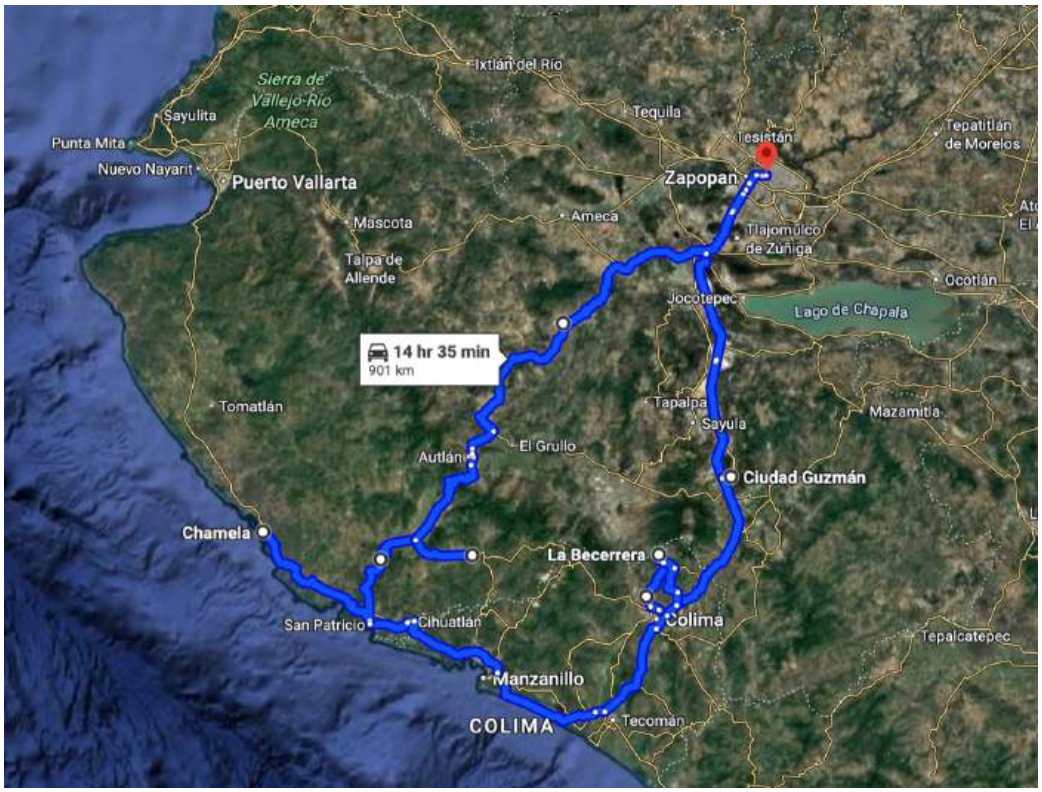
Western Mexico: Jalisco and Colima

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

Few places can match Mexico's diversity and endemism of mammals: even after 8 trips to the country, I still have well over a hundred species left on my target list! For years, most of Mexico's Pacific coast represented a major gap in my coverage of the country – especially the west-central states of Jalisco and Colima, the richest zone of all for endemic genera and species. So, when a window of opportunity presented itself in spring 2025, the choice really was a no-brainer. As is often the case, Juan was easily convinced and equally thrilled at the prospect of exploring new places and tracking down his own lifers. Before long, we reunited in Guadalajara, excited for another adventure across Mexico full of rare and poorly-known mammals.



A rough map of our route across the states of Jalisco and Colima

TRAVEL ADVICE (addenda to my summer 2024 report, which has general advice)

A note on safety

Western Mexico, including Jalisco and Colima, can be a tricky place to visit. While the situation, in these two states at least, certainly isn't as challenging as in places like Sinaloa, Michoacan, and Guerrero, there are significant pockets of narco presence. These change frequently, so while I include some cautions within this report (relevant to when I visited), they're almost certainly outdated by now. Off the beaten path travel should only be attempted with reliable local guides, and I'd advise against independent

exploration, with the main exception being the well-known tourist sites on the coast between Puerto Vallarta and Manzanillo. The good news, though, is that Juan has a lot of field experience in the region and has the connections to ensure a trip here is both safe and productive. So, if you want to seek out these species for yourself, please do so with him (juancruzado@outlook.com / WhatsApp +52 1 81 1487 8136).

Car rental

After years of being overcharged by the standard international operators in Mexico, this time I decided to book a local rental outfit, Optima Car Rental, which came with excellent reviews. The rental office was close to the arrivals hall and they gave us a Nissan X-trail, exactly as promised, on time, and with unlimited miles. Best of all, it costed about half as much as we'd paid for a similar car last summer in Monterrey! Needless to say, recommended. The car model itself turned out to be less capable off pavement than we'd hoped, but this wasn't a huge issue: as is often the case, it proved easy to arrange local transport on the few stretches of difficult road we encountered.

Mammal watching tips

When to visit

I often have difficulty recommending the "best" time to visit the various parts of Mexico for mammal watching, and this trip was not an exception. Based on our experience, March seems to be a solid option – the weather was largely warm and sunny, we could still find water sources for bat netting, and rodent and bat numbers were both overall fairly high. On the flip side, several nights were surprisingly cool and rodent activity seemed very low on the Pacific coast in particular (where it was already very dry). If bats are the top priority, I might suggest scheduling a trip a few weeks later into the dry season in April, when the nights are consistently hotter – so long as you can still find water. For rodents, early November (right after the rains) might be the best option, especially in the Chamela area – though there will be too much water for good batting and road conditions might be challenging in the mountains.

Trapping & netting

Juan came prepared with 5 mistnets and 140 Sherman traps! We deployed both every night – the 5 mistnets were consistently useful, though 140 Shermans was perhaps too much for our small group of 3, and we usually only set 50-80. Small mammal trapping in Mexico, as always, requires scientific permits, so you will need to work with Juan to participate in these activities. For traps, my standard catch-all bait recipe of oats, peanut butter, vanilla, birdseed, and black oil sunflower seeds worked very well.

ITINERARY (March 22-30, 2025)

- 3/22: arrive Guadalajara ca. 6AM, pick up rental car, run a few errands, and drive (~2h) to Ciudad Guzman. Rest, "linner", and night work on Nevado de Colima (El Alcazar). Night Ciudad Guzman (Chalet de Colombo Hotel).

- 3/23: AM Nevado de Colima, then drive 2h (incl. a detour to Colima City) to Laguna La Maria. Night on-site (Centro Ecoturistico Laguna La Maria).
- 3/24: Drive to Chamela (4h, with stops in Colima City & Manzanillo). Night work near Limoncito. Night Chamela (private accommodation).
- 3/25: Full day exploring the Chamela-Cuixmala area. Night work near Nacastillo. Night Chamela (private accommodation).
- 3/26: Drive to Manantlan (3.5h). Dinner & night work nearby. Night La Pareja (homestay).
- 3/27: Hiking to 1400m in the Sierra de Manantlan followed by night work. Overnight camping.
- 3/28: Return to La Pareja and night work at different sites nearby. Night La Pareja (homestay).
- 3/29: AM La Pareja, then drive to Tecolotlan (3h). Night work at Balneario Paso Real near Chiquilistlan. Night Tecolotlan (Hotel Plaza Albatros).
- 3/30: AM drive to Guadalajara (2h) & flight home ca. 4PM.

SITE GUIDE

Nevado de Colima (March 22-23)

Nevado de Colima is a 14,000-ft volcanic massif located ~2h S of Guadalajara on the border between the states of Jalisco and Colima. The westernmost major volcano of the Mexican Transvolcanic Belt, it represents an important biogeographic crossroads between this range, the Sierra Madre Occidental, and the Sierra Madre del Sur. The mountain is a major biodiversity hotspot: it's an important center of endemism for herps and conifers and hosts a very impressive array of mammals, some in atypical habitats (e.g. Jaguarundi in pine-fir forest at 2800m). Nevado de Colima is mostly safe to visit but there are pockets of narco presence, so inquire locally and/or take a guide before exploring at night or going off the beaten track.

Undescribed *Peromyscus* species (*boylii* group) of Nevado de Colima (photo: Juan Cruzado)

For our first night on the mountain, we focused on high-elevations (2200-2800m) of the mountain's N slope near "El Alcazar," an ecotourism site on communal land of the ejido

Huescalapa. Thanks to Emmanuel Guevara for recommending this area. It takes ~1h to drive here from Ciudad Guzman. The last 10km are up a windy dirt road; well-graded, but with a few steep sections with poor traction (where the X-trail struggled). We saw **Rock Squirrels** in town followed by a **Mexican Gray Squirrel** at ~2500m on the mountain. The latter looked really strange compared to the animals I'm used to from E, C, and S Mexico – cool gray, with a white belly, dark cap, whitish post-auricular spots, and little rusty coloration. This form is sometimes referred to as 'Colima Mountain' Squirrel (*S. aureogaster leucops, S. cervicalis,* or *S. poliopus cervicalis* in the literature); I wonder if it'll be split one day.

Top & bottom left: Wagner's Harvest Mouse, showing its dusky ankles and long, unicolored, black tail; Bottom right: the more grizzled Volcano Harvest Mouse

El Alcazar is located at ~2700m in beautiful temperate "cloud forest", mostly very mesic pine-oak with a strong component of 2 fir species (*Abies flinckii* and *A. religiosa*

colimensis). The rocky, humid ravines with *A. flinckii* are textbook habitat of the very rare Goldman's Diminutive Woodrat (*Nelsonia goldmani*), a Mexican endemic genus and our top target. After setting 140 Sherman traps, we spent 5 hours walking and driving.

Left: Jalisco Harvest Mouse; Right: Mexican Gray Squirrel of the unusual Western Mexico color morph

Thanks to my thermal scope we saw a profusion of small mammals, more than I've ever seen in any Mexican montane forest. Among the firs at 2800m, we saw a mysterious **Deer Mouse** (*Peromyscus* sp.) – reminiscent of *P. beatae* in size and proportions, but with remarkably bright golden coloration. Neither Juan nor any of the colleagues he reached out to had ever seen anything like it before, and it likely represents an undescribed species from the *boylii/aztecus* group. We also saw a pretty **Volcano Harvest Mouse**, a rather rare mammal, in this area. Lower down, in the oaks at ~2500m, we added **Southern Deer Mouse**, a possible Mexican Vole, the distinctive (large and yellowish) **Transvolcanic Mouse**, and a very cool **Wagner's Harvest Mouse** that Juan managed to catch by hand. Measurements confirmed the ID of this very rarely seen species, and we all appreciated its large size, bright orange fur, dark hind feet, and the impressively long, unicolor blackish tail. At ~2200m, we added 2 **Jalisco Harvest Mice**, yellowish with gray ears and white hind feet. A great night, and certainly my record harvest mouse total (10+ individuals of 3+ species).

The friendly camp host gave us a lift up the last, difficult stretch of the entrance road the next morning. To our shock, given how many rodents we'd seen the previous night, we had no captures! Poor bait was likely to blame. We did however see a **Hooded Skunk** pre-dawn, a few more **Mexican Gray Squirrels**, and a likely **Mexican Fox Squirrel**.

Laguna La Maria (March 23-24)

This well-known birding site is located at mid-elevations (1400m) in thorn-scrub/ evergreen forest ecotone surrounding a small crater lake on the SW slope of Nevado de Colima. We detoured through Colima City en route, stopping at a great spot for **Ring-tailed Ground Squirrel** near Comala (19.3078, -103.7557). This gorgeous species (I'm

surprised no mammal watchers have reported it before!) is a member of a West Mexican endemic genus and fairly common in its localized range.

Two spectacular endemic mammals of Colima: Ring-tailed Ground Squirrel and Mexican Big-eyed Bat, with its diagnostic white dorsal line

Unlike El Alcazar, Laguna la Maria was quite crowded and there's fairly limited access to high-quality habitat. We'd initially planned to visit Amixtlan, a much larger mid-

elevation cloud forest reserve nearby that seems excellent for mammals, but had to change locations at the last minute to due to security issues there. We struggled to find a viable site to set traps and mistnets until a friendly family gave us access to their creekside forest nearby (19.4587, -103.7040). Netting (7:30-10PM) was productive, with 4 **Toltec Fruit-eating Bats**, 5 **Northern** and 3 **Honduran Yellow-shouldered Bats**, 3 **Jamaican Fruit-eating Bats**, 2 **Great Fruit-eating Bats**, **Intermediate Fruit-eating Bat**, **Merriam's Long-tongued Bat**, and best of all a gorgeous, endemic **Mexican Big-eyed Bat** (our top target) right as we were closing the nets! Juan saw *Baiomys* here as well (both Northern and Mexican Pygmy Mice are found at this site).

The next morning, we only had 1 capture in 40 traps here, a **Mexican Woodrat**. It took us a while to ID as it looked nothing like the *N. mexicana* we were used to, uniformly warm brown and tiny, with all measurements well below the published lower limits (despite being an adult). Populations of this species found in tropical habitats of W Mexico (ssp. *eremita*, and *tenuicauda*) may be distinct at species level.

Leaving the area, we got lunch and made another stop for the **Ring-tailed Ground Squirrels** in Comala, followed by a visit to the Manzanillo golf course to see an introduced population of **Tropical Ground Squirrel**. I generally dislike watching introduced mammals, but you have no choice in this case as the entire native range of this squirrel (the "Tierra Caliente") is unsafe to visit and has been for nearly 20 years.

Left: Mexican Woodrats are represented in Western Mexico by the very small, rufous ssp. *tenuicauda*, that appears more similar to the (more southern) *N. ferruginea*; Right: Tropical Ground Squirrel

Chamela (March 24-26)

The Chamela-Cuixmala Biosphere Reserve occupies a broad swathe of lowland tropical dry forest on the S coast of Jalisco. My most eagerly-anticipated stop of the trip, it's thought to be the single most important site for endemic mammals in Mexico. Based out of a bunkhouse near Chamela that Juan uses when he conducts Jaguar research in the area, we explored a range of sites surrounding the RB (which has few roads and trails). Mammal activity was surprisingly slow, perhaps due to very dry conditions at this time of year or unusually cold nights during our visit. Although some usually abundant species

proved nearly absent, we came away with a respectable list of sightings thanks to a lot of effort. I'd like to return in Oct/Nov someday.

We spent the first evening near Limoncito (19.4731, -104.9382), an hour's drive from Chamela. Netting over a permanent spring at the head of a small arroyo produced many **Little Yellow Bats**, **Mexican Mustached Bats**, and **Gray Sac-winged Bats**. A **Cinnamon Myotis** hit the net but managed to escape, to all of our frustration as this is a rare, near-endemic species; at least I recorded the bat's calls as it flew off. Lots of **Peale's Free-tailed Bats** (and perhaps a few Broad-eared Free-tailed Bats) were flying overhead and gave close views as they dove steeply through the air to drink from the pool, dodging the nets every time. The long dirt road to the site, which follows the riparian belt of the Cuixmala River, can be good for night drives, but this time it was very quiet. 2 hours in, we'd just seen a **Painted Spiny Pocket Mouse**, **Michoacan Mouse**, and **Virginia Opossum**. The most exciting find was a medium-sized tree rat I thermal scoped in some riparian thicket. It froze deep in a bush and didn't move for several minutes until I crawled underneath, when it finally gave a clear but brief view as it scurried down a branch. Brownish, with a bright white belly and a dark tail, it could've only been a Magdalena Rat (*Xenomys nelsoni*), an endemic genus of Chamela and one of my top targets, but it was disappointing to only get poor views. A colleague of Juan's is working on splitting the lanky, very reddish ssp. *insolitus* of **Mexican Cottontail** found in the area – usually common, we finally spotted one of these large rabbits in a roadside clearing a few miles S of Chamela on MX-200.

Two more endemics, Northern Little Yellow Bat (Left) and Mexican Mustached Bat (Right)

A few traps set in riparian thicket didn't catch the Magdalena Rat, but did get a rather rare **Black-eared Rice Rat**, another Chamela specialty. We rested most of the day before visiting a ranch near Nacastillo that Juan had surveyed for Jaguars. After getting permission from the owners, we set mistnets in their garden, a nearby arroyo, and a cattle tank. The most exciting captures were single **Sinaloan** and **Northern Black Mastiff Bats** (over the tank), and we also caught **Northern Yellow-shouldered Bats**, **Jamaican Fruit-eating Bats**, **Great Fruit-eating Bat**, 2 **Pygmy Fruit-eating Bats**, 4

Little Yellow Bats, and 2 **Common Vampire Bats**. The cattle tank in particular was a hub of activity, with lots of Sinaloan Mastiff Bats, Underwood's Bonneted Bat, and Dobson's Lesser Mustached Bat also recorded on the detector. The only mammals seen on the night drive back to Chamela were another **Painted Spiny Pocket Mouse** and a probable **Jalisco Mouse**, though Allen's Woodrat likely occurs at the ranch.

Clockwise from top left: Black-eared Rice Rat, Sinaloan Mastiff Bat, Collie's Squirrel, and Jalisco Mouse

The next morning, 50 traps by the bunkhouse only captured a single **Jalisco Mouse**, a pretty, reddish brown *Peromyscus* with a sharp facial mask. Juan and I were surprised at how poor the trapping success was here, especially the lack of the usually abundant Painted Spiny Pocket Mice. En route to Manantlan, we finally found a **Collie's Squirrel** while driving through Melaque.

Despite challenging conditions, we all really enjoyed Chamela, and I'd have appreciated another night to give the Magdalena Rat more effort in particular. A lot of other great mammals are possible here, like Northern Gray Mouse Opossum, 'Colima' Vesper Rat, Mexican Giant Shrew, Banana Bat, Pygmy Spotted Skunk, Jaguarundi, and Ocelot.

Sierra de Manantlan (March 26-29)

The rugged Sierra de Manantlan, an isolated sub-range of the Sierra Madre del Sur in S Jalisco, has shot to the forefront of Mexican mammalogy in the last few years thanks to the discovery of several new species and species-level taxa. The mountains are remote and challenging to access, but contain a gradient of beautiful, well-preserved habitats from thorn-scrub and semi-deciduous tropical dry forests to oak-dominated cloud forest and subtropical pine-oak forest at the crest (>2000m elevation).

Manantlan was a top priority for Juan and me, but arranging a visit proved more complicated than we expected. Our goal was to spend 3 nights sampling a gradient of habitats spanning tropical dry forest (<1100m), mid-elevation cloud forest (1100-1800m), and pine-oak forest (>1800m). At the low elevations, tropical dry forests and thornscrub hold a range of species endemic to Mexico's Pacific coast. Mid-elevation cloud forest offers the possibility of several rodents and perhaps a rare bat (e.g., Velvety Fruit-eating Bat and Van Gelder's Bat). Up high, humid pine forests hold the two micro-endemics of Manantlan – the very rare Buller's Spiny Pocket Mouse and the endemic 'Manantlan' Vole (*Microtus* [*mexicanus*] *neveriae*) – as well as abundant Eastern Cottontail (of the huge ssp. *macrocorpus*) and Gleaning Mouse.

Carter's Myotis (left) is one of the rarest bats of Western Mexico, while the very similar Brown and Merriam's Long-tongued Bats are comparatively common

To sample the low and mid elevations of the range, we based ourselves out of La Pareja, a community on the S slope of the mountains. Juan organized our visit through Aldo Santana, a local guide who runs a small ecotourism business in Manantlan and had worked with researchers from a nearby university on prior surveys. Aldo wasn't around at the time of our visit, but he arranged for us to stay at his family's home, and his father, Alvaro, was our local guide in the field. They were wonderful, and really couldn't do enough to help. The food was also exceptional: among the best I've ever had in Mexico! We'd hoped to explore the high elevations from the Estacion Cientifica

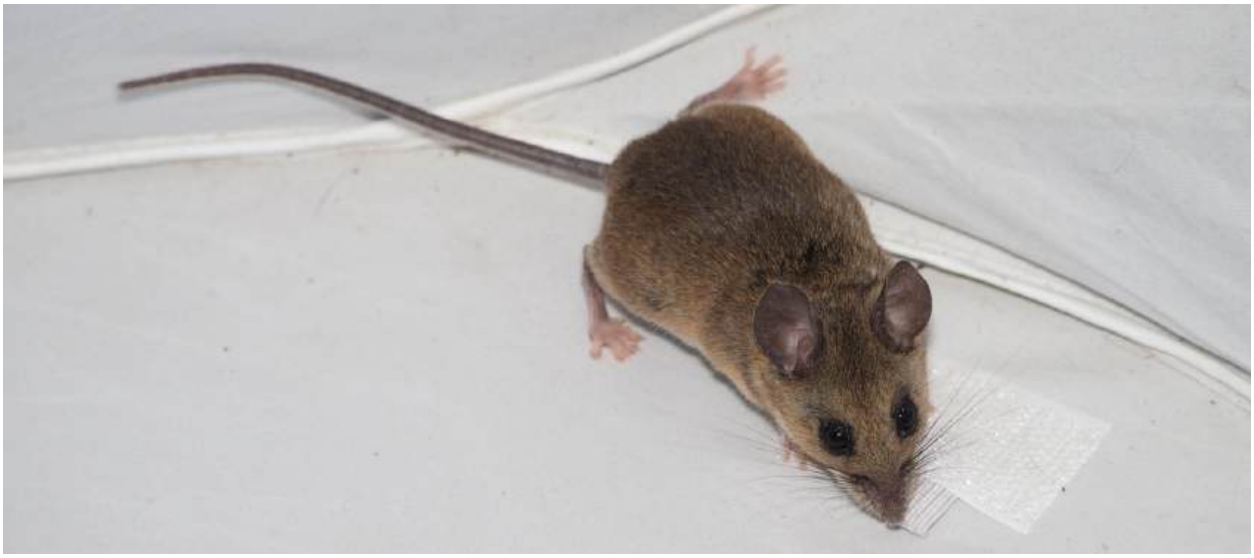
Las Joyas, a university field station in well-preserved pine-oak forest. Unfortunately, sampling permits costed over $1500 so Juan decided to pass on this site.

We spent the first evening netting bats along a stream near La Pareja in fragmented tropical deciduous forest (~1000m asl). The very first bat was a **Carter's Myotis**, a rare bat and very exciting not only for us but also many in the Mexican mammalogy community – to our knowledge, we obtained the first photos & call recordings of this Mexican endemic! We also captured 5 **Northern Yellow-shouldered Bats**, 2 **Jamaican Fruit-eating Bats**, **Great Fruit-eating Bat**, **Little Yellow Bat**, **Common Vampire Bat**, 2 **Pygmy Fruit-eating Bats**, and 2 **Brown Long-tongued Bats**. We spotted 3 **Fulvous Harvest Mice** while setting Sherman traps nearby. The next morning, we finally had a nice catch of mice: 3 adorable **Southern Pygmy Mice** were the highlight and we also caught 2 **West Mexican Cotton Rats**, yet another endemic. 3 *boylii* group *Peromyscus* were a nightmare to identify as usual. Clearly not Gleaning Mice, and measurements (too small) and altitude (too low) also didn't fit the recently-described Ensink's Mouse, found at higher elevations in these mountains. Size was comparable to **Brush Mouse**, but the mice were a brighter fulvous color with fully dark, nearly naked tails. Similar mice have been caught on the Pacific slope from extreme SW Durango to Laguna La Maria; a 2013 paper suggests that these are referrable to yet another undescribed species…

Peromyscus cf. *boylii*, Mexican Pygmy Mouse, and Hispid Cotton Rat are typical species of the scrubby lower elevations of the Sierra de Manantlan

For our second night, Juan and I investigated ways to access the high pine forest, with Las Joyas out of the question. There are no roads from La Pareja to the crest of the

range. Our hosts knew 3 roads from other communities in the Sierra, but two were likely impassable with our 2WD SUV and the third had narco activity nearby. We eventually decided to hike from the end of the road past La Pareja to the cloud forest (no mean feat with so much equipment) and camp for the night. We netted bats over a small stream at ~1200m, but had little luck, only catching a few common species (the best were **Mexican Mustached Bat** and **Brown Long-tongued Bat**). Next, we set traps at a few different elevations from 1000m to 1300m, just below the pines. The highest trap line was the best, yielding an individual of the recently-split **Ensink's Mouse** (grayish in color and very arboreal, like the related *P. levipes*), endemic to SW Mexico, and 2 characteristically very yellowish **Gleaning Mice**. At low and mid elevations, we captured 6 of the mysterious **Brush Mouse**-like *Peromyscus* captured the previous night plus one or two more **Ensink's Mice**.



Top & lower left: the rather variable Ensink's Mouse; lower right: the larger, richly colored Gleaning Mouse

We hiked back down the mountain and caught up on sleep for most of the day, before setting out again in the afternoon to place straps. Alvaro suggested an arroyo with thornscrub and large boulders, where he'd see mouse opossums and large rats (presumably the endemic *Hodomys alleni*). We set nets by a stock pond, hearing many aerial insectivores (e.g. *Lasiurus intermedius, Eumops ferox*, etc.) but catching only common species. In retrospect, we might have been better off setting all 140 traps and

then walking the trap line at night in search of woodrats and mouse opossums, which are more easily found by thermal scope. A 1-hour night drive afterward was fairly quiet, producing excellent views of 2 **Fulvous Harvest Mice** and a colony of **Common Vampire Bats** in an abandoned building. However, the Sherman traps were loaded with rodents the next morning. 2 **Allen's Cotton Rats**, much warmer in color and with sleeker fur compared to yesterday's *S. mascotensis*, were highlights, as were 2 (also endemic) **Mexican Rice Rats**. We also captured another **Southern Pygmy Mouse**, **Fulvous Pygmy Rice Rat**, **Michoacan Deer Mouse**, and what appeared to be a **'Coalcoman' Harvest Mouse** – an undescribed species currently allied to Sumichrast's Harvest Mouse – based on its HB : tail length ratio and white ear hairs. Very pleased with (finally) the productive trapping, we set off back toward Guadalajara.

Clockwise from top left: Allen's Cotton Rat, 'Coalcoman' Harvest Mouse, and Mexican Rice Rat

Tecolotlan (March 29-30)

Although primarily meant as a stop on the long drive between Manantlan and our eventual destination of Guadalajara, the small town of Tecolotlan proved to be a promising base to explore the Jaliscan highlands. We spent the evening in the canyon of the Rio Ferreria at Balneario Paso Real. There was a ton of bat activity along the river: Fulvous Naked-backed Bat, Mexican Mustached Bat, and Carter's Myotis were detected and we had close views of **California Myotis**, but oddly they all avoided the nets. Thankfully, we eventually caught several endemic **Hairy Fruit-eating Bats**, my

key target, and saw even more roosting in fan palm “skirts.” We also frequently heard the loud flight calls of Western Bonneted Bat overhead. Juan wanted to minimize night driving for safety reasons, but just slowly driving the first 10km back from Paso Real proved surprisingly good. I thermal scoped a large, pale yellowish harvest mouse that Juan and I agreed was likely a **Hairy Harvest Mouse**, though it would’ve been good to get photos. This was followed by a huge bonus – a **Northern Mouse Opossum**!

Top: Hairy Fruit-eating Bat, showing its roost & hairy uropatagium; Bottom: Northern Mouse Opossum

We were back in the morning to visit a couple of nearby caves, but couldn’t find the hot cave (with *Mormoops* and *Natalus*) and didn’t see any Mexican Big-eared Bats in the Cueva de Bandoleros, where they occasionally roost. The trail down the river seems promising for setting small mammal traps (we didn’t have time) for e.g., ‘Jaliscan’ Spiny Pocket Mouse, White-bellied Rice Rat, and possibly Small-footed Mouse. We then drove the 2h back to Guadalajara for yet another unsuccessful cave search (for Waterhouse’s Leaf-nosed Bat) and the usual rush through traffic to the airport.

With more time, the Sierra de Quila, a nearby conservation area spanning the transition from thornscrub to pine-oak habitats, is worth a visit. The endemic Buller’s Pocket

Gopher is common, and Mexican Fox Squirrel, Hairy and Zacatecas Harvest Mice, Mexican Big-eyed Bat, and Arizona Myotis are known from the area, among others.

Fulvous Harvest Mouse posing at Manantlan

OTHER SITES OF INTEREST

The Sierra de Talpa near Puerto Vallarta has several promising sites that form a nice elevation gradient through high-quality habitat. The Selva El Tuito (e.g. Rancho Primavera) has evergreen forests that should be good for Collie's Squirrel, Mexican Woodrat (*eremita*), Michoacan and Jalisco Mice, Black-eared Rice Rat, Allen's Cotton Rat, and possibly Pygmy Spotted Skunk. Gleaning Mouse is common at slightly higher elevations at the ecotone with pine-oak (e.g. Senda el Jaguar), and there are also records of several excellent bats like Wrinkle-faced Bat, Mexican Big-eyed Bat, Velvety Fruit-eating Bat, Mexican Dog-faced Bat, and Wrinkle-faced Bat here. Pine-oak forests surrounding Lago de Juanacatlan are one of the few accessible areas to search for the rare Buller's Spiny Pocket Mouse and huge ssp. *macrocorpus* of Eastern Cottontail. Mexican Fox Squirrel and 'Colima Mountain' Squirrel also occur there.

Allen's Woodrat is reportedly common in the lowlands of Colima (e.g. Pueblo Juarez) and the area seems promising for other interesting mammals like Northern Mouse Opossum, Banana Bat (still very rare), and Cinnamon Myotis.

Finally, we were hoping to revisit Ojuelos de Jalisco in the far NE of the state for another attempt at the rare Plateau Kangaroo Rat. We'd failed to find one last summer (in part due to car trouble), but Juan had gotten some new, promising leads. This was another area we pulled from the itinerary as the security situation had really deteriorated.

SPECIES LIST

1. Virginia Opossum (*Didelphis virginiana*)

2. Northern Mouse Opossum (*Tlacuatzin sinaloae*)
3. Mexican Cottontail (*Sylvilagus [cunicularius] insolitus*)
4. Mexican Gray Squirrel (*Sciurus aureogaster*)
5. Collie's Squirrel (*Sciurus colliaei*)
6. Mexican Fox Squirrel (*Sciurus nayaritensis*)
7. Tropical Ground Squirrel (*Notocitellus adocetus*) [introduced]
8. Ring-tailed Ground Squirrel (*Notocitellus annulatus*)
9. Rock Squirrel (*Otospermophilus variegatus*)
10. Painted Spiny Pocket Mouse (*Heteromys pictus*)
11. Mexican Woodrat (*Neotoma [mexicana] tenuicauda*)
    Magdalena Rat (*Xenomys nelsoni*) [probable, with poor views]
12. Michoacan Mouse (*Osgoodomys banderanus*) [W & C clades]
13. Brush Mouse (*Peromyscus* cf. *boylii*)
14. Jalisco Mouse (*Peromyscus chrysopus*)
15. Ensink's Mouse (*Peromyscus ensinki*)
16. Transvolcanic Mouse (*Peromyscus hylocetes*)
17. Southern Deer Mouse (*Peromyscus labecula*)
18. Gleaning Mouse (*Peromyscus spicilegus*)
19. Undescribed Deer Mouse sp. (*Peromyscus* sp. nov.)
20. Volcano Harvest Mouse (*Reithrodontomys chrysopsis*)
21. Fulvous Harvest Mouse (*Reithrodontomys fulvescens*)
22. Hairy Harvest Mouse (*Reithrodontomys hirsutus*) [probable]
23. Jalisco Harvest Mouse (*Reithrodontomys nerterus*)
24. 'Coalcoman' Harvest Mouse (*Reithrodontomys* cf. *sumichrasti* clade IV)
25. Wagner's Harvest Mouse (*Reithrodontomys wagneri*)
26. Black-eared Rice Rat (*Casiomys melanotis*)
27. Fulvous Pygmy Rice Rat (*Oligoryzomys fulvescens*)
28. Mexican Marsh Rice Rat (*Oryzomys mexicanus*)
29. Allen's Cotton Rat (*Sigmodon alleni*)
30. West Mexican Cotton Rat (*Sigmodon mascotensis*)
31. Gray Sac-winged Bat (*Balantiopteryx plicata*)
32. Mexican Mustached Bat (*Pteronotus mexicanus*)
33. Brown Long-tongued Bat (*Glossophaga commissarisi*)
34. Merriam's Long-tongued Bat (*Glossophaga mutica*)
35. Hairy Fruit-eating Bat (*Artibeus hirsutus*)
36. Intermediate Fruit-eating Bat (*Artibeus intermedius*)
37. Jamaican Fruit-eating Bat (*Artibeus jamaicensis*)
38. Great Fruit-eating Bat (*Artibeus lituratus*)
39. Mexican Big-eyed Bat (*Chiroderma scopaeum*)
40. Pygmy Fruit-eating Bat (*Dermanura phaeotis*)
41. Toltec Fruit-eating Bat (*Dermanura tolteca*)
42. Honduran Yellow-shouldered Bat (*Sturnira hondurensis*)
43. Northern Yellow-shouldered Bat (*Sturnira parvidens*)
44. Northern Black Mastiff Bat (*Molossus nigricans*)
45. Sinaloan Mastiff Bat (*Molossus sinaloae*)
46. Peale's Free-tailed Bat (*Nyctinomops aurispinosus*) [bat detector + flight views]

47. California Myotis (*Myotis californicus*) [bat detector + flight views]
48. Carter's Myotis (*Myotis carteri*)
49. Cinnamon Myotis (*Myotis fortidens*) [bat detector + flight views]
50. Northern Little Yellow Bat (*Rhogeessa parvula*)
51. Hooded Skunk (*Mephitis macroura*)

INATURALIST

My observations from the trip: https://www.inaturalist.org/observations?d1=2025-03-22&d2=2025-03-30&user_id=vnsankar

REGIONAL ID MATERIAL

The rodents from Jalisco, Mexico: identification key. (https://www.scielo.org.mx/pdf/therya/v5n2/v5n2a16.pdf)