

THE BUSTAMANTE AREA

COMPRISING A FEW INTERESTING FACTS, NEAR FACTS, PURE CONJECTURE, AND
POSSIBLE LIES ABOUT THE AREA AROUND
BUSTAMANTE, NUEVO LEON, MEXICO

AN INTRODUCTION TO SOME STRANGE STUFF &
A CAMP FIRE GUIDE FOR THE NEW CAVER

by Gill Ediger

The first wild cave I ever went to was La Gruta del Palmito near Bustamante, Nuevo Leon. The town and area had lots of interesting rumors surrounding them. Some are certainly more factual than others. One was that most of the local inhabitants were descended from Tlaxcalan Indians native to the Puebla/Vera Cruz region much farther south in Mexico. They had been impressed by the thousands, more or less voluntarily, by Cortéz as infantrymen to help his small Spanish army in the “liberation” of Tenochtitlan from the Aztecs, mortal enemies of the Tlaxcalans. Later they were kept on as “mercenaries” by the Spanish ostensibly because of their “fierceness and bravery”, but most likely because they were the only ones who would do it and, their homeland, culture, and government having been raped by the Spaniards, they had little else going for them. The possibility of physical coercion should not be disregarded either. Some have suggested that they were virtual slaves; and a virtual slave is virtually the same as a real slave, so why the distinction? At any rate, the Spanish army, with their Tlaxcalans in tow, were in northern Mexico clearing brush for a kilometer on either side of the Camino Real so that some Spanish Viceroy who was planning to tour the vast desert between San Louis Potosí and San Antonio de Bexar could be better protected from Indian attack, or for some other reason. The situation developed that the army was recalled and they abandoned their Tlaxcalan entourage en place. That place is now called Bustamante. It was probably named something else at the time, but was soon thereafter named Puebla de Tlaxcala¹ for obvious reasons. Later, after a baby named Anastasio Bustamante had been born elsewhere and made a name for himself, also elsewhere, as President of Mexico in the early 1830s when his “conservative [political] party ruled Mexico through terror, imprisonment, and assassination, all in the name of law and order and the protection of property”,² its name was changed to the same as his for reasons known only to the Mexicans. As distinguished from the otherwise indigenous Indians of northern Mexico the Tlaxcalans had sharper facial

features, at least, such as cheek bones and noses pronouncedly distinct. Even an amateur racist can spot these obvious central Mexican characteristics among many of today’s Bustamante inhabitants. Along with caving and camping, picking out the Tlaxcalans is one of the leading recreational activities of the area.

We can surmise that Puebla de Tlaxcala had a previous name because another rumor had it that “the remains of vast irrigation systems” were in evidence when the Spanish first came upon the scene, which was probably in the 16th Century. None of the indigenous Indians were major agriculturists at that time. But then, of course, neither were any of us. There are numerous irrigation ditches there, and in use, today. Chances are good that you will see some in your quest for Tlaxcalans. You must look nearer their feet, however, than their cheek bones if you wish an early success. Around Easter, Christmas, and other religious holidays you may find Tlaxcalans, or even common Norteños, as the everyday variety of local Mexicans are called, with their cheek bones firmly embedded in the mud of the canals after too much personal irrigation with a locally produced mescal, a product of the maguey plant. There is some chance that the existing canals are imposed upon, in, under, or around (pick your preposition) some of the original ones, gravity and topography governing more the placement of such constructions than human whim or fancy. Most, probably, are not related to the originals, if, in fact, there were any.

If there were they were there due to the river which issues from an impressive canyon at that place and also called Bustamante. The stream is named Río Sabinas (Cypress) although it is sometimes called other names locally, a widely spread Mexican custom. Bustamante Canyon is a major east-west defile in the limestone of the Sierra de Gomas (Gums, probably for the sap of some latex producing plant that grew there and which was used for sealing or waterproofing things), a minor northern extension of the Sierra Madre Oriental. The range actually tapers out a few kilometers farther north. Minor arroyos and the normally dry Río Sabinas funnel rain water runoff from a thousand square kilometers of desert plain into the western opening of the canyon. On such rare occasions it floods furiously. Normally it

¹According to Berlandier there is (or was) another town named Puebla de Tlaxcala established in 1592 just west of Saltillo, Coahuila, former capital of Coahuila y Texas. “It was founded by a colony of Tlascalas whom the Spaniards brought in...four hundred families...at the expense of the public treasury [to] resist the incursions of barbarians [local Indians]”. They were essentially mercenaries.

²Simpson, Lesley Byrd, *Many Mexicos*, Univ of Cal Press, 1941, p237.

carries only a small jump-acrossable stream fed by thermal springs near the west end of the canyon. Among other designations, and at various times, parts or all of the canyon have been made into state and national parks, of sorts, the result of which were certain real property “improvements” mostly in the form of barbecue pits and picnic tables. These were washed out in a recent flood but are being replaced. The former road through the canyon has been repaired and paved. The “hot springs”, which are not hot at all, were at a favorite camping spot used by cavers for many years. The campground was significantly reworked by the land building forces of the aforementioned inundation. “Improvements” are again being made. Nearby is the trailhead to Precipicio, a big, fun, and well decorated cave, which could just as well have been named Lechuguilla, located high on the canyon wall. Also nearby, a large mound of travertine, used as a base for a goat corral, is evidence that the thermal springs were once much higher, greater, and more nearly saturated with minerals.

Just north of the limestone Sierra de Gomas are 2 igneous peaks, highly weathered, and pierced with mine shafts and tunnels in several places. The shorter, more pointed peak that somewhat resembles a candle stick in a holder has been descriptively named La Candela by persons unknown and that name has been accepted by the local Mexicans, far away geographers, and numerous foreigners just passing by. It is a fine example of a “volcanic neck”, the basaltic remains of the once molten lava column which welled up and overflowed the crater’s rim or blew explosively upward. The softer ash and crumbled lava that formed the cone have weathered to the desert floor and left the more durable neck for our bemusement. The taller, more massive peak is usually called El Carrizal, obviously a name sake of the ancient hacienda and spring at the mountain’s base, of which more later. Some maps list one of the pair as Pico Iman. That this is in honor of the Somalian female model of that name is unlikely. Imán is, however, in addition to a surname, the Spanish word for magnet. There are bits of ore lying about the place that resemble hematite or magnetite. Is this really Magnet Peak? The primary mine is (or was) the Golondrinas (Swallows). As most of the mines in the area, this one produced a variety of ores including lead, silver, and some gold, along with traces of lesser minerals. Many loose crystals can be found both outside and within the mines. A beautiful fist sized cubic crystal of galena was found near one of the trails above the cave. As far as I know, Gringos have never been denied permission to visit the mine and collect minor samples. Large scale operation has ceased, but pick and shovel work goes on from time to time. An abandoned railroad grade now serves as the road to a ranch located at the old mine headquarters.

Behind a low limestone foothill on the north-eastern side of El Carrizal a small rising of warm water flows from beneath some rubble rock. A shallow pool for swimming has been created there and is quite enjoyable. Fortunately it is isolated enough that clothes are never needed to swim. Just above it is a cave entrance which leads back down to a lake which eventually discharges as the spring water. The lake is usually covered with a thin film of powdery bat guano. A higher, dryer walk-in en-

trance is located a few hundred feet south and slightly higher on the hillside. The cave, like damn near everything else in the area, is named Carrizal, specifically Gruta de Carrizal³. (*Carrizo* is ‘cane’ or ‘reed grass’, such as Georgia Cane or any other cane resembling bamboo, but not bamboo which is *bambú*, or sugar cane which is *caña*. *Tule*, which is a nearby placename higher up the mountain, specifically means ‘reed’ and connotes one that grows in water, which Georgia Cane usually does not. *Carrizal* translates literally as ‘caney’, *-al* having the value of *-ey* or *-ish* in English. To us it really means ‘cane break’.) The cave has been mined for guano and/or phosphates in the past. Histoplasmosis, a lung fungus, has been contracted by several cavers from the high, dry, dusty passages in this cave and signs, in Spanish, outside the cave warn of this danger. Histoplasmosis spores cannot subsist in the lower, wetter stream passages.

The spring and resultant stream, however small, were veritable godsend in the deserts of Nueva Biscaya, the early Spaniards’ name for this area. That this valuable water supply should be protected for the king’s business called for a fort. And the maintenance of a fort called for a local community. And that all called for food. And food called for farming. And farming in the desert called for irrigation. And irrigation called for water. And that just about completed the circle. Except the circle was in the shape of a square. It was a square built in the guise of a hacienda. And all haciendas, in one form or another, served the purpose of most of the above listed features. But mainly it was a fort! It was also a community, it was a farm, it was a commissary, it was an oasis and an inn for the traveler—a caravanserai. It had a church with a priest, a mill with a miller, an abattoir with a butcher, a forge with a smith, a wheel with a spinner and a loom with a weaver, a cobbler, a flesher, a cheesemaker, carpenters, masons, plasterers, gardeners, many farmers, several goat herders, and a few cowboys to tend the cows and horses, and when warranted, a platoon or two of the king’s men (as described at the beginning of the major quotation on the following page) and their horses, to protect the king’s interest, whatever that might be. And of course a Mayordomo—the boss. This went on for 2 or 3 hundred years. The “wild Indians” roamed ‘round the country stealing what they could, killing whom they would, and generally making the place a bit sporting for the local subjects of the king—probably one of the Charleses, with his Hapsburg lip, drooling into a handheld silver bowl while an attentive servant waved an ostrich feather before His Highness’s ever open mouth lest one of many wayward flies should fly in amongst the Royal halitosis. But I digress. These people lived like this for centuries—not the same people!—their offspring and families! We know this from many contemporary accounts. Haciendas were Mexico for over 15 generations.

Of particular interest to us is the Hacienda del Carrizal. The Patrón lived in far away Spain—an absentee landlord. From its inception the Hacienda was a way station for those traveling to the missions in Texas with their associated presidios and towns.

³For a description of this and other caves mentioned see AMCS Bulletin One, *Caves of the Inter-American Highway*, Austin, 1967, by Terry Raines and William Russell, published by the Association for Mexican Cave Studies; other AMCS publications; issues of *The TEXAS CAVER*; *The BEXAR FACTS*; various other local Grotto newsletters; and people who’ve been there.

And it was a filling station for those slow moving trains of creaking oxcarts plodding monotonously through the sun baked chapparal, where everything alive either bit, stung, or scratched. In fact, it may have been built expressly for that purpose, and, I'll wager, to keep the Indians from the water, an action almost guaranteed to piss them off. You can visit what is left of the Hacienda today. It is mainly just 4 massive stone walls and many building foundations. A trained eye can recognize a few house mounds, low piles of dirt that once were adobe roofs, or odd piles of rubble that were once walls. When I was there a family of goat herders occupied several rooms in one corner of the courtyard. Rooms in another corner housed their animals.

By the 1830s Mexico had won its independence from Spain and was having the political adventures and growing pains of a new republic. With the protection of the king (such as it was) gone, the Spanish owner out of the picture, and the Mexican treasury in dire straits, the new Republic's army moved not on its belly so much as on uncertain credit.

In 1836 a Mexican battalion of sappers [engineers] under the command of Colonel José Enrique de la Peña was making its way from San Luis Potosí to the Alamo to meet up with other Mexican forces under Antonio Lopez de Santa Anna to whup up on the upstart Texicans, which they did—for a while. At any rate Joe made the following entries in his narrative⁴: “In fact, in the towns of Aldama, Candela, and Lampazos and at the hacienda of Carrizal [the General] demanded bread or tortillas and meat, and although here and elsewhere the inhabitants cheerfully granted whatever they could for the soldier...” etc. Of the Indians (probably Apache or affiliates⁵) which were still doing pretty much as they pleased in most of Texas and northern Mexico in 1836 he made the following entry: “but fortunately the savages who frequently roam these areas omitted their bothersome visits this time. They were in the habit of roaming the camps where we had spent the previous night to see what could be found there, sometimes venting their cruelty on those left behind or on deserters. These fierce people customarily scalp their victims, sometimes before sacrificing them, sometimes after, and then have a celebration during which many hours are spent dancing around the scalp.”

Jean Louis Berlandier, a French botanist, was some manner of

⁴de la Peña, José Enrique, *With Santa Anna in Texas, A Personal Narrative of the Revolution*, Texas A&M University Press, 1975, p23-24.

⁵The nomadic Indians of the region in the 16th Century were probably few in number and did not have horses, but were wandering groups (not even tribes in the strict sense) moving slowly on foot from water hole to water hole in search of food and shelter. Numerous caves and rock shelters throughout northern Mexico contain pictographs left by these wanderers. It is interesting to speculate what they might have done with a few cans of spray paint. At first they were probably a minimal threat to large groups of travelling Spaniards or settlers. As nomadic scavengers they soon became bothersome, especially to settlements and small groups of isolated field workers or travellers, robbing, killing, and sometimes even eating them. By the 19th Century the local Indians most certainly had been driven out, killed, or absorbed by the Lipan Apache who had previously occupied the area of west central and north western Texas. They were driven into southern Texas, which was also northern Mexico, by the invading Comanches on horses, who had likewise been displaced from their homelands by white settlers in Kansas Territory and Mexicans in New Mexico. With all this moving around it is lucky for the Apaches that they had acquired and learned to ride horses. For the Spaniards it was a distinct run of bad luck. There is even evidence in later years of Comanche raids into this area.

the eclectic 19th Century scientists, caught up in the industrial revolution, manifest destiny, evolution, geology, biology, astronomy, paleontology, human diversity, and a number of other disciplines, both scientific and quasi-scientific, which were popular throughout that century. They were science nerds. He made a trip through Mexico in the company of several other “scientists” in the years just prior to the Texas Revolution (which was in 1836). It has been stated by some historians that his trip was also political, having been sent by the Mexican government to assess the new settlers in Texas. His accounts of the journey⁶ were written a few years after that event so some of his earlier observations are tainted by later insight and possibly by bad memory. For our purposes though, he is quite clear and extensive, a fortunate coincidence which will lead in nicely to another topic. What follows here is an interesting description of the human activities in the valley during the early 1830s which have some relevance to our caving activities in the area today.

In 1833 there were companies [of soldiers] to which back pay was due in excess of thirty to forty thousand piastres. The commandant general found himself obliged to disband them be-cause of the poverty of the public treasury, which could no longer maintain them.

As one approaches Boca Leones [Lions' Mouth, which is now the town of Villaldama] the cordillera to the west becomes steeper and steeper. [There is a curious fascination with Lions here. To wit: Villaldama is Boca Leon. Above the town of Bustamante and quite visible from Villaldama is a prominent ridge named Cabeza de Leon (Head of the Lion). The State is named Nuevo Leon. Keep a careful watch while in these parts.] Its flanks are covered with tall pines which the inhabitants cut down for their buildings. [Berlandier, as a Botanist, should have known a pine, at least. Although I believe him, there are presently no pines in the area unless at a high elevation.] At the entrance to the *villa* there is a stream [the Río Sabinas] which flows from the mountains. This stream is a branch of the Río Salado, which joins the Río Grande at Revilla [now Ciudad Guerrero]. A lively vegetation flourishes on its banks. Boca Leones, today called Villaldama, is a town of 2,310 inhabitants. The houses are not badly built. Missionaries from the convent of San Francisco in Zacatecas maintain a hospice, which is reserved for friars going to the missions in Texas. The church is vast, but without elegance.

There are seventeen mines within the district of the town. They are located five or six leagues [a league is about 3 miles] to the northeast of the western sierra [which seems to mean north, is about right for the Minas Viejas]. Towards the beginning of the past century [around 1700] these mines produced a great deal of silver, but after 1740 the lead content of the ore became very high. Since that time the inhabitants have conveyed that poor metal to Durango, Zacatecas, and Chihuahua [these towns are 300, 300, and almost 400 miles away respectively, and lead is very heavy], where they find a good outlet for it. Today only four mines are worked, producing annually about twelve hundred arrobas [literally ¼,

⁶Berlandier, Jean Louis, *Journey to Mexico, During the Years 1826 to 1834*, The Texas State Historical Association, 1980.

extended to '¼ of 100 pounds' (25 lbs or 11.5 kg)] of lead. The lead is sold at the fair in Saltillo, and a little silver, reputedly charged with gold, is extracted from it. At Boca Leones there is a *diputación de minas*, and it is only the poor who occupy themselves with the extraction of the metal of which we have spoken. In the environs there is a small calcareous [limestone] hill which is useful to lithography [for making lithographic stones on which etchings were made for the printing industry, etchings being the way pictures were presented in print, photography still being 10 or 20 years in the future]. While visiting the abandoned furnaces of the smelter which are in the town, [etc]...

The chief wealth of this municipality lies in the manufacture of about nine hundred arrobas of mescal which are sold annually. The Lipans, whether at peace or at war, prevent the inhabitants from raising herds and dedicating themselves freely to farming. Pastures and annual crops amount to very little. Altogether there are 4,500 head of livestock of all kinds, and the harvest of corn averages at the most from twelve to fifteen hundred fanegas [bushels] a year. In the environs...we again encountered cactus covered with cochineal...[which is a small insect [the Cochineal] that lives in a white silken cocoon on the prickly pear plant and from which a beautiful burgandy dye is produced for coloring fabric].

On the morning of the twenty-fifth we started off for the Hacienda del Carrizal. On the way we passed by Pueblo de Tlaxcala, where the municipal council came before the general. He was received by the sound of bad music and the noise of bells, in the midst of a crowd gathered in front of the authorities' house. The population of that village is composed of indigenes who are descendants of the ancient Tlascalas⁷, the faithful friends of Cortés and his companions, as well as some Indian converts of Boca Leones. The latter contrasted with the first, who recalled with pride their noble origin and the prerogatives [to die for the Spaniards] granted to them by the king of Spain. The indigenes cultivate the land, well understanding the principle of irrigation. They also manufacture wine from the maguey and *piloncillo* [raw brown cane sugar, italics his]. The houses lie at the eastern foot of the cordillera, close to a large opening [Bustamante Canyon] which rests in the midst of steep cliffs. From a census...we learned that the population then amounted to 1,983 and that the principal industry consisted of the preparation of hides for soles.

We headed towards the northeast, towards the Cerro del Carrizal, near which is found the hacienda of the same name. The Cerro del Carrizal, with its very steep, porphyritic [in this case I think he means granitic] summits, inaccessible to man [they are not], forms a part of the *cordillera*, as does the Sierra de Candela, which extends up into New Mexico [that is: the cordillera extends up into New Mexico, not the Sierra or the Cerro, which stay right where they are. What he means is that the cordillera, or 'chain of mountains', can be followed, from here, westward into Coahuila, north westward into Texas and the Big Bend of the Río Grande, thence north into New Mexico, more or less. Though sort of continuous,

⁷Berlandier in two cases spells 'Puebla de Tlaxcala' with an x while in the same paragraph spelling the tribe's name 'Tlascalas' with an s. As in the spelling of Cortés or Cortés, either rendering is usually accepted, though place names in Mexico seldom use the s form of these words.

they are actually not of the same chain.]

At the Hacienda del Carrizal, which belongs to a rich Spaniard, we were received with kindness and good wishes by the family of the manager who took care of the property. The haciendas located on the border of regions invaded by the indigenes have a special form of construction, one common to all the missions and in general to all establishments exposed to the invasions of nomadic tribes. Each hacienda has its church, and the dwellings of the owners and the out-buildings, as well as the huts of the workers, are arranged in such a manner as to form a vast square court [with 3 foot thick walls 15 to 20 feet high] which has no more than one or two entrances, capable of being shut in case of war. One may form an idea of this arrangement from the sketch which I gave in one of the views of the Cerro del Carrizal [not included]. The doors of all the houses open into the court in such a manner that all the inhabitants may easily gather together and so as to prevent any kind of entry to the enemy. Each individual on these haciendas must be armed, and it is from the flat rooftops that a resistance is put up when they are attacked. The indigenes have not come to the Hacienda del Carrizal for several years, but in 1824 and 1825 they massacred field hands nine miles further north.

Berlandier then digresses into several paragraphs of "scientific" observations made by him and his companions during their stay at the Hacienda, some of which I'll highlight in case someone should have an interest. They can pursue the matter further at their convenience. An example of the scope of these guys' interest is shown by his remarks concerning a 'moon dog' which appeared one night and with which he seemed inexplicably unfamiliar. "...I observed a singular phenomenon." 'Singular' would be rendered by us today as 'interesting' or 'unusual'. He goes on:

The moon, then close to the zenith, appeared obscured on a bluish background which registered twelve to thirteen degrees on the *cyanometer* [italics mine! What the Hell's a cyanometer good for?]. A whitish circle of three to four degrees in width and an internal diameter of thirty to thirty-two degrees...had the orb of the night at its center. ...And this immense circle around the earth's satellite was observed almost all night.

Back on earth they also found local examples of granite, "large blocks of magnetic iron ore [magnetite], which had rolled down, ...masses of garnet, two or three of which had a median diameter of five or six feet." Also, "On climbing up they first encountered a superb Secondary [a forsaken 19th Century Wernerian geologic term which included Mesozoic, as sometimes did the term 'Primitive' used below] limestone, clearly stratified, in which is carved a large cavern. Above lay an extremely fine Primitive limestone and all the products of *the first epoch* [italics mine] of the cliffs. On all sides were crystals of aragonite, garnet, and magnetite...underlying the limestone and shale." Considering that Geology was in its infancy then and somewhat beset by religious hocus pocus, these guys were actu-

ally doing pretty well. Today, 160 years later, about all we've improved upon is theory. Rocks haven't been made any lighter, or become more accurate to throw.

The cavern of the Carrizal has been known only for a short time. Its entrance, at the foot of the eastern slope, is very small, low, and difficult. After crossing the threshold one is obliged to wade through hollows that are constantly filled with water, which comes from different points in the cavern. This water constitutes what is known in the country as a *buey*, that is to say, an unvarying quantity of water present there at all times [a *buey* is an 'ox', the correct Spanish term is *buey de agua* meaning basically what he said, a body of water associated with a spring.

He then occupies the next 3 paragraphs with descriptions of the cave, its passages and formations, theories of cavern formation, the limestone and its dip, water temperatures of the 2 streams, raccoon and otter footprints, the fish near the entrance, and bats which "exist there in such great numbers that one cannot be heard because of the noise they make".

A few days later they left the Hacienda del Carrizal and headed north to the Hacienda de la Barranca near the Presidio de Lampazos and a large spring associated with them both. They are about a half-day's journey, or 30 kilometers, from Carrizal. (*Lampazos* are the large-leaved 'elephant ears' which grow abundantly along the stream.) Today it is a good sized town between Laredo and Bustamante and the spring is a public park.

To the west of Lampazos and the Carrizal-Lampazos road is a large mesa, easily visible by daylight. It is the Mesa de los Cartujanos. Of it he said this: "...so called because it had been inhabited by a savage tribe of that name which had long since been entirely destroyed. ¶That arid plateau is more than three leagues wide and one and a half long [which seems a strange way to measure length and width]. It has steep contours prone to landslides, is covered with grazing land, and *belongs to the Hacienda del Carrizal* [italics mine]. Herds are safe there because there is only one accessible passage. The plateau has a dwelling and good springs. When the Lipans were on the warpath in 1825 or 1826, they forced the inhabitants of the village of Candela to retreat to the mesa." During the 1970s and '80s, because of its isolation and remoteness, a small airstrip located on the mesa was used by drug smugglers as a way station much as the nearby haciendas had been used in centuries past.

On the way to Carrizal one crosses the tracks of the Ferrocarril Nacionales de Mexico, built in the early 1880s as the Mexican National Railway by a fellow named (Civil War) General William J. Palmer who had owned and built the narrow gauge Denver and Rio Grande Railroad in Colorado and planned to connect the two in a line to Mexico city. The MNRy was also built as 3 foot gauge from Mexico City through Monterrey, Nuevo Leon to Corpus Christi, Texas. It was made standard gauge, 4'-8½", in 1901. During, or just before, the Mexican Revolution of 1911-1914 federal forces built a fortress-like railroad station at the Carrizal crossing, ostensibly to defend its possession of

the railroad. The station was named Estación Candela, for a town a few miles west, just over the state line in Coahuila. While they did the work and were paid for it, the workers were unsympathetic to their employer's cause and installed the cornerstone, which undoubtedly lauded the government, backwards. And there it sits today, blank and mysterious. The station is no longer in use, except by the pigeons. It is a good place to stop and take pictures. Rails on a siding there bear manufacturing dates of 1883 and 1884. The portion of the railroad between Laredo and Corpus Christi is now known as the Texas-Mexican Railway. According to my sources it was still owned by the Nacionales de Mexico until the late 1980s or early '90s.

That the mines of the area are quite old there is little doubt. We know from Berlandier's report that several were actively producing in 1700, almost 300 years ago. It is possible they could have been in operation more than a hundred years before that. Some mines in other parts of Mexico were being developed by the Spaniards as early as 1540 after having been lead to the open veins by Indians forced to disclose "Where did this gold (or silver) come from?" Many of these "mines" had been minimally worked by the Indians for centuries, mostly by picking up loose nuggets or scraping the native metal from veins wide enough to work without removing bedrock. By law, or decree, all mines, indeed all mineral resources, belonged to the king. He got 20% of the take before expenses were figured. The operator could have anything that was left after that. In order that his share was accounted for and collected, areas known as *Reales de Minas*, figuratively 'Royal Mines', but meaning more to us today when rendered 'Royal Mining Districts', were established and a deputy was sent to look after the king's interest. Including the deputy, clerks, accountants, inspectors, and probably others the delegation, the office, and the territory covered were all referred to as the *Diputación de Minas*. The mining activity around Boca Leones was important enough that a *Diputación* was established there. When Mexico gained its independence in the 1820s the practice of government ownership was continued, the National Treasury being otherwise substituted for the king. It is still thus today.

East of the Villaldama-Lampazos road are some low, sloping saw-toothed ridges (hence the general Spanish term *sierra*, literally meaning 'saw', used since ancient times for 'mountains', probably originally meant peaked mountains resembling saw teeth, much as the more simple minded but eloquent French used the word *tetons*, 'big tits' to describe the same phenomenon). These limestone ridges are the weathered upturned edges of a bowl-like syncline which forms the valley, itself a natural line of transportation and communication, and are indistinctly divided into 2 named ranges, the Sierra de Lampazos to the north and the Sierra de Iguana nearer Villaldama. (That there were ever iguanas here is debatable. Several references by original Spanish explorers note a small band of Indians calling themselves Icuanas living exactly there, and to the east. The spelling Yguana was also used.) Located on the west face near the top about midrange is an area known today as 'Minas Viejas'. The **e** is pronounced like a long **a** in English, and the **j** is like an **h**. The term means 'Old Mines', plural. There are many in the

area, ranging from pick-and-shovel scratchings to full-blown mines with drifts, adits, shoring, mine track and other rusting iron. The ore bodies were formed by mineral saturated water or steam vents during igneous periods, probably associated with the Carrizal volcanoes to the west, which utilized and filled with minerals the joints and fractures formed in the limestone when it was warped. These mines were important enough that a narrow gauge (3 foot) railroad over 20 kilometers long was built to them probably in the 1880s or '90s, which was an intense period in Mexico of both railroad building and mine development using 'modern' methods. In AMCS Bulletin One, *Caves of the Inter-American Highway*, there is a reference to a spot on the highway 2 miles north of Villaldama: "Cross grade of old narrow-gauge railroad to La Pachona Mine." (A *pachona* is a bitch of the Pointer breed, and by inference, a 'lazy woman'. A Setter might be more appropriate.) In fact, the Pachona Mine is shown on the east face of the range on the topo sheet at an elevation of 650 meters and about 3 or 4 kilometers from the end of track at Minas Viejas at 1200 or so meters above sea level. The track passed several other mine entrances on its way. It is possible that there was a mine tunnel connection from the original mine through the mountain to access the railroad, or the ore could have been hauled by burro (later by truck) to the scuttles. There is a circuitous, often steep road connecting the two mines with some other workings. Some mining was done during World War II and a few derelict trucks of that vintage can be seen to the side of this road. The tracks were removed about 1958. In 1969 or '70 Terry Raines, Sherry Greer, and I rode motorcycles up the old grade, which was rapidly being overtaken by thorny plants, to a mine. In my memory it was not one of the mines I visited on a Minas Viejas trip in the '80s. But my memory could be wrong. We turned our headlights on and rode into the mine over the washboard left by the crossties. The tunnel had intersected 1 or 2 significant solutional features, with large formations, before we headed back out of the mine. This area is significant to us today because several caves have been located nearby, notably one called Montemeyor. It is a vertical cave with several deep and interesting pits. The entire area is under lock and key, so San Antonio cavers, in cahoots with the land owner, organize several trips a year to the cave and surrounding area. A part of the road follows the old railroad grade. Caves, undoubtedly, remain to be found in this limestone range.

Although his directions are in question (throughout his writings he often says 'northeast' for 'southeast' and makes similar obvious nonsensical transpositions), Berlandier mentions while in Lampazos that "The mining camp of La Iguana is found in that jurisdiction.... The cliffs in the area are tunneled everywhere, but there are only five notable mines. The minister...in 1810, alleges that formerly there were veins of native silver, but that today no one works them because the vein is very narrow and its walls and ceiling are too hard. It is asserted that there is a great deal of gold but capitalists capable of undertaking large works are lacking in that region. Currently, copper and a little iron are being mined." Two paragraphs later he says, "Towards the east we could still see the eastern wall of the valley of the Carrizal [which would have to be to the south] dividing into the branches where the abandoned mines of La Iguana and Vallecillo...are

located." (Lomas de Vallecillos is a small, low range even farther east, on the main federal highway (85) running more directly between Laredo and Monterrey via Sabinas Hidalgo. While almost outside the scope of this work, I mention its mines basically due to their antiquity and to point out that while Berlandier calls the area 'abandoned' by the 1830s at least one mine there was being worked for lead during the time of the U.S. Civil War 30 years later. The mines were subsequently flooded when a water vein was broken into and several hundred miners were drowned.)

Most of the mines of the *Real* are closed now. Lead is abundant in the world from more easily worked deposits and the demand is not so great as it once was, having been displaced by plastics and the like. The price of silver, never terribly stable, has been so low since the U.S. and most of the rest of the world went off the Silver Standard back in the '30s, I think, that hard rock mining of it has not been much warranted. Most of the Mexican silver mines which were forced to cease operating by the Revolution have never reopened and unless something drastic happens to the price of silver, never will. In 1997-98 the mine was being resurveyed by Texas cavers under contract to a Mexican mining company interested in reopening the mine

La Gruta del Palmito means 'The Cave of the Palmettos'. Palmettos are dwarf fan palms that usually grow in moist marshy areas such as Florida or east Texas. But they also grow in the desert and enough obviously grew on the mountain side above Bustamante that they named a cave that. Because the construction of the cave's name is so awkward we usually just call it 'Bustamante'. When we say "Let's go to Bustamante!" we usually mean the cave, not necessarily the town.

The cave was discovered in 1907 by a resident of Bustamante who made his living on the mountainside collecting palm fronds for thatched roofs. He noticed cool air coming out of a pile of boulders and dug his way partially down until the breeze turned into a blast. He reported his find in town and a whole gaggle of folks proceeded up the mountain and excavated the entrance.

This is a BIG cave, boys and girls, essentially one BIG room. And it's lots of fun. For about 30 years UT and other grottos have been taking training trips to Bustamante. It's usually a club trip as well, so that the new cavers can get to know the older ones. Back in the old days it was a lot different. I have a San Antonio newspaper clipping from about 1956 describing a trip to Bustamante by a crew of cavers making a film. They rented burros in town to carry their gear. (You would be hard pressed to rent many burros in Bustamante anymore.) Cavers would usually just walk up. What they walked up was a trail about a mile long that climbed to the cave entrance 800 feet further up the hillside. The trail was steep in places and not so steep, even going down a bit, in others and consisted of somewhere between 40 and 50 'switchbacks', depending on how you counted them. The climb took most people between 45 minutes and an hour. If you listen carefully around the campfire you may hear stories, which have gotten worse over the years, of that horrible climb. It really never was bad. I've seen frail Mexican crones in plastic loafers and fat bozos in leather street

shoes up at the entrance, both with smiles on their faces and few, if any, misgivings in their hearts—about the hike, at least. When you get to the entrance take a look at it. Rumors had it that Pancho Villa and his whole army rode their horses into the cave and hid from the federales for several weeks. They must have been riding stick horses.

There were always rumors about one of the governments (city, state, or federal) making plans to commercialize the cave and to bring in tourists by the trainload. Toward those ends several abortive stabs were made, but they were never equal to the task of overwhelming that great Mexican custom known simply as “*Mañana*”. A sporadic program of collecting variable entrance fees was begun in the 70s, and continues to confuse us. Some time in the early '70s electric poles and lines appeared at the ledge near the cave entrance high up on the mountain. But then that was pretty much the end of that. Some years later they got around to stringing wires and open bulbs on wooden sticks inside the cave. These sticks rotted out in several other years, maintained a little bit but mostly not, until they lay at times upon the trail. This cycle of on and off and up and down continues to this day so you never know from one trip to the next what the situation's gonna be. In the mid '70s they built a new road from town. It was more like an interstate—a 50 foot wide, straight, and nearly steady grade from Bustamante to the parking lot beneath the cave. Earlier access had been along a winding car trail in between the cactus and chaparral, ungraded, unmaintained, and often hard to follow the first try. It was much more down-to-earth—more trouble, but more fun. Somebody had to ride the fender to jump off and move odd rocks so we wouldn't drag our gas tank or muffler. And in that same time frame they built the 'hotel' at the parking lot. It wasn't really a hotel, as rumors had it. It was supposed to be a ticket office, restaurant, and *refresco* stand. The only thing it ever was was an abandoned brand new building. 'Til it got old. And then they built “The Road!” As I said, the cave was 800 feet up the mountain side above the parking lot. The Mexicans determined to build a road thither. A D-9 bulldozer and the rest of the project wore out simultaneously when they got to within a hundred meters or so of the ledge and entrance. In the process they covered up a lot of the old switchbacks and a bit of nostalgia to boot. But the rock rolling was sure good for a couple of years. Then came a landslide which blocked the road about halfway up. And there it sits! Neither road nor trail are quite what they should have been. But the cave is still just about the same.

When I first visited the cave in 1967 it was being resurveyed by Orion Knox. He is still working on that survey in 1998, nearly once a month he and his wife Jan make the trip from Austin to Bustamante to survey and sketch another little section of the cave. His map includes nearly every rock big enough to be drawn.

In 1961 the Texas Speleological Association sponsored a clean-up trip to the cave, indicating that it was already trashed out. During the years the UT Grotto made a few clean-up trips as well, removing 3 pickup truck loads of garbage filled plastic bags on one occasion. Labor Day projects were again sponsored by the TSA in 1997 and 1998 with the purpose of continuing the

clean-up, starting an ongoing program of graffiti removal, and placing concrete steps, provided by the city of Bustamante, in place along the tallus slope in the Entrance Room.

La Gruta del Palmito is a damn fine cave. It's not the biggest, not the deepest, not the best, but you'll sure not forget it. I can't really tell you how it is—you've got to go see for yourself. It's a friendly cave, not out to hurt you. But you need to pay attention. There are ledges and rocks beside the trail you could fall off of. In a place or two are low spots you could bump your head. And once or twice the trail gets just a little slick. But that's all a part of caving, and it's part of why we brought you here—to learn to be careful and take care of yourself. Caving is still a solo sport, even though you're with a crowd. You've got to be in charge of your own destiny—to be responsible for what you do and how you do it in a cave. This cave will teach you bunches, and it'll do it in a very friendly way. I hope you enjoy it half as much as I did.

A few things to notice or to think about. The hand of man has been layed heavy in this cave. In addition to graffiti for a hundred years, the cave's been subjected to formation breakage, trail marking and building, earth moving, power poles and wires, and a whole, whole lot of garbage left behind by who knows whom. Take a look around and get a feel for what cave vandalism is. It's another reason that we've brought you here. Two things we never do: leave something we brought into the cave is one, and leave something someone else brought in if we've the space to tote it out's the other. We brought out 40 bags of garbage on one trip and hardly made a dent. But the graffiti is a sinful sight. You may see a few wire brushes in some people's packs. When we can we stop and brush a little off. It's not the best way, but it works unless the artwork is flowstoned over. If it is, it's there for all eternity. Look at it closely and you'll understand why we don't do it and why we sometimes get severe with folks who do. Broken stalactites and other formations are about as numerous as any other kind. Many were broken naturally, but a lot were just knocked off for fun or souvenirs. Damn few were ever carried out. Sort of a waste.

Still, it's a great cave. I've included a couple of maps of the cave. One is for you to rip out and carry with you while exploring. I wish I'd had one. Not because I got lost, but because the cave is so big it's hard to really understand the scope of it and know where you are within it. The other map is for you to take home and show people what you did. You'll use it more than the 1st one. If you have a flash camera, take it, but remember it only takes pictures within about 15 feet. The big rooms won't show up. People and close up stuff will. Have a good trip. If you take slides you can share the good ones with us at the meetings. If you take prints they'll be of little value to any of us.

Austin, Texas
3 November 1993
updated 19 September 1998

**TAKE NOTHING BUT PICTURES
LEAVE NOTHING BUT FOOTPRINTS**