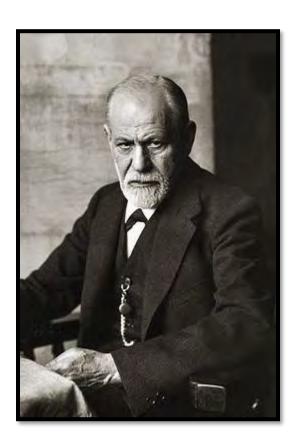
# DENIAL

A Crime Mystery Novel of Puerto Rico

French L. MacLean



**Denial** – also called abnegation, is a psychological defense mechanism, postulated by Sigmund Freud, in which a person is faced with a fact that is too uncomfortable to accept and rejects it instead, insisting that it is not true, despite what may be overwhelming evidence.



Sigmund Freud

#### Disclaimer

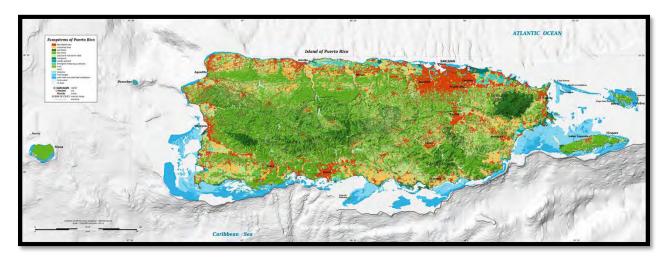
This story is set in 2014. All characters appearing in this work, with the exception of Dean Ripa and the personalities described in conjunction with the Héctor "Macho" Camacho murder, are fictitious. Any resemblance of these fictitious characters to real persons, living or dead is purely coincidental. Dean Ripa, on the other hand, does exist and is one of the world's subject matter experts of one of the central topics in this book, although **all** his words and actions in this story are fictional. Nothing in this work should connote agreement by Mr. Ripa as to the possibility of the story line as ever being true.

Background information concerning *The French Connection* uses the actual names of those involved in the case. All statistics I the book were researched for correctness. The account of Private First Class Carlos James Lozada and his Medal of Honor in Vietnam is also true; Puerto Rican military personnel have historically received numerous medals for bravery, a testimony to their courage.

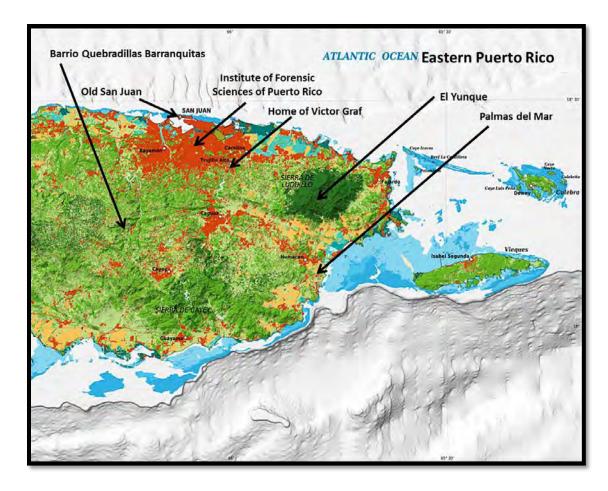
Famed boxer Héctor "Macho" Camacho was, in fact, murdered in Puerto Rico in November 2012 The case has never been solved

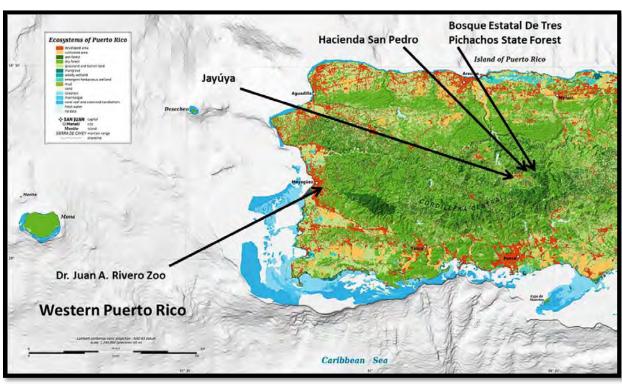
No dangerous animals were used or observed in Puerto Rico during the writing of this work of fiction. In fact, none of them reside in any form on the island. The *Hacienda San Pedro* produces world-class coffee; the owner, Roberto Atienza, is alive and well and brews perhaps the best coffee you will ever taste! The restaurants mentioned in this work are fabulous and well worth a visit, as is the entire island.

Maps showing key events in the story:



The Isle of Enchantment





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# **Part One**



# Panic in the Garden of Eden

Willie Colón was proud of his roosters. No barnyard pimps these; each one of the 40 birds had been hand selected, raised, trained, fed, pampered and exercised for two tasks – first, win in the cockfight arena and second, produce future generations of birds as tough as they were. That's what he was trying to tell this young reporter from Philadelphia, Pennsylvania, but the kid wasn't listening too closely. Willie had come down from Barranquitas with a few roosters to fight at Isla Verde, and as he was completely bi-lingual and had an outgoing personality, the arena owner asked him if he would chaperone this reporter from up north. Willie saw that the kid had an agenda, just like most of these junior media types that wanted to force their own set of values on everyone else. The tyranny of the minority, that's what it was. Declare your own values to be the true path to righteousness, manufacture "facts" as you need them, belittle any opposing views, and declare as bigots and extremists anyone who expressed an opinion different from the vocal minority. Up in "gringoland" they called it being politically correct. But any infringement on speech was never correct.

"But Mr. Colón," the kid whined, "isn't this sport of yours truly barbaric?" Willie could tell that in the final newspaper article the word *sport* would always be in quotations – not a true sport unless the old Philly "Mainline" elites said it was. Maybe Willie could bulldoze the kid with a history lesson.

"Cockfighting is said to be the world's oldest spectator sport, going back 6,000 years to Persia. According to one source, there is evidence that cockfighting was a pastime in the Indus Valley Civilization about 2500 to 2100 BC."

"Don't you mean BCE, Mr. Colón?" the kid offered, wanting to insert into the discussion the relatively-new, religious-neutral description (Before the Current Era) of epoch classification, so as not to offend any particular reading group.

"No, I don't mean that," replied Willie, "we don't use that term down here and if you don't want to appear to be a know-nothing, ivory-tower pedant, you won't use it either. But I digress," smiled Willie. He continued with the history lesson but it was clear that the kid's mind was on other things.

Willie, who stood about 5'5" tall, was balding, weighed 180 pounds and was a fireball of energy, looked up and saw an all too familiar sight. The young reporter's face appeared almost lifeless – a motionless mask of denial; the eyes were barely in-focus; there were no wrinkled brow thought lines present that would indicate the processing of information behind them. The kid had the traditional, 1000-yard stare, also known as the deer-in-the-headlights-look. For those readers of body language, facial expression or academic professionals, the look said the following: "I do not have the level of facts at my command to refute your facts and so I will say nothing, as you

would destroy my argument if I did. However, I know my facts to be superior to yours because I learned them at the foot of Professor X, whom although he never actually did any real work in the world, knows how the world should be run – and why bother with reality when my own factual universe is so tidy and complete. So I will simply stare through you and say nothing."

"Kid, are you listening? I'm getting to the good parts," Willie said in his best hail-fellow-well-met demeanor. "I can see by the look on your face that the subject of the ancient world was neglected in what I am sure was an otherwise sterling education, but we turn now to the Middle Ages, where perhaps you will be on firmer ground – *terra firma* as we would say," Willie opined to the still expressionless youth, who may have been wondering how he was ever going to get a word in edgewise with this Puerto Rican old man who it seems could have taught World History 401 at Drexel. "You see, Englishman George Wilson wrote the earliest known book on the sport of cockfighting, *The Commendation of Cocks and Cock Fighting*, in 1607. A few years before, the English introduced the word *cockpit*, a term to mean a place of entertainment or frenzied activity. William Shakespeare – perhaps you have heard of him – used the term in *Henry V* to specifically mean the area around the stage of a theatre. In fact in Tudor times – the dynasty that succeeded the House of Plantagenet – the Palace of Westminster had a permanent facility of a cockpit, called the *Cockpit-in-Court*."

"Let me now transition to Puerto Rico and our glorious history, which you no doubt would have asked me to explain if you had received a proper education – I'm sure your parents, should they not deny you as their offspring, are still perplexed at just what your costly tuition bought them. Cockfighting has taken place in Puerto Rico since the 16th century, one of the few forms of entertainment from the Spanish colonial era that is still here. In those days, people from all social levels crowded into public plazas or at the drying platforms on coffee estates to fight their roosters, bet on the outcomes or simply to pass the time with friends."

"Mr. Colón, can you skip forward to modern times? I am sure my editor will just cut all this preamble stuff out of the article anyway," the kid offered rudely.

"As you wish," sighed Willie, looking at his watch and beginning to wonder why he agreed to this interview in the first place. "After the change of sovereignty in 1898, brought on by a war between the United States and Spain due to the catalyst of the sinking of the American battleship *USS Maine* in Havana Harbor – caused no doubt you would say by an undetected fire in one of her coal bunkers, a naval mine or her deliberate sinking to drive the United States into a war with Spain, if I gave you an opportunity to opine, which I will not – the second American military governor of the island, Guy V. Henry, prohibited cockfighting. However, cockfighting continued to take place "under the table" until 1933, when the President of the Senate of Puerto Rico, Rafael Martínez Nadal, proposed a law legalizing it."

"Amazingly, it was promptly signed into law by Puerto Rico's Governor Robert H. Gore, who was a big supporter of American President Franklin D. Roosevelt and who believed that cockfighting would benefit tourism. In fact, he planned that a yearly grand carnival of cockfighting would attract thousands of mainland tourists. To facilitate the sport, regulation of it was placed in the hands of the Recreation and Sports Commission, which later became the Department of Recreation and Sports. A new law was signed in 2007 reaffirming the legality of the sport in Puerto Rico. Cockfighting is regarded as a gentleman's sport, with fights held in *galleras* located all over the island."

"Ah, I see by your face that you are having a hard time believing that FDR could have even a tangential role in cockfighting. It is a perfectly honorable sport; supposedly, American Presidents, including George Washington and Thomas Jefferson, were enthusiasts, and I have even read that "Honest Abe" Lincoln received that excellent moniker because of his fairness in refereeing cockfights as a young man in Illinois. But if this history bores you, why don't we jump forward to today. Currently, in many countries, the spectacle of cockfighting is as popular as baseball and American football are in the United States. While there are always outliers that have illegal games – such as your own Arkansas, South Carolina and Virginia to name a few – France, Mexico, Nicaragua, Venezuela, Colombia, Ecuador, Dominican Republic, Philippines, Peru, Panama, the Canary Islands, Saipan, and Guam have legitimate arenas with seats or bleachers for spectators surrounding the ring, as we do here in Puerto Rico. Among the competitors that raise fighting cocks, there is great pride in the prowess of their roosters, winning a championship and starting a line of descendants that may also become champions."

"Not to mention that many people bet on these fights to the death," interjected the kid, trying to score maybe his only point of the afternoon. "Of course," replied Willie, in a tone that indicated that the kid's comment was self-evident to anyone with half a brain, "Many owners officially put their roosters up for a \$100, \$200, \$500 or \$1,000 stake wager, which is kept in a sealed envelope by a judge during the fight – the winning owner receiving that stake money of which he will give half to the trainer of his bird. Additionally, informal wagering on top of that, of course, can drive betting amounts much higher, especially when the two owners are fierce competitors and let their emotions get the best of them. That is why cockfighting here is known as the sport of gentlemen, because the bets are guaranteed by the bettor's word, and what is at stake is each man's honor, not just his money."

"That happened to me more than once, I must confess, and the most I have ever bet on one fight was nearly \$5,000 – *Jesus, Maria, José*, my wife Luisa would kill me if she ever found out!"

"Of course, that is not to say that the sport is not expensive. I will typically spend \$50, \$75 or \$100 on a new rooster of four months of age, depending on the reputation of the bird's owner; you see that most owners know each other, or at least know another owner who, in turn, knows the third owner. One rooster owner I knew paid \$1,000 for a single cock, while in Santo

Domingo, in the Dominican Republic, a Puerto Rican owner received \$11,000 for a cock and two hens in a package deal. Add on top of that \$5.00 per week, per bird to the trainer who will get a cock ready to fight and lots of money for special food and even B12 vitamin shots to keep them healthy. I have five trainers for my birds; you can imagine the expenses of one owner I know who has 1,000 fighting cocks!"

The kid started to flail. "Well isn't it true that cockfighting is purely a man's sport and that women are not allowed or not encouraged to participate?"

Willie answered, "Well, if you mean do we allow hens to fight, the answer is *no*. And yes, years ago, most of the people involved in the sport were men. But there are currently 18 female cockfighting ring administrators, and even more women are becoming judges each year."

"Let me continue. The best roosters are taken to the rings, where they are weighed in a process to pit two roosters of equal weight, or sometimes equal age, as combatants. The owners of the two roosters must be in agreement with the pairing; weights need not be exactly the same, but should be within an ounce or so of each other. The weigh-in and match-making process takes place before 6:00 p.m. on Monday through Friday and before 11:00 a.m. on weekends. The bottom line is that cockfighting is the tenth biggest industry on the island when it comes to revenues. It also generates 40,000 to 50,000 direct and indirect jobs on the island. One economist figured that the support accounts for \$800,000,000 per year of the island's Gross Domestic Product."

"So what kind of breeds of gamecocks do you have here on the island?" the kid asked.

Willie answered, "About 500 years ago, the Spanish brought game fowl to Puerto Rico. Today's Puerto Rican Gamecock is descended from English and Spanish game fowl. The Spanish game fowl originated from the old jungle fowl of the Mediterranean, scattered there by sea traders since the Roman Empire. Our current cock is a slender bird, reaching around 4.5 pounds in weight. It was refined by breeders seeking cockerels that were fierce toward opponents, had a good mating disposition, good reproductive potential, and gentle disposition with hens and people. Red Puerto Rican Gamecocks, Black Puerto Rican Gamecocks, Creole Puerto Rican Gamecocks, Black Rumpless Puerto Rican Gamecocks, Dark Red Naked Neck Puerto Rican; I do not want to get into the differences in species, genus, family or sub-family; the scientists can do that. I just want a gamecock that will fight and win and then make lots of little gamecocks that look and fight like he does."

"But I've heard that in addition to the birds being bred for aggressiveness, they are raised on steroids and injected with painkillers just before a fight," offered the reporter.

Willie paused for a second and then replied, "I have read that this happened up in New York at an abandoned movie theater in the Bronx where secret cockfights were held, as it is illegal there. The cockfighters there pay as much as \$300 each a month just to stash dozens of fighting roosters at out-of-the-way farms in upstate New York, New Jersey and Pennsylvania. Promoters in New York stand to earn as much as \$30,000 a night in admission fees, betting and illegal sales of food and alcohol, so it must be popular there. Birds here can receive steroids during their training as well as periodic vitamin shots as I mentioned, but let me continue with more important aspects."

"Before the fight, the owners go to the *armadero*, where they 'arm' their roosters by putting on the spurs. The owners can determine that their roosters will use natural spurs, but this does not happen so much now. If artificial spurs are selected, they can only have a maximum length of one and nine sixteenths (1 9/16) inches" Willie added.

"But I thought that razors were used and not spurs that resembled the original spike on the rooster's leg," offered the kid, but his tone was such that he half-expected to be slapped down in Willie's reply to it. The kid's expectation was fully met.

"You are thinking perhaps of *sabong*, a popular pastime in the Philippines. While Puerto Rico and the Philippines both start with the letter *P*, they are almost halfway around the world from each other; are you deficient in geography as well?" The kid said nothing; he knew the old man was correct. The kid couldn't even get to the Jersey shore without a GPS on summer weekends.

There was a great deal about Willie Colón the kid did not know, such as he was from Barranquitas in the hilly country in the middle of the island and that he had grown up in a family of sixteen children. He did not know that Willie had served as a cook in the Army in Korea; he did not know that later Willie went to college and became a financial expert. The kid did not know that Willie was now the president of a large bank that loaned out tens of millions of dollars. He did not know that Willie drove a *Lexus*, or could have had any other car he may have wanted, as the bank provided him one as an incentive to remain with them and not take his talents elsewhere. He did not know that Willie had visited Cuba three times and had an inside track to do business on that island, where Willie saw financial opportunity as soon as the Castro brothers exited the historical scene. And he did not know that Willie knew lots of people in Puerto Rico – people who knew how to get things done. The kid just assumed that Willie was another small time Puerto Rican old man who liked his rum, liked to sing in his son-in-law's *salsa* band and liked to bet on some third-world "sport" like cockfighting.

"In the Philippines, both illegal and legal cockfights occur. Legal cockfights are held in cockpits every week just as they are here – but illegal fights, called *tupada*, are held in secret cockpits so the authorities have a great difficulty in raiding them. In both types of cockfighting, knives or gaffs are used. We do not use knives here. Cockfighters care very deeply about their birds,

despite inferences such as yours that they do not. They even give names to some of the birds. I know of one man who got a heart attack because he was so upset his rooster lost. Other owners have been known to jump inside the ring to save their birds when they're losing, but you are not supposed to do that."

"Let me show you one of these spurs," said Willie, pulling out a pair of manufactured spurs. "As you can see, an artificial spur for cockfighting has a hub portion for attachment to the spur stub of a fighting cock and an elongated curved shank portion that is attached to one end to the hub and having at its opposite end a finely pointed tip. The spur is integrally formed of molded, substantially transparent, thermoplastic material, most preferably an unmodified polyetherimide resin. Please tell me if you would like me to spell any of these words for you," smiled Willie, knowing that at this point, the conversation was going to resemble the great Roberto Clemente – possibly Puerto Rico's greatest sports hero – taking batting practice from some rookie pitcher just up from the *Bristol Pirates* in the Class A minor leagues – jacking every pitch out of the park.

"They almost look like the fangs of poisonous snakes," marveled the reporter. "I remember seeing photographs of a highly dangerous Gaboon Viper in Africa and its fangs are similar in shape to these and can get up to two inches long."

"That is a good observation -fangs," offered Willie, seeing that the reporter was finally trying to reach some common ground. "Of course, venom shoots through snake fangs, and our 'fangs' in cockfighting are designed to prevent the insertion of poison into a match. Once the roosters are armed, the judge is responsible for cleaning the feathers and feet of the roosters to ensure that the owners have not applied any kind of substance that could give one rooster an advantage over the other."

"How do the trainers fix the artificial spurs to the roosters," asked the reporter.

"That is an excellent question, one that I should show you to make understanding easier. Ray, here, is from near Caguas and is one of the premier cockfighters on the island. As you can see, his first step is to cut off the gamecock's original spur, leaving only a small stub the approximate size of the socket on the artificial spur; that was done some time ago. Once the natural stub is prepared, Ray fills the cavity of the artificial spur with a hot liquid wax. This wax is specially made for this purpose and comes in a solid bar. Ray heats the bar of wax with an instrument resembling a soldering iron, or with a match. Once the wax liquefies, he pours the wax into the socket, allows it to cool a bit and then places the socket over the natural hub. Once aligned on the leg and after the wax has set, he uses plain white tape to anchor the spur to the cock's leg. He can further secure the spur by wrapping and tying a length of string about the first layer of tape. Then, he can wrap a second layer of tape over the string and first layer of tape. You can

see that the artificial cock spur must be able to withstand, without significant deformation or loss of strength, repeated application of heat."

"Currently, the owners of the arenas rent the spurs at \$10 a pair to the owners, another expense. You may conclude that this process is in much the same fashion that a boxing trainer prepares the hands of his human fighter so they will not be damaged when they strike their opponent, although obviously, the fighter owns his own gloves, which has on a few sad occasions led to tampering. Such was the case when Carlos 'Panama' Lewis tampered with the gloves of his fighter Luis Resto in his fight with Billy Collins, Jr. Resto beat Collins to a pulp in a bloody 10-round unanimous decision; Collins suffered a torn iris and permanently blurred vision, which ended his boxing career.

In fact, from many points of view, cockfighting is quite similar to the sport of boxing and many of our boxing champions have used as a mascot cockfighting champions from previous times. We can discuss that comparison later, if you wish, as I know that many great boxers from the States came from or trained in your native Philadelphia; men like Joe Frazier, Bernhard Hopkins, Meldrick Taylor and Joey Giradello. Perhaps you have visited *The Blue Horizon* on Broad Street, where so many great fights have taken place?"

The kid actually did not know that. Boxing, like so many other contact sports, were pastimes that did not interest him. They were for people he did not know and did not wish to know.

The reporter continued. "So you do not keep the artificial spurs on the roosters permanently or at least for long periods?"

"Oh no, that would be dangerous to us! To remove the spur after the match, the tape and any string are unwrapped. Then, the wax in the socket is softened by applying heat to release the hold on the spur stub. Ray will typically do this by applying a flame from a match, lighter or the like briefly to the hub. The wax can then be completely removed from socket – once it is off and away from the bird – by a further application of heat to cause the wax to flow freely out of the socket." As Ray was removing the wax, he offered another tidbit to the reporter. "The roosters have to be trained like boxers. And like boxers, you have to keep them away from the hens or they will end up getting weak and lazy," he laughed.

Willie added, "I saw a while back on *Spike TV* a show called *1000 Ways to Die* and this episode featured a death involving a cockfight, where a man who bet on a rooster attached razors to its legs to ensure it would win, but was slashed to death himself. This may or may not be true, but what is certain is that the sharp artificial spurs have been known to seriously injure rooster trainers and owners, even to the extent of driving the spurs clean through a man's palm. Should that strike hit an artery in a man's wrist, he could bleed out before he received medical attention."

"From the *armadero*, the judge's assistants take both roosters to the ring, the arena where they fight, which is generally circular in shape and has padded sides high enough that the roosters cannot escape. The fight commences when the roosters are released from the cages; it will have a maximum duration of 14 minutes – which is shown by a timer usually positioned above the ring. A rooster loses the fight when one of the following happens: he has not attacked with his feet for one full minute, while the competitor has been attacking frequently with his feet; he is lying down, resting on both legs and/or on his body for a full minute, while the competitor is on his feet; he lies down during the final minute of the fight; when one of the roosters stops fighting during the final minute while the other is constantly attacking; or when one of the roosters dies. A fight is considered a tie after 14 minutes if both roosters are standing or lying down. The fight will also be deemed a draw if both cocks fail to stand on two legs for over one minute at some time before the 14 minute mark."

"But isn't it difficult to determine which rooster is which when they are similar in color?" The kid was starting to warm to the subject, now understanding that Mr. Colón knew a lot, a whole lot, more than anyone in Philly he had talked with as background before his trip to the island.

"Yes," offered Willie, "although the owners know exactly which bird is which, some of the patrons in the seats – who, shall we say, have had a shot or two of *Don Q* rum, may get confused. Therefore, before the match, a trainer will put a blue or a red band around the lower leg of each bird and that color will be used to describe which bird is fighting, and which bird is not, at various points of the match."

"Do you mean that the roosters are actually trained for these contests?"

"My yes, that is a crucial facet of the sport and begins from the time they are young. You may be surprised to learn that gamecocks, due to their pedigrees of dozens of generations, careful rearing, and strict training, are radically distinct from common barnyard roosters. Gamecocks are given the best of care. Remember, we do not need to teach aggression; gamecocks possess congenital aggression toward all males of the same species, although until about four months of age, you can keep males together in a cage and they will not fight each other. The roosters start by eating special meals of meat, eggs and vitamins."

"When they get into their prime fighting age that could be six to eight months, they are run around in a circle by the trainer in sessions several weeks before a match and placed on strict diets. Like long distance runners, the bird may start by being run 25 minutes to get its stamina quite high; then, as the match draws closer, this running duration is reduced to 20 minutes, so the bird will feel much faster in the ring. Much of what they eat is corn, but often a day or two before the match they switch to natural papaya so their systems can get an energy boost. After their training sessions, the trainers carefully bathe the roosters in cold water that is thought to assist in muscle regeneration."

"A special trainer clips their feathers about three weeks before the match to give them an aggressive appearance; the expert who often does this for me used to be the boxing trainer for our famous Felix 'Tito' Trinidad and I pay him \$5.00 per bird so they always look good. This expert told me that Felix and most boxers were also very concerned that they looked good getting into the ring, with a fresh haircut, although they often did not shave because they believed that a short beard provided a little cushion against a punch. While not all fights are to the death, the cocks may endure significant physical trauma. I think it is time that you should see an actual fight. From here behind the cockpit, you can hear the bettors make their wagers. Let us walk around to the front and see what will happen."

The fight began. The action was fast – so fast the kid could barely follow it, and he could not make out the strikes of the birds' kicks – which seemed to occur as each cock would jump six to eight inches into the air – although many in the audience could see the strikes and began screaming to place additional wagers on a rooster that they believed was gaining the upper hand. About eight minutes into the match, a strong kick to the head sent a gamecock's opponent toppling over. Neither bird, in the opinion of the reporter, was winning; one was just not losing as badly as the other was. The floor of the cockpit seemed to be some type of green Astroturf; there never seemed to be a lot of blood on the floor, although it did accumulate more feathers and pieces of feathers as the match wore on. The attacking bird was permanently blinded during the fight due to injuries to both of his eyes, but continued to battle aggressively for almost ten minutes, before slowing down considerably.

In the final minute of the contest, the bird slumped to the ground exhausted and could continue no more. The referee declared the other combatant the winner of the match and the bettors paid up. Although defeated in the contest, the bird's owner received an offer immediately after the fight that if the rooster survived, another man would purchase the cock for \$300, a price warranted due to the rooster's demonstration of courage, grit and toughness. Obviously the prospective buyer believed that the gamecock could sire future roosters with the same traits.

As the reporter saw more fights at the *Club Gallístico de Puerto Rico*, the largest cockfight arena on the island and less than five minutes away from the *Luis Muñoz Marín International Airport*, he became aware that many of the combatants attacked their opponents by biting with their beak for grip and then kicking their opponents' vulnerable underbellies with their powerful legs, using their heels or the artificial spurs as weapons. While the bites seemed to cause minor injury, it was the vicious kicking that became the source of lethal blows – or at least blows that won the match due to vast accumulated damage on the opponent.

In one match, the kid saw a gamecock peck at the eyes of his opponent, checking for life, after delivering a deadly kick to its underbelly. This nearly sent the kid fleeing to the men's room, but he took a few deep breaths and gamely continued watching. Later, Willie and Ray told him that on average around 40 percent of losing gamecocks died from their injuries, although many made

full recoveries and served as brood cocks or even returned to the pit to fight again. In an unexpected sight, the reporter saw trainers – after a match – feed the exhausted animals, treat wounds and give each living bird a shot of antibiotics that was mixed with some painkillers. Some birds were returned to their owners with only a few scratches. Others were more severely wounded. The reporter thought that many of the latter would most certainly be permanently disabled or would die several hours later. A few of those birds were given to the tender hands of boys as young as six, who, in some cases, would spend weeks nursing these battered gamecocks back to the land of the living.

"You should come back to Puerto Rico in April," Willie remarked to the reporter. "At the *Coliseo Gallístico* in Morovis, the *Mayor's Cup* will take place. Several mayors from all over the island will bring their prized roosters to fight for the honor of the cup. You will enjoy it, plus the arena is air conditioned, well-kept and has a bar – try some *Palo Viejo* rum when you're there, kid – and a restaurant, as well as gaming machines and billiards if the fighting gets too much for you. Many people in my own hometown have urged me to run for mayor myself, so perhaps I will see you there in another capacity! 'The Cockfighting Mayor' – that has a certain ring to it, does it not?"

"Look, young man, here is my best rooster, getting ready to fight. Isn't he a good-looking bird? His name is "Volki" which is a nickname down here for the old *Volkswagen Beetle* automobile. Last year he fought three times and won all three matches; in two of them, he killed his opponent. You may watch him and determine from the results whether or not I know what I am doing in this sport," laughed Willie – knowing that in any match, a poorly-bred, poorly-fed, poorly-trained cock could defeat a much better opponent with one lucky "kill shot" to the heart early in the contest.

That kill shot never occurred and by the ninth minute the opposing bird looked like it at been tossed into a *Cuisinart Smart Power Premier 600-Watt Blender*.

The kid vomited. Gaining his senses, he abruptly thanked Willie for the experience and on unsteady legs, left the arena – heading for his posh hotel room in Condado.

Willie shook his head; he hadn't even been able to bring up the great Puerto Rican boxers like Sixto Escobar (nicknamed *El Gallito* – The Rooster,) Carlos Ortiz, Wilfredo Gómez, Samuel Serrano, Wilfred Benítez, Wilfredo Vázquez, the aforementioned Trinidad and the lately-departed Héctor "Macho" Camacho. Willie couldn't understand these elitist media people on the mainland, who wanted to impose their sense of propriety on everyone else. What had Theodore Roosevelt said about the man in the arena striving mightily versus the cold and timid souls that would never fight and who knew neither victory nor defeat? Cockfighting had begun to enjoy a growing audience in recent years, despite laws forbidding it up in the States and the crusades of animal advocates, who deplored it as cruel. Maybe the popularity had been fueled by

a wave of new immigrants from countries throughout Latin America and Asia, where cockfighting was as legal as hunting and fishing are in the United States.

No. The real problem was not the blood in the arena or the number of cocks killed in the matches. Hell, tens of millions of chickens were killed and sliced up every DAY in the United States for the *Tyson's Chicken* and the *Kentucky Fried Chickens* of the world. And on Super Bowl Sunday, Willie understood that 1.5 billion chicken wings were consumed – and using higher math one could deduce that as there were two wings per bird, 750 million birds went to the chop for this single sporting event.

No, the real problem dealt with class privilege. The dominant economic upper class, led by the political and social elites, sought to "deny" the American middle and working-class certain elements of political thought, social justice, public order, and even certain entertainment, while gentlemen's fox-hunting, put-and-take hunting and sport-fishing remained legal sports. These same elites denied their own children's participation in brutal games like boxing or football, but had no qualms with poor minority boys going into these blood sports. Looking up at a cockfighting arena revealed that the spectators looked the same as the owners and trainers of the cocks – rich men or poor men alike in Puerto Rico sat next to one another. But at an American college football game, although sixty or more percent of the players were young black men, the people in the stands were almost always lily white.

Willie collected his wagers, helped his assistants pack the birds into their traveling containers and took them home to Barranquitas, a city up in the mountains of central Puerto Rico.

Willie put his birds into their cages, put a blanket over the top of each coop, sang them a lullaby and went into his house – where after a hearty meal of rice, beans and chicken – he went to sleep. For some reason, the trainer had forgotten to remove the fighting spurs of "Volki" who was now having his own post-fight victory meal of shredded papaya. Willie would remove them the next morning.

Later that night, Willie Colón's prize gamecock, "Volki" – the bird that had shredded its opponent so badly that the kid from Philadelphia had puked all over himself and staggered out of the arena – disappeared without a trace from its cage.



I should probably introduce myself at this point, as I will serve as your narrator for this remarkable tale. My name is Detective Sergeant Antonio Ponce and I am finishing up my 40 years of police work on the island, but before I tell you more about Willie's rooster I have to get you caught up with a lot of complexities about Puerto Rico, just in case the only things you know are that we invented the *Piña Colada*, have more Miss Universes than anywhere else on earth, are located in the Caribbean and don't pay taxes. Oh, let me address that last one first; we are taxed to death down here – we just have different types of taxes than you do, so don't let me hear that myth again or I'll give you a one-on-one guided tour of part of the now-closed Río Piedras State Penitentiary, also known affectionately here as *Oso Blanco* (White Bear) – and maybe leave you in there for a day or two so you can get the full ambience of the place.

Puerto Rico is actually an archipelago of small islands within the larger archipelago of the Antilles Islands. Several dozen smaller nearby islands are also part of Puerto Rico; two of them, Vieques and Culebra, are municipalities. Vieques, located eight miles east of Puerto Rico, has an area of 52 square miles. Vieques has no rivers to speak of; the soil is fertile. The highest peak on this little island is Monte Pirata, some 1,000 feet high. Two of the most populated areas of Vieques are Barrio Esperanza, on the southern part of the island and Isabel II, where the city hall and most government services are located, to the north. Vieques has its own the Bio Luminescent Bay and various lagoons. Obviously, fishing is an important economic activity for Vieques.

Culebra is located 17 miles east of the main island of Puerto Rico. Smaller than Vieques, it has an area of just ten square miles. It is also located in an excellent fishing area, which contributes to the economy of this small island. Scuba diving and snorkeling are magnificent here due to the clarity of the water. On land, the arid soil is used for pasture and also to cultivate fruit, most of which is consumed locally. Monte Resaca is the highest mountain on Culebra. Other small islands near Culebra are: Isla Culebrita, Luis Peña, Cayo Norte, Lobo and Lobito. Most of the other diminutive islands around Puerto Rico are used for wild life reserves and recreational areas and include Isla Mona, Monito and Desecheo to the west and Caja de Muertos (Dead Man's Casket) to the south.

Known as *La Isla Grande*, the main island of Puerto Rico is about 110 miles long by 35 miles wide. In general, it is divided into three geographical areas: coastal plains, central interior mountain ranges and the northern karst. The coastal plains are smaller in square miles than the other two regions, but more people live along the coast than do inland. This area, which is relatively flat, was originally formed by the erosion of the interior mountains. The largest cities on the island are located here, San Juan to the north, Ponce to the south and Mayagüez to the west. Our 704 miles of coast line have numerous beaches, sand dunes and inlets.

The Central Interior Mountain Ranges cover most of the island of Puerto Rico and include interior mountains, hills, mountain sides and low areas within the mountains. About 75 percent of Puerto Rico's land area consists of hills or mountains too steep for intensive commercial cultivation. These mountain ranges are named La Cordillera Central, La Sierra de Cayey, La Sierra de Luquillo and La Sierra Bermeja. La Cordillera Central extends from the town of Aibonito in the east to Maricao in the west, located about 21 miles from the northern coast and nine to 15 miles from the south coast.

The northern side is much steeper than the southern side. Its highest peaks are located between the towns of Villalba and Adjuntas and include Cerro La Punta (4,389 feet) and Los Tres Picachos (3,953 feet.) In fact, given that to the north of the island is the Puerto Rican Trench, if you measured Cerro La Punta from the floor of that trench to its peak, it would be higher than Mount Everest. Much more rain falls on the northern side of the mountain range as compared to the southern side. And the difference in vegetation is stark. While traveling south and west around the island on Puerto Rico Route 52 and 2 – the island's two super highways, the grass immediately turns brown from lush green once the area of Salinas is reached.

La Sierra de Cayey is an extension of La Cordillera Central, extending from the university town of Cayey to Humacao on the eastern coast. It is not high; in the east, its elevation reaches only 400 feet. Two promontories, Sierra Guardarraya and Cuchillas de Panduras, extend southeast between the towns of Yabucoa and Maunabo. In the northeast of the island, from Gurabo to Fajardo, is La Sierra De Luquillo. El Yunque (3,494 feet), El Toro (3,524 feet) and El Pico Oeste (3,416 feet) are located along this range. Finally, there is Sierra Bermeja, the smallest of the branches of the Central Mountain ranges, which extends from the town of Guánica to the southwestern tip of the island, running south of El Valle de Lajas, the largest valley on the island. The highest peaks of this small range reach about 1,000 feet.

The Northern Karst, located in the northern interior mountainous part of the island, consists of formations of limestone rock dissolved by water throughout the geological ages. It is a plateau, with elevations of 100 to 700 feet. Much of the area is composed of limestone hills, many of which are pocked with holes and caves. Many of these caves have not been completely explored. Some of the area's rivers, like *El Río de Camuy*, flow normally before disappearing under the surface, only to mysteriously reappear more than a mile downstream. It is the site of the *Rio de Camuy Cave Park*. Arecibo Observatory, the world's largest radio-telescope, is also located in this area. If "ET" ever does visit earth, he'll probably home in on Arecibo as a direction marker.

I would be remiss if I did not speak about Puerto Rico's climate, especially if you are reading this in the northern tier of the United States, perhaps during one of your atrocious winters. Puerto Rico is located in the tropical zone of the world globe. Temperatures average 82°F. Although you might think that the seasons on the island do not change very drastically,

especially when it comes to temperature, if you take a good look, you will actually see the differences. The seasons differ in rain, winds and plant life. The dry season is usually from November to May, while the rainy season takes place usually from June to October. However, climate here has variations from area to area. El Yunque, a true rain forest, averages 180 inches of rainfall annually, while the southern coast of the island averages 40 inches a year. The temperature in the south is usually a few degrees higher than the north, while temperatures in the central interior mountains are almost always cooler than the rest of the island.

Puerto Rico is a component of the archipelago of the Antilles, a chain of islands that stretch more than 1,500 miles from Florida in the west to Venezuela in the southeast. They Antilles enclose the Caribbean Sea; to the north and east of the chain is the Atlantic Ocean. The Antilles are further sub-divided into the Greater Antilles and the Lesser Antilles. Cuba, Jamaica, Hispaniola (Haiti in the west and the Dominican Republic in the east of that island) and Puerto Rico make up the Greater Antilles, with Puerto Rico being the smallest of the four major islands. The body of water between Hispaniola and Puerto Rico is the famed Mona Passage, known for its treacherous currents

The Lesser Antilles, located east and southeast of Puerto Rico, are made up of dozens of smaller islands including the Virgin Islands, Montserrat, Guadeloupe, Dominica, Martinique, Barbados and Trinidad. Although political structure is different among the islands, climate and natural habitats are quite similar.

The history of Puerto Rico began with the Ortoiroid people settling the archipelago between 3000 and 2000 BC. Later, between about 400 BC and 1000 AD, the Saladoid and Arawak Indians populated the island. At the time of Christopher Columbus's arrival in the New World in 1492, the dominant indigenous culture was that of the Taíno Indians.

The Taínos had one very large problem – the Caribe Indians from South America. This latter tribe frequently raided the island looking for women, as their own girls were supposedly so ugly you could go blind looking at them. Even worse, the popular stories had it that the Caribes were cannibals. So they terrorized the gentler Taínos until the Spanish arrived, but if the Taínos believed their ship had come in – pardon the pun – they were sadly mistaken.

After Christopher Columbus discovered Puerto Rico, on his second voyage, on November 19, 1493, the island – originally called *San Juan Bautista* for St. John the Baptist – formed a key part of the Spanish Empire of the New World as a major military post during many wars between Spain and other European powers – especially England – for control of the region in the 16th, 17th and 18th centuries.

In 1508, King Ferdinand II of Aragon assigned Ponce de León to lead an official expedition to the island. The following year, the Spanish Crown officially appointed Juan Ponce de León

governor of the island. The Spanish soon established the first *repartimiento* in Puerto Rico, a system that consisted of distributing numbers of Indians for wage-free and forced labor to officials and colonists on the island. After several priests protested against the treatment of the Taínos under the *repartimiento* system, the Crown instituted the *encomienda*, which specified that Spaniards were obliged to pay the Indians for their labor and to teach them the Christian religion.

Evil won out, however, and the Spaniards soon reduced the Indians to slavery, claiming that the Indians were inferior and subhuman. Forced to work from dawn until dusk, under threat of corporal punishment and death, the Taínos died by the thousands. In 1510, Cacique Urayoán, a native chief, ordered his warriors to drown a Spaniard, Diego Salcedo to determine whether or not the Spaniards were immortal – as the Taínos believed that Spanish colonizers had divine powers. After watching the corpse for several days, until they were sure that he was dead, the Taínos revolted against Spaniards with no success. Ponce de León ordered 6,000 to be shot; the survivors fled to mountains or left.

We have been a battleground for much of our history because of the island's strategic location with respect to the Caribbean and the rich northern coast of South America. In 1528, during their attempt to capture the island, the French attacked many settlements on the island, sacking and burning the town of San Germán. In fact, about this time, most of the Spanish on the island were concentrated at San Germán or San Juan. In 1539, concerned about potential threats from European enemies, Spain began constructing massive defenses around San Juan, to include the construction of *San Felipe del Morro Castle*, known today as *El Morro*. This fort featured 18-foot-thick walls; the Spanish also built San Cristóbal and San Geronimo Forts with the financial subsidy from the Mexican gold and silver mines.

The English sea captain – we call him a low-life pirate and a scoundrel, with the nickname of *El Draque* (The Dragon) – Sir Francis Drake attempted to land and seize the fortress of San Juan several times, but the Spanish repulsed him on every occasion. In fact, the old bastard died of dysentery on January 27, 1596 just after his last attempt at San Juan. Unfortunately, no one was thus able to collect the 20,000 *ducat* reward that Spanish King Phillip II had put on his head.

Another English marauder was Sir John Hawkins, who made our life intolerable. He was on the same voyage as his second cousin Drake and Hawkins died at sea just north of San Juan on November 12, 1595. On June 15, 1598, the British Navy led by Sir George Clifford, 3rd Earl of Cumberland, landed in Santurce, conquered the island and held it for several months. The Earl was forced to leave the island later that year due to an outbreak of plague among his troops.

Other pirates roamed around the island later. Roberto Cofresí, better known as *El Pirata Cofresí*, was the most renowned swashbuckler in Puerto Rico. He became interested in sailing at a young age, when he acquired his first ship and became acquainted with the Mona Passage in the early

1800s. Throughout his career, he commanded at least three different vessels, with the most infamous being a fast six gun schooner named *El Mosquito*, displaying his preference for speed and maneuverability over firepower. On March 5, 1825, Cofresí engaged Captain John Slout and the *US Grampus*, a schooner, off the island. After a naval battle of 45 minutes, Cofresí abandoned his ship and attempted to escape to land, but, along with his crew, was captured. Authorities took Cofresí to *El Morro* in Old San Juan. A military trial jury found all of them guilty of piracy and on March 29, 1825, a firing squad executed Cofresí and his men.

About this time, the Spanish Crown revived the *Royal Decree of Graces of 1815*, realizing that it was in danger of losing its two remaining Caribbean territories, Puerto Rico and Cuba. The decree, printed in Spanish, English and French, was designed to attract Europeans to the Caribbean and settle here, with the hope that the independence movements – blossoming on both islands – would lose popularity and strength with the arrival of massive numbers of new settlers. Free land was offered to those who wanted to populate the islands on the condition that they swear their loyalty to the Spanish Crown and their allegiance to the Roman Catholic Church.

In 1898, during the Spanish–American War, U.S. forces invaded Puerto Rico. In the aftermath of the war, the island became a possession of the United States. The *Foraker Act* of 1900 established a civil government, and the *Jones Act* of 1917 made Puerto Ricans U.S. citizens. That is important! We take great offense when we are questioned concerning U.S. citizenship – we are. These initiatives paved the way for the drafting of Puerto Rico's Constitution and its approval by Congress and Puerto Rican voters in 1952. The island remains a Commonwealth controlled by the United States, but remains an anomaly, often fielding separate Olympic and World Baseball Classic teams.

Now let us look at my area of expertise, our inhabitants. Puerto Rico has 3,675,000 people, give or take. We are still computing long-term exodus from the island as a result of *Hurricane Maria* in September 2017. Concerning age, 18.4% are ages 0-14; 14.6% are 15-24; 38.6% are 25-54; 11.9% are 55-64 and 16.4% are 65 and older. That last number is large because a lot of older Puerto Ricans residing in the States come back here to live out their last days in the warm Caribbean sun, rather than struggle through winter after winter in New York or Chicago. The median age of males on the island is 36.4 years, while the median age for females is 40.

The federal government says that 76.2% of Puerto Ricans are white, mostly of Spanish origin, while 6.9% are black, 0.3% are Asian, 0.2% are Indian, 4.4% are mixed and 12% are the ubiquitous *other*. However, those statistics are almost meaningless here. We look at race much differently than you do up there. We see almost everyone as one mixture or another, so it isn't a big deal what your category might be. As a result, we don't have the race hustlers like you do that try and shake down businesses and parts of societies in the name of creating an equal playing field, but in reality only want to selfishly line their own pockets.

But we do have our problems on the island. You have to stay out of public housing areas (known here as *caserios*) that are identifiable by their cement facades, apartment-like balconies and often surrounded by rolls of concertina barbed wire. Gangs that frequently run many of the day-to-day activities are a problem in these projects, and activities linked to the drug trade take place often. One of the worst caserios in San Juan is *Louis Lloren Torres*, where a lot of the city's crime takes place. Roughly 68,700 violent crimes struck the island in 2008, including over 800 murders; 2010 still had the second highest yearly rate of murders in Puerto Rico's history, with 995 deaths. That included the murder of an off-duty police officer who tried to intervene in a store robbery in San Lorenzo. Bayamón saw the worst crime not long ago, with nearly 16,600 violent incidents, including 154 killings in one year. In 2008, some 177 people were murdered in San Juan. Unfortunately, in 2011, Puerto Rico set a new record with 1,117 killings. But that has gone down in recent years and was 679 murders in 2017.

Crime statisticians chalk the high crime rates to inadequate numbers of police officers and a low rate of operational patrol cars. But in my years – and I hate to say this – some of the problem stems from corrupt police officers, judges and politicians. Over the last decade, at least 100 local police officers have come under investigation and an additional 75 officers have been convicted for police corruption.

These same stat-boys estimate that about 60 percent of homicides on the island are linked to drug trafficking. Ever since the U.S. Navy pulled up stakes at Roosevelt Roads and abandoned the gunnery range at Vieques a few years ago (after many protests,) the drug cartels have moved in to fill the vacuum. Now, the cartels from Colombia and other sources ship large amounts of illegal drugs to Puerto Rico, especially the southern and eastern coast. From the island, the drugs are trans-loaded to other carriers and generally shipped in smaller amounts to the mainland.

Drug runners deal in forbidden cargos of other types, however, so I would put their fingerprints on as much as 80 percent of the crime on the island. For example, along the west coast, many of these contraband artists deal in human trafficking from the Dominican Republic to the island. The highest estimate I have heard is that as many as 300,000 Dominicans are now in Puerto Rico in an illegal status. While many may be hard-working, honest immigrants, others are involuntary victims of the sex traffic industry, including many underage children. The Dominicans were also smuggling in ten Cubans a month to Puerto Rico, who were fleeing the communist island and looking for asylum.

Additionally, the drug runners can often smuggle precious gems, stolen archaeological artifacts or prohibited exotic animal species into the island to circumvent laws, taxation or other regulatory requirements. The lure of Puerto Rico, of course, is its status as a U.S. territory. Once drugs are smuggled onto the island they can head directly to the U.S. mainland without going through customs.

The Dominican Republic, just across the treacherous Mona Passage strait separating it from Puerto Rico, serves as the transfer point for much of the South American cocaine shipped from Puerto Rico into the United States mainland. The "Dom Rep" is also a major transit area for drugs heading to Europe. Cocaine lab refining usually is done in South America, before the final product is shipped in bulk. However, recently, these labs have been appearing in the Dominican Republic. Not long ago, authorities seized about 500 pounds of coca paste – the raw ingredient for refined cocaine – from a laboratory on a ranch on the outskirts of the Santo Domingo, the Dominican capital. The narco guys have formed an unholy alliance in Puerto Rico: the Colombians supply the drugs, the Dominicans supply the labs and the boats, and the Puerto Ricans supply the muscle and the knowledge of area. Drugs can come in anywhere along the coast, with Fajardo being a particularly active spot for bringing them in.

When I was in the Drug Enforcement Administration – the DEA, the drug runners were doing it predominantly by air. Now it's predominantly by "go-fast" boats. One year, a U.S. Customs and Border Protection aircraft near the island spotted a 30-foot long, go-fast boat loaded with 1,500 pounds of cocaine in waterproof bales. A British navy frigate, *HMS Lancaster*, patrolling in the area, ended up seizing the boat, its three-man crew and its cargo. Later in the year, officials arrested Edgar Collazo Rivera, a prominent Puerto Rican businessman, who operated shipping and garbage companies and had contracts with municipal governments. According to drug enforcement authorities, his 61-foot yacht *Olga* – valued at \$8,000,000 – was allegedly used to transport cash to the Dominican Republic to buy drugs. In January 2014, U.S. Customs and Border Protection officers seized 78 pounds of cocaine inside a container at the San Juan seaport. The ship, the *M/V Caribbean Fantasy*, had just arrived from Santo Domingo.

In October 2013, the FBI arrested 27 suspected members of a drug-smuggling group – 18 on the island and the others in Texas, Florida and California. The network was believed to have made over \$100 million between 2005 and 2010. Convicted drug trafficker Figueroa Agosto, known as the "Pablo Escobar of the Caribbean," previously led the group.

Also known as José David Figueroa Agosto, and nicknamed "Junior Cápsula," he was born on June 28, 1964 in San Juan. In 1999, Agosto escaped from prison in Puerto Rico, where he was serving a 209-year sentence for murder and illegal weapon possession, and fled to the Dominican Republic, where he managed to obtain several alternate identities and continued drug trafficking Following a lead in late 2009, police raided one of his many apartments and found \$4 million in cash and \$1 million in watches. In the ensuing car chase, he managed to elude the police, after fleeing his vehicle, by hiding in a sewer. He returned to Puerto Rico, by paying \$1 million to unnamed high-ranking military personnel, and was able to hide in San Juan, Puerto Rico until July 2010, when we arrested him in Santurce, as he tried to escape from officers conducting surveillance.

These go-fast boats of the drug smugglers, with two or more big engines, roar across the Caribbean from the northern tip of South America in one or two days, often under cover of darkness. The smugglers off-load the bales of cocaine to fishing boats or transfer them to vehicles on deserted beaches, which should not surprise anyone. Colombian-led traffickers are simply taking advantage of a region where they made deep inroads in the 1980s, before drug lords in Mexico began to dominate the trade by the late 1990s. Before that was during the heyday of the Colombian cartels and the so-called "Cocaine Cowboys" of Miami, who turned that city into the epicenter for the cocaine trade, a by-product of which also turned Miami into one of the most dangerous cities in the United States, immortalized in the TV series *Miami Vice*.

Although more Coast Guard patrols, as well as human and electronic intelligence, to detect illicit planes and boats are available, about 14 percent of U.S.-bound cocaine shipments – roughly 42 tons – was trafficked through the Caribbean in the first six months of this year.

That leads me to explain a bit more about myself, as a fair number of people down here seem to confuse me with Puerto Rican TV personality Rafael José – and although I do look like him, I have much more hair. I was born in 1948 in Humacao on the east coast of the island. Like many young men of my age on the island, I joined the Army and wound up in Vietnam in 1969. After my stint in the military, I took a few courses in law enforcement and joined the police in Humacao.

I guess police work was in my blood. My mother's uncle left the island and went to New York a long time ago and became what we call a *Nuyorican*, a combination of the terms "New York" and "Puerto Rican." That term refers to members of Puerto Rican descent or of their descendants located in or around New York State especially the New York City metropolitan area. An estimated 1,800,000 *Nuyoricans* are believed to live in New York City – the largest Puerto Rican community outside Puerto Rico – with the original enclaves centered on Spanish Harlem – where her uncle moved – Manhattan and the South Bronx. Now, however, they have migrated like everyone else to Long Island and other suburban locations. Some island Puerto Ricans do not consider *Nuyoricans* as true Puerto Ricans because of some perceived cultural differences.

My mother's cousin, Esteban, became a cop in New York after he had been a co-pilot on a B-24 *Liberator* during World War II. I guess being an engine mechanic, which he had studied to be at *Samuel Gompers Career and Technical Education High School* in the Bronx, just wasn't exciting enough.

Raymond Chandler, an American novelist from Chicago, once wrote, "Down these mean streets a man must go who is not himself mean." That was "Uncle" Esteban to a tee. His first assignment as a cop was as a rookie in the quiet 10th precinct – the One-O – Manhattan South. From there he went to narcotics in Manhattan North. Because he spoke Spanish fluently, he was

a long-time buyer in the narcotics squad there. While working narcotics as an undercover detective, he once had to go up to Sing Sing, disguised as a prisoner, in order to hear a drug dealer's confession. The dealer was looking for a plea bargain and only the warden knew the new "prisoner" was really an undercover cop. It took Uncle Esteban two days, but he got the confession and got out of that hell-hole before he had his throat cut.

Among those police officers he helped train were Eddie "Bullets" Egan and Sonny Grosso, of the movie *The French Connection* fame. The other cops called him "Bullets" because as a uniformed patrolman, Egan had worn an extra cartridge belt so he would have more ammunition on hand in an emergency. Later on, Egan and Grosso tailed a low-level Mafia punk named Patsy Fuca. Through their surveillance, they linked Fuca to a visiting French television show host, Jacques Angelvin, who was in New York and driving a 1960 *Buick Invicta*.

The two officers were part of a team of NYPD and federal drug bureau detectives that figured out that Angelvin was probably a courier for a drug ring operating out of Marseilles, France. The police "stole" the car, stripped it and found heroin inside. They later put the car back together as it had been, returned the *Buick* to its owner, and it ended up at the Bronx home of Patsy Fuca's uncle Joe, where it was unloaded, with none of the "wise guys" aware of what had happened. The cops moved in and arrested everybody there, except for a big wheel that was behind the whole deal, Angelo Tuminaro, also known as "Little Angie," a major drug importer with the Luchese Cosa Nostra crime family of New York.

From Narcotics, Uncle Esteban went to the  $40^{th}$  Precinct – the Four-O – in the South Bronx, right next to the notorious "Fort Apache," the  $41^{st}$  Precinct. He was on regular patrol and after he passed the sergeant's test, he was reassigned to the  $73^{rd}$  Precinct – the Seven-Three.

Robert L. Denton, a patrolman from the Seven-Three, had his throat slashed by a man outside of a store, in daylight, on the sidewalk, for no apparent reason, in the Brownsville section of Brooklyn. Denton had actually lived in my mother's cousin's hometown of Bethpage on Long Island. The killer initially escaped, as Denton's partner tried to help his fallen comrade. Somehow the police department was able to find the killer pretty quickly, as the neighborhood residents – who had long shunned contact with the police – were more than happy to help find the scum ball, not wanting to have an unhappy precinct of cops around busting heads for too long.

While in handcuffs in the Seven Three station house, the alleged killer apparently lost control of his leg muscles and somehow inadvertently fell down a long flight of stairs in the building, while being moved to the Manhattan House of Detention, known popularly as *The Tombs*, for holding before his trial. An investigation subsequently found no police brutality had occurred in the "unfortunate" accident. The killer later got a life sentence.

Uncle Esteban was a "cop's cop" and I wanted to be like him since I was a kid. Perhaps because of my proficiency in English, I progressed up through the ranks and finally joined an interagency unit dealing with drug enforcement that worked closely with the U.S. Customs and Border Protection – which we just call the CBP. It was dangerous work, but I managed to survive unscathed until November 2012, when our famed boxer, Héctor "Macho" Camacho was killed and I was assigned to the special task force investigating his death.

I remember it like it was yesterday. Subjects unknown shot Camacho in the left side of the face on Tuesday night, November 20, 2012, about 7:00 p.m. as he sat in a black *Ford Mustang* with a friend, Adrian Mojica Moreno, outside a bar named the *Azuquita Bar & Grill* on Route 167 (*Avenida Comerio*) in Bayamón. Actually, the *Mustang* was parked in front of the law office of Roberto Perez Obregon next door. Moreno was killed, while the bullet that hit Camacho entered his jaw, tore through three of four main arteries in his neck – affecting blood flow through his brain – fractured a vertebrae and lodged in his shoulder. Paramedics took the unconscious boxer to the Puerto Rico Medical Center. Four days later, seeing that Héctor had not regained consciousness after doctors had declared him brain dead, his family decided to pull the plug and Héctor died shortly thereafter.

We found nine sealed bags of cocaine in Moreno's pockets, while a tenth was found open in the car. It appeared as though the gunmen shot both men as they were climbing out of the *Mustang*, which was distinguishable by double wide white racing stripes across the back, top and front of the car. The windows were up, but no bullets struck the glass. A witness described that two men fled the scene of the crime in a sport utility vehicle, but the information was so sketchy that we were unable to make an arrest. One squad car chased a suspicious van, from which the shots might have been fired, and found it abandoned in the area of *Jardines de Cataño*, a public housing area in Cataño, north of Bayamón and west of San Juan across the bay.

The bar was a typical roadside spot that locals would stop by and have a drink every now and then: *Johnnie Walker*, *Dewar's*, *Heineken*, *Budweiser*, rum of various labels and some small items to eat. When I interviewed the owner he said that "Macho" usually came by once a month or so and was well known, obviously. The establishment was about two blocks south of Puerto Rico Route 22, an expressway and there was some thought that the perpetrators may have followed the *Mustang* before the attack.

You know I just thought of something; it's strange how an idea will just pop up in your head. Now that I am recalling the incident, I am wondering if Camacho and the *Mustang* had been on Route 22. If they were, just before the incident, and if they drove through a toll plaza on an *Easy Pass* lane without the required RFI tag on the inside of the windshield, the control camera might have snapped a picture of the car and the license plate. That's no big deal, but if another car, also without an *Easy Pass*, following the *Mustang*, had run that same lane, maybe there was a

picture of that too in the system. I'll have to ask one of my old friends still on the squad about that.

Outside the ring, Héctor was a wild man and everyone knew it. As a teenager, he was a brawler, a serial shoplifter, an admitted drug user and a car thief. Authorities in the States and Puerto Rico arrested him numerous times on charges including domestic abuse, possession of a controlled substance, burglary and attempting to take an M-16 rifle through customs. Before his death, he had turned himself in after a warrant charged him with beating one of his sons, and a trial on this charge was pending at the time of his death. Reports also indicated that he was now burglarizing electronic stores while using the drug *Ecstasy*.

This fatal incident was not the first time Héctor was a victim of violent crime. A year earlier he was shot during – according to Camacho – a carjacking in which he was the victim. Everybody knew his character; he was the PR bad boy and people loved him for it. He could bring Puerto Rican boxing audiences to their feet cheering, when before a fight he gave his battle cry – "Its 'Macho' time!"

Camacho's record was 79-6-3 with 45 wins via knockout, but his image as a no-quit island fighter transcended even that sterling record, so we put pressure on every informant and jailbird we could to try and get a lead on the case. We were really busting balls. The incident had the hallmarks of a drive-by shooting; what we wanted to know is if it was a random hit or if the perpetrators knew "Macho" was in the target vehicle and that so much cocaine was present.

The perpetrators had not stopped to retrieve the illegal drugs; word on the street was that Adrian Mojica Moreno was the target and that the shooter or shooters did not know that "Macho" was in the same vehicle, but he was just as dead as Moreno. Whoever did this woke up the next morning knowing that he had murdered one of the most beloved sports heroes of Puerto Rico, and that he would be looking over his shoulder for the rest of his life.

It was a real zoo later at "Macho's" funeral wake at San Juan, when two former girlfriends and his sisters got into a brawl at the services. It had started fine, with a large Puerto Rican flag draped over the open casket and a huge video screen behind the casket and floral arrangements on which were shown Camacho's greatest hits of his boxing career. All the former great Puerto Rican boxers came to pay their respects.

But then, Cynthia Castillo, age 28, kissed Héctor as he was in his casket. Castillo, who said she was Camacho's current girlfriend, then walked away from the coffin and to the area reserved for Camacho's family members. Gloria Fernández, age 50 and a previous girlfriend of "Macho," was none too pleased by that gesture, so she got in a fight right there with Castillo. Camacho's sisters, Esther and Estrella, also got involved in the altercation. The fight spilled into an adjacent

hallway and police were called in to break it up. "Macho" was later buried up in the Bronx at the New Saint Raymond's Cemetery.

It had been a bad year on the island and pressure started coming down the line to make some arrests. The previous March, Puerto Rico's police chief quit less than a year after being appointed to lead a department that federal agents have accused of corruption, illegal killings and civil rights violations. Critics throughout the media claimed that Emilio Díaz Colón, a retired National Guard general, did not do enough to combat violence that resulted in the record number of homicides in 2011. And each of the island's 17,000 officers was feeling that pressure to crack down on homicides in general and the Camacho murder in particular.

We got on the trail of two men and arrested them, but forensic evidence cleared the pair and also showed the suspects' impounded car had not been used in the shooting. Then came the worst night of my life; we had received another tip that Camacho and Moreno had, indeed, been selling, but had not been paying their supplier in a prompt manner. Maybe they thought that because of "Macho's" visibility and popularity they could get away with it; we might never know. At any rate, we lined up a raid on a warehouse near the *Azuquita Bar & Grill*. A tip said that the warehouse had drugs inside and was a distribution center for drug runners.

We hit the place about midnight and right away all hell broke loose. I do not remember much, only that some guy in a ski mask opened up with a *MAC-10* – a Military Armament Corporation Model 10 – and at a rate of fire of 1,250 rounds per minute, five 9mm rounds ripped through my leg, two below the knee, one through the knee and one smashing my femur in my thigh. All I remember were the guy's eyes. They didn't blink; they didn't show emotion. They just looked supremely calm, like they could see into the future and knew they were in complete control of events. Then everything went black. It didn't fade to black like in the movies; it slammed to black in an instant.

I guess I was lucky to live through that gunfight – another detective didn't – but the bad news continued and doctors had to amputate my leg about mid-thigh. That took me off the front line force in the counter-drug arena, but my bosses let me move over to a liaison group that works with the Department of Agriculture so I could collect my full pension in a few years. These are the folks you see at the *Luis Muñoz Marín International Airport* at San Juan when you fly out. The United States Department of Agricultural screens all luggage and carry-on bags for flights heading to the United States. Additionally, all international flights with a transfer to the United States mainland must be inspected at the USDA terminals here on the island. However, direct flights from Puerto Rico to a non-U.S. airport are exempt from this inspection. In another area, when there is an incident with cockfighting, that can fall under the USDA domain too.

Chasing roosters – that's how I got on this case. Uncle Esteban would be laughing.

Historians are not in agreement concerning when coffee arrived in Puerto Rico. Some experts opine that the first seedling of Arabica coffee was introduced in the island in early 1700 by a French immigrant, while others postulate coffee's arrival much earlier, believing that its origin dates back to the post Columbus arrival in Puerto Rico. A logical compromise may be that the Spanish may have introduced coffee in Puerto Rico, when they found the perfect climate and soil conditions in the high altitudes of the Cordillera Central mountain regions in the late 1500's. The rich volcanic soil and climate of Puerto Rico's interior proved the perfect place to grow coffee.

For years, the biggest three roasters, *Yaucono*, *Café Rico* and *Café Crema* controlled 70 percent of the coffee production in Puerto Rico. The city of Yauco, located in the mountains in the western half of the island, became famed for its coffee and became known as *El Pueblo del Café*, "The City of Coffee." However, the topography of the island belied this claim; it is mountainous in the center from east to west especially the coffee region, whereas the coastal areas around the perimeter of the island – that includes Yauco – is mostly flat land (and fairly arid near Yauco) where coffee is not cultivated.

It may be more accurate to say that Maricao, Puerto Rico is the heart of the coffee region, along with Lares, Utuado, Jayúya, Adjuntas and Ciales. One of the largest coffee plantations in Maricao was *Hacienda Juanita*. This farm and the town have a history for producing the best coffee of Puerto Rico, which was then exported and coveted worldwide as one of the best by the Vatican, France, Spain and England at the beginning of the 19th century. The *Café Arabica de Puerto Rico* is a bean that's hard and of the best kind with all the qualities necessary to produce the rich aroma and exquisite flavor of true Puerto Rican coffee.

During the late 18th and early 19th centuries, coffee gained in importance and growers saw the need for high altitudes and mountainous terrain to produce the best coffee beans. The city of Utuado gained population as workers, seeking the riches that coffee had to offer, migrated from Puerto Rican coastal towns, Ireland, the Canary Islands and the Balearic Islands of Majorca and Minorca. In the late 19th century, Utuado experienced an explosive economic growth centered on the cultivation of coffee, also known at the time as *oro negro* ("black gold.")

By the 1890s, Utuado was the largest producer of coffee in Puerto Rico. By 1899, this golden era ended with the United States occupation of the island in 1898, which made sugar the new crop of importance instead of coffee. The following year, *Hurricane San Ciriaco* destroyed many of the coffee *haciendas*.

Then *Alto Grande* came on the scene. According to legend, King Louis XIV of France received some Arabica coffee trees as a present. As the climate conditions in Paris were not conducive to

young coffee trees, in the early 1700s Louis ordered that the trees be sent to the island of Martinique, and shortly afterward, in 1737, coffee trees also arrived in Puerto Rico, where they flourished. The brand *Alto Grande* was founded in Puerto Rico in the year 1839, grown and processed at the *Alto Grande Hacienda* in Lares, Puerto Rico.

According to the company, processing *Alto Grande* coffee begins with the careful selection of the finest coffee beans which are used only in that coffee. Grown at an altitude of up to 3,000 feet, the beans require eight days to process. Once the beans are picked, workers take them to the *hacienda* where only fresh ripe coffee cherries that have been picked within the last eight hours are accepted. Other workers place these coffee cherries into a specially designed "float tank." Any coffee cherries that rise to the top are immediately rejected and only coffee cherries that sink have the properties required to become *Alto Grande* coffee. I think it has something to do with specific gravity.

Workers then remove the pulp from each coffee bean and the bean begins a second "float and wash cycle." The coffee beans move from this float and wash cycle to special *reposo* pools, where they are washed every three hours with freshwater, the constant freshwater being critical to the product. The water comes from a well which is over 600 feet deep; it exceeds federal purity standards for bottled water and is never reused.

Once the coffee beans have completed the washing process the drying process begins. Each bean is rotated once every forty five seconds and dried slowly at a precise temperature which duplicates natural sunlight. After drying for a minimum of five days, the ideal coffee bean reaches a moisture content of 12 percent and ensures every *Alto Grande* coffee bean exhibits the same color.

Once dry, every coffee bean, size 17 or larger, is put in parchment to protect it from humidity, while it awaits its turn to be sorted by size and weight. In the 20th century, worldwide coffee bodies declared that three coffees, one from Kenya, one from Hawaii and *Alto Grande* from Puerto Rico had achieved the select status as belonging to the top trio of coffees in the world.

If *Alto Grande* has been declared the king of Puerto Rican coffees, then *Hacienda San Pedro* is certainly at least a grand duke, with many aficionados believing both are equally distinguished. At the end of the 19<sup>th</sup> century, Emeterio Alemán departed Spain and sailed to Puerto Rico. A hard-working young man, he soon became a head butler and then went to work as a foreman of one of the most prestigious coffee plantations in Puerto Rico. Taking an extra job as a teacher of agriculture, he amassed enough money by 1931 to purchase his own small farm in the area of Coabey, outside the town of Jayúya. He named this coffee plantation *Hacienda San Pedro* and it grew from just a few acres at the beginning to 359 acres today – of which 194 are planted with coffee. According to local yore, each morning at dawn, Emeterio would go out on horseback, accompanied by all seven of his sons, to inspect each coffee tree one by one, to which he

assigned a name to each plant. As the plantation expanded, Emeterio's son Albert carried on this tradition as does Roberto Alemán, grandson of the patriarch.

One hundred percent of the plantation's beans are Arabica; it is in the selection of those beans that Roberto sorts the coffee into several grades. *Café La Finca* could be termed table coffee – that which would be perfectly suitable for every day breakfast before heading off to work. A grade higher was the medium roast *AA* coffee, currently selling at the price of \$12 per pound. A dark roast *Espresso* would lead to the cash register displaying \$14 per pound. At the top of the line is their famous *Caracolillo*. Most coffee berries have two halves to the seed inside, but *Caracolillo* has only one, hence the rarity and higher price.

Regardless of the type of bean, they are dried in antique drums that are over a hundred years old. During the critical final hours while the coffee beans are drying, Mr. Alemán spends night after night waiting next to the drums for the exact moment when the coffee beans reach a perfect level of dryness. Coffee aficionados on the island say his ear is so finely tuned that, even while he is asleep, he automatically recognizes the precise pitch that tells him the coffee is dried to perfection.

Despite the many outstanding producers of coffee on the island, coffee production in Puerto Rico in 2013 hit the lowest level ever in the island's history, amid a deep economic crisis. Farmers produced some 80,000 pounds of coffee during the harvest, representing only a third of local consumption; production in previous years had fluctuated between 105,000 pounds and 150,000 pounds. Puerto Rico has been forced to import coffee from Mexico and the Dominican Republic to meet local demand. Other critics say that the demand for Puerto Rico coffee has dwindled because of the damage done by a deceitful practice of the big roasters of selling coffee with a Puerto Rico label, when in fact the content might be coffee mixed with coffee from third world countries and thus, not pure Puerto Rican.

Another major problem is a severe shortage of coffee pickers; the bottom line is that it is hot, difficult physical work. An estimated 35 percent of the crop is lost every year because there is no one willing to pick it, leading to millions of dollars in lost revenue. As people on the island became better educated over the years the last choice may be to work in agriculture. The government tried to draft troubled teens and prison inmates as pickers, but the measures were not considered successful.

Roberto Alemán was feeling the pinch at *Hacienda San Pedro* and now routinely spends a few hours each day picking coffee beans – showing the workers that the job was important enough for the boss to do himself and to urge them to greater effort. His leading by example worked, and the process at the plantation was turning the corner to record profits once again.

Roberto was out in the field early that day; his experienced eye was seeing what beans should be picked at their optimal ripeness. He had noticed a few field mice scurrying around; he would have to speak with the foreman as the profit margin was not so high that they could ignore these little pests. Roberto was standing, left arm extended at roughly the height of his shoulder when it happened.

A shadow moved in the blink of an eye toward him – almost a leap through the air aimed at the round muscle in Roberto's forearm. Inch-long fangs, not deflected by any bones, clamped down on the flesh, skewering the limb. The angle of attack had struck the fattest and presumably the warmest part of his lower arm. Had a hypothetical, dispassionate scientist been standing next to Roberto Alemán, he might now have started a stopwatch on an irreversible ten minute countdown, which would lead to Roberto's ultimate destiny.

Nine minutes, 58 seconds – Roberto felt the grip of what felt like iron tongs followed by a second, confirming grasp, as a mouth tightened to squeeze off the second and larger pulse of venom. The plantation owner blurted, "Cristo, please save me!" He tried to pull his arm away from the mouth of the creature, which only embedded the two fangs deeper into his arm that, in turn, brought more excruciating pain. The creature's mouth had the feeling of a firm handshake from an old uncle who had spent his entire life doing manual labor, and enjoyed displaying his firm grip on his young nephews, tick, tick, tick, tick.

Nine minutes, 30 seconds – Roberto could see the lip shields spreading outwards like wings on the creature's skin, a pair of eyes buried beneath. With no eyelids, the creature was unable to shut its eyes. Roberto could see that the position of his arm relative to the creature's head permitted the downward thrust of its jaws, followed by the instantaneous mandibular clinching, embedding the fangs and rotating them outward, so as to expel even more venom, *tick*, *tick*, *tick*, *tick*.

Nine minutes — Roberto could feel the warm wet blood welling up through his fingers on his right hand as he clutched the wounds reactively, confirming their depth. Unfortunately for him, the forearm is a rich vascular area and one of the creature's two fangs had had directly struck a vein into which the venom now coursed. Roberto could see yellowish drops of venom dribbling down his arm from the bite. The creature had withdrawn its head, hovering over the farmer with a sort of confidence, looking through slitted eyes at what it had achieved with so little effort, *tick*, *tick*, *tick*, *tick*, *tick*.

*Eight minutes, 25 seconds* – Roberto could feel a tense inner pressure in his arm somewhat like the sensation of a fire building deep inside it, the limb suddenly becoming a boiling, overflowing cauldron of searing heat and excruciating pain, *tick, tick, tick, tick, tick.* 

Eight minutes – Roberto felt lightheaded and sensed an initial foreboding that he was going to die at the end of this experience. He sensed that the bite had penetrated at least one vein in his arm. Something was happening to his blood pressure, but he did not know if it was going up or down – simply that it was changing very, very fast. The creature's venom could kill quickly, without recourse to allergic trauma or anaphylactic shock, but Roberto didn't know any of that. He also did not know that the combination of kallikrein and kallikrein-like toxins in the venom were designed to quickly smash the blood pressure of the prey animal, in this case, Roberto, *tick*, *tick*, *tick*, *tick*.

Seven minutes, 40 seconds – Roberto, fighting the pain as best he could, felt dizziness, some trouble breathing, faintness and weakness, numbing of his lips and fingers and a tightness of his throat and accompanying difficulty in swallowing – familiar signposts of an already altering blood distribution, *tick*, *tick*, *tick*, *tick*.

Seven minutes – The fire building in Roberto's arm felt like it was starting to boil over to the rest of his body. His fingers spasmodically shriveled into his palm as though the tendons had been cut completely through with a surgeon's scalpel, *tick*, *tick*, *tick*, *tick*.

Six minutes, 30 seconds – Roberto clutched the puncture wounds once again with his right hand as the two geysers of blood, an indication of the failed clotting mechanism around the wounds, continued to spurt – dammit, an artery must have been punctured. The pins and needles sensation that he had felt in his upper arm were now spreading through his back and chest. Feeling a bit sleepy, he wondered for a moment if he might bleed to death out in this coffee field that had suddenly turned unbearably hot, *tick*, *tick*, *tick*, *tick*.

Six minutes – Roberto noticed that he was sweating profusely and that the creature had not moved for several moments; instead it seemed to be smiling at him confidently as it watched him in distress, *tick*, *tick*, *tick*, *tick*.

Five minutes, 20 seconds – Roberto's stomach heaved and he started to projectile vomit, tick, tick, tick, tick.

Five minutes – Roberto's bowels began to uncontrollably evacuate. A devout Catholic, he tried to summon the names of some saints to come to his rescue, but in his increasing mental confusion, he found that he could not recall their names. He had a sad, fleeting thought that he would certainly be a mess when somebody found him; he hoped it would not be one of his family members, who would locate him in this condition, *tick*, *tick*, *tick*, *tick*.

Four minutes, 32 seconds – Roberto's stomach, now empty, felt as if it was being subjected to ever-increasing jolts of electricity; he experienced paralysis of his chest muscles about this point, tick, tick, tick, tick.

Four minutes – Roberto's jaws and teeth began chattering uncontrollably as he asked himself what he had done to deserve this level of unbearable pain, tick, tick, tick, tick.

Three minutes, 30 seconds – Angioedema caused Robert's throat to become so swollen that he would be unable to make any verbal communications or continue screaming at the top of his lungs, which he had been doing – whether he realized it or not – for the previous six and a half minutes, tick, tick, tick, tick, tick.

Three minutes – Roberto's blood pressure dropped so low that at this point there was probably no reviving him. The world started spinning around in his vision. He stopped screaming. He just wanted this ordeal to end, whatever the outcome, however badly that might be. His legs began to weaken, his knees began to buckle and his body started to slide toward the ground, *tick*, *tick*, *tick*, *tick*.

Two minutes, 15 seconds – Roberto began to experience his first heart attack as he was hunched on his knees on the ground. His eyes became unfocussed and his nose started to bleed, *tick*, *tick*, *tick*.

Two minutes – Roberto's eyes could not detect the sunlight around him and his thoughts began to drift away toward earlier, more pleasant times. At this point, he could not conceive of any effort he might try to attempt to survive this ordeal. Had he cared to look upward – which he did not – he would have seen that the creature was still stationary and still staring down at him, *tick*, *tick*, *tick*, *tick*.

One minute, 30 seconds – Roberto, his tongue now hanging slack out of his mouth, blacked out completely; his breathing was now very shallow, tick, tick, tick, tick.

*One minute* – Roberto's body tumbled to its side and lay motionless next to the coffee plant. Although Roberto could not see it, a man was running toward him wondering what on earth had happened to his boss, *tick*, *tick*, *tick*, *tick*.

30 seconds – Despite the fact that Roberto's friend had reached his side, Roberto felt an overwhelming sense of loneliness and promises unfilled, tick, tick, tick, tick.

Buzzer sounds; time expired – Roberto Alemán stopped breathing. His heart continued to pump for a few seconds, but it finally stopped beating and he died. When his friend, the *hacienda* foreman, looked around, he saw no creature nor any trail showing its previous presence. "Madre de Dios!" All he saw was that his boss was a crumpled mess, that the experience his boss had undergone looked dreadful and that his boss was clearly dead.

### Barrio Quebradillas Barranquitas

Sergeant Antonio Ponce drove up to Barranquitas, a locale in the mountains south of Bayamón that had a population of 24,000 people, to one of the local cockfighting arenas outside of town, where he had an appointment with Willie Colón at 8:00 a.m. in the Barrio Quebradillas section on the outskirts of the town. It was over some stupid rooster, but as Colón had paid a whole lot of money for the bird, it was almost in felony territory, if the bird had been stolen and not just wandered off.

Willie was in a quandary; he knew how much he had paid for the cock, but his wife did not know the extravagant amount that he had shelled out for the rooster and Willie wanted to keep that sensitive – and potentially painful – information on the down low.

After describing his problem to the policeman, and how he would appreciate it if his wife did not get any hint on what he had spent, Willie led Sergeant Ponce to his home and the cages for his fighting cocks. Each cock had his own cage – quite simply to prevent the birds from attacking each other – about two feet by two feet in dimension and some 30 inches tall. Ponce had noticed on the drive in that Willie's house was about a quarter of a mile from the main road and that all the cages were on a small hillock next to Willie's driveway perhaps sixty feet from his house.

The cages sat atop a wooden frame that kept the floor of each cage at least 12 inches off the ground so the birds would not get damp from the ground humidity. They were aligned in six rows, each row with four cages. Passing through each cage in the row was a white PVC pipe of three-quarters of an inch in diameter some one foot above the floor so each bird could jump up and roost on the pipe each night. The chicken wire used for all four walls and the ceiling had rectangular openings that were two inches by three-quarters of an inch, much too small for much of anything live to pass through. The chicken wire on the floor had even smaller quadrangular openings – three-eighths of an inch by one inch.

The chicken wire was nailed to the wooden frame every few inches. On top of the cages was a sheet of plywood or a strip of tin that served as a waterproof roof. These materials had cinder blocks on top of them to prevent any stiff wind from repositioning them. Ponce noticed that under the wooden frame, grass and small plants had grown under each row of cages, probably assisted by the chicken droppings that fell through the chicken wire floor.

Each cage had a chicken wire door on the front about seven inches by seven inches. Each door could be fastened shut and appeared to be bird proof. None of the doors, however, had a lock and any child four years of age or older would figure out how to release a bird after a moment or two.

## Barrio Quebradillas Barranquitas

"This cage is the one that held my rooster, who is no longer here as you can see," explained Willie. Sergeant Ponce examined the cage, noting that there was no water in the small water box attached to the inside of the front chicken wire next to the door; each cage had such a container and all others appeared to have been filled earlier in the morning. The chicken wire door was in place. "Did the cage look like this when you first found it?" asked the police officer.

"Exactly as this, including the portion of chicken wire on the floor that appears to have been pulled up," replied Willie.

Sergeant Ponce studied the cage; it was simple, but effective. "The flooring has indeed been altered, but I believe that it has been pushed in from below the floor, and not pulled up from above. Do you have any dogs?"

"We have two; my wife has a small lap dog and I have a three-legged mutt that weighs about 20 pounds. But neither one has shown any interest in the roosters, as we feed them a couple of times a day so they aren't hungry," Willie explained.

"How about children; do any live here," asked the detective.

"My kids are all grown up; my daughter, her husband and their three sons live in the back with us," Willie replied.

Willie and the policeman went back and interviewed all three little boys, none of whom gave any indication that he was even remotely interested in the birds. Each one had some kind of handheld computer game and seemed to spend his entire time mesmerized by his palm.

Ponce thought for a while and then came up with his tentative conclusions. "I don't think any child did this as it would have been much easier to just open the chicken wire door and sooner or later the cock would have jumped out. A dog might have been interested – probably not your two sterling specimens no doubt direct descendants of wolves – but I have never seen a dog try and push something open; it would have tried to pulled something apart with its teeth, and to do that in this case, the dog would have had to have been inside a cage pulling upward on the bottom chicken wire."

Ponce was enjoying himself; he liked these guys from the interior of the island who did not think of themselves as the high and the mighty. Ponce continued, offering, "The cock did not do this by himself. And I cannot figure out why an adult person would have laid in chicken crap to push up the chicken wire on the floor. And therefore, my conclusion – after considerable deliberation – is that I do not know what happened at this point."

"It is a mystery to me too, and my friend Ray called me last night saying two nights ago, he had a cock disappear as well," Willie offered.

## Barrio Quebradillas Barranquitas

"Does Ray live near here; maybe the circumstances are similar," the policeman said aloud to himself.

"No, Ray lives over between Caguas and Bayamón in the mountains by Aguas Buenas," blurted Willie, finishing the detective's thought for him.

Ponce had a bad thought that he might end up his police days chasing roosters all over the island, as in some mad dream about cockfighting combined in a macabre form of *Ground Hog Day*, and was debating whether or not to drive to see this Ray fellow. However, before he could fully contemplate that, at 9:30 a.m., he received a cellphone call from his office; "Sergeant Ponce, get to a place where you can talk freely; we have a problem."

Ponce ended the conversation with Willie Colón, thanked him, and informed Willie he would get back with him when he had additional information. The detective then drove to the nearby Barranquitas police station and got on a secure ground telephone line at about 10:00 a.m. He didn't want somebody intercepting a cell phone call.

The voice on the other end of the line at his office said that some coffee plantation owner had died a few hours earlier and that it might have involved a fatal bite from an animal. Ponce was to drive to Jayúya, see the medical officer and find out what happened. The incident had "gone viral" with respect to who knew about it; the head of the entire United States Department of Agriculture in Puerto Rico had been personally called and had issued his first edict – henceforth all communications about the incident would be done face-to-face with no email traffic, texts, and no telephone conversations without his prior permission.

The USDA chief of the Veterinary Services Division had been informed that Sergeant Antonio Ponce would be the lead man on the case. The chief said he wanted to speak to the sergeant face-to-face in his office in Hato Rey at 5:00 p.m. that same day.

Antonio Ponce was burning daylight as he drove out of Barranquitas toward Jayúya, but the narrow winding mountain road to that town invited disaster at speeds much above 30 miles an hour. Thank goodness, he was on the edge of the *Ruta de la Longaniza* (The Longaniza Trail) that stretched along Routes 156 and 155 between the mountain towns of Barranquitas, Orocovis and Morovis. The area had one sausage restaurant after another; he once counted 27 different Puerto Rican sausage dishes from pork with *annatto* to beef to chicken varieties. Three of the 16 restaurants along the trail offered fresh, raw *Longaniza* to take home and cook, so when Antonio was told the day before of his trip to Barranquitas, he gladly stowed his ice chest in his car. As he had learned in the Army – one never knew when the next meal would be, so every day was a good day to stock up.

# Jayúya

Dr. Raphael Russo served as the medical officer for Jayúya. Most days, he had nothing to do, which is exactly the way he liked it. Almost all people in this mountain coffee town died of old age or obvious diseases such as cancer or coronary malfunctions. Often, no autopsy was required, which was also exactly the way Dr. Russo liked it.

If a relative did not ask for an autopsy, or if the cause of death was not so mysterious it warranted a second look, then Dr. Russo did not conduct an examination. That was good, because Dr. Russo did not like asking questions.

In fact, a lot of people in Jayúya did not like to ask questions. On October 30, 1950, the town was the setting of the "Jayúya Uprising," in which Puerto Rican Nationalists began a revolt against the Government of the United States. Led by Blanca Canales, a social worker, and her cousins, Elio and Doris Torresola, a group of revolutionaries assembled at the town square, during which a speech proclaimed Puerto Rico to be an independent republic.

Rebels later attacked the police station, cut telephone lines and burned the U.S. post office to the ground. During the ensuing fighting, one police officer was killed and three others were wounded before the station surrendered to the rebels.

The rebel group held the town for three days, raising the Puerto Rican flag, until Jayúya was bombed and strafed by U.S. P-47 *Thunderbolt* fighter-bombers with .50-caliber machineguns, five-inch rockets and 500-pound bombs, in support of a ground attack by the Puerto Rican National Guard, after President Harry Truman declared martial law and ordered the U.S. Army and Air Force to restore order. Although much of the town was destroyed in the fighting, news of the bombing was not widely reported outside of Puerto Rico. A few reports, calling it "an incident between Puerto Ricans," appeared in the media on the mainland, a story supported by President Truman.

At a similar uprising in nearby Utuado, after the Nationalists finally surrendered, five were escorted behind the police station and machine-gunned without trial in what became known on the island as "The Utuado Massacre."

At 9:00 a.m., an ambulance brought the body of Roberto Alemán to the small Jayúya morgue and Dr. Russo was called. He arrived about 20 minutes later and one look at the body told the pathologist that today was going to be a very bad day, a very bad day indeed. After making his initial inspection of the exterior of the corpse, he called and asked to speak to the duty officer at the Institute of Forensic Sciences of Puerto Rico. He told the duty officer who he was and what he had seen, at which point the duty officer told him to cease his own investigation and send the body immediately to the Institute for the official autopsy; Dr. Russo was to declare the cause of

death "unknown" at this point on his forms, and to refrain from offering any further opinion to any source concerning this matter.

Sergeant Antonio Ponce arrived at the morgue at Jayúya at 11:00 a.m. He interviewed an obviously jittery Dr. Russo, who told him that an ambulance bearing Roberto Alemán had left the mountain city an hour earlier bound for San Juan. The ban on electronic communications was already making an adverse impact on the case, not that anyone up the line cared how difficult it might be for the lead detective.

At this point, the single most-important piece of evidence on this case was the body of the deceased, and already the Puerto Rican government was flexing its muscle in moving the local pathologist aside, so that the Institute boys could put their stamp of approval on whatever verdict there might finally be concerning the cause of death for the unfortunate coffee magnate.

Sergeant Ponce turned his car around and headed east toward San Juan. Dr. Russo quickly closed the morgue, closed his office and drove over to the *Triple G Bar & Grill*, where he ordered his first shot of the day of *PitoRico pitorro* rum, distilled in and previously bootlegged from Jayúya. Deep down, Dr. Russo figured it would be better to get hammered in this little out-of-the-way watering hole than possibly say anything he shouldn't to any other persons inquiring about the recent mysterious death of Roberto Alemán.



The Institute of Forensic Sciences of Puerto Rico offered expert and scientific services in cases related to the commission of a crime. Over the course of a year, personnel of the Institute would conduct about 3,600 autopsies, analyze 5,280 firearms and investigate 3,744 toxicology cases.

Part of the Institute of Forensic Sciences held a restricted section, usually reserved for high-profile cases. Sergeant Ponce knew several technicians there from his previous days in counterdrug operations – they supported evidence-collection at 6,000 of those cases per year as well. Although he was off the Camacho case after Ponce's nearly fatal leg wounds, he had a good hunch that much of the "Macho" case evidence in the form of the body and the bullets found in it probably were examined at this location, as the Camacho crime was the classic definition of a high-profile case – a really high-profile case.

The Jayúya case just smelled as though it was headed in the same direction, pardon the pun. Ponce arrived at the Institute at 1:30 p.m. and already the autopsy of Roberto Alemán was in progress. The police sergeant limped up to the administration desk, showed his badge and informed the receptionist that he had been assigned to the Jayúya case by the boys up at Hato Rey and he had just spent the entire morning bouncing around the interior of the island between Barranquitas and Jayúya and now back to civilization in Rio Piedras, and it would sure help him out if he could just sit in a chair in the corner of the examination room, where the autopsy was being conducted, to take the weight off his prosthetic leg, maybe the pain would go away and he wouldn't have to ask too many stupid questions afterward.

The receptionist liked Sergeant Antonio Ponce – everybody who knew him did – and she walked him in to the third examination room where the autopsy in which he was interested was being conducted. She nodded toward the attending pathologist, indicating that the limping visitor was authorized to be present at the proceeding; she could see that the physician had a small tape recorder hooked to his belt and was speaking in a regular voice into a lapel microphone attached to his apron that was already soiled with dried blood. The doc was examining the left arm of the deceased and from his perch in the corner, Sergeant Ponce had a good view of the fatal wounds; the two ugly punctures appeared to be a couple of inches apart and dried blood had formed around the wounded area on the deceased's arm.

During the rest of the autopsy, the pathologist cut open the body and examined the organs, using terminology that was above the detective's comprehension. The detective also observed the doc as he also took bodily fluids from various organs. Unlike dozens and dozens of other—perhaps over one hundred—autopsies that Sergeant Ponce attended, the pathologist kept consulting a scientific text as if he was seeing new things or following some procedures of which he was previously unfamiliar.

Ponce craned his neck to view illustrations in the text, but thought better than to leave his seat to move closer for a better look. There was never a need to interrupt a professional doing his work. Antonio crunched a few *Aleve* capsules between his teeth to dull the pain in his leg; the remaining stump was still pretty tender and Ponce wondered if the prosthesis might not be an exact fit; he would have to consult with the orthopedic surgeon next week if he got a chance.

The young pathologist finally finished his work in about an hour, taking more samples, and turned off the tape recorder. As he washed up, he spoke to Sergeant Ponce for the first time, "I see that you have become involved in our interesting death here."

Ponce nodded; he and the forensic doctor had worked together before on several cases, always with excellent results. "OK, doc, what do we have here; what killed this guy?"

"Technically, his heart stopped. He clearly had a heart attack, maybe two if we take each major artery and vein as separate categories; although the two events probably came so close together that we would be on firm ground in saying that it was just one major, massive attack. I believe that the victim died within ten minutes of that event," the physician opined. "But you and I have been around the barn enough times to know that neither of us would be wasting our time here on a simple heart attack involving an average *Puertorriqueño*. This brings us to his forearm."

The men walked back over to the table and looked at the wound. "The two punctures went about one inch deep through all layers of skin and into the muscles of the deceased's left forearm," said the pathologist. "The two wounds would not have been fatal in and of themselves had they been made by a nail; in fact, normally, by applying pressure to the wounds, the blood flow would have been stopped fairly quickly and after receiving a tetanus shot and bandaging the wound the patient could have returned to light work," the pathologist further explained.

"Which still would not explain why we are here, which has taken me away from driving all over the island examining cock fighting roosters," Sergeant Ponce responded with a smile. "What could have caused those two punctures, doctor? If we can answer that, then we can solve how this man really died and why we are here."

"Antonio, as always, you can cut right to the heart of the matter, pardon the pun; you should have been a pathologist yourself. The blood and tissue work may assist us; we ought to know in no more than a day if there is anything unusual. Right now, I am calling the puncture wounds *aberrations*. That is, they occurred shortly before death, but at this point we do not know how they factored in the exact cause of death."

"Doc, have you ever seen a snake out in the wild? Well I have. Back when I was young and stupid – unlike today when I am just no longer young – I was beating the bushes in Vietnam in the  $2^{nd}$  Battalion of the  $503^{rd}$  Infantry Regiment in the  $173^{rd}$  Infantry Brigade. There were snakes

all over. We used to call them 'Jake No-Shoulders' and Jake the Snake,' and some of them were really bad news. Over there, the one thing that scared you the most was thinking that some night or early morning, before it got really light, you were going to find yourself in your foxhole and that sometime during the night 'Jake' climbed in there with you to get warm. Well, sometimes 'Jake' wasn't interested in getting warm and he just wanted to bite somebody. Now, none of these snakes actually wanted to eat a man because although the snakes could get pretty large, none was large enough to make a meal of you."

"I remember the Banded Krait, which was just a little skinny guy not more than four feet long or so, but we called him the 'two-step snake,' in the belief that his venom was so lethal that if he bit you, you would fall dead after taking just two steps. Of course, that was probably a slight exaggeration, but I read up on them after I got home from the war and found that the bite of the krait is astonishingly potent and can actually kill a man. The venom of the Banded Krait is a neurotoxin, which – and correct me if I'm wrong, doc – means that it disables the victim's nervous system, like yanking an electrical plug out of the socket, which shuts down all your appliances. Death comes when those neurotransmissions cease because with no instructions to breathe, the muscles of the diaphragm stop working and the victim asphyxiates."

"Then we had the King Cobra. Oh, man, that bad boy could get really big, over 12 feet long, and it loved to eat rats and rats were all over 'Nam so you could never tell where this snake would pop up next. A bunker full of U.S. troops was rat heaven, because we used to throw out the parts of C-Rations we didn't want to eat and the rats thought that was Thanksgiving. The thing was, if you disturbed a King Cobra eating a rat, the snake would often try to bite you instead."

"Supposedly these snakes traveled in pairs, mated for life and would seek revenge if you killed its mate, so if you shot the snake in a bunker and did not get the other one, you were always looking over your shoulder to see if the other one was coming after your ass. You could tell when a guy walking point on patrol or searching a hut in a village ran into a King Cobra, when you heard him put his M-16 rifle on *rock and roll* and empty the whole 30-round magazine full-auto in its general direction!"

"Then there was the Russell's Viper..."

"Stop, *Padrino*, Stop! I know all about snakes with neurotoxic venom and snakes with hemotoxic venom that disrupts blood clotting, destroys red blood cells and causes organ degeneration, in addition to really damaging the tissue around the site of the wound – sometimes so badly that an amputation has to occur! And let me tell you, the boys up in Hato Rey know all of that too and right now they are shitting bricks. And you know how that rolls downhill. So let me tell you what they have told me so far, and I'm begging you – never say anything about this to anyone, and for God's sake, don't tell anyone I told you any of this!"

Antonio Ponce shut up. He could see the fear in the pathologist's eyes, and he could sense that just like in the Camacho case, a lot of innocent guys, doing their best to solve a case, were going to get burned in the process.

"We found out about *Señor* Alemán earlier this morning when the staff duty officer received a call from the medical officer in Jayúya. The doctor there described the body, the condition of the deceased's arm and you could tell that this old doctor was scared to death. He was almost begging us to take the remains and do the autopsy ourselves. So we said, 'what the hell, we'll help the old doc out.' The duty officer subsequently informed me that the body would arrive in a couple of hours and some little memory went off in my mind that an incident of this type might be covered in our special protocol book that is locked up in the safe precisely to handle sensitive situations. As the chief pathologist, I opened the book – there are only two or three people who have access to it here at the Institute – and sure enough there was a whole section on possible venomous snakebites."

"Antonio, let me tell you, the protocols involved in this incident – and from now on I am not going to use the terms *poisonous snake* or *snakebite* – make the Camacho case look like some low level street-dealer punk in the *La Perla* slum in Old San Juan. So, I call the number the protocol says to call in Hato Rey and I tell them I have a possible **33**. The damned protocol sheet tells me I can only use this term and cannot say or communicate in any way the words *poisonous snake* or *snakebite*, I can only say it is a possible **33**. The guy I'm talking to tells me to follow the protocol and emphasizes to only use permissible medical terms on the examination forms that are allowed by the protocol. He tells me that the name of the deceased is to be listed as 'John Doe.'"

"Then it **really** gets scary, Antonio. The guy tells me that I am not allowed to call any federal level agency for any assistance on the case. I cannot contact anyone from the Center for Disease Control – the CDC – in Atlanta, Georgia. I cannot contact the National Institutes of Health – NIH. NIH is made up of 27 Institutes and Centers, each with a specific research agenda, often focusing on particular diseases or body systems, and I am not allowed to contact any of them. I cannot contact any of the 6,000 scientists who conduct basic and clinical research on NIH campuses across the country, as part of their Intramural Research Program."

"I cannot contact the famous Loma Linda University Medical Center in California. I cannot contact any of the three vaunted Mayo Clinics. I cannot contact the Virginia Poison Center at Virginia Commonwealth University at Richmond, Virginia. I cannot speak with the Miami-Dade Fire Rescue Venom Response Program, the famous *Venom One*. And remember those boys have access to 25 different antidotes that can treat venomous snakebites from approximately 95 percent of the world's snake population and could tell us what this is in an instant. The list of whom I cannot call is long and distinguished, all in the name of secrecy. The

samples I sent to the lab for analysis all have phony labels that state that the tissue came from an unnamed man over in Costa Rica and that this is a training exercise for the lab."

"When the lab determines the results, they are to walk them over to me, and after I look at them, I am to personally take them up to Hato Rey and brief the results. I can make no copies of the test-result forms and I have to ensure that the lab has kept no copies of the test results for their files. If anyone from the media asks me anything about the incident, I am to deny everything. And finally, I am supposed to discuss this case with authorized officials only face-to-face and not to use telephonic devices, texting, emails, fax, Tweet or put it on *Facebook*!"

The two men got a needed laugh at the last prohibition. The pathologist continued, "I suspect that you will be told to report to Hato Rey after you leave here if you have not been told that already. I do not know what your instructions will be; I would only ask that you say that when you stopped by to see me, I told you that the only thing I could be certain of was that the deceased's heart had stopped, causing death, that this action was likely caused by one or more heart attacks in rapid succession and that I am awaiting toxicology results from the lab and will personally deliver them to Hato Rey when I get them."

"OK, I have that; thanks for sharing your suspicions so far and for filling me in on the protocols. I will keep you informed – by personal conversation only and not on *Facebook* – of what I find and what they tell me up in Hato Rey. But why all the secrecy, do you think, about one guy dying in this manner?" finished Sergeant Ponce.

"Because," the pathologist answered, "they are in denial. The official party line for the last 400 years has been that there are no poisonous snakes on the island and therefore, now there cannot be any poisonous snakes on the island. As you know, we do have snakes. For example, the Toro Negro Forest is home to 11 species of snakes, all non-venomous. The Puerto Rican Boa grows 6 to 7 feet in length and weighs about 2 pounds. This heavy-bodied snake has tan to dark brown body color and dark blotches down his back."

"While it will defend with a bite, it kills prey by squeezing the air and life out of its victim like all constrictors. It is a nocturnal snake that hides under camouflage during the day and comes out to hunt at night, and is a protected species due to over-harvesting to collect oil and skins. The Puerto Rican Racer grows to 3 feet. Its body is a solid brown with each scale edged by a darker brown. Like Toro Negro's various garden snakes, it is a daytime hunter. The forest also features blind snakes that spend nearly their entire lives underground but do sometimes take cover under rotting trees. They don't bite; in fact, they have no teeth."

"For someone to have been bitten – and worse yet killed – by a poisonous snake would make the proposition that we have no venomous snakes untenable. Puerto Rico is at a tipping point, Antonio. Concerning tourism, the *Frommer's Travel Guide Puerto Rico* says that the island is

only the size of Connecticut, but pulsates with more life than any other island in the Caribbean. It is blessed with pristine sandy beaches, rain forests, towering mountains, wonderful food, the best coffee and rum in the world, fabulous music and a vibrant, diversified culture. It is a port of call for every important cruise ship in the Caribbean. We **own** the *Piña Colada* for goodness sake!"

"As you know, since Puerto Rico is considered a U.S. territory, U.S. citizens can travel to and from the island without a passport or travel visa. U.S. currency is also accepted, so you don't have to worry about exchanging your money before you travel. In fact, more people visit Puerto Rico every year as tourists than live here as residents. Tourism is a huge part of the island's Gross Domestic Product and probably hundreds of thousands of people here have some economic benefit from tourism, from restaurants to charter boat fishing captains to coffee plantations to hotels."

"Palmas del Mar, on the coast near Humacao, is as luxurious as any resort in the Caribbean as is El Conquistador, the Waldorf Astoria Resort west of Fajardo. Even Donald Trump, 'The Donald,' has dumped a bucket load of money into his Trump International Golf Club & Residences at Río Grande."

"But there is a gray cloud on the horizon and that cloud is named *Cuba*. The really big money men in Puerto Rico believed that when the Castro brothers depart this good earth, Cuba will turn in one of two directions. Fidel died, but Raúl didn't. One – and the money men pray for this with all their black hearts – will be that Cuba goes further into the communist quagmire, unsupportable for significant tourism."

"The other direction, according to the money men, would be for Cuba to open up and become its own mega tourism destination for not only North Americans, but for well-to-do people from around the world. Cuba is closer to the United States and easier to get to; it has more beaches, a similar climate and it will have the lure of the unknown. If Cuba supplants Puerto Rico as a primary Caribbean tourist destination, the big investors are going to take such a bath on their investments here that it will make the Great Stock Market Crash of 1929 look like a slight market correction."

"No one knows when the day of decision will come for Cuba, or what their path to the future will be, but a public panic – and make **no** mistake, it would become a panic – across Puerto Rico concerning poisonous snakes would be a disaster to our tourism industry. Antonio, 'Jake No-Shoulders,' 'Jake the Snake', 'Jake Two-Step' and King Cobras seeking revenge can only cause an economic collapse and a run to sell-off real estate and other tourism-related assets for pennies on the dollar that truly could reach *tsunami* proportions. So they must deny and keep denying anything that could adversely affect tourism – such as the presence of poisonous snakes on our little island."

Antonio nodded his head. "Well, you know the old saying, doc: you can't get rich in Puerto Rico by working. Keep developing your report and I'll try and buy us some time with the boys over in Hato Rey."



El Conquistador

The U.S. Department of Agriculture Animal and Plant Health Inspection Service (APHIS) in Puerto Rico has, as one of its major missions, to grant clearance procedures for aircraft, baggage, cargo, mail, and vessels, and the movement of regulated items from Puerto Rico and the U.S. Virgin Islands to the United States and its territories. On the other hand, there are no restrictions on the movement in either direction between Puerto Rico and the U.S. Virgin Islands.

The Code of Federal Regulations (CFRs) provides the authority for the regulatory action taken and are enforced by Customs and Border Protection (CPB) and the Plant Protection and Quarantine officers (PPQ.) USDA in Puerto Rico also conducts inspections of food processing facilities. Enabling legislation provides the authority to carry out the mission of protecting American agriculture from plant pests. Legislative acts are the fundamental authority granted by Congress to the Secretary of Agriculture to promulgate regulations to protect American agriculture.

The regulatory authority for taking the actions listed in their service manual is contained in the Plant Protection Act (PPA.) The PPQ provides the authority to prohibit or restrict imports, exports, or interstate movement of plants pests, plants, plant products, noxious weeds, biological control agents, and means of conveyance. To accomplish this, the U.S. Department of Agriculture follows the document *Puerto Rico and the U.S. Virgin Islands Regulation and Clearance from Puerto Rico and the U.S. Virgin Islands to Other Parts of the United States*.

Within the USDA in Puerto Rico is the Veterinary Services Division, headquartered at Suite 700, 654 Muñoz Rivera Avenue in Hato Rey, in the IBM building, part of the financial district of Puerto Rico. It has sub-offices at the *Luis Muñoz Marín International Airport*, Carolina, PR; *Rafael Hernández International Airport*, Aguadilla, PR; *Henry E. Rohlsen International Airport*, St. Croix, USVI; *Cyril E. King International Airport*, St. Thomas, USVI; *San Juan Maritime Port*, San Juan, PR; *Mayagüez Maritime Port*, Mayagüez, PR; *St. Croix Maritime Port*, St. Croix, USVI; and *St. Thomas Maritime Port*, St. Thomas, USVI.

The mission of the division is "to protect animal and public health. Our safeguarding activities include monitoring and surveillance for domestic animal diseases. Our safeguarding activities include educating Puerto Rico's and United States Virgin Islands' citizens about animal health issues which stimulate and strengthen our objectives through partnering. We also investigate and respond to emerging and foreign animal diseases, which contribute to the protection of the national animal herd, as well as enhance the marketability of our animals and products for export with our international trading partners."

Sergeant Ponce reviewed the dominoes in his hand. The key to this popular Latin American game, so beloved in Puerto Rico, is to understand that it is not a luck-driven contest, even when

it appears to be so. Yes, there is some good fortune as the tiles each player receives in the original draw, but from that point on, experience, and knowledge, will determine the final winner. The fact that experienced players can wipe out casual players with ease confirms that *Dominoes* is a game of skill.

*Dominoes* are played by two teams against each other; each team has two players. The game is a contest of imperfect information. Each player does not know which tiles other players have, as they are picked face down. You cannot talk with your partner, or give him facial or other hidden signals which might indicate what dominoes are in your hand or what strategy your partner should take. So how do you tell your partner about which numbers to play and in what order?

First, you must know what numbers you have in your own seven-domino hand. A complete set of double six dominoes has 28 domino tiles with a value of 168 points in total. This number provides some interesting and valuable information. If you divide 168 by 28, you get 6. That's the average number of points for a single tile. Note that it is not 7 (as anybody might think because 7 is the most probable roll when throwing two dice), because dominoes include combinations with a 0.

Additionally, divide 168 by 4, and you get 42. This is the average point count for the initial hand of 7 tiles. At the beginning of the round, count the points of your hand. Every hand will range between 15 (the lowest possible hand) and 69 (the highest possible hand.) If the hand is a great deal more than 42 points, then you have what is known as a *high hand* and points will be an issue during the round.

If it is far less than 42, then you have a *low hand* and good possibilities of winning a blocked game, which is the result at some point where no one can play all his tiles. A blocked game can often be a positive result as most *Dominoes* contests run as a series of games, where both teams start at 500 and then subtract points remaining in the hands of their opponents at the end of each game, until one team reaches 0 and is declared the winner.

What did old Sergeant Ponce have in his hand, he asked himself? It was a dismal offering. He knew that this case would be of the greatest interest to his superiors; he would be a pawn in this enterprise. Undoubtedly, they would hold over his head the pension that would be his in just a few years, if he did not play ball.

He knew how that worked. They were hamstringing him in the communications' arena, if the pathologist's interpretation was correct. He could not go back to seek help from his old comrades in counter-drug, local police officials or even the FBI. He would have to find the experts that might have the keys to solving this problem in the private sector, and in some cases, these "fringe" unofficial experts might be right on the edge of the legal-illegal world themselves.

However, the boys over at Hato Rey had made a key error. In their haste to limit who knew about this incident and who would know in the future about the situation, they made the decision to keep the circle of those in the know extremely small. That meant that up the line, they would be dependent on what the pathologist told them and what he, the detective, told them, unless there was some other conduit of information that for now he was unaware. For secrecy's sake, they probably did not have that many additional fact-finders. Keeping the decision-making team at Hato Rey small also meant that they had no mechanism to question their assumptions – no outside neutral observers saying, "Hey, wait a minute, that fact or assumption is just plain incorrect or OBE – overtaken by events."

The boys at headquarters, because they were trained up in the States, knew the latest technology and procedures, but they did not understand that in Puerto Rico, you could never assume that subordinate players did not know each other on a personal level. *Padrino* meant "Godfather" and not from a Mario Puzo novel describing the head of an organized crime family that dispensed favors and who at some later date would demand to be repaid for those dispensations.

In Puerto Rico, a Godfather was just the opposite; he was there to keep the growing child on the straight and narrow – getting to church, doing his studies, staying away from gangs and most importantly on the island, keeping away from drugs, which would poison a kid's life in so many ways and often lead to a terrible early death.

Sergeant Antonio Ponce had been the Godfather of the now chief pathologist at the Institute of Forensic Sciences of Puerto Rico since the lad had been in diapers. The boys in Hato Rey assumed that the pathologist and the detective would not trust each other and thus would not share information, because they assumed that the men were not related. That relationship must be kept secret from them.

He also knew that for the boys in Hato Rey to "win" (which in bureaucratic terms meant that they would successfully cover their asses), the entire circumstance surrounding the death of Roberto Alemán – if his hunch on what caused it was correct – had to be kept secret. It would not be an issue for the boys in Hato Rey to shift the blame for what had occurred to someone else – not that they wouldn't try, if that's what it took; they had to ensure that no blame was ever discovered at all – that the situation of the last 400 years remained unchanged – no poisonous snakes in Puerto Rico.

It was going to be difficult to win this game of *Dominoes* concerning the dead man from Jayúya, but he might be able to successfully achieve a block. The boys at Hato Rey might have the *high hands*, but unknown to them, the *Padrino* would know exactly what was in his partner's hand.



However, it was Antonio Ponce who needed to question his assumptions after meeting the senior veterinarian of the Veterinary Services Division, Dr. Jonathan Dailey, later in the day. "Welcome, Sergeant Ponce; I have heard and read a lot about you, especially when my staff advised me last year to bring you on board our organization. I had no problem with your qualifications, but I worried that with your experiences you might find our area of responsibility – shall we say – a little boring. However, God works in mysterious ways and if this situation goes as I fear, you may become the savior of Puerto Rico!"

For the next 15 minutes – with Ponce remaining silent the entire time – Dr. Dailey, who was the only person in the room other than Ponce, reviewed the facts as he knew them: sudden death at a coffee plantation near Jayúya...strange marks on the arm of the deceased...awaiting toxicology report from lab whose technicians believed the incident to be a training exercise concerning a deceased in Costa Rica...possible venomous snakebite...from here on out the incident will be classified as 33 with no use of snake-related terms...no other federal, state or local government agency to be made aware of the situation at this time...no electronic communications to discuss any aspects of the situation – all discussions would be done face-to-face.

"Now, Sergeant Ponce, fill me in on any additional facts of which you are aware and tell me what we need to do to fix this problem."

Ponce spoke in measured terms. "I have no additional facts. Here is what we must do as I see it. I must go to where the man died, look at the scene and interview any co-workers that may have additional information. If they do, I will ensure that I brief you quickly on the results, but I must have freedom of movement and not be at your beck and call in Hato Rey every day."

"We can make a decision on how to proceed after that visit to the coffee plantation. I will also be discreet, but I must get smart on the animals, shall we say, involved in a **33** incident. I will order some books and search for some subject matter experts that I can speak with on the mainland – very discreetly."

"I will need an expense account for all that and I will need a cover story. May I suggest this one, Dr. Dailey? A well-connected businessman in Puerto Rico – his name I am not at liberty to release – went whoring and drugging on a business trip to Costa Rica. He supposedly died in a tragic accident there. We are not so sure it was an accident, but the high visibility of the deceased means that we must be extremely discreet in our pursuit of the facts."

"That sounds perfect, Sergeant Ponce. And then, if you find an animal that fits with our **33** scenario near the coffee plantation, you will kill it and dispose of the body."

"No sir," said the detective respectfully. "That must be a carefully planned operation. It would do us no good to kill anything and have dozens of workers see what happened and worse still,

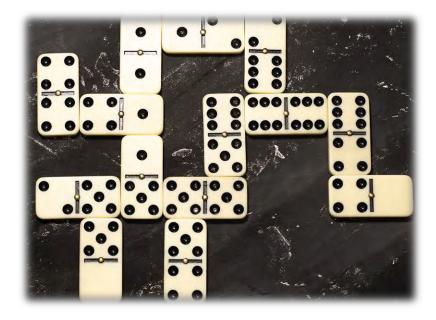
view the dead body of the **33**. Everybody has a cell phone with a camera these days, and a very bad picture could "go viral" as they say in a matter of minutes. Yes, we must dispose of this **33**, but in a manner and time of our own choosing, assuming even that we can locate it. Ideally, we would also find out how it got there and who might be responsible for it being in the island in the first place."

"Yes, detective, you are quite right. We do not want a picture of this thing on the front page of the *San Juan Star*. It is time you began your work; not a minute can be wasted. Go to the coffee plantation and see what you can find, and get back to me within 72 hours."



Sergeant Antonio Ponce drove home to his small apartment in Minillas, a district of San Juan. He lived in a modest apartment a block off the *Avenida De Diego* and the Museum of Art (*Museo de Arte de Puerto Rico*.) Then he walked over to a small coffee shop and had an *Espresso*, sitting at a tiny table along the sidewalk. He had to sharply focus his mind.

Tonight he would start searching the Internet for sources he could consult that might help him understand what he was up against. Much of the information on the Internet was total junk, but it was an excellent tool for finding experts to consult and the titles of books he needed to read. Ponce was at the stage now of trying to understand the nature of the problem – what do we know and what do we not know? He would hit the road tomorrow morning, but fortified with some caffeine, tonight he would surf the ether.



## The Zoo

The following morning, armed with the information he had gained at Rio Piedras, Hato Rey and the Internet, Sergeant Ponce drove to Mayagüez, on the west coast of the island, to the *Dr. Juan A. Rivero Zoo*. There he met Professor Urayoán Guailí, a biologist who also worked at the wildlife park. Guailí was one of those modern biologists that had graduated from the University of Puerto Rico at Mayagüez. In his early 30s, he looked like he had lifted enough weights in the gym to move the zoo's pet rhinoceros from one end of its outdoor pen to the other without breaking a sweat.

"Puerto Rico has no poisonous snakes," Professor Guailí explained. "We never did as we were an island and therefore landward migration of these species to here from Central and South America never occurred. That is not to say that we do not have dangerous reptiles on the island. I know a gem dealer in the tourist area of Old San Juan, where the cruise liners dock, and he showed me a picture of his wife at an apartment in Carolina looking at a boa constrictor that had been brought in from Colombia as a pet; it was probably ten feet long."

"Jesús, María y José! (Jesus, Mary and Joseph,)" Ponce let loose. "That last one would surely count as a dangerous reptile!"

"Certainly," added the professor. "A constrictor that size could kill a child. The young man also mentioned that a friend of his – a landscaper – may have seen a cobra. He also added that he was once offered a rattlesnake at a \$2,000 asking price. He mentioned a pet store owner in Carolina as being a "go-to" guy for extra-legal reptile purchases, but I could not get any additional information out of him. In February 2005, a man in Naranjito was bitten by his pet rattlesnake. He suffered terrible pain and almost died at the Diagnostic and Treatment Center there. The antivenom that finally saved him was sent from Florida."

"I also know that police have seized rattlesnakes in some of the housing projects where drugs are being trafficked; it sounded as though the reptiles were used as primitive watchdogs. A snake of course cannot truly serve in that role, but it can serve as a deterrent to nosy neighbors just by the thought that one might be in an apartment or storage shed; most sane people head quickly in the other direction when they hear the rattle of a rattlesnake."

"Some of my other investigations have found Caymans – any tropical American crocodilian of the genus Caiman and related genera, similar to alligators, but with a more heavily armored belly, narrower snouts and even more aggressive behavior – some five to seven feet long, Red-Tailed Boas that I mentioned before, Reticulated Pythons, Anacondas, Burmese Pythons and even one King Cobra here on the island. I know in the case of one poisonous snake that was captured by Puerto Rican authorities resulted in its owner being fined \$25,000. Would you like to see our serpentarium?"

Sergeant Ponce did, although the mere mention of a King Cobra gave him bad memories, and the two men began walking toward the most distant part of the zoo, mostly uphill. Ponce's injured leg was killing him and he asked to pause frequently during the seemingly endless hike.

"It almost seems as though the zoo desires that this reptile house be a real pain to see – almost like 'we have to have one, but we hope not many of you visitors will see it," offered the policeman.

"I have often felt the same way," the professor answered. "Once we tour the inside of the Serpentarium, see if any other conclusions you may have match mine."

The building was small and cool, but certainly not cold. Inside, one exhibit held a Bearded Dragon and a Blue Tongue Skink. A second glass enclosure hosted a small boa constrictor and a Red Footed Tortoise, while next door was a single Reticulated Python that appeared to be about ten feet long and was probably an albino. A Puerto Rican Slider Turtle had his own home next door, as did a Nile Monitor.

Finally, a Puerto Rican Giant Anole, which was a harmless lizard, lived in splendor in a single exhibit as did the endangered species Puerto Rican Boa Constrictor. The information plate on the front stated that the natural range of this reptile was between the towns of Aguadilla and Bayamón. Finally, the infrequent visitors to the serpentarium could see the vaunted Puerto Rican Crested Toad and the Giant Marine Toad, both guaranteed to scare the daylights out of any child less than three years old.

"So what did you notice, Sergeant Ponce?"

"There were no poisonous snakes in there," answered the astute policeman.

"Yes, you are exactly correct. Let me fill you in on a little secret. Our policy concerning the serpentarium is to never house an animal – read poisonous snake – that could pose a threat to anyone, if it were to somehow escape from the zoo to the island at large. And let me offer another observation. Clearly, the zoo would be one of the first points of contact for anyone seeking more information on all kinds of animals to include those that inhabit Puerto Rico and those that do not."

"The fact that you are here is testimony to that concept. We have in the past received calls asking about poisonous snakebites here on the island and we have a specific protocol to follow under that circumstance."

"And what might that be?" asked the detective, almost dreading the answer he was about to hear.

"We provide the caller with an official U.S. Government telephone number in the United States. You see, Detective Ponce, we have no antivenom here in Puerto Rico for any type of poisonous snake. It would seem that we are living under the assumption that since Puerto Rico *never had* any indigenous poisonous snakes, they would *never have* any."

"And if we would never have any poisonous snakes here, ergo there would never be a bite from a poisonous snake here, and thus there would be be no need to store any precious, perishable and expensive antivenom here," Urayoán added, "no poisonous snake then equals no poisonous snake now, equals no snakebite now, equals no snakebite in the future, equals no requirement for antivenom on the island. It is a strategy of denial."

"I think I know, but tell me anyway," Ponce remarked, "what are the consequences of such a denial policy?"

The biologist breathed deeply and responded, "Antivenom should ideally be administered within four hours of the bite, although in many cases, it can be effective even if given within 24 hours. The dosage required varies with the degree of envenomation. And, of course, there are dozens and dozens of different types of poisonous snakes, so for the best results, you would have to know which type of snake inflicted the bite, so you could send the exact antivenom. If you did not know what type of snake bit the victim, you would have to use a polyvalent, wide-spectrum antivenom, which is usually not going to be as effective as antivenom specific produced for a specific snake."

"Then there is the aspect of cost. I have read that a victim of a serious rattlesnake bite in the state of Montana – serious being a bite that injects a lot of venom – can expect his hospital bill for the treatment – that often involves a lengthy stay at the facility – to be as much as \$85,000 to \$100,000."

"A couple in North Carolina received a bill for an 18-hour emergency-room stay which they say cost them \$89,000 after the husband was bitten by a poisonous snake. The four vials of antivenom medication reportedly cost about \$20,000 each, although research later found that the retail price of the medicine was between \$750 and \$12,000 per vial. *Medicare* would have paid about \$9,460 for the total treatment, while their *Blue Cross Blue Shield Insurance* reduced the bill to a little over \$20,000, and they ended up paying about \$5,400 to cover their deductible and co-pay, so you can see that the costs are staggering."

"If someone has been bitten by a poisonous snake here in Puerto Rico, the best case scenario is that we could get the correct type of antivenom from Miami into the patient in San Juan in about four hours. This would cover the time the request was first sent, and then the drug probably would be sent from the Miami-Dade Fire Rescue Venom Response Program. The Venom Response Team, which has been downsized, currently maintains the largest and only antivenom

bank for public use in the United States. The team employs the latest techniques to prevent morbidity and mortality through antivenom intervention 24 hours a day, seven days a week, locally, nationally and internationally."

"So the team would take the antivenom to Miami International – let's say that takes, including handling the initial call, 60 minutes. If a scheduled flight was departing shortly afterward bound for the island, the package would be placed on that aircraft. There are 12 scheduled flights from Miami to San Juan on any average day. Seven of those are nonstop, with an average flight time of two hours and 35 minutes. Add to that several minutes of taxing before takeoff and again after landing and you can conclude three hours for the flight piece."

"If you have to send it in an aircraft that has an intermediate stop, travel times expand to seven or eight hours, so discard those. If the patient was at a hospital in the capital area, perhaps a helicopter could take the antivenom to, say, the *Rio Piedras Medical Center* from the *Luis Muñoz Marín International Airport* – say that would be 30 additional minutes and add ten minutes of prep to get it to the correct operating room and then into the guy's arm. So I would say that at the four hour and 50 minute mark – after a victim was bitten, he might be receiving the first vial of antivenom."

"Of course," added Professor Guailí cheerfully, "if the call comes in to Miami after 10:15 p.m., which is the time for the last departure of flights from the airport to the island, the next scheduled flight out to San Juan is not until 6:45 a.m. the next morning, so you are screwed if that is the situation. And remember, my guess is that the doctor at the Rio Piedras Medical Center, if he has practiced solely in Puerto Rico, probably has never done this procedure before, so he is going to need a crash course on how much and how often to administer the drug, while the antivenom is enroute."

"And if the venom was faster-acting than the roughly five hours in the best case scenario, what would happen?" Sergeant Ponce wasn't adroit at math, but he was fast enough that he did not like where these calculations were heading.

"Then the patient would just have time to call his family to tell them he loved them, then make sure his life insurance was paid up, and finally dictate a Last Will and Testament – provided it wasn't too complex," offered the professor. "You know how lawyers are; they hate it when the signature on a Will is scrawled and unreadable because the individual is in his final death convulsions!"



Sergeant Ponce took a couple of hours to drive from the zoo to the coffee plantation just east of Jayúya. He first met with the widow of the deceased; her first question concerned when the body might be returned for the funeral. The detective knew that was going to be a sticky subject and told *Señora* Alemán that he understood her concern and that he would check into that question when he returned to headquarters. She informed the police officer that her husband had been 58 years old when he died, but that he did not have any debilitating illnesses and had been a healthy man all of his life. By the time she had run to the mill, where the coffee was processed, her husband's body lay beneath a sheet; it did not appear that she had seen the wound to his forearm. That was a fortunate non-event.

The foreman, who had worked at the *Hacienda San Pedro* since he had dropped out of school in the fourth grade, took Ponce to the area of the plantation where Roberto Alemán had been picking coffee beans when he met his end. It took everything in Antonio's willpower not to show concern that some creature may be watching him at this very moment, although the detective could see no sign of its path or location; no trace of its very existence could be detected. It had likely rained since the day Mr. Alemán died; no blood was on the ground, not that there would have been much left anyway. Ponce fingered his service weapon; he knew it would probably not be enough if he suddenly spotted this creature – or worse, if the creature spotted him.

He wished that he had his old M-16 rifle from his army days, complete with a 30-round "banana clip." Better still would be if his entire old platoon from 'Nam were there. He recalled a guy nicknamed "Cajun," who was from some God-awful place in Louisiana, and another guy, "Johnny Reb" – which was not his real name obviously, but what he insisted he be called – both loved snakes. But those southern boys sure could fight. He remembered when every morning, just before dawn, they'd fire a "mad minute" with everything they had on the perimeter of the firebase, just in case the Viet Cong, "Charlie" as they were nicknamed, were massing out front waiting to attack when it got light. Sometimes it worked, but not against the regulars of the North Vietnamese Army, the NVA. That was one reason that they called those NVA boys, "Sir Charles." He wished the whole platoon was there now, firing one of those "mad minutes" into the coffee groves.



Sergeant Ponce's mind drifted off to Dak To, Vietnam on November 20, 1967. His platoon was a little in front of the company position. At 2:00 p.m., a company of "Sir Charles" rapidly approached one of our four-man early-warning outposts, along a well-defined trail. Another Puerto Rican soldier, Private First Class Carlos James Lozada, alerted the company and

commenced firing at the enemy, who were within ten meters of his position. His heavy and accurate M-60 machinegun fire killed at least 20 enemy soldiers and completely disrupted their initial attack. Antonio's friend Carlos remained in his exposed position and continued to pour deadly fire upon the enemy despite the platoon sergeant telling him to withdraw to safety. The enemy continued their assault, attempting to envelop the outpost, and simultaneously launched a heavy attack on the forward west flank of the company, with the intent to cut them off from the battalion.

Somebody at battalion gave the order to withdraw, but Carlos apparently realized that if he abandoned his position there would be nothing to hold back the surging enemy and that all of Company A would get hammered. He yelled for the other soldiers to move back and that he would stay and provide covering fire. Antonio was pretty sure that Carlos knew that the enemy was converging on three sides of his position and by staying there he was facing certain death.

The Medal of Honor citation later said that "Private First Class Lozada continued to deliver a heavy, accurate volume of suppressive fire against the enemy until he was mortally wounded and had to be carried during the withdrawal."

Private First Class Antonio Ponce was almost at the end of his own tour in Vietnam, so the unit sent him back to New York to escort the remains of his fallen comrade. The Army buried PFC Lozada with full military honors at the Long Island National Cemetery located in Farmingdale, New York. His name is located in the Vietnam Veterans Memorial Wall, Panel 30E-Row 045 in Washington, DC. His name is also inscribed in *El Monumento de la Recordación* (Monument of Remembrance), dedicated to Puerto Rico's fallen soldiers and situated in front of the Capitol Building in San Juan, Puerto Rico. The Bronx respected him by naming a playground in his honor located behind 175 Willis Avenue. In Puerto Rico many of the names of fallen Puerto Rican military heroes are listed on the *El Monumento de la Recordación*. Ponce and Lozada had been best buddies.



The foreman was the first to arrive on the scene the day of the death and he now asked Sergeant Ponce, "Sir, what do you think could have bitten Mr. Alemán that way? Is that what killed him?"

"We still do not know the answer to that question, but from what the pathologist has told me after his preliminary work, it appears as though a massive heart attack, or two heart attacks in quick succession did him in. There was nothing that you could have done to save him; he was basically dead when he hit the ground," Ponce added.

"What about the bite on his arm, sir, what caused that? I heard him screaming from down the hill, which is why I came running."

"If I had to guess, and this is just between you and me, it is that your boss may have been bitten by a rabid dog that had wandered up here from Jayúya. That attack might have so frightened Mr. Alemán, that he experienced his fatal heart attack. A bite from a rabid dog would have hurt like hell, especially if the dog locked its jaws on his arm. I know that I would have screamed like the devil if a dog like that bit me."

"Don't worry, I won't tell anyone, detective. To tell you the truth, the other workers and I have been pretty nervous. You see, when we saw the bite marks and how Mr. Alemán had died, we thought it might be a *Chupacabra*!" The foreman looked over his shoulder as he made his statement, appearing to be fearful that a similar attack could occur again with him as the victim.

Puerto Rico had always had its legends, and many of the people on the island were extremely superstitious. The vaunted *Chupacabra*, literally "goat sucker" is a legendary creature rumored to inhabit parts of the Americas, with the first sightings reported in Puerto Rico.

The first reported *Chupacabra* attacks occurred in March 1995, during which eight sheep were discovered dead, each with three puncture wounds in the chest area and completely drained of blood. That August, a woman named Madelyne Tolentino, claimed that she saw the creature in the town of Canóvanas, where almost 150 farm animals and pets were reportedly killed.

Twenty years previously, similar killings in the small town of Moca were attributed to "The Vampire of Moca" (*El Vampiro de Moca*.) Police initially suspected that the killings were committed by a satanic cult. Later killings were reported around the island, with additional losses of farm animals. Each lifeless animal was reported to have had its body bled dry through several small circular incisions. As detective Ponce recalled, the description of the *Chupacabra* stated that it was a heavy creature, with a row of sharp spines reaching from the neck to the base of the tail.

"I've seen too much in my day to dismiss the existence of the *Chupacabra*," said detective Ponce, with a knowing look to the foreman. "However, I'd still put my money on a rabid dog, though."

The foreman wasn't buying it. This wasn't some rabid dog that bit his boss. The detective was lying, because he didn't want to admit that the *Chupacabra* had killed Mr. Alemán. The foreman would not tell the widow, because he loved the Alemáns and he did not want Mrs. Alemán to experience any more pain caused by her husband's passing.

However, the foreman would tell his fellow workers about the detective's suspicions and from now on, the coffee bean pickers would work in pairs and carry clubs, just in case the *Chupacabra* came back to kill again. That had been its bite that he had seen on Roberto Alemán's arm. That damned creature had sucked all the blood out of Roberto. That was what had killed him; that is why Roberto screamed so long as he was dying.

However, it would seem that the good people of Jayúya were nothing if not thorough. That night, 39 stray dogs in the Jayúya area were clubbed to death, their bodies found the next morning in the streets and alleyways. Actually, 40 dogs had expired that night, but the body of the fortieth was never discovered.



El Monumento de la Recordación

While he had been at the *Hacienda San Pedro*, Sergeant Ponce received a telephone call from the pathologist at the Institute of Forensic Sciences of Puerto Rico requesting that at his earliest convenience he swing by the Institute for a discussion. The detective reached this location after about a two hour drive that may have traversed a total of 50 miles. Puerto Rico had terrible roads throughout the interior of the island; in fact, everything except the *autopista*, what Americans would term the Interstate, which circled the island closer to the coast, was pretty second class

It was said that when the Americans came in 1898, to survey an area for a road they simply let a donkey walk from the projected start point to its end point and then built the actual road in the animal's footsteps. Ponce thought that if this folklore was actually true, than not only was the donkey a dumb ass, but a blind ass as well.

Once at the Institute, the detective and the pathologist sat down behind closed doors to discuss what the autopsy of Roberto Alemán had found. The doctor began, "I need to caveat this by saying that we did this autopsy "in-house" to remain within the intent of the guidance we received from Hato Rey. Some of the tests, and results, were new to us. I believe we have everything pretty accurate, but we might have missed some nuances. To get right to the heart of the matter, Mr. Alemán was bitten by a poisonous snake, the type of which we believe to be a Bushmaster. He received an incredibly large dose of venom, which in turned caused many of his life-support systems to shut down, which in turn led to his one or two – we are still uncertain as to the exact number – heart attacks that ultimately killed him."

"Here is what we know about the Bushmaster in general. Adult Bushmasters vary in length from 6.5 to 8.25 feet, although some may grow to as much as ten feet. The largest known specimen ever recorded was just less than 12 feet, making it the longest venomous snake in the Western Hemisphere, and the longest viper in the world. Large adult Bushmasters commonly weigh from 6.6 to 11 pounds. It is not the heaviest viper in the world, being surpassed in mass by the Gaboon Viper in Africa and the Eastern Diamondback Rattlesnake in the United States."

"Actually, the Bushmaster is not a viper, but a pit viper – the distinction is important. Technically known as *Crotalinae*, but commonly known as pit vipers, these snakes are a subfamily of venomous vipers found in Asia and the Americas. They are distinguished by the presence of heat-sensing pit organs. These deep pits, or fossa, in the loreal area between the eye and the nostril on either side of the head, are the external openings to a pair of extremely sensitive infrared-detecting organs, which in effect give the snakes a sixth sense to help them find and perhaps even judge the size of the small, warm-blooded prey on which they feed. It basically gives them the ability to see heat, no matter what the conditions of light or darkness are."

"Here is what we do not know. Our preliminary reading indicates that there are three and maybe four sub-species of Bushmasters. If there is a difference in the venom of each, we simply are not proficient enough to detect that. I am not sure if that means anything, but I wanted you to know this – in other words, we do not know which of the three or four sub-species this is. Now, as to this pit viper in particular; from the distance between the two puncture wounds on the deceased's arm – which were covered with venom – unfortunately, I believe that we are dealing with a creature that is in the upper range of length. Secondly, I do not know how old this creature is, as I do not know the rate of growth or the exact length; but it clearly was no baby."

Sergeant Ponce sat stunned for a few moments. This news was far worse than he had imagined. It indicated, simply by the size of the animal, that not only was the habitat around Jayúya conducive to the existence of the Bushmaster, but also that this type of pit viper was thriving there. Ponce then asked, "I know that as the *Padrino*, it is I that normally gives out the advice, but what do you suggest we now do?"

"Padrino, obviously this is a man-killer and must be destroyed. It is a killing machine. Hato Rey must be informed immediately; I called them before you arrived and informed them that you would be hand-delivering the autopsy report tomorrow morning so that you would have time to digest it this afternoon and tonight. They concurred, but I was reminded by them that it should be the only copy and that I was to destroy all documents related to it here after you left," the pathologist explained. But before you go out willy-nilly, you must first find out from the experts everything that this monster is capable of doing, so I do not lose my *Padrino* in the process!"

"I agree, *Ahijado* (Godson.) However, my old nose smells a bad odor on the possibility that we will have only one copy of this report. Use your scanner to make an additional copy of everything, especially photos of the wound site and the toxicology reports. I may need to show a copy to an expert on the Bushmaster, to see if we can get even a small edge against this killer. If things go badly in the end, I will tell Hato Rey that I made the copy and that you had nothing to do with it. It is already 5:30 p.m.; I want to read this carefully before I give it to them, so I will drive back to my apartment and deliver this bad news tomorrow."



Ponce returned to his apartment off the Avenida De Diego, checked his mail and then pulled a plastic file folder out of his desk; into this he put the copy of the autopsy report. There was no package. The previous night, he had found an interesting textbook online and decided to rush order it – *Management of Snakebites: Study Manual and Guide for Health Care Professionals*, by Dr. Olga Pudovka Gross. The book had not yet arrived. He then walked over to the same small coffee shop and had a *café con leche*, this time sitting in the back of the café. Tonight he needed to contemplate the situation – mull it over slowly.

When he returned to his apartment he would search online for experts of this Bushmaster. He would select an expert that seemed to know a lot, and providing he was not employed somehow by the government, he would visit and interview this man or woman. Now, however, he needed to read every word of the autopsy report to see what was there, but also to guide him to find those things that were not there, but that he needed to know.

It was sort of like this coffee shop. It was in a nice area – expensive cars were parked along the avenue; others here were well-to-do and quite respectable, but did not show their money. Ninety-eight percent of the people were what he called "working stiffs" just like himself. Then there were the panhandlers that walked, or road small bicycles in front of the café. Detective Ponce would always watch them carefully and fairly often saw a few asking passersby for some spare change.

However, some panhandlers, despite their vagabond appearance, never asked a soul for anything. Although they looked destitute, they were actually well-paid lookouts on somebody's payroll. These "vagabonds" served as lookouts for people who were doing illegal things, while other "beggars" were lookouts for people who did not wish to have illegal things done to them. The key in this case was not what the beggars did, but what they did not do.

So there was a killer snake near Jayúya, but what was Sergeant Ponce not seeing there?



Before he hit the sack, the detective called Willie Colón to see if the missing rooster had turned up. It had not, but Willie was in a happy mood, bordering on ecstatic. That day he had taken two roosters to Morovis, to the west of Barranquitas for a cockfight. As Willie explained, he had done this for two reasons; first, the cockfighters and bettors in the small town of Morovis knew nothing about Willie's roosters; second, the good folks of Morovis were prepared to wager large amounts of money on their own hometown birds. His first rooster had fought to a draw, resulting in no money lost or won. However, Willie put \$6,000 on the second bird in a straight up bet; if his rooster won, Willie would be \$6,000 richer, but if his rooster lost, he would be the same amount poorer, an event his wife would certainly not appreciate.

The banker knew all about hedging one's bets, however, and after the fight started, Willie's rooster jumped out to a large advantage, placing several thunderous kicks to the chest of its opponent that drew blood. The Morovis bettors, who had wagered a lot of money on their bird that now appeared to be in grave danger, quickly began yelling to now place additional bets on Willie's bird as a hedge, but there were no takers. Frantic at the direction of the fight, these bettors began offering odds of two-to-one, three-to-one and five-to-one. A five-to-one bet

indicated that they were willing to put up, for example, \$500 on Willie's bird for an expected winning of just \$100, if Willie's bird did win.

Conversely, if Willie's bird lost, these bettors would lose their entire \$500 wager. Several of Willie's boys were in the crowd, egging the bettors on. Finally, when the Morovis bettors found that they had no takers at five-to-one, they frantically upped their offer to ten-to-one odds. Willie's boys pounced on the deal and laid down \$1,000.

Willie was now in the catbird's seat. If his rooster won, he would win his original bet of \$6,000, minus the \$1,000 his associates had just put on the Morovis cock – for a net gain of \$5,000. If Willie's bird lost – which it was not appearing to do at this point, but one never knew – Willie would lose his \$6,000 original bet, but he would win the \$10,000 that his associates would garner on their ten-to-one bet for \$1,000 – a net gain of \$4,000. In the unlikely event of a draw, no money would change hands. It was as close to a lead pipe lock as a bettor could have.

#### Willie's bird won.

On the down side for the day, Willie reported to the detective that three of his hens had wandered off the farm. Willie – as did most Puerto Ricans that owned hens – allowed them free run in the barnyard – or what substituted for it. The hens pecked around during the day for natural food; several times each day, Willie's wife would walk out and throw handfuls of corn kernels to the hens, thus imprinting on the birds' memories that the area immediately around the house was an endless source of food.

The birds would nest up on tree limbs or in the bushes at night, but would fly down early each morning to do the same routine day after day. They were chickens and that's what they did. However, somehow, today, these three hens were nowhere to be found.

Sergeant Ponce hung up the phone after the discussion and thought for a while. Willie had a good setup because he understood a principle of strategy. Prepare well and jump to an early lead; force your opponent to abandon his own strategy; pounce when your opponent then made a mistake and place him in greater jeopardy. It worked in cockfighting and it might work with respect to this **33** incident.



The next morning, Sergeant Ponce took the original copy of the autopsy report, and its photographs and forensic test result annexes to the IBM building in Hato Rey, where the Veterinary Services Division (VSD) was headquartered. As before, he met alone with the chief physician, Dr. Dailey.

"Doctor Dailey, I picked these up last night from the Institute of Forensic Sciences and read over them carefully. As you know, I am not a medical man, so some of the information contained in the tox report is above my understanding, but I know a bottom line when I see it and we have a very large problem here."

Dailey motioned for the detective to sit down and appeared mesmerized as he went through the report in total silence page by page. After what seemed like a half hour, but in reality was no more than a third of that, Dailey said softly, "This is my worst nightmare. I had been hoping that this was a false 33, with the wounds coming from some other animal, perhaps a tarantula or something. After I talked with the pathologist last night, I could sense that this was not the case, so the entire night I was hoping that it was the type of animal that was discarded by its owner and that it had but days to live in our habitat before it died and during this short period, it managed to run into the victim."

"But this, this, is something that not only can thrive on our island – or at least in Jayúya – but that maybe it can even get to be more dangerous than it was in its natural habitat, wherever that was originally. During the last few days, I have gone through my own veterinary library and found this manual that includes the various species of *Lachesis acrochorda*, *Lachesis stenophrys*, *Lachesis melanocephala* and the *Lachesis muta*."

Ponce thought it was interesting, but not unexpected, that the chief of the VSD could not bring himself to say straight-out "Bushmaster." But that was about to change.

Dr. Dailey held up the book and continued. "It says that the Bushmaster has an almost mythological status amongst the indigenous people of the rainforests in South America. Because of its attraction to heat, they call it the 'fire extinguisher' and warn travelers never to sit near an open fire in Bushmaster territory, because the snakes can leap a distance of several meters towards a heat source and at very high speed. A snake expert was once called to a road traffic accident, where a Bushmaster had attacked the headlamp of a passing motorbike. In another incident, after accidentally disturbing a Bushmaster, an Embera Indian from northwestern Colombia said the snake chased him for some distance along a rocky riverbank."

"The book goes on to say that native tales of Bushmasters being attracted to fires built in the jungle probably have a factual basis in that if a Bushmaster were nearby when the fire was being

built, one could almost expect it to come over to investigate. These indigenous persons approached the task of building a cook-fire with extreme caution when they were with scientists who were hunting Bushmasters in remote areas at night. It also says that the *Lachesis stenophrys* and the *Lachesis melanocephala* live in Central America, while the *Lachesis muta* resides in South America. It seems that this *Lachesis acrochorda*, also known as the Chochoan Bushmaster is found in western Panama and northwestern Colombia and Ecuador. Jesus, look at this, 'the heat-seeking sensors under the eyes that allow them to lock on to warm-blooded mammals. A human can die within an hour of being bitten unless they receive the right antivenom injection.'"

Dailey gingerly pushed the book across the desk so that Sergeant Ponce could see a photograph of a Bushmaster with its mouth wide open and fangs extended – almost as if the doctor expected the picture to come to life if the book bumped something. It looked like the creature could swallow a basketball, which was a bit of an exaggeration, but it could envelop a human hand by the look of it.

"Doctor Dailey, it says here under the photo that Bushmasters will rarely bite anything (even in a defense strike) unless it is warm, but that this does not prove that Bushmasters are not easily provoked or will not defend themselves, but only proves that they don't like to bite cold-blooded (or cold-bodied) objects," added Sergeant Ponce, who had started to sweat himself, even though the office was nicely air-conditioned.

"Well, Sergeant," said Dr. Dailey, closing the text book. What do we do now?"

"I would say, Doctor Dailey that we need to do three things. First, I would ask you to track down through your contacts what the range of this Bushmaster might be. I am not talking about range in the overall sense, such as in the western half of Panama or a discussion of rain forests. What we need to know is where this particular Bushmaster will travel. Will it stay within one mile of the plantation? In other words, during the life of an individual Bushmaster, where does it go, assuming that it has food and water in the area it is in?"

"What will that tell us?" asked the vet.

"Two things," responded Ponce. "First, it will tell us where someone dropped this creature off at some point in its life. It did not just spring out of the ground on its own accord, and it has not been there forever or we would have had a previous fatality, as aggressive as it appears to be. And most importantly – at least for me – that information will help me plan how I will kill this Bushmaster, unless you would like to personally handle that as well!"

"I never tread on the areas of expertise of others," Dr. Dailey said, as he smiled.

Sergeant Ponce continued, "You see, I have two things I must do. The first is to kill that Bushmaster, and I have to know how big an area I must search and how I can see it in this area with all its natural camouflage. We cannot just go into an area with 200 men with machetes, cutting down all vegetation. First, someone, or even more than one person, would be bitten. Secondly, 200 men would know what happened and see the dead Bushmaster and then the entire island would know. Once we kill the animal, I have a second task. We need to find out who let this snake loose and from there plug the pipeline from which this person received the creature in the first place. If not, he may decide to get another one in a few years and we will have this same problem all over again."

"To do that, there is a man in North Carolina that I have found who may be **the** world's expert on the Bushmaster. If anyone knows how to find and kill this snake – excuse me – this **33**, it will be him. I will depart for the States tomorrow. Until then, could you have one of your people expedite the proper Puerto Rican importation forms so that I can bring back any special weapon or equipment that this man recommend that I have. I could probably do this ad hoc with my credentials and badge, but I do not need some TSA officer in Atlanta delaying me."

"Consider it done, Sergeant."



The *Cape Fear Serpentarium*, located off of 20th Orange Street, in Historic Downtown Wilmington, North Carolina, appears to be a modest facility, but as in many things, appearances can be deceiving. The serpentarium, founded in 2001, is a 10,000-square-foot structure devoted to reptiles of all types, although snakes are clearly the premier exhibitions. The facility features 54 displays that house more than 40 species of venomous snakes, additionally including five large bays featuring giant constrictors that are not venomous but dangerous nonetheless. It also features three full-fledged interior habitats housing three species of crocodile. Other displays are the homes for several large and exotic species of lizards.

Understanding the power of technology, the directors of the serpentarium have installed lush state-of-the-art dioramas designed by the film industry in North Carolina. In total, there are close to 150 animals on display at any given time, some so rare – and venomous – they are not exhibited anywhere else in the world. Although perhaps not a household name yet, the *Cape Fear Serpentarium* has been featured on *Discovery TV* and *Animal Planet*. Within print media, articles about the serpentarium have appeared in *Attaché Magazine*, *Oxford American Magazine* and the *Wilmington Star News*.

Perhaps equally is important to providing a first class learning experience, the *Cape Fear Serpentarium* assists professional technical experts. Scientists and herpetologists visit Wilmington from all over the world to view reptiles that can be seen nowhere else in captivity. The *Cape Fear Serpentarium* is recognized as one of the world's foremost reptile collections because of the efforts of one man, expert herpetologist Dean Ripa.

"A renaissance man, a man for all seasons," these are the type of terms used to describe the talents and life of the owner of the serpentarium, Dean Ripa. Born in 1957 in Wilmington, North Carolina, he began as a herpetological-*wunderkind*, before the age of ten already catching venomous snakes in nearby swamplands. Then the inevitable happened and by age 13, a cottonmouth had seriously bitten him; Dean was immediately hospitalized in intensive care, losing the functional use of his right hand for a two-year period. At the end of those two years, Ripa had expanded his collection to include King Cobras, Gaboon Vipers and Black Mambas, locked in cages hidden in the attic rooms of his parents' spacious home – and unknown to them.

While we do not know the exact reaction of his parents when they learned of their additional house guests, we do know that in the late 1970s, Dean left for Africa to capture and export live snakes back to the United States. With this successful venture under his belt, he began traveling the world, finding and catching snakes for major zoos, laboratories and private collectors. Between hunts, he found time to become a renaissance-style painter, "Big Band" jazz singer (most notably with the *Tommy Dorsey Orchestra*), ethnographic art collector and novelist. The eclectic mix is even more impressive when one considers that during his career, Dean Ripa has

been on the receiving end of 14 poisonous snake bites, several of which resulted in near-death experiences.

He is also an innovator. He noted that one of the problems of manufacturing antivenom for Bushmaster bites had been to obtain good, healthy venom from snakes that typically die rapidly in captivity once subjected to the stress of venom extraction. Capitalizing on the propensity of Bushmasters to strike at sources of heat, he devised a non-harmful method of extracting their venom. Ripa found that a dog's rubber play-toy, with a soft, thin, rubber exterior and hollow interior, heated to approximately 104–122°F, offered to hungry Bushmasters, caused a "strikehold" technique of bite, exactly as if the toy was a prey animal. The snake's venom is expelled into the hollow interior of the toy and can later be extracted by cutting the toy open.

Because Bushmasters have a tendency to hold on tighter and inject more venom when resistance is offered, Ripa found that he could manually induce greater venom yield by manipulating the object, causing more venom to be expelled, without the snake releasing its bite-grip on the rubber toy. He found that the snake would not swallow the object, as chemical cues finally informed the snake that the toy was not prey and the snake subsequently would abandon it. Using this method, Dean Ripa extracted venom equal to the greatest yields ever recorded for Bushmasters, over 330 milligrams. Equally as important, the new method does not stress or injure the snake, as does the conventional method of seizing it behind the head and "milking it" as you often see on television.

"Great to meet you Sergeant Ponce; thank you for sending me some of your questions in advance," Dean Ripa stated as he offered his hand. "Please sit down and we will get right to your situation. I understand that the Puerto Rico Department of Natural Resources must preapprove all exotic pets such as snakes, birds and reptiles before they can be admitted to the island. As you said, I think we can rule out that happening in this case!"

"Concerning the range of each individual animal, well, snakes move slowly and very gradually until they find a food supply and good shelter. So, the first thing they look for is a good place to hide, at a good temperature that is suited to them. Remember, snakes – and this includes the Bushmaster – are quite vulnerable to other creatures for the obvious reason that almost every other animal is taller than they are. Once they have found shelter, they travel out from that place to find food. So, spatially it all depends on them finding these perfect things. If they do not, they may keep looking. However, that would not happen right away."

"Conversely, if as you postulated, a Bushmaster has plenty of prey and plenty of water, it will have no inclination to roam very far; it is not like a duck or goose with a migration instinct. I would imagine it would live and die within one mile from where it was hatched – maybe even less. Bushmasters are crepuscular – dawn and dusk – or nocturnal predators. They are mainly ground-living, sit-and-wait predators; they conceal themselves near likely areas of rodent activity

and wait for a prey animal, such as a possum, to come within striking range. They also eat birds, such as jungle fowl, and other reptiles. Like other vipers, they rattle their tails when threatened and if you are lucky you can hear that, but there are no actual rattles, you are just hearing the dry leaves being struck by the tail. Actually, you may be unlucky if you hear it, as that will mean you are very close to the source of the noise! Find out where the most rodents are at that coffee plantation and there you will most likely find your Bushmaster."

"Concerning whether a military-style thermal sight could detect a Bushmaster might depend on two things; one would be the thermal resolution of the apparatus. Each new generation of sight gets better with clearer and sharper definition and resolution. The second factor involves the temperature of the individual snake. Bushmasters are cold-blooded animals; they assume the same temperature as the environment around them, although at times, the snake may be warmer than the ground around it if it has been sitting out in the sun and the nearby ground is in the shade."

"Again, it would boil down to the device. In theory, if the device has enough fidelity it could find a Bushmaster that was in the process of devouring a warm-blooded mammal. Of course, what you could do is use the thermal sight to detect the warm-blooded rats as they congregate and feed, which it would do very well. Find the rats, and I believe you will find your snake."

"Concerning what weapon to use to kill this snake, obviously when I search for Bushmasters in the wild, I am attempting to capture them alive. It would obviously please me greatly if you could capture this snake and we could have it here at the serpentarium. However, I understand the sensitivity of this situation and I am not unfamiliar with firearms. First, don't think you have to go *Rambo* here; remember that a hit with a .22-caliber bullet is a better result than a miss with a .44-caliber bullet. I understand that you cannot just have a good old-fashioned firefight out there with machineguns and flamethrowers, and that it just may be you with one or two assistants – or maybe, God forbid, just you."

"I am serious about this, Sergeant Ponce; if you go out by yourself to hunt this creature, you will likely die. And forget the cowboy stuff and the exotic weaponry. You need simplicity and you need to practice like hell before you go out because I guarantee you, you will be scared as hell when you see this beast and what it does."

"I would take two weapons; first a Browning 12-gauge semi-automatic shotgun, called the *Maxus*. I know of several hunters of a wide variety of game and also those who shoot fast moving skeet, and for reliability, speed and firepower this *Maxus* is the tool of choice for many of them. It has a 28-inch barrel and once you take the magazine plug out, you can cycle five rounds through it semi-automatically so you are putting out a round as fast as you can squeeze the trigger each time."

"Decent shooters can crank all five rounds out in less than two seconds. You want to fire the  $2\frac{3}{4}$  inch long shells, rather than 3 inch, or the  $3\frac{1}{2}$  inch shells, because you want to remain on the target with less recoil and also because the *Maxus* will hold four of the shorter shells in the magazine instead of just three of the longer ones. And that last fourth shell may be a life-saver."

"There are at least a dozen shot sizes with the 12-gauge round. Try some of the different buckshot sizes in practice and see what patterns well with your particular weapon. You do not want any large gaps, called 'holes' in your pattern, where none of the buckshot goes. Try a #4 Buckshot load first; depending on the maker, each of these rounds can have as many as 24 pellets in them, each pellet being about .24-caliber, and they pattern pretty well. And a pellet of this size that hits will pass through the entire body of the snake – snakes are not armored."

"Do not be tempted to use any low-production specialty rounds you see at many gun shows. These rounds – some are advertised as flechette rounds – are not nearly as well tested as regular lead shot; you simply do not want to trust your life to something that may not work as advertised."

"I would also take a back-up weapon just in case something happens, to even include the Bushmaster striking at you and the strike hits the shotgun and knocks it out of your hands. You do not want to be crawling along the ground trying to feel for that weapon while the Bushmaster is trying to 'feel' for you!"

"For the backup, I would take a Ruger *Mark III Hunter* .22-caliber Long Rifle semi-automatic pistol or maybe a Smith & Wesson .22 *Victory* in the same caliber; put it in some kind of shoulder holster so you have both hands free for using the shotgun. The *Mark III Hunter* has a ten round magazine, is extremely accurate and it can be fired with one hand, unlike a shotgun that requires both hands to get the job done. With almost no recoil, you can put round after round into your target at ranges in which you would expect to engage the snake; remember, you are not going to be taking 50 yard shots at one – it will be close-in work."

"The Bushmaster is an efficient attacker, but it is not a *kamikaze*. When you hit it with one or two rounds, it will try to escape. It knows nothing of firearms and cannot detect bullets whizzing through the air at it; it only knows when it is hit that it wants to avoid being hit again and that instinct translates into a desire to flee. Bushmasters, and I know this sounds strange for so fearsome a creature, are really quite delicate, especially their backbone and spine; any kind of stress or trauma can kill them. However, you may not see much damage at first. Their blood pressure system is so low, they don't bleed much."

"Sergeant Ponce, let me tell you a little about how the Bushmaster attacks. After we discuss this, we will go over to one of the displays and I will feed one of the snakes so you will get a better feel of that process. Strike induced chemosensory – taste and smell – searching behavior,

involving *strike-release*, has been described for Old and New World vipers, while *strike-hold* tactics have been described for others, including jumping vipers and Bushmasters. Bushmasters do not require chemical cues, only heat, to provoke *strike-hold*, which suggests that a distinction be made between the forms of *strike-hold* behavior. In general, a *strike-release* bite will inject less venom, while a *strike-hold* bite can result in massive amounts of injected venom, sometimes in two pulses. Unfortunately in your situation, the Bushmaster does a lot of *strike-hold* attacks."

"These *strike-hold* attacks may be divided into two kinds, and don't worry I am going to get technical for a moment: *Chemosensory-Visual Induced Strike-Hold* (CVISH), such as with many vipers and another type, *Heat Induced Strike Hold* (HISH), as employed by Bushmasters. These two types may occur in concord, and most often do where endothermic – warm-blooded – prey is taken, but they are by no means obligatory to one other. In *Chemosensory-Visual Induced Strike-Hold*, chemical clues qualify the object as prey, and the strike is subsequently guided visually to its target. Snakes that regularly feed on ectothermic – cold-blooded – prey employ this type target acquisition, although they are not confined to it."

"In the Bushmaster, which eats only endothermic prey, chemical clues doubtless play a significant part in locating the hunting site, and determining presence of prey. The Jacobson's organ is the first stage of the accessory olfactory system, and contains sensory neurons that detect chemical stimuli. Snakes, including the Bushmaster, use this organ to sense prey, sticking their tongue out to gather scents and touching it to the opening of the organ when the tongue is retracted."

"However, thermal cueing alone is the final requisite to induce the strike. Chemical clues, and chemosensory searching behavior, may be required after the prey has been subdued or killed – in order to relocate the dropped prey, when it is to be repositioned in the mouth for swallowing or to trail it for short distances if the *strike-hold* has failed to bring it down. A Bushmaster will rarely *strike-hold* a cold dead rodent, that is one at ambient temperature or below, but will *strike-hold* a warm one. A feeding episode rarely occurs in the absence of an initial strike sequence. A Bushmaster can become accustomed to eating cold dead prey in captivity; however, they will rarely strike it per se, except in a defense mode, such as if the handler is shaking the dead animal with tongs and this motion touches the snake's head."

"This is typical of the 'bite first, ask questions later' hunting strategy of Bushmasters. Any warm-blooded prey is a candidate to become a food item, and any warm object is a candidate to be *strike-held*. I have the dubious distinction of being the most Bushmaster-bitten person in history, at least the most Bushmaster-bitten person to have survived multiple attacks! Four times I have been envenomated by Bushmasters, and twice *strike-held* on account of predatory *Heat Induced Strike Hold*. My third episode of *strike-hold* involved a very angry young snake that was being medicated; I am quite sure that this was a defense response, suggesting that when a

Bushmaster gets mad or agitated enough, it can get confused as to the proper strike technique to use."

"Shining a light into the heat-pits of Bushmasters provokes the *strike* aspect of the *Heat Induced Strike Hold* response. A man walking with a flashlight through jungle at night, for example, can be in for a startling experience, if a Bushmaster is laying in close proximity. In a mild sequence, the snake may merely raise its head up to a considerable height in order to investigate the unusual phenomenon it is sensing."

"However, if the light is very bright, sudden and close-by, the startled snake often makes a frenzied attack against the light, hurling itself at the 'hot' object in a series of maddened, rapid strikes, one after another. Remember this snake can strike four feet high on your body from the ground and the strikes can be so violent that they propel the snake's entire body toward the intruder. The sudden appearance of heat appears to cause of sort of sensory overload, and the snake literally goes berserk."

"I have been told by native hunters, who had been searching for small game at night using various kinds of torch lights, that Bushmasters have risen up 'out of nowhere' to strike the light out of their hands. The sudden ignition of a match flame can have the same effect on the animal, as smokers visiting my facility have observed when an alarmed Bushmaster made an unexpected lunge to try and bite them in the face."

While describing the characteristics of the species, the herpetologist had opened the glass door in the front of one of the exhibits and was using a snake hook to elevate the animal upward so the detective could get a better view. Now it was close enough, thank you very much.

"Not to worry, though, the glass front of the enclosure protected them from harm, and I can conclude with certainty that a smoker is far more likely to die of lung cancer than he is of being killed by a Bushmaster. However, this brings up a good point. When you fire that shotgun, if the snake is nearby and if you do not hit it, the muzzle flash may act like the sudden ignition of the match flame and provoke a strike. I do not think that the much-smaller muzzle blast of the .22-caliber pistol would provoke a strike reaction, but this is just an educated guess."

"You may have read about recent attempts to quantify defensive behavior of venomous snakes; one involved the behavior of fifty free-ranging cottonmouths – also called water moccasins – when confronted by a human antagonist. The cottonmouths encountered in the field received one or more of three treatments: (1) one of the scientists stepped beside the snake with his boot touching the snake's body and held that position for 20 seconds; (2) one the scientists stepped directly on one of the coils of the snake for 20 seconds with enough force to cause discomfort to the snake; or (3) one of them grabbed the snake at mid-body with a set of snake tongs modified to resemble a human hand or arm."

"The scientists recorded the behavior of the tested snakes during each stimulus. When stepped beside, about 50 percent of the snakes attempted to escape, and about 25 percent gaped – that is opened their mouth – but none struck. When stepped on, about 50 percent of the cottonmouths gaped, and only ten percent bit the boot. When grabbed with the artificial hand, about 35 percent of the snakes bit it."

"The obvious flaw with this and other studies is that the bite-subject is not a *real* human foot or a *real* human hand and thus had no radiated warmth. The thermally-cued snakes do not bite these objects because they are of neutral temperature. They do not bite them for much the same reason they do not bite each other, while they will bite a rodent that walks on top of one, or a man that sits on one, or a real hand that touches one. Of course, gross generalizations about the response cues of snakes will always be problematic, for those responses vary from species to species, and even within the same species. Some species will bite the 'cold' boot or the 'fake' hand more often than others, because they rely on visual cues to a degree greater than other species do."

"For example, if I were to repeat these studies with my Bushmasters, I have no doubt that nostrike/no-bite incidences would occur almost 100 percent of the time. This behavior would not prove that Bushmasters are not easily provoked or that they will not defend themselves; it would only prove that they did not want to bite a cold-bodied object."

At this point, the herpetologist laid the snake back down, took a dead white rat from a nearby open container and used the snake hook to present the prey in front of the reptile. In an instant, the snake struck – the entire act seeming to be only a blur to the detective. The detective immediately began to comprehend that anyone who assumed that they could avoid a strike by using their own quick reactions ought to rethink that assumption. In case the serpent wanted a second course, Sergeant Ponce stepped back two feet, while the herpetologist removed the snake hook and locked the glass front piece.

"There is one additional point I must make, Sergeant Ponce. The thermal/infrared sensory abilities of many snake species are well known. Extraordinarily sensitive, these heat-pits of vipers can sense temperature changes, perhaps as little as  $0.003^{\circ}$ C. The pits help locate prey, guide the predatory strike, and are even used as anti-predator devices. Bushmasters use their infrared receptors almost exclusively in striking. For other activities, such as courting and male-to-male combat – to put in your frame of reference, cockfighting – Bushmasters rely greatly on vision. When confronted with an edible, but non-moving target, such as a rodent that has detected the snake but is too terrified to move, Bushmasters sometimes 'bob' their heads rapidly in order to thermally 'sight' their prey."

"This lends credence to the idea of these Crotalinae pits are a kind of imaging device, rather than simple thermal receptors. This is important, Sergeant, the prey object, or else the heat receptor itself on the Bushmaster, must *move* or the object cannot be accurately targeted. Note, that I did not say that if you remain perfectly still without breathing, the Bushmaster will not strike you."

"What it does mean is that even if you remain still, and the Bushmaster starts *bobbing* its head, it is targeting you and the strike will almost surely come a split-second after that *bobbing*. And, Sergeant Ponce, it will be a *strike-hold* bite and you can expect a massive amount of venom to be injected."

"You mentioned that you lost your leg to amputation not long ago. We did some experiments here that might be of special interest to you, concerning a potential bite on a prosthetic arm, heated to approximately 100°F to induce *strike-hold*. The snake would not strike the object unless warmed, despite artificially scenting it with rodent odors. The Bushmaster's strike is thermally cued, suggesting that insulating materials such as rubber boots might be sufficient to prevent most bites occurring on those portions of the anatomy that are sufficiently covered."

"I should add, though, that Bushmasters usually do not bite the feet, but higher up on the body on the knees, calves, ankles and sometimes thighs, resulting from their long striking range and great body length."

"I have developed a special full body suit that works well here at the serpentarium in reducing *Heat Induced Strike Hold* attacks by pit-vipers, as it reduces the thermal signature of the human body. The key to the effectiveness of the suit is the effectiveness of insulating materials that isolate warmth behind the surface of the suit. For example, 'snakebite proof' boots may not really need to be 'bite proof' – that is of a fabric that fangs cannot penetrate – to be effective; their neutral surface temperature, among other factors, simply may prevent the bite from occurring in the first place. You should buy a good set of snakebite proof boots that fit you before you head out into the wild and you may also take the full body suit we have here with you and after you have solved your problem, you may bring it back and explain to us how well it worked."

'If it works,' thought Sergeant Ponce. "OK, Dean, let's assume for the moment that we can kill this thing. Then we have to find out who dumped the snake into the wild in the first place. What are the tipoffs concerning who would be a venomous snake owner?"

"If you are expecting me to say that they are maladjusted, single, young white males, I would be leading you astray. However, there are some general things to look for to increase your chances of finding the former owner. Snake and other reptile owners are among the highest paid workers in the country, often earning six-figure salaries, possibly because it costs a lot to maintain poisonous snakes. So your owner is probably not someone who is part of the chronically unemployed, although someone who does lose his job might think that he can no longer afford the snake."

"Snake owners have a fierce streak of independence and a belief that what they do in their own lives should be free of government intervention. They are undeterred by authority. For example, it is a Class C felony to possess or transport snakes in Hawaii, with violators subject to a

\$200,000 fine and up to three years in prison. However, the state has still collected or confiscated over 100 snakes since 2000, even with these draconian punishments as deterrence."

"Editors and writers, engineers, marketing and public relations professionals, law enforcement officers and social workers often prefer snakes as pets. Regardless of the profession, the person must first start the quest to obtain a poisonous snake by making sure everyone else in the house is onboard with the idea. That will not help you, because if owning the snake causes the divorce, the owner will still own it, so marital status is not a tip-off."

"Despite the fact that Puerto Rican hospitals do not have antivenom, a poisonous snake owner may have his own supply in a refrigerator. He may then cut an under-the-table-deal with a hospital or doctor, who would be willing to see him in an emergency immediately after an accidental bite and use the antivenom the owner has to stabilize the situation. I do not know if doctors or hospitals down there would provide you that type of information."

"A poisonous snake owner does not want to take a chance with other pets, like a dog or cat, around a venomous snake. In fact, if they know what they're doing, they should keep regular pets totally out of the area that the snake will be in. Given the complexities of this species of snake, my guess is that the owner does not have any other pets at home."

"These types of snakes need adequate living quarters. It is a bad idea in general to bring a snake home and then set everything up for it afterward. I would think the owner would have a large cage, with sliding glass doors and vents on the back, made for snakes. Many venomous snake keepers use *Neodesha* cages. If the owner did not use a special cage – costing hundreds of dollars if not more – but tried to use an aquarium with a sliding/locking screen lid, he might be asking for trouble."

"Also, the room in which the cage is located should also be escape proof and have a door-jam so the snake cannot squeeze out under the room door and get into the rest of the house. The owner should make sure that the snake cannot get into the air conditioning vents in the room either. Remember, snakes can squeeze through extremely small openings."

"Temperature matters a great deal with respect to the activity of a snake. A snake at a warmer 90°F is literally not the same snake that you knew at a comfortable 82°F. It can get faster, more nervous and defensive at almost an exponential rate with every degree the temperature goes up. Predicting a snake's behavior at a higher temperature, based on its known reactions at a lower temperature, can get the owner into deep and serious trouble that could prove fatal. The cage must also have a misting system if periods of high humidity are found in a snake's natural habitat such as the Bushmaster."

"Concerning the room that the cage is in, you cannot underestimate these guys. The combination of raw muscle power, short-range speed, wide strike range, unpredictable strikes and massive venom delivery make a Bushmaster among the most lethal snakes on earth. They have a lot of

muscle power to back up their arguments if they don't want to do whatever it is you want them to do."

"Physically handling or restraining one is definitely a two-person job, both to protect you and the snake. They can easily injure or kill themselves if they are inadequately restrained and they are allowed to thrash around and hit something hard."

"A Bushmaster can usually be persuaded in a slow, comfortable manner to see things the handler's way and urged to crawl into a latching shift box for transport or examination. Often they will take a ride on two hook sticks without much fuss. A skilled owner may never need to restrain it, and this is definitely for the better. If the owner must touch the Bushmaster, it is best to do it quickly and decisively, with the help of an assistant or a padded board to restrain the body of the animal, so the snake cannot thrash about."

"Unrestrained handling with these snakes can result in real disaster, as they are strong enough to physically overpower a handler very quickly and can throw off a neck-pin or bodily slamming their way out of less than perfectly sturdy enclosures when they are sufficiently upset. They can shatter glass with their strikes, or snap the plastic closure tabs on a garbage can lid."

"Tangling with one is a tough battle and you can lose, even if you have the right tools. Snake guys are always buying things to help them do the job better, so you should check with every pet store and shop on the island to see *who* buys *what*. I do not know what your laws are on searches of stores, but lean on the store owners. They probably never sold an illegal snake to anyone, but they know damn well who has one through observing what the customer buys in the way of accessories. A guy who comes in all the time buying live mice probably does not have a parakeet."

"Here are some of the tools a poisonous snake owner will have on hand. Snake hooks are by far, the most commonly used piece of equipment in poisonous snake handling. Back in the day, we made our hooks from anything we could find, but now they can be purchased in all sizes, with new and improved models coming out all the time, so check the store to see who buys big hooks for very large, dangerous snakes."

"The art of using one is first, of course, not to hurt the animal, but a close second is to have your holding hand far enough up the shaft of the tool that the reptile cannot pivot on it and strike your hand – you have to know to the inch how far that bad boy can reach out and touch you."

"Tongs with pistol-grip actuators are a very handy piece of equipment, when used properly. They have wider jaws to better support the weight of the snake; their rubber-coated top jaws help stop slippage, while the smooth bottom jaw keeps the snake from getting a good grip with their ventral scales, so they cannot move through the tongs very easily. However, when used improperly, the tongs can injure or kill a snake."

"A good bagging system makes dealing with large, fast, venomous snakes much easier and safer. Cloth snake bags – never use plastic – are the easiest way to transport larger snakes. When shipping venomous snakes, you are required to put the snake in a bag, and then put that bag inside a second bag, to ensure safety."

"Surgical hemostats can be used for many things. I use 18-inch Hemostats to feed dead rodents to my small venomous snakes, and I use the 24-inch hemostats to feed my larger venomous snakes like the Bushmasters. Sometimes you have to use a clear restraining tube in which you guide a snake's head in one end and the narrow tube prevents him from turning around and biting you. The only problem with these tubes is that a large snake, which needs to use the largest tube, is also strong enough to flex his body and possibly split the tube if it has a weak point."

"If the owner is into breeding snakes, he would need a sexing probe as the best, most reliable way to identify the gender of adult snakes. Surgical tweezers can be used to feed snakes or remove left over pieces of skin that were not shed properly. They also can be used to remove ticks. Surgical scissors can be used to cut open eggs, if a hatchling cannot do so on his own, and of course they can be used during medical procedures. A 'pinky pump' is used to force feed non-feeding snakes, although I find it easier to force feed baby snakes by hand or with small hemostats if the snake is venomous."

"Syringes can, of course, be used to administer drugs directly into a snake. They can be used to inject *Panacur*, *Flagyl*, *Ivermectin* and other drugs into thawed food items to treat snakes for internal parasites. Syringes can also be used to aspirate eggs while inside the female, in the event that a female cannot lay her eggs on her own, making the egg slightly smaller so the female then can pass the egg."

"Pressure bandages are a must for anyone keeping venomous with neurotoxic venom. When applied properly, they can give you much more time to get to medical help, when you have been bitten. In the event of a bite from a snake with hemotoxic venom, a pressure bandage may not be the best way to go, as it can cause much more localized tissue destruction, and increase the possibility of losing the appendage. Even though we do not know all the different species an owner might have, I would guess that pressure bandages would be present."

"It sounds like we will have to do a lot of old fashioned police work – pounding the pavement and finding as many pet-store owners as we can," said the detective.

"I would think so, but remember after you find this creature, please send me as many photographs and details as you can so I can see if this snake has ever turned up before with a snake dealer," the herpetologist added. "I wish you the best of luck, Sergeant Ponce and don't hesitate to invite me down there to help you if that becomes necessary."



At the motel at Wilmington that evening, Sergeant Ponce played, "I know a guy, who knows a guy." His brother-in-law had made a career of the Army, before retiring a dozen years ago. Antonio called him and talked about advanced technology – something that Dean Ripa had said sparked something in the detective's mind. The brother-in-law, who had been a colonel, was a good friend of a retired Navy Rear Admiral that now worked in Virginia for the *Raytheon Company*. That company made plenty of advanced technology; he would put the admiral in touch with the detective that evening.



Good to his word, the colonel called the admiral, and the admiral called the detective. Thirty minutes later, Sergeant Ponce jumped in his rental car and headed north for Virginia.



Cape Fear Serpentarium

Antonio Ponce did not like enlisting his Godson to help him on this task, but everything he had heard from Dean Ripa in Wilmington confirmed that a solo operation to kill the snake was a suicide mission. Ponce had followed the herpetologist's advice and purchased two Browning *Maxus* 12-gauge shotguns and two Ruger *Mark III Hunter* .22-caliber semi-automatic pistols.

He also ordered over a thousand rounds of for each weapon, selecting several types of the shotgun shells so that they could experiment in Puerto Rico; the gun dealer in Wilmington had been impressed with Ponce's credentials; the weapons and ammunition would be waiting at the USDA office in Hato Rey by the time the detective returned to the island; the package was marked *personal*, *to be opened only by Dr. Dailey*. That would show Dailey that Ponce was moving out rapidly to terminate the problem. If Dailey saw that there were two weapons and that perhaps Ponce was expecting the chief veterinarian to go on the hunt with him, so much the better to play on Dailey's nerves to an extent that he might cave in on later requests to avoid that dismal prospect of slogging through hot underbrush to find something he was terrified of finding.

Given what Ponce had seen in the displays at the serpentarium, the Bushmaster would probably not be out in the open when they came upon it, but rather be partially under vegetation of some density – perhaps even multiple layers of it. Ponce wanted to ensure that the lead pellets in the shotgun round had enough energy to penetrate this vegetation cover and not be deflected from their intended target. This was not an exercise in seeing how many coffee bean plants they could blow apart with the *Maxus*.

True to his word, the firearms dealer in Wilmington had indeed ensured that the four weapons and ammunition were in Dr. Dailey's office when Sergeant Ponce arrived back in Puerto Rico and then went to Hato Rey. And true to Ponce's expectations, Dr. Dailey danced around the subject of who might be going with the detective on the search and destroy mission against the **33**. After hinting that for secrecy's sake, it might be best if Ponce and Dailey were the only two men on the team, Ponce backtracked, saying that if both the men on the team were killed on the operation, someone back at headquarters had to be alive who knew what was going on and who could then develop an alternative plan.

Ponce then told Dr. Dailey that the second man on the operation could be the pathologist from the Institute. Immediately Dailey balked at that idea, until Ponce argued that the main role for the pathologist would be to quickly administer first aid in case the Bushmaster bit the detective.

Ponce then threw a few jabs by describing in lurid detail the *Heat Induced Strike Hold* technique of the Bushmaster that Dean Ripa had explained at the serpentarium – making sure that he emphasized the multiple venom injections that the snake was likely to accomplish during its bite.

Dailey was almost swooning by the end of the description and Ponce worried that the veterinarian might lose his lunch.

The detective then threw the setup punch, stating that while he was in North Carolina, he managed to obtain from the serpentarium enough antivenom to treat both men should the Bushmaster get lucky and bite both its two attackers. He added that his investigation to date had found that there was no antivenom of any type on the island, a clear piece of gross negligence on the part of authorities; thus, Ponce was forced to bring his own antivenom from the States. Dr. Dailey focused his watering eyes quickly; this was an area that some might point to as a failure on the part of every past – and daresay current – Chief Veterinarian of the Veterinary Services Division if it became public knowledge.

Then the police officer delivered the knockout punch, describing a novel he had ordered online a few days before. "Dr. Dailey, have you ever read *The Snake*, by John Godey?" When the veterinarian shook his head "no" Sergeant Ponce continued. "It is a novel written back in 1978 and is about an African Black Mamba venomous snake in New York City. A commercial sailor had won the snake in a poker game in Maputo, Mozambique and brought it to New York. However, he was killed in a robbery and the snake got out of its box and subsequently killed the man that had killed the sailor."

"To make a long story short, the venomous Mamba headed for Central Park, where it lived for several days, killing almost a dozen more people. The snake was finally killed, but not before the entire city was paralyzed from fear. Of course, the story was not true, but fear is a difficult emotion to defeat once it has raised its ugly head."

Sergeant Ponce excused himself by saying that he wanted the pathologist's schedule empty for the next week and that he needed Dr. Dailey's intervention at the Institute to ensure that this happened without a snag. The detective then mentioned that for the next three days, he and the pathologist would be training and experimenting with their new weapons to determine the conditions that would maximize the strengths of both the shotgun and the pistol.



Sergeant Ponce then took the weapons to his apartment so he could examine each one fully in peace and quiet. His life would depend on understanding the nuances and capabilities of each firearm. He found that the Browning *Maxus* had a lightweight aluminum alloy receiver attached to a composite stock that had a close radius pistol grip. The entire weapon was flat black. The length of the barrel was indeed 28 inches, giving the shotgun an overall length of 49.25 inches. Unloaded, the weapon weighed 6 pounds and 15 ounces. Quickly raising the weapon to his shoulder and looking down the raised rib on the top he saw that it had a brass bead for a front

sight. The weapon pointed well; Ponce felt certain that he could get off rapid, aimed shots under the pressure of a life and death situation.

The manual described the *Maxus* as a gas-operated, autoloading shotgun capable of quickly firing up to five shells using  $2\frac{3}{4}$  inch loads, with the three-shot adaptor removed from the tubular magazine. As installed in the weapon, the adaptor limited the magazine capacity in compliance with federal migratory bird regulations. Ponce wasn't going after migratory birds and removed the plugs on both shotguns now, so he would not forget to do so later. That allowed the weapons to have four  $2\frac{3}{4}$  inch shells in the magazine and one in the chamber. He also found the mechanical safety just behind the trigger. The designers of the weapon had thought to not only color code it, showing when the weapon was in firing mode, but also that the button could be felt in the dark as to which position it was in.

The weapon was also designed to fire one shell at a time with each successive pull of the trigger. Upon firing, high-pressure gases from behind the shot in the shell passed through two ports, or holes, in the barrel, through the gas bracket and into the gas system, forcing it rearward. As the gas system moved rearward, it forced the bolt to the rear, operating the action. As the bolt moved rearward, it cocked the hammer and ejected the fired shell. After fully traveling to the rear, the bolt began its return forward, picking up a new shell from the magazine and chambering it. After the last shell has been fired, the bolt locked to the rear to facilitate reloading.

Additional shells could be loaded prior to the weapon firing all five rounds, but Ponce did not want to try the action in his apartment in case he got the sequence out of order and accidently pulled the trigger. His neighbors understood his policeman's hours, but they were not that understanding of being awakened by a loud shotgun discharge in the middle of the night.

The *Maxus* came with three chokes, devices that are simple, ingenious and have made shotguns some of the most versatile weapons in the world. Shotgun chokes were originally designed to control pattern diameters at different yards, the pattern being the grouping of the pellets at a given yardage. The grouping of pellets, in turn, is termed a pattern and is measured by a circle diameter. This particular circle must have certain efficiency, which means that it has to have a certain number of pellets in a given area for it to be labeled an efficient pattern.

The choke screws into the inside of the barrel at the muzzle end of the barrel on modern shotguns. Shotgun barrels are generally just tubes with no rifling on the inside that is present in a rifle (hence the word *rifle*.) Rifling makes the single bullet that comes out of a rifle very accurate. For shotguns, it is the general accuracy of the group of pellets that fly out with each round that is really important, not the individual accuracy of each single pellet. When the shot column comes down the barrel after the round is ignited, it meets up with the choke, which forces the column to squeeze tighter together; these forces are called radial forces.

Once the shot exits the barrel, wind resistance and gravity act on it. When the air resistance comes into contact with the outside pellets of the shot column, it induces spinning and they start peeling away from the center. The tighter (smaller diameter) the choke, the stronger the radial forces, the tighter the pellets are squeezed together so that the pattern holds tighter over a longer distance.

Conversely, the less restriction of a shotgun choke, the more loosely the pellets are held together and the faster the pattern opens up. Open patterns provide more leeway on accuracy when the shooter is firing at fast-flying birds at various angles, or in the game of skeet, for example. "Full chokes" work best when the target is not moving that fast, if in the air moving directly away from the shooter, is on the ground or may be tougher to kill and thus requires more pellets to hit it.

Ponce thus chose the "full choke" and screwed it in to the end of the muzzle. His target was not flying; it might be stationary or if it was in motion, as in a strike, that motion would be in a straight line toward him, not off at a wide lateral angle, where he would have to apply lead. Additionally, Sergeant Ponce was certain that the more pellets that hit the snake, the better. He could not count on the "golden BB," only a single pellet striking the target, but in the perfect vulnerable vital place to make an instantaneous kill. No, in this case, there was strength in numbers.

The detective then opened the box for his pistol. It was a Ruger Model *Mark III Hunter* and like the *Maxus*, it was finely made. A semi-automatic pistol in .22-caliber Long Rifle, it had a stainless steel finish with Cocobolo wood hand grips. The weapon's magazine held ten rounds; an additional round could first be loaded in the chamber, giving the total capacity of the weapon of 11 rounds.

Two magazines came with the pistol; it also featured a manual safety and a loaded-chamber indicator which showed the shooter that a round was present. With a 6.88 inch fluted barrel, the overall length of the weapon was 11.12 inches. It weighed 41 ounces unloaded, in part because it had excellent sights — a fiber optic front sight and an adjustable rear sight. It was drilled and tapped to later add a telescopic sight, but Sergeant Ponce ascertained that this would limit the effectiveness of the pistol at close quarters and low visibility, so a telescopic sight was out.



For the next three days, the would-be snake hunters practiced with their weapons at the *El Yunque National Forest* in eastern Puerto Rico. With 28,000 acres of lush, tropical vegetation, it is the rainiest of all the National Forests in the United States and the only tropical rain forest in the United States' National Forest System. It rains about four times a day here. Up to 240

inches of rain per year have been recorded on the higher peaks in the forest; thus more than 100 billion gallons of rainwater fall here per year. El Yunque, the local name for the former Caribbean National Forest in Puerto Rico, has six rivers, numerous streams and several waterfalls. While not generally hazardous, the rain forest does experience numerous landslides and sudden violent thunderstorms.

There are over 240 species of plants and trees in El Yunque, 50 species of birds, 11 species of bats, 8 species of lizards and 13 species of *coquis* – the famous ubiquitous Puerto Rican frog, along with Puerto Rico's only native mammal, the bat. Some rare species of animals found there are the Puerto Rican boa, which can reach the length of 90 inches, the Peregrine falcon and the Puerto Rican parrot. The Puerto Rican parrot is one of the ten most endangered species of birds in the world, with only about 40 alive in the wild.

The ground is wet and muddy and is shaded by tall trees that have huge trunks with small plants growing on them. The forest includes mahogany, teak, and rosewood trees known for their beautiful cut wood. There are vines hanging from many of their branches. It is green everywhere you look. Part of the forest is located on the La Sierra de Luquillo mountain range.

The top layer of a tropical rain forest is termed the *canopy* – the canopy being the tops of the trees which are the branches and leaves. Many rain forest animals live in the canopy. Below the canopy is the layer called the *understory*. This layer is made up mostly of tree trunks, young trees and air plants. The bottom layer of the forest is called the *forest floor*. The forest floor has few plants growing because the soil is very thin, being composed of mostly dead plant parts, fallen tree trunks covered in with moss, ferns, and fungi. Under the ground, the roots of rain forest trees do not grow downward very deep, so they can take up only water and food found near the top of the soil.

To keep the large trees from falling over, there are thick parts on the tree trunks called buttresses. These buttresses are a favorite haunt for ambush predators. Small evergreen fern trees can grow to 30 feet in height, with a 3 to 5 inch trunk and a crown of ten or more spreading fern leaves. Frogs and spiders hide under leaves on the ground. Rodents and other small animals abound, both on the floor of the forest and in many trees – in fact, rats are quite fond of nesting in palm trees. At night the forest comes alive as millions of insects fill the air and bats fly out of their nesting places to feed.

The forest covers lands of the municipalities of Las Piedras, Luquillo, Fajardo, Ceiba, Naguabo, and Rio Grande. It received its name from an old Taino Indian spirit *Yuquiye*, which means "Forest of Clouds."

The two men first practiced firing at stationary targets on the ground, five to 40 feet away, with their *Mark III* pistols. In this non-stress environment, Ponce found that he could hit the

silhouette of a ten foot Bushmaster drawn on a long piece of cardboard at least eight times out of every ten round magazine with the *Mark III*, when the target was within 15 feet. There was almost no recoil with the pistol, which Ponce hoped would be a large plus if he had to use it, as you could easily keep your eye on the target with this weapon. The pathologist was not so accurate; he could only manage four hits out of every magazine. The men then placed the targets in bushes and a few feet up in the branches of small trees. The more they fired, the more accurate they got and the easier magazine changes for the pistol became.

They took a break for supper and then went back out that evening to see what they could do in low light conditions. As long as the target was illuminated by a flashlight, the men were able to achieve similar results to those they had achieved in the daytime.

The next day, the pair fired their shotguns...and fired...and fired. Clearly, this weapon would be the primary killer, when they finally found the snake. At every target, from four feet to 40 feet, at least one #4 Buckshot pellet struck the snake's silhouette, most always five to ten, and in about 20 percent of the engagements 12 to 15 pellets hit, with even more than that hitting the silhouette when it was less than 15 feet away.

They then fired at night, with one man holding a flashlight and the other man shooting a shotgun. This proved less than satisfactory and Sergeant Ponce devised a way to tape a flashlight to the forend of the shotgun stock, so that the beam of light pointed in the exact same direction as the barrel. It was affixed with good old duct tape, instead of a formal shotgun mount, but the tape saved a few ounces of weight that the detective appreciated. As the pathologist would be carrying an additional piece of equipment, Ponce did not have him fix a flashlight to his shotgun.



Detective Ponce had worked out his strategy over the week they practiced firing. He and the pathologist had two hurdles to clear at the coffee plantation. First, they had to locate the creature and kill it. Second, they had to do this without anyone getting close enough to see the creature alive or see its dead body. And, of course, they had to do both without getting killed. Ponce recalled what he had learned in North Carolina and what he had read about the activities of the animal. It hunted at dawn, dusk and at various times during the night. Once it killed and ate its prey, it probably did not need to eat again in that 24-hour period. When it was not hunting, the creature probably stayed in one place, conserving energy and basking in the sun or sleeping.

It was heavily camouflaged, which meant that if it was not moving, it would be difficult to see. So the optimal time to find it was probably during the night as well as at dawn or dusk. Night was out; the Bushmaster would easily spot them way before they saw him and either slink away

or rush in to attack; they would have to try and locate him in the hour at dawn and then later in the day during the hour at dusk.

Those two times could also help in keeping the prying eyes of the other plantation owners away from the operation. Ponce would talk with the foreman and frighten him concerning the prospects of the workers encountering a rabid dog – or worse a *Chupacabra* searching for another human victim. If the detective and the pathologist could swoop in during that hour in the morning and again the evening, find the reptile, kill it and quickly put the body into a large burlap sack they would take with them, by the time anyone came to investigate the gunshots, Ponce would have the dead creature bagged up in the cargo van, waiting to return to the Institute. He did not have to conceal that they had killed something, but only conceal exactly what that had been.

Now, he unveiled his ace in the hole to the young pathologist. "What I am going to show you now must remain secret. You can never tell anyone about it, because it may be the only thing that saves our lives," Antonio explained with a serious look on his face. With that, he pulled out of a burlap sack a grayish device about 16 inches long that looked like one half of a powerful set of naval binoculars.

"This is a thermal infrared weapon sight developed for the United States military by the *Raytheon Company*. Do not ask me where I got it, but it is the latest model right off the assembly line. The sight is designed for use on small arms in the U.S. military's inventory, but it can also be used as a standalone observation device. It does not require low levels of light to operate; by using thermal imaging, it can be used day or night equally well. This thermal imaging also allows the device to see through smoke or fog, which would normally obscure other night vision devices; for our purposes, which means it will work when it gets foggy in the mountains. It is called the *Medium AN/PAS-13B(V)1 Thermal Weapon Sight* and as you will soon see, it weighs 2.8 pounds, has a five power zoom capability, and operates on batteries that allow for 6.5 hours of continuous operation. It runs on Lithium AA batteries and my source gave me plenty of those."

"Let me explain how it works. The military has various reticles and mounts to affix the sight to a weapon. We do not have the time or the experience level to do this, so we – I mean you – will use this as a separate detection device instead of a flashlight. When using the eyepiece, you depress the rubber cup surrounding the eyepiece slightly to engage the display and cooling mechanism. The image displayed for the user is black and white. You can select whether white or black will represent hotter objects by selecting 'black hot' or 'white hot."

"Let me get into a little of the physics, *Ahijado*, not to impress you, but so you can understand what makes this work and how you can best use this device, because I will not have one and you must serve as my eyes in the dark, so I can kill this creature before it kills your *Padrino*."

"Thermal imaging sights are sensors that detect heat, which is also known as thermal energy or infrared. Technically, these devices are detecting radiation, which increases as the temperature goes up. Because they detect radiation, thermal imagers do not require any visible light to produce an image. With enough precision a thermal imager can see minute differences in heat and represent this as an image on a screen, or in this case what looks like a telescope. The temperature differences detectable on some of the world's most sophisticated devices can be as small as  $0.01^{\circ}\text{C}$ ."

"The individual who procured this thermal weapon sight did not say how sophisticated this sight was. However, even with this wonderful device, we will be at a disadvantage. Extraordinarily sensitive, these heat-pits of Bushmasters can sense temperature changes, perhaps as small as 0.003°C, even better than this sight, with its millions of dollars of developmental costs and hundreds of scientists and engineers who developed it."

"And we have another problem; human beings, animals and cars generate heat and are usually warmer than their surroundings, allowing the user of a thermal imager to get a good look at them. This sight, for example, can detect a man at three-quarters of a mile away. However, a cold-blooded animal, such as a Bushmaster, will be harder to see because their body temperature adjusts to their surroundings."

"Then how am I going to see this Bushmaster?" The pathologist's question sounded desperate.

"That is the million dollar question," replied the detective. "Here is what I believe. It may not be possible to actually see the Bushmaster, but we should be able to see activity associated with the Bushmaster. For example, we could see the creature eating a rat or other warm-blooded animal; we would not be seeing the **33** but rather the warm-blooded rat being killed and eaten. Second, this Bushmaster, based on my discussions with an expert on North Carolina, could be ten to twelve feet long. If it is moving, then you will be looking for something that is that long that appears to be at a slightly different temperature than the terrain it is traversing. It is that *movement* that will tip you off."

"I am not so sure, *Padrino*." The pathologist remained unconvinced.

"Neither am I; but let us test our theory as best we can," Ponce replied.



The men were practicing that afternoon in El Yunque, near Route 186, about two hours before dusk. A van slowly drove up and from the driver's side a smiling Professor Urayoán Guailí, of the *Dr. Juan A. Rivero Zoo*, climbed out. "I have to have him back safe and sound by day after

tomorrow," the professor said, as he walked to the rear of the van and opened the twin doors. He reached inside and popped off the lid on a large container that looked like a tall garbage can. Gingerly reaching inside, Professor Guailí softly and slowly lifted the ten-foot long albino Reticulated Python that until early that morning had been a blissful resident of the serpentarium at the zoo in Mayagüez.

The pathologist jumped back. It was clearly the biggest snake he had ever seen, and despite the fact that the professor was handling it with great aplomb and confidence, the creature looked extremely dangerous.

"Based on your call, Sergeant Ponce, I brought our biggest specimen," the professor offered, still smiling. "Fortunately, it is an albino, so it will be harder for me to lose him during your tests, because once we put this bad boy on the ground, he is going to get inquisitive about his surroundings."

"As long as h-he does not get too in-inquisitive about me," stammered the pathologist. "OK, wha-what are we going to do now?"

"Guys, here is the plan. First of all, we put all the weapons away. Doc, turn the thermal imager on. We will observe the python first in its surroundings, seeing how it looks as he moves. During all our tests we must remember to allow the python time for its temperature to stabilize in whatever vegetation it is in. I am especially interested in how it appears at dusk – the hour before and two hours after. Then we will put 'Jake' here to bed and head over to the *Rainforest Inn*, where we will spend most of the night. Two hours before dawn, we will get up and head back to this area to conduct another test before and after dawn. We will do our last test tomorrow evening before dusk again. In between the thermal tests, we will continue to practice with our weapons."

The men began testing the thermal imaging device, seeing what it could detect of the python – which proved a willing stand-in – and what it could not detect. The pathologist quickly understood how to work the sight, but it was clear that he was deathly afraid of snakes of any kind.

They knocked off work about two hours after dusk, put the python back in its container and started toward the small *parador*, a Puerto Rican term for a boutique hotel – in this case the *Rainforest Inn* on the border of the rain forest. Once they arrived and checked in, Sergeant Ponce invited the other men to have dinner with him at the *Palio Restaurant* in the nearby town of Rio Grande. It was an upscale seafood restaurant, but Antonio figured he might as well have a few pricey meals before he went to the coffee plantation for his date with destiny.

At the *Palio*, the men perused the extensive menu. They were in for a culinary treat. Just before they ordered, Sergeant Ponce mentioned something he had forgotten to say during the training session with the thermal sight. "Professor Guailí, I hope you brought some live vermin so tomorrow morning we can observe through the thermal sight your python as it eats a warmblooded animal. That may be what we actually see when we use the sight for real in a few days."

The professor nodded his head affirmatively, while the pathologist looked up from the menu, his face turning pale. When the waitress returned, the detective and the biologist ordered appetizers and large seafood entrées, *Langosta al ajillo* – lobster in garlic butter. The pathologist, ordering last, asked only for a bowl of broth, some toast and a glass of water. Detective Antonio Ponce smiled; after all, he was picking up the tab and toast was cheaper than lobster.



In a perfect world, the men would have fired their weapons and tested the thermal sight for several weeks, putting thousands of rounds downrange. However, a perfect world was in conflict with a perfect killer that had already dispatched one man at a coffee plantation in the middle of the island; they would have to go back to the *Hacienda San Pedro* soon and hope that their plan, weapons, and practice would prove successful, when they faced this creature.



**Browning Maxus** 

Two mornings later, right on schedule, Professor Guailí took the zoo's albino Reticulated Python back to Mayagüez, while Sergeant Ponce and the pathologist took a separate van toward Jayúya. During the drive, Ponce and his Godson discussed numerous, "what if" scenarios. "What if" they saw the creature and it turned away and tried to escape into thicker foliage? "What if" they spotted their quarry and began to close in on it, when workers at the coffee plantation returned unexpectedly to see what was happening?

The pathologist began to feel that they had covered almost every potential outcome, but the detective knew better. No plan, no matter how well conceived, would cover every contingency. What could go wrong would go wrong, and often it would go wrong at precisely the worst possible moment.

The men arrived at the *Hacienda San Pedro* in mid-afternoon. Sergeant Ponce first met with *Señora* Alemán, the widow of Roberto. He told her they were there to try and find if there was some animal that may have contributed to the death of her husband. Immediately, *Señora* Alemán became belligerent. It appears that while the detective and the pathologist had been practicing in El Yunque – which followed his several-day trip to North Carolina – *Señora* Alemán had requested that the body of her husband be released from the Institute of Forensic Sciences so she could give him a proper burial.

Unknown to Sergeant Ponce, Dr. Dailey, of the Veterinary Services Division, had put an administrative hold on the remains, and when the irate widow began calling in political favors behind the scenes, Dailey ordered that the body be cremated and the ashes returned to her.

That was a bad move. Catholics represented a minimum of 85 percent of the island; the Alemán family was particularly devout and the Church discouraged cremation, based on several concepts. First, the Church had long believed that the body, as the instrument through which the sacraments are received, was itself a sacramental, holy object. Second, the Church opined that as an integral part of the human person, the remains of a person should be disposed of in a way that honored and reverenced it – unlike many earlier pagan practices concerning the disposal of dead bodies. Finally, and perhaps most importantly, cremating a body constituted a denial of the ultimate resurrection of that body.

In 1997, the Holy See granted permission to U.S. bishops to allow Funeral Masses in the presence of cremated remains. However, the Catholic Church in Puerto Rico, divided into five dioceses and one archdiocese, was often more traditional than its larger brother on the mainland. Roberto Octavio González Nieves was the leader of the Roman Catholic Church in Puerto Rico and the current Archbishop of San Juan. Archbishop Nieves was a powerful man on the island and Archbishop Nieves loved coffee – quite specifically, *Hacienda San Pedro* coffee. While it

might be sacrilegious to say that the archbishop started to raise hell over the cremation of Robert Alemán that is exactly what he did. The religious leader had stood tall in defense of the Navy-Vieques protests a number of years before, and no one on the island – in or out of government – wanted to tangle with him. *Mierda* rolls downhill, as they say in Puerto Rico, and – under orders from above – Dr. Dailey shuffled with hat in hand to personally apologize to the archbishop, stating that there had been an infection in the remains that could have had serious contagious repercussions – but that he should have contacted the Catholic Church before he took such an action and that he would do certainly do so in any similar situation in the future.

Archbishop Nieves was a religious man, and he was also a practical man. He thanked Dr. Dailey for his explanation, hinted that the good doctor might want to attend mass more often so he could refresh himself on the church's procedures, and said goodbye – as the veterinarian scurried out of the office before anything else could happen to his fragile soul.

The archbishop then picked up the telephone and called *Señora* Alemán. He explained that for health reasons the Institute of Forensic Sciences had ordered the cremation of the remains, but given those circumstances, there were no unfortunate religious ramifications that would be attached to her deceased husband. Archbishop Nieves then told the widow that due to the praiseworthy Catholic life that her husband had led, the archbishop would be honored to travel to Jayúya to personally officiate at the Funeral Mass for Roberto Alemán.

That funeral occurred a few days later without a hitch. The archbishop was happy and *Señora* Alemán was happy, but that did not prevent her from later giving Detective Ponce a piece of her mind. The detective dutifully apologized again for the mishap with the remains and discussed with *Doña* Alemán what he was requesting to do at the *hacienda*. *Doña* was a term originally reserved for female royalty and selected female nobility; in Puerto Rico, the term was now often used as a mark of esteem for a female of personal, social or official distinction, such as a community leader of long standing or a great-great grandmother.

Ponce applied the word liberally in the discussion with her. He then explained his theory that a rabid dog may have contributed to the terrible accident concerning Roberto and that the detective and a pathologist were there to find the dog as the day turned to dusk, similar to the low-light conditions in which the event had happened in the first place.

Señora Alemán gathered the workers together and informed them that the work day was now done, but that they would be paid for a full day of effort. She informed them that the two visiting officials needed complete cooperation in their quest to clear the coffee plantation of any dangerous animal – most likely a large dog – that could have played a role in the unfortunate death of her husband. That cooperation meant leaving the area completely and not returning to work until 9:00 a.m. the following day. The men were happy to hear that they would receive a full-day's wage for tomorrow, even though they normally began work at 5:30 a.m. In return, no

one – and *Señora* Alemán emphasized *no one* – would sneak back to the *hacienda* during that time out of curiosity, nor would anyone have a camera or cell phone when he came to work tomorrow.

Señora Alemán was a stern, but fair, leader and the workers departed, although a few whispered under their breath that maybe the quarry was a *Chupacabra*. Señora Alemán departed a few minutes later, first telling Detective Ponce that she would be spending the evening with her sister in nearby Adjuntas. She wished the men well and drove away in her *Jeep Grand Cherokee*.

The detective and the pathologist went to their own vehicle and unloaded their equipment. Each man put on a shoulder holster, in which was a Ruger *Mark III Hunter* .22-caliber Long Rifle semi-automatic pistol. The pathologist took the thermal sight out of its case and turned it on. He then tried to shoulder the *Maxus* shotgun on his right shoulder using the shoulder strap, but found that this was too awkward to haul the shotgun on his shoulder while using the thermal sight with both hands.

"OK, leave your shotgun in the van. Your most important role here is to stay right next to me and be my eyes with the thermal sight. I'll do the firing, primarily with my shotgun. This is what I meant by no plan remaining the same after you start. Don't worry, we can still make this work fine," Sergeant Ponce told his Godson, sensing that the younger man was on the edge of losing his cool, faced with this major adjustment to their original battle plan.

"Alright, *Padrino*, I'll keep an eye glued to the sight and I can help you out with the pistol if you need it," replied the pathologist.

"Now put on the special insulation suit that the herpetologist gave me in North Carolina," ordered the detective.

"But, *Padrino*, I thought you should wear that suit. You will be the one in front and are the one that might first encounter the creature."

"I know that, but you will be wearing the suit and no back-talk," added Antonio, whose voice indicated that this part of the discussion was over. The pathologist did as he was told and put the insulation suit on, tucking the legs of it inside his snake-proof boots. Then he put the shoulder holster back on and ensured that the thermal sight was on, and set to "white hot" that the pathologist found most useful in detecting a heat source.

Antonio Ponce thought to himself that if they needed the extra firepower of his Godson, who now only had the pistol and had never fired a shot under pressure, they would be in serious difficulty, but he said nothing to undermine the confidence of his younger partner. "I know you'll be fine; let's start up the hill to where the incident occurred. We will walk back and forth

along the slope of the ground, working from the lower part of the hill toward the upper. That way, we will cover all the ground and force the creature to go uphill to get away from us which should slow him down."

For the next two hours, the pair traversed the area within several hundred yards of the coffee plants where Roberto Alemán had been killed. They saw nothing and heard nothing. As it began to get really dark, Antonio ordered a stop to the search. In total darkness, they were giving up too much an advantage to their adversary. Antonio was sweating profusely and was almost overheating from the exertion; it was the most exercise he had done since the night of the ill-fated ambush in the warehouse.

The men carefully walked back to the van, stowed their equipment and got into the front seat where they are several mortadella sandwiches that they had picked up at a local *panaderia* bakery. After they finished the meal, the two men made themselves as comfortable as they could and slept inside the van. They would have to get up early in the next morning and did not want to waste time driving from a hotel. It would be better to stay at the *hacienda* area, although neither man suggested they throw their sleeping bags outside to rest on the ground.



The men awoke early the next morning, while it was still pitch black in the Puerto Rican mountains and the sun had yet to come over the *Bosque Estatal Los Tres Picachos* State Forest to the east of the plantation. The coffee in the thermos was less than lukewarm, but each man poured a half a cup just to get the sleep taste out of their mouths. Sergeant Ponce never had gotten used to waking up early in the morning, whether that was on patrol in Vietnam or on a stakeout with the drug enforcement boys.

Part of the problem was that in his line of work, one had to go from a state of sleep unconsciousness to full alert within a matter of minutes and even seconds, which was extremely tortuous on the senses. But the hunters had to get moving soon to take advantage of dawn conditions.

Unlike the evening before, searching at dawn meant that each passing minute brought with it a tiny increase in visible light, although for approximately one hour the *hacienda* would be bathed in twilight, a period in which many of the animals would wake up and begin their daily search for food. Sergeant Ponce was hoping that the rats and mice – all warm-blooded mammals – common to many of the agricultural fields and farm structures would be highly visible to both the heat detector on the pathologist's thermal sight, and the natural heat detectors in the heat-pits of the Bushmaster.

Again the men began to search the area where most of the coffee beans were picked, the literally tens of thousands of coffee trees on the *Hacienda San Pedro* plantation. Each coffee tree is a vigorous bush or small tree that usually grows to a height of up to 12 feet; it has a straight trunk, and can survive for about 50 to 70 years. The coffee tree is an evergreen with spear-shaped leaves, which are green and shiny on the upper side. The trees on the plantation produced *Arabica* beans. The first flowers appear during the third year of growth, but coffee bean production is only profitable beginning the fifth year. One tree can produce over 30,000 flowers in a year.

Because the *Arabica* tree is susceptible to both disease and drought, it requires very careful cultivation, and that certainly happened at *Hacienda San Pedro* under the supervision of the Alemán dynasty. The flowers are white with five or six petals, whose shape and scent resemble those of jasmine, and for this reason the coffee tree has been called "Arabian Jasmine" since the 17th century.

The flowers later form little tufts made up of 8 to 15 elements, at the base of the leaves. These produce the same number of berries, commonly known as cherries because of their color. Green to begin with, the berries ripen over several months, becoming successively yellow, then red, garnet red, and finally almost black.

Berries that fall on the ground attracted rodents.

The men walked back and forth among the trees. Every now and then the pathologist would spot a rat scurrying around looking for a meal, but saw nothing that would have resembled a long, skinny animal slithering along the ground or waiting in ambush for a rat that wandered too close to it. On a few occasions, a small group of rats could be seen in the thermal scope congregating near a tree, but the gathering of rodents triggered no attacks.

As the sun began to shine over the mountains to the east of the *hacienda*, Sergeant Ponce decided that this phase of the search was at an end and the men carefully returned to the van at the plantation buildings lower down on the hill. Once again, he was sweating, the warm rivulets rolling down his arms from his shoulders and down his legs from his chest. His limp was more pronounced than during the previous search, which he realized meant that he was getting tired.

There they waited for *Señora* Alemán to return. An hour later, she arrived and Sergeant Ponce briefed her on the results of the previous evening and the morning search, requesting that they be permitted to return in late afternoon. She agreed and the detective and pathologist drove to Jayúya, where they found a small bed and breakfast and booked two rooms. After a three hour sleep, the pair convened in the small *vestíbulo* (sitting room) of the *parador*, ordered two double *Espressos* and planned their next move.

"Keep the coffee coming, *Señorita*, until I tell you to stop," said Antonio with a friendly air. We have important work to do and have been up all night worrying about it." The young lady left. She knew from talking with her friends the night before that these men from the *Policia* were looking for the *Chupacabra* that had killed the beloved *Señor* Alemán. Word traveled quickly in the little coffee valley. If she could help the men by providing cup after cup of the strongest, best *Espresso* they ever had, then that is exactly what they would get.

"We could spend weeks out here going over every tree and bush in this plantation," offered Sergeant Ponce.

"Yes, and there is nothing to say that just because we searched one area of the bushes on one night, that this thing might not move into the same area the next day," the pathologist added.

"You are exactly correct. We have been barking up the wrong tree. While I was resting this morning I kept thinking of every word that Dean Ripa had told me, when I visited his serpentarium in North Carolina. It eluded me at first, but finally I recalled his admonition: 'Find out where the most rodents are at that coffee plantation and there you will most likely find your Bushmaster.' It is obvious to me now."

"What we must do is to find out where the rodents congregate and wait there to ambush our killer while it is in the process of ambushing its own prey. My guess is that this will be in the area of the production buildings, where they roast and process the beans. They also have a small café there where the workers eat and coffee tourists stop for a *café con leche* and a tour of the facility. That main building also has several small garbage cans, which undoubtedly also attract rats and mice. I will really depend on your ability to use this thermal detector tonight."

"I'll tell you one thing, *Padrino*; I won't be falling asleep anytime soon with all this coffee coursing through my veins!"



The men checked their equipment and replaced the batteries in the thermal vision sight. As always, it would be their key piece of equipment, as the pathologist would first have to locate the largest congregations of rodents. They departed the *parador* and drove back to the coffee plantation as the sun began its slow descent to the west.

Once again, *Señora* Alemán gathered the workers together and informed them that the work day was done, as the two visitors needed to continue their quest to clear the coffee plantation of any dangerous animal. The men departed, knowing that once again they could sleep in and would not have to return to work until 9:00 a.m. the following day. As the men departed, they once

again speculated on the possible presence of a *Chupacabra* and whether only two policemen, one with a pronounced limp, could handle it.

After all the staff departed, the two hunters donned their gear and walked to the area of three large buildings that housed the equipment used in the processing of coffee beans. The pathologist walked around all three buildings and identified one has being the "home" to at least ten scurrying rodents. The two men sat down on a bench along one wall, where the pathologist would have a good long field of vision in which he could detect both the rodents and any possible predator. In addition to his shotgun, and holstered Ruger *Mark III Hunter*, the detective had the large flashlight taped to the shotgun, but kept the light shut off. If his Godson spotted the snake, Ponce would flick the light on, acquire the target and quickly begin shooting. Tonight, the men would not depart the area after dusk, but remain at the *hacienda* the entire night.

Minutes turned to hours and the temperature dropped slightly. Shortly after midnight, the pathologist whispered to his *Padrino* that the rats had departed the building. Ponce decided that they would move to the other buildings until the thermal sight showed the rats to be in abundance and then would again set up another ambush position to try and kill the predator as it was stalking the vermin.

The moonlight provided enough light for Sergeant Ponce to pick his way around several machines between the buildings and up to a doorway of the next building. Again, he was straining at the exertion and could feel his temperature rising as he began to sweat. The pathologist was right behind him and at the doorway, the younger man moved around the limping detective to peer into the darkness. Sure enough, he spotted at least 15 rats inside the room with the thermal sight. Sergeant Ponce could confirm their presence after hearing numerous squeaks and squeals of the happy rodents as they found sources for more tasty morsels of food.

Suddenly, the pathologist blurted a warning. "Padrino, something is moving toward the rats about ten feet in front of us. I cannot tell what it is; one end of it appears to be slightly warmer than the rest of it, which is blurry, but it seems quite long. Wait! It is turning and slowly moving toward us. The hot end is starting to rise off the ground, Padrino. Padrino, the hot end is bobbing!"

Instantaneously, Ponce flipped on the flashlight, and then saw only a blur. Immediately, a hammer blow struck his right leg.

Had the same hypothetical invisible scientist that had earlier observed the death of Roberto Alemán now been standing next to Sergeant Antonio Ponce, he would again have started his stopwatch on another ten-minute countdown toward death.

Nine minutes, 58 seconds – Antonio felt the impact of the strike just below his hip, a blow that almost knocked him backwards so forcefully that his leg began to buckle. Behind and to the side, the pathologist froze in position, too afraid to move. Ponce immediately fired a shot from the Maxus, BOOM, which went harmlessly into the air. Unknown to Sergeant Ponce, the Bushmaster had aimed its strike at the flashlight, whose beam had struck him in the eyes and enraged him, but the serpent's aim was two inches wide and he had hit the leg instead, tick, tick, tick, tick, tick.

Nine minutes, 54 seconds — Antonio realized he had made a mistake taping the flashlight to the shotgun. He had assumed that he would be engaging the beast ten feet or more away from him, where the light would illuminate the target for the shot. However, not only was the creature much closer than ten feet, it was actually touching him. Ponce raised the butt of the shotgun above his shoulder to direct the beam of light downward, lifting the butt so high that his index finger had to come off the trigger. Finally, he elevated the weapon far above his head so that the flashlight shone downward, and he could see the lip shields spreading outwards like wings on the creature's skin, a pair of eyes buried beneath as it was hideously attached high up on his right leg. The body of the creature was a brown camouflage pattern, while the top of the head was almost completely black. He could see the thrust of the serpent's jaws, followed by the instantaneous mandibular clinching, embedding the fangs, and rotating them outward, so as to expel even more venom into his body and felt the initial foreboding that he was going to die.

Antonio's Godson, the pathologist, who had not been bitten but was going into psychological shock, felt dizziness, faintness and weakness, a tightness of his throat and accompanying difficulty in swallowing, and started to scream, but remained immobile, *tick*, *tick*, *tick*, *tick*.

Nine minutes, 50 seconds – The creature's mouth tightened to squeeze off a second and larger pulse of venom into Sergeant Ponce. Antonio, with his right armed extended straight upward and his right thumb now on the trigger, squeezed off another round of the shotgun, **BOOM**, but it also was un-aimed and slammed into the floor next to the creature's body. At full-choke, there was almost no dispersal of the buckshot so none hit the target. The detective began to go into combat mode and fired a third shot less than a second later, **BOOM**; if it hit the animal to the rear on the body, there was no immediate reaction and the snake continued biting quite enthusiastically. The pathologist stopped screaming and began to move toward his stricken Godfather, *tick*, *tick*, *tick*, *tick*, *tick*.

Nine minutes, 46 seconds – The creature tried to withdraw its fangs from its target, but could not, and began to hideously twitch its head, horribly hissing all the while. Sensing, rather than knowing, Antonio fired two more un-aimed rounds downward, **BOOM**, **BOOM**, then ripped the flashlight off the shotgun with his left hand and threw the *Maxus* off in the air to his right; something in his combat memory told him that he could not fire the shotgun at the creature without blowing off his own foot or leg in the process – although in reality, the detective had

fired the entire capacity of the weapon. Looking down – through dust and powder generated by the rapid firing of the shotgun, which gave an eerie glow to the beam of the flashlight that now pointed toward him from the floor – Sergeant Ponce could see yellowish drops of venom dribbling down his thigh from the bite. To Ponce's left side, the pathologist had removed the Ruger *Mark III Hunter* from his shoulder holster, *tick*, *tick*, *tick*, *tick*.

Nine minutes, 42 seconds – The creature continued to struggle to free its fangs from Sergeant Ponce's thigh, hissing all the while. Holding the flashlight still with his left hand, Antonio reached across his chest with his right hand and drew his own *Mark III* from his shoulder holster. From the left side of his peripheral vision, he saw his Godson's right hand, in which was his pistol, extend past the front of the detective and toward the creature, *tick*, *tick*, *tick*, *tick*.

Nine minutes, 38 seconds – The creature finally started to free its fangs from its target, twisting its head and still hissing profusely. Antonio sensed that his opponent would re-cock its head and deliver a second fatal strike against him, maybe this time right at his groin or chest. He recalled what Dean Ripa in North Carolina had told him about a Bushmaster trailing its prey for short distances if perceived that its *strike-hold* had failed. Before the head of the snake had withdrawn, however, Antonio saw the muzzle of his Godson's pistol touch the serpent right behind its head and heard the first **Bang** of the .22 semi-automatic, as his Godson, hissing angrily between his teeth in an emotion that Antonio had never seen before, pulled the trigger at this point-blank range, *tick*.

Nine minutes, 37 seconds – Bang, Bang, Bang, Bang, tick.

Nine minutes, 36 seconds – Bang, Bang, Bang, Bang, tick.

Nine minutes, 35 seconds; buzzer sounds; time expired – Bang, Bang, click, click, click. The Bushmaster fell dead to the ground, its head almost severed from its body from the carnage of ten rounds fired at the same spot along its spine. The pathologist stopped his guttural death scream and began to shake, still pulling the trigger on a now-empty magazine; he had shot all 11 rounds in just three seconds, hitting the snake with every bullet. He began to look at his Padrino, expecting him to drop dead any second from the massive bite he had seen inflicted on him by the Bushmaster. Sergeant Antonio Ponce looked down at his leg. In addition to the venom, he saw blood, wondering if it was his or from the dead animal. Strange, he felt nothing, but that might be caused by the jolt of adrenaline he knew his body had experienced. Maybe the poison would kick in shortly. Maybe he was already dead. Maybe this was how life violently ended for a cop.

The pathologist reached for a small medical bag on his waist that held several antivenom injections. Sergeant Ponce had brought these back in a refrigerated organ-donation pack from Wilmington in the terrible event that they would need them. The detective had kept their

existence secret during all the practice sessions at El Yunque, so as not to scare the younger man on the sobering realities concerning their odds of survival, and had given the case to the younger man only after arriving at the coffee plantation.

"Tell me what your symptoms are," yelled the pathologist, as his medical training kicked in and he reached for the first hypodermic, while his Godfather was looking down, where the serpent had struck him.

"Hold on, *jóven* (youngster.) I think I am alright, but what about you? You were screaming like a charging gladiator, while you were dispatching this monster – saving my life I might add. When I pointed the shotgun at the Bushmaster and shined the light at it, the creature started to strike, but it had to go around the muzzle of the shotgun sticking out toward it and hit my leg instead of my hand or arm, I guess."

"That makes it even worse, *Padrino*; there are many veins and arteries in your thigh and if we do not act quickly, the poison will be carried to your vital organs in no time."

"You would be entirely correct," Antonio said, permitting himself a small chuckle, "if, indeed, a prosthetic leg had veins and arteries. But fortunately, mine from the Veteran's Administration is of the 'no frills' variety and the only materials inside this leg are plastic, foam, cables and steel. The reptile bit into it, possibly because I was so warm trying to move around, and could not extract its fangs from the plastic and foam material. But enough of me, let's get this creature out of the building, packed into a container and into the van before anyone who has heard our little firefight comes up to investigate."



## Part Two



# Noah

Sergeant Ponce pulled out a large machete from a scabbard on his waist and finished separating the Bushmaster's head from its body, not that much more than a sinew or two still held them together. Perhaps he had seen too many horror movies when the supposedly dead monster suddenly bounced back to life, killing everyone in the room. The herpetologist in North Carolina had been correct; the Bushmaster did not bleed that much, although a few drops had splattered on the detective's leg. He had also been correct when he said that if Ponce had gone out by himself to hunt this creature, he would likely have been killed.

Ponce estimated that the creature was at least ten feet long, but it was fairly thin and he and the pathologist were able to lift and drop the body into the large burlap bag, without too much trouble. The detective gingerly placed the head on top of the body in the bag; he also had read somewhere that involuntary muscle contractions could cause the head of a dead snake to snap its jaws shut. Antonio had no desire to test that theory. The men then tied the top of the bag shut and carried it between them the 50-some feet to their van, keeping their hands above the tied portion of the bag – just in case.

As they were placing the bag in the back of the van and shedding their hunting gear, the men saw the first headlights of an approaching car as it raced down the valley. The pathologist finally removed his insulation suit that looked almost exactly like a set of mechanics coveralls to the untrained eye. With their weapons and thermal sight also stored in the back of the van, the two hunters began to climb into the front seat, when the car came around the corner of the processing building ad came to a stop. Out jumped the *hacienda* foreman and two other workers.

"Did you get the *Chupacabra*, detective?" The foreman was bursting with excitement at the potential for seeing Puerto Rico's most infamous killer. "Can we take a quick look at it and perhaps take a picture?"

The pathologist looked at the detective. Sergeant Ponce knew that the situation was fairly benign at this point, but to keep it that way you had to throw a bone to these bystanders, just in case you later needed their help.

"OK, guys; here's the deal. If I show you the body, whether or not you take a picture, the pathologist here and I are both going to get fired. So I can't do that, just like I'd never ask you to do anything that would cause you to lose your jobs."

The men looked toward the ground dejectedly, their ambition to be one of the few people to ever see a real blood-sucking creature swiftly going down the toilet.

"But I tell you what we're going to do. I'm not going to bullshit you again by telling you that this is some kind of dead rabid dog locked in the back of the van. You guys were right all along. It is a *Chupacabra*, a fairly small one, but a deadly one nonetheless. You three guys are the only ones on the island that we're going to tell about this, as our orders are to go back to the huge medical waste incinerator at the Institute of Forensic Sciences of Puerto Rico tonight and while we're all alone, throw this *Chupacabra* in it and make sure that the 1,000°F temperature burns this entire creature to fine ashes. And you three guys are the only guys on the whole island that are going to know that. Not even *Señora* Alemán, bless her, is going to be told."

The three men looked up smiling. They might not get a picture of the *Chupacabra*, but they just received a story they could tell for the rest of their lives in every bar and bistro on the island. They might never have to buy their own drinks again -Don Q on the house!

Sergeant Ponce interrupted their bliss. "Now I have to tell you one more thing, guys. I have to swear you to complete and permanent silence on this. If we ever get wind that this story is out there, we know exactly who we told tonight – just you three. And it won't be too hard to remember that, and we will come looking for you and when we find you we are going to put you in jail for a long, long time; you all understand that?"

The three men nodded affirmatively, wondering how they were going to exploit this priceless opportunity without getting caught by this imposing police sergeant, who looked like he meant every word he said.

Sergeant Ponce and the pathologist got in the van and began to pull away toward Puerto Rico Route 144. The detective rolled down the window and said to the three men, "Thanks for helping us tonight, boys. You know it took five 12-gauge shotgun blasts to bring it down, but keep that under your hats as well." Then the van then pulled away toward the east and Rio Piedras.



Chupacabra

Sergeant Ponce had been truthful when he told the three *hacienda* workers that he and the pathologist were heading that night to the Institute of Forensic Sciences of Puerto Rico. He knew the three men would have a difficult time remaining silent and he did not care – in fact, he was hoping they would start spreading the tale that Roberto Alemán had been killed by a *Chupacabra*, because as wild as that sounded, it was a believable story in Puerto Rico. And the next morning, the three men would actually find the five expended shotgun rounds, which would give them the physical proof to make their story much more plausible.

Sometimes to protect the real facts, you had to let people run with a bogus alternative theory. He recalled how his brother-in-law told him about 20 years ago about some really senior general or admiral, who had committed suicide back in the day. The press was all over the story and ran with the theory that the senior officer had killed himself because he had been discovered wearing medals and decorations that he had not actually earned earlier in his career. But that wasn't actually what happened. That wasn't what happened at all.

The officer had been caught by his wife in an affair with an enlisted woman – and that wasn't his first transgression; that had been why he ended his life. So the service issued a weasel-word statement that they would neither confirm nor deny anything about the motivation of the officer to commit suicide – when they knew all along exactly what it was. And they let the media go with a story – the bogus medals – that was not as damaging to the service involved, as at that time, marital infidelity of officials at the national level was a huge problem. Say nothing and let the media run circles with a bogus story – that's what his brother-in-law had told him.

After three hours of driving, during most of which the two men remained silent letting their adrenaline levels drop back to normal, the van reached the Institute of Forensic Sciences and the men unloaded the burlap sack and their weapons from the van and took them to the pathologist's office. It was a few minutes before 4:00 a.m., some two hours before the first shift of medical personal would arrive. Now, only some security men were on duty, as well as the cleaning and maintenance staff.

"OK, *Padrino*, what are we going to do now? Do we burn the snake in the medical waste incinerator, as you hinted to the three guys back at the *hacienda*?"

"No," replied the detective, "we have much more important work to do in the next couple of hours, while we are alone. We need to document many facets of this 33 – we probably should go back to using that term in this setting. We must weigh it, which should be easy as we can just weigh the whole bag and subtract the weight of the empty bag from that. I estimate the length at ten feet, but we will have to confirm that. Then we have to take pictures of every angle of this thing. I especially want photos of its mouth when open. Be careful when you prop it open with

a ruler; we'll need that to show the measurement between the fangs, so that later we can show that this distance was an exact match to the puncture wounds on the victim's arm. See if you can recover some of the venom, so an expert can later determine which sub-species this is."

"I can get all this done before the regular staff arrives. I understand about matching the fangs with the wounds. What do you hope to do with all this other information, detective?" Much like Sergeant Ponce thought it wise to return to the use of the term **33**, so did the pathologist concerning the use of the words detective or sergeant, instead of *Padrino*.

"We have two missions now. The first is to try and determine how this **33** got to the island; in other words, who brought it here. If, and that may be a big if, we can determine who brought it here, we can shut off that pipeline of importation, so we do not have a repeat of this situation in the future," opined the detective. He was thinking that he would need to call in Dean Ripa from North Carolina to assist them, and would give the herpetologist a call later.

"What is the second mission?" The pathologist was weighing the bag now on a scale. He had earlier placed two autopsy carts head to head so the creature could be stretched out on them to its full length, after being weighed, for further examination.

"The second mission is to protect ourselves. At some point, I do not want someone over at Hato Rey to come to the conclusion that you and I know too much. I do not sense that we are in any danger, either to our careers or our personal safety, but I want to make sure that we have an airtight deterrence capability," Sergeant Ponce explained.

"What do you mean by that?" The pathologist had just concluded that the **33** on the scale weighed 18 pounds, 2 ounces.

"Let me again reiterate, that we are not in danger at this point, but that we must gather information now or it will be too late to do so later. What I mean by an air-tight deterrence capability is that anyone up the chain who would contemplate later taking any action that would be unfavorable to either of us would quickly become aware that we have proof and evidence beyond a shadow of a doubt that this 33 existed on the island in this period and that in our investigation of this incident, we uncovered policies and decisions that had previously been made that put all of the island's population at risk with respect to this potentially lethal situation." While he was explaining this, Sergeant Ponce disassembled the two shotguns and put them and the two pistols in a large hard carrying case that he later would take to his office and store in the arms room.

The sergeant continued. "The final piece of an air-tight deterrence capability is that a person who would do us ill must believe that we have fail-safe mechanisms that our information will be made public, no matter what happens to us. They would know that the release of this

information would be sort of a 'doomsday device' for the high and mighty and that it would occur whether we were alive or dead, God forbid. Enough gloom and doom though; the odds are we never have to use it. How long is our friend here?"

"Twelve feet even," replied the pathologist. "We may be shorting him a half an inch based on your decapitating hit with the machete. I can also say with certainty that the cause of death was eleven .22-caliber Long Rifle bullets fired into the neck area of the creature, combined with a near-simultaneous decapitation! Whoever fired those rounds must have been a crack shot or he must have been very close to his target! Very, very, close."

The two men got a good laugh at the comments. The pathologist then started an examination of the creature, talking into a lapel microphone in the same tone that he would in a normal autopsy. Over the course of the next 45 minutes, he opened the creature's mouth, inserted a ruler and took numerous photographs. He also took pictures of the entire length of the animal and then began to capture venom, using an empty hypodermic syringe and extracting residual venom from the venom glands along the side of the animal's head. Then the pathologist cut open the snake and examined its organs. To the doctor's surprise, he found the remains of a very small dog in the snake's stomach. He guessed that maybe a rat or mouse was on the menu for dessert.

While the pathologist was finishing his work, the detective decided that he would call his source at *Raytheon* and see if he could keep the thermal sight for a while longer. He would then notify Dr. Dailey that he needed to come by and debrief him on the previous evening. Finally, he would call the North Carolina herpetologist and offer him an all-expenses-paid trip to Puerto Rico. Although he knew the pathologist would do a thorough job on the semi-autopsy, both the pathologist and the detective did not know what they did not know about the creature, and thus, they needed a true expert to closely examine the dead creature.

The pathologist put the camera's memory stick into his computer and made a copy of all the examination photographs to a flash drive that he gave to the detective. He then coiled the snake and eased it on to one autopsy cart and took that to a special secure positive temperature mortuary cold chamber. Here the Institute of Forensic Sciences stored human bodies at between 36°F and 39°F. This storage area was usually used for keeping bodies for up to several weeks, it did not prevent decomposition, which continued at a slower rate than at room temperature. The pathologist pushed the tray into one of the wall units, closed the door and locked it. He was the only pathologist with a key to the unit.

Both men then left the Institute of Forensic Sciences and went to their respective homes for a few hours of much-needed sleep. Detective Ponce would call Dailey and Ripa about 10:00 a.m., but now he just needed to change his pants because the right thigh area looked like some snake had gone wild on it.

## **Hato Rey**

Sergeant Ponce got up at 10:00 a.m., showered and called Dr. Dailey's office, saying he would be there at 1:00 p.m. with his report. Then he called the *Cape Fear Serpentarium* and asked for Mr. Ripa. The herpetologist came to the telephone and Ponce told him in cryptic terms that he had something extremely interesting for him to see in Puerto Rico. Ripa asked when would be an appropriate time to visit and the detective said "tomorrow."

Sergeant Ponce added that the entire trip would be on the tab of the Department of Agriculture, and that he would wire an advance of \$3,000 through *Western Union* that afternoon. All Mr. Ripa had to do was to go to a nearby *Western Union* office, either a self-standing enterprise or one affiliated with a bank, and present a photo identification to get the funds. Once he purchased a ticket with the money, he was to call the detective and give him the airline information and Ponce would meet him at the appropriate arrival gate of *Luis Muñoz Marín International Airport* in San Juan.

Detective Ponce walked downstairs and across the street to his favorite café, the *Hacienda San Pedro Coffee Shop*. Strange, he thought; he had never really thought of the place as being part of the plantation where he had just conducted his investigation, but it was. He ordered a *café con leche* and a *Pastelillo de Guayava*, a sweet pastry with powdered sugar on top and guava paste as an inside filler. Antonio visualized how the debriefing would go and how he might answer the various different questions that Dr. Dailey might pose to him. Sergeant Ponce thought that he would not have to get into the air-tight deterrence capability at this point, as there was still too much work to be done.

The police officer finished his small snack and went to his car. The time was 11:00 a.m. and he departed to drive to his office in another part of Hato Rey. Here, he put the hard case containing the four weapons in the departmental arms room, and went to his office to see how much work had piled up. The secretary gave him a stack of telephone messages. Fortunately much of the law enforcement communications on the island were good old-fashioned telephone calls and not emails. The lady that helped handle his communications had been there forever and was a trusted mainstay of the shop.

"Glad to see you back, Sergeant Ponce," she said. "We thought that perhaps you had been kidnapped by a bunch of nefarious cockfighters up in the mountains. I have divided the notes into three categories with five by eight cards. The ones on top are the most important and the people you may want to contact sometime today. You will be glad to know that Mr. Willie Colón called. He was happy to be able to tell you that they found one of the three hens over at his brother's house. Apparently some of his nephews had come over, opened the cages and dropped corn on the ground so the rooster and hens would walk home after them. However, two hens and that prized rooster of his are still missing."

Ponce laughed, sat down and spent an hour returning phone calls. None of them had to do with the death of Roberto Alemán, for which Ponce was extremely grateful. At a logical stopping point, he notified the office staff that he had a scheduled briefing with the chief of the Veterinary Services Division at 1:00 p.m. and did not want to be late. He left open if he would be back to the office that day, but that if a Mr. Dean Ripa called with any message, the detective should be contacted right away.



Sergeant Ponce arrived at the office of Dr. Dailey and was ushered in. Unlike his previous meetings with the chief of the VSD, where the two men were the only people present in the room, today there was a third man.

"Sergeant Antonio Ponce, I'd like to introduce you to Mr. Gregory Valparaiso. I've asked him to be here today to sit in on our meeting so he can gather the facts straight from the expert – you. Greg has extensive experience in public affairs, in case we require those talents."

Sergeant Ponce shook the man's hand and the three men sat down. The detective made three tentative conclusions. The first was that Valparaiso did not normally work for Dailey – he was some type of outsider. The second conclusion was that while the third man may have had some public affairs experience, he was a doer more than a talker and his presence may have been ordered by someone pulling strings offstage. Ponce's final conclusion was that he did not like the man, who was wearing expensive cufflinks, had his monogrammed initials on his shirt cuff and probably had on a \$2,000 suit – he undoubtedly was not a government worker, unless he had an outside source of income to boot.

"From the cryptic nature of your phone call – and Greg, we have implemented some rigorous operational security here – I believe that congratulations may be in order. Tell us what happened!" The veterinarian was positively beaming, almost sending a message to the third man that everything was under control and there was no need to worry.

The detective went through the entire litany of the last 72 hours, explaining their search strategy in each of their three search forays to the *hacienda*. He explained their weapons in detail and how it took almost a dozen rounds to finally dispatch the **33**. At this point, Dailey explained to Valparaiso that the number **33** was a classified Department of Agriculture term on the island for a case involving a poisonous snake, but that an actual **33** event of such an animal in the wild had never been reported before in Puerto Rico.

Sergeant Ponce continued. He described that he and the pathologist had used night vision devices but did not go into details about the capabilities of this equipment and also did not

## Hato Rey

provide the origin of the equipment. Based on their non-questions concerning the equipment, the police officer concluded that neither man was a "gun guy."

Antonio finished his lengthy recount explaining that the remains of the **33** were now secure in a special secure positive temperature mortuary cold chamber at the Institute of Forensic Sciences and that the pathologist's initial examination of the **33** indicated that it was indeed a Bushmaster and that it weighed 18 pounds, 2 ounces and was 12 feet long. The numbers raised the eyebrows of both the other men.

Gregory Valparaiso raised an index finger and began to ask a question. "OK, Detective Ponce, how many people know that you were at the *hacienda* searching, what did they see, and what did you tell them? Also, did you sanitize the area before you departed?"

"I would say that 50 people employed at the *Hacienda San Pedro* personally saw us there, beginning with *Señora* Alemán, and Dr. Dailey, she is still pissed off that the remains of her husband were cremated before they could receive a proper burial," replied Ponce.

"Greg, I will go into my decision on that with you later and how I finessed Archbishop Nieves to smooth things over with the widow," remarked Dr. Dailey.

*Finessed*, my ass, thought Sergeant Ponce. The archbishop whipped you like a rented mule, as 'Johnnie Reb' would have said in Vietnam. The detective continued, "Of those 50 people, three of them saw us just before we departed after killing the **33**, but they arrived after we put the remains in the van and therefore saw nothing critical. They believed that we had just shot a *Chupacabra*, and I did not attempt to dissuade them from this opinion. In fact, I told them that it had taken five rounds from the Browning *Maxus* to put it down."

"What about the sanitization?" The third man seemed very concerned about that aspect.

"We left nothing of the remains behind. The **33** did not bleed much because of its low blood pressure system. I left the expended rounds from the shotgun and from the pathologist's pistol right where they fell," said Antonio.

"Why did you do that?" The third man seemed agitated.

"So that the workers would find them," responded the detective. "You see, the *Chupacabra* in Puerto Rican lore – Ponce had confirmed to himself during the conversation that Valparaiso was not from Puerto Rico, but probably the northeast U.S. – is quite fierce and extremely difficult to kill. After the event, I concluded that five empty 12-gauge shotgun buckshot rounds and eleven expended .22 pistol cartridges would support most Puerto Rican beliefs about this creature. Conversely, if it ever crossed someone's mind that this might have been a 33, they would conclude that no 33 in existence would require that much firepower to bring it down."

"An excellent decision, Sergeant Ponce," piped in Dr. Dailey quickly. "That was a brilliant move. The people of Jayúya would naturally have a belief that some non-human life-form played a part in the death of Roberto Alemán, and you provided tangible 'proof' in the form of those shotgun shells that it must have been a *Chupacabra* that did the foul deed." Dailey did not like where Valparaiso was going and wanted to squelch this line of questioning before it could expand. But he had to be careful, as Valparaiso did not work for him.

"Now Sergeant Ponce, what is our next move?" Dailey wanted the police officer to lay out a roadmap, so if Valparaiso had a problem with it – which meant that Valparaiso's bosses had a problem with it – it would look like the police sergeant had made a poor calculation and not the VSD chief.

"Our next task is to determine how this **33** got to the island. I feel sure that it was not born here, as we have absolutely no history of this type of animal. Our only piece of evidence is the body of the creature in the mortuary cold chamber at the Institute of Forensic Sciences." He then explained that an expert on this species, who had no connection with any government institution, was on his way down to the island and that he would be there in a few days. Ponce immediately raised his hand, a sign that he knew there may be objections, but that there was a method to his madness, if he would be allowed to continue.

"I know you may have some concern about bringing this expert in, but sometimes that has to be done, such as with Mr. Valparaiso here. This herpetologist is *the* expert on Bushmasters. He owns a private serpentarium, where the largest numbers of Bushmasters in captivity are housed. He has developed new techniques to extract their venom for use as an antidote. He has bred several generations of these creatures in captivity and has an extensive repository of DNA information about every Bushmaster that has known to have been sold in the United States. From that, he can determine if this particular animal is a descendent of one of them. He knows the names of the collectors, who purchased these animals. When he sees this creature and takes DNA samples, he will be able to lead us to the person on the island who imported it."

"Until he arrives, we will be beating the streets to find out who might be in the snake trade on the island. I will tell my old narcotics-dealer snitches and pet-store owners that the governor has had enough of this crap of letting boa constrictors go into the wild when they get too big for a pet owner to handle and that my ass is in a sling to find out who has one. This should keep the existence of our type 33 secret – and I assume that you want to maintain this condition of secrecy – but if we do not find who imported this animal, it will happen again, perhaps with even worse results."

"Well, I want to see this herpetologist, when he arrives. I know many herpetologists, and I want to query him on his level of proficiency," interjected Dr. Dailey.

"Sir, I advise against that," offered Sergeant Ponce. Secretly, he wanted to control what information Dailey – and now Valparaiso – received from Dean Ripa, but that reasoning would never fly. "You should not see him at this point, because that insulates you from anything the herpetologist may later say, or if the situation escalates out of control. I'll take the fall if Ripa's advice goes south, but it won't; this guy is the best. And as I have in the past, I will keep you closely in the loop with my reports."

"David, I concur," added Valparaiso. It is called 'plausible deniability' and everyone in this room understands the definition. Had Detective Ponce not suggested it, I would have."

"OK, I guess that about gets me up to speed; how about you Greg?" Valparaiso nodded that he had no further questions. "Sergeant Ponce, good luck with your meeting tomorrow with the Bushmaster expert, and keep me informed," Dr. Dailey added, as the conversation came to an end.

Sergeant Antonio Ponce left the room, thanked the receptionist and headed downstairs to his car. He was convinced that this Mr. Valparaiso – whoever he was and for whomever he worked – had tape-recorded the entire conversation in Dr. Dailey's office.

That was OK. Antonio had taped the conversation as well.



Antonio drove home and not back to the office. As always, he crossed the street and went into the café house. He ordered an *Espresso* and sat near the back of the room. The emergence of Gregory Valparaiso widened the circle of those in the know. He could not be sure of who else was aware of the problem on Dailey's end, but as Valparaiso worked for somebody else, that person – or people – would know at least as much as was discussed at the meeting earlier this afternoon.

Sergeant Ponce reviewed his own "team." There was his Godson, whom he could count on completely and was the top expert in his field of pathology on the island. The only downside was that if push came to shove, Ponce could be deterred if his Godson's safety was at risk. Second on the team was Dean Ripa – at least from the standpoint of being the resident expert on Bushmasters.

That was all he knew about the herpetologist; he had no idea of how much "when the going gets tough, the tough get going" was in the snake-man. Third, he could probably count on Professor Urayoán Guailí, the biologist at the zoo in Mayagüez. The guy knew about snakes in general

and was a horse in great shape if any really heavy lifting was involved. That was only three partners to help him, but it was a start.



San Juan Coffee Shop

# Carolina

Bright and early the next morning, Sergeant Antonio Ponce transformed into a madman as he headed to the municipality of Carolina. Located just to the east of San Juan and south of the international airport, Carolina is known as "*Tierra de Gigantes*," the "Land of Giants," not only for well-known Carolina resident *Don* Felipe Birriel González, who stood 7'11" tall, but also in honor of the famous poet Julia de Burgos and the even more famous baseball player the late Roberto Clemente of the *Pittsburgh Pirates*.

Time and time again over the next eight hours, Ponce appeared out of the nowhere behind an old informant, who heard the following words – a split second after he felt an iron grip squeeze the top of his trapezius muscle, until it brought tears to his eyes: "I'll bet you thought I was dead (add a first name.) How have you been? I've missed seeing you. Why don't we walk back into this alley and talk a bit? You wouldn't want your friends out here to see you chatting with me, would you?"

Then the pair would ease into a nearby alley or behind a trash dumpster and Ponce would continue. "I heard something about you pushing kiddie porn after I left narcotics. That's a real step down for you, (add a first name.) You know when you were running drugs and I was trying to catch you, I could understand that you had a family to feed, but this stuff with children is pretty low. Does your wife know you're into kiddie porn? Do your kids know you're into kiddie porn? Does your boss in the cartel know you're into kiddie porn? Because I've heard that they have a particularly nasty remedy for guys the cartel catches pushing kiddie porn."

"Tell you what I'm going to do. I'm going to forget that I ever heard about you and kiddie porn and in return, you don't have to tell me anything about running drugs now. Isn't that a deal? And here's what you're going to do for me," Ponce said, squeezing the man's shoulder muscle until the punk screamed. "Hey, you seem pretty tense, (add a first name.) I work straight for the governor now on stuff he wants fixed, and he doesn't care I how fix it, *comprende*?"

"And right now, the 'old man' – the governor – has had it up to here," the detective added, squeezing the man's shoulder muscle once again for effect, "with all these big-ass boa constrictors and pythons that have been found in El Yunque and other parts of the island. So I'm scarfing them up with a friend of mine, a big weight-lifting biologist in Mayagüez, who has them in this big cage over there by the zoo. And you know what, (add a first name)? He doesn't like guys who push kiddie porn either."

"So I tell you what, you need to start nosing around and you need to start telling good old Sergeant Antonio Ponce just who is importing snakes to Puerto Rico under the table, and how are they getting here, and what pet store owners have a piece of the action. Because if you don't, I'll have my friend the big biologist throw your miserable ass into that cage with all those big,

nasty snakes. And you know what, (add a first name)? I'll bet those huge snakes don't like kiddie porn either."

With that, the detective would let out with a maniacal laugh that could be interpreted that he hoped the snitch would not help him, just to see what would really happen inside that snake cage. Then, while still grasping the snitch with his right hand, he reached into a jacket pocket with his left hand and pulled out a live, writhing ten-inch baby boa constrictor that Professor Urayoán Guailí had loaned him and waved it under the snitch's nose.

"Do you see this? His *Abuelo* (Grandfather) is eighteen feet long and lives in Mayagüez. Would you like to spend some quality time with him?"

The punk squealed in panic and pain by the double assault on his senses. "Whatever you say, Detective; I'll start right away and get the information for you!"

"I know you will," replied Sergeant Ponce in a low, calm, but menacing voice; "I know you will."



Then Police Sergeant Antonio Ponce waited a grand total of eight hours and started visiting his snitches all over again. The information started to flow. Some of the sources mentioned Delta DASH (DSH), Delta Airlines cargo flights specific small express package service. DASH shipments apparently had the highest boarding priority and fastest transit time of any Delta Cargo product; the service was offered throughout the United States, Puerto Rico, and the U.S. Virgin Islands.

The sources conceded that this was only for small, non-poisonous snakes to make it on the island, but they had heard that sometimes potentially dangerous ones were intentionally mislabeled and slipped in. Ponce had a feeling that whoever brought the **33** into the island wouldn't chance sending an expensive snake this way and used some other means of transportation. His sources were trying to buy time by telling him things he already knew. He needed for them to tell him things he did not know.

Finally, a legitimate tip came in. Ponce drove to Old San Juan, parked in one of the large parking garages and made his way over to Tanca Street. There he found a small clothing store that sold – among other things – some nice *guayabera* shirts. Often made of linen, a *guayabera* shirt is distinguished by two or four patch pockets and two vertical rows of usually ten tiny pleats, running along the front and back of the shirt. The pockets are separately detailed with identical, properly aligned pleats, with the top of each pocket adorned with a matching shirt

button. The bottom of the shirt has a straight hem, thus it is not tucked into the trousers. Although traditionally worn in white and pastels, *guayaberas* are now available in many solid colors and serve as formal wear for many occasions.

Walking inside, he spotted a young man that had been identified by one of his snitches. Walking up to him, Ponce flashed his badge and asked the store co-owner to accompany him to the back tailor shop. Over the next ten minutes, Ponce determined that the man – who had lived for a number of years in Chicago – previously had owned a Ball Python that reached a length of four feet.

The man said that he subsequently found that the cost of raising prodigious quantities of mice to feed the pet was getting too high and so he sold it to a friend. He went on to say that later, he and some other Puerto Rican snake enthusiasts saw five large pythons next to a river at El Yunque; three Brazilian Red-tail Boa Constrictors and one albino python that the man said was between 15 and 20 feet long. The last detail peaked Ponce's interest and he gave the witness his card in case he remembered anything else. The information wasn't much.

A few years before, federal agents arrested dozens of airline workers and baggage handlers at the international airport, including a dozen current and former employees of American Airlines, targeting what authorities believed were two drug smuggling rings working together to move cocaine into the United States aboard commercial aircraft. Ponce felt it was possible that the drug lords could move venomous snakes through the same system, but cracking the code on that possibility involved heavy use of the drug enforcement guys, which wouldn't keep the existence of the snake secret for too long.



Puerto Rico had a long – and some would say proud – heritage as a center for smuggling. Rum, slaves, gold, precious stones and all been brought in and sent to other destinations without the authorities being any the wiser. Sometimes the goods being smuggled – such as drugs and poisonous snakes – were illegal. In other instances, items were legal, but smuggled in to avoid payment of significant excise taxes. Now it was addictive drugs; tomorrow it would be something different. Regardless of what was being brought in, the principles remained the same. Keep the circle of who knew what was going on very small, live a lifestyle that was not ostentatious and thus would not raise suspicions, be prepared to bribe officials to look the other way, and when all else failed, prepare to make a fast getaway if the whole operation collapsed.

Most Puerto Ricans knew the score and looked the other way. In many respects it was entertainment; open the newspaper and see if anyone was busted and for what. Sometimes you could find a good deal on an emerald necklace for your wife or girlfriend that was reasonable

without all the taxes added to it. Heck, Hollywood even cashed in on the topic with the production in 1939 of *Mr. Moto in Danger Island*, where Peter Lorre, as the international law enforcement agent was requested by the U.S. government to travel to Puerto Rico to investigate diamond smuggling, after an earlier investigator had been murdered.



Meanwhile, the pathologist was surfing the net and checking *Facebook* entries. It was a long shot but you never knew who would do something dumb and brag about it to the world. He finally found something called, *Puerto Rico Reptiles, Inc.* Some guy had posted a picture a few days earlier showing an open refrigerator jam packed with dead white mice. The caption read, "Herper freezer! Just finished unloading 4,250 frozen weaned rats and 528 jumbo rats. Won't take long for them to be empty again..." Then he found a seven-minute video on *You Tube* by the same group showing several dozen snakes. The video was kind of herky-jerky and he couldn't tell exactly what species the snakes were, but they appeared to be constrictors for the most part. However, clearly there were a lot of folks in the video who had a great deal of interest in the reptiles.



Oblivious to the efforts of Sergeant Ponce and the pathologist, somewhere on the island, a man was worried. He had spent several years raising a special snake – a Black-Headed Bushmaster. Now, the man could not find the snake; he walked all over the area, where he had released it, and there was no trace of the animal. Unlike other snake owners that he had known years ago, when the man owned the snake, had tried to replicate almost every detail of the snake's natural habitat. The cage he had been in was almost three times the size of the enclosures most private collectors could afford for their own acquisitions; it was even larger than most display areas used in zoos and serpentariums. The man also went to great lengths to feed live food to the reptile instead of the frozen-and-then-thawed mice and laboratory rats that served as a bland diet for most snakes in captivity.

Yes, he knew all about the admonitions that live prey in their death throws could possibly harm a snake, but as long as you didn't throw an adult dog or cat in the cage, nothing bad was going to happen. He had even used puppies on occasion; in Puerto Rico nobody kept track of pets that came up missing. The Bushmaster seemed to enjoy his hot meals, especially the small fat ones that the man had plumped up for a few days before throwing them into the cage.

Once the snake attained a length of ten feet, it was time to let him go to the wild, where he could really thrive. The man knew that day would come sometime, but he was saddened nonetheless when it finally arrived. He had studied the southeast corner of Costa Rica until he knew it as well as his own backyard. There were at least four areas in Puerto Rico that closely matched the Costa Rican Province of Puntarenas; in fact the whole island – minus the urban sprawl – could be a haven for poisonous snakes, in his opinion.

He did not want the snake to be too close to humans, or they might mount a campaign to seek out and destroy the reptile, but he also did not want the creature to be so far away that it would be difficult to get food. Puerto Ricans threw trash all over and trash attracted vermin. That's why all the mice – and later rats, some of which were quite large – that he provided for the snake were live. The snake needed to learn how to hunt, how to gauge distances for striking – in short, how to survive on its own, independent of the hand of man.

And so, the man selected the *Bosque Estatal Los Tres Picachos State Forest* not far from a coffee plantation for this Bushmaster. It had water; it had food. It had plenty of large trees and deadfall around which, and in, a snake could comfortably hide. It had the right altitude and it had the correct humidity.

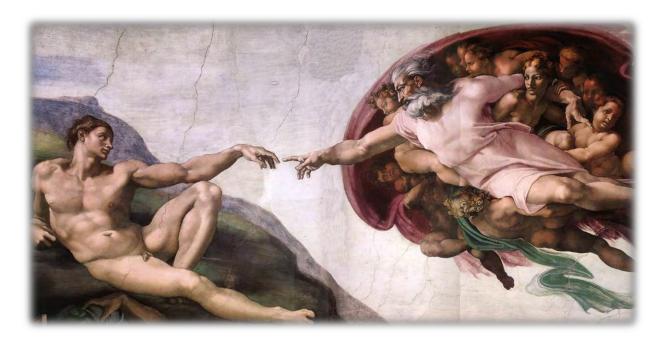
Before he drove to the forest to release the snake, he gave it the last series of its injections to assist the animal's immunization system to attain a level of strength to protect it from typical infections and parasitic infestations. The man knew that no matter how many different maladies

he had planned to protect the animal from, there would always be a few that he did not anticipate. But the snake was large and active; it would survive. The man had conducted many medical procedures on the snake, although he was no doctor, and not once had he been bitten.

And so he released the snake in the forest and drove home. Every so often, he would return to the area to check on his animal prodigy, but always at a distance. He knew how to find it, perhaps an element of psychic bonding had occurred between the two in the years leading up to its release. But it was on its own now. He had given it a start.

In fact, whenever he thought about the snake and its future life, he visualized the ceiling of the Sistine Chapel at the Vatican that he had once visited on a vacation to Italy. In the central section of the ceiling, Italian artist Michelangelo had created four episodes from the *Book of Genesis*. In the first of the pictures, which has become perhaps one of the most widely recognized images in the history of art, Michelangelo shows God reaching out to touch Adam, their forefingers less than an inch apart at the instant of the creation of man.

Always in his mind was this picture, except that to the man, there was no Adam, only the Bushmaster. And in the painting deep within the man's imagination, it was his own hand that was almost touching the head of the snake.



# Luis Muñoz Marín International Airport / Institute of Forensic Sciences of Puerto Rico

Dean Ripa arrived the next day at 4:30 p.m. on Delta Air Lines, Flight 1387, from Atlanta, Georgia. Detective Ponce met him at the gate and helped him through the winding maze of the airport to the baggage claim area. From there, the two men walked a short distance away to just outside the terminal building, where Ponce's car was parked at the curb, guarded by another employee from the Department of Agriculture – the detective's assignment had its small perks.

"I have booked you into a hotel at Condado, Mr. Ripa; the room is reserved for you, but I thought you might like to first make a short detour to the Institute of Forensic Sciences of Puerto Rico. It will only take about 45 minutes to get there and you will be able to see what you came down here for. After a quick look there, we will go back to the hotel. I've made reservations for us for 8:30 p.m. at a restaurant there called the *Bar Gitano*. I think you'll like it."

Sergeant Ponce drove the herpetologist out of the airport complex and toward the Institute. Traffic was heavy and it started to rain, although the shower soon ended. It always seemed to take longer to get somewhere on the island than one originally thought. Ponce told the herpetologist about the forays into the coffee plantation, concentrating on the night they killed the snake. Ripa was especially interested in its attack against the detective, especially since it had struck him on his prosthetic leg and the possible effect the flashlight beam had on the snake an instant before the strike. The conversation consumed the drive time and they finally arrived at the Institute of Forensic Sciences.

They met the pathologist at the door. "Welcome to the island, Mr. Ripa; we'll head directly to our mortuary cold chamber. I have placed our new arrival out on an examination table so you can take a look at him."

The herpetologist knew that he was going to see a Bushmaster, but when he arrived in the cool examination room, and the pathologist pulled back the sheet, Ripa took a short, surprised breath and gave a low, short whistle.

"Jesus, it's huge. I guess I was prepared to see something five to seven feet long; what you found is obviously about twice that. I will make my first conclusion right now. Whatever environment in which you found this reptile, it certainly thrived there. This tough guy looks like he never missed a meal. Other than the fact that he is dead, he looks really healthy, pardon the pun. And from the appearance of its head, I would say that you have a Black-Headed Bushmaster."

"We are all ears, Mr. Ripa, tell us everything you know; we appreciate that you have come to visit us," said the detective in a friendly manner. "If you do not mind, I'll ask our senior

pathologist here to turn on his small tape recorder so we can go back later and refresh our memory on what you have told us, just in case we miss anything, which I now often do in my old age."

Dean Ripa laughed. "OK, but grab a chair, because when I start talking about my favorite subject, I can get long winded. I apologize upfront if you have heard some of this before, when you were up in Wilmington, but I think it is important to get the doc here up to speed as well."

"The Black-Headed Bushmaster, known as the *Lachesis melanocephala*, is a species of the *Lachesis* genus, the Bushmaster. Alejandro Solórzano, an acknowledged expert of the species, also referred to the animal as the *Lachesis muta melanocephala*, and you will sometimes see this name used. It is known locally in Costa Rica as the 'Plato Negro' because of the black head. As you already know, Bushmasters are in the family of *Viperidae* and the sub-family of *Crotalinae*. We do not believe that there are any sub-species for this snake – at least we have not found one yet. Black-Headed Bushmasters are most often found in Costa Rica, more specifically on the Pacific coast in the Province of Puntarenas, and even more focused in the southeastern portion of that province."

"Concerning the terrain in which they live, they can be found in Tropical Moist and Wet Forest areas from near sea level to maybe 3,280 feet, although a very small number have been found at elevations up to 4,900 feet. That last elevation would be considered a Premontane Wet Forest-Rain Forest transition. If there is one area in which you would almost certainly find the Black-Headed Bushmaster it would be in the Osa Peninsula tropical rainforest in southeastern Provincia de Puntarenas, not far from the border with Panama. The central mountain range in Costa Rica, with its ranges often exceeding 6,000 feet, constitutes a natural barrier between the Central American Bushmaster in the north and the Black-Headed Bushmaster in the south."

"The four species of Bushmasters range from the southern tropical regions of Brazil, to the Atlantic, to the Pacific slopes of Costa Rica. One report, from fifty years ago, stated that Bushmasters were also native to southern Nicaragua, but little information exists on the scope of the reptile in that country. I would say that one of the foremost research facilities concerning the animal is the *Instituto Clodomiro Picado, Facultad de Microbiologia, Universidad de Costa Rica* in San José, Costa Rica. Researchers there say that the Black-Headed variety is the most aggressive of all Bushmasters."

"Adult *Lachesis melanocephala* frequently grow to six or six and one-half feet long. I reported in 2001 an example that was seven feet, eleven inches long, so your example may be the world record, if you wanted that claim to fame. And you said it weighed 18 pounds and 2 ounces? That is phenomenal. Alejandro Solórzano, one of the leading experts on the Bushmaster, reported another example in 2004 that was 7 feet, 6 inches in length. The animal gets its name from the top of its head which is uniform black in color. You will note that it has a completely

black dorsocephalic region, excuse me, I mean the head, and a deep, yellow-colored dorsum, or back."

"Along this dark yellow back, there are black rhomboidal markings. This contrasts with the pale grayish-yellow coloration that characterizes the Central American Bushmaster. The bottom of the animal is light yellow. Baby Black-Headed Bushmasters are yellowish, having a dark dorsal pattern and a black dorsocephalic region. In contrast with adults, neonates have light, narrow postocular, meaning behind the eyes, bands in the black head cap. There are other differences concerning the average number of ventral scales on each species, but let's not get into that...unless you plan on getting close enough to count them!" The detective was quite close and indeed he had no desire to count anything except his heartbeats to confirm that he had not been bitten.

"Here are a few interesting facts about the Black-Headed Bushmaster. Because the environment, where this species lives, often consists of elevated forests with cool temperature and continuous drizzle, the Black-Headed Bushmaster has adapted so when it is basking, only the head is in the sunlight, keeping the rest of the body concealed. Secondly, although the Bushmaster genus is the world's longest venomous snake it has the smallest swallow threshold. Drop for drop, the venom of the bushmaster is not as potent as many other venomous snakes, but the sheer volume of venom and the depth to which its long fangs can inject it, make this pit-viper so potentially dangerous. The venom is highly specialized proteinacious saliva that is also a digestive juice, so that when a Bushmaster kills its prey, the venom begins the process of digesting the prey even before it is swallowed."

"Although the Bushmaster has a whole set of teeth similar to what we have, it does not use them in the same way as we do when eating. Elastic ligaments between the halves of the jaws allow the mouth to be opened to a greater width than you would imagine. This allows a snake to swallow its prey whole, rather than chew it into smaller pieces. First the Bushmaster will position its own head so that the head of the dead prey will be the first part of the animal to enter the snake's mouth."

"The Bushmaster will then hook the teeth of one side of its mouth into the head of the prey. The Bushmaster then pushes the other side of its mouth forward a short distance and engages these teeth into the neck of the prey animal. Using this ratcheting motion, the snake draws its head completely over the dead animal and the prey disappears down the throat of the Bushmaster. Should the prey still have some life left in it, the curved shape of the teeth act as hooks and prevent the animal from pulling free out of the Bushmaster's mouth."

"Now the two venom fangs, of course, are affixed to the top jaw of the Bushmaster. The fangs, in turn, are connected to the venom gland and conduct venom from the gland through a canal in each fang, sort of like a primitive syringe. These fangs are subject to a lot a wear and stress and

if the Bushmaster had only one pair of them, its life-span would be quite short. However, the wonders of nature have provided substitute fangs that grow just behind the functioning ones. These replacements move up to take the place of the lost fangs in a never-ending cycle that lasts throughout the Bushmaster's life."

"Another phenomenon that lasts a snake's entire life is molting – or shedding their outer skin. Snakes never stop growing, however there outer skin does not expand and therefore several times a year this skin becomes too tight for the growing snake and must be discarded. You can see when a snake is about to start shedding its skin when that skin becomes dark and dull-looking. The snake's eyes also seem to be cloudy as the outer protective lens of the eye is part of this skin."

"The snake will begin the process by rubbing its face against a tree trunk or branch until the skin around its mouth begins to break away – don't worry, we believe that the snake feels no pain during the process; it may even like it. Over the next several hours, the snake squirms forward; literally crawling out of its old skin, which ends up at the animal's tail, inside out. With a new top layer of skin, its eyesight is again excellent and its skin appears quite healthy. However, during the actual period of molting, a snake is quite vulnerable, with limited mobility."

"I guess I should finally add that female Black-Headed Bushmasters lay between 9 and 16 eggs per clutch, which hatch in the spring. They only lay eggs once a year."

"That's about all off the top of my head that you might want to initially know. Tomorrow, if you would help me, doctor, I would like to do a very close examination of the reptile to see if I can find any anomalies that could lead to further information about it. I'll also take some DNA samples to see if I can later determine a family line."

"I know that you do not have indigenous poisonous snakes here in Puerto Rico, plus this species of Bushmaster comes from a very limited area that is 1,300 miles from here and most of that is the Caribbean Sea so we know it did not get here on its own. I suspect that is what you want me to help you do now: find out who might have imported it and from where. I'll tell you, guys. Given the immensity of this specimen, I would like to know the answer to that myself!"



As the herpetologist was explaining the complexities of the Black-Headed Bushmaster, on another part of the island, another example of that species was observing a rat through its heat sensors. The rat was prancing along a fallen tree trunk, seemingly oblivious to any danger it might encounter. As the serpent struck, the rat seemed to sense movement toward it, but the strike was so sudden that the rodent had no time to avoid it, and the fangs plunged home. With

its fur now standing erect from the initial effects of the venom, the rat curled into a tight ball as spasms rocked its body. Not knowing what else to do, the vermin began biting the location of the wound on its body, but this produced no relief from the agonizing pain that engulfed its small form.

This particular Bushmaster – on this particular attack – used the *strike-release* biting technique. Perhaps the size of the rat indicated to the serpent that it did not need as much venom to kill it as a *strike-hold* bite would produce. In fact, the sheer length of the snake's fangs would have caused death without venom – called by herpetologists a "dry bite" – as these "daggers" had pierced the rat's lungs and ultimately the tiny mammal would have drowned in its own blood.

As always, the Bushmaster acted in the most efficient manner for the type of prey or enemy it encountered and on this occasion, did not strike again. The dying rat squeaked and gurgled – as bright red blood rushed up its throat to its mouth – and made an effort to retreat, but its four legs were spastic and the prey collapsed on the ground.

As the Bushmaster could observe, the rat's teeth were clenched in a death rictus; its little eyes were unfocussed and only half open; and its breathing had stopped. It would be a tasty meal, with the exception of a half-gorged tick attached to the lower half of the rat's back.

Parasites simply had no sense of decorum.



The *Condal Tapas Restaurant* was located in the Condado area of San Juan, just east of Condado Lagoon. It was in a posh beach neighborhood right next to the Atlantic Ocean and its fabulous blue and white pounding surf. The restaurant, a brainchild of renowned Chef Roberto Treviño, was in the category of a Spanish Tasca, commonly referred to as a *Tapas Bar*.

As Sergeant Ponce drove up to the restaurant, he commented to Dean Ripa that parking at the restaurant was a hassle, because it was so popular, and then promptly pulled his vehicle half on the sidewalk, parked and placed a *Policia* placard inside on the front dashboard.

"So much for hassles," noted Dean Ripa. "I wish I had something like it for North Carolina!"

The two men walked inside, the pathologist having earlier begged off the invitation saying that he really wanted to get home to his two children after the previous several nights of adventure; Antonio did not press him on his request. The herpetologist immediately noticed the ample bar, *al fresco* terrace and a magnificent dining room. The interior rustic décor of artwork depicting castanets and bullfighters, brick and fine wood created the impression that the restaurant might have been lifted magically from the center of a traditional Spanish city in the motherland.

"I am at your mercy concerning ordering from this lengthy bill of fare, Antonio, if I may call you that," offered Ripa.

"Only if I can call you Dean, in turn," replied the detective, who had already formed the opinion that the herpetologist was not a stuffy expert but a regular guy.

The men saw that the menu was extensive as well, consisting of an assortment of Spanish cheeses and cold cuts as pre-appetizers, followed by a list of 21 original Spanish hot and cold *tapas*.

Puerto Rico had been a Spanish colony for hundreds of years and much of the culture was still heavily Iberian in nature. In select bars in the mother country, *tapas* – originally conceived as appetizers – have evolved into an entire, sophisticated, cuisine. Patrons of *tapas* can order many different tapas and combine them to make a full meal. The serving of *tapas* is designed to encourage conversation, as diners are not so focused upon eating an entire meal that is set before them at one time. In some countries it was customary for diners to stand and move about while eating *tapas*, but that was not true in Puerto Rico, except at cocktail parties.

The word "tapas" was derived from the Spanish verb tapar, which means "to cover." Original versions of tapas were the slices of bread with meat which sherry drinkers in Andalusian taverns used to cover their glasses between sips, a practical measure meant to prevent fruit flies from

hovering over the glass of sweet sherry. The meat, which provided enough weight so that the thin slice of bread would not be blown off the glass by the wind, was normally ham or *chorizo* sausage – both quite salty and that would activate thirst. Seeing an opportunity for greater sales, enterprising bartenders and restaurant owners began creating a variety of *tapas* to serve with the sherry, thus greatly increasing their alcohol sales, which led to increased *tapas* sales in a spiral of cash inflow.

"If we were really hungry, I would order us some *Cocas*, which are like small pizzas, or we would split one of their *Seafood Paellas*, a rice dish that I am sure you are well-familiar, as traveled as you are. However, that is a lot to eat and I do not want to have you drowning in your glass of sherry – especially before you have told us everything you know about our 'little friend' at the Institute and how he may have gotten here! So we will stick with *tapas*, and I guarantee you, you will not be disappointed," offered Antonio.

A waitress led the men to a table and after listening to Sergeant Ponce's request for a few moments, she departed to get their order. Antonio began the conversation.

"Dean, as in the States, there is a saying in Puerto Rico 'that even the walls have ears.' So I suggest that we not discuss what you have seen earlier today or what we might do tomorrow, or really how any of this has to do with the island. However, what I am fascinated with is the overall trade – that is buying and selling in the private sector – of these animals. I guess I am talking about how that works in the States, but I am sure that part of it extends to those foreign countries, where these animals originated. Could you give me a laydown of that whole process?"

As Antonio was finishing his question, the waitress returned with their drinks and the first *tapas*, bread with tomato and *Serrano* – a thinly-sliced, dry-cured Spanish ham. The men each took a piece and as the server retreated to the kitchen, Dean began his answer.

"You guys sure do like to give me open-ended questions on which I can pontificate! OK, where do I start? I guess giving you my first immutable principle of keeping poisonous snakes is a good place to begin – if you own a poisonous snake, it is not a question of if you will ever be bitten, it is a question of when you will be bitten. I know; I have seen and treated more Bushmaster bites than anyone in medical history – unfortunately all seven were on me. You will never see an old poisonous snake collector with Alzheimer's disease, because the first time he forgets to close the lid on the container holding an Eastern Diamondback Rattlesnake will result in a dead old poisonous snake collector that used to have Alzheimer's disease."

"Curiosity, rebelliousness; people, almost always men, collect poisonous snakes for several reasons. Probably first is the danger involved; owning and taking care of venomous serpents is a high, where your adrenaline is racing and your senses are heightened, because you know just

how dangerous it is and that your first mistake could be your last mistake. Second, concerns just the collecting genre – I have something that you do not. Third, while it is not illegal to own poisonous snakes in most areas in the United States, it is often viewed as being right on the edge of what is considered acceptable in polite society. So the owner of an animal of this type is somewhat of a 'bad boy' and a lot of guys enjoy that image."

"Just like with drugs, venomous snake owners often start their hobby with more common examples. In the States that might mean a copperhead, a water moccasin or a small rattlesnake. That's what I did. That is not to say that one of these local variety snakes cannot kill you. More people die from rattlesnake bites in the United States than they die of King Cobra bites. It seems as though once a collector of a venomous snake owns it for a while, he will do one of three things."

"First, he may realize that this is not only a fulltime hobby, but truly a dangerous one and he decides to sell the snake and get out of this end of collecting, before something truly tragic happens. Or, the snake owner will read voraciously about the type of snake he has and seek to be an expert on that species of snake. If that happens, he may want to obtain more snakes of this type of species, or perhaps of the same genus, and really become an aficionado on them."

"So, Dean, would that be like a guy starting with one kind of rattlesnake and then maybe getting different kinds of rattlesnakes, so he would have an Eastern Diamondback, a Western Diamondback, a Timber Rattlesnake, a Pigmy Rattlesnake and so on?"

The waitress returned before the herpetologist answered. She cleared the table of the used plates and replaced them with the next *tapas*, which was *papas bravas*, a spicy tomato sauce over soft potatoes.

"Man, you were right, these are good," Dean said after taking a bite. "I could sit here all night and eat and talk!"

"Of course in English you have to be very careful how you pronounce a place such as this. Make sure your listener hears the word *tapas* and does not mistake it for *topless*. I ran into a problem with that once with a woman from the States, who thought I was inviting her to the latter! Just call this the new style of police interrogation," laughed Antonio.

"As long as you water-board me using *sangria*, I'll be fine! OK, where were we? Oh, yes, a third option for those collectors who are hooked on the hobby – and the *mojito* I am drinking is causing me now to make *really* bad puns – and do not want to specialize in one species or genus, is to gravitate to collecting ever more poisonous and more dangerous snakes. I guess it is like a guy collecting cars that after buying a *Corvette* wants to move up to own a *Lamborghini*. The people I have been talking about up to now are what we would term – and this is not talking

down about them – as amateurs. They love poisonous snakes, they own poisonous snakes, they buy poisonous snakes, and if they sell their snakes it is either when they are getting out of the hobby or it is to use the money to buy an even more-expensive, and probably more exotic – poisonous snake. This is probably what you are most interested in – amateur poisonous snake owners, who instead of trying to sell his 'pet' just let it go in the wild to be done with it."

"Dean, I think you are exactly correct and this is a fascinating area that, even with the Department of Agriculture, I knew nothing about. OK, say I am in Florida or North Carolina or Texas and want to buy one of these, rather than go out and look under rocks or old logs for a new friend?"

"Antonio, you would not believe how easy it is. Take Florida; I think it is probably the epicenter of collecting venomous snakes in the States. Very simply – and this is almost a quotation of the law there – no person, firm, or corporation shall keep, possess, or exhibit any poisonous or venomous reptile without first having obtained a special permit or license therefore from the Fish and Wildlife Conservation Commission. The Florida Fish and Wildlife Conservation Commission is empowered to issue a license or permit for the keeping, possessing, or exhibiting of poisonous or venomous reptiles, upon payment of an annual fee of \$100 and upon assurance that all provisions of owning such an animal have been met. First, the owner must have safe, secure, and proper housing for said reptiles in cases, cages, pits, or enclosures."

"Second, the owner may transport venomous reptiles only in the following fashion: 'The reptile, or reptiles, shall be placed in a stout closely woven cloth sack, tied or otherwise secured. This sack shall then be placed in a box. The box shall be of strong material in solid sheets, except for small air holes, which holes shall be screened. Boxes containing poisonous or venomous snakes or other reptiles shall be prominently labeled *Danger – Poisonous Snakes* or *Danger Poisonous Reptiles*."

"Third, all poisonous or venomous reptiles, held in captivity, shall be subject to inspection by an inspecting officer from the Fish and Wildlife Conservation Commission. Finally, no person except the licensee or her or his authorized employee shall open any cage, pit, or other container which contains poisonous or venomous reptiles. If you want to exhibit your animals, you also have to post a good and sufficient bond in writing in the penal sum of \$1,000 payable to the Governor of Florida, in case someone in the public is hurt by one of your animals."

"That's it, Dean?" Antonio thought the rules would have been more stringent, but when he realized the situation in South Florida with huge constrictors was out of control, he could see why.

Once again the conversation was interrupted by the waitress who had brought a sausage in a thick sherry sauce. Antonio cut it in half, giving the slightly larger piece to his guest. "You'll

really like this, I think. You can see why this type of food promotes good conversation, instead of staring down at your plate and shoveling food in your mouth. OK, once I have done that as a resident in Florida, where do I buy what I want?"

"You could start with an organization called *REPTICON*. It basically has one exhibition show every weekend somewhere in the U.S. There are 12 shows this year in Florida, four in North Carolina, four in Tennessee and seven in Texas, for example. There is almost a certainty that one of the exhibitors will have a common variety of poisonous snake – some as inexpensive as \$35 an animal. The show has to conform to the rules of the state in which it is being held, so let's say it is one of the dozen shows in Florida, if you have met the requirements that I discussed above, you could buy the snake. Then there is the *National Reptile Breeders' Expo*, where you could make some excellent contacts."

"There are other shows as well; a collector could just surf the net and he would find plenty of public exhibitions. Of course, the Internet has revolutionized snake collecting as it has many other hobbies and businesses. I took the opportunity before I left to do a quick search on the availability of our friend and found the following, and I quote: 'Black-Headed Bushmasters: very few of these magnificent snakes available in the world. Captive bred here in South Florida from Costa Rican adults; they are now 18 months old and close to 5 feet; eating like champs and showing exceptional color and disposition; they will be ready to breed in the next six to eight months; \$12,000 for the last pair; serious inquiries only.""

At this point, the server came with the last *tapas*, a somewhat larger shrimp and noodles *ajillo* (shrimp and noodles with a light garlic sauce.) The two men again split the appetizer on to two small plates and Ripa continued the discussion, while the detective gave in and started eating.

"In fact, years ago, I was selling Black-Headed Bushmasters for \$2,500 apiece. You can get hybrid mixes that are part Black-Headed Bushmasters and part Central American Bushmasters for \$1,850. Of course, you have to be careful. One, some snake-sellers will tell you the snake is one kind of species or sub-species, when it is actually another. Second, some of these hybrids are unpredictable; we simply do not know what their genetic mix will do to influence their behavior – in other words, they might be more aggressive than a pure-bred species would be."

"I still sell Black-Headed Bushmasters, bred in captivity at the serpentarium, to experienced keepers. However, I try to be careful who gets them, as a couple of guys were later bitten by Bushmasters I provided them and the fellows almost died. I do not want that on my conscience, so I do my due diligence and weed out who I think may not have the expertise to own one, which is almost everybody. Reptile sellers can be real 'snakes' themselves; many spend a lifetime trying to bad-mouth their competition, because in this world, reputation is everything."

"Alright, I am getting the distinct feeling that the owner of one of these has to be a person of some means, because you haven't even gotten to the cost of care and feeding, which must also be high, just to ensure that your expensive investment does not get sick, injured or dies prematurely," offered Antonio.

"Exactly; these animals are quite delicate. Most mistakes in keeping animals of this type concern feeding, and include the quantity and quality of the food and water, as well as the calcium-phosphorus balance and protein content of the animal's diet. This is critical, as the generally low metabolism of reptiles makes them susceptible to fatty liver syndrome, arteriosclerosis and kidney calcification. Humidity is a vital, but often neglected, factor when keeping snakes. Diseases of the respiratory system, like pneumonia, often result from incorrect humidity. Keeping snakes in too-high humidity or poor air circulation in the cage or container can often cause massive fungal infections; the excessive spraying of the enclosure is quite a common mistake."

"Each snake species is adapted to the temperature in its natural environment – any failure to accurately replicate this in captivity can lead to severe digestive disorders. Insufficient light can lead to rickets, anorexia, starvation and mouth rot; on the other hand, the over-use of lamps and other heat sources can result in serious thermal burns. If the preferred optimal temperature rang or zone is exceeded by only a few degrees, a critical level is reached that can be disastrous."

"Another problem with heat is if the temperature is too high, the food starts to decompose in the intestines before digestion can occur. Conversely, too cold an environment can bring digestion to a standstill and the food in the snake's intestine may begin to rot, although the venom of this particular reptile causes the breakdown of tissues in the prey animal to begin even before it is eaten."

"And concerning the size of the area in which the animal is contained, most collectors do a pretty adequate job creating enough space, but when they start obtaining more and more species, which for the most part must be kept in separate containers, they run into space problems. A recent survey concerning the size of reptile enclosures, for example, found that 56 percent of all snakes were kept in enclosures that were too small."

"I feel like a student that has listened to a professor help him cram for a final exam, Dean. Why don't you sleep in tomorrow morning, and then I'll pick you up from your hotel and take you back to the Institute of Forensic Sciences, where you can take a nice long look at our friend and see where that might lead you concerning where it may have originated in the sales circuit and how it may have gotten here," Antonio offered as the waitress returned one final time with the check.

"That will be fine. I am certainly glad you came to see me up at the serpentarium. Right now, you probably think that we are looking for a needle in a haystack, but there are certain 'fingerprints,' if you will, that may lead us in a direction that could bear fruit in your search. Tomorrow may tell us what we do not know today."

Sergeant Ponce and the herpetologist went out to the detective's car, and he slipped a ten dollar bill to an old man, who had pulled up a small stool and had sat next to the car the entire evening. Ponce had eyes and ears all over the island; it was getting time to lean on the snitches again.



Condal Tapas Restaurant

Just after noon, Sergeant Ponce picked Dean Ripa up from his Condado hotel and drove him to the Institute of Forensic Sciences. As before, the pathologist met them at the door and ushered them back to the mortuary cold chamber. Under the same sheet was the dead Bushmaster.

"Mr. Ripa, may I suggest that we start at the head and work our way back to the tail. Sergeant Ponce and I have agreed that if you need to photograph any parts of the creature that will not be a problem. However, please do not include any background that would identify this room, the Institute of Forensic Sciences or Puerto Rico. Additionally, if your camera has a built-in GPS that puts an electronic imprint of a photographs' location, such as latitude and longitude, please turn that capability off as well. While we cannot control anything you may say after you depart us, we would ask that you just say that you took these photographs in Costa Rica."

"I understand completely your concerns and I will comply with them both here and after I go home. You have a potential problem here; you have treated me with respect; and professional courtesy demands that I follow your wishes," the herpetologist answered. The photographs I will keep only in my secure files. When I get back to Wilmington, my intent is to compare the color patterns on this specimen with those I have on file for other *Lachesis melanocephala* to see if I can determine possible ancestor traits."

"It is too bad that we do not have something like *Ancestry.com* for reptiles, although I suspect that one day something like that might actually happen. Unfortunately, you cannot wait for *some day*. As I mentioned last night, I also want to take some DNA samples to see if these can later determine a family line. I outsource that, as DNA identification is beyond my capability, but the lab will never know where the sample came from."

With the detective looking on, the other two men spent two hours going over every inch of the reptile, with Ripa taking at least one hundred photographs of the animal, and the pathologist taking a dozen different tissue samples for the herpetologist to take back to his serpentarium. As they moved to about two feet from the end of the tail, the pathologist noted a peculiarity: "Dean, do snakes ever get ticks?"

"Oh, yes; snakes, whether they are captive or in the wild, are loaded with parasites. Concerning internal ones, first up are the blood-borne parasites, of which there at least a dozen. When the parasite burden is especially high, they can cause severe hemolytic anemia and death. Parasites of the respiratory tract are less common than blood-borne parasites, but typically are a much bigger problem. Lung flukes are flatworms that live in the large blood vessels around the snake's heart, but are categorized with the respiratory parasites because the disease they cause is primarily in the lungs. Parasites in the lungs can cause significant inflammatory problems or make a secondary bacterial pneumonia even worse. Intestinal parasites can cause chronic

regurgitation, diarrhea and dehydration. Tapeworms and roundworms live in a snake's intestines as well."

"I am certainly glad, Dean, that we did not get into this subject last night at the *tapas* bar," offered Antonio, trying to add a little mirth to such a disgusting topic.

"I did not realize you guys were going to that type of restaurant or I would have gladly gone with you," added the pathologist. "Perhaps we all could go again tonight; I'm getting hungry!"

The three men laughed at the comments and then got back to the serious topic at hand. "I'm sorry my explanation was so long-winded," said the herpetologist. "Yes, there are often ticks on snakes. Do you see one? If so, just gently take it off with a forceps. Don't worry; the Bushmaster won't feel a thing!"

The men laughed. They were starting to gel as a team, but what happened next was a shock to them all.

"I am trying to pull this thing off, Dean, but I do not think it is a tick; it is much harder," observed the pathologist. "Could you have possibly hit the serpent when you fired your shotgun during its attack?"

"Maybe it is one of the #4 buckshot; that is what I fired first at the Bushmaster," replied Ponce.

"It should be made of lead and be about a quarter inch in diameter, like a little ball-bearing," said the detective, recalling how in the flurry of firing, it would be entirely possible – perhaps likely – that at least a few of the buckshot actually had struck further back on the snake as it attacked.

"I am pulling it out now, but it appears to be more cylindrical and more complex than a small round ball. In fact, I am going to stop pulling and cut it out instead. I can cut around it with a scalpel and not damage whatever it is," remarked the pathologist, as he reached for one of the many small forensic instruments on a potable cart next to the examination table. "Jesus! It looks like a small electronic device, maybe some kind of transmitter. It is an inch and three eighths long; about three-eighths of an inch was sticking outside the animal, just off the centerline of its backbone," the pathologist reported.

"Jesus," responded the herpetologist. "Jesus, Mary and Joseph," the detective said in the same instant.

"It is some kind of tracking device," said the herpetologist, moving closer. "That outside piece may be an antenna. We have long known that animal tracking data helps us understand how individuals and populations move within local areas, migrate across oceans and continents, and even evolve over the years. Since the last century, improved communication systems, shrinking

battery sizes, and other technological developments have led to a range of methods for tracking animals. Scientists began systematically tracking individual animal movements since around 1900, when the first bird banding techniques began."

"In the late 1950s, researchers began using radio transmitters to track wildlife. Twenty years later, the Argos satellite system provided a new method for tracking animals globally. Finally, just 20 years ago, the Global Positioning System (GPS) began to be used, providing the potential to obtain very high-resolution tracking data."

"But we had never believed that individual snakes could be tracked in this manner. First, even the most technologically-advanced systems were simply too large to put on a snake. Obviously there is no neck around which you could put a collar. There are no fins to which you could affix a tracking tag of several ounces in the best case. So your battery would have to be tiny. Additionally, as I mentioned, snakes are fairly fragile and a tag like this, with part of it subdermal, is just asking for a massive infection for the animal in the wild that would almost certainly lead to its death." For once, the herpetologist was at a loss to add anything else.

Sergeant Antonio Ponce was visibly upset. "This adds a whole new dimension to the problem. Whoever was able to do this...what I mean to say is that it may not be a single person that is behind this. Technology like this must cost a *whole* lot of money. I would think that it requires a scientific/engineering capability that a basement warrior simply cannot develop. It also means that whoever let this creature loose wanted to monitor its movement. C'mon guys, brainstorm this with me. *Ahijado*, do you have a portable blackboard that you can wheel in here so we can start mapping out this question?"

"I'll get it right away. And I'll call my wife to let her know I won't be coming home tonight for supper."



The men stood around the blackboard as Sergeant Ponce took the chalk. "OK, in this upper left quadrant we have potential perpetrators; just general categories of people at this point. In the upper right hand quarter we will write different motives. We'll get to the bottom quadrants in a bit. OK, it seems to me that we could have a private sector, individual snake guy; we won't call him a herpetologist just yet, but a guy who is clearly a pro at snake keeping. Would you agree that given the type of reptile and the sophistication of this electronic device – and until we test it we won't know what it can really do, but this thing isn't jewelry – this is what you'd call a *pro*, Dean?"

"Yes, of course," replied the herpetologist, although he seemed somewhat in shock at the revelation he had just witnessed.

"OK," continued the detective, "the second category would be a small group of these guys – snake guys, who bring different skills to the table with one of them having access to a transmitter of this type. So far, so good?"

"I'm not sure about that," offered Dean. "Snake guys do have assistants; younger guys who they are training, or just people in their employ, but snake guys are kind of loners. I'm not sure this is a group effort, at least not a group of snake guys, but I'm in shock right now so hell, it could be."

"OK, we'll put a question mark next to that category," said Ponce. "Give me another possible perp."

"Foreign Terrorists," answered the pathologist. "They're trying to raise hell with the United States and Puerto Rico is a perfect environment for poisonous snakes. It is either a real attack on us, or a dress rehearsal for them to try the same thing, maybe in Florida."

"Good, I'll write that down; it certainly is in the realm of the possible," noted Antonio. Let me add that in this category we could include narco-terrorists. Are there any other categories?"

"I'm not a 'black helicopter conspiracy' guy, but the U.S. government has the money, technical know-how and access to dangerous animals that they have the capability to do something like this. But I cannot see a motive for them to do so here on Puerto Rico," Dean offered. "Iran yes, but not here."

"Alright, we cannot dismiss that, so I will include it. Let's move on to the upper right – motives. Terrorism is one; are there any others?" The detective was writing away now.

"If it is a snake guy, a motive could be to play God," offered the herpetologist. "Look, when a snake guy gets to a professional level of knowledge and is maybe breeding snakes and writing about them, sometimes he can get carried away; like breeding a new species or sub-species of snake. That new form of life may not be recognized by the scientific community, but he knows it is new and the other snake guys know that it is new. Now in the case of this creature, nothing that I see on it is new; it is your basic Black-Headed Bushmaster, albeit it is king size. But, Puerto Rico has been venomous snake free forever, and a motive for a snake guy would be to either see if a single Bushmaster could exist on the island for a protracted period of time, or..."

"...If he could introduce more than one of them in order to create an entire population of Black-Headed Bushmasters on the island," the pathologist finished the sentence, "a Noah's Ark experiment."

The three men completed their blackboard exercise, put the remains of the snake back into its cold chamber wall unit and locked the secure door.

"I'll tell you where we are going, once we are in the van," Antonio remarked. "Before we go, wash off the transmitter thoroughly and put it up on your desk near the window," he said to the pathologist. "If it has some kind of solar-power device, we want it to soak up as much sunlight as possible, so we can have the electrical engineering boys test it to see what it can really do and perhaps how powerful the signal is that it transmits."

As the three men were in the van, the detective told the other two that they were driving to the *Palmas del Mar* resort on the east coast of the island not far from Humacao. Palmas was a world-class resort community in the Caribbean, located in Puerto Rico's southeastern coast, about 45 minutes from San Juan. The community, formed from an old coconut plantation, stretched out over 2,700 acres and includes extensive gardens, lavish homes, small beachside apartments, two championship golf courses, a "Mega-yacht" marina, the largest tennis center in the Caribbean, a hotel, a self-contained school system through high school, 18 restaurants, an equestrian center, an exclusive beach and country club and a world class yacht club. Six miles of coastline, three of which are beaches, framed the resort on its eastern front and offered plentiful options for relaxation and entertainment.

Home owners included members of the Bacardí family, politicians and "regular people" who happened to be in the right place at the right time when they resort was in its expansion phase 20 years ago. Antonio's sister and her husband were "regular people," she in the Army first and later the Department of Justice and her husband in the Army. They had a small apartment in Palmas, forty feet from the beach. Antonio had contacted his brother in law a few weeks ago concerning emerging night vision technology; his brother-in-law had been the one to put him in contact with the retired admiral. True to form, his brother-in-law had an encrypt-capable telephone in the apartment, with a similar encrypt program on his phone in the States.

Antonio had a key to the apartment and the guards at the front of the gated community knew him. The van drove through several miles of manicured landscape, well-kept homes and palm tree after palm tree.

"Pretty nice, huh? My sister and her husband have been married 40 years. He went to West Point and was in the Infantry. After he retired, he worked as a consultant for the Department of Homeland Security for a few years. He developed a binder of twenty articles he found from newspapers and magazines and technology journals from all over the world that Secretary of DHS would get every Friday, and another copy went to the head of the Coast Guard and another copy went to the chief of the Transportation Security Administration and so on. And these

articles were stuff that my brother-in-law would find and he knew those guys needed to see it, but that through normal channels, they would never become aware of it because of the bureaucracy. He had an arrangement that no one could mess with the book before he gave it out each week. Now, the bozos just kiss the boss' ass up there and are afraid to tell him what he really needs to know."

"What does your brother-in-law do now?" The pathologist had met Antonio's sister once, but had not known about this side of his family.

"He writes books and travels around researching. He wrote one book on this old wagon train in 1874 that was looking for gold in Montana, but ran into Sitting Bull and Crazy Horse and 1,400 of their closest friends! During the fight, one of the buffalo hunters on the wagon train pulled out his Sharps buffalo rifle and plugged a warrior with one shot at a range of 1,500 yards. So my brother-in-law, as he was researching, organized a couple of black powder long range shooters and found the exact spot where the buffalo hunter took that shot and they tried to duplicate it. He does cool stuff like that. Here we are."

The three men parked in the back of the building and walked around to the front where the apartment door was, facing the ocean. They could hear the surf pounding the shore not far away. Inside, Antonio located the telephone and placed a call to his brother-in-law in the States. "Hello, Frank, this is Antonio. I am at your apartment with two colleagues. No, we are not drinking your rum. We need to talk to you secure, like I did a few weeks ago. OK, I am going secure now also."

There was no real difference in the quality of the voices on the phone from either end. The encryption device could not withstand an assault by the National Security Administration's cryptologists – and the former head of the august body had been a classmate of Frank's at West Point – but it would defeat typical private investigators tapping phone lines or most random hackers looking to intercept commercial phone calls in which personal and financial information was discussed.

Antonio explained that they had found a very dangerous snake, killed it, and found that it had what appeared to be a small electronic monitoring device embedded in it. He asked his brother-in-law to provide them a start point concerning such a device, the technological challenges, any on-going military applications or anything he had found of a similar nature when he worked for Homeland Security.

"Sure, I can help, Antonio. Some of this may be dated, but it is all unclassified as I haven't seen a black document for over ten years. But I have seen open-source documents and media that I'd bet were derived from classified sources, and I have asked my own sources to confirm certain things. As you know, the key to getting information from tight-lipped organizations is to

convince them that you already have 99 percent of the story and you just need to tie up one or two small points. Often they'll try and be cooperative, not realizing that they are providing or confirming a really important piece of data."

"OK, concerning tracking of moving objects, be they alive or machines; the primary trade-offs for choosing a tracking method are between size, price, amount of data that needs to be collected and ease of data collection. The ideal device for a living object to be tracked would be that it be lightweight enough to be safely carried by the animal, cheap enough to put on a lot of animals, and be able to transmit high-resolution data to a satellite, so that the animal does not need to be captured again to read whatever data is stored on the device."

"In reality, you must choose the best available method based on the size and movement patterns of the animal in question, the study budget, and the research questions you want to address, be that simple movement or also some behavioral information like eating. Experts in this field call the device they put on an animal a *tag*. I will start describing the general nature of these from the simplest to the most-complex and we can talk from there."

"By far, the simplest monitoring device is a band or ring – a physical tag with a unique code or number that is attached to the animal. To record movement, the individual must be seen or caught again, and the number and location must be reported to a common banding center. These tags contain no electronic components and are most commonly used on birds. On the positive side, they are lightweight, very inexpensive, and can be attached by almost any rudimentary-trained people, resulting that that large numbers of animals can be tagged."

"The downside is that because most of these animals are not caught again, only a small percentage of these tags result in movement data, and most of the movement data include only two locations per animal – the location on the ground where the animal was released and the location where it was found. Bird banding programs have been in operation since the early 1900s, and large long-term datasets are available for this type of tracking."

"Next in complexity are light-level geolocators – devices that collect measurements of light levels. Again, the tagged animal must be recaptured and the tag removed to access the data. However, with these tags, light level information is used to estimate sunrise and sunset times, which are used to estimate the movement of the animal. On the positive side, these tags can be lightweight, relatively inexpensive, and provide the only available method for tracking movements of some smaller migrating animals, as well as many marine species that spend most of their time below the ocean surface where they cannot be tracked by satellites or radio receivers. They are not that accurate though, as the location estimates can have very large errors, which vary depending on the time of year and the location of the animal."

"Now we are going to start getting more high-end, which means expensive."

"A Global Positioning System (GPS) tag calculates the location of an animal at specific time intervals using positions estimated by a network of satellites. These locations can be stored onboard the tag or transmitted to the user through a communication network such as Argos satellites or GSM phones (Global System for Mobile Communications) or even through ad hoc wireless downloads. The tags can provide thousands of extremely accurate location estimations for animals. But these types of tags are relatively expensive and heavy. Therefore, they are usually limited to larger animals and require a large research budget if you want to tag a great number of animals."

"Next, I would put Very High Frequency (VHF) radio transmitters, which are electronic tags — one per animal — that emit a very high radio frequency signal that can be used to locate the animal. The user must track the signal using a receiver and directional antennae, which must typically be within a few kilometers or less of the animal to detect the signal — if the signal is further away, the receiver will not capture it. The signal can be tracked by foot, car, or plane, or, if funds allow, by using a stationary system of receivers placed throughout the study area. As you can see, it can be very labor intensive to follow the animals with the receiver. The tags are relatively lightweight, inexpensive, and can have fairly long battery lives. This method can be used on small animals and is most useful for populations that stay within a geographically restricted area."

"Finally, there is what is known as an Argos Doppler tag (known as a platform transmitter terminal, or PTT.) These are electronic tags that send periodic signals to Argos transmitters on polar-orbiting satellites in space or near-space. Receiving stations located around the globe collect the data from these satellites and send it to a processing center, where location estimates are made by measuring the Doppler shift on the signals sent by the tag. The location estimates are typically much less accurate than those made with a GPS, but the tags can be much lighter than GPS units and can also be used to transmit GPS locations if the tag is properly equipped. Compared to VHF or banding, these tags are relatively expensive and heavier, but allow for location measurements from anywhere on the globe."

Sergeant Ponce and the other men digested what they had just heard. Then the detective ran through the possible perpetrators from a general sense and asked what type of tag each category of perp would use.

"Let me first say that in my years of working with DHS I never came across any miniaturization of tracking devices combined with animals and terrorism. That does not mean that it could not happen. I saw lots of things about bad guys using dogs to act in lieu of suicide bombers, but nothing concerning terrorists putting tiny transmitters on the backside of highly venomous snakes. Now if terrorists are behind this, my guess is that they would try Argos Doppler tags, because they would not want to be found walking around El Yunque with a VHF receiver."

"In fact, if it is a terrorist group and they were using Argos Doppler tags, they could monitor the animals from outside of Puerto Rico; they would not even have to stay on the island. They would do this using *Movebank*, a free, online database of animal tracking data hosted by the *Max Planck Institute for Ornithology*. Their headquarters is located in Seewiesen in Upper Bavaria in Germany. The other part of the Institute is located in Radolfzell at Lake Constance."

"Movebank helps animal tracking researchers to manage, share, protect, analyze, and archive their data. It is an international project with over three thousand users and includes research and conservation groups around the world. The animal tracking data accessible through Movebank belongs to researchers all over the world, but each subscribing researcher chooses which parts, or all, of their study information and animal tracks to make visible to other registered users, or to the public. So, in this case, a terrorist could be sitting in London monitoring the general location of the snakes in Puerto Rico as could his handler in Tehran."

"Last, the United States Government is not in the business of letting poisonous snakes loose in Puerto Rico and then tracking them. I think you can rule this out. Having said that, there could easily be some entity in, or working for, the government that is engaged in miniaturizing transmitters, so it is possible that whoever is doing this on the island has access to that product somehow. I know that technological research priorities should include improving tag powering mechanisms, increasing sensor capabilities, devising better attachment techniques, miniaturizing tags and developing more efficient data recovery methods."

"I heard in the shadows about potential capabilities of putting tiny transmitters in terrorists under sedation and then tracking those boys after they were released from Gitmo. I know that's what I'd do if they put me in charge."

"Now if it was a lone snake-guy, I would think he would go with a VHF transmitter; it would be smaller and less hassle for his precious snake and it would get him to a more accurate location for the animal. You know he would want to actually see his little darlings every now and then just to confirm that they were not sick or anything. A terrorist, on the other hand, wouldn't give a crap if a few snakes died in the process of a mission."

"So what you need to do is crack *Movebank* or crack the frequency that the device uses if it is VHF. I may be able to help you with that last piece. Take a bunch of photos of the device from all angles; measure and weigh it and record that. Then use whatever imaging machines you have to determine what the inside looks like. Then send me all that info and the pictures. I know a guy over in Iowa City, who knows a lot about tags and I'll take all the stuff up to him and see what he says. If you can get me all the stuff by noon tomorrow, I can get you an answer in two days."

"Thanks, Frank; we'll leave a new bottle of *Don Q* and some cigars for you here for when you come back down in June. Again, thanks a lot; this is a good starting point; say hello to my sister."



The man had gone to the area again to try to find his snake, but with no result. He was driving a beat up old van; its appearance was unremarkable in Puerto Rico – there were at least 20,000 such vehicles on the island. The van had one of those old radio antennas that were mounted vertically on the front hood. It looked as old as the van and had several bends in it, probably from the driver running into low-hanging branches.

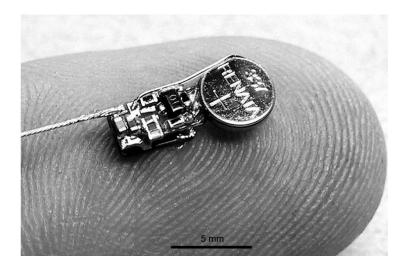
If you were to measure the length of the antenna – and the chance of that happening was the same as finding a snowball in hell – you would find that it was exactly one meter in length, perfect for the frequency of the signal emanating from the tiny transmitter on the Bushmaster. It was an omni-directional antenna; the man had opted against installing rotating stacked Yagi antennas attached to a compass inside the van, as that system could attract unwanted attention.

The man kept the receiver on behind the front seats, whenever he was driving; it was powered by the van's electrical system so had no batteries to run down. The man was a trained electrical engineer and had been a fine one before he retired, so power usage was right in his wheelhouse. After the latest failed attempt to locate his Bushmaster, he departed the state forest and drove north on Puerto Rico Route 149, through Ciales, to Manatí, and Puerto Rico Route 22 toward San Juan. As he wound his way through Puerto Rico's largest city, enroute to his home in Trujillo Alto, he drove past the Institute of Forensic Sciences of Puerto Rico so he could stop by his favorite *panaderia* and by a few loaves of his favorite *pan de agua* bread. There were a few lights on in the Institute – night owls catching up on some paperwork, no doubt. Most of the structure was dark.

Suddenly the receiver in the van started to beep; sometimes that happened in the plethora of electronic transmissions in high population densities. The man drove past the Institute and the beeps became fainter. He was curious about what had just happened, so he made a left turn and drove a quarter mile before making another left. He would drive along the rear of the building and see what the receiver told him.

As his vehicle again approached the Institute, the sound of the beeping became louder and the beeps occurred more quickly. The man drove several different patterns in the neighborhood and each time the receiver behaved correctly with respect to a VHF source inside the building. The man then departed; he would check the receiver the next day to see if it was operating correctly

and then repeat the experiment. If there was no flaw in the equipment, how on earth did his snake get into this building?



Sergeant Ponce called the next morning to the office Dr. Dailey and notified the receptionist that he would be there in two hours with a crucial update. She cleared her boss' schedule and promptly 120 minutes later the detective showed up and was ushered into the office. Once again, Gregory Valparaiso was present.

"Dr. Dailey, we have a problem," said the police officer. "During our in-depth examination of the **33** yesterday, we found an electronic monitoring device surgically implanted in it. That indicates a level of sophistication we have not seen before in this case."

Neither Dailey nor Valparaiso said anything and Ponce continued. "I have an outside expert in the States examining the peculiars of the device. He does not know how we obtained the device, where we obtained the device or what type of host it was planted inside. From his results, we may be able to determine the method by which the receiver of this information gathers the data and possibly what type of person or group is behind this. Our deduction at this point is that our perpetrator is not a simple pet owner who let his animal go when it became too large or dangerous."

"We could not exclude foreign terrorists. Let us stay with that possibility for a moment. You have directed me not to work with any government agency and I have followed this directive to the letter. What I need for you to do is to query your sources up the Department of Agriculture chain of command and across to the Department of Homeland Security to see if there is any indicator or piece of intelligence that a foreign terrorist group is planning to conduct any operation in Puerto Rico concerning dangerous animals. I think that is general enough that it will not elicit suspicion about a 33."

"Second, my source in the States indicates that if the device is one particular type, Argos Doppler tags, than the data from the electronic monitoring device will be transmitted to an organization known as *Movebank*, a free, online database of animal tracking data hosted by the *Max Planck Institute for Ornithology* in Seewiesen, Germany. At my level, I have no leverage to contact *Movebank* and ask them the extent that animals in Puerto Rico are being monitored. Dr. Dailey, if you have an ability to discuss with *Movebank* how many animals in Puerto Rico are having their data monitored through the *Movebank* system, it would assist us. They can filter it by excluding those transmitters that are obviously on birds, and any transmitter on a ground animal that moves more than one-half a mile in any one day. Fortunately our type of 33 is not a roamer. Additionally, if their data shows that one of their transmitters is currently located in the Institute of Forensic Sciences of Puerto Rico, you need to go into a full-court press and find out everything you can about the researcher who is pegged to that transmitter!"

"If my source can determine that the transmitter is not an Argos Doppler tag, but rather a VHF tag, we will be looking on the island for a perpetrator here, who may be driving around as we speak, trying to pick up the signal from the **33** that he let loose on us but has for the moment gone silent."

"The last piece of information I have for you is that Mr. Ripa, the curator of the *Cape Fear Serpentarium* in Wilmington, North Carolina and an acknowledged expert of the type of **33** of which we are concerned, has done a full examination of the **33**. He will return to Wilmington in a few days and run the DNA he has obtained from our specimen through his own database to see if it is related to any other individual of this species that he has previously encountered. That could further lead to the name of a particular owner, and from there we may be able to determine how it got to the island in the first place."

Dr. Dailey nodded and asked a question. "Is it our belief that if this is an Argos Doppler tag, then we might be looking at terrorism?"

"It would unquestionably be possible, but not a certainty. There has been no reported evidence of terrorists involved with **33**s. Mr. Ripa does not believe that it is foreign terrorism. I think he is leaning toward a domestic snake owner, but after I leave here, we are going to have an indepth discussion of why he feels this way. I wanted you to know soonest, what we had found, since it may indicate that the case is shifting in a new direction."

"Greg, can you work your trap-lines for a contact we can depend on at *Movebank*?"

"Certainly, David; I know just the guy who can call them and offer a large donation to help in their worthy endeavors in return for some discreet information. However, I have no clout with DHS; you'll have to try that with your other contacts. There may be a silver lining concerning possible terrorism, however. Everyone understands that you don't go out and cry *wolf* when you are dealing with terrorists. You keep that under wraps, so you can lull the potential terrorists into a false sense of security, before you pounce on them."

"I would call the TSA boys here on the island and suggest that they raise their threat alerts for a while and look through more bags of people moving through *Luis Muñoz Marín Airport*. Have them do a more thorough search of cruise ships as they dock as well, so people can see that we take this terrorism stuff seriously.

"Sergeant Ponce, when is Mr. Ripa going back to North Carolina?" Dr. Dailey was in information overload. If this turned out to be a terrorist incident, events would steamroll over him fairly soon. Valparaiso would be able to help with the *Movebank* thing, although he would owe somebody a big favor and that person would want repayment undoubtedly at the worst

possible time. And the people Valparaiso represented were going to weigh in fairly soon anyway and that could well get ugly.

"He flies out tomorrow, Dr. Dailey. I want him to get back to his DNA database as soon as possible, and he cannot do that from here. He will talk to me tonight on whom in the snake world might have the know-how to do all this; not many guys would attempt to perform any type of surgery on an adult 33 of this species. But, this will in no way be a perpetrator list; we'll need more information and maybe he can find it in North Carolina at his serpentarium."

"Meanwhile, I am going to turn on the heat in the pet store community to see what they know; I am not expecting that anyone is going to confess to bringing this animal into Puerto Rico, but our snake guy may have screwed up and ordered certain supplies and equipment from someone here that would be a tip-off, now that we know the problem."

"Alright; thank you, Detective Ponce. Let's meet again in about four days. Greg, will you have anything from *Movebank* by then?"

"I should, David. You may want to start crafting a statement for the media if something else happens. Remember, we agreed that if you had to go public, you would give me a 48 hour notice."

Sergeant Ponce excused himself, once it was obvious that the conversation was at an end. Whoever was doing this had not made a mistake so far, except to implant that little transmitter in the Bushmaster. The transmitter was designed to show someone where the snake was. Somehow that transmitter had to show Ponce who was monitoring the snake and where he was.

# **Hotel El Convento**

"Want to know how primitive man still is? Just say the word 'snake' in a crowd anywhere and watch what happens to every single person – man, woman, or child. All sense of logic, rationality or proportion is quickly lost; otherwise intelligent people regress to a childlike state where the impossible becomes 'reality' and where true reality is denied. Snakes can suddenly leap extraordinary distances through the air, pass effortlessly through walls like ghosts, smash through thick glass windows, roll down hills like tires, outrun Secretariat, break legs with their strikes, tie people up and whip them to death, and hypnotize people simply from the gaze of their eyes."

Ripa was on a roll. After Antonio had briefed Dr. Dailey, he returned to the Institute of Forensic Sciences, picked Dean up along with his DNA samples, and took him back to his Condado hotel to pack for an early flight out the following morning. He needed Ripa to try and match the characteristics of the Black-Head Bushmaster they had killed with some other snake that Ripa had seen in the past, or that he knew existed in someone's collection.

Failing that, Ripa had to try and identify the breeding line of the snake – in other words, its pedigree – to determine who may have bred this snake. If the perpetrator had found this snake in the wild rain forest in Costa Rica and brought it into Puerto Rico directly from that location, the trail was going to instantly go cold.

Now they were in Old San Juan at the *Hotel El Convento*. The hotel is located in an old nunnery, at 100 *Calle Cristo* across the street from the *San Juan Cathedral*, the western hemisphere's second oldest cathedral. Known originally as the *Monasterio del Señor San José de la Orden de nuestra Señora del Carmen*, it was founded in 1651 by *Doña* Ana Lanzós, a wealthy widow who donated her money and her large residence to three nuns brought especially from Santo Domingo, who served as founders of the nunnery.

Between 1854 and 1861, the building was expanded, after the original residence was torn down. The nunnery fell on hard times and was closed in 1903. In 1959, Robert Woolworth started the renovation to turn it into the *El Convento Hotel*, which opened in 1962. In the 1990s, workers again renovated it and rechristened it as the *Hotel El Convento*, today a 4-star small luxury hotel with a 4-story courtyard and a swimming pool on the roof. It is quite close to the *Puerta De San Juan Gate*.

"OK, Dean. If this is foreign terrorists – and it is terrible to say this – but it will not be our problem anymore. The feds will jump in here with both feet and once they catch some Arab or Pakistani, or Russian, or Chinese operative that had something to do with it, they will start walking the dog backward to the place where this plot originated and I doubt that this is either Puerto Rico or North Carolina. So let us forget that possibility for a moment. What the

pathologist here and I need is for you to give us a criminal personality profile of a snake guy who could conduct this level of sophisticated operation. We have got to identify a person's mental, emotional, and personality characteristics. We have got to know what belongings found in the possession of the offender would indicate that he might be our guy, although if we can find Bushmaster-related evidence that might be easier than in most other cases. If we find somebody interesting, we have to know what strategies to use for the interviewing process after we pick him up.

"You're going to have to appeal to his vanity," replied the herpetologist. "He needs to know that you believe that no other herpetologist in the world – and that may in fact be true – could have done what he has done in transplanting a Black-Headed Bushmaster to the wild in a part of the world that that no poisonous snakes had never lived in before. You cannot be corny, but he needs to think that if there were a Mount Rushmore for snake experts, he would be on it. I guarantee you, he knows who the experts have been who have gone before him, so here are a few names to throw out."

"These herpetologist professionals, who have been bitten and killed by poisonous snakes, would surely be mentioned if we had a pantheon of accomplished snake experts. Well-known herpetologist Douglas March died after being bitten in 1939 by a deadly Fer-de-lance from Central America. Grace Olive Wiley was a female American herpetologist best known for her work with venomous snakes; in fact, she was the first person to successfully breed rattlesnakes in captivity. A curator for ten years at the *Minneapolis Public Library*, which had an extensive collection of live reptiles and amphibians in its natural history museum, on July 20, 1948, she invited journalist Daniel P. Mannix to photograph her collection of snakes in San Diego. While she was posing with an Indian Cobra, the flash from Mannix's camera spooked the snake and it bit her. Although she was rushed to the hospital, the only vial of cobra antivenom was accidentally broken in the rush to treat her, and Grace was pronounced dead less than two hours after being bitten."

"Professor Karl Schmidt, one of the most important herpetologists in the 20th century, died on September 26, 1957 after being bitten by a juvenile Boomslang snake from Sub-Saharan Africa, perishing from a brain hemorrhage 28 hours after the bite. Marlin Perkins, who was then the director of the *Lincoln Park Zoo*, had sent the snake to Schmidt's laboratory at the *Field Museum* in Chicago for identification. Schmidt underestimated the severity of the snakebite and, as a result, did not seek medical treatment until it was too late to counteract the effects of the Boomslang's venom."

"Professor Schmidt was not the last to fall. On a Saturday night in January 1964, Gerald de Bary, the director of the *Hogle Zoological Gardens* in Salt Lake City, Utah, was finishing up his reptile cage cleaning chores. At 10:30 p.m., de Bary opened the Puff Adder cage and experienced a brief moment of faintness; to keep from falling threw up his left arm to grasp the

edge of the enclosure, but instead his arm went into the Puff Adder's cage. The snake struck instantly and sank both fangs deeply into the underside of Gerald's forearm. At 5:30 a.m. on Monday morning, 30 hours after being bitten, de Bary seemed to be holding his own, but an hour later there was a sudden drop in his blood pressure and his heart stopped beating. All attempts to revive him failed."

"Wesley Dickinson, a veteran herpetologist and former president of the Long Beach, California, Zoological Society, was killed at his home in Santa Ana, California, on July 10, 1966, while force-feeding an eight-foot-long King Cobra. The snake bit Dickinson on his left hand, but as his arm had been paralyzed previously by a rattlesnake bite in 1949, he did not realize he had been struck until after he withdrew his hand from the container. Co-workers tried administering antivenom in vain."

"Perhaps the most famous members of our profession, Robert Mertens, an extraordinarily accomplished German herpetologist, was hand-feeding his pet Twig Snake. The snake bit him; Mertens, 81 years old, lingered for three weeks before dying on August 23, 1975. His reported last words have become as famous in the snake world as those words inscribed on the *Statue of Liberty* are to most other people – 'what a fitting death for a herpetologist.'"

"Brian L. West was trying to help a female King Cobra deliver its eggs on May 30, 1992, when it suddenly turned and bit him on the second toe of his left foot. He immediately told a friend, 'It bit me on the foot . . . We've got to catch the animal and put it in its cage before the paramedics get here, so no one else gets hurt.' Brian died just five minutes after the bite, while his wife, a registered nurse, tried to raise a vein in his arm in order to inject the lifesaving antivenom they had on hand for such an emergency. Unfortunately, Brian was dead before she could get the needle in him."

"Larry Moor, founder of the *British Columbia Association of Reptile Owners*, was nipped by his pet Egyptian Cobra on July 30, 1992; he ran screaming into the street, hailing people to take him to a hospital, before dropping dead on the sidewalk. Anita Finch was bitten by a 12-inch-long Gaboon Viper in her home on December 17, 1999; she scribbled a note to authorities and died before the ambulance arrived."

"And Joseph Slowinski, a herpetologist who spent most of his time in the field, was bitten by a juvenile foot-long Banded Krait, on September 11, 2001 high in the foothills of the Himalayas in the barely inhabited north of Myanmar, near the border of China. Thirty-nine years old, Joseph died the next day. Michael Peterman was bitten by a baby African Rhino viper, after he accidentally bumped the snake, while trying to feed it. Rushed to a Cincinnati hospital, he died just as antivenom was being flown in from Miami-Dade County in Florida to Cincinnati, on August 4, 2003, some 18 hours after the bite to his thumb."

"Dean, we are impressed," remarked Antonio. "You ripped through these details to include exact dates and times of death as if these stories were a type of gospel."

"In a way they are, Antonio. Every herpetologist worth his or her salt has heard about all of these folks and maybe even grew up wanting to emulate one or two of them – minus the fatal last bites. You have got to stroke this guy's ego, so we can find out if there are any more Bushmasters out in the wild, and to determine who might have assisted him, and what his overall plan is. Then, because I know you want to keep this all under wraps, you are going to have to figure out a way to keep this guy silent. Because once he gets caught, he is going to want to trumpet his achievements to the whole world in general and to the herpetology community in particular."

"I have been doing a great deal of thinking since yesterday. As I mentioned, this guy appears to have cleared two really, really significant hurdles that herpetologists and scientists had been unable to clear for years. First, he has been able to miniaturize the power source – in this case by attaching the tiny solar panel to the device. This obviates the need for a large battery. However, I knew that one day, someone would accomplish this. However, what really amazes me is that he has found a way to immunize or in some way preclude the snake with the surgically implanted tracking device from becoming infected. Infections happen a lot. In fact, some animal tracking technology companies have deliberately downplayed the extent of infections associated with implanting any device, so they can continue to receive grant money to do more research."

"One of the most common and important of the many viral diseases that affect snakes is caused by a retrovirus that produces Inclusion Body Disease (IBD), a fatal disorder that affects multiple body organs and systems in the animal. IBD is most frequently diagnosed in boa constrictors, but can be seen in pythons, and some herpetologists believe in other snakes. Among infected snakes, boas may be able to survive for several months, while pythons usually die within days or weeks of developing the symptoms. Bushmasters would likely only live three to five days with this condition."

"The responsible retrovirus for IBD can be transmitted between snakes through breeding, or through bite wounds from other animals, snake mites, and the ingestion of contaminated droppings. Snakes that are under stress and have a weakened immune system are more susceptible to IBD and can contract the virus if they come in contact with objects that have been used around infected snakes. Concerning the implementation of tracking devices, the surgery involved produces a fairly large wound that can easily become infected."

"The symptoms of Inclusion Body Disease may appear suddenly, but they can also remain invisible and dormant for years. The signs that a snake may have IBD include: bacterial infections, delayed healing of wounds, loss of appetite, skin ulcers, vomiting, weakness and

weight loss. In severe cases, or when the virus has been present in the animal's body for a protracted period, IBD may lead to neurological symptoms including: abnormal tongue flicking, the inability to roll right-side up when the animal is on its back, facial tics, muscle spasms and seizures."

"How can you determine after death if a snake had Inclusion Body Disease," asked the pathologist. "I did not do an autopsy to determine the cause of death."

"A veterinarian can perform a blood test to measure the animal's white blood cell count. An increase in the number of white blood cells can sometimes detect early infection of the disease, but as the disease progresses, the white blood cell count often falls dramatically. When the veterinarian examines a sample of blood cells under a microscope, he may be able to see abnormal structures on the inside of these blood cells. However, a definitive diagnosis of the disease is only possible when the biopsy samples of internal organs are sent to a pathologist for testing. That is what usually finally happens; to my knowledge, there is no known treatment or cure for IBD at this time. Or it could be some other type of infection, but the level of white blood cells will show that also."

"I think I can accomplish this," the pathologist turned to Sergeant Ponce. "Let's handle this internally as it might only confuse Dr. Dailey."

"I'll call over to the zoo and see if Professor Guailí can come over tomorrow and assist you," the detective added. "Dean, you ought to see our biologist snake guy from our zoo at Mayagüez. He's got biceps as big as boa constrictors!"



When Antonio returned to his apartment later that night, he received a phone call from his brother-in-law. "Say, Antonio, I know we are not on a secure line, but what I have is important and I'll keep it sanitized. The little piece of equipment that you photographed, it is VHF. So you can forget the other stuff about that place that collects data over in Europe. I think this means you have a lone guy on this. I showed these to the expert and he remarked that it looks like your guy has been able to attach a workable tiny solar panel, so it doesn't have to depend on batteries. That's a huge development if it does work. The frequency that you'll be interested in is 150.430 MHz."

"OK, I got that; thanks for rushing it. I'll get back with you when we need more help!"



The man stopped by several small "mom and pop" pet stores in Carolina, checking to see what was new and interesting. He rarely bought anything, but he liked the sounds and smell inside these shops. He had bought a small aquarium a few years before, and some fish to go with it. Now he was toying with the idea of getting a piranha, but had nixed the idea as being too dangerous.

As he walked down the aisles of the store, listening to the chirping of the many varieties of tropical birds, he heard two men talking to the owner in an animated manner. "That crazy detective is busting heads again down in the *barrio* – the neighborhood," one of the men remarked. "He's trying to find the pipeline of boa constrictors coming into the island. It's going to ruin things for everyone. You know me; sure I have a couple of Ball Pythons, but I'm not hurting anybody."

"He came in here yesterday," interjected the store owner, "and wanted my sales records for what he said were 'snake-related' items – snake-hooks and frozen mice. He said he would shut me down if I didn't cough up the 411 on that. He said that the governor had told him he wanted all the big boa constrictors and pythons that had been released into the wild at El Yunque rounded up and killed. He asked me who around here had a pet snake. He also leaned on me about if I knew any snake owners over in Jayúya. I told him I didn't even know any snake owners here – let along Jayúya – but with the Internet, they could order all their stuff off that. He was pissed off and said he would be back."

The man continued to walk around the store, strolled up to the register and innocently asked, "Who is this cop, anyway? Did he ask anything about fish?"

"No, gramps, but that will be next," offered the owner. "His name is Ponce. You remember him, I'm sure; he was on the 'Macho' Camacho case until he was seriously wounded in that ambush at the warehouse a couple of years back. They say he can barely walk now; they had to amputate his leg after he was wounded. He looked OK to me though. I say that the only reason he has trouble walking is because he's tired of kicking so many asses in the *barrio* on this snake case."



The man left the store. He wondered why the cop had asked about Jayúya. That was only three miles from the state forest, where he had let the Bushmaster go. Could the cop have found the snake? No, it would have killed him. The man needed to go home, find out who this detective was, what he looked like, and then find out where he was assigned and what he was doing –

especially if it was around Jayúya. It was time for the man to turn on his own "thermal sensors" and look around

The man smiled. He had left no trail on the island that he had ever owned a snake. No one imported a Bushmaster for him; he did not take any chances importing any small snake through the Delta DASH system. He never ordered one on the Internet. The same situation was in play concerning the cage he used for the snake and all the tools needed to take care of the snake. All that stuff had been packed up when he lived in Florida and sent to his retirement home at Trujillo Alto by *Allied Van Lines* or whatever company it had been.

However, what he was most proud of was the way he brought the snake into the island, even if he could tell no one how he did it. When he had earlier lived in Florida, after he had retired, he scheduled a Caribbean cruise that departed from Fort Lauderdale. One of the ports of call on the trip would be Old San Juan. The man brought the snake eggs that were a little larger than chicken eggs with him from his home in Florida to the port, parked his car, and put the eggs in his jacket pockets. At the port of embarkation, he deposited his two suitcases with the baggage crew and walked up the gangplank. After he was greeted, given an electronic identification card – to use as a credit card on the ship so the passengers would spend more – provided with a cabin assignment, and handed a complimentary beverage by a pretty waitress, he was directed to his accommodations, where he found his suitcases waiting outside the door.

The man had paid an exorbitant fee to be the sole occupant of the small cabin, but he needed the privacy. He was not concerned about the eggs hatching; that would occur weeks later. He set up a small "nest" for the eggs and lined it with a cloth material that would help keep them at the proper temperature. Then he turned up the heat in his cabin to approximate the temperature in the wild that was best for the hatching process. Claiming extended sea-sickness, the man remained in his cabin – receiving his meals through room service, until the ship docked at Old San Juan partway through the trip.

At Old San Juan, the man placed the eggs in his jacket pockets once more and joined the throng of passengers departing the ship to see the sites, eat at a Puerto Rican restaurant and shop along Cristo and Fortaleza Streets in Old San Juan. However, the man did not pursue any of these touristy activities, but instead hailed a cab that took him to his retirement home in Trujillo Alto.

After paying the cabbie, he took the eggs into his house to the "snake room" that he previously had set up. It included an elaborate enclosure for the eggs, which controlled the temperature to the precise degree and allowed for proper humidity. In the wild, when the female Bushmaster is ready to lay eggs, she looks for a den – constructed by another animal – and claims it as her own, sometimes sharing the burrow with the animal that constructed it – undoubtedly much to the consternation of that animal. After laying the eggs, she would wrap her body around them and

protect them until approximately 78 days later when they hatched. The mother snake would not leave her eggs for any reason during this period.

The man had replicated the burrow for the snakes exactly and now gently placed the eggs into it. Then he called a different cab company and took a cab back to Pier #4, where the ship was docked.

After the ship departed from Old San Juan, the man had a "miraculous" recovery from his earlier sea-sickness and enjoyed the rest of the trip with the other passengers. Once he returned to Florida, the man finished settling his affairs there and departed the "Sunshine State" for Puerto Rico by air, arriving in San Juan just ten days after he had deposited the eggs at his home on the island.

No security service in the States or on the island was aware of any of these actions; no poisonous snake was known to have been shipped to the island, and the man had no incriminating purchase trails in Puerto Rico for either an animal or for related equipment.

There was simply nothing.



The man felt a strong urge to hit the road again and visit the island. He was worried. On several occasions he had driven by the Institute of Forensic Sciences of Puerto Rico and each time, with the same strength, the receiver in his vehicle picked up the signal of the tiny transmitter he had implanted into the male Black-Headed Bushmaster that he had released a few months previously at the *Bosque Estatal Los Tres Picachos State Forest*.

He had a good ear and good equipment and to him the sound indicated that the transmitter had not moved at all. That was not a good sign. It was not a good sign that the transmitter appeared to be stationary and it was really not a good sign that it was transmitting from the Institute. Certainly, it could be another transmitter unrelated to his project that happened to be on the same frequency just by chance, but he could only prove that if he went back to the state forest and found his transmitter on his snake.

The man had studied the ecology of the island for several years in developing the parameters for his project. A brilliant scientist, he had received a PhD from an Ivy League School in Electrical Engineering before entering the aerospace field. Many of his inventions and team projects had found their way to NASA.

For part of his career, he had worked at the *Sandia National Laboratories*, managed and operated by the Sandia Corporation, which was a subsidiary of the *Lockheed Martin Corporation*. The facilities served as the two major United States Department of Energy research and development national laboratories. Their primary mission is to develop, engineer, and test the non-nuclear components of nuclear weapons.

He had worked at the Sandia facility on Kirtland Air Force Base in Albuquerque, New Mexico. While he was there, Sandia had hosted *ASCI Red* (Accelerated Strategic Computing Initiative), one of the world's fastest supercomputers. That was replaced by *ASCI Red Storm*, originally known as *Thor's Hammer*. It was decommissioned in 2012, well after the man had retired. Sandia is also home to the *Z Machine*, the largest X-ray generator in the world and designed to test materials in conditions of extreme temperature and pressure. It even tested some of the man's miniaturization projects. Ah, the good old days of Z-pinch, Lorentz forces and plasma compression.

The man's wife had died of cancer ten years ago; his children were grown and resided in Boston and the "Silicon Valley" on both coasts. His final professional work had been at Cape Canaveral and he remained in Florida after he retired as a widower. Like many children, his kids had their own lives and did not visit their father much, the most frequent conversations being telephonic and now the ubiquitous emails and texts. He was sure they would regain their interest in him after he died when it came time to execute his will. His children were unlike him – always

interested in material things and how much money they made compared to their neighbors and friends.

Throughout his life, the man, on the other hand, lived in the world of theoretical possibilities. He saw everything – whether that was a written plan or a piece of equipment – in terms of how it could be improved, or what it could be turned into, or how it could be made smaller and still retain the same ability to function. The man lived primarily inside his own mind, having the ability to analyze difficult problems, identify patterns and come up with logical explanations. Throughout his career and life, he sought clarity in everything, and was driven to build his accumulation of knowledge.

His co-workers sometimes thought of him as an "absent-minded professor," who over-valued intelligence and the ability to apply logic to theories to find solutions. At times, he was so strongly driven to turn problems into logical explanations, that he lived much of his life within his own head, and did not place as much importance or value on the external world. His wife told him that a lot. His natural drive to turn theories into concrete understanding also sometimes turned into a feeling of personal responsibility to solve theoretical problems, and help society move towards a higher understanding. She told him that a lot as well, especially when he would tell her that he had to work a particular weekend.

Although he was a good husband and father, the man valued knowledge above personal relationships. His mind was constantly working to generate new theories, or to prove or disprove existing theories, whether that was something at work or just something he heard on the radio or television. He approached problems and theories with enthusiasm and skepticism – often ignoring existing rules and opinions (to the dismay of his superiors) and defining his own approach to the resolution. In short, he sought patterns and logical explanations for anything that interested him.

Because he was extremely bright and able to be objectively critical in his analysis, he loved new ideas and became very excited over abstractions and theories. Because he sometimes appeared to be "dreamy" and "distant" to others, as he spent a lot of time inside his mind musing over theories, he hated to work on routine things. He had to always watch that it was not so obvious that he would much prefer to build complex theoretical solutions and leave the implementation of the system to others, in case they thought he was lazy.

However, he need not have worried as his co-workers believed that his intense interest in theory meant that he would put forth tremendous amounts of time and energy into finding a solution to a problem that had piqued his interest. That would lessen the work that they had to do.

At some point in college – the man could not recall exactly when – he took a series of personality tests. His results indicated that he was an INTP (Introverted Intuitive Thinking

Perceiving.) He scored highest in having great precision in thought and language. The test confirmed that he could readily discern contradictions and inconsistencies and that the world existed primarily to be understood. These were not the characteristics of much of the population; in fact, only 3.3 percent of all people would be classified INTP. Of course, he could have told the testers all that before he took the test, if only they had asked him.

The man's wife had never been a "pet person," much less interested in reptiles, so he acceded to her wishes and they maintained no animals in their home. Now, after her death, he decided he needed to shift his interests and began reading about people in the "Sunshine State" and their fascination with snakes. He began to devour every periodical and book on the subject and then began visiting small reptile shows, before escalating to the numerous *REPTICONs* (Reptile and Exotic Animal Conventions) in the southeast. He earlier had seen some rattlesnakes when he had worked at Sandia, but most had been dead, killed by automobiles as they tried to cross the highway near the base.

Perhaps it was natural that the man's interest would home-in on venomous snakes. They came in small packages – at least compared to the large constrictors – and were some of the oldest species still on earth. Evolution seemed to pass them by. They crawled on their bellies; had no limbs to grasp implements or propel their bodies at anything above modest bursts of speed and were quite vulnerable to predatory attack from above – and "above" to a snake included just about everything.

Only their venom – a highly modified saliva containing zootoxins that facilitated the immobilization and digestion of prey, and defended against a threat – could be said to be advanced in the animal world. The man was intrigued by the variety and lethality of these toxins. There were neurotoxins, dendrotoxins, fasciculins, proteolytics, cytotoxins, phospholipases, cardiotoxins and hemotoxins. Some of these venoms dismantled the molecular structure of the area surrounding and including the bite. Others attacked the heart and cardiovascular system, while still others acted on the brain and nervous system. A few had just localized action at the site of the bite. And, of course, the pit vipers had heat sensors that put any similar device made by man to shame.

The man would own a variety of venomous snakes over the years in Florida. With his active search for knowledge, he began with an Eastern Diamondback Rattlesnake, an American viper with hemotoxic venom, and observed that it could strike at up to 2/3 its body length at its prey; he maintained it for a year in excellent health – during which time he became an expert in the species – and then traded the snake to another snake guy for a different species of venomous snake. The routine was always the same; the man kept one snake at a time, so he could devote his entire considerable attention to it and it alone.

He owned a Death Adder, found originally in New Guinea and Borneo. This neurotoxin producing snake hunted and killed other snakes; the man found that its strike could go from the ready position to the bite and back to the ready position in just 0.13 seconds. The man owned a Philippine Cobra for a year. This snake could spit its neurotoxin venom almost ten feet. Prior to acquiring his next venomous snake, a Black Mamba, the man enlarged his snake enclosure so this feared African snake could display its famous speed of up to 12.5 miles per hour. The man also found that without antivenom, the mortality rate for those bitten by a Black Mamba is almost 100 percent. The man also owned a Taipan from Australia, whose bite was also one of the world's most venomous.

Then the Black-Headed Bushmaster from Costa Rica visited the home of the electrical engineer. He then bought a Malayan Krait, also known as the Blue Krait, a deadly small snake, but found that the snake was so shy in the daytime that he had a difficult time observing its nature. That was a shame, as about 50 percent of all bites from this krait resulted in human death – even with the administration of antivenom. No venomous snake collection would ever be complete without a King Cobra, and the man exchanged his krait for one. He found this snake to be mildly interesting, perhaps because he had already read so much about it and could almost predict it's every behavior and movement. Finally, the man obtained an Eastern Brown Snake from Australia. He observed that the snake was fast moving, would be aggressive under certain circumstances and he read that it had been known to chase aggressors and repeatedly strike at them, although this did not happen to him.

However, owning and observing these feared reptiles left a void in the man's search for knowledge. He wanted to be part of the process by which these snakes inhabited the land. For a brief moment, the man considered moving overseas to Africa or Australia to observe one or more of these species in their natural habitat, but quickly discarded that idea. First, he was economically comfortable, but not rich. Those types of endeavors could devour money faster than a famished anaconda. However, more importantly, in that scenario, he would simply be an observer and not a participant; he would not be able to control events or place his mark on the species.

Next, the man wondered if he might not tamper with the genetics of a species of snake, perhaps even creating some type of sub-species by breeding one snake with another. However, the man knew that his expertise in life belonged in the electronics' field and not the biological. Besides, he might only be able to influence ten generations of animals, not nearly long-enough to produce a lasting, separate sub-species.

Then the man began to examine the areas in which these snakes lived. He began to wonder why certain species lived in particular areas, but not in other areas that had similar weather, climate and topographical conditions. For example, in the arid rocky interior of the Caribbean island of Aruba lived the Aruba Island Rattlesnake, *Crotalus Durissus Unicolor*, an endangered sub-

species of rattlesnake. However, it lived on no other island, many of whom were almost duplicates of Aruba in many respects.

The volcanic island of St. Lucia was home to the *Bothrops Caribbaeus* – the St. Lucia Lancehead, while the nearby island of Martinique was host to the Martinique Lancehead – *Bothrops Lanceolatus*. Some herpetologists believed that the ancestors of both snakes could have been carried to these two Lesser Antilles islands on large clumps of vegetation floating north after a significant storm from the mouth of the Orinoco River as it emptied into the Gulf of Paría and the Atlantic Ocean. Both snakes were commonly known as a sub-species of Fer-delance. As both snakes are on the endangered list, recent reports of bites are almost non-existence.

At some point in the man's thought process, he began to contemplate if it might be possible for him to introduce a species of venomous snake into a geographic area that previously been free of such a species. It would have to be a place, where later research by biologists – perhaps long after the man was dead – could rule out any other cause for the species' presence. That train of thought led the man to conclude that an island would be perfect for such an experiment, provided that this island had hundreds of years of records that proved that no such species had ever been found there. If the island was far enough from the mainland, unlike Trinidad and Tobago, for example, these biologists would rightly conclude that some individual had conceived of a plan to introduce this species to the particular island.

While the man was not a biologist, he had known many of them during his working years. They were always talking about the scientific classification of this animal or that. At the highest end was the kingdom, in this case *Animalia*. Below that came the phylum of *Chordata* that had a hollow dorsal nerve cord, which was just about every animal that the man could think about. Lower still was the subphylum of *Vertebrata*, or chordates with backbones. Below that was the class of *Reptilia*, obviously reptiles.

The man recalled how the biologists had argued among themselves that the class name was or was not valid because not all descendants of a common ancestor were included, which was stupid to him. The order came next and in the case of the animal that interested the man it was *Squamata*, the scaled reptiles that had over 9,000 species. Below the order was obviously the suborder, in this case that of *Serpentes*, elongated, legless carnivorous reptiles with no eyelids or external ears. Below the order was the family, *Viperidae* that all had relatively long, hinged fangs that permitted deep penetration and injection of venom. *Viperidae* were found all over the world except Australia, New Zealand, Ireland, Madagascar, Hawaii, various other isolated islands, and obviously north of the Arctic Circle and in Antarctica.

Now the classification began to get truly interesting for the man. Below the category of family was subfamily and the man chose the *Crotalinae*, commonly known as pit vipers, distinguished

by the presence of a heat-sensing pit organ located between the eye and the nostril on either side of the head. He chose pit vipers because his study showed that they could defend themselves better than any other snake due to their remarkable sensing organs that made them truly the kings of the night. Lower still was the level of *Genus*. There were 18 *genera* of pit vipers in the world (with 151 recognized species) and of these, the man chose the genus of *Lachesis* – the Bushmasters.

Perhaps it was the genus name that referred to one of the Three Fates in Greek mythology (*Clotho* [the spinner], *Lachesis* [the allotter] and *Atropos* [the unturnable]) who determined the length of the thread of a person's life that led the man to choose *Lachesis*. The Three Fates controlled the metaphorical thread of life of every mortal from birth to death. Independent, they directed fate and ensured that the fate assigned to every being by eternal laws would take its course without obstruction. Working as a team, *Clotho* spun the thread of life onto her spindle. *Lachesis* then measured the thread of life allotted to each person with her measuring rod. Finally, *Atropos* served as the cutter of the thread of life. She chose the manner of each person's death; and when their time had arrived, she cut their life-thread with her shears.

There were four subspecies of Bushmaster and the man did not use anything as romantic as Greek mythology in determining which subspecies to select. He utilized good old-fashioned scientific methodology that would eliminate other variables as to how a particular snake ended up on a particular island.

And it turned out to be quite simple. The man found that the *Lachesis acrochorda*, also known as the Chocoan Bushmaster, had as its home territory both the Pacific and Atlantic versants of eastern Panama. It also lived throughout the valleys of northwestern Colombia and along the Pacific Coast of Northwest Ecuador. While perhaps unlikely, the fact that it was found on the Atlantic side of Panama meant that it could arrive in Puerto Rico in the same way that snakes may have arrived on the island of Martinique. That ruled this subspecies out in his mind.

The *Lachesis stenophrys*, referred to as the Central American Bushmaster, is found in Central America in the Atlantic lowlands of southern Nicaragua, Costa Rica and Panama. This subspecies is also native to the Pacific lowlands of central and eastern Panama. Perhaps the most wide-ranging of the Bushmasters, this subspecies also resides in South America in the Pacific lowlands of Colombia and northwestern Ecuador, the Caribbean coast of northwestern Colombia and inland along the Magdalena and Cauca river valleys in that country. Its presence along the Caribbean coast ruled this subspecies out as well for the man.

The South American Bushmaster, *Lachesis muta*, is native to the equatorial forests east of the Andes and includes: northern Bolivia, Colombia, eastern Ecuador, Peru, eastern and southern Venezuela, Guyana, Surinam, French Guyana and much of northern Brazil. It also occurs on the

island of Trinidad. The possibility that the *Lachesis muta* could arrive naturally in Puerto Rico was small, but still too significant for the man to consider introducing to the island.

He had one subspecies remaining, but it proved perfect. The *Lachesis melanocephala*, the Black-Headed Bushmaster had a very small natural range. It was restricted to the Pacific side only of Costa Rica in the vicinity of the small Osa Peninsula in Puntarenas Province. To travel to Puerto Rico naturally, a Black-Headed Bushmaster would have to crawl from the Pacific side of Costa Rica, across a mountain range, into Panama, across a quarter of Panama to the Caribbean coast and then across the Caribbean Sea – against the prevailing trade winds and many currents. The *Lachesis melanocephala* was good – but not that good.

The man would introduce the subspecies into four separate locations on the island that approximated the natural conditions on the Osa Peninsula and Puntarenas Province in Costa Rica. These areas would be tropical moist forested areas, receive plenty of precipitation, maintain temperatures of 75°F and be less than 3,280 feet in altitude.

He would place a fully grown male and a fully grown female in each area in the general vicinity of each other – Bushmasters were not flock or herd animals – to facilitate breeding. He would surgically implant the tiny transmitters in each of the eight snakes in this first generation on the island, so he could periodically monitor them and check on them after significant events such as a major hurricane, in case they needed temporary assistance.

The man approximated that in the worst case one of the pairs would not mate successfully. He also assumed that of the three pair that did, they would have 13 successful births in each clutch of eggs, as there were no serious enemies of the snake on the island except man and they were located in sparsely-populated areas. That would mean that after one year, the island would have the four adult males and four adult females of "Generation 1" and 39 young Bushmasters of "Generation 2" – a total of 47.

During the second year, the man assumed that one of the "Generation 1" snakes would die, leaving seven; three pairs would again successfully mate and again average 13 births per clutch, a total of 39 snakes in what was now "Generation 3." The man assumed that five of the Bushmasters in "Generation 2" would die. The rest of that generation would still be too young to reproduce. At the end of year two, therefore, the experiment would total 80 Bushmasters.

The man went through his calculations once again for the third year of the experiment and determined that there would be seven snakes of "Generation 1" remaining, which would have produced 105 offspring over these years – for a total of 112 serpents.

The next year would prove pivotal, as many of the snakes of "Generation 2" would begin to have offspring of their own. As such, with any luck, by the end of this fourth year, there would be

over 550 Black-Headed Bushmasters on Puerto Rico – fully adequate to support a continuing stable population, even if something happened to the man. Whether or not the numbers of some of the existing species of animals – or humans for that matter – would remain stable, once the presence of the serpent on the island became entrenched, was another matter.

Arithmetic & Geometric

$$a_n = a_1 + (n-1)d$$
 $a_n = a_1 (r)^{n-1}$ 
 $S_n = \begin{bmatrix} a_1 + a_1 \end{bmatrix}_n$ 
 $S_n = \underbrace{a_1 \begin{bmatrix} 1-rn \end{bmatrix}}_{1-r}$ 
 $d = a_2 - a_1$ 
 $r = a_2 / a_1$ 
 $A_{mean} = \underbrace{A+B}_{2}$ 
 $G_{mean} = \underbrace{A-B}_{3-r}$ 
 $S = \underbrace{a_1}_{1-r}$ 

# **Part Three**



**Loose Ends** 

## **Institute of Forensic Sciences of Puerto Rico**

The three men huddled in the office of the pathologist. "Professor Guailí thanks for coming over today. I think I need to fill you in on what has happened since we saw you at El Yunque," and with that, Sergeant Ponce took the next twenty minutes explaining what had transpired at the *hacienda* and where the investigation had led. "So, in conclusion, the herpetologist is back in North Carolina attempting to determine if the particular animal that we killed at the coffee plantation is an offspring, or an actual animal, that he has encountered before. Here on the island, my investigation into how a Black-Headed Bushmaster might have been imported has reached a stone wall."

Urayoán Guailí whistled through his teeth. "This was always our worst nightmare. As you are probably finding out, we are woefully unprepared to admit that this situation could exist, let alone successfully deal with it. It is difficult to reverse course in a denial strategy."

"Exactly right, Urayoán, and just to maintain the protocols, we now use the term **33** for this incident and try to avoid terms like Bushmaster, snake, serpent and so forth. Plus, we do all our communications in person and not over electronic means," added the pathologist.

"I understand completely. I appreciate you filling me in. As one of the chief biologists for our largest zoo, I am sure that if this gets out, my head will go on the chopping block for not seeing this situation developing before it happened."

"None of us are going to the glue factory, Urayoán," the detective offered. "Here is what we are going to try. We know that the former owner of this 33 intends to monitor this creature, and for the moment, let us assume that he does not know that his beloved 33 is dead. Therefore, he will continue to search for it. My brother in law has sent us four Very High Frequency radio transmitters and receivers. They operate on the same frequency as this tiny transmitter that we found embedded in the 33, after we killed it -150.430 MHz."

"How can I assist?" The biologist was gaining confidence from his psychological nadir a few seconds before.

"We are going to drive back to the *Bosque Estatal Los Tres Picachos State Forest* just to the east of the plantation, where we found the **33**. I want you to determine where in that forest that **33** would be if it was still alive. Then we are going to put one of these four new transmitters at that location and turn it on. I want you today to go online to *Cabela's*, or *Bass Pro Shops* or *Scheels All Sports* up in the States and order a half a dozen of the best game trail cameras you can. Here's a special credit card the boys over at the Department of Agriculture at Hato Rey gave me to use for the investigation. Don't worry about the cost."

## Puerto Rico Institute of Forensic Sciences

"Here's what we want. Infrared game cameras deliver large pictures with a quick response time of animal movement along trails and at feeding areas. They are used by hunters in the off-season to find areas, where certain game animals live, so they can go back later during hunting season. Most of these types of cameras deliver crisp, high-resolution 10 megapixel pictures and high definition video with clear sound, either day or night. Get the cameras with *FastFire* shooting mode that captures four pictures per second with a trigger speed of less than one second."

"The infrared flash reduces the amount of red light seen by game as well as prolongs the flash's duration without sacrificing quality. Of course, our **33** owner will see the flashes go off, but we can mount the equipment so high that he will not be able to get at the cameras – his first instinct will be to run out of the area. You'll find in the write-ups that every photo can be imprinted with the barometric pressure, moon phase, temperature, time, and date as well as camera identification number for added accuracy."

"My guess is that our guy will go in there only during the day, because he believes the **33** is still alive and no matter how good he is, he knows he does not want to be poking around at night in the dark against something this dangerous. We would not have gone in there at night either, if we had truly understood what we were up against. And we wanted to kill it; he wants to assist it. So, daylight it will be. Therefore, when you are looking, see if we can get cameras that you can turn off the flash for daytime use, so possibly he does not even know he is being photographed. These types of cameras are usually pretty silent so as not to frighten game. Many are painted a camouflage scheme that blends in with the trees to which they are often affixed. Plus, if we put them up high, he won't see them. Remember, he will be looking at the ground and looking at it closely, because he wants to spot the **33** way before it spots him – if that is even possible."

"I almost forgot. We may find an area in the state forest near where you think the snake would still be if alive that is close to an area where the perpetrator could park his vehicle. We will want to put at least one additional camera right there to see if we can photograph his vehicle. If any of the models look like they could do that, make sure you get them as well."

"I have it detective. I'll rush order them regardless of cost. We may want to do one more thing pretty soon. We do not know where this guy lives or what routes he drives during his regular activities or when he goes out to the forest. I know it is a small chance, but we may want to consider turning off the miniature transmitter that you found on the **33**. If he detects signals from it, as emanating from this building, he is going to smell something suspicious."

"Great idea, Urayoán. We will put the transmitter in the doctor's safe for now, so the VHF signal cannot get out. Let me know when the equipment comes in and we will go out and set the trap to catch this guy."

## Jayúya

The man was nervous, very nervous. That morning he had again driven past the Institute of Forensic Sciences of Puerto Rico, but this time, the receiver in his van picked up no VHF transmissions. Sometimes these devices could be a little finicky, so he changed the frequency slightly on the receiver, just in case the transmitter was slightly out of calibration. He did this once, just above 150.430 MHz and drove around the building and then adjusted it a second time, slightly below the designated frequency and circled the building once again. There were no signals on either occasion.

This meant one of three possibilities to the man. He defined the term in language of the question "How certain am I that the event will occur?" As he thought it through this he tried to create a measure of certainty in terms of a numerical measure and a number, between 0 and 1 (where 0 indicates impossibility and 1 indicates certainty.) First, when he initially picked up the signal a few days before at the Institute, it could have been from a different transmitter on the same frequency, but completely unrelated to his work. He calculated that probability at 0.9, equivalent to a 90 percent chance it was another transmitter and the ramifications of such an occurrence to his project as none.

Second, the Back-Headed Bushmaster could have crawled from its lair at the *Bosque Estatal Los Tres Picachos State Forest* and traveled some 70 miles to the Institute. That was obviously impossible and thus he discarded that as a 0 percent possibility. Finally, the man entertained the possibility that someone had found the snake and its transmitter and either killed it or brought it back alive to be examined at the Institute. He thought that the probability was only 0.10 (10 percent) that this had actually occurred, but if it had, the ramifications were enormous to his program of introducing the species to the island.

He could eliminate the third option if he could find the creature and its transmitter back at the state forest, so he immediately drove west to that location. Parking his vehicle, he dismounted the receiver and placed it in a backpack. Its "normal" rechargeable battery would last at least six hours under use. However, the man could not help himself and had tweaked the entire battery system so that it would be fully functional for at least 24 hours.

He walked first to the area that he initially released the animal months ago, hoping that either the receiver would pick up the signal, or he would see some visual sign of its recent presence. Neither event happened. Then the man walked to a second location – several hundred yards from the first – where he had last located the creature about one month ago. Again, there were no signs, audio or visual, that the animal or the transmitter was present.

The man then spent the next three hours traveling a spiral pattern outward from that second location, but he found nothing. He knew that he was now searching for the proverbial "needle in

the haystack," a technique that went against every scientific fiber in his body. Convinced that a further foot-search was fruitless, he looked at his map and found that the coffee plantation *Hacienda San Pedro* and the town of Jayúya were the closest outposts of human activity to this area of the forest. He walked back to his van, stowed the receiver (but kept it in the on position, just in case so it could continue to receive) and drove directly to the *hacienda*. Parking his vehicle, he strolled into the small café and ordered a cup of coffee. He was in information collect mode, asking nothing, but seeing if conversation in the room might provide a hint of a promising lead.

Within fifteen minutes, the man was able to determine that Roberto Alemán, the owner of the plantation, had died an unexpected death several weeks before and that his widow had unleashed holy hell on the authorities who had cremated the body of the deceased without her permission. He also gleaned that Puerto Rico's Archbishop Nieves had personally traveled to Jayúya to conduct the funeral mass for the deceased and that two police officers had spent several nights at the *hacienda* investigating the death.

The man then hopped back in his old van and drove toward Jayúya. Back at the *hacienda* he had asked no questions, nor had he made any comments concerning any of the events to the staff or other patrons, which later might be recalled if they were interrogated by police. Dozens of visitors stopped by the *hacienda* every weekday; hundreds more every Saturday and Sunday and this man seemed no different than anyone else.

At Jayúya, the man first stopped at the *Triple G Bar & Grill* – for his purposes, one bar was just like any other and the order he visited the establishments made no difference to his search process. In one of those occurrences that Professor Carl Gustav Jung, a Swiss psychologist, described as *synchronicity*, the man found that he was not alone in the establishment. Synchronicity, as Jung believed, was the experience of two or more events as meaningfully related, where they are unlikely to be causally related. The subject would see it as a meaningful coincidence, although the events need not be exactly simultaneous in time.

For the man, this meaningful coincidence was the presence in the bar of Jayúya's medical officer (MO), Dr. Raphael Russo, and two other men who worked at the *hacienda*. The three men, each liberally lubricated with liquid libations that were various alcohol drinks, were discussing the recent death of Roberto Alemán.

"Doc, it was a *Chupacabra*. The cop told us, as he was leaving the *hacienda* that last night, that a small *Chupacabra* had killed *Don* Roberto. He even told us it took a bunch of shots from a 12-gauge shotgun to bring it down, and here are two of the casings that we found in one of the buildings where they got it." The man handed the expended shells to the MO, who looked them over.

"Well, these are certainly 12-gauge buckshot rounds, but when the detective talked to me, he never mentioned a *Chupacabra*; I may forget a lot these days, but I would have remembered that for sure. Nope; all he told me was that I had done the right thing in notifying the Institute of Forensic Sciences of Puerto Rico and shipping the body over there. Yep; he told me I did the right thing."

"Well. Maybe the two cops were different people," the third man – also a worker at the *hacienda* – chimed in unsteadily, the five empty beer bottles in front of him mute testimony to his inebriated state. "What, what did he look like?"

"You know; he's the guy that was on the 'Macho' Camacho case," said the doc. "He got his leg blown off in that warehouse when he got too close to who killed Héctor. I wish he had nailed those sons of bitches; he would have too if they hadn't got him first. I heard that he got set up; that somebody high up on the police force was protecting some drug dealer and they tipped off the cartel about the raid, and they just stitched him up when he came through the door. He was one of the few good ones we had."

"After his leg healed up, they put a fake one on him and now he walks with a big limp. He told me he can't do counter-drug now, so they got him on stuff dealing with animals. He was bitching about trying to find some guy's fighting rooster that had disappeared over east up in the mountains; said he was glad that his old buddies in the DEA couldn't see him now."

"Yep; that's the same guy that talked to us," the *hacienda* foreman offered. "He told us as they were leaving the plantation that he and his partner were taking the dead *Chupacabra* back to that Institute and they were under orders to cremate it that very night. I remember now. Sergeant Antonio Ponce; that's the guy. He said that if we ever went public with the story, he would come back and string us up by our balls."

"And this isn't public?" The doctor finished his drink and ordered another.

The man ordered a *Medalla Light* and a cheeseburger. It was a pedestrian beer, but if he had asked for an *Old Harbor Kofresi Stout*, somebody might have remembered him being there. It was becoming obvious that the man's experiment had an unplanned variable that he needed to eliminate

That variable was named Sergeant Antonio Ponce.



## **Bosque Estatal Los Tres Picachos State Forest**

The game trail cameras arrived from the States and the detective, the pathologist and the biologist drove to the *Bosque Estatal Los Tres Picachos State Forest*. Arriving at midday, the men drove around the perimeter of the area for their initial look. Located a mile and a half east of Jayúya, the forest was bounded by Puerto Rico Route 149 on the east, and Puerto Rico Route 144 in the south and Puerto Rico Route 533 in the north, although route was an exaggeration and the roads were little more than one lane in either direction.

The buildings of the *Hacienda San Pedro* were not more than 250 yards south of the forest. At least fifteen mountain streams had their source in the center and highest part of the forest known as the *Tres Picachos (The Three Peaks)*; they radiated outward toward the edge of the forest in all directions. At the peak of the mountain, the elevation is 3,953 feet, much too high for the snakes. The rest of the forest lay at elevations downward to 1,246 feet.

Located on the border between the municipalities of Ciales and Jayúya, there were a few farms and small buildings on the southern and southwestern edges of the forest, but none inside it. Irregular in its circumference, the widest part of the forest west to east was three miles, as was the widest measurement north to south. The inside was mostly forested, with steep slopes and not much open terrain. In the island's early history, the Taíno Indians thought the mountain to be sacred.

Sixty-four percent of the forest is categorized as subtropical humid, with a further six percent humid. The rest, 27 percent, is very humid montane. Botanists would classify the trees located above 3,576 feet as dwarf forests. Those found between 2,788 feet and 3,576 feet would be known as sierra palm forests. Between 2,296 feet and 2,788 feet were the *tabonuco* forests – also known as gommier and candlewood – distinguished by trees with broad low buttresses. Shade coffee trees are found at an elevation of 1,968 feet, while below that elevation, the low lands of the forest consist of former coffee plantations that have become overgrown.

The average precipitation in the forest ranges from 78 to 156 inches. Its average temperatures run from 64°F to 75°F. Some 88 percent of the land in the forest has a slope of over 20 degrees, which makes mudslides common. Sergeant Ponce recalled his discussion with Dean Ripa who had said that regions suitable for Bushmasters would have tropical moist forested areas, receive plenty of precipitation, be at altitudes below 3,280 feet and maintain temperatures of 75°F. Seventy percent of the forest fit the altitude and vegetation profile, while all of it was suitable from a rainfall, humidity and temperature standpoint. The *tabonuco* trees were exactly the ideal type for the Bushmasters that the herpetologist had earlier described.

The biologist found three dirt roads that led a few hundred yards off the hard surface routes toward the center of the forest. The men placed three of the game trail cameras at these areas,

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about fifteen feet off the ground and aimed at the most likely point the perpetrator would stop his vehicle and dismount.

At each spot, the men then hiked into the forest for a further 300 yards and placed another camera at each of these interior locations, where it appeared that old trails once had been present but were now overgrown. Again, the biologist shinnied up a tree and fixed one of the camouflaged cameras to its trunk using the adjustable strap that came with each device.

The pathologist then walked along each trail until the camera took his picture. It was daylight, so the camera did not use a flash. The cameras were also fairly silent and if the biologist had not been up in the tree next to the camera to adjust the angle of the picture, he would not have heard the soft click as the device snapped the picture.

The same procedure occurred at the second area and again at the third. Because the biologist had ordered so many devices, he was able to get a bulk discount rate, so they were able to place several additional cameras at each site. Confident that they at least had a chance to spot the perpetrator if he came back to these areas, the biologist climbed down the last tree and the three men made their way back to Puerto Rico Route 533 and their vehicle.

While the men were at the third tree; while the biologist climbed the tree and adjusted the cameras; while the pathologist walked under the tree; while the camera took a picture of the pathologist; while the biologist descended the tree and while the men walked out of the forest, a motionless ten-foot-long adult female Black-Headed Bushmaster silently watched them from under a fallen tree trunk some thirty feet away through her heat sensors.



Game Camera

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Armed with the information he had gleaned from the loose talk at the coffee plantation and the bar in Jayúya, the man returned home to Trujillo Alto to plot his next move. It seemed very likely now that this Sergeant Ponce had killed one of the Bushmasters that he had released at the *Bosque Estatal Los Tres Picachos State Forest*. However, all was not lost, but Ponce had to be taken out of the equation lest he discover additional aspects of the experiment.

The man did not know if the police detective had found the small VHF transmitter implanted in the snake, but since he had mentioned taking the body of the *Chupacabra* from the *Hacienda San Pedro* back to the Institute of Forensic Sciences of Puerto Rico for destruction, and since the man had located the transmission of one of his transmitters some days past as being from the Institute, he assumed that either the detective had found the transmitter and removed it from the animal before he had its body cremated, or that the detective had the entire animal and transmitter intact and in post-mortem storage. Perhaps the transmitter was in some type of vault now and that its signals could not be located at this time by his receiver, or perhaps electronics experts were examining it at this very moment for clues to its capability and origin.

So the transmitter was probably compromised. However, the cop would not know if this was the only snake. The detective might assume (correctly) that the snake's owner would go back to try and find the Bushmaster, once he found that the transmitter was not working properly. If the detective believed that to be true, then he would undoubtedly set an ambush for the man at the state forest, most likely where he thought the man would have released the snake. The forest was pretty large, but the detective might get lucky and set up the ambush in exactly the right place.

The man decided that the most prudent course to take was to remain away from this state forest for the time being. He then went on the Internet and began to find out all he could about Sergeant Antonio Ponce. It was amazing what you could find out about anyone, especially a public official. Within an hour, the man had located the office in which Sergeant Ponce worked and the type of official and private automobiles he drove. The man did not want to risk hacking into the Puerto Rican Commonwealth's vehicle registry to obtain the license plate for each vehicle, as there was no telling what blowback systems they had to trace hackers breaking into their data.

No, he would simply conduct a small stakeout of the Department of Agriculture building parking lot for a few days until he spotted the good detective arriving or departing. It would be an opportunity for the man to get some fresh air and read a few books. Once he located the officer's car, the job would be halfway done.



It took exactly a day and a half before the man spotted Sergeant Ponce rolling into his office parking area in Hato Rey. The man waited for five minutes after the detective limped into the building and then walked quickly to the rear of Ponce's automobile. The man reached under the rear bumper and on its inside edge attached another VHF transmitter.

This one was larger than the ones he used with the snakes and it emitted a much more powerful signal that could be detected much farther away. It had a large battery and was snuggly affixed to the inside of the bumper so it would not fall off. Looking at the bumper from behind the car revealed no evidence of the transmitter's presence. Once the detective was out of the way, the man would return and remove the antenna in case anyone examined the deceased's car.

Then the man returned home.

He was not a killer; he did not especially like firearms and constructing a bomb – although well within his talents – would have been an anathema to him. He was old, well past retirement age, and in any physical struggle against an armed police officer, he would surely lose the fight, and lose quickly.

No, he was not a trained killer, but he understood exactly what was needed – an almost certain fatal attack against Sergeant Ponce that would subsequently put the fear of God into any other police officer who took over the case and decided to investigate too closely the biological changes happening on the island.

And the man knew just the tool to achieve both.

During the decade that the man had owned various snakes, his all-time favorite was a small viper known as the *Bothrops jararacussu*. This species was a venomous pit viper endemic to southeastern Brazil, Paraguay, southeastern Bolivia and northeastern Argentina, occurring at an altitude from near sea level to over 3,900 feet.

This slender and terrestrial species grows to a maximum total length of just seven feet two inches, although the man did not believe this and thought that the average total length was often much less. His *Bothrops jararacussu* was perhaps four feet long.

The color pattern of the *Bothrops jararacussu* is extremely variable, consisting of a dorsal ground color that may be brown, gray, olive, tan, yellow, or almost maroon. The mid-body color is usually somewhat lighter than the head, anterior and posterior. The dorsal ground color is overlaid with a series of pale-edged, dark brown trapezoidal or sub-triangular markings on either side of the body, the peaks of which reach the vertebral line. These markings may be situated

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opposite each other, or juxtaposed, although most specimens have a pattern with all three variations. The head has a prominent dark brown stripe that runs from behind the eye, on either side of the head, back to the angle of the mouth. Dorsally, this stripe is bordered by a distinct pale area. The tongue of the *Bothrops jararacussu* is black, while its iris is gold to greenish gold, although is some light conditions they have a purple or blue tinge.

But it was not the size or the color pattern that interested the man so much. It was that this small snake was the most inquisitive serpent that he had ever known. The man had no idea how snake intelligence could be measured, but if a method could be devised, the *Bothrops jararacussu* would be at the head of the class.

The little guy got into everything, not because he was antagonistic or aggressive, but because it seemed to want to know everything about its environment. It would explore every square inch of its enclosure; it would try and learn everything about anything that was placed in that enclosure, whether that was a new rock or a fresh meal. It was almost as if he wanted to meet and get to know his prey before he ate it.

The man thought that this level of advanced inquisitiveness was one reason that the *Bothrops jararacussu* was so deadly; it would not shy away from humans and its curiosity would often place it so close to people that it had to strike and defend itself more than other snakes that kept their distance from humans. The other reason the *Bothrops jararacussu* was so lethal is that this species is often abundant within its range, where it is an important cause of snakebite. In fact, it was the best-known venomous snake in the heavily populated areas of southeastern Brazil, where it was responsible for 10 percent of snake bites in São Paulo State, Brazil. It could even be found in Rio de Janeiro. It was not only dangerous; it was dreaded.

Typical envenomation symptoms include local swelling, bruising, and blistering of the affected limb, spontaneous systemic bleeding of the gums in the mouth and into the skin – a subconjunctival hemorrhage and incoagulable blood. The systemic symptoms can be fatal and may involve hemostatic disorders, intracranial hemorrhage, shock, and finally renal (kidney) failure. Many victims die of respiratory and circulatory failure despite large doses of specific antivenom and modern intensive-care-unit management.

The man also learned that effects of poly-specific *Bothrops* antivenom were not impressive in saving victims. One study that the man had read listed the *Bothrops jararacussu* as the eleventh most venomous snake in the world.

If the man could be said to have loved any one snake, it was this one. The little creature was like an undersized point guard in basketball that stuck his nose into every play and wasn't afraid to get floor burns diving for loose balls. And so, even as the man traded venomous snakes each year for new species, he kept the diminutive *Bothrops jararacussu* for some unforeseen

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requirement. Now the little serpent – the only one up to that time he had ever given a human name to – had to take one for the team. It was time for "Alan" to shine.



Alan

It had been a long two days and no one came close to the stakeout at *Bosque Estatal Los Tres Picachos State Forest*. The pathologist and the detective returned to San Juan and after checking in at the office, Sergeant Ponce drove home to his small apartment in Minillas in San Juan. Before going to his residence a block off the *Avenida De Diego*, he walked over to the small coffee shop and had an *Espresso*, again sitting at a small outside table along the sidewalk.

After a half hour, he paid his bill and went home. The mail had stacked up in his hallway mailbox. Most of the envelopes were trash advertisements offering this product or that service. The Internet was supposed to get rid of a lot of unwanted regular mail, but all it seemed to do was target subjects that some unseen, but omniscient, database believed he had interest in a product. Buy a box of *Corn Flakes* at the *Mercado* using a credit card and he would get dozens of *Kellogg's* coupons in the mail for other cereals the company made.

Antonio opened the door to his apartment and found that it was extremely cold; he had either turned the temperature way down on his last night at home, forgetting to reset it before he left for the stakeout, or the thermostat was *dañado* (on the fritz) again. Either way, he would pay for it when his next electrical bill came in at the end of the month. The detective walked to the regulator on the wall and set the dial for 72°F to see if that would turn off the air conditioning unit, which it seemed to do in a few minutes.

The detective quickly glanced through his mail, walked into the bathroom and turned on the bath water nice and hot, after closing the drain plug. He was exhausted after the 48-hour stakeout and needed a hot bath so he could sleep straight through the night. He had already had his cup of coffee for the evening; food could wait until breakfast. Before he took off his clothes in the bedroom, he turned the television on to see what was on the news.

Stripping down, he left his clothes in the bedroom and limped into the bathroom, leaving the door partially open so he could hear the breathless television reporter talk about the day's inane activities around the globe and then around the island. Inside the bathroom, he carefully removed his prosthetic leg from its harness and laid it across the closed seat of the toilet. The water was halfway up the side of the tub and was nice and hot – close to  $100^{\circ}F$  – a bit of vapor coming off it, perhaps as the hot water from the faucet met with the colder ambient room temperature. As he lowered himself in the water, its level rose to perhaps three-quarters to the top of the tub. He slid lower into the water until his entire body and head were under the water and then brought his head back up until everything below the level of his nose remained under the surface.

Ponce closed his eyes and thought briefly about what the previous two days had brought and how they might change their strategy if nothing continued to work.

As Antonio opened his eyelids, out of the corner of his left eye he saw the motionless head and neck of a small snake perched on the edge of the bathtub. Ponce froze. The snake's head was elevated perhaps 12 inches above the porcelain. Its tongue was flickering in and out of its mouth.

The snake's head had a prominent dark brown stripe from behind the eye, on either side of the head, to the angle of the mouth; it was bordered by a distinct pale area. Antonio was captivated by the snake's large eyes, which appeared to be a gorgeous mottled blue, reminding him of a light blue star sapphire found in some university class rings. In each eye, the snake's pupil was a very thin vertical black line. The belly of the snake was clearly a light tan. He could only see part of the side of the snake, which appeared to be a darker shade of brown on which was a series of pale-edged, dark brown trapezoidal markings.

Sergeant Ponce had no idea how long the snake was. It was obviously not the same species as the Black-Headed Bushmaster, but it looked like it could kill him with one bite – which in fact it could.



Early that morning, the man had brought Alan to the detective's apartment in a small cloth bag. The man had previously scouted the residence's entrance and found that there were no electronic security devices. He found that the detective's apartment had a door with one of those motelstyle card key readers. Years earlier, the man had developed a small device that had its own card on the end of an electrical wire that would actually read the opening code when inserted into the key slot. The device would mimic the security code back through the card and the door would automatically open. He invented the device so he could get into his motel room when he was traveling and for whatever reason he had misplaced the motel-issue card or when the motel's card did not work, which half of them seemed not to.

The man opened the door, walked in and quietly shut the door behind him. It was a typical apartment of a police officer who was a bachelor. There was a valiant attempt at neatness, but the apartment was probably only truly clean when the detective's cleaning lady came in twice a month. The man saw a sheet of paper on the back door, where the lady had placed a series of dates and her initials. He could see that she was not due back to the apartment for ten more days, so it was likely that the detective would be back before she was. Alan was going to have a great time in the apartment, exploring every room, nook and cranny.

The man walked to the thermostat and cranked the temperature down as low as it would go. Then he walked around the house and gently opened each room and closet door a few inches so the snake could investigate wherever he wanted. Then the man walked to the middle of the

living room, gently untied the cord that was wrapped around the top of the bag and placed the bag on the floor.

After a few seconds, Alan slithered out of the bag and onto the carpet.

After the man left the apartment with the now-empty bag, Alan began crawling around the living room, poking his head under every piece of furniture, flicking his tongue and using his heat sensor to determine if there was any prey or potential enemy in the vicinity. There were none. Then, gliding from room to room, Alan spent the next several hours happily exploring every part of the apartment. Everything was new to him, as he had been born in captivity in the city of Valinhos, in the state of São Paulo, Brazil, under the care of a *Bothrops jararacussu* breeder by the name of "André." All Alan had known was a container – small at first but later larger and better appointed after the man obtained him. Now he was free and it appeared that the world was his oyster.

After a few hours, Alan noticed that the temperature in this place had dropped significantly, lower than he had ever experienced before. The *Jararacussu* began to get lethargic and Alan began to look for a nice safe place he could curl up and go to sleep. He found the detective's closet and crawled inside. Finding a cozy place, where part of his body was inside one the detective's shoes, Alan went to sleep.



Alan awoke many hours later when he felt the vibrations of a creature, as it walked into the apartment. He peeked out of the closet and his heat sensors detected a large, moving, living beast shuffling around the living room. The creature was much too large to eat, but it was large enough to easily attack and kill the snake; Alan would have to find out more about it.

The creature went to a box on the wall and did something; then it walked into the room next to the closet Alan was still in and took off its clothes. One of its legs had something wrong with it; the leg neither looked like the other nor did it have the same heat signature. That interested Alan. The creature was not fluid in its movements. Maybe its strange leg was injured. The creature then went into another smaller room and shortly afterward, Alan felt a rise in humidity coming from that little room. He also felt the ambient temperature begin to slowly rise degree by degree and he began to feel less lethargic and more active. In a few minutes, Alan sensed he would want to move around and get a closer look at this new creature.



Perhaps ten minutes later, Alan finally slithered out of the closet and the protection of the shoe. He silently crawled on the carpet out of the closet, across the width of the bedroom floor and slowly crept through the crack where the door of the bathroom was slightly ajar.

As his head entered the small room along the floor, Alan's senses reached overload immediately and what they told him, shocked him.

Unlike the rest of the apartment that was comfortably dark, the small room was bathed in bright, white light – so intense that it hurt his eyes as his pupils attempted to crash shut to mere slits.

Next, Alan noticed that the tile floor of the little room was still freezing cold and was covered with a light film of warmer water; it was also slippery and difficult for Alan to traverse as there was nothing for his scales to gain leverage. He spotted a small oval rug ahead of him and zipped silently and directly for it. Now he felt much better. He was about two feet from a very smooth, white wall that was about two feet high. Above the wall, it appeared to be raining, as small droplets of water splashed over the side. Alan was perplexed because he had seen the large creature enter the room, but as he looked around, he could not see any trace of it – either visually or by heat signature.

Perhaps the creature was behind the short, smooth white wall in front of him, so very, very gingerly, Alan elevated his head and the upper part of his body to the top of the wall, where there was a small piece of material that had a rough surface; it was a rubber anti-slip pad. The rest of the white wall appeared quite slick, with no purchase, even for a snake. Alan peered over the wall and as his belly ribs were supported by the material on top of the wall, he raised his head one foot above the wall and looked into the bathtub.

What he saw amazed him. It was the largest body of water he had ever seen and it appeared to be extremely hot, so much so that his heat sensors temporarily blocked all other senses from transmitting their findings to Alan's brain and he temporarily lost his regular vision. The water seemed to be one constant high temperature and Alan found that neither his temporarily-blocked eyesight nor his heat sensor could detect what might be under the surface of the water. Alan detected a round object at the right end of the water, but it was not at a temperature that was so different from the water that it would be interesting to pursue.

The round object in the water was Sergeant Antonio Ponce's head.

As the snake was staring at him, Antonio tried to figure a way to have the snake leave the area without biting him. He knew that the snake's reflexes were much faster than his own and he would have no chance to hit or grab the serpent. Antonio sensed that the snake had not struck him already because the temperature of the water was probably now higher than his own body

temperature. That would change once he shut off the water, but to stop the flow, he would have to rise up out of the water and that would certainly trigger the snake to strike.

What Antonio needed to do was not to turn off, but to increase the flow of hot water until it rose to the level of the top of the tub and spilled over the side, perhaps washing the snake back down to the floor, or causing the snake to become uncomfortable because of the increasing heat of the water. Antonio knew that many varieties of snakes could swim, but he did not know the temperature of the water that would deter this particular reptile from gliding into it or to be so hot to make the snake uncomfortable on the edge of the tub. Antonio also did not know if all snakes could go below the water's surface and bite their prey, although he thought that some could.

Antonio's right foot, of course, was gone, a casualty of the amputation. His left leg and foot were on the side of his body that was closest to the reptile. Very, very slowly – so he would not cause any ripples on the surface of the water – he inched his left foot under the water toward the front of the bathtub. Antonio then very, very slowly lifted the toes of his left foot slightly out of the water to where they barely touched the hot water knob on the faucet. The snake remained motionless, its eyes still seemingly glued in a hypnotic gaze toward Antonio's face.

Ever-so-slowly and gently, Antonio used his toes to push the knob fractionally in a circular direction that would allow more hot water to flow in. When he could feel the hotter water flowing, he ever-so-slowly lowered his foot back under the water's surface. Ideally, Antonio would have used his right foot and toes to turn the cold water knob on the right side of the faucet so that less cold water came in as well, but, he obviously could not do so. He considered for a moment twisting his body to the right so that he could use his left foot to control the cold water knob, but rejected the idea because it would cause too much movement in the tub and the snake would almost certainly react to that.

Now it would be a battle on whether Antonio could endure more heat than could the snake. Antonio knew that when a human being is immersed in 102.2°F water, the person's heart rate would increase by 12 percent, which could cause problems if the person had a heart condition. Antonio's heart was fine, although it had been beating rapidly since he first saw the reptile. He also knew that many Jacuzzi tubs operated at a temperature of 113°F, and at that heat, it was highly recommended that a person remain in the water for only three minutes; he also knew that college students routinely violated that precaution, especially when they had been drinking. It had been a long time since Antonio was a college student. Finally, in forensics' class, Antonio knew that hot water often ran out of domestic taps at 158°F, which was far too hot for bathing and could easily cause injuries. While he had never measured the highest temperature of the water in his own bathtub, he knew that when it got very hot, it became quite painful.

While Antonio was making his calculations of the temperature of the water, Alan was making his own assessment. He knew that in his enclosure at his own home, he was comfortable when his

body heat was maintained at 86°F, although Alan did not think in numbers, only comparisons, and he knew that the heat he was experiencing now was greater than that at home. He also knew that on cold days, he would go to sleep when the temperature dropped to 50°F and that this had happened earlier today when he was first in the apartment. He also knew that once, when he was younger, there had been a problem in his enclosure and when the temperature had reached 90°F he became uncomfortable and that when it hit 104°F, he stopped moving. His senses were that the water now was approaching that dangerous latter temperature right now. If he would have had a previous experience, and if he could have remembered that, he would have known that when the temperature rose to somewhere around 115°F, he could only withstand that for a very short period of time and then would have to move somewhere cooler.

It therefore appeared that the breaking point might be the same for both Alan and Antonio, although neither organism understood what the other could, or could, not tolerate. The water became hotter and hotter and rose higher and higher toward the edge of the tub. Antonio's face was sweating profusely; the snake showed no discomfort. Antonio, ever so slowly, moved his left leg toward the side of the tub so it would not be directly under the column of now uncomfortably hot water falling from the faucet. Antonio did not know how much longer he could take this scalding heat. The stump of his right thigh was now killing him and he felt like he had regained consciousness in the middle of the amputation in the operating room.

After what seemed like hours – but was only an additional minute or two of real time – the scalding hot water reached the top of the tub and began overflowing. At the same instant, Alan felt the sudden increase in heat and quickly backed off the edge of the bathtub, dropped to the floor and began to turn his body toward the bathroom door.

Antonio was afraid to look over the edge of the tub for fear that the snake was on the floor, and maybe was looking up at the edge and would strike the first thing it saw coming over it. To encourage the reptile to keep moving out of the bathroom – if it was not moving in that direction already – Antonio used his right hand and arm to create as large a "bathtub *tsunami*" as he could without extending his head above the water level. Instantly, cascades of steaming hot water went over the side of the bathtub in Antonio's best re-creation of the *Chorro de Doña Juana Waterfall*.

After a few seconds, Antonio slowly raised his head above the edge of the bathtub, just in time to see the snake's tail go through the open doorway out of the bathroom. Without turning off the water, Antonio crawled over the side of the tub, used the toilet to pull himself up to his one leg and used his hands and arms to help navigate his body as he quickly hopped to the door. After shutting the door and locking it, Antonio went back to the tub and turned off the water. The floor was a mess; undoubtedly some of the water would seep down into the apartment under his on the lower floor, but he would handle that later. Grabbing a towel and drying his now "lobsterred" body. Antonio put his prosthetic right leg back on, wrapped the towel around his waist.

picked up his shoulder holster from the top of the closed toilet seat and put it on. Then he picked up his cell phone and dialed his Godson.

"You won't believe what just happened. I am here in my apartment now in the bathroom, with the door locked. When I was taking a bath, I looked up and saw a **33** right on the edge of the tub, right here in my apartment!"

"What did it look like, Padrino?"

"What the hell do you mean 'what did it look like?" It was maybe four feet long, thin, was brown and had light blue eyes," replied the exasperated detective.

"Light blue eyes? *Padrino*, have you been hitting the *Don Q* again?"

"No, dammit, but that sounds like a good idea about now! *Mira* (Look), it was not the same kind as the **33** we found out west, but it appeared pretty nasty. It is now somewhere in the apartment, but it probably cannot escape, unless it can find an air vent somewhere. Now, here is what I want you to do. Call up Professor Guailí and then go pick him up and bring him to my apartment. It is too late at night to pick up any sophisticated equipment so just bring three long brooms and a cotton laundry bag to put it in after we catch it. Bring over an extra set of clothes for me to include a single left shoe, as I don't need a complete pair anymore!" Both men laughed.

"Do not come inside the apartment for any reason until I tell you to do so. What we are going to do is that once you get here, I am going to try and clear a path to the thermostat and turn the temperature down to as low as it will go. When I got home this evening I found the air conditioning cranked up high, but I did not think anything about it. Now I believe that whoever brought the 33 in here lowered the temperature, so the creature would go to sleep until I came home and jacked the thermostat back up. If that is true, once we get the temperature back down there, it should become listless enough again so that we can catch it without harming it and without it harming us."

"We'll be there in 30 minutes; just hang on, Padrino."



The rest was anti-climactic. The pathologist and the biologist arrived on time. The detective opened the door of the bathroom, flicked on the overhead light switch, drew his pistol and seeing no sign of the reptile, went straight to the thermostat near the front door of the apartment and turned it all the way down. Within six seconds, he was outside the apartment door, where he met the two other men. Antonio changed into the spare set of clothes and the three men walked over

to the café, where they spent the next 45 minutes drinking numerous coffees, eating several pastries and waiting for the temperature in the apartment to cool down.

When they returned to Antonio's place, they turned on all the lights in the apartment and began carefully searching, slowly sticking their brooms into every corner and under every piece of furniture. They finally found the snake curled up in the floor of the closet, eased it out and pushed it into the cloth bag. It was lethargic and offered no resistance, nor did it try to escape.

After tying the bag shut, the men searched the entire apartment one additional time to ensure that there were no more unwanted visitors. Antonio left the thermostat at its lowest possible level and locked the door of the apartment; he would spend the night at his Godson's house. They decided that the following day, Professor Guailí would transport the snake back to the zoo at Mayagüez and place him in a special unoccupied snake enclosure, where the animal could be housed, fed and watered for the time being. For now, Guailí would tell no one of the zoo's new acquisition.



## Wilmington North Carolina

## Wilmington, North Carolina

"Antonio, this is Dean. How are you doing? I think I have some good news for you."

Sergeant Ponce, now on his cell phone in Hato Rey, replied that he was fine now, but that the previous night he had an encounter with another **33** in his apartment. He told the herpetologist about the hunt for the **33** in the state forest; later in the day, the biologist would photograph the latest animal from last night's adventure and send the photographs to North Carolina, although the detective was fairly certain that this latest encounter was not the same species. Then Antonio asked him to describe the good news.

"OK, I took all the photographs home and entered all the biological data into the computer. Something about your **33** that we examined had intrigued me, but I did not want to confuse the effort when I was down on the island with you."

"Over the last fifteen years or so the practice of breeding **33**s exhibiting various mutations of color or pattern has gained wide popularity. In the breeding world, aficionados deal with dominant, co-dominant and recessive traits. If a recessive gene is paired with a normal gene, then the effect will not be visible in the snake. This condition is called heterozygous, or *het* for short. The term, as used in Herpetoculture – "herps" for short – simply means that the animal is carrying the gene for a recessive trait, but it does not visually express the trait. Just as in humans, everything about a **33** is determined by various genes and how they interact with each other. They receive one half of their genetic material from each parent. The genes with which we as breeders are concerned affect coloration and pattern."

"Let me get to the point, Antonio. The coloration of the **33** I examined was a bit off what is considered regular for this particular species. In our world, we call it an 'ivory morph.' Well, one dealer in the States really specializes in ivory morphs in captive-bred of these **33**s so I contacted him, and obviously he wants to remain nameless. But anyway, he gave me a short list of guys who had bought breeding pairs in which the buyer was interested in the potential that offspring could have an ivory color to them – although everyone understands that in genetics you are only talking about probabilities."

"Here's my problem. Much of the trade in these animals is cash only, and a great deal of the time, the buyer doesn't use his real name and the seller doesn't ask. There are no onerous government regulations to collect this information. Now the dealer that specializes in ivory morphs is pretty certain that 95 percent of his buyers live in Florida and if you had a picture of the guy, the dealer could confirm whether or not he had ever bought one of these animals, but he has no records of any names. So for him to provide any details, you are going to have to get a photo."

#### Wilmington North Carolina

"Well, heck, Dean, that isn't much good news," offered the detective.

"Well I was just getting to that, Antonio. You have to remember that these breeders are not certified geneticists; often they are more like Dr. Frankenstein and experiment first, while asking questions later. It has nothing to do with ethics. What they do not understand is that mating animals for color patterns may also introduce mixing genes that affect health. And what this particular dealer/breeder has found out the hard way is that associated with these ivory morphs appears to be a higher incidence of susceptibility to infection."

"He doesn't know why this is so. I do not know why this is so, either. And the problem is that since he has no real names of his buyers, unless he sees them, he cannot get the word to them about the potential problems with infections. However, what that may mean for you is that this guy down there does not know about the infection problem, however that helps you."

Antonio thanked the herpetologist and promised him they would get the photos of the newest 33 to him as soon as possible. The detective strongly believed that the one in his apartment was placed there by the same man that had released the other species of 33 near the coffee plantation. That meant that if the man had two 33s, he probably had more.

This was not the case of some **33** owner that released his pet into the wild when it became unmanageable. The detective guessed that the perpetrator had figured out that his snakes had a high incidence of infection, for whatever reason, and that infections often killed these types of animals, so it only made sense to have more animals in reserve, whatever his design or activity.

Sergeant Ponce's second thought was that this perpetrator was no ordinary criminal type. He was a very accomplished electrician, knew about VHF devices, understood at least two species of venomous animal (and was wily enough to probably not have been bitten by either) and seemed to be one step ahead of the efforts to find him. Somehow, the perpetrator knew that Ponce was on the case of the **33** near Jayúya, and he wanted Ponce off that case. Somehow, he knew where Ponce lived and how to track him to his home.

Track him to his home was like tracking a snake to its lair. The man had put a transmitter on the **33**; how could he do the same for a man he was tracking? Maybe the detective needed to go out and check his car.



#### Around the Island

Sergeant Ponce found transmitter behind bumper on his car. He weighed the option of removing it, but decided that he would let the electronic boys examine the device and left it in place. Antonio was not certain how he would capture this snake man, and he would pay extra attention to see if anyone was following his car.

Antonio then went to the *San Juan Star* and talked to a reporter who owed him a favor. The following day, the reporter ran an article in the newspaper that described that a four-foot snake had been run over by a truck on the *Avenida De Diego* near the Museum of Art. The article opined that the dead snake probably had been owned by a reptile dealer in the area. The creature was believed to have crawled through an air conditioning vent in an apartment, but the reptile was too badly run over to identify the type of snake. In the same edition, the editors ran an opinion piece that urged a crackdown on the ownership of dangerous boa constrictors on the island.

After notifying Dr. Dailey of his plan, the detective purchased ten VHF receivers and instructed mechanics at the Department of Agriculture (DA) motor pool to mount them in ten vehicles. Using Dailey for top cover, Ponce requested twenty DA officers to man the ten vehicles. Each SUV would patrol a separate designated area in Puerto Rico for two weeks looking for signals close to or on the 150.430 MHz band. The teams of investigators would mark the time, location and strength of each positive reading, but none of the men was told the purpose of their search.

Detective Ponce and the pathologist returned to the *Bosque Estatal Los Tres Picachos State Forest* with their game cameras to set up an ambush for the perpetrator. Once again, the female Bushmaster observed their coming and going, but the two men remained oblivious to the lethal danger nearby. The female snake felt lethargic and did not leave her sheltered area to examine these two intruders.



Meanwhile, the man came to the conclusion that he was not up to the task of eliminating the pesky Sergeant Ponce. The man was not certain what the article was all about in the *San Juan Star*, but for whatever reason, Alan had been unable to finish the job. Maybe he lay dead on the street; maybe the policeman had killed the snake; or maybe Alan had missed his target and was somewhere loose on the island. The man had not put a transmitter on Alan for the simple reason that he never anticipated letting Alan out on his own.

The man was getting desperate. While he was driving around the island with his clandestine receiver, he saw clearly-marked Department of Agriculture SUVs driving near the major

#### Around the Island

mountain forest areas. Each vehicle had an external Yagi antenna mounted on it. The man knew that each system was attached to a compass inside the vehicle. Try as he might, the man could not rationalize that the patrolling vehicles were benign and not looking for his transmitters. He had to get rid of Ponce before it was too late. There was still hope. Even if the agents found 50 percent of his Bushmasters, the remaining couples could populate the island if everything went perfectly concerning his calculations on mortality and reproduction. But not with Ponce alive; he was like a heat-seeking missile that had to be eliminated.



The man returned to the pet store where he had purchased his aquarium years before. Again, the same men were sitting around discussing the current events. In his previous visits over the years, he knew that one of them had a low-level connection with a narco group involved with pushing drugs in the area. He spotted the man in the store, kibitzing with the owner, who said, "Well, I haven't seen good old Sergeant Ponce around the neighborhood in a while. The word I heard on the street was that he's been driving around the island looking for big boa constrictors!" The men got a good laugh. About twenty minutes later, the men went on their separate ways and the man followed the man with the connections for about two blocks before he approached him.

"Juan, I do not know how to run this by you, but I am having a serious problem with a man where I live. I have heard that you know some men who might be able to help me with my problem," began the man.

"I might," said 'Juan,' although that was not his real name, a fact that was not known to the men in the pet store to include the man who was now addressing him. "Tell you what the deal is. I don't want to know any more about it. I don't want to know who it is, what he's done, or what you want done about it. But I will tell you one thing, from what I've heard. This kind of thing is real expensive. And the guys who do this type of thing want cash, and they want a bunch of it upfront. And if you renege on them, it gets ugly really fast and events get out of control to the point that you wished you had never met them. Do you understand all that?"

"I have, Juan, and I think this is the only way to solve my problem. I am afraid of this guy," offered the man, realizing that variables he had never planned for now could be unleashed to the point where his whole project was in danger.

"OK, here is what you do. Tomorrow night at 8:00 p.m. you will be at the *Plaza de San José* in Old San Juan; do you know where that is?" Everyone in Puerto Rico knew this relatively small cobblestoned plaza that is dominated by a statue of Juan Ponce de León. The monument was cast of bronze from English cannons that were captured in 1797.

#### Around the Island

The plaza, the highest point of elevation in the city, served as a thoroughfare to four cultural sites on its perimeter. It had never been known as a meeting place for clandestine activity and its myriad of visitors ensured that the identities of those meeting there would blend into a sea of unknown faces. "The person who will meet you will know what you look like; you do not need to know anything about him now, so do not ask," 'Juan' added in an ominous tone. "Try and find a place to sit as close to the statue as you can. I think that should do it and remember to never ask me about this again."

The man turned and left. These old guys did not know the hell they unleashed when they had someone handled by the narcos. Nothing was cheap; everything was painful; and often the person hiring the narcos was caught up in the process as collateral damage. "Juan" hoped that would not happen to this old man, who had always seemed like such a nice, soft-spoken person.



Plaza de San José in Old San Juan

## Plaza de San José/Kamel International Bazaar

The following day, the man went to the *Plaza de San José* as he had been instructed. He saw the white *Iglesia de San José* (San José Church) and the *Casa de los Contrafuertes* (House of the Buttresses.) The church was now under an extensive repair project to bring it back to its former glory. The man could see dozens of young adults sightseeing in the evening air – heading to and from the many bars and restaurants along *Calle San Sebastián*. In the square, the man stopped at a street vendor and ordered a coconut-flavored *Piragua*, a snow cone-like snack that the vendor prepared by shaving ice off a large block and topping with one of ten to twenty flavors from bottles in a rack.

The man found an open chair next to the monument of Juan Ponce de León; he took a seat and finished the snack. It was 7:50 p.m. Nothing seemed out of the normal; no one paid any attention to him. Quite honestly, the man was scared. He had never done anything like this before, but then again, how many people ever did, when contracting to murder someone? At precisely 8:00 p.m., the man sensed another person immediately behind him, but did not turn around.

A low voice close to the man's right ear spoke in a calm tone, "Do not look around. When I finish talking, wait on this bench for exactly five minutes, then calmly get up, turn around, and then walk directly back down *Calle Del Cristo* toward to the San Juan Bautista Cathedral. Walk on the other side of the road and pass the *Hotel El Convento*. Continue along the *Calle Del Cristo*. On the ride side of the street, you will see many small stores and bars. Go into a small shop called the *Kamel International Bazaar*, on 154-156 Cristo Street; you will see on the balcony a sign that says two rooms are for rent. Do not raise your arms in any manner on the way over. Do not talk to anyone; do not bump into anyone. If we sense any attempted signal to a confederate or any police officer, we will break contact with you and deal with you later at a time and place of our own choosing.

At the bazaar, go inside and find the lady that looks like she is the boss. Tell her that you would like to take a look at the one-room apartment for rent; she will direct you to go there. Do not gaze around the inside of the store; you can come back some other day and do your Three Kings' Day shopping. If you understand these instructions, gently nod your head, and wait as I instructed you."

The man nodded, waited five minutes, got out of the chair and began walking out of the plaza and down the street toward the destination he was given. Although he had not seen the person that had spoken to him, no one ahead of him fit who he thought might be the person in his mind's eye. The hard blue-gray cobblestones used to pave the streets were smooth and almost slippery as it had rained late that afternoon. The man found that he had to keep his eyes down to look where he was placing his feet and thus was unable to try and see who may have been the

#### Plaza de San José/ Kamel International Bazaar

voice he heard in the plaza. On several occasions, he almost bumped into some of the many visitors in Old San Juan who were spending a last few hours of sightseeing before they boarded their cruise ships to depart for another Caribbean port of call.

No one was near the door of the bazaar and he walked right in. Within a minute, he was able to identify a middle-age woman who seemed to be in charge and asked her about the room for rent. The woman guided him toward the rear of the store; about halfway back – there was the *Cyrus Persian Grill* at the courtyard to the rear of the store – the woman walked to a large red tapestry hanging on one of the white walls. She pulled the tapestry to the side, revealing a passageway; the man passed through the opening, went into a tiny hallway and ascended the decorated stairs to his left. He was alone, the woman having returned to the store to serve other customers.

The man saw the door to one of the apartments and attempted to enter; it was locked. He then walked a few feet to the other door and was able to open it. The inside of the room was not completely dark, although there were no lights on – the light through the window overlooking the street partially illuminated the sparse furnishings. The man walked toward the old bed, turned around, sat down and prepared to wait for someone to come into the room to talk to him.

The man was surprised when a voice suddenly came from a chair in the corner of the room. "Stand up, move toward the window slowly, I want to get a good look at you," a man's voice said. The man did as he was told. Sitting in the chair was a Hispanic male some 40 years old. The man could not judge his height, but noticed that the stranger had black hair and a moustache, two features that would be utterly worthless in attempting to identify any adult male in Puerto Rico. In fact, the stranger might not even be Puerto Rican. Although the man spoke only rudimentary Spanish, there was something about the stranger's voice and complexion that suggested Central America. What were unique were the man's eyes. They had a cold, calculating look – an "I have been here before and I know what you are going to say and do before you do" countenance to them.

"Let us use English; I know all about you and you will be more accurate in your own language. Tell me what your problem is," the stranger ordered.

The man was careful in what he told the stranger. He could obviously tell nothing about his biology project, so he explained that he had a small business buying gemstones to further sell to tourists visiting the island. As with many gem dealers in Old San Juan, the tourists loved avoiding paying duties on their purchases. For reasons unknown, an "official" had tumbled on to the business and began squeezing more and more "juice money" from him to allow him to continue to operate his business and avoid paying taxes on the sales of the stones.

The stranger began thinking. He did not believe the man's story, but would have to check the details. He had to be sure that whoever was squeezing the man – in whatever enterprise that

#### Plaza de San José/ Kamel International Bazaar

might be – was not a member of the cartel, for whom the stranger did selected business as well. After a moment, the stranger asked, "Tell me everything you know about this "official."

"Well, he is some type of police officer," said the man. "I have done some research on him and the man's name is Sergeant Antonio Ponce. He has a prosthetic leg..."

"That will be enough," said the stranger. "I know of this detective, and let me tell you something; you have just crossed the line into the big-time, my friend. This Sergeant Ponce cannot be bought off; he cannot be dissuaded from bothering you by threats or intimidation. To solve your problem, this detective must go away, and I doubt that you have enough money to make that happen."

"I can pay you \$50,000 in cash," offered the man. "I have a pension as income, but I have saved some money here and there..."

"It will cost you a lot more than that," the stranger interrupted again. "It will be \$50,000 upfront and another \$50,000 after the job is complete. Ponce is a very dangerous man and if he is put to ground there will be blowback from the authorities as they try and apprehend whoever did it. You need to know one other thing. I do not know your real reason to want Ponce dead, but what you need to understand is that if you are ever arrested for whatever you are doing and you attempt to make a deal with the police to give up information on the death of Sergeant Ponce in return for some kind of leniency, it will be the worst day of your life. Everyone – and I mean everyone – you hold dear in life, including yourself, will be killed in such a demonic, cruel way, that you will curse your own mother for ever having given birth to you. Do you understand all this?"

"Yes sir, I...I...do; I understand com...completely," stammered the man, now shocked to his breaking point on what he had now apparently set into motion. "I have the upfront money here in my bag already. I will get the other \$50,000 by selling some assets in such a way that the sales will not attract any curiosity."

The man picked up a gym bag he had placed on the bed when he sat down. "The money is in here; you may count it. Before it became obvious that I was no match for this police officer, I also bought this small device to keep track of him so he would not surprise me when I was making my transactions." With that, the man lifted a small VHF receiver out of the bag. "I placed a transmitter under the bumper of Sergeant Ponce's car and to my knowledge it is still there. All you have to do is turn on the receiver here. It only picks up frequencies in a narrow band and has to be within one-half mile of the transmitter. The louder the sound coming from the speaker, the closer the transmitter is. I used to be in the electronics industry. When this receiver beeps, it will undoubtedly be Ponce's automobile."

#### Plaza de San José/ Kamel International Bazaar

The man glanced superficially at the money and looked at the receiver. He did not have to tally the amount of cash; in his line of work, the customer never short-counted the total owed or he would forfeit both the money and his own life. "I do not know how this receiver will be used in the future," said the stranger, "but I will take it. You will be contacted after the contract has been fulfilled concerning payment of the final installment. For now, you may leave the bag, walk to the door you came in, go through the door, walk down the stairs, out of the store and never look back. *Vaya con Dios*."

The man did as he was told and quickly left the store. The stranger closed the bag and made his way to another door in the rear of the building that was not visible to anyone on the street; there were at least three entrances to this building. The man seemed nice, but the stranger had quickly assessed that the *Abuelo* (grandfather/old-timer) was not the sort of man who could withstand any serious pressure from the police if he should later be arrested with respect to the demise of Sergeant Antonio Ponce. After he paid the final installment, the man would become a dangerous loose end and the stranger did not like loose ends.



Typical bazaar in Old San Juan

# **Bosque Estatal Los Tres Picachos State Forest**

The following day, the man drove back to the *Bosque Estatal Los Tres Picachos State Forest*. He did not know when the stranger would kill Sergeant Ponce, but he felt he had to check on his Bushmasters right away. Part of his decision-making thinking urged him to wait until the detective was gone from the scene, but another portion overrode that thought and urged him onward.

The man did not know which Bushmaster – male or female – that the detective had found at the coffee *hacienda*. However, he did know that a single snake in an area would never reproduce; therefore, if he could find the surviving snake and transport it to one of the other areas in which he had placed snakes, it could help produce more Bushmasters there – although the dispersal model would thus change. He could recalculate that later and maybe transfer a male and female from the second generation back to this forest location.

The man turned on the receiver near the forest, but initially heard nothing. This negative response led him to drive to another area on the edge of the forest, where he parked. Unfortunately for Sergeant Ponce, this parking area was not where he and his team had placed a camera, so no pictures of the vehicle were ever taken.

The man wandered around the woods with a portable, battery-powered receiver and finally got some "pings." As the pings grew louder, the man grew more cautious, as he knew he was getting nearer to the snake. He thought to himself that if he had it to do all over again, he would have had the transmitters on the females transmit at a slightly different frequency than those on the males, so he could tell from a distance the gender of the Bushmaster he was tracking.

The pings finally became so loud that the man knew he was within a few yards of the snake. He switched off the receiver so he could focus on his visual senses and not be distracted by the sounds. The man had a seven-foot long mop handle to help him probe under fallen tree trunks and other suitable hiding places. After a few minutes he spotted what appeared to be about 18 inches of the snake's body under some ferns. He could not tell in which direction was the dangerous head, so he proceeded prudently – although the literal definition of that word would never be associated with probing for a huge dangerous snake in the jungle with a piece of wood. He took the handle and gently touched the snake's body to see if he could provoke some slight movement that would indicate the orientation of the serpent.

There was no movement and the man pressed harder with the handle. Again, there was no response from the snake. Something was very wrong here. The man used the handle to move some of the ferns away and finally saw more of the snake. The head of the animal was covered with ants; obviously the creature was dead. The man made a quick field examination of the snake. He could find no wound marks on its head or top half of its body. Finally, when he

## Bosque Estatal De Tres Pichachos State Forest

reached the rear back portion of the Bushmaster he found his problem. The entire area around the incision, where the man had implanted the VHF transmitter, was swollen and pus-infested. The snake had some type of massive infection. While he could not be certain, the man rightly concluded that the infection had either killed the snake or had made it so weak that some other illness was able to fatally ravage it. The only positive result of the finding was that Ponce obviously had not found the snake. Well, there was nothing to be done.

The man thought again. No, he could try and make it a little more difficult for the detective to slow him down until the contract assassin could finish the job. The man pulled out a small penknife and some rubber gloves. He then cut out the transmitter from the snake. It was obviously still functioning, and he walked out into a patch of sunlight to get a better view of the small device. He would put it somewhere where the snakes were not, so Ponce could chase his own ass in a circle for all the man cared.

At that moment, the man heard several "clacks" up in the trees. He looked up and heard several more unusual noises perhaps 10-12 feet above the ground. After staring at the tree trunks for a moment, he saw several small plastic boxes that were painted with camouflage paint. He took his mop handle, reached up, and began striking the boxes in an attempt to knock them down from the trees.

After a few minutes he had dislodged the four boxes he had first heard – and then seen – and they tumbled to the ground. The man picked the first one up and examined it. The device was a game camera; he had seen many of them in sporting goods stores in the States. It was very rugged and the man concluded that it was still operational. Obviously someone was monitoring the area and the man suspected the worst. These cameras must be Ponce's doing. That man was becoming the engineer's personal white whale, tormenting him just like what had happened to Captain Ahab in *Moby Dick*.

After the man determined that the cameras had no sending units that would transmit electronic photo files to a receiver in some other location, he felt confident that if he took the devices home, he could destroy them there, after first downloading the images on his own computer to see what else they had recorded. He could then destroy the cameras or perhaps find another use for them.

The man turned around, and with the cameras, portable receiver and VHF transmitter from the dead Bushmaster in a cloth sack, he walked out of the state forest and back to his vehicle and started home.



#### Bosque Estatal De Tres Pichachos State Forest

Two hours later, Sergeant Ponce arrived at the *Bosque Estatal Los Tres Picachos State Forest*, not realizing that he had just missed his quarry. He walked to the area in which he and his team had emplaced the cameras, finding that someone had recently stolen four of the cameras. The detective would have loved to have assumed that some third party had found the devices and simply had stolen them, but his reasoning would not permit such a dishonest finding. It had been the owner of the snake Ponce had killed at the *hacienda* – he was almost certain of that. Antonio found and carefully removed the two remaining intact devices from up in the trees. He would download any photographs they had made and send them to the herpetologist in North Carolina to see what identifications could be made. The detective felt that he was getting close, but close was only good enough in horseshoes and hand grenades.



The man returned to his home in Trujillo Alto and downloaded the pictures to his computer. He could see the police detective and a younger man in several photographs. It looked as though the pictures were made as a test pattern, which meant that a third officer – unseen in the photographs – was next to each camera adjusting their sight pictures so that every foot of ground in the area had coverage. He hoped that the death of the police sergeant – which hopefully would happen soon – would disorganize and demoralize the team to such an extent that they would be ineffective in stopping his project – or at the very least disrupt them for such a period of time that the numbers of Bushmasters on the island would increase and gain an irreversible toehold on their new habitat.

He had failed to kill the detective with Alan. However, he was sure that this hired killer would be much more successful.



## Naguabo

Over the next several days, around the island, Sergeant Ponce, the pathologist and Professor Guailí – using the VHF receiver – located and killed five Bushmasters. The biologist noted that the two pairs of the snakes were in close enough proximity that they could have been reproductive pairs, as there was one male and one female in each. The fifth Bushmaster, found near the *Las Orchideas Nurseries* in Barranquitas, Puerto Rico, was a male. Sergeant Ponce told José Bonifacio, the owner and president of the nursery, that they had just captured a large boa constrictor near his plant farm. The wise *Señor* Bonifacio had no desire to inspect the catch and returned to his poinsettias. The three snake hunters took the five bodies of the serpents back to the Institute, where after removing the transmitters, they incinerated the dead animals.



Sergeant Ponce, feeling that progress was being made in the case, drove to a small *empanada* restaurant in Naguabo, on the east coast of the island, for supper. Located north of Humacao and south of Ceiba, it was known as *El Pueblo de los Enchumbaos* (the town of the soaked ones), because of the heavy rainfall throughout the year. In the southeast barrio of the town, along Route 3 as it paralleled the Caribbean, were several empanada seafood stands that featured small pastries, stuffed with various seafood, and fried. Parking several blocks away, as the barrio was in the midst of one of its numerous festivals; Sergeant Ponce walked to one of the outdoor stands, the *Chumar Restaurant*, and ordered several pastries and a *Medalla Light*. Next door was *Bobby's Restaurant*, which served the same quick and fresh seafood, much in the same way as *Geno's Steaks* and *Pat's King of Steaks* on South 9<sup>th</sup> Street in Philadelphia duel for cheesesteak supremacy.

The stranger – the hired killer – watched through his Zeiss binoculars as Sergeant Ponce ate his meal. He had followed the police officer, using the special VHF receiver that monitored the cop's car through the hidden transmitter under its rear bumper. He could see Ponce as he received a telephone call in the middle of his meal, but the stranger was too far away to hear the conversation.

"Dean, thank you for calling; how can I help you?

"Antonio, your man's name is Victor, Victor Graf. I circulated the photos you provided a few days ago around the 'snake circuit' and another dealer contacted me just now. He said this guy was a nice fellow and a bit older than your normal snake-owner. The dealer said he was smarter than hell; he picked up on every facet of snake-owning really quickly. My contact said he did not know what Victor did for a job, but that he might be some kind of engineer. He wasn't a 'creep' and wouldn't attract attention in any manner," the herpetologist added.

#### Naguabo

"I also looked at the photographs again carefully, although I am certain I have never met him," he continued. "What I can tell you is that this guy – Victor – knows he has had his picture taken. You can see that in his eyes; he is looking for the camera when some of the pictures were snapped. Did all these photos come from different cameras?"

"No, Dean; four of the cameras were ripped down from the trees. We think he found those and took them."

"I know I am preaching to the choir, Antonio. Be careful. Any guy, who could build a miniature transmitter of the sophistication we saw, could pretty easily make an improvised explosive device out of a game camera."

Antonio said goodbye and placed a call to an old friend at DEA. He gave the contact the name of the suspect and asked him to run it through the computers to get an address, but did not give any additional details of his interest in the man. As it was an unusual name for Puerto Rico, the answer returned in sixty seconds. Victor Graf lived in Trujillo Alto.

The stranger got a peculiar feeling through the binoculars, watching Sergeant Ponce take and make the phone calls. He sensed that the cop had received important information in the last few minutes and that the hit man decided that he might have to change the plan. The hit man had been preparing to detonate the bomb a few minutes after Sergeant Antonio had returned to his car after his meal. But he had a phenomenal sixth sense, which is why he received so many lucrative business offers and was so successful. Plus, the lines at both restaurants were thirty people long; the entire area was packed and there was no telling what might be in the cars next to the cop's. There could be a chain reaction of explosions, which would kill dozens. The hit man wasn't looking to duplicate Baghdad or Kabul – not because he had a humanitarian streak in his pitiless heart – but because such a mass-casualty event might trigger an immediate federal dragnet with unpredictable consequences.

He was nicknamed *El Múcaro*, "The Owl," among the circles of the men that hired the stranger, in part because his eyes seemed to see everything – in both day and night – and that he could perceive the situation in every direction around him, just like the owl that could turn its head in a 270 degree arc. It was also said that The Owl never slept – that he was constantly planning or searching for his prey. As a result, many men – although they would never admit it – in the cartel, who hired *El Múcaro*, were actually quite afraid of him as well. The man was a chimera. No one knew where he had been born, any details of his life, or how many men he had killed during his career.

Strangely enough, the hit man thought of the two Philly cheesesteak giants at almost the same time as Ponce had. A couple of years before, The Owl had eaten at both when he was up in Jersey doing a job for the mob there – tying up a loose end. Somebody had to disappear without

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a trace and The Owl made that happen through the use of an industrial vat of acid in some factory – because there are no loose ends with industrial acid.

The Owl put his binoculars in their case and returned to his own car. He would deal with the sergeant tomorrow, but tonight he had to tie up a loose end of his own.



El Múcaro pulled his car up a block short of the man's house in Trujillo Alto. After meeting the new client in the square in Old San Juan a few weeks ago, and receiving the down payment for the job he was to do, The Owl did a little investigating on his own and soon found the man's name – Victor Graf – and the location of his home. He knew that Mr. Graf had retired and had moved to the island some years ago, after an accomplished career as an electrical engineer. Some of the associates of The Owl in the States had located the adult children of Mr. Graf, just in case pressure points needed to be applied to the old man in the future. However, there would be no need for any prospective pressure after tonight.

The Owl had originally intended to shoot the target until the client showed him the VHF receiver. The hit man was a master marksman and using those tools of the trade came as a second nature for him. However, the existence of a VHF transmitter under the bumper of the target's car presented some intriguing possibilities. The most obvious impact, of course, was that the hit man could easily follow his target and "watch" as the target entered the kill zone.

Thinking some more about the hit, the assassin suddenly realized that the client's obvious expertise could be used to later lead police, investigating the murder, into incorrectly concluding the identity of the policeman's killer. Besides, Ponce was one tough *hombre*; *El Múcaro* had put an entire burst of fire from his MAC-10 into the cop in that warehouse near the *Azuquita Bar & Grill* a few years ago The cop was on his tail for *El Múcaro's* previous hit that took down Héctor "Macho" Camacho and his cousin. And now, the cop was still alive and his target again. It was karma.

However, a bomb detonated under the driver's seat of Sergeant Ponce's car could do two things. One, it would certainly kill the detective, which was the object of the exercise. Secondly, the blast would severely damage the rest of the car, but it would not completely destroy the VHF transmitter that Victor Graf had placed on the rear bumper of the vehicle, and thus would be at the farthest point away from the blast on the car. Graf was no assassin; somewhere on his transmitting device would be his fingerprints or his DNA. Any prosecutor fresh out of law school could make a logical link between the bomb and the VHF transmitter – concluding that the same perpetrator had been responsible for both. Graf would be blamed for the murder – end of case.

And Graf would be unable to refute that accusation.

Because he would be dead. End of case.

The Owl looked around in the dark and saw no neighbors out walking. He was wearing zip up coveralls over a special one-piece *Under Armor* body suit. The combination would help reduce

any flecks of skin – and resulting DNA matter – from falling off the hit man and becoming evidence in the home of the cop's murderer. Wearing black gloves, he slipped a small pistol from his pocket; it was a *Walther PP* in .22-caliber Long Rifle, the same caliber as the Ruger *Mark III Hunter* that the pathologist had used to kill the Bushmaster at the coffee *hacienda*, although The Owl was not aware of that coincidence.

The pistol had been made in Germany in 1937; some American soldier had brought it back after World War II, so it was virtually untraceable. The *Walther PP* (known in German as the *Polizeipistole*, or police pistol) was developed by the German arms manufacturer Walther, and produced in the town of Zella-Mehlis in the Thuringian Forest. It was a blowback-operated semi-automatic pistol that featured an exposed hammer, a double-action trigger mechanism, a single-column magazine, and a fixed barrel that also acted as the guide rod for the recoil spring. It had a 10-round magazine; weighed 23.8 ounces and was 6.7 inches long.

From another pocket, the hit man removed a cylindrical silencer and screwed it into the end of the barrel at the muzzle. The assassin had bought the silencer in Tennessee; he had paid cash, so again, the piece had no history and had no manufacturer's name or serial number on it. The .22 *Walther PP* did not make much noise in its pure state; with the silencer attached, the noise emitted at firing was little more than a cough-like sputter.

Seeing no witnesses, the hit man opened the front door of the house, which was unlocked. Sitting in the living room, Victor Graf was watching television; Graf turned his head toward the door as if expecting the visit and remarked, "I had a feeling that you were getting close to finishing the job, although I have been faithfully watching television and checking the Internet, and so far I have seen nothing."

"Yes, Ponce is dead; it happened over near Naguabo about 30 minutes ago; I suspect that it may take a few hours to identify the body and that the incident was not an accident. You should be able to see the details tomorrow morning, although I cannot remain on the island for that long as you might expect. Therefore, I came over now to conclude our arrangement," The Owl added.

"Yes; I see; that is perfectly understandable," replied the man, who picked up a shoe box that was on the floor next to his chair. What the man really saw was that the assassin was wearing gloves and that he had a small pistol in his right hand. The man thought that was unusual, as he did not consider himself a threat to the assassin and he was sure that the hit man was not afraid of him. "I believe it is all here, although I apologize upfront that there are so many small bills."

The Owl took the shoebox from the man; the client had been correct on the weight of the money, although that would present no problem to him; small bills would attract less attention in many situations anyway. The hit man was still not sure what Graf's game was, although it was probably something to do with smuggling. As he decided to open the lid to take a quick peek at

the cash, The Owl made a mental note to test the money later to ensure that it had no cocaine residue on it, just in case he was later stopped for a minor traffic violation and the cops found some of the cash.

What happened next was the stuff of a Stephen King horror movie. The assassin had accepted the box with his left hand. He then brought his right hand around from his side – still holding the *Walther PP* with silencer attached – placed the pistol on top of the lid of the box, balanced the box in his left hand near his chest and used his now-empty right hand to awkwardly lift the lid of the box, being careful so as not to drop the box and gun and spill the money onto the floor. As he had raised the lid perhaps four inches, his all-seeing and all-knowing eyes spotted a blur that was so fast that even the great *El Múcaro* could not comprehend it.

What Victor Graf could have told The Owl was that in addition to the money – which was in large bills and not small – was another small *Bothrops jararacussu* just like Alan except a female. Its mouth was wide open as the front half of the snake hurtled out of the box and a round tongue was flickering in and out of its mouth.

As with Alan, this serpent, which the man had nicknamed "Alice," had a head that also had a prominent dark brown stripe from behind the eye, on either side of the head, to the angle of the mouth; it was bordered by a distinct pale area. The snake's large eyes, mottled blue, looked straight at *El Múcaro's* face, its intended target. In each eye, the snake's pupil was not a thin vertical black line, as when Alan was in Sergeant Ponce's bathroom, but wider as they tried to gather available light in the semi-dark living room. The belly of the snake was light tan, while the side of the snake was a darker shade of brown on which was a series of dark brown trapezoidal markings with pale edges, although the snake's movement was so fast that these colors and details did not register with *El Múcaro's* brain.

Alice bit viciously into the face of the hit man, the right fang embedding itself deep into the man's left eye socket at the eyeball. Instantly, the snake's venom was injected into the soft tissue only inches from *El Múcaro's* brain that was already racing along at a thousand miles an hour as it attempted – in vain – to comprehend the situation. This time it was Victor Graf, and not a hypothetical, dispassionate, invisible scientist, starting a mental stopwatch that would time the demise of the target of the little *Bothrops jararacussu*.

Two minutes, 58 seconds – The Owl comprehended that what had bitten him was a snake, as he felt both fangs slashing deep into his face. He tried to scream but could not; even now after just two seconds, the nerves in his face were becoming paralyzed. His right hand released the grip on the box lid and the *Walther PP*; his left hand simultaneously released the shoebox, *tick*, *tick*, *tick*, *tick*.

Two minutes, 50 seconds – Alice, still attached by her fangs to El Múcaro's face, tried to swing her tail to the side so as to gain leverage for her body to strike again if necessary. El Múcaro felt his entire face and head on fire, as he brought both hands upward, grabbing the snake about a foot down from its head. However, that action only embedded the two top fangs deeper into his face, tick, tick, tick, tick.

Two minutes, 40 seconds – The Owl finally realized that the snake's left fang had completely pierced his flesh next to his septum in his nose and that the venom from this fang was shooting straight into his nasal passage that led down his throat and into his lungs. His esophagus joined the rest of his upper body in the feeling that he was being burned at the stake. His eyes, still almost cross-eyed as they tried to focus on the snake's head attached to his face, could barely detect the lip shields spreading outwards like wings on the creature's skin, now covering the blue eyes buried beneath, *tick*, *tick*, *tick*, *tick*.

Two minutes, 30 seconds – Victor Graf watched the changes coming over the hit man with great interest. Graf had never seen, of course, a live Bothrops jararacussu bite a man, much less even heard of any venomous snake bite a man in his face. He was especially interested in the lack of strength the hit man seemed to have with respect to removing the snake from his face. The hit man was large – probably six feet tall and 200 to 210 pounds – and yet he was unable to pull the four-pound serpent from his face, even though it was attached by only two fangs the size of medium hypodermic needles. Maybe the hit man's nervous system was becoming spastic and was unable to control his muscles anymore, tick, tick, tick, tick.

Two minutes, 20 seconds – The Owl moved his right hand from the snake's body and to his own face, feeling the warm wet blood welling up through his fingers as he attempted to pry the snake's fang from his nose. Facial wounds were always bloody, the hit man knew, because of so many surface capillaries, but bleeding to death was not a possibility for *El Múcaro* – his fate was far more precarious than that, *tick*, *tick*, *tick*, *tick*.

Two minutes, 10 seconds – The serpent withdrew its fangs, its head now hovering above the hit man's face. Alice gazed down through slitted eyes at her thermal target that showed signs of massive pain and panic. Victor Graf noticed several drops of yellowish venom dribbling down the face of the hit man, proof positive that the bite had not been dry, tick, tick, tick, tick.

Two minutes – The hit man could feel a tense inner pressure in his chest now, somewhat like the sensation of a huge boiler ready to blow deep inside it. He had been wounded by gunfire several times in his career, but nothing had prepared the assassin for what was happening to him now, tick, tick, tick, tick.

One minute, 50 seconds – The Owl felt lightheaded and came to his first conclusion that he was going to die at the end of this experience. Something was happening to his blood pressure – it

was changing very, very fast. The creature's venom could kill quickly, without recourse to allergic trauma or anaphylactic shock; it was a combination of myotoxic and neurotoxic properties, which were quickly destroying the blood pressure of the prey animal, in this case, *El Múcaro*, *tick*, *tick*, *tick*, *tick*.

One minute, 40 seconds – The assassin, trying to fight the pain and psychological horror he was experiencing as best he could, felt faint, and now had serious trouble breathing and a tightness of his throat, as well as difficulty in swallowing. With the snake no longer attached to his face, however, The Owl was finally able to let out a pathetic horrified shriek that was almost childlike in its wail, *tick*, *tick*, *tick*, *tick*.

One minute, 30 seconds – The hit man brought his left hand to his face after dropping Alice from his grip and clutched both fang wounds, as now two geysers of blood, an indication of the altered clotting mechanism around the wounds, spurted through his fingers. He realized that he was now blind in his left eye; perhaps the fang had pieced the eyeball or the venom was now affecting the optic nerve. The pins and needles sensation that he had felt earlier in his upper chest and head was now spreading through his back and chest, tick, tick, tick, tick.

One minute, 20 seconds – Victor Graf noticed that the hit man was sweating profusely, even though the air conditioner was set on a comfortable 76°F. Well, it would have been better had it been 70°, but Victor had earlier worried that a lower temperature might make Alice slower out of the box – as it were – and she was his life insurance tonight. He also noticed that Alice was now slithering along the carpet toward the shoebox which was lying open end up on the floor a few feet from the hit man, *tick*, *tick*, *tick*, *tick*.

One minute, 10 seconds – El Múcaro's stomach heaved and he started to vomit violently, tick, tick, tick, tick.

*One minute* – The assassin's bowels began to uncontrollably evacuate. Victor Graf noticed the phenomena with disgust as he realized that he would have a large clean-up job of puke and crap ahead of him after the assassin was dead. Oh well, it wouldn't be long now, *tick*, *tick*, *tick*, *tick*.

50 seconds – The hit man's empty stomach felt as if it was being subjected to ever-increasing jolts of a powerful electrical current; he started to experience paralysis of his chest muscles; his knees started to buckle, *tick*, *tick*, *tick*, *tick*.

40 seconds – The Owl's jaws began chattering uncontrollably, as his body sank to the floor. Victor Graf noticed that the hit man had stopped screaming, which was nice, as the screeching had been getting on his nerves over the last minute or so, *tick*, *tick*, *tick*, *tick*.

30 seconds – The hit man, now earily silent, began to experience a massive heart attack as his butt hit the ground. His eyes became unfocussed and his nose started to bleed, *tick*, *tick*, *tick*, *tick*.

20 seconds – The front door slammed open and Sergeant Antonio Ponce limped into the room. He quickly took in the situation. There was a man on the floor whose face was bleeding, whose eyes were unfocussed and who was probably near death. The room smelled like crap; the dying man had probably defecated in his pants. In the background, the television was showing the 11 o'clock news. Near the downed man, the detective could see the tail end of a smallish snake as it crawled into a shoe box. Near the box was a small black pistol – with silencer attached – next to the lid of the box. There was a large amount of money scattered near the box on the floor. Sitting in an easy chair was an older gentleman, probably Victor Graf. He did not appear to be armed and looked like an interested bystander in what was unfolding before him. With his recent experience in his apartment's bathtub still relatively fresh in his mind, Sergeant Ponce lifted the cover of the shoebox and closed it on the container so the snake would remain inside, tick, tick.

10 seconds – The Owl, his tongue hanging slack out of his mouth, blacked out completely; he was completely oblivious to the presence of Sergeant Ponce; there would be no memorable last words between the two antagonists – that only happened in novels and in the movies, *tick*, *tick*, *tick*, *tick*.

Buzzer sounds; time expired – El Múcaro stopped breathing. One of the most accomplished professional assassins in the Caribbean lay dead. Sergeant Ponce recognized the open eyes even in death. They belonged to the man who had shot him in the warehouse near the Azuquita Bar & Grill. He picked up the Walther PP and put it in his pocket, keeping his own pistol trained on the man in the easy chair. It was probable that the pistol had belonged to the dead man, but Ponce was not sure yet why the assassin was in the home of the man Ponce wanted in conjunction with the Bushmaster mess, although the silencer was a good indication of possible intent and that you can get much farther with a kind word and a gun than you can with just a kind word.

Sergeant Ponce grabbed the back of a nearby dinner table chair and pulled it forward, his eyes always on the old man, while keeping the shoebox on the floor in his peripheral vision. He did not want the box's denizen to make another run of the house while he was in it. "You must be Victor Graf," the detective opened the conversation. "We have been looking for you for a long time with regards to your snakes. How does this stiff fit in that? He reminds me of a guy I knew a while back in another case. I had no idea that he was a snake-lover as well."

"I am not sure, detective. I was just sitting here watching the news and he broke in about ten minutes ago. He had a gun in his hand; you picked it up a moment ago and put it in your pocket. However, I have no idea why he came to my house."

"Professor, that's a load of crap and we both know it. Here's what I know and you fill in the details and don't deny anything – I get pissed off when someone goes into denial on me, when we both know what the story is. We already know all about the snakes; we know about the VHF transmitters in each snake and how difficult it was to miniaturize them. We do not know how you got the Black-Headed Bushmasters into Puerto Rico, but we are sure it was ingenious, however you did it."

"We know that you put a similar VHF transmitter on my personal automobile; in fact, it is still on there. My guess is that the dead guy here was not bringing you a shoebox full of money; I can only guess that the money in the box was yours and was a payment to him, or to somebody else he represented, for some reason. He came here unexpected; he was armed; and somehow you put him in close contact with that snake that bit him and is now in the shoebox. I am no snake expert, but the coloring on the snake I just saw go into that box was the same as the coloring on a snake that almost killed me in my apartment in San Juan a while back. That snake was called a *Bothrops jararacussu* and my guess is that the snake in the shoebox is one of those babies also. How are we doing so far, Mr. Graf?"

"You know a lot, Sergeant Ponce. Were it not for you, the experiment would have been a success; tell me, how many Bushmasters have you found and where were they? When the transmitters started to go out, I assumed you had located them, but I never was able to determine how far they roamed in their lives – something I would have liked to have known."

The detective ran down the list of Bushmaster locations, after which Graf permitted himself a small smile. "You have me, Sergeant. So what do we do now? I never intended to have the coffee plantation owner bitten by that first Bushmaster. I had worked on breeding them to eliminate the possibility that they would attack humans. My intent was to see if I could introduce them into an area that had never had snakes before, not to have killer snakes terrorize the populace. That would be counter-productive, as snakes that were perceived to be dangerous to humans would be attacked relentlessly until they were all destroyed, which would have caused failure in the experiment. I guess you will arrest me now, but I am still not certain what I will be charged with, as you have said that you are not sure how the snakes got to the island in the first place. Perhaps I just found them here and was trying to protect both the animals and the citizenry of this enchanted isle."

"You will not be charged with anything, Mr. Graf. You will not be arrested; you will not be taken to a police station and you will not be afforded a lawyer that would undoubtedly attempt to try your case in the public in order to influence a later jury trial. We are not interested in

incarcerating you so that you will be rehabilitated. Look at the man on the floor, Mr. Graf. It is my guess that you hired him to kill me so that I would not continue to be sand in the gears of your experiment, but we are not interested even in that. We are also not interested in trumpeting to the world that we have wrapped up the case of who shot me and killed another police detective during the 'Macho' Camacho case, even though the department could use some good publicity for a change. So what is going to happen, Mr. Graf, is that we will have what is called a 'sanitation team' come in here in a few minutes – they are probably on their way now – and they will take the body of this man back to the Institute of Forensic Sciences of Puerto Rico and they will incinerate it in the massive cremation oven there."

"It is the same oven that was used to incinerate *Señor* Roberto Alemán, the owner of the *Hacienda San Pedro*. He was the man that the first Bushmaster killed. In fact, he was quite an important businessman on the island, but the powers that be here determined that no one should ever be able to prove exactly how *Señor* Alemán died. And so, his body was reduced to ashes. It is the same oven that we used to incinerate each of your Bushmasters after we located and killed them."

"So, Mr. Graf, you have one choice and one choice only. When I leave here tonight with you, we are going to a section in one of our prisons, which is an isolation wing. The prison has been formally closed; it was called *Oso Blanco* and nicknamed 'The Alcatraz of the Caribbean.' It is in the process of being demolished, but a remote underground section will be maintained in perpetuity, for the 'worst of the worst.' Think of the dreary little cell in the Baltimore State Hospital for the Criminally Insane where Dr. Hannibal Lecter was incarcerated in that movie *Silence of the Lambs* and you will have a good idea where you are going. Yes, we actually have these 'garden spots,' except our cells are unbearably hot year round because this old prison has no air conditioning. You will be kept in this tiny cell for the rest of your life, with no amenities – no television, no radio and nothing to read – and no contact with anyone from the outside world. No one – including your children – will know you are even there, because there will be no announcement of your arrest, no trial, no nothing. You will simply disappear effective tonight, sort of like moving from Florida to Puerto Rico as you did earlier. We will have no knowledge of why you left the island or where your new destination might be. You will become a non-person, Mr. Graf."

"I do not understand any of this," Graf offered. "What I did was at worst borderline criminal, and for that you will violate at least three amendments of the Constitution?"

"It has nothing to do with laws, Mr. Graf," Ponce went on, "Although you have violated enough statutes to receive a prison term of at least 20 years. I am certain that a jury would convict you of something like criminal negligence and combine that with the death of *Señor* Alemán, it will get ugly in a hurry. No, your crime was to put in jeopardy Puerto Rico's entire tourism industry, and because of the magnitude of that, Puerto Rico's entire economy. Let me be honest with you,

Mr. Graf. In your experiment to see if Bushmasters could be introduced to the island, you tried to play God. My guess is, because you are a learned man, you may have even visualized the ceiling of the Sistine Chapel at the Vatican, where Michelangelo showed God reaching out to touch Adam – you know, the one where their forefingers are almost touching each other. One of my colleagues called it a 'Noah's Ark experiment.'"

Victor Graf audibly inhaled sharply. This detective could read his soul. Sergeant Ponce continued, "Continuing with our biblical theme, we *Puertorriqueños* consider our island to be the Garden of Eden, which as you know was a picture-perfect idyllic existence. It was flawless: an excellent climate, luscious food, nothing really to worry about. We feel the same way about our island, which is why Puerto Ricans consistently are polled as being one of the 10 happiest populations in the world. Now back to the Garden of Eden, Mr. Graf, if you recall there was really only one thing bad with this place and that was the serpent, which caused the entire ruckus with Eve and the apple."

"Mr. Graf, you have done something far worse than violate some law; you have literally introduced the serpent into our Garden of Eden here on Puerto Rico. Your poisonous snakes have the potential to scare all of us, and maybe kill a few of us. Your snakes will cause tourists not to come here, and in turn, investors not to invest here. You see, we have been in denial for hundreds of years. We have denied that there is anything here that would upset our paradise. Part of that is that we have denied that we could ever have any venomous snakes on the island, which is why we have no antivenom and why we do not even have venomous snakes in our zoos. You have shattered our illusion and for that many people on the island would say that you have no right to exist."

Graf knew he was doomed. "You said that I 'have one choice and one choice only." What did you mean by that; it sounds as if I have no choices at all?"

"Yes, in fact you do have a choice, Mr. Graf. You can go into oblivion in that horrid little prison cell, where no one will ever hear of you again, or you can join the pantheon of the greatest herpetologists that ever lived," said the detective.

"I do not understand," replied Graf, who was genuinely confused.

"Oh come now, Mr. Graf; you are by far the most intelligent opponent I have ever faced" — Antonio intentionally avoided the use of the word *criminal* or *perpetrator*. "Do not tell me that you have never heard of Grace Olive Wiley and her Indian Cobra; Professor Karl Schmidt and his Boomslang; Gerald de Bary and his Puff Adder; Wesley Dickinson and Brian West and their King Cobras; Larry Moore and his Gaboon Viper; Joseph Slowinski and his Banded Krait; and Michael Peterman and his baby African Rhino viper. Remember the king of them all, Robert

Mertens, when he was hand-feeding his pet Twig Snake. It bit him and he died three weeks later. His last words were, 'what a fitting death for a herpetologist.'"

"You have the opportunity to be in that group for the rest of recorded history, Mr. Graf."

Sergeant Ponce leaned over and used the muzzle of his pistol to gently push the shoebox across the floor to within two feet of the sitting Victor Graf. "I will tell a renowned herpetologist in North Carolina that you were conducting ground-breaking research on the *Bothrops jararacussu* and allowed one to bite you to test what you believed was effective antivenom." Sergeant Ponce leaned back in his chair, keeping his pistol trained on Graf's chest, in case the man attempted to throw the box at him. "Your experiment ended in failure and resulted in your untimely, but heroic, death."

"Her name is Alice, and she is the sister of Alan whom I believe you met in your apartment, Detective Ponce. I see you already know that there is no effective antivenom for the *Bothrops jararacussu*. Let us hope that she has enough left after biting him," Graf gestured toward the dead man on the floor. Then with a quick movement he picked up and placed the shoebox on his lap, raised the lid with his left hand and slowly used his right hand to reach into the box and gently grasp the snake. She did not bite, but merely looked up at him. Graf raised his hand and moved Alice toward his throat. "You can skip with the Cleopatra act when you contact Mr. Ripa," Graf said, "it sounds like you had to call in a whole army of herpetologists to finally catch me."

"We had to get the best of the best, Mr. Graf. And even then, we needed to get extremely lucky."

Graf smiled and then gave Alice a strong squeeze, which triggered her reaction to bite. The strike hit him on the side of his neck, probably close to the right carotid artery. A few seconds later, Graf's eyes opened wide and he nodded in the affirmative, signaling to the detective that the man knew that the bite had indeed envenomated him.

Sergeant Ponce stood up and moved further away from Alice's newest victim in case the man had any last wish to take the police officer with him to snake heaven or hell. About a minute later, after Graf had released his hold of the snake, Alice slithered away from her latest prey, moved down to the floor, and remarkably – in Sergeant Ponce's opinion – went back into the shoebox. Ponce waited a few seconds and then very gingerly picked up the lid of the shoebox and placed it back on top, effectively trapping Alice for a second time.

Graf went quickly into that good night and two minutes later was close to death. His twitching hand seemed to motion the detective forward as if he wanted to tell him something. Ponce

approached the old man, as Graf – with great effort – whispered through clenched teeth, "You...didn't get...them all...there is...one left...and she...is ready...to lay...eggs."



After Victor Graf died, Sergeant Ponce made several phone calls. The first was to Dr. Dailey, telling him that the detective urgently needed to meet with the chief veterinarian first thing in the morning. The second call was to an old contact in the Drug Enforcement Agency asking him to send a "sanitation team" to the house in Trujillo Alto; he would give them instructions when they arrived. The third call was to the Institute, where the pathologist and the biologist had been standing by waiting for the contact.



The pathologist and Professor Guailí arrived first to the home of the now deceased Victor Graf. Sergeant Ponce ushered them in through the door. Guailí was the first to speak, "Holy crap, it looks like a battlefield in here. What happened here Antonio?"

"We must be quick, Urayoán; I want you out of here before a special team arrives from the DEA." Handing the biologist the shoebox, Detective Ponce continued, "Be very, very careful with this. Inside is a female *Bothrops jararacussu*. She is the sister of the snake we found in my apartment that you have back at the zoo. Her name is 'Alice' and the male snake we caught earlier goes by the name of 'Alan.' You can start heading back to Mayagüez tonight, but you better tape that box shut or she might get out again; she has already killed two men here tonight and I don't want her to run up the score to three. Tomorrow, I want you to start the construction of a new snake enclosure at the zoo. Keep these two in separate enclosures so we do not start a new sitcom called *The Bothrops Bunch*."

"Tell the zoo director that these orders come down straight from the top. On the identification plaque and any documentation you will fill out, just say that they are on loan from a zoo in Brazil. The kids will probably like it if you put the names 'Alice' and 'Alan' on the enclosures, but we probably don't want to say that 'Alice' killed two bad men and 'Alan' terrorized an old one-legged cop in his bathtub! It is time the island stop being held hostage to the denial strategy and this will be the first step. Now head out of here and stay safe on the drive back, my friend."

The biologist nodded and left. "OK, *Ahijado*, help me go through the pockets of these two men," continued Antonio. "We need to remove all identification documents, wallets, jewelry, wristwatches and anything else that could be used to identify them. In about 20 minutes the DEA 'sanitation team' will get here, but you'll be gone by then. They are a high-level crew and

are trained in cleaning up a crime scene or sensitive scene so that no evidence that it ever happened is taken away. I would say that in about two hours, they will bring two body bags to you at the Institute. You can guess who will be inside each bag, but do not open them to find out. Take the two bags and anything else the team gives you and burn it all to ashes in the incinerator. Do not log that you burned anything tonight. I do not want your 'fingerprints' on any of this destruction of evidence. Don't worry, the team will not say anything; this is what they do for a living and they do it very well."

The two men went through the pockets of both dead men. The pathologist found a small electronic detonator in the pocket of the hit man. "Wonder what this is, *Padrino*? This red button sort of looks ominous."

"Do not touch any of the buttons," warned Sergeant Ponce. The guy who owned that was a professional assassin. He was the guy who stitched me at that warehouse, and my guess is that he had something to do with the earlier ambush of Héctor Camacho. I'll have the 'sanitation' boys take a look at it."

The pathologist finished the search and turned over all identification items to the detective. Then he departed the house and went directly back to the Institute to await the arrival of DEA special unit. Sergeant Ponce took a quick look around the house to ensure that there were no more creatures that might interfere with the work of the team that should be arriving at any minute.

He had first heard of "off the books" agents like these that operated in the gray legal areas decades ago. Back then, on July 20, 1993, authorities found the body of Deputy White House Counsel Vince Foster in Fort Marcy Park off the George Washington Parkway in Virginia, outside Washington, D.C.

Multiple official investigations ruled his death had been a suicide. However, numerous conspiracy theories, postulating that he was murdered, remained in the public consciousness. What Ponce had heard "under the table" at various functions was that Foster had, in fact, killed himself and that the murder-conspiracy theorists were all wet. However, as Detective Ponce understood it, a "sanitation team" had been involved, because Mr. Foster had killed himself not at Fort Marcy Park, but in downtown D.C. at an apartment that was used by many people in the president's inner circle from Arkansas to relax or let off stress – sort of a safe house for them. Because, there likely had been illegal drug use and other questionable activities at the apartment, and that DNA evidence undoubtedly existed there that would embarrass many high-ranking political leaders, a Secret Service "sanitation team" had quickly and secretly moved Foster's body from the apartment to the park, where no such embarrassing linkages could ever be made.

As one retired Secret Service agent, an old friend, cryptically told Antonio, "the power and charisma of the big boss to command such loyalty would be a factor. But it could be done; I

once committed clearly criminal burglaries in order to get evidence to take down some counterfeiters; we took care of business on that one!"

The DEA team arrived soon. "Who the heck whacked these guys here, Antonio?" asked Jesus, the leader of the team and an old friend of the detective. "Some pro from South America named 'Alice,' but that isn't her real name," replied Antonio in a good-natured banter. "It's some long Brazilian name. She is already in custody, so we don't have to worry about her."

"She sounds interesting!" Jesus considered himself quite the ladies' man, but that *machismo* feeling was not rare on the island. "She has deep blue eyes, partner, but her personality leaves a little to be desired," deadpanned Antonio.

"Who are the stiffs?" Jesus asked. The team leader had a hilarious personality, something that was needed in this line of work where the team often saw some pretty gruesome scenes.

"The guy on the floor is a professional shooter as well; he may be the guy who killed Camacho."

Jesus whistled and went over to the dead man on the floor and kicked the body hard in the chest. Héctor "Macho" Camacho had been one of his heroes. "How about the old guy in the chair; what did he do?"

"It's a long story, but the bottom line is that he tried to play God," offered Antonio.

The team began collecting anything that could be used to link Victor Graf or the assassin to any crime. They took with them the glass enclosures that Graf had used to keep his snakes and all tools and accessories used in snake keeping. Sergeant Ponce handed the detonator to Jesus, who took it outside for a few minutes. The agent returned and said, "Antonio, thanks for letting me check this out. I examined the old guy's van, the big guy's car and your car. We just removed a VHF transmitter from under your bumper and an improvised explosive device from under the driver's seat on the bottom of your car. I was thinking about leaving the bomb there and just blowing it in place as you really need to get a new car, now that you're a big shot in the Department of Agriculture!"

"Ha...ha," Antonio replied derisively. "Say, take this pistol I took from the hit man on the floor and run it through ballistics. I have a feeling that it may solve a few open cases."

The team departed the man's house for the Institute and Ponce headed home for a couple of hours of rest. The café was closed, but later the pathologist called saying that the team had dropped off their packages and that nothing was left.



The following morning, Sergeant Antonio Ponce left his apartment and headed for the IBM building in Hato Rey, where the Veterinary Services Division was headquartered. As in his initial visit, he met alone with the chief physician, Dr. Jonathan Dailey. Ponce walked to the conference table and began placing numerous objects on it including the personal effects of Victor Graf and the hit man, and photographs of dead Black-Headed Bushmasters, the dead hit man and the dead snake owner. Then Ponce began his carefully prepared speech.

"Doctor Dailey, we have done what you asked. The man who brought to the island the Bushmaster snake that killed Roberto Alemán is Victor Graf. I should say *was*, as he was bitten by a poisonous snake last night and died. The other man, an international assassin whose real name we will probably never know, assisted Graf in some manner, but we are uncertain as to its scope. However, he will assist Graf no longer, as last night a poisonous snake bit him and he died as well. You can see both dead men in these photographs."

"Jesus, the newspapers will be crawling all over this!" Dr. Dailey was visualizing how this "epidemic" of deaths by snakebite would play in the newspapers and how copies of these death photos would appear on the front pages of every newspaper on the island within a matter of days.

"Do not worry about it, Doctor Dailey. The two men have disappeared, both literally and figuratively and will never be heard of again – they have been 'sanitized'; forget you ever knew they existed. Victor Graf was dealing in two different kinds of snakes: the first is the *Bothrops jararacussu*, a venomous pit viper endemic to southeastern Brazil, Paraguay, southeastern Bolivia and northeastern Argentina. Graf had two of those and we now have both still alive and in confinement."

"The second type of snake associated with Mr. Graf – and the one that started this mess – was, as you know, the *Lachesis melanocephala*, also known as the Black-Headed Bushmaster. These snakes were native to Costa Rica. We believe that Graf had eight of these snakes; we know that seven of them are dead, and we have cremated the bodies of all seven animals. We located a general area for another snake through its VHF transmitter, although we could never locate the snake, only that the transmitter is somewhere in the area."

"We do not know if an eighth Bushmaster is still alive and we have no idea where it might be located. Our problem is that Graf had implanted a very small VHF transmitter in each of the eight Bushmasters, and for some reason the transmitter fell out of this particular snake so we have no way to track or locate it. We can hear the transmitter only and it is not moving, but it is so small that we cannot find it."

"What do we do now, Sergeant Ponce? What if Mr. Graf put more transmitters out there just to fool you?" Dailey seemed agitated; the detective could sense that he was worried about that last Bushmaster.

"If we find the last snake, it will only be because someone gets lucky and sees it up in the mountains or deep in the forests, I believe. So any massive, continued search for the snake will just reinforce to the people that we are desperate, because we cannot conceal a search of that magnitude. We know of only one person that has been bitten, and that was now several weeks ago, so this snake is probably not really close to inhabited areas. Additionally, because of mistakes in artificial breeding, we know that this animal – as was true with the other seven – is highly susceptible to infections and could be dying of a massive infection even now. However, we can get a jump on the problem by doing something that initially you will not want to do."

"We must abandon the denial strategy that no poisonous snake could ever be on this island. What we have to prove to the public is that, in general, we do not have any poisonous snakes on the island and we want to keep it that way. However, if we do find a poisonous snake, brought here illegally, it is no big deal because we have in place the means to quickly capture it and 'deport' it back to its home country or put it in a zoo where it cannot escape, but where people can go and learn about these creatures."

"And when we find the owner, we'll hammer him," interjected Dr. Dailey, who was beginning to sense that his job might well be safer than he had first feared.

"By learning more about them, people will lose their fear of snakes and the ramifications to the island by the presence of a poisonous snake here or there in the future will be minimal," Antonio continued.

"And it will be no effect on tourism," added Dailey, warming to the new strategy. He had underestimated Detective Ponce. The cop was a beast. Lethal snakebites my ass; Ponce probably killed both men in a simultaneous shootout and personally dumped their bodies into some incinerator or industrial vat of acid – never to be seen again.

"I should tell you that the two *Bothrops jararacussu* are now proud residents of the *Dr. Juan A. Rivero Zoo* in Mayagüez. We took the liberty of altering a few facts and their new display states that they are on inter-zoo loan from Brazil. It is a small first step, but one that will show that because of the new enlightenment of the Department of Agriculture, Puerto Ricans are actually better defended now against poisonous snakes than they ever were before."

"I would advise you to issue a departmental order to urge at least one or two hospitals on the island to start stocking at least minimal amounts of antivenom so if a *Puertorriqueño* is bitten in the future, we can save his life, without having to rely on a tortuous lengthy path of antivenom from Miami to the island, after a person is bitten. We will ensure that if an unfortunate person is bitten in the future, after he is saved by the antivenom, it will be reported in the news that the presence of antivenom on the island was due to your personal initiative to do the right thing."

"You know that some influential people here on the island will be skeptical of your plan," offered the veterinarian. "Gregory Valparaiso, who you met, would have been one. However, he ran into a few problems of his own, when he stepped on the wrong toes and now has no say in anything."

Detective Ponce was impressed. He had an idea that Valparaiso had made a few poor assumptions on how far he could push some of the power-brokers on the island and had not set up his own air-tight deterrence capability. So the doctor had him eliminated, in the administrative sense of the word. He had underestimated Dailey. The doctor was a bureaucratic "beast."

"I understand that doctor. You did what you had to do. We did what we had to do. I have the evidence of the scope of the problem we dealt with. It will stay with me in case anyone claims that you or I failed in our mission." The detective emphasized the words *you or I* and *our*, to reinforce to the doctor that the two men's fates were truly intertwined. "This problem with a denial concerning adequately dealing with the challenge of a venomous snake on the island is long and distinguished. The unwritten policy of not having any antivenom on hand is close to criminal negligence. The proof of the whole dismal chapter is safe and sound with me and will remain so unless anyone is looking to pin the tail on the donkey. In that case, they will find that this donkey has a hell of a kick."

"In that case, I think we should make you an Inspector – Inspector Antonio Ponce has a nice ring to it, I think. Were you not on a case of a missing fighting rooster, when I called you in on this mess? Get some rest, and when you head back to the mountains, Antonio, give my best to Willie Colón. He is not only my personal banker, but I have been able to make a modest amount of money betting on his roosters over the years."



# Barrio Quebradillas Barranquitas

The last Bushmaster had no idea that she was the only one of her species alive on the island. She did not know that the male Bushmaster released with her a few months previously had been killed by Sergeant Antonio Ponce a few days before near the orchid farm. She only knew that she had suffered from a massive infection a while earlier that had caused her lower back to pop open from sepsis. She also knew that before she could lay her 16 eggs, she needed to eat once more. She was hungry, so hungry that she decided that even in the middle of the day, she was looking for food. Slowly gliding along the ground, her heat sensors detected prey about 30 feet in front of her. It looked like a chicken, but that was all the Bushmaster knew about it.

Two weeks earlier, the 12-foot Bushmaster felt pain and itching on its rear dorsal area as infection started to set in, caused by entrance of microbes into the unhealed wound produced by the implantation of the VHF transmitter. Unlike its brethren, this Bushmaster was lucky and during the process of shedding its skin, the incision opened as the snake was twisting between two stones and the entire miniature device was ripped out. Although that occurrence was quite painful for the Bushmaster, it actually saved its life, as the incision now was able to heal from the inside out, the cut receiving direct sunlight, which helped to fight the infection. The event also made the Bushmaster undetectable by the VHF receiver as she had no transmitter anymore.

Now, the Bushmaster was healthy, but still did not know that, in fact, it was not a regular chicken now in her thermal acquisition capability, but that it was a fighting cock that had been released from its cage by some mischievous youngsters a few weeks before. She did not know that this particular cock had been born and raised in the mountain town of Barranquitas not far from where he had been released or that its owner was Willie Colón. She did not know that two hens she had previously killed and eaten had belonged to Willie as well. She did not know that this particular cock still had two-inch sharp artificial spurs on its heels that had not been removed after its last fight – spurs that, even if the serpent killed the rooster, could possibly rip open the snake's narrow throat – when she tried to swallow it – causing fatal injuries. And the Bushmaster did not know – and presumably would not have cared – that the cock's name was "Volki" and that Volki was a lot faster than a regular chicken and that Volki had never lost a fight.

As the Bushmaster approached its prey, Volki sensed the presence of the predator. Volki did not know the fearsome reputation of a Bushmaster. Volki did not know that the creature had two long fangs or that it possessed toxic venom. Volki knew nothing about *Heat Induced Strike Hold*. All Volki knew was that this creature looked like it wanted to fight and that Volki liked to fight and that he was not backing down no matter how big and nasty this creature appeared.

So Volki let out his loudest crowing and sprinted directly toward the huge Bushmaster. He would fight this intruder to his island. *Es hora del Macho* – Its "Macho" time!