MEXICO August 5-15 2016 Venkat Sankar



Dawn in the Oriental Basin (3 km W San Antonio Limon Totalco, VER)

Introduction:

I'd long wanted to visit Mexico, first for conifers and now for mammals and when I was thinking of where to go during the summer, this was the obvious choice. I knew August was a somewhat sub-optimal time to visit but if I didn't go then, I'd probably have to wait until next year and that wasn't an option for me. So, I started researching places to visit where I could see the largest number of endemic and otherwise interesting species in a short amount of time.

The whole trip came together rather serendipitously as I contacted a Mexican mammal enthusiast, Juan Cruzado (juancruzado@outlook.com), through iNaturalist for some help finding Perote Ground Squirrels. Juan, it turned out, was actually a researcher with extensive experience in bats and rodents of Mexico with a wealth of knowledge on Mexican mammals (he has seen about 360 of the 540 or so species in Mexico!). Better yet, he said he'd be interesting in traveling with us on a trip and help find mammals, as mammal watching is something almost unknown in Mexico.

So after several months of planning and many edits to the itinerary, we eventually came up with a trip that sounded right: a 10-day tour of the country from the Pacific Coast across the Transvolcanic Arc, then up the Altiplano to the Sierra Madre Oriental near Monterrey!

Some Tips:

Go in the dry season. While I did reasonably well considering the time of year, we had rain several nights in the evenings and sometimes all night. This effectively killed trapping a few of the nights and made mistnetting pretty much useless as there was water everywhere. As a result, we missed some key rodents in places and missed most bat species everywhere. In the end, we got about 15-20 species fewer than both Juan and I were expecting due to this.

Don't expect to see all your targets. I know this is a given for pretty much all destinations but it holds especially true in Mexico. There are loads of species here and even if you put in a lot of effort, there will still be many misses. There are two reasons for this. The first is that mammal watching is a very new concept here and the "spots" for many species still haven't been found. It will take some time, but as more people start visiting, more and more places will start becoming better known. The second reason is that many species are rare or elusive; think shrews, *Megadontomys*, and *Habromys*. These are species for which less than 10 animals are generally caught in thousands (sometimes tens of thousands) of trap nights; the chances are pretty much nonexistent in a short time. Pitfall trapping may work better for shrews if you have the time. Also, if you have specialized gopher traps, that would be very useful as well (most gopher species are too large/difficult to catch in normal Sherman traps).

Mexico is a big country. I bit off a bit more than I could chew on this trip and should have cut maybe 2 destinations. In the end, I made a few drives that were a bit too long and blew a couple of days completely. I suspect I would have gotten more species if I had just spent more time at certain places. That said, at a different time of year, spending more time might get boring as in some sites (i.e. Oriental Basin), most species are relatively easy to find.



Pinus nelsonii (Nelson's Pine), an endemic conifer of NE Mexico (Cerro del Potosi, NL)

Get local knowledge on where to look. This seems like a no-brainer, but habitat loss is so bad in many parts of the country (especially on the Plateau) that you need someone who knows an area very well to find less disturbed areas where target species can be found. Don't hesitate to use local help if you can get it.

Day-by-Day Journal:

Day 1:

After arriving in muggy Puerto Vallarta in the afternoon, we met up with Juan Cruzado, a Mexican biologist who had generously agreed to accompany me for the next ten days as a guide. Mexican mammal watching is something that

seems very much in its infancy, and Juan is one of the few people with an excellent working knowledge of the entire country (he has seen something like 360 out of Mexico's 540 mammal species in the country!).

After getting a snack in town, we got onto a water taxi (late, but safe) bound for the lazy seaside village of Yelapa. Marine mammals are sometimes seen on these crossings, with Humpback Whale (Nov-Mar only), Common Bottlenose Dolphin, and Pantropical Spotted Dolphin most common and other species such as Bryde's Whale and Rough-toothed Dolphin only seen from time to time. Unfortunately for me, the water was choppy so I saw no mammals--only a sea turtle.

After dropping our stuff in the Garcia Rentals, a cheap, clean, and beautiful place to stay only meters from the beach, we went to the house of Cheryl, Juan's friend, to set traps. After setting traps, we headed back down the hill to set a mistnet in a clearing near Cheryl's house. It was approaching nightfall and I saw a tiny bat fluttering through my spotlight beam very close, most likely an endemic **Little Yellow Bat** and the first mammal of the trip. I'd like to see this in the hand in the future by mistnetting.

We then rested a little, waiting for stuff to start hitting the net. Our first bat was a nice **Great Fruit-eating Bat**, a very common species locally; unfortunately, after this the net didn't catch anything--only a few unidentified bats bouncing off the net. The couple of traps we had set close to Cheryl's house however were much more productive, catching a **Michoacan Deer Mouse** and a very orange **Marsh Deer Mouse**, two more endemics! While walking around the garden, we also saw a large **Virginia Opossum** in a tree. After a late dinner, we headed back to our rooms and slept for the night.



Marsh (Tawny) Deer Mouse (Peromyscus perfulvus) (Yelapa, JAL)

Day 2:

In the morning, Juan and I went to check the traps and found a lot of stuff. Out of only 30 traps set, we had caught an impressive 8 animals--7 of the endemic **Painted Spiny Pocket Mice** (*Liomys pictus*) and another Michoacan Deer Mouse.

After that, we took a little walk up the river from the village and saw 3 of the endemic **Collie's Squirrels** (*Sciurus colliaei*), another species for the list. A couple of locals told us that 1-2 Ring-tailed Ground Squirrels, another beautiful endemic, could be seen from time to time sunning of the riverside rocks above the village; we looked a couple of times, but didn't see any. From there, we decided to visit the nearby bat caves. After failing to find a local as a guide, we asked around and eventually found a way there ourselves. While a number of nice species (including several Mormoopids that could be expected in such a cave) are present in the area, this cave only contained 2 common species: many **Gray Sac-winged Bats** and a small cluster of **Common Vampire Bats**. Perhaps there is more diversity here in the dry season.

Returning down from the cave, Juan and I decided to check out the nearby area for possible trapping sites. The abundant rocks around the creek line looked good for Allen's Wood Rat and areas along the streams themselves seemed promising for cotton and rice rats (Black-eared and Coues' Rice Rats and West Mexican and Allen's Cotton Rats are present in the area). While poking around some boulders along the creek, I hit a big stroke of luck when I spotted a **Mexican Giant Shrew** dash under a boulder! The boulder itself was too large to lift, but Juan and I tried flipping a few nearby rocks to get a look at the animal to no avail. While walking back, we found a nice pool next to the river to mistnet in with many Sinaloa Wrens and West Mexican Chachalacas nearby as well as a few of the endemic Mexican Spiny-tailed Iguanas.



Collie's Squirrel (Sciurus colliaei) (Yelapa, JAL)

That evening, we were hoping to mistnet (three nice species, *Myotis carteri*, *Myotis fortidens*, and *Centurio senex* are not uncommon in the area), trap, and spotlight a little for Grayish Mouse Opossum and Pygmy Spotted Skunk, two species allegedly common near town. Unfortunately, despite the best laid plans of mammal watchers and mammals, torrential rain put paid our plans and we made a hasty retreat back to the room. We were a little bummed by our bad fortune at this point...

Day 3:

Due to the heavy rain, the earliest boat was pushed out a couple of hours until 9:30, cutting into our driving time for the next destination, Michoacan. Juan figured it would still work out though, so we lugged all our stuff onto the boat and headed back to Puerto Vallarta. This time however, we were lucky with the marine mammals--a small group of the coastal form of **Pantropical Spotted Dolphins** as well as many sea turtles.

Back in Puerto Vallarta, we started on the drive to Uruapan, located on the Tarascan Plateau in Michoacan state and transition zone between temperate and tropical ecosystems. It was a long drive, punctuated at first by a roadkill Ringtailed Ground Squirrel near Compostela (a quick search nearby failed to turn up an animal) and also a roadkill Hooded Skunk and Coati (too bad we didn't see any of these alive). Near Uruapan, the terrain got very pretty with lush pine-oak forests, volcanoes, and lovely Purepecha villages. We also saw our first autodefensas in the town of Cheran, a sign of the continuing drug wars that haunt parts of this region.

In Uruapan, we met Juan's friend, Fernando, dropped our stuff in the beautiful (and cheap) Hacienda San Pedro, and got dinner, which included the best guacamole I've ever had, with local lime and avocado. We then set traps in the nearby El Zapien sector of Barranca del Cupatitzio NP, an area with a nice mammal list from previous surveys and safe and close to town. Spotlighting was pretty poor, with only a distant view of a large bat that based on size, flight pattern, and habitat, must have been an **Underwood's Mastiff Bat**. I'd like to get a good confirmed look at this species, preferably in the hand, in the future (it's a difficult species however); apparently it's common in Sierra de Huautla in Morelos.

Day 4:

Up early in the morning, eager with anticipation to check the traps in a new habitat. Unfortunately, trapping was a dead loss: no animals in 40 traps! One small compensation however was a sighting of a **Peters' Squirrel** nearby; this species was only confirmed recently in the area, around Huandacareo and Ziracuaretiro. After returning to the hacienda, Juan, Fernando, and I took a little

walk around before brunch seeing another Peters' Squirrel and a Mexican Gray Squirrel, the latter of which I missed.



Michoacan Pocket Gopher (*Zygogeomys trichopus*) mounds (photo Juan Cruzado) (Sicuicho, MIC)

We then decided to explore the nearby countryside for mammals. Using Fernando's local knowledge of the area, we first visited the town of Sicuicho in Los Reves district, on the lower slopes of Cerro Patamban, an area where he had seen Smoky Pocket Gophers a few times before. After arriving at the burrows on the nearby soccer field, we opened up a few tunnels and waited for about half an hour with no action. We then set off to a small forest clearing, rapidly converted to maize cultivation in the nearby pine forest. Here, we found the impressive cone-shaped mounds of the Michoacan Pocket Gopher. Our initial plan was to try and catch one using some larger Sherman traps we had, but given that we couldn't really excavate a good tunnel, we bailed on the idea--I think custom gopher traps would work better for this beautiful, elusive species. If you'd like to see this species, I recommend going soon as the animals will soon be gone from this area as it is being destroyed for crop cultivation. This would be a very interesting area to trap, also close to the type locality (La Palma) of the almost unknown Los Reyes Deermouse (Peromyscus sagax) and within the range of Goldman's Diminutive Woodrat (Nelsonia goldmani).

We then returned to the soccer pitch and waited a little bit, then I saw dirt flying up out of a hole and some of us glimpsed a little patch of fur--a **Smoky Pocket Gopher**. Despite watching the area for the next 15 minutes, the cunning gopher managed to plug its tunnel entrance without being seen by any of us. Unreasonable!

The initial plan was to then head into the Tierra Caliente around Nueva Italia de Ruiz to look for Tropical Ground Squirrels (*Notocitellus adocetus*), very common in the area. Unfortunately, we had spent a little more time at the gopher site than

we had realized and it was now a bit too late to safely visit the Tierra Caliente, an area known for recent issues involving drug trafficking. So we reluctantly gave up on the ground squirrels and returned to Uruapan for an early dinner.

After Juan and Fernando set traps, we then went looking for bats near town. Unfortunately, it began to rain quickly and we only saw many **Yuma Myotis** and a **Brown Rat** while returning to the accommodation. Some nice species including Hairy Fruit-eating Bat, Geoffroy's Tailless Bat, and Mexican Big-eared Bat are known from the area, however.

Day 5:

A little apprehensive given the previous day's results, Juan and I set out to check the 80 traps set the previous evening. After some initial success with a harvest mouse, identified after a lot of trial and error as a **Sumichrast's Harvest Mouse**, a difficult species, we found nothing. This must be a very difficult place to trap at this time of year! This was a real pity, as there are many other nice species in the area including Goldman's Diminutive and Mexican Woodrats, Transvolcanic and Osgood's Mice, and Volcano, Sumichrast's, Zacatecas, and Mexican Harvest Mice among other things (all except *Peromyscus hylocetes* are probably difficult to find however).



Sumichrast's Harvest Mouse (*Reithrodontomys sumichrasti*) (photo Juan Cruzado) (El Zapien, MIC)

We then started on the road to Mexico City, eating a not so great meal at a roadside restaurant. Foul weather along the way put an end to our plans for trapping in Milpa Alta, where we probably would have caught some Osgood's and Black-eared Mice and maybe a Saussure's Shrew, Volcano Harvest Mouse, or Mexican Volcano Mouse. Our first stop in the city was Chapultepec Park, where we saw the first **Mexican Gray Squirrel** literally the second we walked into the entrance gate. This was hands down my easiest mammal lifer ever! If

you miss this species here and the weather is not very bad, you need to hang up your binoculars for good. We even saw melanistic animals!

We then enjoyed a nice dinner and slept earlier for once. Juan and I were trying to formulate plans to get more mammals out of later sites at this point, as the weather had not been playing nice thus far...

Day 6:

We got up early in the morning with a little drizzle in the air, from our motel near Xochimilco, for the drive to San Pablo Oztotepec in Milpa Alta. The plan was to meet up with some community wildlife rangers and ride in their truck up to Volcan El Pelado just to the South where Volcano Rabbits are abundant. By the time we arrived at the pickup site, the weather had changed to misty and overcast, apparently optimal conditions for our target species.

The drive up to the mountain was a little quiet (sometimes Volcano Rabbits can be seen on the road), with the only interesting sighting being some very fresh Merriam's Pocket Gopher mounds along the road. Some meadows were covered with huge densities of their burrows, leading me to think that if you waited an hour in one of these sites in the morning, you'd likely be able to see an animal. Unfortunately, we couldn't do this as we had bigger fish to fry...

We got off and started walking through the bunchgrass to the forested slopes of the volcano. The rabbits prefer rocky, scrubby talus slopes on the edges of steep draws surrounded by pine forest and zacaton grasslands. After finding some very fresh scat, some minutes old, we knew we were almost on top of the rabbits. Unfortunately, the rangers informed me that since we visited in the breeding season, the rabbits were shier so good views and photos would be more difficult.



Volcano Rabbit (Romerolagus diazi) footprints (Area Communitaria Milpa Alta, DF)

After carefully searching one particularly promising draw, Juan's friend and the lead tracker, Gabriel, let out a whistle. I tried to move as quickly and quietly as possible to where he was standing and thankfully, soon after I arrived I was watching an adult **Volcano Rabbit** at close range out in the open on a log, giving

prolonged views for 30 seconds! Unfortunately, my camera was with my dad, who arrived as the rabbit began to hoon off so no pictures from this fabulous encounter...:(

We then turned our attention to the Mexican Cottontail, the other key species for the area. After searching a few areas of open pine forest, one of the trackers eventually spotted one across the draw and tried to flush it for me, but it only gave fleeting and untickable views. My dad, who was closer to the action, however saw it well and even observed 2 more Volcano Rabbits, albeit briefly!

After seeing another Peters' Squirrel and looking for more sign of the cottontails, it was getting a little late so we decided to head back and move on to our next destination. While walking back to the car however, we had to carefully climb down a steep ravine to get onto the grassy flats near the vehicle. My parents went with a few of the rangers down a closer route, while I followed Juan and Gabriel around the ridge through another area. Thank goodness for this, as when I began walking down the ravine, we flushed a lovely **Mexican Cottontail**, which gave great views! They are impressively large animals, with rufous coats, almost the size of jackrabbits (their local name is *liebre*, or hare).

Other mammals were a little thin on the ground, but did nonetheless see sign of White-eared Cotton Rats and Mexican Voles and also unsuccessfully flipped many, many rocks to look for shrews (all I suspect easier in Popo-Izta NP however, where Volcano Rabbits and Mexican Cottontails are more difficult). On the drive back, we saw an **Eastern Cottontail**. We checked several meadows where Mexican Ground Squirrels are usually easy to see, but inexplicably saw none.

We then set off and began driving towards Coatepec, Veracruz. Along the way, we missed the Mexican Ground Squirrels in Zoquiapan NP and Rio Frio (overcast, cold weather) and had an early dinner in Puebla. Near the cabins (Cabanas la Jicarita), a dark cat ran across the road in front of the car near some coffee plantations, giving us a brief hope that it might have been a Jaguarundi; I suspect it was just a dark domestic cat however. Around the lodge, we set traps and spent a little time spotlighting, seeing nothing; Ringtail, Nine-banded Armadillo, and Common Opossum are regularly seen however. One note is that Ringtail and not Cacomistle is present in the area; the two species have the same name in Spanish, "cacomixtle," so it can get confusing.

We tried using a bat detector for a bit, but only recorded a few distant molossids.

Day 7:

An early start picking up the traps and while our success was low (only one animal in 40 traps), we still caught a great **Blackish Deer Mouse**, another endemic and a beautiful, large species, very big for a *Peromyscus*. Mexican Deer

Mouse is also common in the area, with Xalapan Pine Vole and Nelson's Giant Deer Mouse half hoped for longshots (both are easier to see at Pahuatlan in the Sierra Norte of Puebla).



Black Deermouse (*Peromyscus furvus*) (near Coatepec, VER)

We then spent some time walking around the garden looking for squirrels (Deppe's and Mexican Gray Squirrels are common), but only got a brief look at a **Deppe's Squirrel** in the forest above the macadamia nut trees. We then looked around for gophers, finding the large mounds of Hispid Pocket Gopher nearby. One flung up dirt, spooked as we arrived at site, but we could not see the animal. Damn! We did observe an interesting Potoo however.

We then set off for Totalco in the little-visited Oriental Basin, an isolated patch of desert in the middle of Mexico's central Volcano arc and a hotspot for microendemic mammals. Along the way, we stopped to check out the mounds of Cofre de Perote Pocket Gopher along km129 and km125 of the toll road.

In Totalco, we immediately headed to the area around the cemetary, or *panteon*. This area, previously open grasslands (some of the last remaining in the area) was an almost certain place to see the endemic Perote Ground Squirrel. Unfortunately, since the time of Juan's last visit to the area 4-5 years ago, conditions have really changed for the worst and settlements and maize fields have taken over large portions of the once squirrel-filled grasslands. After working through a few remnant fields and seeing few burrows, we figured the best approach would be to slowly drive the road looking for squirrels (there were many burrows in the embankments).

After a little while however, it felt like we were chasing ghosts and the increasing number of livestock traveling the road forced us to leave the area, drop our stuff the cheap and clean Hotel Maria Esther in Perote, and grab a quick dinner. We then returned to Totalco to set traps, driving along a very rough track through a dry arroyo to an area west of town, on the edge of lava fields locally known as "malpais" and near the type locality for *Peromyscus bullatus*.

After setting 40 traps however, we were soon called over by a man hunting cottontails and his son. Seeing that the man was carrying a rifle, Juan carefully spoke to the man, then told me that we ought to talk to a nearby landowner before continuing to set traps. Apparently, the lookouts for the nearby farmers had seen us wandering around in the desert above the crops and were worried that we might steal something. Juan said that the farmers were going to call the police so we'd first have to notify them of our intentions before finishing the traps.

After talking to the farmers, they were ok with us setting traps in the desert, so we returned, finishing setting the traps, and spent some time spotlighting up the road. However things were pretty quiet and the bright moon didn't help either. I only saw 3 **Desert Cottontails**, a **Mexican Spiny Pocket Mouse** and a **Silky Pocket Mouse** and got a crappy, untickable look at a Phillips' Kangaroo Rat (subspecies *perotensis*) that my dad and Juan saw much better. The most memorable sighting of the evening was some Nightjar... I was starting to get worried about the area, both regarding mammal watching and species survival prospects as the degree of habitat destruction was the worst I'd ever seen.

Day 8:

We set off early to pick up the traps, and fortunately this time, the results were very good: 1 gorgeous **Phillips' Kangaroo Rat**, 4 **Zacatecan Deer Mice** (*Peromyscus difficilus*), and a vanishingly rare **Perote Mouse** (*Peromyscus bullatus*). We also caught 2 more animals that were either *P. difficilis* or *P. bullatus*, but the two species can be very similar and we weren't too sure as to their identities; my guess is *P. difficilis* though. Other species common here are *Peromyscus maniculatus* and *Baiomys taylori*. The almost unknown *Neotoma nelsoni* has been recorded near El Frijol Colorado, not far away on the same lava flow.



Perote Kangaroo Rat (*Dipodomys phillipsii perotensis*) (photo Juan Cruzado) (3 km W San Antonio Limon Totalco, VER)

Afterwards, we headed back to the *panteon* to look for ground squirrels. After a couple of misleading directions by locals to sites where only Rock Squirrels now occur we saw 2 **Rock Squirrels** and another **Desert Cottontail** ourselves. After

some frustrating searching, we had a big consolation prize however as a **Long-tailed Weasel** darted off the edge of the road, giving good views!

We then continued to the end of the road and just before stopping near a large puddle, a **Perote Ground Squirrel** dashed off the road and into a roadside burrow. Some squeaking and searching on foot nearby failed to turn up the animal again and we gave up and headed back. Along the way though we had a great looks at another different Long-tailed Weasel. Habitat destruction or not, it's an impressive place where you can see two of these animals in a day! I just wish I could've visited a few years earlier.

However, thinking back, despite all the good sightings, it's hard for me to associate Totalco with anything but sadness. The habitat loss is terrible and there is no protected area for any of these species. Juan, whose family is from the area and who has himself visited the Oriental Basin many, many times over the years tells me the habitat loss elsewhere is as bad as or worse than in around Totalco. The future for most of these species is very bleak and I'm sad to say that I may be among the last mammal watchers to observe some of these species in the wild. So go now, while you can. :(

We were now running late and Juan suspected that we may not be able to make it to Charcas, our next site in San Luis Potosi to set traps on his friend Felipe's ranch. However, this was a trade I was more than happy to make as I was starting to suspect that if I just gave up on the squirrel and postponed it for another visit, it may be extinct or near-impossible by the time I return.

Unfortunately, the rest of the day was pretty bad as traffic in Queretaro meant we couldn't reach Charcas and Felipe's ranch. This was too bad, as it cost me White-sided Jackrabbit and good chances for many other nice species, like Goldman's and White-toothed Woodrats, Cactus, Plateau, and White-ankled Mice, Arizona Myotis, Greater Long-nosed Bat, Hooded Skunk, Chihuahuan Grasshopper Mouse, Nelson's and Chihuahuan Pocket Mice, and more... I guess I'll have to go back another time; Juan knows some spots for Nelson's Kangaroo Rat nearby so I can try there too. We spent the night in San Luis Potosi and figured we'd spend the evening detecting bats at a nearby reservoir where Juan has found Arizona Myotis, Allen's Big-eared Bat, Western Mastiff Bat, Ringtail, and some other nice stuff in the past but a dramatic thunderstorm screwed that up.

Day 9:

After yesterday's disappointment, we needed some pick-us-up mammal watching. Juan figured we'd head out of San Luis Potosi early to visit the Mexican Prairie Dog town at El Tokio. After a few hours of driving, we crossed into the Nuevo Leon border and arrived at El Tokio, immediately seeing many **Mexican Prairie Dogs**, a brief look at a **Spotted Ground Squirrel**, and a

Greater Roadrunner. Given that the species can be tricky to find in the US, I wanted a better look at the ground squirrel and we spent a little time driving around and getting better sightings.



Mexican Prairie Dog (Cynomys mexicanus) (Ejido El Tokio, NL)

I wish we had more time to trap here, as there are other nice species including Nelson's Kangaroo Rat (we found probable burrows), White-ankled and Cactus Mice, White-toothed Woodrat, Nelson's and Chihuahuan Pocket Mice, and Chihuahuan Grasshopper Mouse. Hooper's Mouse occurs not far away too.

As it started heating up, we drove to Cerro del Potosi to see some interesting conifers and kill some time. Along the way, we drove through Galeana, seeing a roadkill Allen's Squirrel but no live ones. On the mountain, there were few mammals--only one of the very attractive Black (*couchii*) subspecies of Rock Squirrel. However, the conifers were great with some rare species such as *Pinus greggii* var. *greggii* and *Pinus nelsonii* (we couldn't reach the top of the mountain due to weather and time, so had to give up on *Pinus flexilis*, *Pinus culminicola*, and *Juniperus monticola*).

We then had dinner in Saltillo and drove to the Sierra de Arteaga, where we dropped our stuff in the cabins at San Antonio de las Alazanas. We first headed to a site near Lontananza, where Flat-headed Myotis has been caught in the past, to record bats and set traps. A local friend of Juan's, Rosy, was coming with us to record bats as well. While the site had produced the goods in the past with species such as Mexican and Townsend's Big-eared Bats, Allen's Big-eared Bat, and Arizona and Dark-nosed Small-footed Myotis, we had a slower night recording with **Pallas's Free-tailed Bat**, **Mexican Free-tailed Bat**, and thankfully, as it started to get later, a **Flat-headed Myotis** (*Myotis planiceps*)!

We then drove to Los Pinos, where Juan had caught Flat-headed Myotis twice in recent years to record. No luck with the endemic, rare species here, but we did

find more Pallas's and Mexican Free-tails and added a great **Big Free-tailed Bat** that flew right overhead, giving a great sequence of calls!

Day 10:

Always a sad day on the last day of a mammal watching trip, but we still had many targets so had to keep focus! Our first order of business was to check traps then get breakfast and drive to a site near Los Lirios where according to Rosy, Durango Chipmunk is easy to see. However, as we were driving up to the trapping site, a **Durango Chipmunk** ran off the side of the road--a lifer for both Juan and I! Now all we needed was a photo...



Durango Chipmunk (*Tamias durangae solivagus*) (20 km E San Antonio de las Alazanas)

We arrived at the trapping site and along with checking the traps, we also had a secondary missions of finding an Allen's Squirrel, another endemic. We had seen lots of shredded Southwestern White Pine (*Pinus strobiformis*) cones in the area the previous evening, undoubtedly the work of these squirrels. After checking the 40 traps, we had seen 5 **Allen's Squirrels**. More importantly, 2 of the traps had mammals in them! The first contained something big in it, and when we opened it, we got a big surprise--a Durango Chipmunk!

After taking the requisite photos of the animal, the first verified record from the area in decades (surprising as it seems quite common), we freed it. The second trap contained a *Peromyscus* that we soon identified as **Osgood's Mouse** (*Peromyscus gratus*). Apparently *Peromyscus melanotis, Peromyscus levipes, Neotoma mexicana*, and *Microtus mexicanus* are present in the area as well. We then drove to Monterreal for some breakfast, seeing another Durango Chipmunk along the way!

After this, it started to heat up (as usual for midday), so we went in search of another rare conifer: *Pinus pinceana*. The site was just to the west, in arid semidesert hills near the village of Cuauhtemoc. While driving there, we passed

through habitat that looked good for Flat-headed Myotis and where Mexican Long-tongued Bat, Mexican Black Bear, and White-tailed Deer (subspecies *miquihanensis*) have been seen by Rosy. After finding the pines, we drove to Monterrey for the last stop of the trip.

I still wanted to get a good photograph of an Allen's Squirrel, so Juan suggested we visit Chipinque Park before leaving Monterrey on my flight. This proved to be a good suggestion. Again, we saw our first animal 2 seconds after we passed the entrance gate into the park and saw about a dozen in the time we spent there, getting good photos. We spent a little while looking for White-nosed Coati, also common here, but didn't find any (it was too crowded on a Sunday). We then flew home.



Allen's Squirrel (Sciurus alleni) (Parque Chipingue, NL)

Other places:

Oaxaca, Chiapas, and the Yucatan peninsula are all very diverse regions full of lots more endemics and other interesting species. The Sierra Madre Occidental of Chihuahua is currently safe and has some interesting montane endemics too like *Callospermophilus madrensis*.

There are of course, many other interesting places near the route we traveled that we just didn't have time to get to: the Sierra Norte near Pahuatlan (Puebla), Popo-Izta NP, Valle de Bravo and Nevado de Toluca, the Monarch Butterfly Reserve, the Michoacan coast, Chamela-Cuixmala, Ojuelos de Jalisco (where White-sided Jackrabbits and the Northern subspecies of Phillips' K-rat is amazingly common), Charcas, Tehuacan, and more.

Then there are those sites that are currently unsafe to visit but hopefully will get better as time goes on--for example, Infiernillo in "Tierra Caliente" Michoacan (the only place where *Rhogeessa mira* occurs, alongside other endemics such as *Rhogessa alleni, Rhogeessa parvula, Glossophaga morenoi, Artibeus hirsutus,*

and *Notocitellus adocetus*), Chilpancingo area of Guerrero (where 6 species molossids were caught in 1 night including *Cynomops mexicanus*, *Eumops underwoodi*, *Nyctinomops aurispinosus*, and *Nyctinomops laticaudus*), Sierra de Guerrero (*Reithrodontomys bakeri*, *Megadontomys thomasi*, *Peromyscus megalops*, *Bauerus dubiaquercus*, *Sylvilagus insonus*), and Sinaloa (where one of Juan's friends caught 7 sp of molossids in a night).

And then there are the Islas Marias, which Juan has visited several times as part of government research projects and has seen the endemic subspecies of Tres Marias Raccoon, Little Yellow Bat, Western Red Bat, Grayish Mouse Opossum, etc.; Bauerus dubiaquercus (he has caught it 20+ times in mistnets!); Sylvilagus graysoni; Peromyscus madrensis (unfortunately almost extinct); and Myotis findleyi! This area is sadly off limits to tourists for the time being...

Conclusion:

So a fascinating trip, albeit with many twists and turns. While I was, as expected, a little sad about the many species I missed (especially that I wasn't able to get to Charcas), the stuff I did see more than compensated for it - who could be disappointed after seeing Volcano Rabbit, one of the world's great mammals?

Given that this is one of the first (perhaps the first) short-term mammal watching trips to Mexico, I certainly had more than my fair share of unexpected discoveries. I saw far less bats than I was hoping for, but saw more rare rodents. I feel in the dry season (April-May), I would have done even better. This is a country with great possibilities for the mammal watcher and finding species here will only get easier and easier as more enthusiasts visit. The most unpleasant finding was however the degree of habitat loss in many places. If you want to see Mexico's mammals, go now as I can't see the situation getting anything but worse in the near future in many areas. :(

I'm planning on returning within the next few years, to different parts of the country such as Oaxaca, Chiapas, and Yucatan, and maybe trying to swing a visit to Charcas too. All those species down there are way too tempting...

Thank you:

A huge thank you to Juan Cruzado for all your help organizing the trip and accompanying me in the field. His expertise was invaluable and I would not have found most of these species without him; accommodation and food recommendations were also cheap and very good.

Also, thanks to Cheryl Harleston, Fernando Valentinez, Monitoreo Milpa Alta (the go-to guys for Volcano Rabbits!), and Rosy Badillo for all your help in the different places we visited.

Species List: (total 42 species seen, * indicates endemic/near-endemic species)

Virginia Opossum (*Didelphis virginiana*)

^{*}Mexican Gray Squirrel (Sciurus aureogaster)



Mexican Gray Squirrel (Sciurus aureogaster) (Parque Chapultepec, DF)

Deppe's Squirrel (Sciurus deppei)

Spotted Ground Squirrel (Xerospermophilus spilosoma)



Spotted Ground Squirrel (Xerospermophilus spilosoma) (Ejido El Tokio, NL)

Rock Squirrel (Spermophilus variegatus)

^{*}Allen's Squirrel (Sciurus alleni)

^{*}Collie's Squirrel (Sciurus colliaei)

^{*}Peters's Squirrel (Sciurus oculatus)

^{*}Mexican Prairie Dog (Cynomys mexicanus)

^{*}Durango Chipmunk (Neotamias durangae)

^{*}Perote Ground Squirrel (Xerospermophilus perotensis)

[*Oriental Basin Pocket Gopher (Cratogeomys fulvescens)]



Oriental Basin Pocket Gopher (*Cratogeomys fulvescens*) mound (2 km E San Antonio Limon Totalco, VER)

*Smoky Pocket Gopher (*Cratogeomys fumosus*)
[*Merriam's Pocket Gopher (*Cratogeomys merriami*)]
[*Cofre de Perote Pocket Gopher (*Cratogeomys perotensis*)]
[Hispid Pocket Gopher (*Orthogeomys hispidus*)]
[*Michoacan Pocket Gopher (*Zygogeomys trichopus*)]

*Phillips's Kangaroo Rat (*Dipodomys phillipsii*)
Mexican Spiny Pocket Mouse (*Liomys irroratus*)
*Painted Spiny Pocket Mouse (*Liomys pictus*)



Painted Spiny Pocket Mouse (Liomys pictus) (Yelapa, JAL)

Silky Pocket Mouse (*Perognathus flavus*)

*Michoacan Deer Mouse (Osgoodomys banderanus)



Michoacan Deer Mouse (Osgoodomys banderanus) (Yelapa, JAL)

*Perote Mouse (*Peromyscus bullatus*)



Perote Mouse (*Peromyscus bullatus*) (3 km W San Antonio Limon Totalco, VER)

*Southern Rock Mouse (Zacatecan Deer Mouse) (Peromyscus difficilis)



Southern Rock Mouse (*Peromyscus difficilis*) (3 km W San Antonio Limon Totalco, VER)

^{*}Blackish Deer Mouse (Peromyscus furvus)

Osgood's Mouse (Peromyscus gratus)



Osgood's Mouse (*Peromyscus gratus*) (20 km E San Antonio de las Alazanas, COA)

*Marsh Deer Mouse (*Peromyscus perfulvus*)
Sumichrast's Harvest Mouse (*Reithrodontomys sumichrasti*)

Brown Rat (Rattus norvegicus)

*Volcano Rabbit (*Romerolagus diazi*)
Desert Cottontail (*Sylvilagus audubonii*)
*Mexican Cottontail (*Sylvilagus cunicularius*)
Eastern Cottontail (*Sylvilagus floridanus*)

*Mexican Giant Shrew (*Megasorex gigas*)

*Flat-headed Myotis (*Myotis planiceps*)
Yuma Myotis (*Myotis yumanensis*)



Yuma Myotis (*Myotis yumanensis lutosus*) (El Zapien, MIC)

*Little Yellow Bat (Rhogeessa parvula)

Underwood's Mastiff Bat (*Eumops underwoodi*) Velvety Free-tailed Bat (*Molossus molossus*) Big Free-tailed Bat (*Nyctinomops macrotis*) Mexican Free-tailed Bat (*Tadarida brasiliensis*)

Gray Sac-winged Bat (*Balantiopteryx plicata*)

Great Fruit-eating Bat (*Artibeus lituratus*)
Common Vampire Bat (*Desmodus rotundus*)

Long-tailed Weasel (Mustela frenata)

Pantropical Spotted Dolphin (Stenella attenuata)