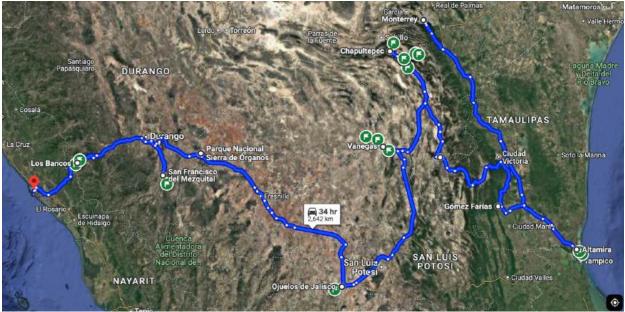
From Monterrey to Mazatlan: A Mammal Watching Adventure across Northern Mexico

Venkat Sankar & Nicole Haseley + Juan Cruzado (mammologist/guide)

INTRODUCTION

Mexico, vast, scenic, and incredibly culturally and biologically diverse, is my favorite country. And after 7 visits, I'm totally convinced that it is one of the world's great destinations for naturalists. The birders and herpers already know this well, and over the last several years – under the guidance of <u>Juan Cruzado</u>, a talented Mexican mammologist – I've made it my mission to see the country's mammal diversity too.

Mexico has a remarkable and unique mammal fauna. The country has a bewildering array of habitats and climates, ranging from the arid Sonoran and Chihuahuan Deserts to tall rainforests, bitterly cold alpine fellfields, and some of the most productive marine waters anywhere in the world. Its mammal list reflects this fact well. At 587 mammal species, Mexico's country list is the 3rd largest in the world, but even more impressive is the fact that 206 of these species are found nowhere else. In fact, Mexico is 2nd only to Indonesia in endemic mammals, but it doesn't include any large islands! The vast majority of Mexico's mammals, and especially its endemics are (often scarce & hard-to-identify) rodents and bats – which largely explains why it's very under-visited by mammal watchers. Literally dozens of these species have never been searched for, let alone seen, by non-scientists. But the country has a thriving network of talented and friendly field mammalogists who do know how to find many of them, so if you love small mammals, adventure, and surveying, I really believe that there are few more exciting places to go right now.



A rough map of our route

For this visit, we planned a road trip across N Mexico from Monterrey to Mazatlan, a region of the country I'd barely scratched the surface of on my first visit in 2016. Northern Mexico is a fascinating place with a huge diversity of habitats, encompassing much of the transition zone between the Nearctic and Neotropics. Parts of the trip felt like a natural extension of my explorations in the SW US, with the habitats and species in several sites very reminiscent of AZ or NM, albeit with much higher endemism. But there are also some amazing contrasts: lots of tropical species and even proper rainforest make it to within a 6h drive of the border – but crucially don't cross it. So only in N Mexico can you experience the singular wonder of waking up in a place that feels like Costa Rica and a half-day later, ending up in an extension of the Rockies!



Quintessential Northern Mexico: from orchids to desert in half a day

TRAVEL ADVICE

A note on safety

Northern Mexico has a bad reputation for insecurity. While it's certainly possible to visit the region safely despite this, I won't sugarcoat things and want to emphasize that the margin of error can be quite thin. Especially so for mammal watchers, considering most of our hobby consists of doing suspicious-looking things at night in remote areas. The security situation is often very fluid, localized, and may change in a matter of hours in ways that don't make the news. Thanks to his huge network of local contacts and decades of experience conducting fieldwork in difficult parts of Mexico, I have full trust in Juan to arrange safe visits to mammal sites throughout the country (or veto them if they're just too unsafe). So, if you go, please do so with him or at least trusted local guides who can keep you out of harm's way. As tempting as it is, I'd be quite cautious about exploring the region on your own for now. Throughout this report, I've indicated sites that are currently safe for independent visits (green), but do verify before you go.

Logistics

Language

Juan speaks great English now, but I'd also recommend learning some level of Spanish (even the level you can reach in about a month of effort is sufficient). While not truly essential, it'll allow you to understand what's going on more easily and chat with the local guides/biologists, which adds a lot of value to the trip. If you're traveling independently, it's absolutely essential.

Money

Make sure to always have a supply of pesos, as almost nobody takes dollars (even hotels from international brands generally refuse to exchange them). They're also absolutely essential for paying highway tolls. Credit card is rarely accepted outside cities & tourist sites. I've gotten into the habit of always withdrawing pesos whenever I pass through a city now so that I don't run out of money in remoter areas (where food, accommodation, guides, etc. will all be paid for in cash). Most credit/debit cards are accepted for cash withdrawals at the large Mexican banks.



Incredible scenery in the Sierra Madre Occidental of Durango along the old MX-50

Car rental

Car rental in Mexico is often complicated. I'd recommend starting your rental in a large city's airport as you're more likely to get the vehicle class you requested; in smaller airports, they may not have what you need or even a vehicle at all. The large multi-national brands (Hertz/Dollar, Avis/Budget) are generally run as franchises (so YMMV) – the cars I've rented from them have been in decent shape, but as is often the case these days, rentals are very pricey! You can get better rates through local outfits, though keep in mind vehicle condition can vary a lot. Always check tire pressure (including the spare!), warning lights, and oil level. Third-party liability insurance is required in Mexico and I'd recommend upgrading to the supplemental package, just in case. You can skip the damage insurance (expect a ~\$1500 deposit on your credit card) if you have trip

insurance or your credit card has it – though they may slime out of covering you, and the rental company might be more lenient if you purchase the company's CDW.

On this trip, we rented a Jeep Compass which was great for about 95% of the driving we needed to do. At least moderately high clearance is essential, and I wouldn't attempt such a trip in even a rental sedan. A 4WD/pickup is not really necessary unless you're going deep into the Sierras; if needed, transport in one can often be arranged locally.

Driving in Northern Mexico

Driving, at least by day, is generally straightforward. Major roads in N Mexico seemed to have much less traffic than elsewhere in the country and traffic cops were also far scarcer. Toll highways (cuotas) are typically excellent (though expensive!), while the free roads (libres) and minor roads are of highly variable quality. Even libres connecting major towns often have lots of speed bumps (*topes*) and deep potholes (the plague of Mexican roads), so always keep watch. In general, avoid driving long distances at night both for security reasons and the risk of sustaining serious vehicle damage from potholes, which are difficult to spot in the dark. Other drivers (even semi-trucks) are usually polite. Note that turn signals are used by other drivers to indicate whether it is safe to pass, and driving on the shoulder is common to give faster vehicles space. Blinkers or flashing headlights indicate road obstacles e.g., stalled car, cop, or livestock.



Aspen groves and even spruce-fir forest cover the highest slopes of the Sierra Madre Oriental

Accommodation

Most small towns have fairly modern, clean local hotels that make functional stops on mammal trips. These can have little online presence so you may have to ask around when you arrive in town. Pesos only, of course. We only pre-booked accommodation in touristy areas.

Mammal watching tips

When to visit

Northern Mexico should be visited from April to October; winters in the Sierra Madres are quite cold and even snowy at high elevations. The pre-monsoon period in May-June is great (outside of drought years), as is early monsoon (mid-July to mid-Aug), though the best time varies a bit for individual species. Be careful with visits to tropical sites from mid Aug-Oct: tropical storms may destroy roads and effectively prevent field work.

A note on trapping

Small mammal trapping and mistnetting are illegal in Mexico without a scientific permit, which is near-impossible for hobbyist mammal watchers to get. If you want to do these activities, you'll need to work with Juan who has the permits required to do so.



Desert Spotted Skunk (Spilogale leucoparia)

Field guides, literature, etc.

The field guide Juan uses (*Guía para identificar los MAMÍFEROS de MÉXICO*) is probably the best reference as it's designed for field identification of small mammals, but it seems to be out of print and certainly unavailable outside Mexico. The same authors more recently released a bilingual guide (*Keys for Identifying Mexican Mammals*), published by JHU Press (you can buy it on Amazon), but it seems to rely more heavily on skeletal features, so harder to use in the field. Other than that, species accounts from the Handbook of Mammals of the World are available for most Mexican mammals through the Plazi TreatmentBank and these usually contain measurements, as does the *Mammalian Species* series published by ASM. For finding sites to visit, collection localities for museum specimens of nearly all species (barring a few recent splits) can be found easily on EncicloVida (<u>https://enciclovida.mx/</u>). Lastly, I strongly encourange mammal watchers taking trips like this to upload small mammal records in iNaturalist, so we can more readily contribute to the scientific record.



Coahuila Chipmunk (Neotamias solivagus)

ITINERARY (July 26-Aug 5)

- Day 1: arrive Monterrey ca. 10AM, pick up rental car, and drive (6h) to Altamira in time for dinner & night work. Night Altamira (Holiday Inn Tampico-Altamira).
- Day 2: AM in/near Altamira, followed by drive (2h) to El Cielo in time for lunch. Afternoon & night activities in El Cielo. Night Gomez Farias (Hospedaje Sol y Luna).
- Day 3: AM in El Cielo, then drive (7h) to Arteaga. Night work nearby. Night Chapultepec (Hotel Huitzilin).
- Day 4: Full day visiting sites in the Sierra de Arteaga. Night Chapultepec (Hotel Huitzilin).
- Day 5: AM in Arteaga, then drive (4h) to Vanegas in time for dinner, trapping & spotlighting. Night Vanegas (Hotel La Antigua Estacion).

- Day 6: AM in Vanegas, then drive (5h) to Ojuelos de Jalisco via Matehuala. Night work curtailed due to car issues. Night Ojuelos de Jalisco (Hotel Ojuelos).
- Day 7: AM tire fix in Aguascalientes, then drive (5h) to PN Sierra de Organos via Zacatecas City. Night PN Sierra de Organos (park cabins).
- Day 8: Drive to Durango City (2h), and then (2h) to La Michilia (above El Mezquital). Night on a private ranch.
- Day 9: Full day on a private ranch in the Sierra de la Michilia.
- Day 10: Drive to Los Bancos (4h) via Parque la Piramide. Night in Los Bancos (homestay).
- Day 11: AM drive to Mazatlan & flight home ca. 2PM.

We were hoping to add a night or two around Mazatlan to sample mammals of the Sinaloan lowlands, but this wasn't possible due to issues with site access & security.

SITE GUIDE

Altamira (July 26-27)



The rare Tamaulipas Jackrabbit is endemic to the tropical Gulf Coastal Plain of NE Mexico

Altamira, an industrial town on the outskirts of Tampico, is about 6h by road from Monterrey. The surrounding area has remnants of a rather unique mosaic of coastal lagoons and scrubby sand dunes which hold 2 key mammal species – the Tamaulipas Jackrabbit (*Lepus altamirae*) and Tropical Pocket Gopher (*Geomys tropicalis*), both endemic to the Gulf Coastal plain of Mexico's northeastern state of Tamaulipas. For decades most of Tamaulipas has been engulfed in turf wars between rival drug cartels, making it one of Mexico's most insecure states. Although not as dangerous as the border zone of Matamoros and Reynosa, a visit to Altamira should nonetheless not be done without local assistance. So, Juan enlisted the help of his friend Gabriel Resendiz, a local biologist who knew the area's mammals well & safe places to seek them.

Few areas are safe to access at night, so Gabriel took us to some scrappy remnant coastal scrub that might hold jackrabbits. No luck, though we did see a few **Eastern Cottontails** (ssp. *connectens*) and a **Striped Skunk**, at the SE corner of its range but clearly ID'd by stripe pattern & tail length. We heard & saw many audibly echolocating bats, at least 2 of which were **Fierce Bonneted Bats**, which seem locally common; Juan and I are fairly confident of this ID based on call recordings + locality. On our return, Gabriel took us down a random side road that produced a huge surprise – great views of the very local **Desert Spotted Skunk**! A great end to an otherwise quiet night.

The next morning, we made an early visit to Dunas Doradas, per Gabriel the best jackrabbit site in the area. The dunes are controlled by the local cartel, and access is only possible by day. As he'd expected, over 2 hours we had great views of 5 **Tamaulipas Jackrabbits** – a lanky hare with bright white flanks, pale gray thighs, and 2 black neck stripes. One of the least-known *Lepus*, this species was reinstated in 2019, previously considered a subspecies of *L. californicus* for 110 years after its description in 1909. We continued to a few mosquito-infested sites for the Tropical Pocket Gopher, but the closest we got were old burrows. Still, better than I'd feared as this species has not been recorded in at least 20 years and its habitat is nearly gone.



El Cielo (July 27-28)

El Carrizo Mouse (Peromyscus ochraventer) is common within its highly restriced range

A 2-hour drive took us to the charming and very safe tropical town of Gómez Farías, the gateway to the RB El Cielo and a study in contrasts from grim, industrial Altamira. One of Mexico's most unique protected areas, El Cielo is the northernmost tropical forest on the American continent and thus a place I'd long wanted to visit. El Cielo is popular with Mexican tourists, with lots of hotels, restaurants, tour guides, etc.

After a late lunch and a bit of rest, we drove up the steep, rocky road to the cloud forest at Alta Cima. While our car made it, for peace of mind I'd recommend hiring one of the local pickups to drive you there, as we did the next morning. At Alta Cima, we met our guide, Estéban Berrones (El Cielo's top birding guide), and set 40 traps on his land near Rancho del Cielo. We drove down the mountain (seeing *Xenosaurus platyceps*), set another 30 traps in tropical semi-deciduous forest near Gómez Farías, and had dinner.

We'd initially planned to net bats near the Rio Sabinas, but high water and an afternoon thunderstorm forced a change in plans and we instead went for a night drive on the Azteca Road. El Cielo has a fascinating mammal list, with Mexican Mouse Opossum, Paca, Tayra, all 6 of Mexico's cats, Black Bear, and Mexican Red Brocket, but you'd need serious luck to see any of these. Our drive was quieter, with **White-footed Mouse**, 2 **Kinkajous**, **White-tailed Deer**, and a pair of **Central American Tapetis** (ssp. *truei*).



Tamaulipan White-ankled Mouse (*Peromyscus collinus*) can have dusky ankles, unlike other members of the *P. pectoralis* group

A driver and pickup were waiting early the next morning and drove us through torrential rain to Alta Cima, where it was only drizzling. We missed the expected Deppe's Squirrel, but our traps had 6 individuals of the micro-endemic **El Carrizo Mouse**, our key target and a lovely species with rich ochre flanks. Unsurprisingly, we did not see Tamaulipan Woodrat (*Neotoma angustapalata*), lost for 50+ years, or the very rare, undescribed harvest mouse species (*Reithrodontomys microdon* group), also endemic to this cloud forest. As expected, the lower traps were less productive, but our single capture was, as

I'd hoped, the near-endemic **Tamaulipan White-ankled Mouse**. 'Texas' Spiny Pocket Mouse and Toltec Cotton Rat are also common here.

Arteaga (July 28-30)

A 7-hour drive brought us to the limits of SE Coahuila and W Nuevo León, a peaceful & safe region reminiscent of the deserts and mountains of the US Southwest though far more biodiverse. After a quick dinner at the Hotel Huitzilin, we netted bats till midnight at a site near Chapultepec where the tiny, microendemic, and very cool Flat-headed Myotis (*Myotis planiceps*) are common. Thanks to Arturo Cruz for his help with arranging access. Surprisingly (as *M. planiceps* is usually abundant here), we caught just 2 **Fringed Myotis** and only had 1 Flat-headed Myotis on the detector.

The next morning, 15 traps at the netting site produced just 1 **Southern Rock Mouse**. 55 traps at the community reserve at Cuauahtémoc yielded no captures, another big disappointment as Juan had found the rare, endemic Hooper's Mouse (*Peromyscus hooperi*) here 2 years prior. The microendemic León Paniagua's Big-eared Bat (described just this year) often roosts in the reserve's mine tunnel, but this time it only contained 2 **Mexican Long-tongued Bats**. Overall, a fairly grim first night.



Southern Rock Mouse (Peromyscus difficilis); Allen's Squirrel (Sciurus alleni)

After lunch, we went to Monterreal to look for Coahuila Chipmunks, another extremely localized species endemic to just 3 montane forest canyons of the Sierra de Arteaga above San Antonio de las Alazanas. While the rain let up, overcast conditions meant mediocre chipmunk weather, though we saw 5 **Allen's Squirrels** and beautiful Maroon-fronted Parrots, both also endemic here. At 6PM, we split efforts, with Juan netting again at Chapultepec and Nicole and I visiting Cueva del Hundido near Puerto Grande in Nuevo León with Silvino Eduardo, a local biologist and Juan's longtime friend.

Juan couldn't catch any *M. planiceps* this time either, but we had a great night in Nuevo León. To my relief, the nets captured our major target – 6 beautiful **León Paniagua's Big-eared Bats** (which Juan & Silvino helped describe) – as well as **Fringed Myotis**. We also saw 2 **Greater Long-nosed Bats** well as they emerged and heard and saw a few **Lappet-browed Bats**, which also roost here (regularly captured, per Silvino). Rodent numbers were high, with lots of **Merriam's Kangaroo Rats**, a lovely **Merriam's Pocket Mouse**, a possible Goldman's Woodrat, and several *Peromyscus* plus a few **Black-tailed Jackrabbits**. The next morning, 70 traps here did fairly well, with singles of **Merriam's Kangaroo Rat**, **Cactus Mouse**, and **Southern White-ankled Mouse** – another endemic, with distinctive pale ankles (vs. the grayish ankles of Cactus Mice).



Leon Paniagua's Big-eared Bat (*Corynorhinus leonpaniaguae*); Southern White-ankled Mouse (*Peromyscus pecotralis*) with its white ankles

We spent a couple of late morning hours back at Los Oyameles, and this time – under sunny skies – found a **Coahuila Chipmunk** after an hour of effort. We didn't see any more despite another hour in perfect conditions, so this species should not be considered easy. Nearby (at ~8000ft on the edge of pine/douglas-fir forest), we also saw a rather large-bodied, long-eared cottontail that may be allied to **Robust Cottontail** (*Sylvilagus [holzneri] robustus*), though the status of *holzneri* group cottontails in these mountains is unclear. Juan and I felt the animal was not *S. floridanus orizabae* (a high-elevation Mexican form) due to color, size & ear length, and the ears also seemed too long for *S. f. chapmani* (and wrong habitat, as this is a low-elevation form) – hopefully someone will study this population soon. After lunch and a quick stop for roadside **Mexican Prairie Dogs** near San Rafael, we headed for San Luis Potosí (SLP).

Vanegas (July 30-31)

Our next stop was the old railway town of Vanegas, located on the northern Altiplano of SLP about 2 hours from Arteaga. Thanks to Pedro Najera for recommending this area.

En route (W of Cedral), we noticed obvious sign of Nelson's Kangaroo Rats, a good omen for the night as this was our key target. This species, like the closely-related (but larger) Banner-tailed Kangaroo Rat, makes large mounds of sand and gravel peppered with burrow entrances, and is readily seen at such sites. We were pleasantly surprised to find a very serviceable hotel in town (El Antigua Estación), but ran out of luck with restaurants. Thus began the first of 3 bread & snack dinners. We set 60 traps in rolling desert near the Zacatecas border and 12 at Nelson's Kangaroo Rat burrow mounds.



Juvenile (note short white tail tip) & adult (photo by Juan Cruzado) Nelson's Kangaroo Rats, and their conspicuous burrow mounds

Since this area is currently quite safe, we also did night drives on several backroads N and E of Vanegas. Over about 4 hours by car and on foot, we saw a rich diversity of rodents. Importantly, we had good views of at least 4 **Nelson's Kangaroo Rats**; endemic to the northern Mexican Altiplano, this is a distinctive kangaroo rat with a short white tail tip. Interestingly, there seemed to be a fair bit of variation in the size of these animals, as well as the intensity and length of the white tail tip, though the latter is

always present. We also saw many **Merriam's Kangaroo Rats**, smaller and with fully dusky tails, plus 2 species of pocket mice – 4 of the spiny, grayish **Nelson's Pocket Mice** and 2 shiny, pinkish brown **Chihuahuan Desert Pocket Mice**. Another highlight was good views of the endemic and uncommon **Pygmy (Goldman's) Woodrat**, a remarkably small and compact *Neotoma*. Other sightings included **Zamora Mouse** (a large, very long-tailed *Peromyscus*), **Cactus Mouse**, several **Black-tailed Jackrabbits**, and a very relaxed **Bobcat**, and we also heard the "howls" of Chihuahuan Grasshopper Mouse. Spotted Ground Squirrel, Ord's Kangaroo Rat, Silky Pocket Mouse, Whitetoothed Woodrat, Southern Deer Mouse, and Hispid Cotton Rat (*berlandieri*) are also possible here. For all of us, this turned out to be the best night of the trip.

As expected, the traps did fairly well the next morning with another **Cactus Mouse**, a **Merriam's Kangaroo Rat**, and 2 **Nelson's Kangaroo Rats** – great to have this species in hand for closer views.

Ojuelos de Jalisco (July 31-August 1)

After a large lunch in Matehuala, we drove about 4 hours to the NE corner of Jalisco state, an area where Juan had captured a broad diversity of rodents during surveys about 10 years ago. Ojuelos is one of the richest sites for small mammals on the Mexican Plateau, with *Opuntia*/leguminous scrub lower down, open shortgrass plains on the high tops of mesas, and rocky oak woodlands on the slopes in between. My key target here was the endemic Plateau Kangaroo Rat (*Dipodomys ornatus*); most recent records of this species are from this area, but there's a range of other nice mammals like White-sided Jackrabbit, Silky Pocket Mouse, and White-eared Cotton Rat here too.



Mexican Prairie Dog (Cynomys mexicanus)

I was hoping for a similar experience in Ojuelos to Vanegas, but it was quite the opposite. Locally, the high shortgrass plains are the best area for kangaroo rats, but nearly all this habitat has been bought up by wind farms and we were unable to obtain access. Juan's local contact, Kevin Meza, had seen a few kangaroo rats near Chinampas in lower-elevation sites that we could visit so we scouted them and placed traps, but the vegetation was very overgrown thanks to excessive recent rains. In my experience, kangaroo rats prefer short grass, so my hopes were starting to drop.



Durango Pocket Mouse (Chaetodipus durangae)

I figured our best chance was on night drives through remnant patches of shorter, grazed grassland; this approach started out promisingly enough with **Northern Raccoon**, **Virginia Opossum**, **Desert Cottontail**, **Black-tailed Jackrabbit**, and nice views of a **White-toothed Woodrat** in the first 2 hours, but at 10PM our hopes were quickly dashed when we hit a deep but near-invisible pothole in the road and got 2 flat tires. The area is sketchy at night (CJNG are active not far away) and no tow company was willing to give us a lift, so we were stranded. Thankfully, Kevin came to our rescue. After we limped the car 3 km away to safer parking in Chinampas, Kevin and his coworker gave us a ride back to their place and put us up for the night. Early the next morning, they drove us back to collect the (empty) traps, and then took us and our flat tires an hour each way to Aguascalientes, where we got them fixed. We returned to our hotel in Ojuelos by 11AM the next morning, reasonably rested and with a working car, able to continue the trip without delays. This help was all way above and beyond the call of duty, and I really cannot thank them enough!

Sierra de Órganos (August 1-2)

Another 4-hour drive (plus lunch in the gorgeous city of Zacatecas) brought us to this scenic and peaceful national park; we stayed inside, in the park cabins. Although primarily a stop on the long drive between Ojuelos and Durango, I'd chosen this park as surveys had revealed a diverse and interesting rodent community including Southern Pocket Gopher, Plateau Kangaroo Rat, Durango Pocket Mouse, 'Allen's' Spiny Pocket Mouse, Tawny-bellied Cotton Rat, and Northern Pygmy Mouse.

Despite excellent looking habitat, activity was quite low, with much fewer rodents than I'd hoped – drought was likely to blame. A night drive produced **Gray Fox**, 2 **Collared Peccaries**, and just 1 rodent – thankfully, great views of a **Durango Pocket Mouse**. I was hoping for lots of captures in the traps the next morning, but we only had 2 **Brush Mice** (plus a **Rock Squirrel** while walking along the trap line). After seeing reports of *Corynorhinus* in caves (Juan and I were hoping for *C. mexicanus*), we arranged a visit to Cueva del Toro (guide required) only to find no bats, which everyone insisted were "always" there. And then their photos from prior visits revealed Mexican Free-tailed Bats. Oh well, and another entry in my long list of failed bat cave visits.

The park rangers were familiar with kangaroo rats (presumably *D. ornatus*) and thought they were common in grazed pastures outside the park, but I'd avoid driving at night in Zacatecas (the park is safe as the entrance road is gated and guarded by rangers).



La Michilía (August 2-4)

Zacatecas Harvest Mouse (*Reithrodontomys zacatecae*); Holzner's Cottontail (*Sylvilagus holzneri*)

Since my first visit to Mexico, I'd always wanted to see the mysterious and distinctive Buller's Chipmunk, the world's southernmost chipmunk. Hidden away in a remote part of the Sierra Madre Occidental, few people have seen this species and even Juan, who knows Mexican mammals as well as anyone, had no leads to offer. Its range, spanning SE Durango and SW Zacatecas, is almost never visited by ecotourists, and travel in this region of Mexico can be unsafe due to the long history of cartel presence. I left it on the back burner until 2022, when I saw that Micah Riegner, who had coguided my 2017 Amazon tour, got beautiful photos of Buller's Chipmunks at a remote ranch in Durango. And so, it became a central target species for this trip. Micah referred me to Dr. Jose Hugo Martínez, a professor at the Universidad Juárez del Estado de Durango (and keen birder) who guided his visit to Durango. Jose Hugo wasn't available on our dates, but was generous enough to provide Juan with the contacts we needed to visit the key sites. A big thank you to both Micah and Jose Hugo, as without their help, it would've been impossible to explore Durango as we did.

For La Michilía, he connected us with Alonso Ibarra, who owns the ranch where Micah saw the Buller's Chipmunks. Alonso is awesome – he has a keen interest in promoting responsible ecotourism in Durango, and was generous enough to accompany us to his ranch for 2 nights and put us up in his lovely ranch house. To visit, you will need to bring food, water, and other necessities. A 4x4 truck is needed for the last 0.5km of the steep, rocky entrance road, but we just walked that stretch with all our gear. The ranch house is very comfortable, with bathroom and (hot!) shower facilities, an outdoor kitchen, and 4 beds; there's no refrigeration, and (solar) electricity is largely limited to running lights. It's a scenic, quaint, and incredibly peaceful place to stay.



Buller's Chipmunk (Neotamias bulleri)

Best of all, the ranch house is right amongst open, grassy pine-oak woodland favored by **Buller's Chipmunks**. Over our stay, we saw 5 individuals, with great views of a pair that live in an oak tree right by the house; although you could likely see them in just 1 morning, given the effort it takes to travel here I'd recommend staying 2 nights. We

actually missed them in the first 5 hours of effort on our first morning, despite staking out the house and walking all over the ranch. Mammal activity was otherwise slow here, though we did see 2 rare **Zacatecas Harvest Mice** on a night walk and 3 **Mexican Fox Squirrels** (of white-bellied, not very orange ssp. *nayaritensis*). Driving the paved road back to El Mezquital in the morning, we saw a remarkable 7 **Holzner's Cottontails** in the rocky pine/oak/manzanita thicket. A really good site for this localized species.

Sadly, I was advised by Juan & Jose Hugo in late September that this area has gotten much more dangerous recently, even for the locals, and is not possible to visit at the time of writing. I hope the security issues resolve soon.

El Salto (August 4-5)

We wrapped up the trip with a final night along the Durango Highway (an area popular with birders), en route to our departure point at Mazatlán. There are 2 key habitats here – cold, high elevation conifer forest & meadows at the crest of the Sierra Madre Occidental; and humid, misty pine-oak forest in the canyons of the Pacific slope.

Parque La Pirámide (a tourist site just W of El Salto off the 40D) is a good spot for nearly all the key mammals of the former habitat. In a few midday hours here, we saw an endemic **Durango Chipmunk** and 2 **Abert's Squirrels**. The meadows here had many burrows of Sierra Madre Occidental Pocket Gopher (though we couldn't spot any while staking them out) and lots of Mexican Vole sign, and are perfect habitat for Holzner's Cottontail, Zacatecas Harvest Mouse, and White-eared Cotton Rat. I've seen most of these species previously, but if I hadn't, a night here would be very worthwhile.



Durango Chipmunk (Neotamias durangae); Abert's Squirrel (Sciurus aberti durangi)

We spent the night further W at Los Bancos, another site where we arranged access through Jose Hugo and Alonso. The habitat here is very humid, misty pine-oak cloud forest at the head of the rugged canyons (*barrancas*) that dissect the W slope of the Sierra Madre Occidental. There's no advertised accommodation here – a local, Dora, graciously hosted us in her house. We set some traps in woodpiles by her house and along a beautiful arroyo nearby, replete with Military Macaws and the endemic Durango Grand Fir (*Abies neodurangensis*). The results were good, with 6 **Durango Mice** and 1 **Mexican Woodrat**, and we also saw a **Mexican Fox Squirrel** (*apache*) while checking the trap line. This is great habitat for the nearly-unknown Western Diminutive Woodrat (*Nelsonia neotomodon*) too, but this species has gone unrecorded for ~30 years.

It's just a 2.5h drive to Mazatlán, so we made a few stops on our return. I'd recommend the old (libre) road, so you can see the incredible views at the Espinazo del Diablo and the rare, endemic Tufted Jay (we missed them in the Reserva Chara Pinta, but had a roadside sighting nearby; **Rock Squirrel** was also seen here). We were advised to avoid stops in villages below El Palmito for security reasons.



Durango Mouse (*Peromyscus schmidlyi*); Mexican Fox Squirrel (*Sciurus nayaritensis apache*)

SPECIES LIST (Endemics/Near-endemics of Northern MX indicated)

- 1. Virginia Opossum (Didelphis virginiana)
- 2. Tamaulipas Jackrabbit (Lepus altamirae) E
- 3. Black-tailed Jackrabbit (Lepus californicus)
- 4. Desert Cottontail (Sylvilagus audubonii)
- 5. Eastern Cottontail (Sylvilagus floridanus)

- 6. Central American Tapeti (Sylvilagus gabbi truei)
- 7. Holzner's Cottontail (Sylvilagus holzneri) [incl. Robust C (S. cf. robustus)] NE
- 8. Abert's Squirrel (Sciurus aberti)
- 9. Allen's Squirrel (Sciurus alleni) E
- 10. Mexican Fox Squirrel (Sciurus nayaritensis) NE
- 11. Mexican Prairie Dog (Cynomys mexicanus) E
- 12. Buller's Chipmunk (Neotamias bulleri) E
- 13. Durango Chipmunk (Neotamais durangae) E
- 14. Coahuila Chipmunk (Neotamias solivagus) E
- 15. Rock Squirrel (Otospermophilus variegatus)
- 16. Merriam's Kangaroo Rat (Dipodomys merriami)
- 17. Nelson's Kangaroo Rat (Dipodomys nelsoni) E
- 18. Durango Pocket Mouse (Chaetodipus durangae) E
- 19. Chihuahuan Desert Pocket Mouse (Chaetodipus eremicus)
- 20. Nelson's Pocket Mouse (Chaetodipus nelsoni) E
- 21. Merriam's Pocket Mouse (Perognathus merriami)
- 22. Pygmy (Goldman's) Woodrat (Neotoma goldmani) E
- 23. White-toothed Woodrat (Neotoma leucodon)
- 24. Mexican Woodrat (Neotoma mexicana)
- 25. Brush Mouse (Peromyscus boylii)
- 26. Tamaulipan White-ankled Mouse (Peromyscus collinus) E
- 27. Southern Rock Mouse (Peromyscus difficilis) E
- 28. Cactus Mouse (Peromyscus eremicus)
- 29. White-footed Mouse (Peromyscus leucopus)
- 30. El Carrizo Mouse (Peromyscus ochraventer) E
- 31. Southern White-ankled Mouse (Peromyscus pectoralis) E
- 32. Durango Mouse (Peromyscus schmidlyi) E
- 33. Zamora Mouse (Peromyscus zamorae) E
- 34. Zacatecas Harvest Mouse (Reithrodontomys zacatecae) E
- 35. Mexican Long-tongued Bat (Choeronycteris mexicana)
- 36. Greater Long-nosed Bat (Leptonycteris nivalis)
- 37. Fierce Bonneted Bat (Eumops ferox)
- 38. Fringed Myotis (Myotis thysanodes)
- 39. Leon-Paniagua's Big-eared Bat (Corynorhinus leonpaniaguae) E
- 40. Lappet-browed Bat (Idionycteris phyllotis)
- 41. Striped Skunk (Mephitis mephitis)
- 42. Desert Spotted Skunk (Spilogale leucoparia)
- 43. Kinkajou (*Potos flavus*)
- 44. Northern Raccoon (Procyon lotor)
- 45. Gray Fox (Urocyon cinereoargenteus)
- 46. Bobcat (Lynx rufus)
- 47. White-tailed Deer (Odocoileus virginianus)
- 48. Collared Peccary (Dicotyles tajacu)

WHAT WE MISSED

Mostly discussed in text, but fairly few by Mexican standards: honestly, the only big misses – species I really wanted to see, and thought I had a good chance of finding – were the Plateau Kangaroo Rat and Flat-headed Myotis. It would've been nice to see Goldman's, Southern, and Sierra Madre Occidental Pocket Gophers, Mexican Spiny Pocket Mouse, Northern Pygmy Mouse, Tawny-bellied Cotton Rat, Southwestern Myotis, Black-winged Little Yellow Bat, or Mexican Red Brocket, but I didn't really target any of these species and we saw plenty others in their place. Very rare endemics include Tropical Pocket Gopher, Tamaulipan Woodrat, Hooper's Mouse & Western Diminutive Woodrat – I'd have loved to see them, but finding any is a major bonus.



Mexican Woodrat (Neotoma mexicana)



Mystery cottontail (*Sylvilagus* cf. *holzneri robustus*?) from the high-elevation Sierra de Arteaga of Coahuila (NE Mexico)