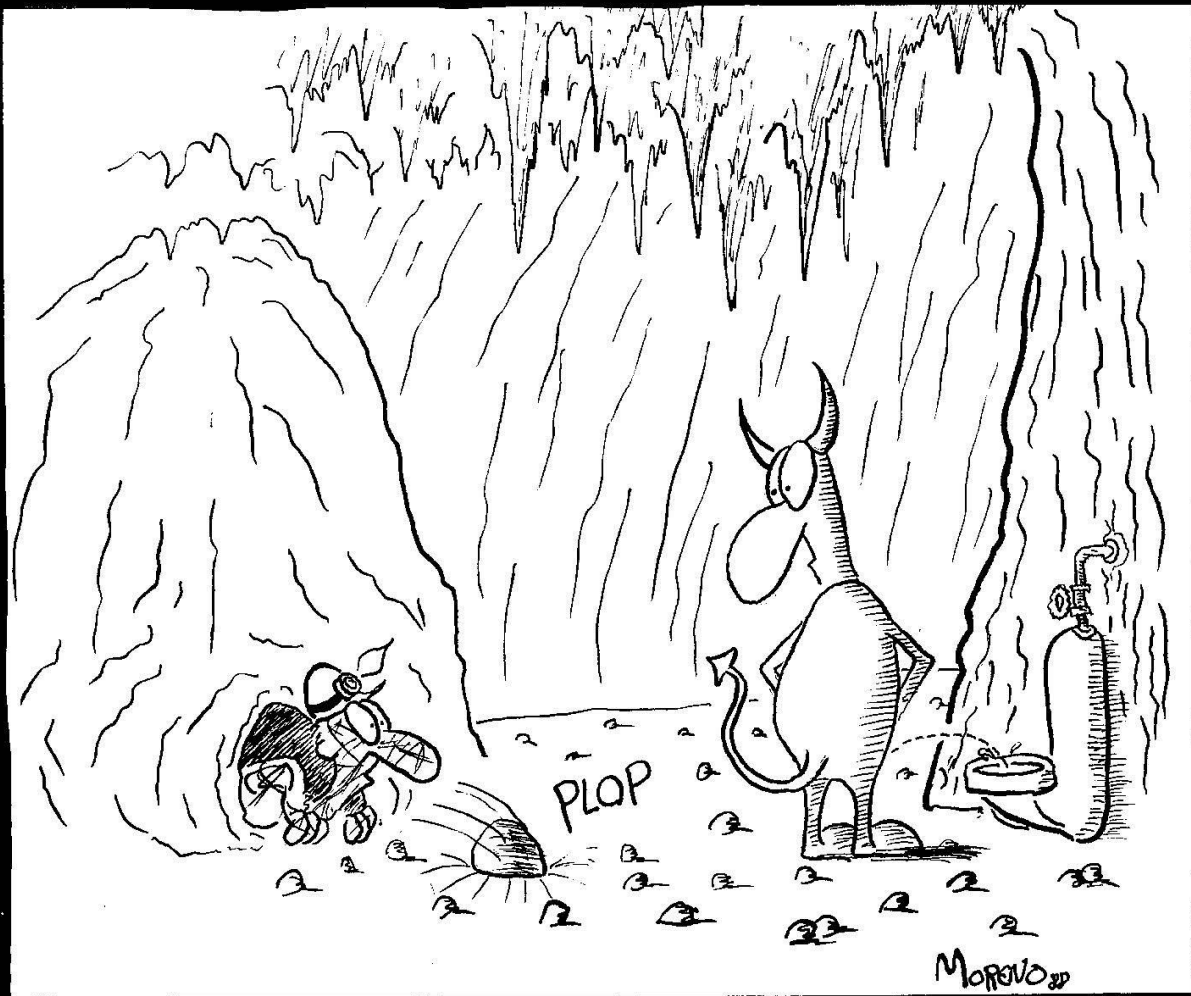


SUBTERRANEO



CONTENIDO – CONTENTS

Subterráneo Número Tres, Noviembre, 1988 - Subterráneo Number Three, November, 1988

3. Introducción al Espeleoclub Zotz, Guadalajara, Jalisco, México y su boletín bilingüe, Subterráneo. Introduction to Espeleoclub Zotz, Guadalajara, Jalisco, Mexico and its bilingual bulletin, Subterráneo. Speleology and cave exploration in Western Mexico. La Espeleología y exploración de cuevas en el Occidente de México: Jalisco, Nayarit, Colima y Michoacán.

4. A Chat with Merlin Tuttle, Bat Defender Extraordinary by John J. Pint. Una Charla con Merlin Tuttle, Destacado Defensor de los Murciélagos, traducido por Jesús Moreno. Insect-eating bats, insectívoros, vampire bats, vampiros, guano, carbon dioxide, bióxido de carbono, CO2 in caves, en cuevas. Bat Conservation International.

7. The East-Wing Balcony: Cold-Dunk Cave Gives up Another 100 Feet, As Usual At A Price... La Cueva del Chapuzón, bats, murciélagos, cable ladder, escalera de cable, prusik.

9. La Cueva de la Salitrera por Jesús Moreno N. Saltpeter Cave by John J. Pint. Dome, domo, stalactites, estalactitas, flowstone, travertina, vampire bats, vampiros, histoplasmosis spores, esporas de histoplasmosis, stalagmites, estalagmitas, spring, manantial.

11. Como Leer un Mapa de Cueva – How to Read a Cave Map.

12. Cueva de la Salitrera – Saltpeter Cave. Map, mapa.

14. La Zaga de las Tierras Huecas por Susana Ibarra de Pint. The Saga of the Hollow Land by John J. Pint. Lagunillas, dolinas, dolines, speleothems, flowstone, travertine, stalactites, estalactitas, histoplasmosis.

17. Murciélagos en Monitos por Jesús Moreno. Murciélagos que se alimentan de insectos, frutos, semillas, néctar, pólen, peces y sangre. Bats which eat insects, fruit, seeds, néctar, pollen, fish and blood. Carnívoros, envergadura, wing-span. Vampyrum spectrum.



This PDF ©2016 by John Pint. Espeleoclub Zotz, later known as Grupo Espeleológico Zotz, was started by John and Susy Pint in 1985 in Guadalajara, Jalisco, Mexico. Publication of the Club's bulletin, Subterráneo, began in March, 1988. Zotz has located, explored, mapped and photographed caves in Jalisco, Colima, Nayarit and Michoacán. PDFs of Subterráneo were published on the Internet in 2016 by John Pint, email: ranchopint@hotmail.com.

Este PDF©2016 por John Pint. Espeleoclub Zotz es conocido también como Grupo Espeleológico Zotz y fue fundado por John y Susy Pint en 1985. Zotz ha encontrado, explorado, topografiado y fotografiado cuevas en Jalisco, Colima, Nayarit y Michoacán. Los PDF de Subterráneo fueron publicados en el Internet en 2016 por John Pint, correo: ranchopint@hotmail.com.

ESPELEOCLUB ZOTZ*, Apdo 103 CP 45010, Cd Granja, Jalisco, México

SUBTERRANEO es un boletín del EspeleoClub ZOTZ* de Guadalajara, Jalisco, que se dedica al descubrimiento, exploración y estudio de cuevas, especialmente en el occidente de la República Mexicana. SUBTERRANEO tiene artículos en español e inglés y se publica tres veces al año. Suscripción (de enero a diciembre): 10,000 pesos anuales (10 dólares EEUU en el extranjero). Tenemos interés en recibir como intercambio otras publicaciones.

ZOTZ es miembro de la Sociedad Mexicana de Exploraciones Subterráneas (SMES) y asiste al Centro Médico del IMSS en sus estudios de la histoplasmosis en Jalisco. También presenta a grupos interesados el audiovisual de Bat Conservation International, Murciélagos, Mitos y Realidades. ¡Su suscripción apoyará estos programas!

SUBTERRANEO is the newsletter of EspeleoClub ZOTZ*, based in Guadalajara, Jalisco and dedicated to the discovery, exploration and study of caves, especially those in western Mexico. SUBTERRANEO, with articles and resúmenes in both Spanish and English, is published three times a year. Subscription: 10,000 pesos per calendar year in Mexico, 10 US dollars elsewhere. Proposals for exchanges with other publications are welcome.

ZOTZ is a member of the Sociedad Mexicana de Exploraciones Subterráneas (SMES) and assists the Mexican Social Security Medical Center in its study of histoplasmosis in Jalisco. We also present Bat Conservation International's slide/sound show Bats, Myths and Reality to interested groups. Your subscription supports these projects!

-> * ZOTZ = murciélagos (bat) en maya (in Mayan) <-

EDITOR: John J. Pint/ASISTENTE: Susana Ibarra de Pint/ARTE: Jesús Moreno
INFORMACIÓN ZOTZ: TEL 13-9443 Guadalajara; preguntar por (ask for) NANI

**BIENVENIDO
A ESTA CAVERNA**


A una caverna le toma
de un millón

a diez millones de años formarse,
pero una persona puede destruir esta maravilla
en minutos.

Las formaciones
como estalactitas
una vez destruidas
ya jamás vuelven a
formarse o repararse.



Los murciélagos
son importantísimos
para el control de
plagas y la polinización
de muchas plantas.

POR FAVOR NO ROMPAS O MATES NADA EN LA CUEVA

La regla de oro de las cuevas es:

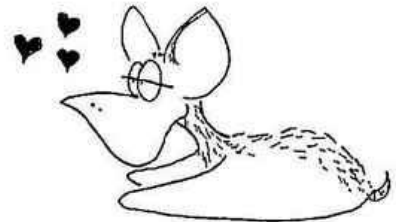
**NO TOMAR NADA,
MAS QUE FOTOS
Y
NO DEJAR NADA
MAS QUE HUELLAS**

ZOTZ WAS HERE !

This laminated sign is now being placed in Jalisco's caves as part of a ZOTZ project to inform visitors of cave fragility and reduce damage to cave life and formations.

ZOTZ HA ESTADO AQUI !

Se pone este anuncio laminado en las cuevas de Jalisco como parte de un proyecto ZOTZ para informar a los visitantes sobre la fragilidad de las cuevas y para reducir el daño a los animales y formaciones.



UNA CHARLA CON - A CHAT WITH MERLIN TUTTLE

BAT DEFENDER EXTRAORDINARY DESTACADO DEFENSOR DE LOS MURCIÉLAGOS

Si alguna vez has visto alguna bellisima fotografia de un murciélago y al verla, en vez de sentir ganas de matarlo, has querido tenerlo como mascota o simplemente te ha gustado, lo mas seguro es que esa fotografia ha sido tomada por el doctor Merlin Tuttle, el más renombrado experto en estos calumniados mamíferos.

El Dr. Tuttle es el fundador de Bat Conservation International, que se encuentra en Austin, Texas. Como Susy y yo pasábamos por allí, decidimos hacerle una visita y preguntarle unas cosas que, pensamos, podrían ser de interés a los espeleólogos de México.

FLORES EN EL DESIERTO

Nuestra primera pregunta fue qué puede hacerse para educar a la gente del campo sobre los murciélagos, pues ellos están en peligro constante de ser dinamitados, envenenados o exterminados de cualquier manera en México.

El Dr. Tuttle comenzó nombrando una larga lista de plantas útiles que son polinizadas por murciélagos en México: aguacates, plátanos, chicozapote, higos, mangos, magueyes y muchos, muchos más. El explicó que las flores de muchas plantas del desierto son polinizables solamente durante pocas horas después del atardecer porque se abren solamente durante la noche y los murciélagos, por ser nocturnos son los polinizadores ideales. Además de esto, parece ser que todas las especies de grandes cactus son polinizadas por ellos. La pérdida de estos animales puede significar la pérdida de la vida en los desiertos.

LOS MURCIÉLAGOS EN LA ECONOMIA

Un método muy efectivo para cambiar a un granjero de enemigo a amigo de los murciélagos, fue descubierto por Tuttle en un encuentro que tuvo él con un granjero americano ... "no muy diferente, por cierto, de un granjero mexicano." Merlin pidió permiso al granjero para hechar un vistazo a los murciélagos de una cueva cercana. "Andale pues, y si los matas, pos', me vale;" le dijo el granjero.

En el piso de la cueva, debajo de la colonia de murciélagos, Tuttle descubrió una gruesa capa de alas de insectos. Inmediatamente las reconoció. Eran alas

If you've ever seen a really beautiful photograph of a bat, one that made you feel like petting the creature rather than swatting it, chances are that photo was taken by Dr. Merlin Tuttle, world-renowned expert on the most maligned of mammals.

Dr. Tuttle is the founder of Bat Conservation International, located in Austin, Texas. As Susy and I were passing through, we decided to drop in and ask him a few questions of concern to cavers in Mexico.

DESERT FLOWERS

Our number one question was what we could do to educate country people about bats, which are in constant danger of being dynamited, poisoned or otherwise "exterminated" in Mexico.

Dr. Tuttle began by pointing out the large number of useful plants that are pollinated by bats in our area: avocados, bananas, sapodillas (for chicle), figs, mangos, agaves (for tequila) and many, many more. He explained that the flowers of many desert plants are receptive to pollination only during the first few hours after opening. Since they open at night, bats are ideal for doing the job. On top of that, there's evidence that possibly all large cacti are bat-pollinated. The loss of bats could mean the loss of many desert plants and all the creatures that depend on them.

THE FARMER AND THE POTATO BUGS

Merlin Tuttle's most effective procedure for turning rural folk into bat defenders was discovered during an encounter with a U.S. farmer who, he pointed out, was "not much different from the Mexican variety."

Merlin asked the farmer's permission to take a look at the bats in a local cave. "Go right ahead," said the man, "an' you kin kill the lot of 'em off, for all I care."

On the floor of the cave, beneath the bat colony, Tuttle discovered a thick layer of countless insect wings. Immediately recognizing them as belonging to the potato bug, he picked up a fistful and walked out of the cave. Nonchalantly, he asked the farmer what "this stuff"

del escarabajo de la papa; tomó un puñado y salió de la cueva. Inocentemente, preguntó al granjero qué era aquello. Casi se le salen los ojos. "¡Son pedazos de esos desgraciados bichos!" "Curioso," dijo Tuttle, "parece que es lo único que los murciélagos de esta cueva comen."

Merlin entonces dió su fórmula al granjero para calcular la cantidad de insectos que los murciélagos consumen. Usando datos muy conservadores, se puede decir que un murciélago pesa 12 gramos y cuando está criando, come al menos el 100% de su peso por noche. Ahora, multiplicando esto por un mínimo de 2000 murciélagos por metro cuadrado de techo de cueva, se obtiene el peso en insectos consumidos por noche: 24 kilos de insectos por metro cuadrado. ¡En el caso de una cueva en Texas se calcularon 115 toneladas de insectos!

Cuando Tuttle regresó a la cueva se sorprendió de encontrar un gran anuncio previniendo a los visitantes de no molestar o dañar a los murciélagos. Cuando le preguntó al granjero acerca de esto, contestó, "¡Andale. Según mis cálculos cada murciélago me ahorra cinco dólares de insecticida."

LA DANZA DE LOS VAMPIROS

Naturalmente no olvidamos preguntarle por la forma de distinguir un vampiro de todas las demás especies, lo cual es un problema en muchas partes de México. El objetivo de esto no era solamente obtener información para nosotros, sino también para ayudar a Jesús Moreno a preparar un folleto de caricaturas con información sobre murciélagos, el cual ZOTZ espera poder distribuir en el campo mexicano.

Los vampiros, explicó Merlin, no tienen cola ni membranas caudales ni hoja nasal, como sucede con los murciélagos frugívoros. Nos mostró luego dos espléndidas transparencias, una, un retrato mostrando a un vampiro enseñando los incisivos puntiagudos, diferentes de los de Drácula que son colmillos. La otra transparencia muestra un vampiro caminando hacia su presa, aparentemente usando los codos como patas.

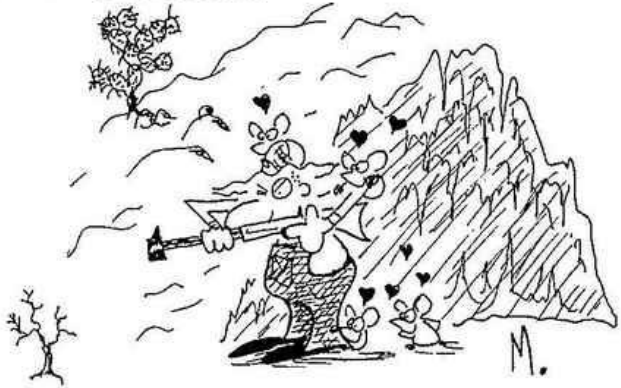
Como en una cueva es difícil acercarse a un murciélago para identificarlo, Merlin nos dijo que el guano de vampiro es diferente al de los demás murciélagos pues se parece al chapopote. El guano de los insectívoros se pulveriza fácilmente y contiene partes de insectos. El guano de los frugívoros puede contener plántulas de las semillas que los murciélagos tiran y en las paredes de la cueva puede haber trazas de polen amarillo.

Finalmente, los vampiros nunca se agrupan en grandes colonias, lo que significa que personas que han estado exterminando enormes colonias, han causado un daño inútil e irreparable.

might be. The farmer's eyes bulged. "Belong to them no-good tater bugs," spouted the farmer. "Curious," said Tuttle, "looks like that's all those bats eat!"

Merlin then gave the farmer his formula for calculating bat consumption of insects. Using very conservative estimates, you could say an average bat weighs 12 grams (.42 oz.) and, when nursing, eats at least 100% of body weight per night. Now multiply this by a minimum of 200 bats per square foot of inhabited cave ceiling, and you have the weight of insects eaten nightly. In the case of one Texas cave, that turns out to be over 250,000 pounds of bugs!

When Dr. Tuttle next returned to the farmer's cave, he was surprised to find a large sign there, warning visitors not to disturb or harm the bats. When asked about this, the farmer replied, "well, shucks, how I kalkylate it, every one o' them bats is worth five bucks t' me as insecticide!"



FEARLESS VAMPIRE CONNOISSEURS

Naturally, we didn't forget to ask Merlin for the complete lowdown on how to distinguish vampires — which are considered a definite nuisance in many parts of Mexico — from the much greater number of beneficial bats found in the country. Our goal was not only to be better informed ourselves, but also to help Jesús Moreno prepare a factual "comic book" on bats, which ZOTZ hopes someday to distribute in remote corners of Mexico.

Vampires, explained Merlin, have no tails or tail membranes nor have they a nose leaf, such as those found on fruit-eating bats. He then showed us two unusual slides. One, a portrait, shows a smiling vampire sporting two pointy upper front teeth, but not quite in the Dracula tradition, as they are small and both in the center. The other slide shows a vampire "walking" up to its prey, apparently using knobs or pads on its wings as extra "feet."

Since bats in a cave are unlikely to pose for portraits, Merlin's information on guano will probably be most useful in identifying vampires. If it's a jet black, gooey liquid like coal tar, you

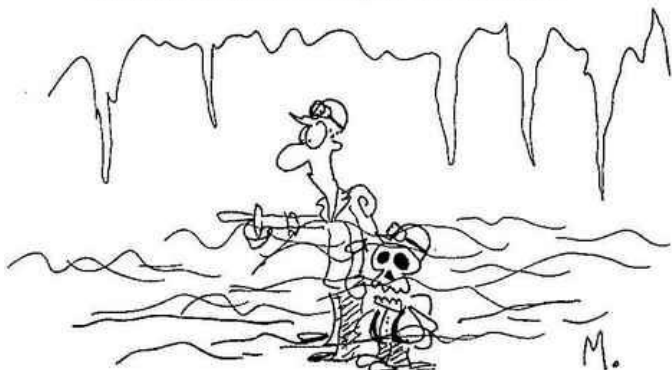
POR UN PELITO

Cambiando de tema y hablando de exploraciones de cuevas, Merlin nos describió la siguiente aventura.

El y un amigo estaban en la parte mas baja de una cueva en Texas. Repentinamente mencionaron que se sentían cansados y con dificultades para respirar. Esto recordó a Merlin un artículo que acababa de leer una semana antes. El artículo describía los síntomas anteriores a la muerte por intoxicación debida al dióxido de carbono y hacía notar que la persona con estos síntomas podía tener solamente un minuto para salvar su vida.

HUELE A GAS

Cuando Merlin comprendió, ayudando a su amigo, con gran dificultad, dado que estaban en la parte de abajo, lograron los dos salir. Cuando apenas salieron, cayeron casi inconscientes, prácticamente tragando aire fresco. Solamente horas después pudieron seguir su camino.



El CO_2 es producido por la respiración colectiva de una colonia de murciélagos y puede acumularse en áreas bajas en lugares no ventilados. Existe una línea de separación donde el oxígeno termina y el CO_2 comienza, lo que significa que un grupo de gente puede estar en este punto y las personas de estatura baja pueden sufrir los efectos del gas mientras que los que son altos no lo notan. El CO_2 no es un veneno, pero donde se acumula, no hay oxígeno, por lo que es igual de efectivo.

Hablando de gases y guano, Merlin nos advirtió mantener la nariz alerta para detectar el olor de amoníaco o de huevo podrido (olor de dióxido de azufre). Si tú puedes detectar cualquiera de estos, empieza a envenenarte. Y solo hay algo que hacer: ¡pélale!

Antes de dejar las oficinas de BCI, compramos el magnífico audiovisual, Murciélagos, Mitos y Realidades el cual hemos traducido al español y pronto podremos presentar aquí.

Traducido por Jesús Moreno



can bet it came from vampire bats. Guano from insect-eaters breaks up easily and may contain bits and pieces of bugs. Fruit bat guano may have sprouts growing it from all the seeds they drop, and the walls of the cave may even show traces of yellow pollen.

Finally, vampire bats never congregate in large numbers, meaning those people who have exterminated huge colonies have undoubtedly done irreparable harm.

NARROW ESCAPE

From bats, we somehow drifted to the subject of close calls in caves, upon which Merlin described the following memorable incident.

He and a friend found themselves in the lowermost section of a Texas cave. Suddenly both of them mentioned that they were feeling quite tired and having a bit of difficulty breathing. This reminded Merlin of an article he had just happened to read a week earlier. The article described the symptoms preceding death from breathing carbon dioxide and pointed out that a person encountering such symptoms may have only one more minute left to live.

TUTTLE'S LAST GASP?

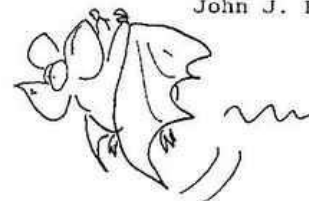
As soon as the light dawned, Merlin grabbed his friend and headed upward. With great difficulty, the two of them struggled to the cave entrance where they both collapsed, breathing in the fresh air in huge gulps. Only after several hours had passed, were they able to stand up and be on their way.

CO_2 in caves is produced by the collective breath of a bat colony and can settle in low, non-ventilated areas. There is a definite point where oxygen ends and CO_2 begins, meaning that if a group is standing in the right (or is it the wrong?) spot, the short cavers could keel over while the others wouldn't feel a thing. Though not a poison, carbon dioxide can still finish you off quite effectively!

In regard to guano, we were also warned to keep our noses open for the smell of ammonia or the rotten-egg odor of sulphur dioxide. If you can detect either one, you are already being poisoned and there's only one procedure: vamoose!

Before leaving BCI's headquarters, we purchased their beautiful slide and cassette show, Bats, Myths and Reality, which we have translated into Spanish for presentation in our area.

John J. Pint



THE EAST-WING BALCONY COLD-DUNK CAVE GIVES UP ANOTHER 100 FEET. AS USUAL, AT A PRICE ...

One bright, sunny day in July, we decided the time had come to take a peek at what could be an upper passage at one end of Cold Dunk Cave (La Cueva del Chapuzón). Susy, John, Jesús, Nacho, Nani and Mano represented the full strength of ZOTZ. Taking the place of Larry Monroe, who was traveling in Arizona, was Susy's brother Pepe, a frequent non-caver "helping hand" for many an expedition.

The "East Wing" had been the first section we ever explored of this increasingly more complex cave. Entering through the lower "swim-in" entrance we had followed the sinuous, 150 meter-long passage past an unbelievably thick concentration of bats, at the top the fissure high above us, to what could have been a dead end, if it were not for the sunlight pouring in from a narrow slot 15 meters above. We then noticed an opening in one wall, about 4 meters up. Was this merely a shallow balcony or the entrance to another passage?

THROUGH THE SLOT

Today we were going to find out. "Dry weather and an upper passage means no cold, wet surprises," we chortled as we approached the famous (outdoor) waterfall where we had first smelled guano five months ago. However, when we noticed the considerable volume of water going over the edge with a mighty roar, it occurred to some of us that even the supposedly "high and dry" upper passage might be a little damp.

The Slot offers access to the East Wing of the cave (if indeed we are dealing with one cave) by a 15 meter rappel. Finding this unobtrusive hole and rigging it in the rainy season, turned out to be a bit complicated due to the tangle of heavy growth, which, we later discovered, included a fair amount of poison ivy.

We lowered a rope down to the cave floor and John began the first descent. Just two meters into the long, narrow slot, he came to a small ledge. Off to

his right he could see that the fissure continued farther than had been evident from above. Might it possibly connect with the Balcony, which was in the same general direction? He worked his way along it until there were no longer 13 meters of emptiness below him. A hole just big enough to wriggle through beckoned ...

ICY DRIZZLE

Squeezing beyond the hole and twisting his body into a pretzel, John ended up with his head looking down over the edge of what seemed to be a four-meter drop. That wasn't the floor of the main passage below, so it must be the balcony! All he had to do was run the rope over this edge...



One detail that hasn't been mentioned is that this particular little hole was directly under a constantly drizzling cold shower and the only bearable position you could take while rigging inevitably resulted in icy water running down the back of your neck.

GOING IN CIRCLES

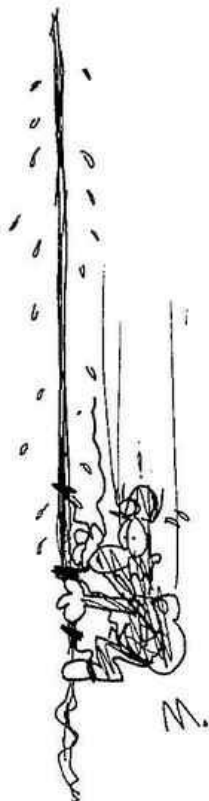
By the time we got a combination of cable ladder and rope connecting the outside world to the balcony, John's spirit, as well as the rest of him, were considerably dampened. But Nacho soon joined him and off they went to explore the new territory. In all they found about 100 meters of crawlways about one meter high. The longest one seemed to be going pretty much in a straight line, until it ended in a sheer drop above a passageway that looked strangely familiar. They were certainly in an ideal spot to observe the bats, which came zooming



right past their noses, many meters above the height of a human being walking on the floor down below. It didn't take long to prove that they had been going in a very wide circle, only to return to a second balcony just a few meters from the first, both within sight of the slot.

PRUSIKING IN THE MUD

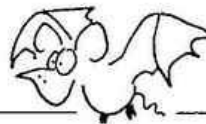
Once they had checked out the entire passage, there wasn't much left to do and when John experienced a renewed attack of shivers and shakes, he decided to go back up into the sunshine, passing on to Jesús the delightful task of repositioning the rope at the dropoff, under the good old cold shower. The result was that Jesús too, soon had the shakes and all of us began to wonder what we were going to all this trouble for. By now Mano had joined Nacho inside and it was suggested they survey the passage in the name of the rest of the crew. This turned out to be a wise decision, because by now the rope was wet and muddy and both Nacho and Mano found it a slow, frustrating job to push their prusik knots up only to have them



slide right back to position one the moment they put weight on them. Eventually, they got out but then and there we decided to test out everyone's gear on a muddy rope... but at home.

Naturally, derigging meant more cold showers, which made our final exit all

the more pleasing. Seated on the warm black obsidian rocks alongside the bubbling river, we soaked up sunshine and beer and devoured our lunches. Cold Dunk Cave had again lived up to its name, even in its "dry" upper passage, but we had gained another 100 feet for our survey!



RESUMEN DEL ARTÍCULO ANTERIOR

SI USTED LEYÓ EL ARTÍCULO PASADO SOBRE LA CUEVA DEL CHAPUZÓN SABRÁ QUE NO HEMOS LLEGADO AL FINAL. BUENO, LA COSA NO HA CAMBIADO: SEGUIMOS SIN LLEGAR AL FINAL. PERO AL MENOS ENTÉRESE DE LO QUE HEMOS HECHO.

OCTAVO INTENTO

SI CORRECTO, YA LLEVAMOS OCHO. EN ESTA OCASIÓN BAJAMOS POR EL TIRO Y A MEDIO CAMINO DECIDIMOS EXPLORAR UN PASAJE. SE EXPLORÓ Y SE LE AGREGARON OTROS 30 MTS A LA CUEVA. DESGRACIADAMENTE NO SE HIZO UN LEVANTAMIENTO ADECUADO.

NOVENO INTENTO

DE NUEVO VOLVIMOS A BAJAR POR EL TIRO, PERO ESTA VEZ HASTA EL PISO. LA IDEA ERA HACER EL LEVANTAMIENTO DE TODA AQUELLA SECCIÓN, PERO ... COMENZÓ A LLOVER Y HABÍA QUE SUBIR (PARECE QUE LA CUEVA SE LLENA DE AGUA) Y ESO ES TODO. PINCHE CUEVA.



LA CUEVA DE LA SALITRERA

por Jesús Moreno N.

John J. Pint

No hay nadie que pueda pararlos, los defensores hace rato que huyeron y ahora ellos son los dueños de la situación ... En eso suena el claxon del Jeep. ¡Pinches virus! Tengo una gripa tumbacaballos y ahí están John y Larry esperándome para ir a otra cueva.

Esta vez vamos a la Cueva de la Salitrera. Me trepo al Jeep con todos mis tiliches más una provisión de Contact X, me acomodo entre todo el equipo y me duermo.

"¡Jesúúúúúú!" alcanzo a escuchar en lo peor de la fiebre. Son los gringos que necesitan que les diga donde está la desviación. Una vez encontrado el camino que es pura terracería, comenzamos a meternos entre los cerros y cada que veíamos a alguien, le preguntábamos por la cueva y así llegamos al lugar.

Ya en el Rancho la Salitrera un señor muy amable nos indicó el lugar exacto de la cueva y allá vamos. Los que ya nosí empiezan a conocer sabrán que con la pura indicación no pudimos encontrar la cueva. Ahí andábamos revisando cada miserable agujero de un enorme acantilado.

Hasta que regresó nuestro amigo (se me hace que nos vio cara de zonzos) — No señor, es por acá — y, sí, ahí estaba la entrada, y bien grande... no sé como no la vimos (por zonzos). Bueno, yo estoy disculpado porque traía gripa.

Preparamos el equipo y nos metimos a la cueva, bastante impresionante por cierto. Pues el techo es alto, además bajamos por unos troncos que habían puesto hace mucho tiempo a juzgar por los crujidos de la madera.

Recorrimos toda la cueva y al final encontramos una formación con forma de campana, muy original.

Al momento de salir me dio otro ataque de fiebre. Allá iban Larry y John bien adelante de mí y yo no los podía alcanzar. Sentía las piernas de chicle y sudaba frío. Pero claro, sall. Tenía la idea de, saliendo, irme al campamento a dormir, pero muy cerca de la salida encontramos un pollo de zopilote y había que tomarle

SALTPETER CAVE

"It took me 20 years to relocate La Salitrera (Saltpeter) Cave," remarked Don Pancho Leotaud. "If you visit it, I think you'll agree it was worth the search."

With a few directions and a topo map, it took us only three hours to reach the little ranch house near the cave, on a sizzling hot afternoon in late May of 1988.

As we stepped out of the Jeep, a ranch hand approached us. While in the USA we might have had to do some explaining as to why we were on someone else's property, here we were immediately welcomed with no questions asked. If we could wait about two hours, said the man, he'd be happy to show us the cave entrance. Meanwhile, we could enjoy a swim in the river over yonder.

We glanced over yonder and asked if that upside-down-bottle-shaped hill, 400 meters high, was the cerro marked La Salitrera on the map. "That's it," he said, "and the whole thing's hollow." This comment we took to mean that it contains a cave. But later, we began to wonder...

MAD DOGS AND CAVERS

The three of us, Jesús Moreno, Larry Monroe and I, wolfed down our sandwiches, crossed the barnyard and headed towards the hill. Following the ranchhand's uncomplicated directions, we promptly became lost and soon found ourselves standing at the edge of a high, steep cliff. Straight down below us we could see what looked like a wide, dry riverbed, on the other side of which there was another cliff sporting a big orange scar pockmarked with holes.

The only problem was that we had no rope along and none of us could fly. So we backtracked almost all the way to the farmhouse and scouted up the trail leading to the river which, further down had not only water, but even fish in it. Like typical mad dogs and true cavers, we overcame

fotos, así que me subí a la cornisa donde estaba el pequeño y me acerqué lo más que pude y click click. Después de eso, ahora sí, armé mi tienda de campaña y icuas! a dormir. Creo que ni cené.

Allá por quién sabe que horas de la noche llegaron nuestros amigos de CEO (Cuerpo de Exploradores de Occidente) para unirse a la exploración.

Al día siguiente comenzamos a hacer las cosas en serio y a hacer el levantamiento topográfico de la cueva, tomar fotos y revisar cada huequito buscando algún pasaje y, sí, lo encontramos pero estaba bien difícil llegarle pues era casi un agujero abierto en el techo y esta vez tuvimos que dejarlo por la paz.

Y eso fue todo ... ¡Ah! y me alivié de la gripa.

LA SUBIDA AL "ENTRESUELO"

Después de cinco meses regresamos a La Salitrera. Esta vez éramos cuatro: John, Susy, Nacho y yo. El plan era intentar llegar a alguno de los agujeros del techo. El primer día nomás nos dedicamos a turístear. Por cierto que hubo oportunidad de tomarle algunas fotos a un vampiro, el cual nos permitió tomarle acercamientos y fotos por todos lados (ha de ser porque ya era cadáver).

Al siguiente día volvimos ya más serios y dispuestos a iniciar la escalada y sí, sí la hicimos. Poniendo cuerdas, la escalera de cable y otros cachibaches, logramos subir a un balcón, como a unos 5 mts de altura y de ahí seguir por una pared inclinada otro poco, y la cueva no seguía. Pero quedaba una pequeña posibilidad detrás de una pared. "¿Y ora que hacemos? Está difícilísimo pasar por ahí." Y sí, sí estaba difícil. El problema era que la pared aunque no era muy alta (unos tres mts cuando mucho) estaba volada, y la altura sobre el piso de la cueva era de unos 10 mts y además era lisa lisa como nadadora alemana, y bueno... no me gusta presumir, pero me la eché. Una vez pasada la pared llegaba uno a otra pared inclinada y al final un túnel vertical algo estrecho que al final se vuelve demasiado estrecho así que aquello midió solo unos 10 metros y fue todo. Quedan por revisar otros dos agujeros como éste.



the temptation to splash in the stream (The temperature was a good 100° F. in the shade;) and stubbornly pushed on until we reached the orange scar. Above us we could see the spot where we had been standing earlier. Just below it, the entire upper portion of the cliff was covered with open-air stalactites!

THE INDIANA-JONES ROTTING BRIDGE

"Kinda looks like limestone," we muttered as we scrambled up our side of the river bank towards the first hole we could see. This went nowhere, and we were working on a second one when our friend the rancher appeared. "Well, you're practically there," he said and pointed toward the main entrance a little further on.

Pleasantly cool air was blowing out of the seven-foot-high Skylight Entrance as we hurried into it to escape the scorching sun. We didn't get far, for we were immediately stopped by a formidable drop, a good nine meters straight down. Sunlight streaming through this aptly named entrance bathed the beautiful room below us. There were outstanding formations everywhere!

The only problem was that we had come prepared for a horizontal cave and the only way we could see to get down below was over a network of long, skinny wooden poles evidently placed there who knows how long before by treasure hunters.

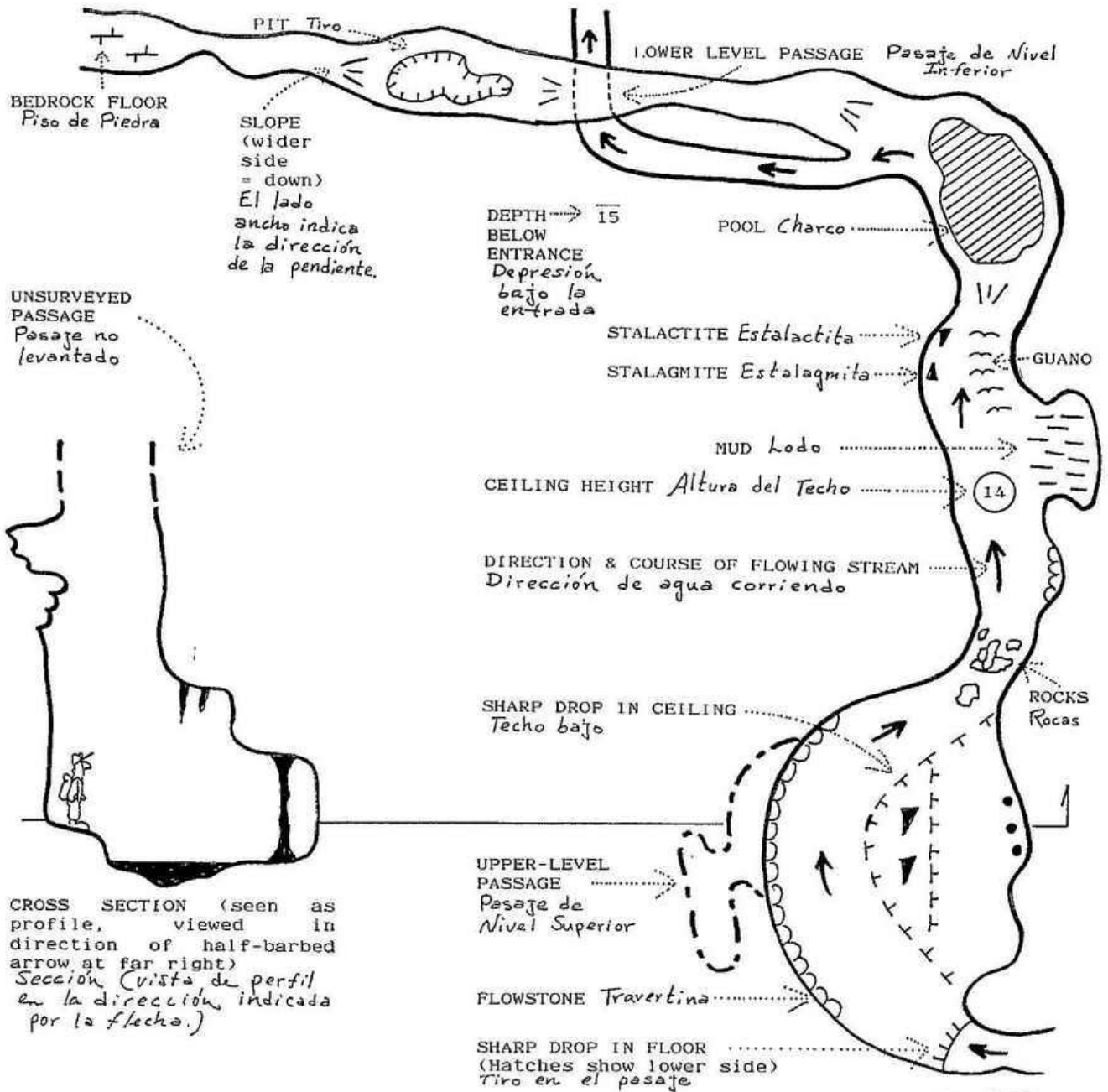
"If Don Pancho could do it, so can we," we mumbled as we lit our lamps and began crawling along the decrepit-looking tree trunks. This Indian-Jones bridge brought us over to a far ledge where we found a diagonal log with a few notches in it. "Hmm, obviously the way down... let's hope it's not too quick ... " After that, another rickety bridge got us down to the floor. Only later did we learn that Jesús, who we thought had a mere cold, was actually battling a fever precisely during these moments and had nearly blacked out while crawling along one of those wobbly sticks. The safety standards of Mexican treasure hunters leaves something to be desired.

THE BELL IN THE GUANO

A few minutes later we were standing below a large dome a good 30 meters (100 feet) high, admiring dusky stalactites on the ceiling and checking the perimeter for leads. From here the entrance, lit by the late-afternoon sun's rays, was truly spectacular.

Off to one side of the room, through a low-hanging curtain of flowstone, we found a ten-meter-wide passage. We walked along it admiring gaudy

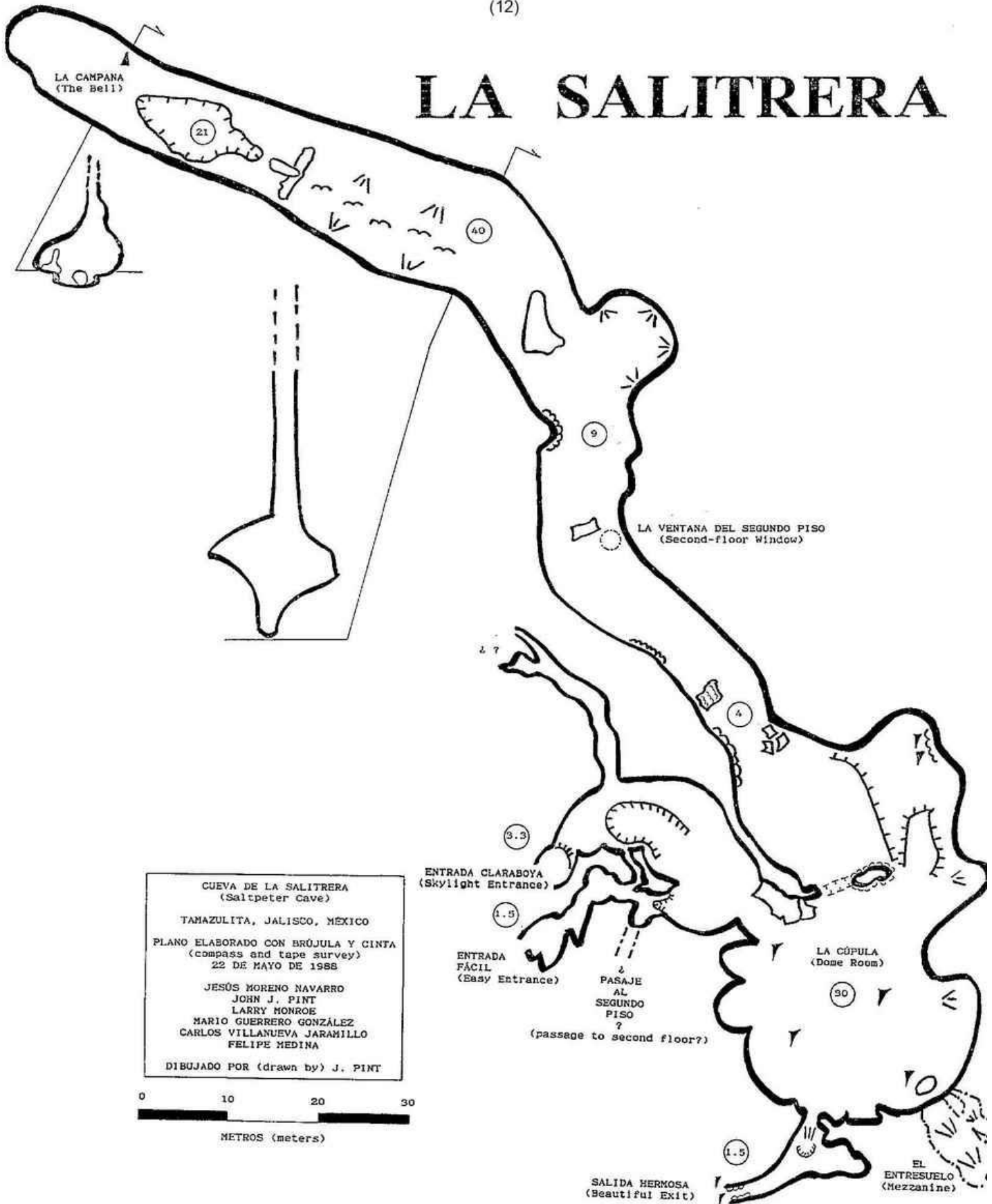
Como Leer UN MAPA DE CUEVA.



CROSS SECTION (seen as profile, viewed in direction of half-barbed arrow at far right)
 Sección (vista de perfil en la dirección indicada por la flecha.)

J. Tint

LA SALITRERA



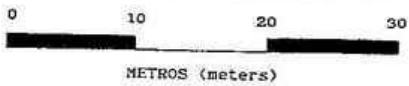
CUEVA DE LA SALITRERA
(Saltpeter Cave)

TAMAZULITA, JALISCO, MEXICO

PLANO ELABORADO CON BRÚJULA Y CINTA
(compass and tape survey)
22 DE MAYO DE 1988

JESÚS MORENO NAVARRO
JOHN J. PINT
LARRY MONROE
MARIO GUERRERO GONZÁLEZ
CARLOS VILLANUEVA JARAMILLO
FELIPE MEDINA

DIBUJADO POR (drawn by) J. PINT



displays of white flowstone on the dark walls. At one point we came upon another of those infamous long poles, leaning against the cave wall. A short distance above its upper end there was a hole in the ceiling, which was about nine meters high. Through the hole we could see several horizontal poles, obviously lying on the floor of a room above us. Beyond the poles, bats were darting back and forth. "Those treasure-hunters must have been plumb loco," we decided, wondering how they could have got up that pole without breaking their necks.

Ninety meters into the passage the center of the ceiling rose dramatically to maybe 40 meters (130 feet) and the whirr of countless batwings filled the chamber. We were now walking on a layer of extremely dry, powdery guano, which reminded Larry he had forgotten his mask. We all tried not to breathe too much and proceeded deeper into the cave.

On the other side of a hole ten meters deep we came to the end of the passage and arrived at a special treat for those who brave the guano... there on the right, standing all by itself, was an enormous white stalagmite in the shape of a bell about seven feet high and perfectly proportioned. Next to this most unusual formation we left a cave register so visitors can write vivid comments like "WOW!" about the bell.

THE CAVE ABOVE THE CAVE

Backtracking to the Dome Room, we found two more exits from the cave, one very beautifully decorated and the other providing us with a sane way to get in and out of the cave without climbing any rotting poles.

On our way back to the farmhouse, we stopped to enjoy the cool, drinkable water of a spring that feeds the little river below the cave. We also ran into a CEO contingent backpacking in to camp near the spring.

That night, after making a hot soup for ailing Jesús, we sat atop a hill near the ranch watching a typical dry-season fire burn up another hill like ours, all the while enjoying a wild serenade from hundreds of large cicadas in the bushes around us.

Next morning we surveyed the cave with the CEO gang's help. Just about the time we finished, Mario Guerrero showed us a two or three-meter-high vertical passage not far from the Easy Entrance. "I climbed up to a point where I could see several horizontal passages which seem to be right above the roof of the Dome Room," he said. Of course, we immediately thought of that pole-crossed hole we had seen in the ceiling... and of rumors Don Pancho had mentioned,

about a way of getting inside the cave from the top of the hill. Certainly there must be a "second floor" to the cave and perhaps there's some truth to the claim that "the whole darn hill is hollow."

EPILOGUE: VAMPIRES, HISTO AND THE MEZZANINE

We returned to La Salitrera Cave on October 15-16. The rainy season had turned the trickling spring into a regular Niagara and had left the river wide and deep enough to swim in. Inside the cave, however, we found no indication whatsoever that water had got in during the last six months (perhaps putting a damper on the likelihood of a vertical entrance on the hilltop). We did find, a good distance from the main bat colony, a small group of vampire bats which occasionally produced a "black drizzle" from their roost high on the ceiling of the Dome Room. A few meters from this shower, one of the vampires lay dead on the floor.

While visiting the Bell formation, we collected a sample of the non-vampire guano for Doctor Amado González Mendoza of the Social Security Medical Center, who is studying the presence of histoplasmosis spores in soil (and now guano) samples taken from all over Jalisco. We then spent considerable time and effort in throwing a rope over a huge formation near the ceiling of the Dome Room so that Jesús and Susy could climb up to investigate what we hoped were passages leading to the "second floor." Unfortunately, the Mezzanine that Jesús eventually reached, led to dead ends. Mario's passage and the Second-Floor Window still remained unchecked.



LA ZAGA DE THE SAGA OF LAS TIERRAS NUECAS

por Susana Ibarra de Pint

John J. Pint

De una gran riqueza en tierra-caliza, esta área había atraído nuestra curiosidad desde hacía ya algún tiempo. Había sido, por cierto, don Pancho Leautaud (miembro del Cuerpo de Exploradores de Occidente) quien había despertado esa curiosidad... aunque no de una manera muy entusiasta que digamos, pues en "una cueva muy grande" contrajo la histoplasmosis que casi lo arrancó del mundo de los vivos.

Realizamos entonces John, Jesús y yo, un primer viaje el 17 de julio, es decir cuando se había iniciado ya la temporada de lluvias. La mañana del día que partimos, para nuestra fortuna, era espléndida y casi olvidamos ese fenómeno. Sin embargo, ya sobre la carretera que conduce a nuestro destino, en la distancia se divisaban ya las montañas que forman parte de la sierra de Tapalpa, detrás de las mismas el cielo se pintaba de un gris oscuro que se esclarecía por los relámpagos cada vez más frecuentes. Aunque de éste lado, era allí hacia donde nos dirigíamos pero ya nada podía hacernos retroceder.

Afortunadamente, la tormenta, que nos acompañó un buen rato en el camino, decidió cambiar su ruta y cuando llegamos a las cercanías del pueblo, el cielo se había despejado abriendo paso a un atardecer que hacía resaltar la belleza que el campo adquiere en esta época del año.

Acampamos de este lado del pueblo y a las 7:00 de la mañana del día siguiente nos encontrábamos en la veredita que sube a las lagunas, casi en la punta del cerro. Un lugareño nos había dicho que tardaríamos unas dos horas de camino y no se equivocó. Ya allí, consultamos el mapa topográfico y nos pusimos manos a la obra. Señalándonos un lugar, unos vaqueros nos informaron que "por allí había muchos resumideros", así pues, saltamos un lienzo y, efectivamente, allí cerca encontramos uno que inmediatamente decidimos investigar. Bajamos unos 4 mts., hasta donde parecía la entrada a un tiro en el que se veían algunos vestigios de concreciones y salimos luego a dar un vistazo general por

THE HOLLOW LAND

A MADCAP VISIT TO A NEW CAVING FRONTIER

On top of the mountain there are several lakes, but they are really much more than lakes, for they are nestled in dolines, large, funnel-shaped depressions normally with drains (and caves!) at the bottom. However, on this mountain top some of the drains became plugged, creating several solitary lakes which have given this spot the name Lagunillas, The Lagoons ...

"What about the Dolines that aren't plugged up?" we wondered. "Why do the people of J___ call the whole limestone mountain top The Hollow Land?" It sounded more than promising, so, even though the rainy season is not the caving season, we decided to go have a look.

Since the lakes can only be reached by a two-hour climb from the village of J___, we planned on backpacking up and spending two nights camped next to one of the beautiful lakes on the solitary mountain top.

THE EXPLODING RABBIT

While Susy and I drove behind in our Jeep, Mano and Jesús brought the promise of excitement and mystery to the trip, for they were piloting Mano's newly purchased, used VW Caribe (Rabbit in the USA) on its maiden long-distance voyage. The theory was that if this car could survive one of our typical caving trips, without a doubt it could be pronounced roadworthy.

Mano's vehicle did quite well during the first hour as we whizzed over asphalted roads with no hazard greater than an occasional gaping pothole or stray steer. It kept chugging along, too, over the dusty dirt road where we spent the next two hours bumping our way up and down steep hills, alongside perilous precipices and across several shallow rivers. However, when we finally got good and far from civilization, the Caribe-Rabbit suddenly screeched to

los alrededores. Encontramos algunas posibles entradas y muchas otras que se taparon con el tiempo o por la mano del hombre. Descubrimos así por qué le llaman allí las Tierras Huecas. Viendo, sin embargo, el reloj y considerando que nos esperaba todavía la bajada además del viaje de regreso a casa, pensamos que era prudente planear otro viaje para más tarde.

Jesús consultó su brújula y sugirió un atajo. "Si estás absolutamente seguro de lo que dices, te seguimos," le dijo John y yo lo apoyé. Algo le falló, no obstante, y la pérdida que nos... dimos! Pasamos más de una hora con la consabida serie de interrogativas y pensamientos negros. "¿Ves algo, Jesús,?" le preguntaba yo desesperada desde abajo mientras él casi se perdía mirando por la copa de un pino altísimo. "No... nada". Me veía ya pasando la noche acurrucados los tres debajo de un árbol en medio de una lluvia torrencial para luego, al día siguiente, darnos cuenta de que estábamos exactamente en lo alto de un precipicio desde el cual podíamos ver el pueblo allá, a lo lejos y cómo bajar por las paredes gigantescas y casi lisas!

... Bueno, afortunadamente no fueron mas que pensamientos negros, pues subiendo y bajando piedras y arroyos, de pronto reconoci-

mos una cierta área y, sí: allá abajo, entre los árboles, se entreveía la laguna grande. Fue como ver una aparición celestial y, como cabritos locos, bajamos corriendo... ¡hogar, dulce hogar!



DE NUEVO LAS TIERRAS HUECAS

Iniciamos un segundo viaje el 26 de agosto (ya en plena época de lluvias!) Esta vez íbamos John, Jesús, Mano y yo. El comienzo también había sido afortunado, por una parte, pues por la mañana no llovió. Por otra parte fue un comienzo poco afortunado "gracias" a la Caribe de Mano, que decidió poner en evidencia lo que tantas veces sucede con los vehículos recién salidos del taller: están peor que cuando entraron. Casi saliendo de Chiquilistlán ésta se detuvo. Las dos puertas delanteras se abrieron y, como balas, Mano y Jesús salieron con una cara de preocupación que nos

a halt (if it's possible to screech at 5 MPH), both doors flew open and out leaped Mano and Jesús onto the road followed by a huge cloud of white smoke billowing forth from inside the car.

IT MUST'VE BEEN THE GERMANS

Susy and I had been following right behind in the Jeep, ready to pick up any pieces that should fall off Mano's precious new possession. As we approached, Jesús reemerged from the smoky interior with something in his hand. "It's just a fuse," he said, showing us a most curious piece of half-melted plastic. "you mean it was a fuse," I commented. "Nothing is left but the metal strip. If it was hot enough to melt plastic, why didn't this thing blow like fuses are supposed to? ..." We eventually discovered that all of the car's fuses contained the same indestructible, unmeltable metal strips, no doubt manufactured by some local entrepreneur who got tired of changing "those damn German fuses that keep blowing all the time."

We also discovered that Mano now had no headlights, but as it was daytime, we weren't too concerned and continued on down the winding road to J.

Just as we were about to cross the great patch of mud that welcomes visitors at the edge of town, the Caribe halted and once again discharged Mano and Jesús, followed by another huge white cloud, only this time it came from under the hood.

Fortunately, the cloud was merely steam from a broken radiator hose, which we quickly fixed by cutting an inch off one end. That was when we asked Mano if anyone had looked over the car before, or at least after he had purchased it. Yes, he said, a mechanic had inspected it, but maybe not too thoroughly...

TOO MANY CAVES TO MENTION

Once we parked the cars, our luck changed. To increase the chances that our vehicles would be still be there after returning from the mountain, we asked a man in a nearby doorway if we could leave them in the street for a few nights. He said it would be all right, and, by the way, we were welcome to camp up around Lagunillas which just happened to be his property!

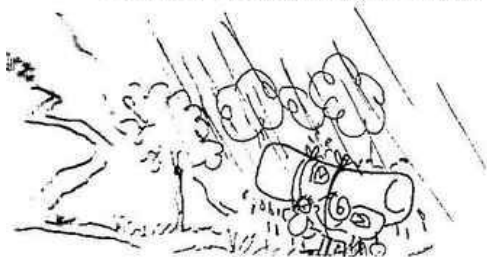
We thanked the man and asked about caves. He replied that there were so many it would be difficult to describe them all. That was why the pastures just beyond the lakes are locally known as Las Tierras Huecas, The Hollow Land. he did, however, specifically describe a hole where



hizo a John y a mí mirarnos alarmados uno a otro. "Ha de ser un fusible", tímidamente explicó Mano y se pusieron los tres a revisar la caja de fusibles. Aún yo, sin saber nada de mecánica, me dí cuenta de que, si lo que quedaba allí eran fusibles, la Caribe funcionaba sólo gracias a fuerzas invisibles lejos de toda comprensión humana. Así pues, confiando en que dichas fuerzas seguirían en nuestro apoyo, continuamos. En un sentido vaya que ayudaron pues la siguiente diablura se le ocurrió ya casi en el pueblo. John y yo íbamos adelante en el Jeep y, de pronto, en una bajadita, la Caribe se perdió de vista. Como no aparecía, me eché en reversa y, sí, allí estaba la Caribe envuelta en una gran nube de humo y Jesús y Mano tratando de sacudírsela. Una de las mangueras que van al radiador se había soltado. Medio arreglaron los tres el problema y entramos al pueblo en donde los tres vehículos se quedaron estacionados enfrente de la casa del amable dueño de un rancho entre las Tierras Huecas.

Pronto, el pequeño cortejo de los cuatro se iba perdiendo en la veredita que sube a las lagunas, mochilas grandes al hombro, cargando lo que era necesario para acampar allá dos noches. El más cargado, por cierto, era Jesús, quien insistió en llevar a cuestas, además de su equipo, el inmenso morral que contenía todas las cuerdas y que pesaría casi tanto como él mismo. "No, mira, Jesús..." no sirvió de nada. El solito lo cargaría y nadie más. Desde allá arriba, Jesucristo lo estaría observando con simpatía recordando su calvario hace 2000 años. Nuestro Jesús, aquí, ciertamente había tenido más suerte pues sufrió sólo una caída causada, él asegura, por el mal acomodo que John sugirió para su cargamento. Caída bastante penosa, eso sí, que pudo costarle una seria fractura en la espalda si él hubiera tratado de levantarse solo.

--> p. 19



you could hear a thrown rock bounce for a long time before finally splashing into water far below ... all year round.

This news seemed to justify Jesús' contention that, on top (literally) of all our camping gear, we ought to backpack up all of our ropes. I suggested that the 100 meter one would be enough, but Jesús offered to carry the entire, full, 20 ton rope bag all by himself. "Live and learn," I figured.

Half-way up the mountain, we heard the first clap of thunder...

SOGGY ROPE DOES WEIGH MORE

Unfortunately, only Susy got to witness what was undoubtedly the most memorable scene of the whole trip, which occurred during the heaviest downpour of the storm that attacked us on the way up. Three of us had been resting under the sparse shelter of some tall bushes and when Jesús didn't show up for a while, Susy, whose wet packed merely weighed 3000 pounds (far less than the others), slogged her way back around the bend below us and there found Jesús tipped over backwards, his two gigantic packs on the ground and his feet in the air! If ever a Mexican caver deserved the Moctezuma Award for long-suffering, but avoidable torture, it's Jesús.

At last, an hour after sunset, we reached the edge of the largest lake, where we were granted a half hour of clear skies to set up our tents. That night I slept like a rock while Susy slept on the rocks, her air mattress having sprung a leak. Oddly enough, the next evening I found the mattresses had been switched, affording me many fine, sleepless opportunities to get up and chase away visiting horses and cows during the night.

DOWN THE DRAIN

Next morning the sun shone brightly and we set off for a resumidero (natural drainhole) we had discovered on a short visit some months earlier. This hole is at the side of a small doline just past the second lake. We dumped a few thousand meters of cord from the famous rope bag, tied on to a tree, and made our way into the resumidero. It turned out we only needed about 30 meters of all that rope, even though we went down past six different levels. But at the bottom of the seventh, we found a small hole choked with boulders and debris. The water obviously continued beyond this point, but it was the end of the trail for us.

This hole, however, had other features which confirmed our enthusiastic speculations about the entire area,

--> p. 19

MURCIELAGOS EN MONITOS

Por: JESUS MORENO

A VER NIÑOS, LA VEZ PASADA VIMOS COMO SON LOS MURCIELAGOS



AHORA VAMOS A VER ALGUNAS ESPECIES DE MURCIELAGOS MEXICANOS



¡HUY! SON UN CHORRO



COMO 60 GENEROS

POR ESO VAMOS A VERLOS SEGUN SUS COSTUMBRES ALIMENTICIAS



HAY MURCIELAGOS QUE SE ALIMENTAN DE: INSECTOS, FRUTOS Y SEMILLAS, NECTAR Y POLLEN, PECES, SANGRE Y LOS CARNIVOROS

BURP



¿COMO? ENTONCES... ¿NO HAY MURCIELAGOS QUE SE COMEN A LAS DONCELLAS INDEFENSAS?



NO, A ESOS LES DECIMOS DE OTRO MODO



PARA EMPEZAR ESTAN LOS QUE COMEN SANGRE, O SEA LOS VAMPIROS.

PERO DE ESOS YA HABLAMOS EN EL NUMERO PASADO.

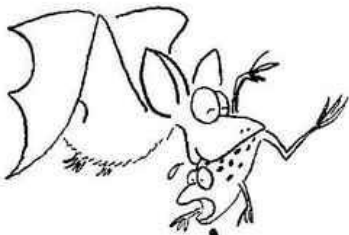
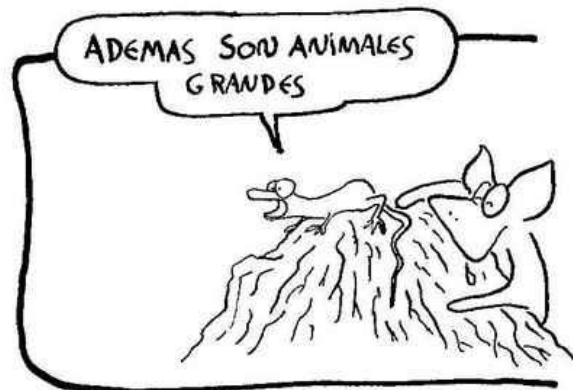


ASI QUE CORRALE Y CONSIGA EL NUMERO PASADO



PRIMERO LOS
MURCIELAGOS
CARNIVOROS

COMO SU NOMBRE INDICA
ESTOS MURCIELAGOS SE ALIMENTAN
DE PEQUEÑOS ANIMALES; RANAS,
LAGARTIJAS, RATONES....



ESTOS ANIMALITOS SON
TROPICALES Y VIVEN EN
VERACRUZ, TABASCO, PENINSULA
DE YUCATAN Y CHIAPAS.

ASI ES, EL MURCIELAGO MAS
GRANDE DE MEXICO, PERTENECE
A ESTA CATEGORIA



CON UNA
ENVERGADURA
DE 70 CMS

¡Y EL NOMBRECITO!

ME LLAMO:
Vampyrum spectrum



DESGRACIADAMENTE
SOLO SE CONOCEN
UNOS POCOS EJEMPLARES
DE ESTE HERMOSO
ANIMAL, EN EL ESTADO
DE VERACRUZ

O AFORTUNADAMENTE,
SI USTED ES RANA,
SAPO, RATON O CUALQUIER
COSA PARECIDA,

Y LUEGO LE
SEGUIMOS, ME
HABLA MI MAMA



Para colmo, comenzó a llover y al rato la lluvia se convirtió en tormenta con granizo y, como pudimos, le seguimos. Esta vez la subida nos llevó poco más de cuatro horas y llegamos arriba cuando ya empezaba a oscurecer. La lluvia se había calmado y apenas montamos las tiendas arreció de nuevo.

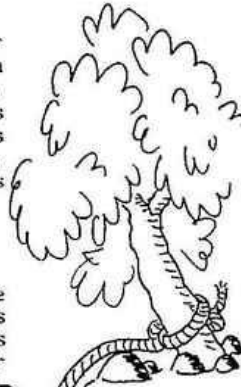
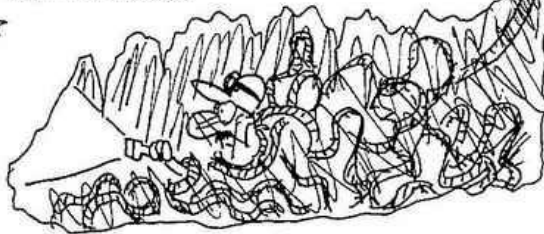
EL TIRO "PEOR ES NADA"

El día siguiente amaneció bastante gris, aunque con destellos de buenas esperanzas pues de vez en cuando las nubes se desgajaban para dejar entrever un cielo azul intenso.

El café para el desayuno esta vez tenía un sabor y un color un tanto diferente ya que, sabiendo que allá encontraríamos agua, no habíamos llevado el precioso líquido de acá por ser bastante pesado. El color del agua en las lagunas era rojizo por el color de la tierra, además de que estaba un tanto revolcada debido al movimiento causado por las lluvias así como por el ganado, verdadero dueño de esos territorios. De la manera que sea, siendo un elemento tan vital, nos supo a gloria.

La laguna grande había crecido de tal manera que el camino que habíamos tomado la vez anterior había desaparecido bajo sus aguas, así que buscamos otro entre los muchos trazados por el ganado que constantemente sube y baja.

La verdad es que esperábamos que el tiro al que entramos la vez anterior llevara a algún lugar así que, con gran entusiasmo atamos la cuerda más larga Y John y Jesús bajaron. (¡Desgraciadamente! sólo necesitaron 30 de los 100 metros que mide la cuerda!) Desilusionados decidimos ir en busca de "la cueva de don Pancho Leautaud" pero, en ese momento, las nubes comenzaron a juntarse y amenazar con tormenta... Sí, tuvimos que regresar y nos pusimos a matar el tiempo jugando cartas dentro de una de las tiendas. Entre bromas comentábamos que, bueno, tal vez a los ojos de muchos había sido una locura planear un viaje del que -a causa de las lluvias- poco podíamos esperar. Nuestras familias ciertamente están ya acostumbradas a nuestras locuras y nuestros padres a vernos partir con un suspiro de resignación "¿qué haría para merecer esto?" tal vez preguntándose en el fondo. Lo único que sé es que, viviendo en un mundo tan lleno de contrastes, tan lleno de absurdos, nuestras locuras son... muy hermosas.



for the room at the bottom of the seventh level was half-covered with a fine variety of speleothems: white flowstone, golden curtains and a sprinkling of stalactites. What might be awaiting us once we've found our way down to the water table?

The rest of the day was to have been dedicated to finding the super-deep pit described by the land owner... however, a few rumbles from the sky turned out to be harbingers of several other powerful storms awaiting their chance to catch us off guard. To make a long story short, our only discovery that day was made during one of the sun-drenched lulls between storms, when the lake was investigated for swimability and found to merit three stars, not for the murkiness of its reddish water, but for the softness of the grassy bottom around the shoreline.

HISTO OR GOLD?

When we finally headed back down the mountain, we got all the sunshine and blue skies we had wanted on the days before. The cow trail we always follow was a sea of black mud a foot deep, giving us plenty of time to observe and collect some of the many unusual plants and insects we came upon. By the time we got to the bottom, we all needed a cool drink, especially Jesús (still panting beneath the soggy rope bag).

By the purest of chances (anywhere else but Mexico!) we stumbled into the shop of an amiable old-timer who was most interested in our exploration. He knew of several large, well-decorated caves on the mountain top. One of these, however, he suggested we not visit, as "Thirty people have contracted histoplasmosis from it." Certainly one of those thirty people is Don Pancho Leautaud of CEO, the man who first got us hunting in this area and who had long ago warned us of such a cave. Oddly enough, the old-timer insisted there is no bat guano in "Histo Cave." He also kindly offered to show us the other caves "any time we want" and wished us well in our "treasure-hunting adventures" We explained that we weren't looking for gold, but always dragged tons of gear up mountains, mainly for the pleasure of measuring dark, tight crawlways full of mud and bats. Then we paid for our drinks and left. "¡Hasta luego!" shouted the kindly caballero, "and next time don't forget your metal-detector!"



MEXICAN MIRACLES, AS USUAL

The crafty Caribe-Rabbit was suspiciously well-behaved as we cautiously exited J past the mud and over the narrow bridge without a guard rail. Then, after twenty minutes of steady uphill driving, we decided we must have gotten all the bugs out of it, for if it was going to overheat, it would surely— at that precise moment, the perverse machine spouted a new geyser of scalding steam.

We lifted the hood and discovered that another water hose had split, but this time the long way! On top of that, steam could be seen leaking from what appeared to be a wad of ... gulp, surely it was epoxy and not chewing gum ... plugging what looked like a (shudder) hole in the engine block!

Ah, dear reader, you are about to say, "and that was the end of that! They all piled into the Jeep and went home." But no, you forget these events occurred in Mexico, where the Great Provider Up Above stations 98% of the heavenly hordes, mainly to keep cars from falling off hairpin mountain curves, but also to straighten out messes like this one.

¡Sí, amigos! Not more than five seconds later, steam still hanging in the air, we were visited by an

overloaded truckful of assorted goods, animals and people, one of whom just happened to be a mechanic from the next village, where he just happened to know a used radiator-hose salesman who might just happen to have the size we needed ...

THE ATTACK OF THE SAVAGE MARAUDER BATTERY

And so it happened! But, several hours later, once we had that used hose installed, it occurred to me to wonder aloud why the engine had turned into a steam generator. "Maybe," I was told, it's because the engine fan hasn't been turning lately." That surely being the understatement of the year, we decided to investigate the errant, electrical fan and found it unwilling to spin due to a bad connection, which, in turn, appeared to have been provoked by the car battery, which was not clamped in a fixed spot like your ordinary battery, but unshackled and free to roam about the engine compartment, happily bouncing to and fro in a shower of sparks and electrolyte.

Once we got the varmint lashed down and the fan, headlights and other useful components reconnected, the incredible Caribe began to behave like a model of virtue and, still under the protection of our heavenly umbrella, we peacefully wended our way back home.

