

Mexico

Who Cares about Mexican Bats?



Los Murcielagos

BY JOHN J. PINT

If you believe U.S. bats are misunderstood and endangered, think about what their Mexican cousins are up against. For the last eight years we have been caving in remote areas of western Mexico and from what we have observed, *los murcielagos* are going to disappear unless someone does something pronto.

“Murcielagos?” queried the old ranchero when we told him we were hunting for bat caves, “—ah, you mean those horrible vampiros that drink the blood of my horses. Si, si, there are a whole bunch of them living in Jorge’s barn. Wish we could figure out a way to get rid of them altogether.” We wandered over to Jorge’s place and found plenty of bat guano in the barn... none of it from vampires. Up in the rafters there was not a bat to be seen. Apparently someone had finally succeeded in “getting rid of them altogether.” We told our informant about the differences between good bats and vampires and how easy it is to distinguish the latter, especially by their semi-liquid, tar-like droppings. That’s when the old man admitted there was a cave in the nearby hills:

“Don’t really know if those were vampires inside there or not,” he mused, “but anyhow, it’s too late. We rolled a big boulder to the entrance—sealed it up real tight. Funny thing is we’ve still got vampires attacking our horses.”

The War Against Bats

Chicken wire, dynamite and bonfires are just a few of the weapons employed by *campesinos* and *rancheros* in their relentless war against bats. And, of

course, without realizing it, they’re also killing them off by the liberal use of some extremely nasty insecticides... frequently sold south of the border by enterprising *gringos* once the stuff is banned in the USA.

A cartoon study of bats, by Jesus Moreno, appeared over the years in *Subterraneo*, the bilingual newsletter of Grupo Espeleologico ZOTZ. It had been hoped that a guide for *campesinos* would be drawn from this material, but the printing and nationwide distribution of such a brochure still remain formidable obstacles.

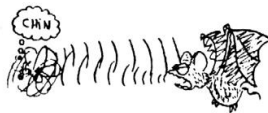
The *Campesinos’* War Against Bats appears to be succeeding spectacularly. Pat Morton of Bat Conservation International wrote us last year, mentioning that “we recently completed some *Tadarida brasiliensis* (Mexican free-tailed) cave surveys in Northern Mexico and found population declines of more than 95% at most sites.” This is a scientist’s way of telling us that an all-out *disaster* is taking place!

We know that bats are beneficial in many ways, but in Mexico they may be *essential* to the survival of desert life as

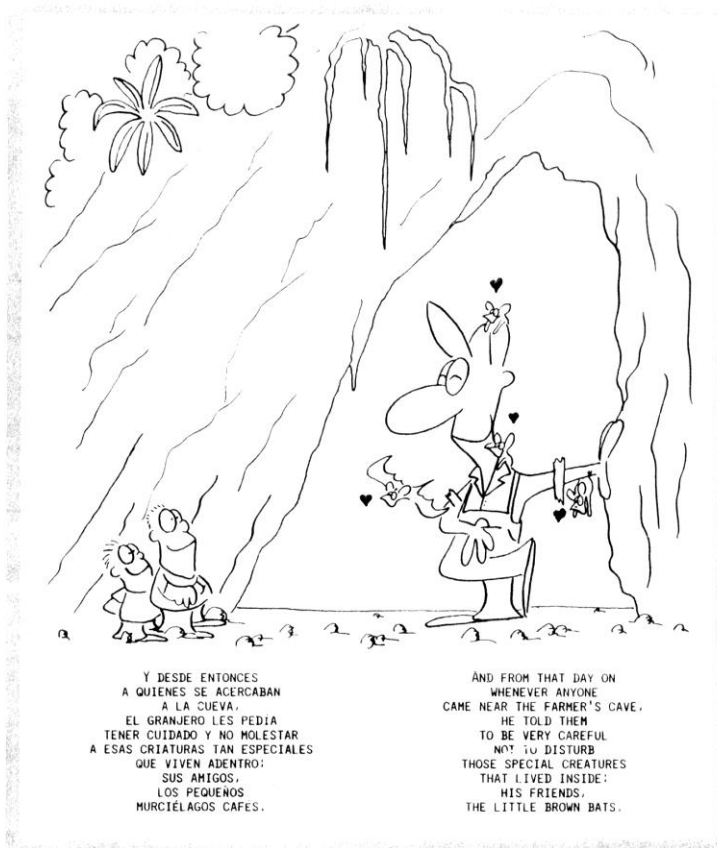
LOS MURCIELAGOS VUELAN GRACIAS A UNA MEMBRANA DE PIEL QUE UNE SUS DEDOS Y FORMA LAS ALAS. - Bats can fly thanks to a membrane which connects their “fingers” to form wings.



OTRA CARACTERISTICA NOTABLE ES EL USO DE LA ECOLOCACION. - Another of their special characteristics is the use of a system called echolocation.



DE ESTE MODO EL MURCIELAGO LANZA UN SONIDO ULTRASONICO Y AL ESCUCHAR EL ECO QUE REBOTA, PUEDE ORIENTARSE EN TOTAL OSCURIDAD Y ENCONTRAR SU COMIDA. - The bat emits an ultrasonic signal and listens to the echo that bounces back. In this way it can get around in total darkness and locate its food. “CHIN” = “Dang it!”



Page from "The Farmer and the Bats" by John Pint and Jesus Moreno. This children's book, based on an anecdote from Merlin Tuttle, proved very popular among Mexican children but too expensive to reproduce.

make you feel effective and maybe aid in raising money, but none of this will *really* affect the War Against Bats until the people responsible are contacted.

Talking "Country"

These people often live well beyond the point where the last dirt road turns into a footpath. Frequently they have little formal education. They are usually far out of the range of big-city media and probably have no electricity. What they do possess is the common sense and intimate contact with nature shared by country folk who live in the middle of nowhere. In our experience, they only lack a little bit of information, and we have thought long and hard about how conservationists could get that information across. Here are two possibilities:

First, a small comic book describing bats in general and vampire bats in particular, could be produced. Such a publication would get its message through even to the illiterate. It could be distributed via existing support/supply organizations for ranchers and farmers (perhaps the ones that sell all that potent insecticide) and would probably be read simply because *vampiros* are a big worry out in the boonies. Of course, cavers could distribute such material much more effectively.

Second, radio spots could appear on the "ranchero" (Mexican country music) stations which every *campesino* worth his *mezcal* listens to all day long (at the highest volume possible) on battery-powered radios.

Alas, both of these projects would cost money. As an example of the good that a little bit of info can do, take our visit to a ranch called El Ojo de Agua (the Water Hole) in an out-of-the-way corner of the state of Jalisco....

The Cave That Cuts Through the Mountain

"I know a cave up in the hills and there's gold inside it, *seguro*," exclaimed Paulo, a one-armed man with a dazzling smile and an unwavering belief that all Mexican caves are loaded with treasure

we know it. Practically everything that grows in the desert, from *agaves* to *pitayos* depends on bats for pollination. When the bats go, the desert plants go, along with most of the flora and fauna around them. So, naturally, you would expect a lot to be happening in this country in respect to bat conservation.

Perhaps something is happening, but not around here. In all these years, practically the only efforts we are aware of are our own, and our principal interest has always been *caving*. Nevertheless, we've written newspaper articles on bats, spoken on radio and TV and put on Merlin Tuttle's wonderful slide shows wherever and whenever possible. Unfortunately, these activities have probably done very little to change things. What we are *sure* has dramatically improved the bats' chances of survival in a certain locality has been our conversations with the very people whose cattle are afflicted by vampire bats and whose understanding of bats was dangerously confused.

Vampire Busters

The Mexican government has an "anti-vampire" department whose members are supposed to be educating and assisting *campesinos*. Their efforts seem minimal. Over the years we have talked to hundreds of local people and only once were we told that the "vampire busters" had come to someone's aid. And, yes, this was the only time we found people who realized that some bats are not vampires. The government assistance is falling behind in western Mexico, because our return trips to the same caves over many years suggest that vampire populations are not declining, but growing steadily.

It should be mentioned that there are some university professors and students studying bats in this country, though their goals seem to be mainly academic.

People who would like to dedicate some of their time to Mexican Bat Conservation should be aware that appearing on TV or writing an article can



buried by the savings-conscious *bandidos* of yesteryear.

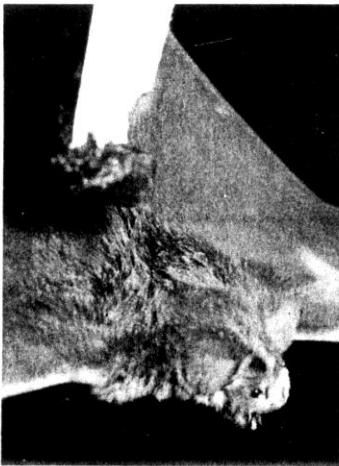
Upon our arrival in El Ojo de Agua, Paulo immediately offered us accommodations in the hacienda guest house, followed by an invitation to enjoy a swim in the spring-fed pool and a delicious *tatemada* meal.

Contrast this to other places in the world where two total strangers might have been welcomed with a shotgun and an ominous "Git off o' my land!" Instead, Paulo immediately took us on a tour of shelter caves in the cliff below the ranch.

Later, we followed him up the steep mountain trail for about four hours. This is easier said than done when the temperature is in the 90's. However, Paulo's frequent reminders that "this cave goes all the way through the mountain," kept us moving, even though we had heard such claims before (only the caves usually ended five meters beyond the entrance).

Barricade

Finally we came to the cave entrance at the bottom of a bushy fold in the hills. To



our surprise, the opening was completely covered by a patchwork of mesh held tightly in place by barbed wire and a framework of stout branches. "What's this all about?" we asked.

Paulo explained that the cave had been filled with dreaded vampires, but luckily, the men we met along the way had "taken care of the problem." With the help of pliers, we made a slit in one side of the formidable barricade and climbed inside.

We were in a passage about six feet high, strewn with large chunks of breakdown. Following this slowly for about half an hour, we checked for side passages and photographed several large stalactites. Then we saw light. "Maybe we've finally found a cave that does go straight through the mountain," we quipped. But as we entered a wide room with a high ceiling, we saw that this second entrance was sealed with another bat barricade.

We backtracked and as we approached our starting point, my wife Susy spotted a very low crawlway. A few minutes later we heard a tiny voice calling from afar: "I'm in another trunk passage, a real beauty." This branch of the cave turned out to have its own entrance (also bat-proofed) near the start of the first passage.

VAMPIRE BUSTING—A vampire bat's back is "painted" with a mixture of strychnine and petroleum jelly. The poison will supposedly affect the rest of its colony as they attempt to lick this member clean. Unfortunately, the Mexican government agents in charge of this project have difficulty obtaining the fine-mesh nets needed to catch the vampires. If they had the training, gear and inclination to go directly to the caves, they might have better luck.

No Way Out

The floor of this new section of the cave was covered with a thick, spongy layer of guano. The farther we walked, the more we were convinced that many thousands of bats had once lived here. Now, there was not one to be seen.

The texture and reddish color of the walls brought a special beauty to this passage. Soon we were threading our way among giant breakdown rocks. We did plenty of climbing both up and down, but never needed a rope. This challenging and enjoyable passage finally came to an end and...yes, there in front of us was light... and the ominous silhouette of chicken wire and branches. At this moment we could almost feel the panic that all those bats must have felt. Had they been caught on the inside like us—trapped, flying desperately from one entrance to another in a futile attempt to find a way out?

When we left the cave, we removed as much of the first barrier as we could (with Paulo's permission), but suspected that it would soon be put back in place. Since the cave had no name, we baptized it "Rogelio and Teresa's" after the humble couple living in a little cabin nearby... who treated us to an incredibly delicious hot dinner.

Bad Air

"We checked every inch of that cave and never found the slightest sign of vampire guano. Those *were* insect-eating bats in there and now you people have to spray your crops with poison to keep down the bugs. If there's treasure in that cave (with a glance in Paulo's direction), it's the tons of good fertilizer lying on the floor. But of course, somebody has killed off the bats that make the fertilizer."

"Caray, señor," said an old-timer. "Don't you know there is *malo aire* (bad air) in the cave? It has made a lot of people very sick." Apparently, in his enthusiasm to tell us about the gold, Paulo had "forgotten" to mention this



Luis Rojas of Guadalajara in the guano-covered main passage of La Cueva de Rogelio y Teresa, Coatlancillo, Jalisco. Photo by John Pint.



"Here's your treasure, Paulo," quips Susy Pint, handing up a bucket of guano from La Cueva de la Vacca Muerta, Coatlancillo, Jalisco. Locals believe this cave features diabolical inscriptions on its walls (in Latin, yet!), but all we found were putrifying bones, presumably belonging to a cow, and not the Devil. Photo by John Pint.

little detail.

"Well, then, don't go inside. But why put up a barrier against bats that eat bugs and pollinate plants?"

The allusion to histoplasmosis proved true. Chema, the only novice caver in our group, got a nasty case of it exactly 11 days later. The rest of us figured we were immune and decided to go back and map the cave several months later....

Equestrian Caving

Once again we were heading up the steep, narrow trail, but this time riding horses and mules which "might come in handy for carrying back the treasure," according to Paulo, the eternal optimist.

Equestrian caving is definitely for me. Instead of arriving pooped out, we reached the entrance in high form, raring to go.

Later, in the course of a rushed mapping job, we received two wonderful surprises. First, the local people had apparently *believed* us city slickers and had actually ripped aside three of the four

chicken-wire barriers. Second, we walked into the guano passage and were greeted by hundreds and hundreds of flying creatures! There were so many swirling around us and bumping into us that we had to crouch on the ground and wait several minutes for them to get used to our presence. The bats were back!

A Word to the Wise

This is only one instance of how a word or two spoken to the right people has resulted in an about-face in regard to harming bats. We've seen similar results when talking to people about cave conservation. Susy once spoke to some children who had been vandalizing a gorgeous

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cave... later they came back to apologize and to thank her: "We never thought about that before," they said. We can't expect people who have never heard a single conservation message in their lives to be aware of what *we* take for granted.

Getting the word out to the right people—country folk who know where the caves are—may be all that's needed to give beneficial bats a chance to survive. If every group caving in Mexico had a stack of illustrated booklets to distribute locally, we might be able to do a lot of good. Perhaps one day a sponsor from north or south of the border will appear for such a project. It had better be sooner than later. If we wait too long, Mexico will have no bats left but the vampires.

Comments, solutions or suggestions can be sent to the author via: Grupo Espeleológico Zotz,

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