Costa Rica: 22nd June to 8th July 2017

Costa Rica was amazing, with a staggeringly diverse fauna, and guides who were consistently fantastic. We focused our trip on mammals, but also saw a tremendous diversity of birds, some extraordinary frogs and reptiles, and a lot of impressive insects, crabs and spiders (not to mention mangroves, bromeliads, high-altitude páramo...). The variety of bats was particularly striking, and meant that without being unusually lucky we still managed to see many species, nearly all of which were new for both of us.



speckled glass frog

Practicalities

Owing to constraints on dad's time we had to go in the wet season, and besides meaning we lost a few sessions to heavy rain it probably made a difference to what we were able to see – if we can go back (we'd love to!) we'll certainly try to go at a different time of year, to see things which may be more apparent then. Also, Costa Rica should come with a slight health warning – it is fairly expensive (only slightly less than the US, but without a nutjob running the place).

Driving was actually pretty easy – at the airport we picked up a 4WD Daihatsu Terios from **Europcar** (highly recommended) and a \$22 **Kolbi** sim (there is a kiosk located in the baggage reclaim section), and then just used Google Maps for directions (in most places signposts were limited!). The people are also very friendly and helpful, which made things straightforward.

For identification we relied largely on Fiona Reid's Mammals of Central America and Southeast Mexico (and dipped into other people's copies of Richard Laval's now sadly out-of-print Costa Rica Bats), Garrigues and Dean's The Birds of Costa Rica, Twan Leenders' Amphibians of Costa Rica, and Chacón and Johnston's Amphibians and Reptiles of Costa Rica. In advance of the trip we invested in a LED lenser head torch (<u>https://www.amazon.co.uk/Ledlenser-H7-2-Professional-Head-Black-</u> x/dp/B00FW12I3O/ref=sr_1_3?ie=UTF8&qid=1499965606&sr=8-3&keywords=led+lenser+head+torch) and were really impressed with it.

Itinerary

22 nd -24 th June	La Selva (we arrived in San Jose just after 2:30pm which left enough time to
	get to La Selva for 7pm)
24 th -25 th June	Manzanillo (including a brief foray into Cahuita NP)
25 th -26 th June	La Selva (including a trip to Pierella Gardens)
26 th -27 th June	Tirimbina
27 th -28 th June	Bosque de Paz
28 th -30 th June	Monteverde
30 th June-2 nd July	Manuel Antonio (stopping en route from Monteverde at Carara NP)
2 nd -3 rd July	Drake Bay
3 rd -5 th July	Corcovado
5 th -6 th July	Drake Bay
6 th -8 th July	Cerro de la Muerte

La Selva (22nd-24th & 25th-26th June)

As with almost everywhere in Costa Rica, **La Selva** was brilliant. The evening we arrived we saw a **nine-banded armadillo** cross the road between the canteen and the tourist bedrooms. Walking the **SAZ** trail later that night (8:30-9:30pm), we saw a **Central American woolly opossum** and a **kinkajou** in the same tree. During the day **Central American spider monkey**, **mantled howler monkey**, **Central American agouti**, and **variegated squirrel** were all pretty easily seen from footpaths. We also saw a **Hoffmann's two-toed sloth** from the bridge along the **SAZ** trail, and another from the **suspension bridge** across the river. Like all but one of the sloths we would go on to see, these were spotted by guides. It's worth noting that you get a complementary guided walk on one morning of your stay – we went with **Jorge**, who was great and showed us lots of exciting birds, which was particularly useful as we struggled to get to grips with the extraordinary diversity. On another morning walk (the day we were in **Manzanillo**) he found a **silky anteater** for a guest! – it was in secondary forest ~80m before the green metal gate along the wide gravel path that leads left from the **SAZ trail**.

Lesser white-lined bats were easily found roosting during the day: in a resthut by the gravel path (soon after the left bend by the green gate), in the armpit of a tree at the research station end of the suspension bridge (to the left of the bridge as you face the station clearing, in one of the first large trees after the bridge reaches the bank), and in the walled-off structures under our accommodation block, where we also found **Seba's** and **chestnut short-tailed bats**. White bats are currently quite hard to find in the area, despite being present (hence our trip to **Pierella Gardens** later on). We also saw a very small bat (smaller than a common pipistrelle) in the forest, but don't know what it is likely to have been. **Collared peccary** are abundant in the research station clearing at the end of the bridge.

Spotlighting on our other two evenings at La Selva produced a tapiti under shrubs just below the canteen, a great view of an absurdly golden Mexican porcupine on the arboretum trail, a vesper rat in vegetation alongside the gravel path, and a red-eyed leaf frog in the swamp on the CCC trail (as well as Savage's bullfrogs more or less everywhere). During the day,

strawberry poison dart frogs are common, and we saw one green and black poison dart frog at CEN 400. There is a white-collared manakin lek at SAZ 650 but we only saw one male displaying when we were there.

Cahuita NP (24th June)

We broke our stay at **La Selva** with an overnight trip down to **Manzanillo**, on the Caribbean coast, and on the way

stopped-in at **Cahuita** as we had heard **crab-eating raccoon** could be seen. However, once there we were told by a ranger that these had been scared out of the area by a large cat (not sure of the species, or the likelihood this was true). We did see **white-nosed coati**, **mantled howler monkey**, and **red-tailed squirrel** though.

areen and black and strawberry poison froas



chestnut short-tailed bat



Manzanillo (24th-25th June)

Michael Kessler's 2016 trip report described taking a boat out of Manzanillo to look for costero (a fairly recent split from tucuxi) and so we thought it was worth a shot. Indeed it was! We took a 7am trip with a boatman called Pepe, which we had arranged through Abel Bustamante (c/o crlocalguide@hotmail.com). Pepe was great, and found us a mixed group of costero and bottlenosed dolphins within 20 minutes of starting to search for them in their favourite spot. They were great to spend time with - breaching frequently, and interacting closely with the bottle-noseds, with whom they can apparently communicate. Pepe also explained that Atlantic spotted dolphin are present in the area during the dry season (when the water is clearer) and that at times when the sea was calmer he could find manatee slightly farther south. It was clear he knew his patch incredibly well, and we'd highly recommend using him. Likewise Abel was helpful, and offered sage advice on a leatherback turtle trip – basically that they were not around that late in the year, with peak nesting time in May. We stayed a few kms away in Puerto Viejo, at Casa Merlin – a really friendly hotel, with nice rooms, and good birds in the garden. Spotlighting the night we arrived we saw a kinkajou in the garden, and after the next morning's boat trip we followed the owner's recommendation of a swim at the beach (a ~15min walk along the road and then down a path opposite a closed bar): it's really secluded and quiet, and there were cool land crabs along the path too.

Pierella Ecological Garden (26th June)

Having not seen white bat in La Selva and knowing they would be hard in Tirimbina (later confirmed by the guides there) we organised a trip around Pierella Garden with the owner William Camacho (8560 6504). This turned out to be a really good decision. As well as the reliable white bats (he has planted lots of their main food plant on his 5ha property), we saw two- and three-toed sloths, lesser white-lined and common tent-making bats, red-eyed leaf frogs and loads of great birds. William knew his land like the back of his hand, and was extremely proud of it – eager to show us all he could. Learning a bit about the butterfly farming business and his restoration work was fascinating, and at \$20 per person (for a two-hour tour – we had to explain after nearly three that we really had to go otherwise we would be late for meeting people in Tirimbina), this was some of the best value guiding we would have.



Honduran white bats, lesser whitelined bat, red-eyed leaf frog



Tirimbina (26th-27th June)

We went to **Tirimbina** primarily as a great site for bats, and we weren't disappointed. On our first walk our guides showed us a tent of **Thomas' fruit-eating bats** near the end of the main suspension bridge, and we saw an **agouti** along a path. **Emmanuel Rojas Valerio** – the fantastic bat person there –



found us lots of great birds, and a couple of **Spix's disc-winged bats**, extraordinary creatures which have evolved suckers on their wings to enable them to exploit as day roosts the slippery insides of





Spix's disc-winged bat, brown-throated threetoed sloth, rainforest hog-nosed pitviper

uncurling leaves. We would go on to find three more groups elsewhere; I suspect they are easier to locate in the wet season – try inspecting off-vertical, still furled-up *Heliconia* leaves. **Emmanuel** kindly helped us with lots of bad bat photos taken elsewhere on our trip, and the great Tirimbina guides also showed us a **rainforest hog-nosed pitviper** just off the path, and both **two-** and **three-toed sloths**. At night, we spotted a **northern raccoon** on the river bank below the bridge, two **kinkajous** and a **Mexican porcupine** crossing the bridge, a **tapiti** at the accommodation end of the bridge, as well as an **annulated tree boa** in a tree. We were lucky enough to accompany **Emmanuel** on his bat-netting rounds, where he caught one **chestnut** and three **Seba's short-tailed bats**, a **Jamaican fruit-eating bat**, and a **stripe-headed round-eared bat**. A really worthwhile stay...

Bosque de Paz (27th-28th June)

This luxury lodge with its surrounding montane forest isn't a site which mammal-watchers normally go to, but it is a birder's paradise. We went because a friend of ours told us it was a reliable place for **paca**. Talking to the owners it also seemed that **margay** are relatively commonly seen too. It rained for most of the afternoon, and so we just bird-watched in the garden – which was a fantastic spot, with hummingbirds galore on the feeders, **black guan** on the corn, and **agoutis** and **white-nosed coati** passing through. That said, we were disappointed that the lodge's new guide appeared to have limited knowledge of the birds, and seemed less good at spotting things than we were. However, that evening the **pacas** did indeed show up (at 1915 – they visit almost every day) to eat the bird seed in the garden, accompanied by what we eventually



caterpillar train

keyed-out to be **forest spiny pocket mice**, which were also common in the forest. In the morning, there were lots of great higher-elevation birds in the forest along the main road, a **red-tailed squirrel** crossing it, more **coatis** and **agoutis** in the garden, white-faced capuchins on the **Sendero Galería** and an **Alston's singing mouse** crossing the **Sendero Botánico**.

Monteverde (28th-30th June)

After quite a long and wet drive we arrived in the late afternoon and headed straight to the **Hummingbird Gallery** near the entrance to the **Monteverde Cloud Forest Reserve**, but the owner explained that the **olingo** typically only comes to the feeders from October to April/May, and indeed, despite our efforts it would be the first disappointment of the trip. So instead we sat and enjoyed a stunning display of hummingbirds, apparently unfazed by the increasingly heavy rain. We had arranged a walk with **Johnny Villegas** for that night, but the rain seemingly meant that it was cancelled, though this was never confirmed. However, we did manage to spot a **white-nosed coati** near our room in the grounds of the good value **Hotel el Bosque**.

Knowing we wouldn't see **olingo** at the feeders, we looked elsewhere for opportunities. **Johnny** had mentioned a place called **Refugio de Vida Silvestre** which turned out to be a private farm north east of **Santa Elena**. We went to ask whether they thought there was much chance, and saw a **nine-banded armadillo** on our arrival. They said they did indeed sometimes have **olingo** but that **kinkajou** was far more common. Unsure of whether to book, we instead headed back to the **Hummingbird Gallery** to see if any bats were there – at least one feeder is usually left up. There were lots of bats flying about, and showing



Geoffroy's hairy-legged bat; note absence of tail membrane, and hairy legs!

our photos the next day to **Richard Laval** revealed both **common long-tongued bat** and **Geoffroy's** hairy-legged bat.

Over the next two days we took morning walks around **Monteverde Cloud Forest Reserve** and **Curi** - **Cancha Reserve**, both of which had great birds (including **quetzals** and **trogons**), but mammals were pretty difficult, not helped by large amounts of rain! However, we did find some **Spix's disk-winged bats** in the bananas near the lookout in **Curi-Cancha**. **Red-tailed squirrel** and **agouti** were also around, as well as one **variegated squirrel** in **Monteverde** village. There was also a **three-wattled bellbird** calling behind **Stella's Bakery**.



forest spiny pocket mouse (photo: Orlando Calvo) and some brilliant crickets

For our second night we organised a spotlighting trip with a guide called **Orlando Calvo** (8395 4938) who took us to **Refugio de Vida Silvestre** in search of **olingo**. Despite not seeing this creature, **Orlando** (locally known as **Fish**) was a fantastic guide, and we'd highly recommend him. Highlights included a mass emergence of **drone leaf cutter ants**, a **Mexican orange-kneed tarantula**, several unbelievably well-camouflaged **stick insects** and **crickets**, and two very beautiful **green palm pit-vipers**. Mammals were relatively hard, but we did see a **two-toed sloth**, our only **common opossum** of the trip, more **Geoffroy's hairy-legged bats** at a nectar feeder, and a confiding **forest spiny pocket mouse**. An **olingo** was seen that night on a different property, also a farm near **Santa Elena** called **Santa Maria's**, which tallied with the advice we received suggesting they are often easier to see at slightly lower elevations (~1300m rather than the 1500-1700m of the park).

Carara NP (30th June)

We broke the drive from **Monteverde** to **Manuel Antonio** by stopping to see the **American crocodiles** from **Tarcoles bridge**. There were loads, they were enormous, and two **scarlet macaws** flew over as well. We then went for two quick walks in **Carara NP** itself, first along the **River Trail**, accessed via a small entrance ~1km after the bridge, and then in the main part of the reserve. The **River Trail** has a shady-feeling car park, and unhelpfully the attendant left as we arrived. Given that thefts seemed commonplace we didn't hang around too long before moving on. But in those 15mins we did manage to bump into a guide who pointed out two **northern ghost bats** under a palm frond overhanging the path, and also a family group who said they had seen "another badger". We aren't quite sure what they actually saw, but given the father described it as looking like a "honey badger" we think they must have seen **greater grison** – it was a shame a combination of the heavens opening and the growing sense it was a matter of time before something got nicked from the car meant we didn't spend longer looking for them.

We went on to the main entrance for another walk. Thankfully that car park is much more obvious from the road, and the park staff are stationed there until 4pm so we felt comfortable leaving the

car. A short walk around the nearest circular path meant we flushed two **white-tailed deer**, as well as spotting a Pacific coast version of the **green and black poison dart frog** (with more black and a lighter shade of green than those at **La Selva**). The parks people also explained there were sometimes **white-lined bats** roosting in a tree in the car park, but they weren't there when they looked for us.

Manuel Antonio (30th June-2nd July)

Manuel Antonio is a strange place, and a combination of hordes of tourists and a somewhat disappointing time with Ave-Natura meant it was our least enjoyable stop. Red-backed squirrel

monkeys, white-faced capuchins, howler monkeys, agouti and three-toed sloths were all easily seen in the National Park - as were a group of picnic-raiding raccoons at the beach. We are still unsure of what species these were – they had obviously black legs, reddish tails and a dark appearance overall, but the fur didn't appear to be reversed on the neck, and the face-mask and behaviour were more like northern than crabeating. We didn't take any pictures, but this image from Manuel Antonio matches closely what we saw. Please do get in touch if you have any



Manuel Antonio raccoon (photo: Trip Advisor)

suggestions, but looking at **Arkive** photos of **crab-eating racoons**, and advice from **Fiona Reid**, we suspect these are also **northern racoons** just with weird markings. We also found a **Spix's disk-winged bat** in a furled *Heliconia* just off the main road through the park. Finding somewhere to spotlight around Manuel Antonio proved somewhat tricky, but an accessible patch of habitat along the last part of the road leading to the **Parador Hotel** produced the only sloth we found for ourselves – a nice view of an active **two-toed sloth**.

We went to **Manuel Antonio** primarily to go out with **Ave-Natura** and so had booked a **silky anteater** tour with **Milenlli** three months earlier, as well as a trip to the **Damas bat caves** with **Maurilio**. The **silky anteater** tour was expensive (\$76/person) and (perhaps because of heavy rain the previous day) we didn't see a single mammal. Indeed, any bird-spotting seemed largely up to us too (though some things were pointed out by a party of kayakers), and so we would echo **Richard Webb's** caution and suggest going out for less money with the kayakers instead.

The trip to the **Damas bat caves** was better, but again we were left a bit disappointed, particularly given the \$80/person we were charged, despite the site being only ~20mins' drive from the boat. We had booked a long time in advance to visit the caves with **Maurilio** as we thought he would know which bats were there. However, on the day we were told **Maurilio** was busy so **Milenlli** took us, and while she was very enthusiastic she knew little more than we did about the species present. She did point out **common vampires** (easy to locate from the pools of blood-stained faeces on the floor) and **greater white-lined bats** (common at the entrance/exit, larger and darker than the **lesser white-lined bats** we had seen before). From our photos, **Richard Laval** and **Emmanuel Rojas Valerio** identified most of the bats we saw as **Carollia** species (probably both **Seba's** and **chestnut**), with one **Niceforo's bat** among them. However, we felt that with a more knowledgeable guide we might have learnt more. That said, a guide is definitely necessary – we quickly felt lost in the caves! – but we would recommend seeing if another tour operator would do it for less.

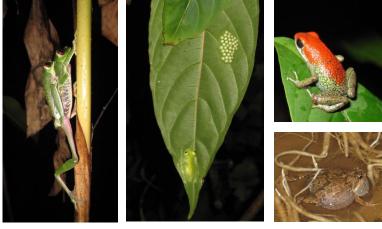
When we first arranged the trip we had asked for a **yapok** trip too, and were offered a slightly discounted price of \$50/person, given the other activities we had booked. However, three weeks before going **Milenlli** told us that the **yapok** weren't being seen, and so cancelled the trip.

Drake Bay (2nd-3rd & 5th-6th July)

Our luck changed as we headed to **Drake Bay**. Given the unpredictable state of the river crossings on the Osa Peninsula we opted instead to park the car in **Sierpe** – there is a safe lock up at **Restaurante Las Vegas** for \$6/day – and take the boat for the last few kilometres. There is an interesting cultural settlement with 1200-year-old near-perfect stone spheres from the Diquís culture, at a site called **Finca 6**, ~3km before **Sierpe**. This was well worth the entrance fee, and 45mins walking around – there were some good birds in the gardens too. We got the 4pm ferry to **Drake Bay**. The boat journey is pretty cool as you see the progression from rainforest to mangroves (and some large stands of saline-tolerant ferns), as well as having the excitement of battling the river currents/breakers as you enter the sea/river. We saw **howler monkeys** on the way, and dad had a **Mesoamerican slider turtle** on the way back. At sea on the way to **Drake Bay** we also had a couple of **pantropical spotted dolphins** which were quite exciting. The ferryman pulled over for five minutes too so that we could all get a good look – I can't think of many places where a scheduled boat would stop like that.

In **Drake Bay** the first stroke of luck was checking-in to **Cabinas Pura Vida**, a really friendly B&B. As well as picking us up from the boat, they had agreed to leave food out for us in the morning (as we were setting off so early) but actually ended up cooking it for us anyway. The owner, **Norlyn**, also explained that he owned a patch of primary forest on the border of **Corcovado NP**, where he was thinking of building an eco-lodge – if he does it may well be worth checking out as a friendlier (and doubtless cheaper) alternative to the Park itself.

That evening our guide for **Corcovado**, **Steven Masis Díaz** (of **Utopia Drake Outdoors**; <u>https://www.utopiadrakeoutdoors.com/</u>), met with us at our hotel. We were introduced to him by a colleague of dad's, who **Steven** had contacted to ask about **tapirs** (dad's colleague runs an NGO trying to protect them), and who has since been hired each time they need a **Corcovado** guide. We have been fortunate to spend time with a lot of different guides – but **Steven** is probably the best we have ever been out with. Given that nowadays you are only allowed into **Corcovado** if you are accompanied by a guide, we strongly recommend going with **Steven**.



We had a second night in Drake Bay after our return from Corcovado, and hired Steven again, this time for a frog walk. It was fantastic, with Steven finding us two species of glass frog, redeyed leaf and masked tree frogs and granulated poison dart frog, as well as another Spix's diskwinged bat. Steven said he sees yapok occasionally on the stream he uses for the frog walk. As we

red-eyed leaf frogs, reticulated glass frog male and egg mass, granulated poison dart frog, túngara frog

found elsewhere on our trip, these guided walks help support private conservation efforts – with the owner of the forest we visited getting a substantial part of our tour payment as an incentive to manage it for nature. **Steven** also told us of a site for **greater fishing bat** at the far left-hand end of the bay as you look out to sea (go along the beach, past a hotel onto a path, and look from the suspension bridge) - but we went too early (~6pm) and so didn't see them.

Corcovado (3rd-5th July)

On our early morning boat to **Sirena** we again had a pod of **pantropical spotted dolphin** and the skipper again sat with them for at least 10mins, which was a nice treat. But before talking about how great **Corcovado** is – and it really is special – it comes with a few warnings. First it is ridiculously expensive, particularly the food which you are forced to buy; this in turn means the legions of backpackers commented on in earlier trip reports have been replaced with uber-rich day-visitors from \$1000-a-night Golfo Dulce lodges, trying to remember which way round to hold their guides' Swarovskis. Second there are a lot of draconian rules – you are only allowed on trails 4am-5pm, for example, and even walking around the ranger station to spotlight is strictly prohibited. Third, you have to book everything exactly one month in advance (via reservaciones@parquecorcovado.org). And finally, the staff are pretty officious. But the having-to-take-a-guide policy actually seemed quite sensible given that it was probably pretty easy to get lost (the Costa Rican Environment Minister famously did so for three days back in 2006, and got trampled by a tapir). It also meant we met **Steven**, which was fantastic.



slaty-tailed trogon, black-mandibled toucan, pale-billed woodpecker (all photos: Deyanira Hernández)







Around Sirena, white-nosed coati, agouti, spider and howler monkeys were all common. Steven also found us roosting greater white-lined bats, we found what turned out to be a silverhaired myotis resting under an eave at the ranger station, and at ~5am one morning we watched greater fishing

> bats over the mouth of the Rio Claro. On walks during the day we had the usual red-tailed squirrels, one group of white faced capuchins, and a couple of excellent sightings of redbacked squirrel monkeys

orange mouth tarantula, endemic bullhorn Acacia allennii and attendant ants, silver-haired myotis, , Golfo Dulce anole, and a large grasshopper

(which are a different subspecies to those at Manuel Antonio), as well as **two-** and **three-toed sloths**. There was a group of **collared peccary** at **Sirena Station** one morning (the **white-lipped peccaries** wander very widely and so are much harder to find, although you might increase your chances by walking in or out from **La Leona**), and a **puma** print near the **Sirena river**.

The highlight of the entire trip, though, was our full day in the park, when along with more routine delights we saw two **Baird's tapir** swim across the **Sirena**, and in the evening a third animal browsing calmly ~4m away from us. We also watched tapirs in wallows a couple of times, and in total had six views across our stay. We also saw two **northern tamanduas**, with one actively foraging in a tree, and a **tayra**, which **Steven** had seen on his previous two trips to **Sirena**.



The rest of the fauna of **Corcovado** was pretty spectacular too, with **tarpon** and **bull sharks** in the mouth of the **Sirena** around high tide, **American crocodiles** patrolling in the river itself, and an adult **spectacled caiman** plus one of her youngsters in the small drainage canal adjacent to the **Sirena** airstrip. Plus, we saw nearly 100 species of birds, with several only revealing themselves thanks to **Steven** successfully imitating their calls. This included a **collared forest falcon** which flew from a couple of hundred metres away to chase **Steven** off. And there was an **orange mouth tarantula** which had built a lichen-coated tunnel on the bark of a tree.

Cerro de la Muerte (6th-8th July)

After catching the afternoon boat back to **Drake Bay**, frogging with **Steven**, and then taking the early morning boat back up the **Sierpe River**, for the final leg of the trip we visited **Cerro de la Muerte**, where one of dad's colleagues, tapir biologist **Esteban Brenes-Mora**, has his field site. It was a fantastic way to end the trip, with some great birds (including a **quetzal** at rather high altitude for the time of year) and some really stunning views of active volcanoes, as well as great oak and bamboo forest, large areas of heath-like páramo on the highest slopes, and even a patch of turbera (tropical peat bog) - not to mention quite a few new mammals.

We stayed in a great homestay called **Iyok Ami** and met up with **Esteban** and a friend of his, **José Ramirez-Fernández**, who is studying high-altitude small mammals. Both are very good naturalists, and showed us many high-altitude endemic birds, and some fresh tracks of **tapir** and a large cat (**puma** or **jaguar**, both were camera-trapped in the previous three months) on the paths around the property. We also saw a few **red-tailed squirrels**.

At night, we tried spotlighting in various areas of forest and páramo, but only picked up one **Mexican porcupine**, about 150m along the trail leading down from **Iyok Ami**. It was particularly interesting given that it was much blacker and seemingly furrier than the lower altitude ones. **Cacomistle** are sometimes seen in the area (apparently look in trees laden with epiphytic bromeliads from ~4:30pm onwards, and listen out for their wailing calls), and **Dice's cottontail** are around although very rarely

seen (we found a **cottontail** latrine in páramo flanking the side-road that leads up to the communications towers about 15km SE of **Iyok Ami**, but despite an hour's spotlighting that night failed to see any rabbits).



José Ramirez-Fernández, Peromyscus nudipes, Chiriquí singing mouse, montane rice rat

As **José** was there, we were able to trap in the grounds of the property for one night, using **20** Sherman and six Longworth traps. The Longworths caught nothing, but between them the Shermans caught three **Chiriquí singing mice**, two endemic **deer mice** (the recently split high-altitude *Peromyscus nudipes*), a **montane rice rat** and a **Chiriquí harvest mouse**. We felt very privileged to get the chance to see these species, all of which are restricted to the mountains of Costa Rica and western Panama.

After a final dawn on **Asunción**, a nearby 3400m hilltop which gave views of the full moon setting in the Pacific as the sun rose over the Caribbean, and a fun walk to see near-endemic **timberline wrens**, we set off for **San José** and (despite the best efforts of a landslide on the Pan-American Highway) our return flight to London - tired, happy, and full of great memories of an exciting and very rewarding trip.

What we saw and where

Mammals (50 species) Central American woolly opossum La Selva Common opossum Monteverde (Refugio de Vida Silvestre) Nine-banded armadillo La Selva, Monteverde (Refugio de Vida Silvestre) Hoffmann's two-toed sloth widespread Brown-throated three-toed sloth widespread Corcovado NP Northern tamandua White-nosed coati widespread Northern raccoon Tirimbina La Selva, Manzanillo Kinkajou Tayra Corcovado NP Central American spider monkey La Selva, Corcovado NP Mantled howler monkey widespread White-faced capuchin widespread Red-backed squirrel monkey Manuel Antonio, Corcovado NP Tapiti La Selva, Tirimbina Paca Bosque de Paz Central American agouti widespread Mexican porcupine La Selva, Tirimbina, Cerro de la Muerte Variegated squirrel widespread Red-tailed squirrel widespread Vesper rat La Selva Alston's singing mouse Bosque de Paz Chiriqui singing mouse Cerro de la Muerte Forest spiny pocket mouse Monteverde (Refugio de Vida Silvestre), Bosque de Paz Cerro de la Muerte Chiriqui harvest mouse Deer mouse - Peromyscus nudipes Cerro de la Muerte Montane rice rat Cerro de la Muerte Collared peccary La Selva, Corcovado NP White-tailed deer Carrara NP Baird's tapir Corcovado NP Costero Manzanillo Manzanillo Bottle-nosed dolphin Pantropical spotted dolphin Drake Bay Lesser white-lined bat La Selva, Pierella Garden (near La Selva) Greater white-lined bat Damas bat caves, Corcovado NP Seba's short-tailed fruit bat La Selva, Tirimbina, probably Damas bat caves Chestnut short-tailed fruit bat La Selva, Tirimbina, probably Damas bat caves Niceforo's bat Damas bat caves Thomas' fruit-eating bat Tirimbina Jamaican fruit eating bat Tirimbina Honduran white bat Pierella Garden (near La Selva) Common tent-making bat Pierella Garden (near La Selva) Stripe-headed round-eared bat Tirimbina

Spix's disk-winged bat Silver-haired myotis Northern ghost bat Common long-tongued bat Geoffroy's hairy-legged bat Common vampire bat Greater fishing bat

Birds (251 species)

Great tinamou Great curassow Grey-headed chacalaca Black guan Crested guan Marbled wood-quail Black-bellied whistling duck Muscovy duck Neotropic cormorant Anhinga Brown pelican Magnificent frigatebird Brown booby Black tern Laughing gull Brown noddy Bare-throated tiger-heron Yellow-crowned night-heron Green heron Tricolored heron Boat-billed heron Great blue heron Little blue heron Great white egret Snowy egret Cattle egret White ibis Green ibis Northern jacana Black vulture Turkey vulture Osprey Swallow-tailed kite Roadside hawk Semiplumbeous hawk Crested caracara Yellow-headed caracara

Tirimbina, M'verde (Curi-Cancha), M. Antonio NP, Drake Bay Corcovado NP (at station) Carrara NP Monteverde (Hummingbird Gallery) Monteverde (Hummingbird Gallery) Damas bat caves Corcovado NP (over Rio Claro mouth)

> Laughing falcon Collared forest-falcon (Crested owl, heard only) Mottled owl (Black and white owl, heard only) (Common potoo, heard only) Common pauraque Grey-rumped swift White-collared swift Chestnut-collared swift Mangrove swallow Blue and white swallow Grey-breasted martin Southern roughwing Violet sabrewing Green hermit Long-billed hermit Green-crowned brilliant Magnificent hummingbird Fiery throated hummingbird Scaly-breasted hummingbird Charming hummingbird Purple-crowned fairy White-necked jacobin Crowned woodnymph Stripe-tailed hummingbird Black-bellied hummingbird Coppery headed emerald Blue-throated goldentail Rufous-tailed hummingbird Green-breasted mango Green violetear Long-billed starthroat Purple-throated mountain gem Violet-headed hummingbird Volcano hummingbird Rock dove

Pale-vented pigeon Band-tailed pigeon Ruddy ground-dove Grey-chested dove Inca dove Ruddy quail-dove Chiriquí quail-dove White-tipped dove White-crowned parrot Red-lored parrot Mealy parrot Brown-hooded parrot (Great green macaw, heard only) Scarlet macaw Barred parakeet Orange-chinned parakeet Crimson-fronted parakeet Olive-throated parakeet Orange-fronted parakeet Squirrel cuckoo Smooth-billed ani Groove-billed ani Slaty-tailed trogon Gartered trogon Black-throated trogon Collared trogon Baird's trogon Orange-bellied trogon Resplendant quetzal Keel-billed toucan Black-mandibled toucan Collared aracari **Emerald toucanet** Blue-crowned motmot Rufous motmot Broad-billed motmot Green kingfisher Amazon kingfisher **Ringed kingfisher** Rufous-tailed jacamar Prong-billed barbet White-whiskered puffbird White-necked puffbird White-fronted nunbird Pale-billed woodpecker Black-cheeked woodpecker

Hoffmann's woodpecker Golden-naped woodpecker Smoky brown woodpecker Cinnamon woodpecker Red-crowned woodpecker Cocoa woodcreeper Streak-headed woodcreeper Wedge-billed woodcreeper Plain brown woodcreeper Tawny-winged woodcreeper Northern barred woodcreeper Black-striped woodcreeper Plain xenops Scaly throated leaftosser Spotted barbtail **Red-faced spinetail** Ruddy treerunner Fasciated antshrike Black-crowned antshrike Black-hooded antshrike Chesnut-backed antbird Streak-chested antpitta Black-faced antthrush Dot-winged antwren Golden-crowned spadebill Common tody-flycatcher Ochre-bellied flycatcher Black phoebe Bright-rumped attila **Rufous mourner** Royal flycatcher Long-tailed tyrant Great kiskadee Boat-billed flycatcher Social flycatcher Grey-capped flycatcher White-ringed flycatcher Streaked flycatcher **Tropical kingbird** Sulphur-bellied flycatcher Great-crested flycatcher Black-capped flycatcher Masked tityra Cinnamon becard Long-tailed manakin Red-capped manakin

White-collared manakin Blue-crowned manakin Rufous piha Three-wattled bellbird Azure-hooded jay Brown jay Ruddy-capped nightingale-thrush Slaty-backed nightingale-thrush Black-headed nightingale-thrush Black-billed nightingale-thrush Mountain thrush Clay-coloured robin White-thoated thrush Black-faced solitaire Sooty thrush American dipper Tropical mockingbird Long-tailed silky-flycatcher Black and yellow silky-flycatcher Long-billed gnatwren **Tropical gnateater** Riverside wren Streak-breasted wren Ochraceous wren Plain wren (Black-bellied wren, heard only) White-breasted wren Bay wren House wren Timberline wren Grey-breasted wood wren Slaty-throated redstart **Collared redstart** Mangrove warbler Golden-crowned warbler Three-striped warbler **Buff-rumped warbler** Tawny-crowned greenlet Lesser greenlet Cherrie's tanager Passerini's tanager Blue-grey tanager Golden-hooded tanager

Smoky-faced tanager Crimson-collared tanager Silver-throated tanager Spangle-cheeked tanager White-shouldered tanager Palm tanager Grey-headed tanager White-throated shrike-tanager Green honeycreeper **Red-legged** honeycreeper Shining honeycreeper Slaty flowerpiercer Blue dacnis Bananaquit Variable seedeater White-crowned seedeater Nicaraguan seed eater Yellow-faced grassquit Blue-black grassquit Greyish saltator Buff-throated saltator Yellow-thighed finch Large-footed finch Orange-billed sparrow Chestnut-capped brush-finch White-naped brush-finch Black-striped sparrow White-eared ground-sparrow Blue-black grosbeak Red-collared sparrow Volcano junco Red-throated ant-tanager Red-winged blackbird Melodious blackbird Shiny cowbird Great-tailed grackle Scarlet-rumped cacique Black-cowled oriole Montezuma orependula Chestnut-headed oropendola Olive-backed euphonia Yellow-throated euphonia

Reptiles and amphibians (43 species) Rainforest toad Marine toad Common dink frog Bransford's litter frog Common rain frog Noble's rain frog Pygmy rain (=robber) frog Savage's bullfrog Túngara frog Red-eyed leaf frog Hourglass treefrog Small-headed (=yellow) treefrog Masked treefrog Speckled (=Fleischmann's) glass frog Reticulated glass frog Green and black poison frog Granular poison frog Strawberry poison frog Mesoamerican slider Black river turtle Common basilisk **Emerald basilisk** Brown basilisk Helmeted basilisk (=casque-headed lizard) Black iguana Green iguana Green spiny lizard Water anole Ground anole Ghost anole Slender brown anole Jumping (=Golfo Dulce) anole Yellow-headed gecko Common house gecko Central American ameiva **Reticulated ameiva** Four-lined ameiva **Tropical alligator lizard** Annulated tree boa Green palm pitviper Rainforest hognosed pitviper Spectacled caiman American crocodile