

The Copper Canyon

Mexico's Scenic Wonder

20th September – 4th (8th) October 2010

A Greentours Trip Report

Leaders – Ian Green & Eric Miranda

Day 1 September 20th Departure

Departure from Heathrow was just a little late and so we arrived similarly just after schedule in Mexico City. Customs and immigration were unusually slow – they are usually very quick here – and so we were on our way to the hotel by a little after nine. We settled into the Gran Prix's comfortable rooms for a rather short night.

Day 2 September 21st Los Mochis, Maviri and to El Fuerte

It certainly seemed pretty early when we all convened at the Gran Prix's reception for our five o'clock shuttle to the airport. Some queueing and hasty drinks later and we were boarding our flight. We were able to appreciate Popocatepetl and its smoking top as we took off and then turned round towards this great peak. Sadly the landscape soon disappeared under a thick blanket of cloud and we didn't see land or sea again until not long before we descended into Los Mochis. Once through the cloud we were met by a watery scene, great lagoons and salt pans stretched along the coast. There had been heavy overnight rain and so everywhere seemed to have a veneer of water. Los Mochis is a tiny airport, one that you can walk from the plane into the one flight baggage carousel and watch your bags arrive by pickup. So soon we were meeting up with Eric our local guide and gastronome, and our two drivers and helpers Ivan and Beto.

They took us coastwards, with sandflats and water on each side with patches of mangrove. Soon the mangrove started to dominate and the birds started to get more frequent. We just had to stop. There were Little Blue Herons, Snowy Egrets and White Ibises, and an Osprey perched in the mangroves. Waders were quite varied with Willet, Hudsonian Godwit, Whimbrel, Long-billed Curlew, Grey Plover, Lesser Yellowlegs, Short-billed Dowitchers, Semi-palmated Plovers, Western Sandpiper and just before we left, a group of Wilson's Phalaropes spinning in the water. Mangrove Swallows hawked across the water whilst behind us White-winged Doves perched atop the tall cacti.

We moved down to the sea and the little village next to it. A tranquil scene, though no doubt the shrimpers we could see were in earnest. There was a little-disturbed beach stretching off to one side and a loose dune-field disappearing off in the distance. Henry set about the dune flora

finding Devi's Claw *Proboscidea parviflora* with both yellow and orange flowers and there was also the nice pink flower *Boerhavia rosei* (or *purpurascens*), a fleshy member of the *Nyctaginaceae*, and one of at least three members of this genus present. Offshore we spotted a small number of Bottle-nosed Dolphins. Blue-footed Boobies passed by in ones and twos at intervals and we saw Heerman's Gull, Yellow-footed Gulls, Forster's Terns, Caspian Terns and a Black Tern go past. There were a number of those two archetypal Pacific shoreline birds, Brown Pelicans and Magnificent Frigatebirds. Moving back inland we stopped at a small cave. This contained a large number of Mexican Free-tailed Bats and was very smelly! There were Tropical Kingbirds patrolling the cave entrance and Hooded Orioles and Curve-billed Thrashers amongst cacti at the top of the cliff which included a *Mammillaria* with red fruits, a couple of *Opuntia* species and a Pitahaya species. Fiddle and Blue-clawed Crabs were noted in the mangroves. Tall cardon cacti, *Pachycereus pringlei*, could be seen further up the hills.

We took a look at a slope a mile up the road. Here we got close up to a barrel cactus for the first time. This was the impressive *Ferocactus herrerae*, around a metre tall and twenty cm across and with very solid recurved spines protecting it. Henry got to grips with some of the thornscrub trees which included *Bursera fragaroides* and Brasilwood. Hooded Orioles and Rufous-winged Sparrows were seen and Andy found a couple of American White Pelicans in the bay. A surprise here was turned up by Sheila and Tina, a group of four Roseate Spoonbills.

Then it was off towards El Fuerte. After a long agricultural interlude we entered the Tropical Dry Forest zone and saw a deal of good habitat. We took a walk up a track. There were several Pierids mud-puddling and Pipevine Swallowtails were noticeable. Gulf Fritillaries were here and there. This was the first time we had really noticed the abundance of insect life in this zone at this season. There were crickets and grasshoppers, including some spectacular wee beasties, everywhere. A straggling pink-flowered *Polygonacean* vine was common. Entering a clear area we took a while to realise that there was an Antelope Jack-Rabbit sat in the middle of it. Needless to say he and his unfeasibly long ears soon fled. All the time we were there flocks of White-winged Doves flew past and we saw Gila Woodpeckers on the *Pachycereus pecten-aboriginum* cacti. Then it really was time to get on to El Fuerte which we arrived at around five forty-five. We settled into the very elegant and comfortable El Fuerte Hotel and met up for a meal at seven-thirty.

Meanwhile I popped off to have a wander in our new surroundings and found it to be rather full of nice things! The slope below the old fortress behind the hotel had several Pipevine Swallowtails going to roost whilst an old cottonwood down by the river hosted many Gray Crackers. There was a good mixed flock of birds down here including MacGillivray's, Nashville and Yellow Warblers. There were several Violet-crowned Hummingbirds and Thick-billed Kingbirds just round the corner from the hotel and just as dusk arrived Lesser Nighthawks started to populate the sky - there were many of them over the distant forests!

Day 3 September 22nd Choix area

My early morning walk down by the river was quite productive with sightings of Rufous-bellied Chachalaca, Peregrine, Common Black Hawk, Painted Buntings and abundant Lesser Nighthawks.

The Hotel El Fuerte supplied us with an excellent breakfast with papaya followed by scrambled eggs and ham and toast. Well fueled-up we were off on the bumpy road to Choix. To be fair the road is only bumpy for the first half of the journey! We made slow progress more because of the wealth of life around us. First a Sierra Box Turtle stopped us and then an albino Crested Caracara, a most odd bird. The verge here and indeed everywhere, was a mass of flowers. Especially prominent were blue, purple, orange and red *Convolvulaceae*, the red being the lovely *Ipomoea quamoclit*. Feeding on the red and orange members of the family were some very active but fortunately very close hummingbirds. A Violet-crowned Hummingbird showed all how he'd got his name and a female Black-chinned/Ruby-throated Hummingbird buzzed around close to us. The fabulous male Costa's Hummingbird with a shimmering pink-purple throat was less easy to get a good look at.

We took a walk up a side track for a couple of hours though there was so much to see we covered less than a kilometre. First up was a superb Greater Roadrunner who was too busy sizing up his prey in the middle of the track to worry about us. Suddenly he had it, a tiny snake, and then realising that there were many eyes on him, he was off. There were lots of the locally common but range restricted Sinaloan Crow. Insect life was amazing. Everywhere there were grasshoppers and crickets, many of them brightly coloured and some were quite a size too. Bill found a Jewel Beetle and there were abundant chafers and shiny metallic green dung beetles, one of which was watched for some time heaving his load up a slope. There were mantids, spiders, huge wasps, robber flies, bee flies and many kinds of ants. Butterflies were fabulous too. Up to three Giant Swallowtails puddled together and there were regular meetings with Pipevine Swallowtails. We saw our first Tropical Leafwings and Empress Leilia. The regional endemic Howarth's White was a good find. Skippers were varied and common with no less than three tailed species – Dorantes Longtail, White—striped Longtail and the Zilpa Longtail. There were Texas Powdered Skippers (like duskywings), Tropical Checkered Skippers and the related Laviana White Skipper, the little Whirlabout, and the lovely Brown-banded Skipper. Riodinid-like butterflies were noticeable though few actually turned out to be Riodinids. The pretty little long-winged black species with orange bars was in fact the Elf, whilst the 'fritillary-mimic' actually turned out to be a fritillary – the Tiny Crescent! On the way back there were some fine hummingbirds with a Broad-billed seen at close range, a long-billed Lucifer Hummingbird on the wire and Sheila found the best of all, the tiny Bumble-Bee Hummingbird which posed well at just three metres range for us – magical.

We moved on, stopping for an ice-cream in Choix before continuing just out of town to a river. This river had plenty of brown water coming down it, most of the other rivers we had crossed were dry. We drove along the riverbank and pulled up under a tree for lunch. It was getting hot now and birdlife was limited to a few orioles, including Streak-backed, an American Kestrel, and along the river itself, Spotted Sandpipers and a Black Phoebe. The butterflies were another matter. There were loads. Even the Tropical Leafwings were common. Most obvious though were the pierids. We found several groups mud-puddling in tight formation, these often containing half a dozen or more species. We noted both White and Yellow Angled Sulphurs, Cloudless and Lyside Sulphurs, Southern Dogface, Dina and Boisduval's Yellows, Dainty Sulphur and both Sleepy and Tailed Oranges. There were Silver Emperors, American Snouts and Banded Peacocks too. Eric served up a fine spread of tuna and apple sandwiches and even made us a dessert on the spot!

We took the 'dam' road from here, a fine piece of tarmac with no traffic on it. This passed through great countryside looking full of wildlife potential. We stopped just past the dam where a local landowner opened the gate so we could go down to look at his hot springs. They were exceptionally hot! A snake slithered off very quickly and then we ran into some good birds. A single Gambel's Quail suddenly arrived on the road and swiftly exited whilst almost in the same instant a covey of Elegant Quail were fluttering inelegantly from cover on the left! The hot springs were in an old riverbed and produced a most strange habitat. Between rocky outcrops were wet areas with abundant *Cyperaceae* including *Eleocharis* and *Isolepis* species. A scrambling milkweed attracted many White Peacocks and one fine butterfly seen here was the Dingy Purplewing whilst Gray Crackers actually cracked their wings up by the bus. Grey Hawk, Great Blue Heron and a passing Peregrine were noted. It was the dragonflies that really excelled though. The purple-pink Roseate Skimmer was noted as was an impressive blue-saddled *Anax* species. Other fine species included the sumptuous Filigree Skimmer which had been seen at several sites during the day.

Day 4 September 23rd Rio Fuerte

We met up at six-thirty with the earliest hints of dawn showing in the sky. Soon we were off to the 'put-in', just ten minutes drive out of town. Here we waited for a little shuttling to be done and the other boat to arrive. Dawn was just arriving and so the air was full of Lesser Nighthawks just finishing their shift and lots of kingbirds just about to start theirs. There was a general toing and froing of waterbirds with small groups of Neotropical Cormorants flying up and down river as well as small groups of Mexican Black Ducks, Green-winged Teal, White-faced Ibis and even a couple of Roseate Spoonbills. Great Blue Herons and Great Egrets flapped past. There was a fine patch of *Hymneocallis pimana* flowering where we got into the little boats. These were hard-hulled and we had six or so in each with the boatman at the back with two oars. These were needed to steer the boats, not to propel them, as the current was good and strong so we went down stream at a steady pace. It was great to get out on the water with no engine! The next half an hour produced a veritable stream of good birds. Hardly had we left than we were admiring Common Black Hawk one side of the river and Osprey the other. The Osprey accompanied us downriver for a while. Our first Black-throated Magpie Jays appeared though a little silhouetted against the light however it didn't matter for a fine bird sat on a dead snag for a while further down stream though there were distractions from a Rose-throated Beccard and an Orchard Oriole at this point. As the sun had only just risen many smaller birds were sitting up on top of the riverside vegetation so we got good views of Gila and Ladder-backed Woodpeckers, Baltimore and Hooded Orioles, and even Painted Buntings.

Soon we landed and whilst Eric, Ivan and Beto carried our breakfast (or at least the things to make it with!) along the path we dallied for there was much to see. Across the river a tree was covered in Neotropical Cormorants. A commotion in the trees at the start of the path was caused by a fast-moving cuckoo and various passerines going in after a Ferruginous Pygmy Owl, the others soon left but not the owl and eventually I found a spot where we could see it well. It had a very fierce pair of yellow eyes! Bill found a scorpion hiding behind some decaying *Opuntia* half way up a plant of the same! Rufous-bellied Chachalacas started calling all around and some flew past, the owl turning his head to watch them go. Then we encountered some Sinaloa Wrens, these with Wilson's Warbler, and a Red-billed Pigeon flew

over, landing some trees away. It was all we could do to get ourselves to breakfast for birds seemed everywhere and the butterflies were just starting up too. The path went to an archeological site where rocks were carved with ancient petroglyphs. Eric set up his cantina under a shady tree round the back and started to produce the most delicious burritos, and while these were cooking we had a bowl full of melon each. Coffee, tea and juice too, all the more tasty because of the location. A fabulous pair of Happy Wrens came very close, one sitting just two metres from us at one point. These behaved in a noticeably nuthatch-y way and have a great lively little ditty! A flock of Cardinals moved through whilst woodpeckers, Lazuli Buntings and Baltimore Orioles came and perched on a nearby dead tree. Further away we could see a Rufous-breasted Chachalaca. There were birds everywhere but the butterflies were soon to become even more abundant as it warmed up considerably over breakfast. On the walk back to boat we saw abundant Variegated Fritillaries, lots of White and Banded Peacocks, several Tropical Leafwings, Pipevine Swallowtails, Elfs, various pierids and a truly impressive variety of skippers including tailed Zilpa and White-striped Longtails, the Mazans Scallopwing, White-patched Skipper, Common Bluevent, Dun Skipper and the marvelous tiny golden Southern Skipperling.

Back on the boats, we drifted downstream. It was ten o'clock now and much quieter on the bird front though the butterflies were going at it hammer and tongs all the way along the bank especially where the creamy flowered milkweed vine hung over the bushes - these were swarming, especially with Soldiers, a Monarch mimic. Northern Rough-winged Swallows flew back and forth and we also saw Black Phoebes, Spotted Sandpipers and a Gray Hawk. We landed in town just near our hotel and walked along the water front to get back there. This proved a great spot to watch two lovely hummingbirds, Violet-crowned Hummingbird and Plain-capped Starthroat, the latter complete with his shimmering pinky – red throat patch.

Some elected to explore El Fuerte's pleasant streets whilst others headed out to the area where we had got on the boats in the morning. This proved a good area for butterflies, there were several large groups mud – puddling on the road with a colourful mix of *Pierid* species present. Skippers and Elfs were abundant along the road and in the grassland were lots of Eastern Short-tailed Blues and Arachne Crescents whilst the lovely orange-flowered *Asclepias currasavica* had one Queen, another Monarch mimic, to each flowerhead! Belted Kingfisher and Green Kingfisher were seen in the wetland as well as Northern Jacana and Common Yellowthroat. On the way down we had stopped for an iguana, the Ctenosaur, or Sonoran Spiny-tailed Lizard, and then found several, one large one posed well up a tree. In the same spot we found a prettily marked Whiptail. Bill found plenty of fine insect life including some nice caterpillars, various shimmering beetles and a strange neuropteran with the most obscure structure! Then it was back to town where Eric took us to a little local taquería, a small restaurant that serves all manner of tostadas, quesedillas and the like. The beef broth was excellent with half a lime squeezed into it!

Our afternoon walk started with the heat still on, the sunny humid day meant temperatures were still high at four. Pipevine Swallowtails were noticeable as we walked down to the river checking out the differences between Thick-billed and Tropical Kingbirds on the way. We soon found a tree with a number of birds in it, these including Orange-crowned and MacGillivray's Warblers as well as Canyon Towhees and Northern Mockingbird. Down nearer the water several butterflies including a Common Buckeye sat on the sand. Bill spotted a Little Green

Heron and Sheila soon found another which sat posing in the sun. Meanwhile Henry thought about getting across some water to photograph *Psittacanthus calyculata* which was in fine yellow bloom. Gray Crackers were common on the trees whilst on one we found two fine male Clark's Spiny Lizards, these with a strong blue wash underneath. A little Verdin was a good find. Down the road we found an assortment of birds, Northern Orioles, Curve-billed Thrashers and various buntings. An Antelope Jack-Rabbit posed well, actually coming closer to us before eventually loping off, its improbably large ears swaying in the breeze. Across the river we found a nature reserve which we explored to dusk. There were some fine cacti and *Burseras* and the views over the river were great. Bill found some superb Bird-eating Spiders (Mexican Golden Redrump Tarantula – *Brachypelma albiceps*) on the way back, meanwhile I stayed a bit longer and was rewarded with several sightings of Mexican Parrotlets and also two Bare-throated Tiger-Herons, one of which sat on an old dead branch not so very far from an Osprey. As the sun set there was a great image of various cacti silhouetted against the orange and blue sky.

Day 5 September 24th El Chepe, the Copper Canyon Train

I was up pre-dawn to check out the area across the river. This produced a few interesting sightings, notably a few Pauraques on the road (as well as hundreds of Lesser Nighthawks in the air) and two Antelope Jack-Rabbits. There were several sightings of Clarke's Spiny Lizard and a fabulous 'grey tree frog'.

We breakfasted to the full again, a long hard day of sitting on a train in prospect, so we needed to have the plate of papaya and lime followed by the Mexican equivalent of a full English breakfast. We packed some of our bags into vans to go with Ivan and Beto on the road journey round to Divisadero which would take them two whole days! They dropped us at the station, just a few kilometres out of town and there we had just a short wait for the train which turned up very close to on time. Eric handed our tickets to the porter and we were shown to our seats in a nearly empty carriage - good stuff! Apparently tourism from the US has plummeted in the last couple of years and so this once busy line is in something of a quiet period. Good for us though as we were able to wander the carriage at will, apart from Bill and Clare who very unluckily found themselves in the two seats reserved for the director of tourism for Northern Sinaloa and his daughter! We were also able to get places at the open window section between each carriage more or less as required.

The journey took us through a long section of undulating Tropical Deciduous Forest hardly interrupted by anything before all of a sudden the cliffs of the Sierran foothills were close at hand. The scenery jumped up a level when a reservoir accompanied us, the blue waters, green forests and orange cliffs made a great picture. Then we were into the entrance of the canyon. This was quite sudden and took us immediately into spectacular scenery. No gentle rise, just big cliffs either side immediately. The next two to three hours were sublime. We followed the substantial river upwards, the river bed littered with boulders, small and house sized! Waterfalls came and went, some of those coming down the cliff sides were high. Cliffs reared up, dotted with *Furcraeas*, Agaves and their relatives, and Bromeliads started to appear. Where there weren't cliffs tiered forests stretched up into the sky, the luxuriant green-ness really quite incredible. We started switch-backing and passed through innumerable tunnels. It seemed

impossible to turn the train round for the next upwards section but somehow they had engineered the corners! We saw the line above and then above again, tunnel entrances seemingly on cliff faces. And when we got up to them they were, the drops palpating. A flock of Military Macaws, a dozen of these fabulous huge parrots, flew past on the far side of the river. Closer at hand butterflies were still abundant and we watched huge White Morphos flutter like pages of an exercise book between us and the cliffs.

The incredibly steep terrain suddenly seemed to ease, just about the same moment that richly varied Tropical Deciduous Forest changed into pine-oak woodland. The change was really quite sudden and the new habitat totally different. We were now following a smaller river of pools and riffles and the forest was open and flowery, very flowery. Orange *Bidens aurea* splashed grassy meadows dotted with oak with colour. There were stands of pink *Centaurea rothrockii*, a tall blue gentian-type as well as alliums and a delicate but upright *Commelina*. Bracken appeared then also some other ferns. We crossed a bridge over a huge chasm and then soon after were in Divisadero. The track down to the hotel passed many shops selling Tarahumara produce, brightly-coloured jewellery and woven baskets, before arriving at a viewpoint. This was an incredible spot, the scene was unbelievable. The land fell away a vertical mile below us. But it wasn't just the depth, it was the sheer size of the landscape you could see that was incredible - the canyon and other canyons seemed to go on for ever.

Our hotel rooms opened right out onto a balcony above the canyon wall – stupendous! We settled in and enjoyed the view as White-throated Swifts sped back and forth and Turkey Vultures played on the thermals. Before the afternoon walk we popped over to the feeders to have a little tuition on hummingbird ID. Most of the possible local hummingbird species were in evidence so this was a good opportunity to compare Calliope and Broad-tailed Hummingbirds, Magnificent and Blue—tailed Hummingbirds, and just to enjoy the shimmering jewel that is the White-eared Hummingbird.

We then took a walk over towards the caves occupied by Tarahumara houses. This proved a very short walk yet occupied most of the next two hours – I think we never got more than 250m from the hotel! The hotel pond had a flowery meadow on one side with pink *Cosmos bipinnatus* and *Monardia* too. The lake fed a waterfall which descended the far side above the infinity pool rim. The cliffs framed this outlet and unbelievably there was a rainbow behind it today. Walking up the slope beyond took an hour – just a hundred metres though! First to attract interest were the fungi, *Suillus* species were common and there were milkcaps, russulas and something like a *Laccarius* too. Peering at these brought amphibians into focus. A tiny Wright's Treefrog was first, a delicate little green creature, then a larger treefrog with oddly warty skin, this *Hyla arenicolor*. We found our first toad, *Bufo occidentalis*. Henry was busy puzzling over the flowers, there were *Castillejas* and two beautiful Penstemons, the first a clear red and the second blue-purple *Penstemon campanulatus*. There was plenty of noise from birds as we reached the top of the low ridge. A large flock of Mexican Jays was busy in the canyon below – we stared down over the edge to get a look at them. Then as we were admiring some more flowers Bill called out that a flock of parrots were circling round. Fabulous – around a dozen Thick-billed Parrots. These large parrots are now very rare and are found only in association with the few remaining pockets of old growth forests in the Sierra Madre which are by definition in rather isolated spots. Sadly this noisy flock disappeared in moments so not all got to see them. Shortly after the thunder started to rumble more threateningly and lightning

illuminated the scene. Rain was starting too and given our elevated exposed position we decided to call it a day and head for the safety of our rooms and watch the storm from the barranca-top. Spectacular!

Day 6 September 25th The Copper Canyon - Divisadero

We awoke to a beautiful dawn over the canyon the sun obscured as it rose by clouds turned a rich orange. We enjoyed the spectacle for a few moments and then went off on the pre-breakfast walk. This took us up the stream valley by the hotel and then back through the woods above. Steller's Jays and Acorn Woodpeckers gave great views as we left and a Chipmunk appeared briefly. We saw one or two Chihuahua Leopard Frogs in the stream but it was actually in the dry looking understory of the forest that we found several other species of frog. There were a couple of the little *Hyla wrightorum*, a green treefrog rather like our European ones, then there was a stunning grey warty *Hyla arenicolor*, another cryptic tree frog in the shape of the Tarahumara Barking Frog, and even a rather rotund little brown frog in the leaf litter. Bill soon turned up our first Earthstars and later we found a few Chanterelle, some impressive Russulas and a Destroying Angel. Birdlife was rather quiet for some time but eventually we found a little party that contained some good species such as Grace's Warbler, Hutton's Vireo, Ruby-crowned Kinglet and Hepatic Tanager. There were also more Steller's Jays, Mexican Chickadees, Brown Creepers and the lovely White-breasted Nuthatch. The floriferous red Penstemon was again common and we saw *Castillejas*, *Monardias*, *Agalina pedunculata* and the pretty white bulb, *Milla biflora*. On the way back we bumped into a huge bird party just as we neared the hotel, thus further delaying breakfast, this including all the above species plus Canyon Towhee, Painted Redstart and Olive Warbler. Northern Raven and a Zone-tailed Hawk were overhead.

Breakfast was a buffet affair with a good variety of cooked fare (including pancakes) and fruit and yoghurt. Suitably energised we were off again, this time heading for the nearby Tarahumara caves. This is a bit of a misnomer really as the locals don't actually live in the caves, but they have built their rather primitive houses into them. After watching Acorn Woodpeckers below we spent half an eye enjoying the many hummingbirds on the rich red shrubs of *Salvia betulaefolia* below the houses. As usual at this altitude White-eared Hummingbirds were dominant but there were also Magnificent, Blue-tailed, Broad-tailed and either Black-chinned or Ruby-throated. Several posed well for photographs. *Cupheas* and the lovely cerise-red *Salvia microphylla* flowered on the rocky slopes. We found our cliff side path too difficult so we retreated and took another way up into the open pine-oak woodland. A large whiptail – type scorpion, four inches long and very impressive looking, was found at the same time as Andy found a most marvellous reptile, the Sierra Madre Alligator Lizard, a gorgeous skink-like reptile with bands across its back and a sinuous careful movement. We didn't know which way to turn, though I did have to keep holding up the rock for a minute or so whilst the scorpion-like creature was photographed. Henry and I continued up onto a plateau seeing Plumbeous Vireo, Bewick's Wren and Cliff Chipmunk on the way. By now butterflies were out and the Pipevine Swallowtail cruised past as did the occasional White-angled Sulphur and California Sister. Ardent Crescent and Black Checkerspot were found. The pretty *Allium glandulosum* was in flower and we found the yellow-starred *Hypoxis* too. Henry found another very large whiptail-like scorpion.

After lunch (big!) I explored a valley the other side of the main road. There was a nice dark purple *Delphinium*, pretty *Cupheas* and the squat *Eryngium lemmoni*. Birds were abundant and included Western Bluebird, lots of both Black-throated Gray and Yellow-rumped Warblers, and no less than three species of Vireo, namely Hutton's, Cassin's and Plumbeous.

After lunch we decided to get our heads down and actually get more than a few hundred metres from the hotel. A party of Acorn Woodpeckers tried to delay us and a group of a dozen or so lovely Gray Silkies certainly did. We found a tiny orchid on the roadside, the flowers less than 2mm across! Further along we found the neat *Helianthemum chihuahuense*, a little yellow *Linum* and Alan collected from the several different pines to ascertain their ID later. Andy found another Sierra Madre Alligator Lizard, this one even more beautifully marked whilst two frog species and a couple of tiny lizards were also seen. After everyone turned back I continued towards the canyon rim (didn't get close!) and had a merry time of it with a big bird party that included Hutton's and Plumbeous Vireos, Yellow-rumped and Grace's Warblers, Ruby-crowned Kinglet, Western and Eastern Bluebirds, Northern Flicker and about forty Steller's Jays.

Day 7 September 26th Divisadero and Sierra Madre Lodge, Creel

Dawn was a bit of a damp squib today, not damp exactly, just cloudy and so light just slowly infused the canyon. There was the compensation of a pair of Rock Wrens on the balcony rocks!

We visited the valley across the railway tracks this morning. As seems typical up here birdlife was practically non-existent until we bumped into a substantial party. This had a good number of Hepatic Tanagers in it and others of note were Grace's, Olive and Yellow-rumped Warblers, Hutton's Vireo and White-breasted Nuthatch. Steller's Jays were never far from the scene. Stephen found a striking large dahlia-like *Iostephane heterophylla* flowering up the slope. Coming down from here we saw Pygmy Nuthatch and Western Tanager. There were some nice flowers hereabouts with a deep purple *Delphinium*, a pretty little *Cuphea*, a buttercup, and lots of the white and green flowered *Eryngium lemmoni*. Further down the valley I found a population of the orange flowered succulent *Echeveria paniculata*.

Fully breakfasted we were soon off again, though not before a Prairie Falcon flew past. This time into the 'national park' that is the area to the west of the station. Here they have engineered a walkway along the canyon rim with many amazing viewpoints and even a couple of bridges across narrow bits with scary drops below (there was always the land based option!). Hardly anyone about today, we enjoyed the walk, for the totally spectacular views, and for the very good flora along the route. The canyon rim was populated with different oak species (*Quercuses chihuahuensis*, *coccolobifolia*, *grisea*, *mcvaughii*, *sideroxyla*, *tarahumara* and *viminea*!) as well as lots of both strawberry trees, *Arbutus xalapensis* (red peeled bark) and *Arbutus arizonica* (grey crocodile bark). Oaks and Strawberry Trees each had their own mistletoe species, the *Arbutus* one with fruits, the oak's just about to flower. Ferns included *Pleopeltis polylepis* on the rocks as well as a couple of *Cheilanthes* species and even a clubmoss. Birds were few and far between with just a Zone-tailed Hawk, an Osprey, and the odd Northern Raven seen. That is until we reached the end point of our walk. I wandered into the nearby trees and found a nice lobelia then an abundance of birds, a large party of Bushtits

being accompanied by Black-throated Gray, Yellow-rumped and Orange-crowned Warblers as well as Northern Parula. There must have been around a dozen Bewick's Wrens with this party and a nice find was a Townsend's Solitaire sat on a treetop.

Lunch was a good Aztec soup followed by a very nice fish dish. We took a last look at the hummingbird feeders – Magnificent, White-eared, Ruby-throated and Broad-tailed being present – and then took to the road for our journey to the next location. The rather dark looking weather soon started to rain so perhaps Creel didn't look its best. We stopped to visit a supermarket and an internet cafe and were then out into some very good countryside between there and the Sierra Lodge. We arrived at four-thirty and settled in amid persistent but variable rain.

I went for an evening walk to check out routes for tomorrow and was rewarded with at least six sightings of Eared Quetzals and two fantastic male Elegant Trogons. The forest floor held both species of *Monotropa*, parasitic plants, as well as an abundance of fungi. Those back at base watched an American Dipper on the river. The evening meal was superb, the local cooks really understanding their food, and all was accompanied by a rather quaint duo of musicians who quietly strummed away in the corner – none of this too loud entertainment here!

Day 8 September 27th Cusarare Waterfall

It was not the brightest morning but thankfully the rain was occasional and light. Breakfast was again delicious, the Huevos Rancheros was just sublime and the rest of the spread looked great too. So then we were off down the track to the waterfall. A Canyon Wren delayed us briefly then after we'd crossed the wooden bridge a Brown-throated Wren was next to seek our attention. We saw American Dippers twice, and watched one on a moss covered boulder singing away. *Lobelias* and *Agastiches* flowered on the slopes and the leaves of *Chimaphila maculata* dotted the pine-needle cloaked forest floor. It was good to see pines of a good size here, though the biggest had been logged out long ago there were now some sizeable trees about. Under them the overnight rain had brought forth a fantastic array of fungi. During the day we saw all sorts of species and any indication of names I'm about to give reflect a mostly Euro-centric viewpoint though many species are also found in North America and therefore presumably Mexico too. Starting with the *Amanitas* there were Fly Agaric, scattered Yellow Agaric, something akin to Tawny Grisette, lots of cf. *Amanita citrina*, quite a bit of the beautiful American Caesar's Mushroom and just one Blusher. Here and there were lurid white Destroying Angels. A strange thing looking a little like an upright club was probably related to the orange spindles growing in the needle litter. Chanterelles, various dung-lovers, turkey-tail like brackets, something incredibly similar to Cep, and an abundance of red Russulas decorated the forest floor. There were Coral Fungus, a superb Cauliflower Fungus, a *Lepiota*, deceivers, witches butter, something orange and strange (!) and a couple of amazing white 'earthstar-like' fungi but still whole and with the base just splitting to show where the arms of the star would be!

We did manage to search for birds too. Eventually we heard a quetzal. In fact two. These were close but not near enough. They led us a merry dance until eventually we gave up and left. We visited the waterfall itself, an impressive curtain of water dropping into the canyon. We learnt a little of the geomorphological history of the Sierra Madre and then some of us went down to

the foot of the falls, passing orchids in bud and in seed (but not in flower) on the way. On the way back more quetzals called, then, finally, we found them. A female sat in the top of a tall tree. Then she flew up onto the main trunk and flew off again immediately. We realised that she must have a nest and so realigning ourselves we found the hole and could see the two chicks with their heads out of the entrance. Fantastic!

The middle of the day was spent around the lodge. We had a nice soup and also discovered species in the vicinity. Sheila found the Chiricahua White and I found a Nabokov's Satyr. Canyon Towhees moved about the grounds.

In the afternoon we walked again down the canyon seeing many of the above fungi and stopping to watch the goings on at the quetzal's nest. One or two other Eared Quetzals were seen and we also watched Ruby-crowned Kinglets, Hutton's Vireo, Mexican Chickadee and Brown Creeper. We saw the saprophytic plants *Monotropa uniflora* (Indian Pipe) and a red form of *Monotropa hypopitys*. Sheila showed us the *Liparis* orchid she'd found in the morning, this one in flower.

Day 9 September 28th Cusarare & Lago Ararenco

Hairy Woodpecker was seen before breakfast by Bill and Clare. We breakfasted at eight and were on our way by nine. We took the road back towards Creel, stopping by a small stream near the road. This was to check to see if it was suitable for Axolotls but it wasn't. However we did see some water scorpions and a few frogs. Western Bluebirds were on the wires and we had great views of a pair of Northern Flickers. On the other side of the road there were Striped Sparrows and Yellow-rumped Warblers in a maize crop. Behind this were a couple of lupins in flower. Two nice *Eryngiums* were also in bloom too. A Zone-tailed Hawk came by at the same time as a Turkey Vulture allowing us to easily see the how the former mimics the latter.

Then it was on to the lake where we spent much of the rest of the morning. Red-tailed Hawk came over a meadow full of lovely *Gentianopsis macrantha*. Also adding blue to the scene was a fine Lobelia and yet another new Lobelia had mauve-lilac petals that were considerably narrower. There were St John's Worts, Eryngiums and Henry found a diminutive pale yellow *Sisyrinchium*. We found birdsnest fungi on the animal dung, this one of the species with black 'eggs'. Henry was the first to spot the snakes. These were Red-sided Garters, and several were seen squirming across the surface of the moss to escape us. They headed for a bush and we cornered them there! There were four snakes in the bush and these were easy to observe as it was a very small open bush! Another snake or two headed to another bush. Wright's Treefrog was joined here by the rather dull looking Smith's Treefrog and the third member of this genus in Chihuahua, *Hyla arenicola*, easily distinguished from the others by its large warts. Looking under some large bits of bark we found another species of Garter Snake, this Tanner's Gartersnake, a species with a dark body marked with a couple of longitudinal gold lines. Meanwhile those birdwatching down by the shore had seen many White-breasted Nuthatches, Canyon and Rock Wrens, and a superb White-striped Woodcreeper. Back up near the vehicles were some Yarrow's Spiny Lizards. We'd seen West Coast Lady and lots of both Reakirt's Blues and Cassius Blues here and at our last stop, by a little stream, we found a *Calephis* species (a metalmark). Henry came up with the yellow *Calochortus venustus* here.

Lunch back at base was quesedillas with salsa – superb! After lunch we had a look at the Greentours travelling library and Andy and I searched the hot dry slope behind the cabins for snakes but with no luck. I did see Nabokov's Satyr and the lovely little *Tamias durangae*, a chipmunk with stripes only on the head.

At four most of us went on a walk, first round the maize fields, and then down the canyon. Various sparrows in the maize included Lincoln's, Lark, Striped and possibly one of the Grasshopper group. There were Lesser Goldfinches too. Overhead were Barn Swallows and a Violet-Green Swallow. Butterflies included the Clouded Sulphur, California Sister and Polydamus Swallowtail. We then walked well down the canyon towards the Eared Quetzal's nest site. It was very beautiful in the evening light and now and again the brilliant colours of a Tarahumara lady would illuminate the forest track. The quetzals were of course busy feeding the young. We watched the female come in twice and deliver a chunky caterpillar, then a praying mantis. Then the fabulous male showed up also proffering something sizeable to the youngster who must have been growing at a phenomenal rate. On the way back a couple of Townsend's Solitaires were seen.

Day 10 September 29th Valley of the Mushrooms & Lago Arencos

My early morning walk produced sightings of Ringtail, a beautiful member of the Raccoon family, and I heard both Great Horned Owl and Mountain Pygmy Owl. On the way back to breakfast I saw Slate-throated Redstart, Belted Kingfisher and, of course, a couple of Eared Quetzals, these both males.

We set off for the Valley of the Mushrooms at nine. The valley is just twenty minutes away and so soon we had turned off onto the road through it. Immediately we stopped to get great views of Rock Wren, Curve-billed Thrasher and Canyon Towhee. A little further on and we found a large flock which was composed mostly of Brewer's Blackbirds but which also had a few Yellow-headed Blackbirds in it. A pair of Zone-tailed Hawks started to circle in the distance, nearer at hand we saw Say's Phoebe and Cassin's Kingbird. We continued past the mission but found ourselves going the wrong way, but no matter, as we found a nice canyon to take a walk in. Very pleasant countryside indeed. There was a pretty pink mallow close to the stream course and Rock Wrens seemed to be everywhere. Chihuahuan Ravens came and went too. We saw some nice spiders and crickets too. Our next stop by a stream produced good photos for some of Great Blue Heron and there were also two fine gentians here, a tall white many flowered *Swertia/Gentianopsis*, and a single large blue *Gentiana* with purple lines down the outside. We made a fleeting visit to the Mushroom Valley which we were rather underwhelmed with and then proceeded round to Lago Arencos for lunch.

Lunch was to be on a bluff by the track so whilst we waited we wandered around the slopes by the lake, Henry and Sheila finding a superb marshy meadow with a great variety of plant life including much more of the *Gentianopsis*. After lunch I took all to a place where I had found Axolotls in a small stream. It took us a while to refind them, but in the end we saw three and caught two of them for closer inspection in Andy's Axolotl Aquarium. About three inches long they were marbled with a kind of pastel grey-green and their external gills were very obvious. This was the Tarahumara Salamander, one of the Axolotls that often reaches the adult phase. On the way back we had great views of a variety of birds and another garter snake was seen

well and photographed.

We returned to visit our roadside meadow the other side of the lake, whilst Eric took one or two off in to Creel for a visit. We once again enjoyed the abundant *Lobelias* and *Gentianopsis* and found several snakes, though not as many as the previous day. Then it was back to Cusarare and after some relaxation, another superb meal produced by the Tarahumara cooks there.

Day 11 September 30th from Cusarare to Batopilas

A beautiful dawn with just a hint of winter cool in the air. Breakfasted, we packed up and left the Sierra Lodge team – they had been excellent hosts and the food had been cooked to a very high standard. The journey today was spectacular. There was never a moment when we weren't driving through beautiful countryside and we saw very few people and houses, just a couple of villages, a road-building crew and otherwise just the occasional Tarahumara. We started through rolling pine forest clad hills around 6000 to 8000 feet above sea level and these continued for the first hour and a half. We made one stop at a viewpoint where Violet-green Swallows and White-throated Swifts were seen. Another was for some Mexican Jays as well as Arizona Woodpecker, both Pygmy and White-breasted Nuthatches, and Ruby-throated Kinglets. Now we descended through pine-oak forest down a beautiful valley that would have been worth many stops except we were limited in the time we had! The canyon opened out into the much grander Batopilas Canyon and we were treated to astounding views in all directions, the river six thousand feet below us! It was a perfect clear day and the whole landscape was cloaked in green, here and there yellow and even reddish where the *Bursera* trees were changing colour. We stopped and walked down the canyon for an hour. It is difficult to explain the feeling of walking in such a place – it was so vertical! Everywhere one looked was either up or down, it was amazing that there was a road in such a place, but a pretty decent road it was, a dirt track, but a well-graded one. The vegetation was fascinating with a strong architectural element. There were Agaves in abundance and many had flowered or were doing so bringing the occasional hummingbird such as Broad-tailed and a female that could have been either Ruby-throated or Black-chinned. There were the Agave's narrow-leaved relatives, *Nolina biglovii* and three species of *Dasylyrion*, *acrotrichum*, *leiophyllum* and the more widespread *wheeleri*, and some of these had flower spikes with dark maroon blooms. Cacti included one dinner-plate cacti in orange flower and a superb compact little barrel cactus (probably *Ferocactus echidne*) that favoured the cliff-faces. The large maroon-centre white trumpets of *Ipomoea longifolia* were common along the roadsides as were orange and red *Zinnias* (*angustifolia* and *peruviana*). Oaks including the blue-green *Quercus oblongifolia* were covered in a little air plant *Tillandisa elizabethae*. There were *Evolvulus*, *Lopezias* and *Cupheas*. Butterflies had become very frequent and having seen a White Morpho which pre-empted the stop we instead saw many of the White-angled Sulphurs, a species only two-thirds as large, but still pretty big! There were also Yellow Angled Sulphurs and Lyside Sulphurs, Cloudless Sulphur and Barred Yellow. We saw one American Lady followed by abundant Tropical Buckeyes and Tropical Leafwings. The odd Monarch came in to feed on a delicate white Milkweed and we also saw lots of American Snouts, Black Checkerspots, Marine Blue, Cream-banded Dusky Emperor, a Creamy Stripe-streak, and some huge Two-tailed Swallowtails. Bill as usual unearthed an abundance of bugs though reptiles were scarce Sheila spotted a Sinaloan Coral Snake, sadly with its head already decapitated.

Meanwhile a little below us, Eric had been setting up the lunch. Amazingly he produced a pasta soup followed by Beef or bean burritos – lovely! Tea and coffee and soft drinks too. Walking down below after lunch I saw a Loggerhead Shrike and several of us saw a Lesser Roadrunner which showed briefly. We moved on down to the river where we found footprints of Bobcat and Raccoon. The riverine vegetation now featured the yellow-barked *Ficus petiolaris* and wherever there were watercourses we would find these now.

Down the road further, we managed to fit in another couple of stops. One was for a Greater Roadrunner which posed well on the road. Another was for an immature Grey Hawk, and another produced a superb red-bodied Bird-eating Spider (Mexican Golden Redrump Tarantula – *Brachypelma albiceps*). We reached Batopilas a little after six and settled into the Riverside Lodge, a lovely place with a cool central courtyard and large high-ceilinged rooms furnished in a very old-fashioned sort of way. Much like Batopilas itself! Eric took over the cooking duties in the kitchen and produced a fine Azteca soup followed by beef and cucumber!

Day 12 October 1st

Batopilas - the Camino Real

I think we all enjoyed the lighter breakfast at six-thirty! Certainly enough tea and coffee to wake us all up properly. Then it was into the vans for the five minute journey to the other end of town and the Camino Real. This is a trail that ran all the way from the mines of Batopilas to Chihuahua and on to Santa Fe in New Mexico. On the Pacific it was linked to what today is Topolobambo. This was to take silver by mule train and must have been an amazing journey, especially in the 18th century when it was first made. It was amazing to see a couple of guys go past riding their horses and with a pack mule in tow!

All was quiet as our walk started, most of us concentrating on our footing on the rather rough start to the Camino Real. Once up above the leaky aqueduct things improved, in fact the further we went the easier the track became. The habitat was superb with the tropical deciduous forest dominated by a range of cacti and lots of small spiny leguminous trees. Nearer the river the trees were bigger and included many fine figs. A pretty white herb I took for a *Bouvardia* but it had five petals not four! Vines strung themselves over the vegetation, indeed one had a big grey Neotropical Coachwhip snake strung over it! Occasional Bicarinate Tree Lizards showed themselves early on but later it was the turn of some brilliant green young iguanas and a lizard with a chestnut tail. Birds were initially rather slow or just disappeared before we could see them but as the sun neared us things improved considerably. One large riverside tree was home to a variety of species. A pair of delightful Painted Redstarts danced around its top and a neatly marked Rufous-crowned Warbler was our first for the trip. Then two really colourful birds arrived, a male Western Tanager and an adult Streak-backed Oriole. A Gila Woodpecker and a Greater Pewee completed the haul from this one tree. Black Phoebes were rather common and along the river we noted Great Blue Heron and Spotted Sandpiper. White-winged Doves were everywhere, one was the target for a Sharp-shinned Hawk that flew in and had a face to face with Andy, later I watched a female Cooper's Hawk nearly knock a dove off a cactus! Speaking of raptors, we'd started with a nice Osprey then seen a superb adult Great Black Hawk perched up by the river, and on the way back Andy spotted a Red-tailed Hawk. Cardinals were frequently glimpsed and there was the occasional

Pyrrhuloxia with them. Sinaloa Wrens gave bursts of their pretty song, a House Wren scolded, and a Happy Wren pattered round without his, admittedly short, tail. Least and Pacific/Cordilleran Flycatchers were seen and on the way back Sheila and I saw a Flammulated Flycatcher, a rarely seen endemic of the West Mexican Rainforest. This may have won the rarity stakes however the undoubted highlight was a pair of Military Macaws flying high overhead, squawking loudly as they passed the moon, Oh for a picture of that moment! Returning, butterflies and dragonflies were everywhere. The latter included many Filigree Skimmers and brilliant Roseate Skimmers, as well as strange bladetails and a damsel that looked like a canyon rubyspot without the rubyspot and with a blue thorax. Pierids were very common with various Sulphurs, Euremas and again both Angled Sulphurs common. The little Creamy Stripe-Streak was seen along with several Riordinids (Scintillant species), these liking the flowers of *Asclepias currasavica* that lined the path in places. These also attracted a few Monarchs and their mimic, the Queen. There were lots of skippers too including Zilpa and White-stripe Longtails, the White Spurwing and Erichson's White Skipper.

Brunch (or really lunch for us backmarkers!) was some tortillas prepared by Eric. Made of blue cornmeal and forming hollow 'bowls' they were stuffed with either courgette flowers or a potato and sausage mixture. Served with Eric's homemade guacamole served in a giant pig mortar, a superb meal!

In the afternoon some took time to explore the town and its famous mining museum whilst the rest of us went up on the ridge above the town and then walked slowly back down. The heat was just leaving though in truth the sun was almost down to the high ridge to our west. There was a little breeze and the long shadows picked out the magnificent canyon topography. Put a handy organpipe cactus or cardon in the foreground and get your camera out! Wildlife was sparse on the walk down. Bill showed us a superb hornets nest and a flatid bug resembling a green thorn. We saw a Gila Woodpecker, Lark and Clay – coloured Sparrows and heard a motmot. Becoming the backmarker I found a Cassin's Flycatcher, a Pyrrhuloxia and a pair of Dusky Flycatchers.

Dinner started with a lovely avocado soup, then there was pork with green tomato sauce, and finished with crepes with a kind of homemade and flamed butterscotch sauce. After dinner I popped out for a nightwalk and found a couple of black scorpions, a Sinaloa Toad, a mouse with a very long tail, and a close-up Ringtail.

Day 13 October 2nd Batopilas - Mission de Satevó

A warm clear dawn saw us already breakfasted and getting into the vehicles for a three km drive to the start of our walk. We would spend the morning walking the second part of the track to the Mission de Satevó, the lost cathedral of the Sierra Madre. The track follows the Batopilas River downstream and goes through outstanding scenery made all the more so by the early morning light and the rapidly increasing tints of red and yellow in the forest. Beautiful organpipe cacti were abundant and tree alongside the trail varied with very many leguminous trees including the smelly-leaved *Senna atromaria*, known by the Mayo Indians as 'Skunk's Ass', which says it all! The Manila Tamarind Tree or *Pithecellobium dulce*, was among the larger trees that also included *Ceiba acuminata*, *Ficus petiolaris* and *Guazuma ulmifolia*. We

finally worked out what the shrub/creeper/small tree (it seemed to do all three!) with the extraordinary heavy horned fruit was – *Randia echinocarpa*, a member of the *Rubiaceae*. There were many different species of *Convolvulus* and the pretty *Martynia annua* with purple and yellow marked flowers. Birds were few and far between this morning though we did encounter one party which contained Streak-backed and Bullock's Orioles, Varied Bunting, and Sinaloa Wren. Other species of note were Great Black Hawk, Western Tanager, Black-capped Gnatcatcher, and of course, the ubiquitous Gila Woodpecker. Nearing our target we noticed a large number of vultures in the sky circling over a nearby bluff, those who got there first saw a Red-tailed Hawk with them, those arriving later a Crested Caracara. Eric was fortunate to see four White-tailed Deer disappear up the hillside.

The first sight of the Mission was memorable. Framed against the spectacular landscape the church rises in the midst of a very small village next to the river. The location is excellent and presumably speaks of a larger settlement when it was built. All records were destroyed in a fire so nobody quite knows why this huge church (more of a cathedral) was built. Those who got there early enough had a wander around inside where much restoration work has been done. Outside Vermilion Flycatchers wowed their audience and the large yellow flowered shiny-leaved *Proboscoidea* was popular too. Young Iguanas were a stunning bright green and earlier in the walk Bill had spotted a Clouded Anole Lizard. We drove back, stopping briefly to look at a Verdin building its nest.

In the afternoon several visited the museum in town, others just enjoyed some time relaxing at the hotel and some came to explore an area about five kms back up the main road. We spent an hour or so walking down a track to the river enjoying exploring the dry forest with its abundant cacti and variety of tree and shrub species. There was little in the way of activity as far as bird or mammal life went. Praying Mantises proved common and Bill kept coming up with new and bizarre forms of insect life!

I went on quite a long nightwalk whose main feature for the first hour was uphill walking! It all came good in the end though as I found a superb Hog-nosed Skunk next to the track and then, visiting the local dump, added another ten skunks to my night trip. These comprised four chunky Hooded Skunks, with expansive white tails flecked with dark hairs, and six Striped Skunks. All were so interested in the dump that I was able to wander amongst them and photograph them at will. Also noted on the walk were preying mantises, scorpions and a kangaroo mouse of some sort.

Day 14 October 3rd to Basaseachic

Another early breakfast. We were packed and on the road by seven—thirty, Bill and Clare already having departed for Chihuahua with Ivan. It was a lovely time of day to travel up the canyon, still not so hot and by the time it would be hot in Batopilas we were already on the canyon rim. Our first stop was to look at a bromeliad growing on the cliff face, this *Tillandsia cretacea* with a tall branched red and yellow inflorescence. Here Bill found a Bug-eyed Leopard Frog and two fantastic Military Macaws flew over. An American lady stopped to chat, she lived in the house just up the road, a wonderful spot, with hardly another house in miles. She told us of the dead snake in the road and so we went to look – a Green Ratsnake.

We crossed the canyon and started up the six thousand feet ascent on the other side. An impressive series of switchbacks. We stopped briefly for Rock Wrens, Sierra Madre Ground Squirrels and Two-tailed Swallowtails, and then had a forty minute exploration of the little side canyon that runs out onto the plateau above. This was a great spot for flowers with the Bat-faced Monkey Flower the undoubted highlight. The strange bat-faced bit was at the end of the flowering tube and a rich purple, this surmounted by two luminous red petals – a wonderful flower. There were others here too, a *Salvia*, peachy *Mentzelia aspera*, floriferous succulents and a *Rhus* whose flowers attracted many colourful beetles. Down in the stream a dead snake was spotted and when I tried to move it resistance was given by a water scorpion determined to hold onto his prize! Mexican Dartwhites were common by the stream and in the oaks, which included the wonderful glaucous leaved *Quercus oblongifolia*, was the male Silver Emperor, like a 'sister' but shot with blue.

Near the only Pemex station on route we found a Camberwell Beauty, or more properly (in North American parlance) a Mourning Cloak, this posing well with wings open. We stopped for lunch in Creel and ice-creams too and then headed cross country to Basaseachic. This took us through some wonderful uninhabited high country with extensive pine forests, here and there with oaks, aspens or Douglas Firs. We stopped for some beautiful *Gentianopsis*, another new one! Also in the woods were a *Gentianella*, *Chimaphila* just about to flower and a yellow scroph. Steller's Jays came to the tree by the bus. Then it was on to Basaseachic which we arrived at about six. We settled into our Cabanas and I went on a wander, finding three Eared Quetzals in the grounds of the cabanas!

An evening walk was not very successful – all we found was some fish!

Day 15 October 4th

Basaseachic - Rancho San Lorenzo and the Cascade

I went out pre-dawn but failed to find any animals, though I did hear several Eared Quetzals calling. There were three Townsend's Solitaires on my way to breakfast.

After breakfast we drove a kilometre or so up to the viewpoint above the ranch. This is an extraordinary spot with a vista of deep canyons, tremendous cliffs, forests, and of course the cascade itself, seriously impressive and quite noisy even at a distance of a kilometre and a half. We photographed the scene, or just stared. I searched for birds however few were in evidence, only a distant perched Band-tailed Pigeon and even further away some swifts. We could hear several Brown-backed Solitaires singing their strange song, though we couldn't see any. Nearer at hand were Acorn Woodpeckers and a Rufous-sided Towhee.

Now we drove for half an hour, round through the small town of Basaseachic and then down to the cascade trail entrance. Parking up here we sashayed quickly past the handicrafts stalls (without much objection from the sellers!) and took to the well-made trail. This follows the course of the river down through a shallow canyon, the river, quite a turbulent little beast, working its way down into the rocks to produce a narrow canyon two metres across and maybe three deep, plus the depth of the powerfully flowing water. We watched Rufous-capped Brushfinches and a Brown Creeper on this section and Andy saw a White-striped Woodcreeper. Butterflies included the California Sister, Red-bordered Satyr and American

Lady. *Castillejas* and *Gentianellas* flowered on the rocky slopes amidst pines that included *strobiformis*, Apache, Lumholtz's and Chihuahua. We reached the point where the river, having worked itself into a bit of a frenzy, throws itself over a cliff and into the void below. The waters fall 246m, almost exactly 800 feet, and with the current very good flow, it made a spectacular sight not to mention the sound. The position of the waterfall allows one to walk right to the edge of the vertical cliff (no steps here!) and look over. The canyon below was just majestic, especially the yellow cliffs on the near side.

From here we walked up to a little col wondering what a Steller's Jay might be mobbing and finding out when a Mountain Pygmy Owl suddenly appeared in front of me. It was hardly going to stay around and after a fierce glare from big yellow eyes it was gone before anyone else got a chance to see it. From the col it was a long and steep descent to the base of the fall. Only Christine and I got that far though Henry made it a good way down. The trees were exceptionally varied on the descent. First we started finding Limes, *Tilia americana*, then Black Cherry, *Prunus serotina*, followed by much *Acer grandidentatum*, this forming big trees at the canyon bottom, as well as *Ostrya virginica* and *Fraxinus velutina*. The brilliant orange-red *Salvia betulaefolia* was common as was *Castilleja* and various yellow composites. A long-flowering orange-pink *Cuphea* was a nice find as was, in the damp grassland at the foot of the falls, the yellow liliaceous *Echeandia flavescens*. Mexican Silverspot fritillaries were a brilliant sight and other butterflies included Checkerspot and Black Crescent. We came across a very good bird party near the top. This included a lot of Bushtits and Townsend's Warblers and a scattering of other nice species such as Painted Redstart, Brown Creeper, Parula Warbler, Crescent-chested Warbler, and a quite stunning Red-faced Warbler. With more brushfinches was a Canyon Wren. There were chipmunks and some very obliging Spotted Ground Squirrels that allowed photography. Two-thirds of the way down the path breaks into the rockface where a "window" allows one a fantastic view of the views complete with its substantial basal rainbow. This was bettered though by the scene at the foot of the falls. I got quite wet getting photographs and being so close to these impressively high falls I couldn't fit them all in even with a 18mm wide angle.

Back up in the approach valley we met up for a picnic, Eric had prepared some very nice quesedillas. Then it was into Basaseachic for some ice-creams whilst Eric shopped for the evening meal. Then back to the Ranch.

Day 16 October 5th

Basaseachic - Piedro Volada!

We started the day just before dawn with a walk up to the viewpoint a kilometre up the road from our cabanas. It was foggy around the cabanas, or rather misty, but as we walked up we were soon out of it and the skies were clear, the moon still shining bright and the stars only just starting to fade. The lamp failed to reveal anything interesting at all so it was left to the stupendous view at the top to take the plaudits. It certainly managed this. We had arrived as the light strengthened but with still some time to go before the sun rose above the sky behind us. Each upper valley had wreathes of mist, and above the Basaseachic Falls was another fall – this one just of mist flowing down over the canyon wall like some copy of the real thing. It was a very photogenic scene though getting the light right was rather problematic! We explored the trails down to two further viewpoints below us, each quite stunning, the lower well worth the

longer trek. As we did this the sun rose and lit the far walls of the canyon turning them orange. I searched canyon tops all about but found no sign of any mammals. There were a few birds though. Below, the weird song of the Brown-backed Solitaire cascaded up to us, whilst much plainer were the utterances of a very obliging Townsend's Solitaire. Townsend's Warblers, Painted Redstarts and Yellow-eyed Juncos were seen. The flora alongside the paths down to the lower viewpoints included a fluffy blue *Ageratum*, a tall orchid species now over, another orchid just about to flower (it was ever thus ...!) and a very fine clump of Indian Pipes in perfect condition.

Eric cooked us up a fabulous breakfast taken in his cabin as it was still a little chilly outside. Then we boarded the vehicles for the trip to the other side of the canyons. Our aim was Piedra Volada, the highest falls north of South America at an impressive 1600 feet (463m). However our first obstacle was a difficult entrance track and some uncertain navigation which meant it took us an hour and a half to reach the trail head. We picked up a local guide and walked with him on a footpath through the forest (shortcut) before rejoining the track again. After the forest we found ourselves on an open rocky ridge, the volcanic rock worn and pitted and indeed the path itself actually worn into the rock. This seemed odd given that it was clearly a rarely used trail – maybe in the past it had heavier human traffic or more likely it was heavy livestock hooves that had hollowed the rock. The views either side of the ridge were sublime. Great canyon country extending in all directions. Rejoining the track we walked past a cliff, the upper parts with billowing masses of an orange composite. Lower down we saw the attractive red blooms of *Silene laciniata* as well as bright red, pink and blue *Salvias*. There were *Castillejas* too and on some rocks a fine collection of *Echinocereus* cacti. Grey Silkies flew overhead as did a Northern Goshawk and a large party of Mexican Jays went by. Most of the party decided to turn back at this point and take their time looking at stuff back along the path. Henry bravely continued with Ivan and Beto and the local guide. Quite a hike by all accounts, another two kilometres from where we stopped and with more up and down at the end. However the views were apparently astonishing at the end point with the fall itself actually dwarfed by the sheerest and deepest of the area's barrancas, the waterfall having cut a deep groove in a sheer cliff 1500m (nearly five thousand feet) high!

On the way back the butterflies were out. We saw a pretty green Juniper Hairstreak, Tropical Leafwings sunning themselves, checkerspots and crescents, Chiricahua Whites, and I was lucky to see two stunning female Blackened Bluewings, shimmering blue-purple butterflies with black cross bars and wing ends black and white. A bird party back near the vans featured two Hermit Thrushes, some Hutton's Vireos and an Olive Warbler. Fossicking amongst the rocks in the field next to Eric's picnic table Andy found a Pacific Earless Lizard and another garter snake. Up in the woods we found a number of Earthstars. Arriving at roughly the same time as Henry was a noisy and restive bull, we left before the results of Eric and Andy's conversation with it could be ascertained.

Most went back to San Lorenzo from there but a few of us continued on the road to Ocampo and its huge gold mine just to check it out for future visits. The road descended into some fine mid-level pine-oak woodland just before the mine. Some cliffs had hundreds of screaming White-throated Swifts buzzing by us at close quarters. In the woods were various orchids, just over, and a green flowered *Zigadenus virescens*. Returning we had a puncture. Changing the wheel took a while due to jack problems, but this became fortuitous as we had the briefest of

sightings of a Mountain Lion just 1500m from the lodge on our return journey. We saw it for just a second as it leapt up the bank and disappeared as we turned a corner in the road! Spurred on, some of us went out for a night drive. The torch had not recharged properly and so we were limited to forty minutes or so of actual searching during which time we saw three Mule Deer and two Eastern Cottontails.

Day 17 October 6th Basaseachic to Chihuahua

On my pre-breakfast walk I found a nice flowery meadow down by the river which had an abundance of a tall large-flowered yellow *Halenia* species as well as a white *Gentianella*, *Agalina peduncularis* and a large yellow flowered evening primrose.

After breakfast there was a brief delay due to a problem with one of the van so in that half an hour we walked along the entrance road. Birds were really quite common with Canyon Towhees, Chipping Sparrows, Yellow-rumped Warblers and Yellow-eyed Juncos everywhere. A Northern Flicker sunned itself in a glade.

Once the vans picked us up it was time to get some miles under the belt. We stopped briefly once for some Scrub Jays but otherwise it was heads down as we passed through increasingly dry oak woodland. Eventually we crested a rise and saw the flatter Chihuahuan Plateau spread out before us and on it something we'd seen little off since we'd got on the Chepe at El Fuerte, namely agriculture. The huge rangelands that once covered these high grasslands have now in many areas been replaced by wheat and other crops. Apples were the thing here too, we passed one ranch that looked like it must produce enough apples for the whole of North America on its own! The landscape was by no means flat, the clear light picking out neatly sculptured hill ranges and the odd stark-looking volcanic plug. The tall roadside pylons held a few Red-tailed Hawks including one immature which gave us great views. Western and Cassin's Kingbirds perched on the wires. Most impressive were the large numbers of Chihuahuan Ravens. Roadside weeds here included a lovely little pink *Anodis* species. A Northern Harrier flew past as we left. Further stops further delayed lunch as saw Swainson's Hawks, a dead Ring-necked Snake opposite our first bunch of ducks, waders and White-faced Ibises, and, on the big highway, a dead Sonoran Gophorsnake.

Finally we reached Lago de Mexicanos and pulled up under a willow tree. Whilst Eric got the picnic ready we took a look at the many wetland birds present. In the pond by us were American Avocet and Black-necked Stilt, Greater and Lesser Yellowlegs and Blue-winged Teal. Yellow-headed Blackbirds, Northern Roughwings and Say's Phoebe were seen and Henry flushed a Wilson's Snipe as he searched for plants. Further out onto the lake were many duck including lots of Pintail and American Wigeon, Northern Shoveler and Green-winged Teal, and further out still Ruddy Ducks and a Bufflehead. There were quite a lot of Greenland Whitefronts, these seeming a little out of place in the warm southern sunshine! Flocks of Wilson's Phalaropes, some Least Grebes, Cattle and Great Egrets, and a Prairie Falcon chasing a yellowlegs completed the scene. After lunch we searched the lake edge a bit more but couldn't find anywhere better so we headed for the Pemex station and some refreshment. Then it was the long haul into Chihuahua, the scene gradually changing to one with virtually no trees.

Day 18 October 7th

Chihuahua's semi-deserts - Villa Aldama & the Sierra
Gomez

We took breakfast at the earliest opportunity and were on the road by seven-thirty. It was fine and clear and the temperature very nice, even quite cool. We drove through the middle of the city, which didn't take too long, and then out into the countryside beyond the airport. We stopped to explore the first area of decent habitat we saw and this did indeed prove a good area. A track into cattle ranchland allowed us to access a large area of mesquite scrubland with all sorts of other thorny vegetation. There were many very pretty flowers too, especially in the Malvaceae and higher up the slope a pretty 'stinkweed' *Cleome* spp was in abundant pink and white flower. Almost the first bird we saw was a Greater Roadrunner perched atop a bush. Other birds that liked perching in the open at this early hour were White-winged Doves, the pretty Black-chinned Sparrows and Northern Mockingbirds, the latter following the few cattle present. They were likely foraging for large insects kicked up by the cattle, for there were abundant grasshoppers and crickets, including some spectacular big colourful species. Pyrrhuloxias were rather more reticent as were Black-tailed Gnatcatchers. Butterflies were pretty common with most species new to us. The Empress Leilia was quite frequent and we saw two swallowtail species, Pipevine and Black. We searched hard for reptiles and saw a few Ornate Tree Lizards, a rock-dweller in Chihuahua, but little else until Andy found us quite possibly the creature of the trip, a Horned Toad, otherwise known as a Texas Horned Lizard. This incredible lizard was practically round and covered in shaggy scales and had a triceratops like neck ruff of horns. It was also superbly camouflaged and with its slow movements Andy did extremely well to spot it. We took an extended break with the Horned Toad before moving on up the road.

Our next stop was on the flanks of the Sierra Gomez, a series of low hills that cross the road northeast of Villa Aldama. A track took us past an old limestone quarry to the edge of the hills. Here we left Eric to rig up a shelter between the two vehicles and set about preparing lunch. We explored the terrain for an hour and a half walking up through sparse mesquite alongside a more vegetated arroyo which held lots of rather shy Brewer's Sparrows. Up the valley the hills rose suddenly and these were very interesting vegetation wise. *Agavaceae* was the family here. There were three species, a curvy-spiked *Agave* with a short inflorescence, a narrow-leaved elegant Sotol with tall flower-spikes (*Dasyilirion wheeleri*) and the superb *Yucca gloriosa*, some of which were in flower. There were even more variety as far as the cacti went. There was a straggling *Opuntia* relative with red fruits, *Opuntia macrocentra* with violet-black spines, *Opuntia aciculata* with neat groups of curved ginger spines, there were two different *Mammillarias*, one very greyish, and there were great clumps of something like an *Echinocereus*. Various bushes had flowers, some pink, others orange and some white – it was quite a colourful place. A stunning Eastern Collared Lizard was seen, grey with orange and black markings and with a striking orange and black double collar. Turkey Vultures came close overhead and Yellow-rumped, Orange-crowned and Townsend's Warblers fed in the yucca flowers. Two Cactus Wrens scolded stridently and Rock Wrens were also noisy. Back at the vehicles Eric was putting the finishing touches to ham and avocado sandwiches with all sorts of other goodies in them!

After a relaxed lunch Eric took most of the group back to Chihuahua to tour some of the cities

cultural sites such as the old cathedral. The rest of us continued to explore the semi-deserts to the northeast. We made one main stop where we explored an arroyo that came down from some higher hills. The fauna and flora was much the same as the previous site, though there were plenty of new species too. Particularly striking were some fine bronze cacti like giant *Mammillarias*! Canyon Towhees and Canyon Wrens inhabited the arroyo bed and a pair of Scot's Orioles had a nest along it. A series of old mine entrances looked worthy of exploration but I didn't have my torch. The spoil heaps outside each small tunnel also looked to be good fun if you were a geologist, there being various purple hued minerals next to quartz veins. We continued on to a wide sandy valley and took a track off it. This reached a dead end by the railway track. We explored a while. Henry saw a jackrabbit disappear off into the distance whilst the rest of us had a good look at an Eastern Cottontail. Best bird here was definitely the Crissal Thrasher. Returning as dusk gathered we noted small creatures crossing the road. Stopping to take a look we found stick insects, and a quick look in the nearby bushes revealed several of them!

Day 19 October 8th Departure

A relaxed start this morning saw us departing the hotel at nine-thirty and heading through Chihuahua to the airport which we reached in good time. We said sad farewells to Eric, Ivan and Beto who had looked after us so well, cooked for us, transported us, and guided us - a great team! The flight was almost an hour late by the time it got into Mexico City but it mattered not for we had a good while to wait for our BA flight back to the UK. Still by the time we had changed terminals we had timed it almost perfectly and had a mere five minutes to wait for the check-in to open. This completed with a minimum of fuss, we all went to an Italian and had a very good meal.

Copper Canyon - the Culinary Experience

by Alan Collis

On our 2010 Copper Canyon trip, Eric Miranda, despite our being far from even small towns (El Fuerte 30,000, Divisadero 600, Creel 5,000, Batopilas 1,400) most of the time, conjured up some spectacular meals to accompany the spectacular scenery. For eight days he was our chef where our lodgings had kitchens, but no cooks. In our other hotels he sometimes joined in the cooking, supervised the menus or selected the outside places to eat well. Being far-sighted, he laid in a stock of wines for those who wanted them. The liquor stores of the Sierra Madre stock a wide range of spirits, enormous quantities of beer and sometimes no wine at all.

Instead of mundane packed lunches, Eric with the help of Ivan and Beto, equipped with a camping gas stove, one frying pan, a chopping board and a sharp knife, prepared burritos, salads, sandwiches, fruit and desserts, accompanied by a choice of fruit juices, beer, wine or cool water, plus tea or coffee. By the riverside near Choix, opposite a huge Montezuma Cypress (a *Taxodium*, to confuse us), we had tuna and apple sandwiches in brown bread and banana, apple and raisins quickly fried in oil with a light cream.

Most of the party were too tired from their long journey from the UK to take advantage of the good menu of our Mexico City hotel, but after our early morning arrival at Los Mochis, transfer to the beach and some birding and plant observation, we fully appreciated Eric's breakfast. Mexican breakfasts are copious, just the thing to set one up for a day's walking and exploring: fresh fruit juice, scrambled eggs (or others) with ham and refried beans, scones, various breads, and, naturally, tortillas.

In our colonial style hotel at El Fuerte we discovered Aztec soup: a consommé containing tortilla chips, avocado and cheese – very tasty. This was followed by a fillet of black bass with a garlic and butter sauce, delicious, accompanied by rice and, alas!, vegetables prepared to satisfy the health superstitions of the visitors from north of the border – steamed al dente without seasoning. This seemed to be the fashion in other hotels too. Another evening we ate by the light of paraffin lamps, not a romantic reminder of the past, rather a power cut necessity. The meal was good. We had one lunch in a taquería (tacos with everything). Health and Safety wouldn't have liked it, but the food was good, safe and clean.

At Divisadero the hotel bar had panoramic windows in front of which hung feeders for hummingbirds whose blurred wing beats were not due to the free margaritas offered to celebrate the inauguration of the first cable car into the canyon. The restaurant prepared some dishes very well, yet others not. Shredded dried beef in a cheese and green pepper sauce is a good Mexican speciality, and an apple tart which tasted of apple is rare enough to be noted. A tender, flavoursome lunchtime steak with a cactus salad, refritos and serrano chilli deserved praise. A large choice of breakfast dishes enabled the fastidious to avoid the tripe soup. Maria, Marta and Mariuca, our three Tarahumara cooks at the Sierra Madre Trekking Lodge at Cusárare, did us proud. After the margaritas, they served a delicious cauliflower soup, followed by succulent chicken breasts filled with vegetables. The lime-flavoured whipped cream which followed was delightfully frothy and light. Delights on other days included a broccoli soup, a light chocolate cake, stuffed peppers, courgette soup, an excellent Aztec soup, marinated beef slices, and enchiladas. The breakfasts stood out for quality. The jams were home-made, and the eggs ranchero (fried eggs, piquant tomato sauce and refritos) piping hot and filling.

At a former café on the sinuous road down the canyon to Batopilas, seemingly lost amongst the never-ending hairpin bends, Eric prepared a soup with fusilli and bought limes picked directly from the tree. Once ensconced in our delightfully unusual hotel at Batopilas, the former home of the owner of a silver mine, Eric showed his real talent as a chef. We arrived at 6pm yet by 8pm we dined on Aztec soup, then tasty rib steak with diced potatoes. The next day, while the group walked along the Camino Real, Eric, for lunch, made black tortilla shells which had two fillings, one of potato and chorizo, the other of courgette flowers and guacamole – both refreshing and delicious. Other subsequent treats included avocado cream soup with a flavour of pork, clam chowder, linguine with mussels and a superb version of the ubiquitous flan. On our departure morning we even had fresh pancakes.

On our way to Rancho San Lorenzo, a rise of some 2 500 metres, we stopped for a simple and nourishing lunch in a café in Creel. At the Rancho we ate under open cover while Eric prepared our meals at a stove beside us. One evening was too cold to eat outside. On arrival we had courgette flower soup, then a tasty meat and potato dish with refritos and tortillas. At picnics there were tostadas with bean and tuna sauce, mushroom quesadillas and various salads. An

intriguingly good seasonal dish was spaghetti with a black corn mushroom sauce.

Systematic List Number 1 Mammals

Nomenclature and taxonomic order is a bit of a mish-mash and is borrowed from both 'Neotropical Rainforest Mammals' by Emmons (1997) and 'The Audubon Society Field Guide to North American Mammals' by Whitaker (1993).

Brazilian Free-tailed Bat	<i>Tadarida brasiliensis</i>	probably this species at a roost in a cave near to Mavili. Many hundreds of them coated the walls so tightly you couldn't see the rock!
Rock Squirrel	<i>Spermophilus variegatus</i>	2 between El Fuerte & Choix
Spotted Ground Squirrel	<i>Spermophilus spilosoma</i>	3+ at Cascada de Basaseachic
Sierra Madre Ground Squirrel	<i>Spermophilus madrensis</i>	widespread in the sierras
Abert's Squirrel	<i>Sciurus abertii</i>	quite common in the forests around Creel, a handsome grey and white species with ear tufts
Collei's Squirrel	<i>Sciurus collaei</i>	one in the Batopilas Canyon
Antelope Jack-Rabbit	<i>Lepus alleni</i>	several seen in the El Fuerte area. This species has immensely long ears!
Black-tailed Jack-Rabbit	<i>Lepus californicus</i>	probably this species noted in the Chihuahua area
Eastern Cottontail	<i>Sylvilagus floridanus</i>	scattered
Desert Cottontail	<i>Sylvilagus audubonii</i>	2 in the Sierra Gomez
American Hog-nosed Skunk	<i>Conepatus leuconotus</i>	1 seen at night on the San Ignacio road above Batopilas (IG only)
Striped Skunk	<i>Mephitis mephitis</i>	6+ in the small dump seen at night on the San Ignacio road above Batopilas (IG only)
Hooded Skunk	<i>Mephitis macroura</i>	4 in the small dump seen at night on the San Ignacio road above Batopilas (IG only)
Ringtail	<i>Bassariscus astutus</i>	1 seen well by the river below the Sierra Lodge near Creel, and another on the Satevó track, Batopilas. Both at night and both IG only
Puma	<i>Panthera onca</i>	1 seen very briefly on the road from the Cabanas San Lorenzo (IG and WI only)
Mule Deer	<i>Odocoileus hemionus</i>	3 in Basaseachic area seen on a night drive
White-tailed Deer	<i>Odocoileus virginianus</i>	4 noted along the Saveto road (Eric only)
Bottle-nosed Dolphin	<i>Tursiops truncatus</i>	several in the bay off Mavili

Systematic List Number 2 Reptiles & Amphibians

The taxonomy and systematic order is taken from the excellent 'Amphibians & Reptiles of the State of Chihuahua, Mexico' published by the University of Colorado and by Espinal & Smith.

Tarahumara Salamander	<i>Ambystoma rosaceum</i>	3 observed at close quarters in a stream near Lago Ararenco
Cane Toad	<i>Bufo marinus</i>	quite frequent around El Fuerte
Sinaloa Toad	<i>Bufo mazatlanensis</i>	probably one at El Fuerte and certainly noted at Batopilas
Northwestern Mexican Toad	<i>Bufo mexicanus</i>	quite common around Divisadero and Cusararé
Mexican Plateau Toad	<i>Bufo occidentalis</i>	quite common around Divisadero
Canyon Treefrog	<i>Hyla arenicolor</i>	common around Divisadero and Cusararé. Distinctive warty skin, rather larger than other Hylas here
Smith's Treefrog	<i>Hyla smithii</i>	what appeared to be this species, slim and gray, was not uncommon around Divisadero and Cusararé but Espinal & Smith suggest it is rare? May be just a colour form of the following species?
Wright's Treefrog	<i>Hyla wrightorum</i>	very common around Divisadero and Cusararé, also noted Batopilas
Tarahumara Barking Frog	<i>Eleutherodactylus tarahumaraensis</i>	what appeared to be this species at Divisadero
Chihuahua Leopard Frog	<i>Rana lemoespinali</i>	scattered in the sierras
Bug-eyed Leopard Frog	<i>Rana magnaocularis</i>	1 in the Batopilas Canyon
Sierra Box Turtle	<i>Terrapene nelsoni</i>	1 on the road between El Fuerte and Choix. An uncommon species
Texas Horned Lizard	<i>Phrynosoma cornutum</i>	Fabulous – Andy found us one in the Sierra Gomez east of Chihuahua
Madrean Alligator Lizard	<i>Elgaria kingii</i>	Andy found two of these large skink like lizards at Divisadero. A beautiful reptile
Clouded Anole	<i>Anolis nebulosus</i>	one photographed along the Saveto track, Batopilas
Eastern Collared Lizard	<i>Crotaphytus collaris</i>	stunning mid-sized lizard with black and orange markings. 1 near Villa Aldama (IG only)
Sonoran Spiny-tailed Lizard	<i>Ctenosaura macrolopha</i>	aka Ctenosaur or Iguana. Several seen in the El Fuerte, Mavili and Batopilas areas
Blue-bellied Earless Lizard	<i>Holbrookia approximans</i>	delicate lizard in semi-deserts east of Chihuahua
Pacific Earless Lizard	<i>Holbrookia elegans</i>	probably this little lizard at the start of the Piedra Volada trail, Basaseachic
Clark's Spiny Lizard	<i>Scleropus clarkia</i>	quite common in the El Fuerte area

Yarrow's Spiny Lizard	<i>Scleroporos jarrovii</i>	common throughout the sierras. The males sometimes took a coppery, purple or even blue hue on their 'chainmail' backs
Crevice Spiny Lizard	<i>Scleroporos poinsettia</i>	prettily marked spiny lizard noted both days at Divisadero
Striped Plateau Lizard	<i>Scleroporos virgatus</i>	strikingly marked spiny lizard from Divisadero
Bicarinate Tree Lizard	<i>Urosaurus bicarinatus</i>	common around Batopilas and also in the Basaseachic area
Ornate Tree Lizard	<i>Urosaurus ornatus</i>	several in semi-deserts around Villa Aldama and Sierra Gomez. Lives on rocks, not trees!
Mountain Skink	<i>Plestiodon callicephalus</i>	striking blue-tailed skink. Divisadero
Little Striped Whiptail	<i>Aspidoscelis inornata</i>	Andy saw one near Villa Aldama
Whiptail sp 1	<i>Aspidoscelis</i> sp 1	coastal scrub at Mavili
Whiptail sp 2	<i>Aspidoscelis</i> sp 2	large stripey species common around El Fuerte
Ring-necked Snake	<i>Diadophis punctatus</i>	a dead one roadside near Cuauhtemoc
Neotropical Coachwhip	<i>Masticophis mentovarius</i>	one in a bush along the Camino Real, Batopilas
Sonoran Gophorsnake	<i>Pituophis catenifer</i>	a dead one roadside near Cuauhtemoc
Green Ratsnake	<i>Senticolis triaspis</i>	a dead one in Batopilas Canyon
Mexican Brownsnake	<i>Storeria storerioides</i>	Andy unearthed one between Creel and Basaseachic
Tanner's Gartersnake	<i>Thamnophis cyrtopsis</i>	prettily striped species. Singles noted twice around Lago Ararenco
Red-sided Gartersnake	<i>Thamnophis sirtalis</i>	a good number seen in wet meadows by Lago Ararenco, also found in the Basaseachic area
Sinaloan Coralsnake	<i>Micrurus euryxanthus</i>	a dead one in the Batopilas Canyon

Systematic List Number 3

Birds

Nomenclature and taxonomic order follows The Sibley Guide to Birds (2000) and Howell and Webb's 'A Guide to the Birds of Mexico' (1995). The number of days a species was seen is indicated as 5/17 - so five days out of the 17 in the field (arrival day and departure day not included).

Itinerary

Day 2 September 21 st	Topolobambo, Mavili & journey to El Fuerte
Day 3 September 22 nd	Choix/El Fuerte area
Day 4 September 23 rd	Rio Fuerte & El Fuerte
Day 5 September 24 th	Copper Canyon Railway to Divisadero
Day 6 September 25 th	Divisadero
Day 7 September 26 th	Divisadero and to Sierra Lodge, Creel
Day 8 September 27 th	Sierra Lodge, Creel & Cusararé Waterfall
Day 9 September 28 th	Sierra Lodge, Creel, Ararenco Lake & Cusararé Waterfall
Day 10 September 29 th	Sierra Lodge, Creel, Mushroom Valley & Ararenco Lake
Day 11 September 30 th	to Batopilas
Day 12 October 1 st	Batopilas – Camino Real and San Ignacio Road
Day 13 October 2 nd	Batopilas – Mission de Satevó and Cerro Colorado road
Day 14 October 3 rd	Batopilas to Chihuahua or Batopilas to Basaseachic
Day 15 October 4 th	Cascada de Basaseachic
Day 16 October 5 th	Basaseachic – Pedro Volada or nearly! Canyon del Gigantes.
Day 17 October 6 th	Basaseachic to Chihuahua via Laguna de los Mexicanos
Day 18 October 7 th	Chihuahua – Villa Aldama & Sierra Gomez

Eared Grebe	<i>Podiceps nigricollis</i>	1 Lago Ararenco
Pied-billed Grebe	<i>Podilymbus podiceps</i>	1 Lago Ararenco
Least Grebe	<i>Tachybaptus dominicus</i>	1 Lago Ararenco & noted at Laguna de los Mexicanos. 2/17
Blue-footed Booby	<i>Sula nebouxii</i>	c.20 at Mavili
American White Pelican	<i>Pelecanus erythrorhynchos</i>	2 near Mavili
Brown Pelican	<i>Pelecanus occidentalis</i>	common on the coast at Mavili
Brandt's Cormorant	<i>Phalacrocorax penicillatus</i>	common on the coast at Mavili
Neotropic Cormorant	<i>Phalacrocorax brasilianus</i>	scattered around El Fuerte. 2/17
Magnificent Frigatebird	<i>Fregata magnificens</i>	20+ on the coast at Mavili
Bare-throated Tiger-Heron	<i>Tigrisoma mexicanum</i>	2 at El Fuerte (IG only)
Snowy Egret	<i>Egretta thula</i>	noted at Mavili and El Fuerte. 2/17
Little Blue Heron	<i>Egretta caerulea</i>	Mavili area
Tricolored Heron	<i>Egretta tricolor</i>	several in the Mavili area and 1 El Fuerte
Reddish Egret	<i>Egretta rufescens</i>	3+ Mavili area
Cattle Egret	<i>Bubulcus ibis</i>	only noted Laguna de los Mexicanos
Green-backed Heron	<i>Butorides virescens</i>	noted at Mavili and El Fuerte
Great Egret	<i>Carcharodius albus</i>	scattered. 4/17
Great Blue Heron	<i>Ardea herodias</i>	scattered throughout. 10/17
White-faced Ibis	<i>Plegadis chihi</i>	noted El Fuerte and Laguna de los Mexicanos
White Ibis	<i>Eudocimus albus</i>	c.10 Mavili
Roseate Spoonbill	<i>Platalea ajaja</i>	4 at Mavili and 2 El Fuerte. 2/17
White-fronted Goose	<i>Anser albifrons</i>	150+ at Laguna de los Mexicanos

Snow Goose sp	<i>Anser</i> sp	several with the Whitefronts at Laguna de los Mexicanos were too distant to be sure whether Snow or Ross's
Black-bellied Whistling Duck	<i>Dendrocygna autumnnalis</i>	noted along the river at El Fuerte
Mexican Duck	<i>Anas platyrhynchos diazi</i>	Noted on the river at El Fuerte and also at Lago Arerenco. 2/17
Gadwall	<i>Anas strepera</i>	2 at Laguna de los Mexicanos
Green-winged Teal	<i>Anas crecca</i>	noted El Fuerte & Laguna de los Mexicanos. 2/17
American Wigeon	<i>Anas americana</i>	numbers at Laguna de los Mexicanos
Northern Pintail	<i>Anas acuta</i>	abundant at Laguna de los Mexicanos
Northern Shoveler	<i>Anas clypeata</i>	common at Laguna de los Mexicanos
Blue-winged Teal	<i>Anas discors</i>	all wetlands visited. 3/17
Bufflehead	<i>Bucephala albeola</i>	1 at Laguna de los Mexicanos (IG only)
Ruddy Duck	<i>Oxyura jamaicensis</i>	2 at Lago Arerenco and several at Laguna de los Mexicanos. 2/17
Black Vulture	<i>Coragyps atratus</i>	Widespread. 15/17
Turkey Vulture	<i>Cathartes aura</i>	Widespread and common. 17/17
Osprey	<i>Pandion haliaetus</i>	locally common in the Mavili and El Fuerte areas, also noted Divisadero and along the Batopilas River. 7/17
Northern Harrier	<i>Circus cyaneus</i>	2 in the Cuauhtemoc area
Sharp-shinned Hawk	<i>Accipiter striatus</i>	singles on four dates. 4/17
Cooper's Hawk	<i>Accipiter cooperii</i>	singles on four dates. 4/17
Northern Goshawk	<i>Accipiter gentiles</i>	1 at Basaseachic
Common Black Hawk	<i>Buteogallus anthracinus</i>	singles twice at El Fuerte
Great Black Hawk	<i>Buteogallus urubitinga</i>	3 birds seen in the Batopilas area
Grey Hawk	<i>Buteo nitidus</i>	noted daily in El Fuerte area also a single in the Batopilas canyon. 5/17
Zone-tailed Hawk	<i>Buteo albonotatus</i>	noted Divisadero and mushroom valley. 3/17
Swainson's Hawk	<i>Buteo swainsonii</i>	1 near Lago arenceno and common in the Cuauhtemoc area. 2/17
Red-tailed Hawk	<i>Buteo jamaicensis</i>	scattered. 7/17
Osprey	<i>Pandion haliaetus</i>	scattered throughout. 5/17
Crested Caracara	<i>Caracara plancus</i>	frequent in the El Fuerte area and 1 Batopilas. 5/17
Collared Forest Falcon	<i>Micrastur semitorquatus</i>	An immature seen well by the river close to El Fuerte is an interesting record, seemingly 200km or so north of its range (IG only)
American Kestrel	<i>Falco sparverius</i>	Widespread. 13/17
Bat Falcon	<i>Falco ruficularis</i>	1 seen at El Fuerte
Merlin	<i>Falco columbarius</i>	1 at El Fuerte train station
Prairie Falcon	<i>Falco mexicanus</i>	1 Divisadero and 1 Laguna de los Mexicanos. 2/17
Peregrine	<i>Falco peregrinus</i>	2 near Choix and 1 Cascada de Basaseachic. 2/14
Rufous-bellied Chachalaca	<i>Ortalis wagleri</i>	several El Fuerte area. 2/17
Gambel's Quail	<i>Callipepla gambelii</i>	1 hurried across the track down to the hot springs near Choix

Elegant Quail	<i>Callipepla douglasii</i>	many seen in the Choix area. Feather found at El Fuerte
American Coot	<i>Fulica americana</i>	noted at Lago Ararenco and common at Laguna de los Mexicanos. 2/17
Grey Plover	<i>Pluvialis squatarola</i>	1 at Mavili
Semipalmated Plover	<i>Charadrius semipalmatus</i>	1 at Mavili
Killdeer	<i>Charadrius vociferous</i>	noted Mavili and Laguna de los Mexicanos. 2/17
American Avocet	<i>Recurvirostra americana</i>	3 at Laguna de los Mexicanos
Black-necked Stilt	<i>Himantopus mexicanus</i>	noted Mavili, El Fuerte and Laguna de los Mexicanos. 3/17
Northern Jacana	<i>Jacana spinosa</i>	1 at the boat get-in El Fuerte. Another records seemingly well north of its known range!
Long-billed Curlew	<i>Numenius americanus</i>	1 at Mavili
Whimbrel	<i>Numenius phaeopus</i>	several at Mavili
Willet	<i>Catoptrophorus semipalmatus</i>	several at Mavili
Marbled Godwit	<i>Limosa fedoa</i>	several at Mavili
Greater Yellowlegs	<i>Tringa melanoleuca</i>	several at Mavili and also noted Laguna de los Mexicanos. 2/17
Lesser Yellowlegs	<i>Tringa flavipes</i>	50+ Laguna de los Mexicanos
Spotted Sandpiper	<i>Actitis macularia</i>	Scattered. 7/17
Wilson's Phalarope	<i>Phalaropus tricolor</i>	4 at Mavili and lots Laguna de los Mexicanos. 2/17
Short-billed Dowitcher	<i>Limnodromus griseus</i>	2 at Mavili
Common (Wilson's) Snipe	<i>Gallinago gallinago delicata</i>	1 Laguna de los Mexicanos
Western Sandpiper	<i>Calidris mauri</i>	1 Mavili – many small waders in the distance!
Yellow-footed Gull	<i>Larus livens</i>	5+ at Mavili
Franklin's Gull	<i>Larus pipixican</i>	1 at Mavili
Laughing Gull	<i>Larus atricilla</i>	2 at Mavili and 1 at Laguna de los Mexicanos. 2/17
Heermann's Gull	<i>Larus heermanni</i>	4+ at Mavili
Forster's Tern	<i>Sterna forsteri</i>	several at Mavili
Caspian Tern	<i>Sterna caspia</i>	several at Mavili
Black Tern	<i>Chlidonias niger</i>	1 offshore at Mavili
Rock Dove (Feral Pigeon)	<i>Columba livia</i>	rather local. 5/17
Red-billed Pigeon	<i>Columba flavirostris</i>	noted at El Fuerte
Band-tailed Pigeon	<i>Columba fasciata</i>	widespread in the sierras. 8/17
Eurasian Collared Dove	<i>Streptopelia decaocto</i>	the incredible ability of this species to colonize rapidly was well illustrated on this trip as we saw them in many localities from the coast to Chihuahua in farmed areas. It seems they only entered Mexico in the last few years! 4/17
Mourning Dove	<i>Zenaida macroura</i>	scattered. 5/17
White-winged Dove	<i>Zenaida asiatica</i>	widespread at lower altitudes. 8/17
Inca Dove	<i>Columbina inca</i>	widespread at lower altitudes. 8/17
Ruddy Ground-Dove	<i>Columbina talpacoti</i>	noted near Mavili
Common Ground-Dove	<i>Columbina passerina</i>	common around El Fuerte
White-tipped Dove	<i>Leptoptila verreauxi</i>	heard near Choix only

Military Macaw	<i>Ara militaris</i>	c.12 seen from the Copper Canyon train below the mid-point (IG only) and 2 seen near Batopilas and another 2 seen in Batopilas Canyon. 3/17
Thick-billed Parrot	<i>Rhynchopsitta pachyrhyncha</i>	Bill C spotted a group of 12 which wheeled briefly level with the canyon top at Divisadero – great sight! c.20 at El Fuerte (all but 1 IG only!) 1 got away too quickly at El Fuerte 1 near El Fuerte (Eric only)
Mexican Parrotlet	<i>Forpus cyanopygius</i>	
Cuckoo spp	<i>Coccyzus</i> sp	
Squirrel Cuckoo	<i>Piaya cayana</i>	1 near El Fuerte (Eric only)
Lesser Roadrunner	<i>Geococcyx velox</i>	1 between El Fuerte and Choix and 1 in the Batopilas Canyon. 2/17
Greater Roadrunner	<i>Geococcyx californicus</i>	1 near Choix, another in the Batopilas Canyon and 2 near Villa Aldama. 3/17
Groove-billed Ani	<i>Crotophaga sulcirostris</i>	common in the El Fuerte area. 4/17
Great Horned Owl	<i>Bubo virginianus</i>	heard at Cusará (IG only)
Mountain Pygmy Owl	<i>Glaucidium gnoma</i>	heard at Cusará (IG only) and seen at Cascada de Basaseachic (IG only)
Ferruginous Pygmy Owl	<i>Glaucidium brasilianum</i>	1 at El Fuerte
Pauraque	<i>Nyctidromus albicollis</i>	2 at El Fuerte at night (IG only)
Common Nighthawk	<i>Chordeiles minor</i>	single at Cabanas San Lorenzo and another just outside Chihuahua was probably this species
Lesser Nighthawk	<i>Chordeiles acutipennis</i>	locally abundant at El Fuerte. 4/17
Vaux's Swift	<i>Chaetura vauxi</i>	scattered. 2/17
White-throated Swift	<i>Aeronautes saxatalis</i>	scattered throughout the sierras. 5/17
Broad-billed Hummingbird	<i>Cynanthus latirostris</i>	several at El Fuerte
White-eared Hummingbird	<i>Basilinna leucois</i>	locally common at Divisadero, scattered elsewhere in the sierras. 5/17
Berylline Hummingbird	<i>Amazilia beryllina</i>	1 Batopilas and 1 near Ocampo. 2/17
Violet-crowned Hummingbird	<i>Amazilia violiceps</i>	locally common around El Fuerte, also noted Batopilas. 3/17
Blue-throated Hummingbird	<i>Lampornis clemenciae</i>	at least one daily at Divisadero. 3/17
Magnificent Hummingbird	<i>Eugenes fulgens</i>	common daily at Divisadero. 3/17
Plain-capped Starthroat	<i>Helimaster constantii</i>	a superb one in El Fuerte
Lucifer Hummingbird	<i>Calthorax lucifer</i>	1 between El Fuerte and Choix
Ruby-throated Hummingbird	<i>Archilochus colubris</i>	one near Mavili and one at Divisadero, several hummers not ID'd were either this species or the next
Black-chinned Hummingbird	<i>Archilochus alexandri</i>	1 at Divisadero was the only certain one
Costa's Hummingbird	<i>Archilochus costae</i>	a fine male between El Fuerte and Choix
Calliope Hummingbird	<i>Archilochus calliope</i>	a scattered of records. 3/17
Broad-tailed Hummingbird	<i>Selasphorus platycercus</i>	scattered throughout. 6/17
Rufous/Allen's Hummingbird	<i>Selasphorus rufus/sasin</i>	1 at Divisadero
Bumble-Bee Hummingbird	<i>Selasphorus heliosa</i>	a superb sighting between El Fuerte and Choix was the only one seen
Mountain Trogon	<i>Trogon mexicanus</i>	2 seen on two separate occasions at Cusará (IG only!)

Elegant Trogon	<i>Trogon elegans</i>	impressive numbers at Cusararé with daily counts reaching 8 and a pair at a nest with one large youngster keeping the parents busy! Also seen and heard most days at Basaseachic. 7(seen)/17
Green Kingfisher	<i>Chloroceryle americana</i>	singles at El Fuerte and Batopilas (both IG only). 2/17
Belted Kingfisher	<i>Ceryle alcyon</i>	widely scattered singles. 4/17
Acorn Woodpecker	<i>Melanerpes formicivorus</i>	locally common in the sierras. 6/17
Gila Woodpecker	<i>Centurus uropygialis</i>	common at lower altitudes. 7/17
Northern Flicker	<i>Colaptes auratus</i>	common in the sierras. 8/17
Hairy Woodpecker	<i>Picoides villosus</i>	1 at Sierra Lodge, Creel (WC & CC only)
Ladder-backed Woodpecker	<i>Picoides scalaris</i>	singles at Mavili and El Fuerte. 2/17
Arizona Woodpecker	<i>Picoides arizoniae</i>	singles twice in Creel area. 2/17
White-striped Woodcreeper	<i>Lepidocolaptes leucogastor</i>	noted at Lago Ararenco and Cascada de Basaseachic. 2/17
Cassin's Kingbird	<i>Tyrannus vociferans</i>	widespread, mostly at lower levels. 8/17
Tropical Kingbird	<i>Tyrannus melancholicus</i>	common El Fuerte area. 4/17
Western Kingbird	<i>Tyrannus verticalis</i>	El Fuerte area and near Cuauhtemoc. 4/17
Thick-billed Kingbird	<i>Tyrannus crassirostris</i>	several daily in the El Fuerte area. 4/17
Ash-throated Flycatcher	<i>Myiarchus cinerascens</i>	2 near Villa Aldama
Dusky-capped Flycatcher	<i>Myiarchus tuberculifer</i>	1 El Fuerte
Nutting's Flycatcher	<i>Myiarchus nuttingi</i>	1 El Fuerte
Great Kiskadee	<i>Pitangus sulphuratus</i>	Locally common at El Fuerte. 2/17
Social Flycatcher	<i>Myiozetetes similis</i>	El Fuerte. 2/17
Western Wood-Pewee	<i>Contopus sordidulus</i>	singles at Mavili and en route to Batopilas. 2/17
Greater Pewee	<i>Contopus pertinax</i>	1 Batopilas
Black Phoebe	<i>Sayornis nigricans</i>	common near water throughout. 11/17
Eastern Phoebe	<i>Sayornis phoebe</i>	singles El Fuerte and Batopilas
Say's Phoebe	<i>Sayornis phoebe</i>	1 Lago Ararenco and several in the Chihuahua area. 3/17
Vermilion Flycatcher	<i>Pyrocephalus rubinus</i>	locally common at lower elevations. 5/17
Least Flycatcher	<i>Empidonax minimus</i>	scattered. 2/17
Pine Flycatcher	<i>Empidonax affinis</i>	1 Divisadero. A few unidentified <i>Empidonax</i> flycatchers
Dusky Flycatcher	<i>Empidonax oberholseri</i>	2 along the Batopilas to San Ignacio road (IG only)
Hammond's Flycatcher	<i>Empidonax hammondii</i>	singles Divisadero and Cusararé. 2/17
Cordilleran/ Pacific Slope Flycatcher	<i>Empidonax difficilis</i>	scattered. 2/17
Buff-breasted Flycatcher	<i>Empidonax fulvifrons</i>	Divisadero (IG only)
Rose-throated Becard	<i>Pachyramphus aglaiae</i>	2 at El Fuerte
Black-throated Magpie-Jay	<i>Calocitta colliei</i>	3 seen from the boat ride along the Rio Fuerte and also 2 near El Fuerte
Grey-breasted Jay	<i>Aphelocoma ultramarina</i>	scattered in the sierras. 5/17
Scrub Jay	<i>Aphelocoma coerulescens</i>	only noted between Basaseachic and Cuauhtemoc
Steller's Jay	<i>Cyanocitta stelleri</i>	widespread in the sierras. 11/17

Sinaloa Crow	<i>Corvus sinaloae</i>	locally common in the El Fuerte area. 4/17
Chihuahuan Raven	<i>Corvus cryptoleucus</i>	noted in the mushroom valley, Creel, and as abundant in the Cuauhtemoc and Chihuahua areas. 3/17
Raven	<i>Corvus corax</i>	scattered in the sierras. 4/17
Tree Swallow	<i>Tachycineta bicolor</i>	1 Sierra Lodge, Creel
Violet-Green Swallow	<i>Tachycineta thalassina</i>	scattered, mostly sierras. 6/17
Mangrove Swallow	<i>Tachycineta albilinea</i>	common near Mavili, also noted El Fuerte. 2/17
Martin sp	<i>Progne sp</i>	El Fuerte. Thought to be Sinaloa Martins these were probably Purple Martins!
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	scattered, common in El Fuerte area. 6/17
Cave Swallow	<i>Hirundo fulva</i>	30+ at Chihuahua Airport sitting above the entrance doors!
Barn Swallow	<i>Hirundo rustica</i>	widely scattered. 7/17
Mexican Chickadee	<i>Parus sclateri</i>	common in the sierras. 9/17
Bridled Titmouse	<i>Parus wollweberi</i>	singles Divisadero and top of the Batopilas Canyon. 2/17
Verdin	<i>Auriparus flaviceps</i>	1 El Fuerte, several in the Batopilas area. 3/17
Bushtit	<i>Psaltriparus minimus</i>	large groups at Divisadero and at the Cascada de Basaseachic. 2/17
Brown Creeper	<i>Certhia americana</i>	locally common in the sierras. 8/17
White-breasted Nuthatch	<i>Sitta carolinensis</i>	locally common in the sierras. 8/17
Pygmy Nuthatch	<i>Sitta pygmaea</i>	1 Divisadero and several at the top of the Batopilas Canyon. 2/17
House Wren	<i>Troglodytes aedon</i>	1 Batopilas
Brown-throated Wren	<i>Troglodytes brunneicollis</i>	noted Cusararé and mushroom valley. 2/17
Bewick's Wren	<i>Thryothorus bewickii</i>	scattered. 3/17
Happy Wren	<i>Thryothorus felix</i>	2 El Fuerte and 1 Batopilas
Sinaloa Wren	<i>Thryothorus sinaloa</i>	2 El Fuerte and scattered Batopilas area. 4/17
Cactus Wren	<i>Campylorhynchus brunneicapillus</i>	c.6 in the Villa Aldama area
Canyon Wren	<i>Catherpes mexicanus</i>	scattered in the sierras and canyons. 5/17
Rock Wren	<i>Catherpes mexicanus</i>	common in the sierras and canyons. 9/17
American Dipper	<i>Cinclus mexicanus</i>	common around Cusararé and Creel. 4/17
Ruby-crowned Kinglet	<i>Regulus calendula</i>	scattered in the sierras. 4/17
Black-capped Gnatcatcher	<i>Polioptila nigriceps</i>	Batopilas area. 3/17
Blue-gray Gnatcatcher	<i>Polioptila caerulea</i>	scattered. 4/17
Black-tailed Gnatcatcher	<i>Polioptila melanura</i>	Villa Aldama and Sierra Gomez
Eastern Bluebird	<i>Sialia sialis</i>	rather uncommon. 2/17
Western Bluebird	<i>Sialia mexicana</i>	locally common in the sierras. 5/17
Townsend's Solitaire	<i>Myadestes townsendi</i>	a total of three seen at Cusararé (IG only) and 4 seen in the Basaseachic area. 4/17
Brown-backed Solitaire	<i>Myadestes occidentalis</i>	1 seen in Batopilas and heard several times in the canyons at Basaseachic

Hermit Thrush	<i>Catharus guttatus</i>	2 on the Piedra Volada trail, Basaseachic
Rufous-backed Thrush	<i>Turdus rufopalliatu</i>	2 El Fuerte
American Robin	<i>Turdus migratorius</i>	scattered in the sierras. 5/17
Northern Mockingbird	<i>Mimus polyglottis</i>	scattered throughout. 4/17
Curve-billed Thrasher	<i>Toxostoma curvirostre</i>	locally common. 9/17
Crissal Thrasher	<i>Toxostoma crissale</i>	1 Sierra Gomez
Grey Silky	<i>Ptilogonys cinereus</i>	c.12 Divisadero and noted Peidra Volada Trail, Basaseachic. 2/17
Phainopepla	<i>Phainopepla nitens</i>	2 between Mavili and Los Mochis (BC & CC)
Loggerhead Shrike	<i>Lanius ludovicianus</i>	singles twice in the Creel area. 2/17
Plumbeous Vireo	<i>Vireo plumbeus</i>	Divisadero. 2/17
Cassin's Vireo	<i>Vireo cassinii</i>	1 at El Fuerte and noted Divisadero. 2/17
Hutton's Vireo	<i>Vireo huttoni</i>	locally common in the sierras. 4/17
Warbling Vireo	<i>Vireo gilvus</i>	1 Batopilas
Orange-crowned Warbler	<i>Vermivora celata</i>	scattered throughout. 5/17
Nashville Warbler	<i>Vermivora ruficapilla</i>	El Fuerte. 2/17
Crescent-chested Warbler	<i>Vermivora superciliosa</i>	3 seen in the Basaseachic area. 2/17
Tropical Parula	<i>Parula pitiayumi</i>	1 at Divisadero (IG only) and 1 Cascada de Basaseachic. 2/17
Yellow-rumped Warbler	<i>Dendroica coronata</i>	Widespread and common. 10/17
Black-throated Gray Warbler	<i>Dendroica nigrescens</i>	Divisadero. 2/17
Townsend's Warbler	<i>Dendroica townsendi</i>	locally common in Basaseachich area and a single in the desert near Villa Aldama. 3/17
Hermit Warbler	<i>Dendroica occidentalis</i>	1 Divisadero
Grace's Warbler	<i>Dendroica graciae</i>	Divisadero. 2/17
Yellow Warbler	<i>Dendroica petechia</i>	Mavili & El Fuerte. 2/17
MacGillivray's Warbler	<i>Oporornis tolmiei</i>	common in the El Fuerte area and also noted in Batopilas. 4/17
Wilson's Warbler	<i>Wilsonia pusilla</i>	El Fuerte area and Divisadero. 3/17
Common Yellowthroat	<i>Geothlypis trichas</i>	1 El Fuerte
Red-faced Warbler	<i>Cardellina rubrifrons</i>	A totally brilliant bird! Cascada de Basaseachic
Olive Warbler	<i>Peucedramus taeniatus</i>	Divisadero and Basaseachic. 4/17
Rufous-capped Warbler	<i>Basileuterus rufifrons</i>	2 Batopilas
Slate-throated Redstart	<i>Myioborus miniatus</i>	singles twice Cusararé and Basaseachic (all IG only!). 3/17
Painted Redstart	<i>Myioborus pictus</i>	common in the sierras and canyons. 10/17
Hepatic Tanager	<i>Piranga flava</i>	Divisadero. 2/17
Summer Tanager	<i>Piranga ruber</i>	El Fuerte
Western Tanager	<i>Piranga ludoviciana</i>	scattered. 3/17
Northern Cardinal	<i>Cardinalis cardinalis</i>	scattered throughout. 5/17
Pyrrhuloxia	<i>Cardinalis sinuatus</i>	3 El Fuerte, 3 Batopilas and common in the Chihuahua area. 3/17
Blue Grosbeak	<i>Guiraca caerulea</i>	3+ near Choix
Painted Bunting	<i>Passerina ciris</i>	El Fuerte area. 2/17
Varied Bunting	<i>Passerina versicolor</i>	Batopilas. 2/17
Indigo Bunting	<i>Passerina cyanea</i>	noted El Fuerte
Lazuli Bunting	<i>Passerina amoena</i>	2 El Fuerte and 2 Batopilas. 2/17

Rufous-capped Brushfinch	<i>Atlapetes pileatus</i>	quite common Cascada de Basaseachic
Rufous-sided Towhee	<i>Pipilo erythrophthalmus</i>	scattered. 3/17
Canyon Towhee	<i>Pipilo fuscus</i>	widespread. 13/17
Cassin's Sparrow	<i>Aimophila cassinii</i>	1 San Ignacio Road, Batopilas (IG only)
Rufous-crowned Sparrow	<i>Aimophila ruficeps</i>	3 seen in Batopilas area. 2/17
Rufous-winged Sparrow	<i>Aimophila carpalis</i>	pairs seen near Mavili and El Fuerte. 2/17
Striped Sparrow	<i>Oriturus superciliosus</i>	noted daily in the Creel area. 4/17
Black-throated Sparrow	<i>Amphispiza bilineata</i>	very common in semi-deserts around Villa Aldama and Sierra Gomez noted Creel area and Batopilas. 3/17
Lincoln's Sparrow	<i>Melospiza lincolni</i>	widely scattered. 6/17
Lark Sparrow	<i>Chondestes grammacus</i>	3 Villa Aldama
Lark Bunting	<i>Calamospiza melanocorys</i>	Cabanas San Lorenzo
Chipping Sparrow	<i>Spizella passerina</i>	widely scattered. 5/17
Clay-colored Sparrow	<i>Spizella pallida</i>	flocks in the Villa Aldama and Sierra Gomez areas
Brewer's Sparrow	<i>Spizella breweri</i>	Sierra Lodge, Creel. 2/17
Dark-eyed Junco	<i>Junco hyemalis</i>	widespread in the sierras. 11/17
Yellow-eyed Junco	<i>Junco phaeonotus</i>	1 top of Batopilas Canyon (IG only)
White-crowned Sparrow	<i>Zonotrichia leucophrys</i>	small numbers at the mushroom valley and Laguna de los Mexicanos. 2/17
Yellow-headed Blackbird	<i>Xanthocephalus xanthocephalus</i>	only seen at El Fuerte. 2/17
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	large flock at mushroom valley
Brewer's Blackbird	<i>Euphagus cyanocephalus</i>	noted from the Copper Canyon train
Brown-headed Cowbird	<i>Molothrus ater</i>	AM saw them in Mexico City before we arrived!
Bronzed Cowbird	<i>Molothrus aeneus</i>	common in the El Fuerte and Chihuahua areas. 7/17
Great-tailed Grackle	<i>Quiscalus mexicanus</i>	El Fuerte. 2/17
Orchard Oriole	<i>Icterus spurius</i>	El Fuerte. 3/17
Hooded Oriole	<i>Icterus cucullatus</i>	El Fuerte and Batopilas. 4/17
Streak-backed Oriole	<i>Icterus pustulatus</i>	scattered. 2/17
Bullock's Oriole	<i>Icterus bullocki</i>	El Fuerte and Sierra Gomez. 3/17
Scott's Oriole	<i>Icterus parisorum</i>	by habitation. 14/17
House Sparrow	<i>Passer domesticus</i>	scattered in the sierras. 4/17
Lesser Goldfinch	<i>Carduelis psaltria</i>	locally common. 8/17
House Finch	<i>Carpodacus mexicanus</i>	

Systematic List Number 4 Butterflies

Nomenclature and taxonomic order taken from Butterflies of Mexico and Central America (Glassberg 2007). Many thanks to Ron and Hilary whose diligence and hard work provided abundant photographic evidence of the butterfly fauna that we were then able to check post-trip. The number of days a species was seen is indicated as 5/17 – so five days out of the 17 in the field (arrival day and landing day at either end not included).

Papilionidae

Pipeline Swallowtail	<i>Battus philenor</i>	very common at El Fuerte, Batopilas and scattered in the sierras and Chihuahua. 8/17
Polydamus Swallowtail	<i>Battus polydamus</i>	1 at Sierra Lodge near Creel
Two-tailed Swallowtail	<i>Papilio multicaudatus</i>	common on the mid-level slopes of the Batopilas Canyon. 2/17
Giant Swallowtail	<i>Papilio cresthontes</i>	scattered around El Fuerte and noted Batopilas. 2/17
Black Swallowtail	<i>Papilio polyxenes</i>	noted Batopilas Canyon and Villa Aldama area. 2/17

Pieridae

Mexican Dartwhite	<i>Catasticta nimbice</i>	noted Batopilas, near Bufa and in Basaseachic area. 3/17
Chiricahua White	<i>Neophasia terlotitii</i>	Noted Cusararé and Basaseachic. 2/17
Checkered White	<i>Pontia protodice</i>	Lago Ararenco and Basaseachic. 2/17
Great Southern White	<i>Ascia monaste</i>	El Fuerte area. 2/17
Howarth's White	<i>Ganyra howarthii</i>	quite common in lowland areas. 5/17
Common Greeneyed-White	<i>Leptophobia aripa</i>	Batopilas area
Lyside Sulphur	<i>Kricogonia lyside</i>	common except in the highest areas. 8/17
Southern Dogface	<i>Colias cesonia</i>	common except in the highest areas. 9/17
Orange Sulphur	<i>Colias eurytheme</i>	scattered in the sierras. 5/17
Clouded Sulphur	<i>Colias philodice</i>	Chihuahua area
White Angled-Sulphur	<i>Anteos clorinde</i>	common throughout. 9/17
Yellow Angled-Sulphur	<i>Anteos maerula</i>	scattered. 3/17
Cloudless Sulphur	<i>Phoebis sennae</i>	common except in the highest areas. 8/17
Apricot Sulphur	<i>Phoebis argante</i>	Mavili
Dina Yellow	<i>Eurema dina</i>	locally common in lower areas. 4/17
Mexican Yellow	<i>Eurema mexicana</i>	Batopilas
Boisduval's Yellow	<i>Eurema boisduvaliana</i>	locally common in lower areas. 3/17
Sleepy Orange	<i>Eurema nicippe</i>	common except in the highest areas. 9/17
Tailed Orange	<i>Eurema proterpia</i>	locally common in lower areas. 4/17
Dainty Sulphur	<i>Nathalis iole</i>	locally common in lower areas. 5/17
Barred Yellow	<i>Eurema daira</i>	locally common in lower areas. 3/17

Lycaenidae

Creamy Stripe-Stroke	<i>Arawacus jada</i>	Batopilas. 2/17
Marius Hairstreak	<i>Rekoa marius</i>	Batopilas
Clytie Hairstreak	<i>Ministrymon clytie</i>	Batopilas
Gray Hairstreak	<i>Strymon melinus</i>	Divisadero
Juniper Hairstreak	<i>Callophrys gryneus</i>	Basaseachic

Brown-spotted Greenstreak	<i>Cyanophrys longula</i>	El Fuerte
Ceraunus Blue	<i>Hemiargus ceraunus</i>	Creel area. 2/17
Reakirt's Blue	<i>Hemiargus isola</i>	locally common in the sierras. 6/17
Marine Blue	<i>Leptotes marina</i>	widely scattered. 4/17
Eastern Tailed Blue	<i>Everes comyntas</i>	common in the El Fuerte area. 3/17

Riodinidae

Scintillant sp	<i>Calephelis</i> sp	locally common in lowlands
Zela Metalmark	<i>Emesis zela</i>	scattered in the lower areas
Checkered Tanmark	<i>Emesis oetas</i>	Batopilas. 2/17

Nymphalidae

American Snout	<i>Libytheana carinenta</i>	widespread. 8/17
Variiegated Fritillary	<i>Euptoieta claudia</i>	widespread. 8/17
Mexican Fritillary	<i>Euptoieta hegesia</i>	noted El Fuerte
Gulf Fritillary	<i>Agraulis vanillae</i>	El Fuerte and Basaseachic!
Mexican Silverspot	<i>Dione moneta</i>	Cascada de Basaseachic
Zebra Heliconian	<i>Heliconius charithonia</i>	Batopilas area. 3/17
Bordered Patch	<i>Chlosyne lacinia</i>	widely scattered and variable. 3/17
Theona Checkerspot	<i>Chlosyne theona</i>	scattered. 3/17
Black Checkerspot	<i>Chlosyne cyneas</i>	locally common, esp mid levels. 5/17
Tiny Checkerspot	<i>Dymasia dymas</i>	El Fuerte
Arachne Checkerspot	<i>Poladryas arachne</i>	El Fuerte and Basaseachic. 2/17
Elf	<i>Microtia elva</i>	locally very common at mid-low altitudes. 5/17
Orange-patch Crescent	<i>Phyciodes drusilla</i>	El Fuerte
Texan Crescent	<i>Phyciodes texana</i>	common El Fuerte area. 3/17
Ardent Crescent	<i>Phyciodes ardyis</i>	?probably this species, El Fuerte
Phaon Crescent	<i>Phyciodes phaon</i>	El Fuerte
Common Buckeye	<i>Junonia coenia</i>	El Fuerte
Tropical Buckeye	<i>Junonia genoveva</i>	widespread. 10/17
West Coast Lady	<i>Vanessa annabella</i>	Creel area and Batopilas Canyon. 3/17
Painted Lady	<i>Vanessa cardui</i>	Mavili & Divisadero area. 3/17
American Lady	<i>Vanessa virginiensis</i>	Batopilas & Basaseachic area. 3/17
Mourning Cloak	<i>Nymphalis antiopa</i>	1 near Bufa
Banded Peacock	<i>Anartia fatima</i>	El Fuerte and Batopilas
White Peacock	<i>Anartia jatrophae</i>	common at Choix Hot Springs
Malachite	<i>Siproeta stelenes</i>	Choix area
California Sister	<i>Adelpha bredowii</i>	widespread in the sierras. 9/17
Blackened Bluewing	<i>Myscelia cyananthe</i>	a male at El Fuerte, females seen twice in Basaseachic area (all IG only!)
Tropical Leafwing	<i>Anaea aidea</i>	widespread and often common. 9/17
Dingy Purplewing	<i>Eunica monima</i>	1 El Fuerte
Black-patched Cracker	<i>Hamadryas atlantis</i>	1 at Batopilas
Gray Cracker	<i>Hamadryas februa</i>	El Fuerte and Batopilas. 3/17
Glaucous Cracker	<i>Hamadryas glauconome</i>	Batopilas
Guatemalan Cracker	<i>Hamadryas guatemalena</i>	Batopilas
Empress Leilia	<i>Asterocampa leilia</i>	one noted between El Fuerte and Choix, then common around Chihuahua
'Cream-banded' Dusky Emperor	<i>Asterocampa idyja argus</i>	Below Bufa in the Batopilas Canyon
Silver Emperor	<i>Doxocopa laura</i>	a male El Fuerte, a female Batopilas

White Morpho	<i>Morpho polyphemus</i>	several seen from the Copper Canyon train, and at least one below Bufa as we descended into the Copper Canyon Sierra Lodge, Creel and also Basaseachic area. 4/17
Nabokov's Satyr	<i>Cyllopsis pyracmon</i>	
Reddish Satyr	<i>Euptychia rubrofasciata</i>	a dead one Batopilas
Red-bordered Satyr	<i>Gyrocheilus patrobas</i>	scattered in the sierras. 5/17
Falcate Satyr	<i>Pindis squamistriga</i>	Colorines
Queen	<i>Danaus gilippus</i>	a Monarch mimic. Scattered. Locally abundant along the Rio Fuerte. 6/17
Soldier	<i>Danaus eresimus</i>	a Monarch mimic. El Fuerte and Batopilas. 2/17
Monarch	<i>Danaus plexippus</i>	scattered throughout, often not as common as the Queen!

Hesperidae

Zilpa Longtail	<i>Chioides zilpa</i>	Batopilas where common
White-striped Longtail	<i>Chioides catillus</i>	scattered throughout
Mottled Longtail	<i>Typhedanus undulatus</i>	Batopilas
Dorantes Longtail	<i>Urbanus dorantes</i>	El Fuerte area
Mazans Scallopwing	<i>Staphylus mazans</i>	El Fuerte
Texas Powdered Skipper	<i>Systacea pulverulenta</i>	El Fuerte
Arizona Powdered Skipper	<i>Systacea zampa</i>	Chihuahua area
White-patched Skipper	<i>Chiomara astchis</i>	El Fuerte
White Spurwing	<i>Antigonus emorsa</i>	Batopilas
Common Bluevent	<i>Anastrus sempiternus</i>	El Fuerte
Brown-banded Skipper	<i>Timocharis ruptifasciata</i>	El Fuerte area
Five-banded Skipper	<i>Timocharis trifasciata</i>	Batopilas
Hermit Skipper	<i>Grais stigmaticus</i>	?probably this species, Batopilas
Common Checkered Skipper	<i>Pyrgus communis</i>	Divisadero
Tropical Checkered Skipper	<i>Pyrgus oileus</i>	El Fuerte
Laviana White Skipper	<i>Helioptes laviana</i>	El Fuerte
Erichson's White Skipper	<i>Helioptes domicilla</i>	Batopilas
Southern Skipperling	<i>Copaeodes minimus</i>	El Fuerte (tiny!)
Whirlabout	<i>Polites vibex</i>	El Fuerte
Apache Skipper	<i>Hesperia woodgatei</i>	Divisadero
Dun Skipper	<i>Euphyes vestris</i>	El Fuerte

ACANTHACEAE

Elytraria imbricata

squat plant with tight heads with little pale blue 'eyebright-like' flowers. Batopilas Canyon and Basaseachic

ACERACEAE

Acer grandidentatum

Acer sp

Basaseachic
planted in Creel

AMARANTHACEAE

Gomphrena decumbens

scattered throughout

ANACARDIACEAE

Mangifera indica

Toxicodendron radicans

Mango. Cultivated in places
Poison Ivy. Basaseachic

APIACEAE

Eryngium lemmoni

Eryngium spp

elegant blue and silver flowered Eryngo scattered throughout several other species present including a 'squat' one at Batopilas and a long-flowered wetland species around Sierra Lodge and Ararenco Lake area

ARALIACEAE

Aralia humilis

El Fuerte area

ASCLEPIADACEAE

Asclepias curassavica

Cynanchum lingulatum

Sarcostemma cynanchoides

widespread orange and yellow flowered milkweed
El Fuerte area
climbing milkweed with balls of creamy flowers. Butterflies love it! Common along the banks of the Rio Fuerte

ASTERACEAE

Ageratum corymbosum

Ambrosia psilostachya

Artemisia ludoviciana

Bidens aurea

Bidens pilosa

Centaurea rothrockii

Conyza canadensis

Cosmos bipinnatus

Cosmos sulphureus

Eclipta prostrata

Erigeron fraternus

Filago californica

Galinsoga parviflora

Gnaphalium pringlei

Iostephane heterophylla

Lactuca serriola

white flowered species. Widespread
widespread
widespread
flowers white to orange/yellow or both. Widespread
white flowers. Tripartite leaves. Widespread
also known as *Centaurea americana*. Large pink and white
Centaurea seen from the train!
widespread
mostly pink daisy with feathery foliage. Widespread
stunning orange flowered daisy. Divisadero and the train
Coastal areas and El Fuerte
white daisy. Scattered
El Fuerte
gallant soldier with tiny white flowers. Widespread
cudweed. Coastal and at Divisadero
large pink dahlia-like flower. Divisadero
wall lettuce. Scattered

<i>Montanoa leucantha</i>	showy sprays of white daisy flowers on large shrub. Abundant in many places. Locally dominant in parts of Batopilas Canyon
<i>Ratibida mexicana</i>	orange-yellow cone flower. Divisadero
<i>Senecio carlomasonii</i>	yellow flowers, large petasites-like leaves. Divisadero
<i>Sonchus oleraceus</i>	smooth sow-thistle. Widespread
<i>Stevia plummerae</i>	nominate form. showy white flat-topped flowerheads. Widespread
<i>Tagetes lucida</i>	yellow flowers, shiny green leaves. Widespread
<i>Taraxacum officinale</i>	dandelion. Scattered
<i>Xanthium strumarium</i>	Rough Cocklebur. El Fuerte etc
<i>Zinnia angustifolia</i>	abundant orange-flowered daisy
<i>Zinnia peruviana</i>	showy scarlet dark centred daisy. Batopilas Canyon and Basaseachic

BEGONIACEAE

<i>Begonia</i> sp	leaves noted across the river from El Fuerte
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BETULACEAE

<i>Alnus acuminata</i>	typical alder, except grows in drier areas as part of forest. Abundant Canyon del Gigante
<i>Alnus oblongifolia</i>	typical alder, grows along rivers. Noted throughout
<i>Ostrya virginiana</i>	Cascada de Basaseachic

BIGNONIACEAE

<i>Tabebuia impetiginosa</i>	small to large tree, palmate leaves. Pink flowers not at this time of year! Widespread Choix, El Fuerte etc
<i>Tecoma stans</i>	large yellow trumpet flowers, narrow toothed leaves. Shrub or small tree. Scattered throughout

BOMBACACEAE

<i>Ceiba acuminata</i>	large tree with palmate leaves with seven leaflets. Widespread
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BORAGINACEAE

<i>Onosmodium</i>	white-flowered borage. Scattered – maybe more than one species
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BRASSICACEAE

<i>Brassica nigra</i>	yellow cabbage. Scattered
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BUDDLEJACEAE

<i>Buddleja cordata</i>	large shrub/small tree, elliptic leaves about 15cm long. Widespread
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BURSERACEAE

<i>Bursera fagaroides</i>	small trees with pale yellow bark, exfoliating in papery sheets. Leaflets 7-13 per leaf. El Fuerte and Choix
<i>Bursera microphylla</i>	spreadin low branched small tree with whitish bark, younger branches red. Bark peels in large sheets. 7-25 leaflets per leaf, very small. Widespread

CACTACEAE

<i>Aporocactus</i> sp	epiphytic species noted at El Fuerte
<i>Cylindropuntia acanthocarpa</i>	widespread, noted in the Batopilas Canyon, El Fuerte area and Satevó
<i>Cylindropuntia californica</i>	Batopilas
<i>Cylindropuntia molesta</i>	El Fuerte
<i>Echinocereus coccineus</i>	El Fuerte
<i>Echinocereus feindleri?</i>	Batopilas
<i>Echinocereus parkeri</i>	Basaseachic
<i>Echinocereus maritimus hancocki</i>	Canyon del Gigante
<i>Echinocereus subinermis</i>	Batopilas
<i>Ferocactus echidne</i>	Batopilas
<i>Ferocactus herrerae</i>	very close to <i>Ferocactus wislizeni</i> . El Fuerte and Mavili areas
<i>Mamillaria gigantea</i>	Batopilas
<i>Opuntia aciculata</i>	Sierra Gomez
<i>Opuntia basilaris</i>	Beavertail Cactus sp. Batopilas and Batopilas Canyon
<i>Opuntia chlorotica</i>	Pancake Pear. El Fuerte area and from the Copper Canyon train road to Satevó
<i>Opuntia ellisiana</i>	Batopilas and Batopilas Canyon
<i>Opuntia ficus-indica</i>	Batopilas Canyon
<i>Opuntia gosseliniana</i>	Batopilas Canyon
<i>Opuntia littoralis</i>	Batopilas Canyon
<i>Opuntia macrocentra</i>	Sierra Gomez
<i>Opuntia phaeacantha</i>	nominate form widespread. Subspecies <i>major</i> was seen from the Copper Canyon Train, Canyon del Gigante and Basaseachic
<i>Opuntia robusta</i>	Batopilas Canyon
<i>Opuntia soederstroemiana</i>	or <i>dobbiana</i> . Sierra Gomez
<i>Opuntia streptacantha</i>	Batopilas Canyon
<i>Opuntia thurberi</i>	El Fuerte
<i>Pachycereus pecten-aboriginum</i>	Los Mochis and El Fuerte
<i>Pachycereus pringlei</i>	only on coastal hills west of Los Mochis
<i>Sclerocactus parviflorus</i>	Ararenco Lake
<i>Stenocereus alamosensis</i>	El Fuerte
<i>Stenocereus fimbriatus?</i>	Batopilas
<i>Stenocereus griseus</i>	road to Satevó
<i>Stenocereus montanus</i>	also known as <i>Lemaireocereus montanus</i> . Batopilas and from the Copper Canyon Train
<i>Stenocereus thurberi</i>	also known as <i>Lemaireocereus thurberi</i> . Widespread

CAMPANULACEAE

<i>Hippobroma longiflora</i>	Batopilas – casually identified as a <i>Tibouchia</i> ??? But had five petals! Medium-sized white flowers
<i>Lobelia anatina</i>	widespread blue lobelia in woodlands and meadows. Also a mauve blue species with larger flowers and a neat pretty blue species, both in damp grasslands by Ararenco Lake

CAPRIFOLIACEAE

<i>Symphoricarpos palmeri</i>	snowberry sp. Scattered
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CARYOPHYLLACEAE

Silene laciniata

brilliant red campion with deeply divided petals. Common Batopilas. Canyon and Basaseachic

CELTIDACEAE

Celtis spp

common in the semi-deserts around Chihuahua

Celtis iguana

common hackleberry around Batopilas

CISTACEAE

Helianthemum chihuahuense

yellow rockrose. Divisadero

CONVOLVULACEAE

Ipomoea arborescens

small tree with large elliptic acuminate leaves. Not flowering at this season. Widespread

Ipomoea chilopsidis

?Batopilas Canyon

<i>Ipomoea costellata</i>	delicate trailing species with smallish pink flowers with lime centre. Divisadero
<i>Ipomoea cristulata</i>	syn <i>Quamoclit coccinea</i> . Brilliant orange long-tubed small flowered sp with entire leaves. Common around El Fuerte and Mavili
<i>Ipomoea hederacea</i>	large blue flowers, ivy-shaped leaves. Widespread
<i>Ipomoea longifolia</i>	tall upright herb with long undivided leaves and large white flowers with mauve-pink centres. Batopilas Canyon
<i>Ipomoea purpurea</i>	purple flowers. Widespread
<i>Ipomoea quamoclit</i>	syn <i>Quamoclit pinnata</i> . Bright red long-tubed sp with delicate pinnately divided leaves. El Fuerte and Choix

CRASSULACEAE

<i>Echeveria paniculata</i>	orange flowers in oddly long raceme. Wet areas on hillside near Divisadero
<i>Sedum stelliforme</i>	white pink-centred flowers, mat-forming. Abundant Divisadero

ERICACEAE

<i>Arbutus arizonica</i>	checkered grayish bark. Along rim of canyon at Divisadero
<i>Arbutus xalapensis</i>	reddish bark, mottled white. Widespread
<i>Chimaphila maculata</i>	white-patterned leaves. Umbellate head in bud now. Widespread
<i>Comarostaphylis polifolia?</i>	narrow-leaved madrone sp. Mountains
<i>Monotropa hypopitys</i>	amazing red-flowered form common at Cusarare and Basaseachic
<i>Monotropa uniflora</i>	Indian Pipe. common at Cusarare and Basaseachic

EUPHORBIACEAE

<i>Croton</i> sp	Mavili
<i>Euphorbia colorata</i>	small brightly coloured species somewhat reminiscent of a poinsettia. Mavili and El Fuerte
<i>Euphorbia serpens</i>	small mat-forming species. widespread
<i>Ricinus communis</i>	Castor Oil Plant. Widespread on roadsides

FABACEAE; CAESALPINIOIDEAE

<i>Caesalpinia pulcherrima</i>	stunning orange-red and yellow flowered shrub. El Fuerte area
<i>Chamaecrista absus</i>	small shrub with small orange flowers. Mavili
<i>Chamaecrista nictitans</i>	pinnate leaves, yellow senna like flowers. Lowlands
<i>Delonix regia</i>	The Flamboyant. Tree with pinnate leaves, spectacular red flowers. Scattered
<i>Haematoxylum brasiletto</i>	Brazilwood. Trees to 10m with deeply fluted trunks, grey bark, leaflets small, 2-4 paired, retuse. Widespread in lowlands
<i>Parkinsonia aculeate</i>	Mexican Palo Verde. Green-barked trees with long slender leaflets that seem mostly rachis! Widespread
<i>Senna atomaria</i>	'skunk's ass', so-named for its strongly smelling pinnate leaves. Mid-sized yellow flowers. Tree to 10m. Batopilas

FABACEAE; MIMOSOIDEAE

<i>Acacia cochliacantha</i>	Boat-spine Acacia. Extraordinary inflated and bent seed pods.
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Enterolobium cyclocarpum

Widespread. Other acacia species present
Elephant's Ear Tree. Batopilas

<i>Mimosa palmeri</i>	columns of tiny bright pink flowers on acacia-like tree. El Fuerte area
<i>Pithecellobium dulce</i>	Manila Tamarind. Pods curled and knobbly. Batopilas

FABACEAE; PAPILIONOIDEAE

<i>Cologania obovata</i>	Divisadero
<i>Desmodium orbiculare</i>	Lowlands
<i>Sesbania herbacea</i>	upright herb with pinnate leaves and yellow pea flowers. In standing water along e.g. Rio Fuerte

FAGACEAE

<i>Quercus albocincta</i>	leaves +/- glabrous and evenly toothed, white below shiny green above. Marginal teeth with an obvious (to 5mm) bristle
<i>Quercus arizonica</i>	leaves hairy, upper grey-green, upper side veins sunken. Divisadero and Basaseachic
<i>Quercus castanea</i>	probably this species at Cusarare
<i>Quercus chihuahuensis</i>	leaves hairy, velvety on both surfaces. Choix and Divisadero
<i>Quercus coccolobifolia</i>	leaves +/- glabrous.
<i>Quercus grisea</i>	leaves hairy, upper grey-green, upper side veins raised. Divisadero
<i>Quercus hypoleucoides</i>	leaves hairy, white woolly below, dark green above, margins entire in lower half, elliptic. La Bufa area
<i>Quercus mcvaughii</i>	leaves hairy, big, 10-18cm, lower surface densely woolly with orange-yellow hairs. Divisadero
<i>Quercus oblongifolia</i>	leaves +/- glabrous. Strongly glaucous. Dominant tree just below La Bufa
<i>Quercus rugosa</i>	leaves hairy, upper dark green, leaves cupped, solid, underside with raised net-like veins. Widespread
<i>Quercus scytophylla</i>	leaves hairy, white woolly below, dark green above, margins evenly and prominently spiny. La Bufa and Basaseachic areas
<i>Quercus sideroxylla</i>	leaves hairy, white woolly below, dark green above, margins entire in lower half, obovate. Widespread
<i>Quercus tarahumara</i>	leaves hairy, big, 13-38cm, lower surface fuzzy and golden-brown. Widespread in mountains
<i>Quercus tuberculata</i>	leaves +/- glabrous, blunt, obovate. Between Batopilas and Chihuahua
<i>Quercus viminea</i>	leaves +/- glabrous, leaf-tip pointed, leaves narrow. Divisadero

FOUQUIERIACEAE

<i>Fouquieria diguetii</i>	Red-flowered inflorescence compact, longer than wide. Mavili
<i>Fouquieria macdougalii</i>	Tree Ocotillo. Red-flowered inflorescence loose, wider than long. El Fuerte and Choix
<i>Fouquieria splendens</i>	Sierra Gomez where Bill found one in flower

GENTIANACEAE

<i>Eustoma exaltatum</i>	gentian-like flowers with purple and pale ring in the centre. Hot Springs near Choix
<i>Gentiana</i> sp	fine blue species at Lago Ararenco
<i>Gentianella</i> spp	various species, throughout
<i>Gentianopsis macrantha</i>	tall blue gentian-like flowers with lobes flattened out. Common

around Ararenco Lake

Gentianopsis sp another tall blue *Gentianopsis* in the woods en route to Basaseachic
Halenia brevicornis small yellow flowered sp. Scattered throughout
Halenia sp large yellow flowered sp in riverside meadows at Basaseachic

GERANIACEAE

Erodium cicutarium Common Storksbill. Introduced. Scattered
Geranium wislizeni widespread pink species

HALOGORACEAE

Myriophyllum pinnatum verticillate leaved waterweed. Lowland water bodies

HYDRANGINACEAE

Philadelphus microphyllus Desert Mock Orange. Divisadero

LAMIACEAE

Agastache pallida pink flowers. Common at Divisadero and in mountains generally
Leonotis nepetaefolia tall orange flowered labiate. Introduced
Lepechina caulescens odd-looking labiate with spikey looking white flowers. Cusarare and Lago Ararenco
Mentha arvensis mint. Scattered
Monarda citriodora widespread labiate, usually pink, sometimes white or mauve.
Ocimum basilicum white flowered basil. Lowlands
Prunella vulgaris Self-heal. Scattered
Salvia betulaefolia subshrub with large red-orange flowers. Common at Divisadero, scattered elsewhere in the mountains
Salvia microphylla small pink flowers. Common in the mountain forests
Salvia muscarioides sage with spikes of blue white-centred flowers. Divisadero
Stachys coccinea woundwort with bright orange/red flowers. Divisadero and Basaseachic
Trichostema arizonicum Arizona Bluecurls. Pretty *Teucrium*-like blue and white flowers. Cascada de Basaseachic

LYTHRACEAE

Ammannia coccinea upright herb with narrow opp and alternative leaves and small pink flowers in axils. Lowlands
Cuphea llavea Bat-faced Monkey Flower. Amazing red and purple flowers. Below La Bufa in the Batopilas Canyon

MALVACEAE

Sida spp several seen
Sidalcea neomexicana pretty pink mallow flowers. Ararenco Lake meadows

MARTYNIACEAE

Martynia annua large white reddish-purple tipped flowers. Road to Saveto
Proboscidea althaeifolia Devil's Claw. Large yellow Monkey Flower like blooms
Proboscidea parviflora? on the dunes at Mavili, orange and pinkish flowers

MORACEAE

Ficus cotinifolia

lves less than twice as long as wide, orbicular, tip rounded.
Large tree. Batopilas

<i>Ficus insipida</i>	Ives at least twice as long as wide, hairy. Figs solitary. Road to Satevó
<i>Ficus petiolaris</i>	Ives less than twice as long as wide, cordate, tip pointed. Variable tree often on rocks and canyon walls with yellow-white trunks. Widespread
<i>Ficus trigonata</i>	Ives at least twice as long as wide, glabrous. Figs paired. Batopilas

NYCTAGINACEAE

<i>Allionia incarnata</i>	Trailing Windmills. Pink daisy-like flowers, leaves sl succulent and hairy and sticky. On dunes at Mavili
<i>Boerhavia intermedia</i>	small pale flowered sp. El Fuerte
<i>Boerhavia purpurascens</i>	or <i>rosei</i> . Purple flowers. Dunes at Mavili
<i>Boerhavia triquetra</i>	Slender Spiderling. Pink flowers. Dunes at Mavili

OLEACEAE

<i>Fraxinus velutina</i>	Cascada de Basaseachic
<i>Agonandra racemosa</i>	pinnate-leaved olive relative. Batopilas

ONAGRACEAE

<i>Epilobium ciliatum?</i>	Divisadero and Cusarare
<i>Ludwigia octovalvis</i>	Lowlands
<i>Ludwigia peploides</i>	wetlands. Lowlands
<i>Oenothera rosea</i>	pink flowers. Divisadero
<i>Oenothera tetraptera</i>	palest pink flowers. Divisadero

OXALIDACEAE

<i>Oxalis corniculata</i>	scattered
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PASSIFLORACEAE

<i>Passiflora arida</i>	pale pinkish species. Coastal areas
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PLANTAGINACEAE

<i>Plantago</i> cf. <i>lanceolata</i>	scattered
<i>Plantago major</i>	Los Mochis airport!

PLATANACEAE

<i>Platanus racemosa</i>	typical plane tree. Along the Batopilas Canyon
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PLUMBAGINACEAE

<i>Plumbago scandens</i>	Sierra Gomez
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POLYGALACEAE

<i>Monnina wrightii</i>	single spike with lanceolate leaves and purple flowers. Divisadero
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POLYGONACEAE

<i>Polygonum hydropiper</i>	scattered
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Polygonum pensylvanicum

scattered throughout

RANUNCULACEAE

Delphinium

yellow species in woods by Cascada Cusarare

Delphinium

purple species Divisadero

Ranunculus sp

Divisadero

RHAMNACEAE

Ziziphus amole

large shrub or small tree, bark flaking, stout thorns, ovate leaves.

Batopilas

RHIZOPHORACEAE

Rhizophora mangle

Red Mangrove. Mavili

ROSACEAE

Cercocarpus montanus

scattered

Fragaria vesca

wild strawberry. El Fuerte and Divisadero

Potentilla thurberi

red cinquefoil. Cusarare and Basaseachic

Prunus serotina

cherry. Scattered

RUBIACEAE

Bouvardia ternifolia

handsome umbels of narrow red trumpet flowers. Divisadero

Hedyotis vegrandis

little pale bluets sp. Scattered

Randia echinocarpa

vine with weird egg-shaped fruit with hard protruberances!

Batopilas

SALICACEAE

Populus fremontii

large cottonwood along lowland rivers

Populus tremuloides

cottonwood in higher areas

SAPINDACEAE

Cardiospermum corindum

vine with pretty hanging inflated fruit. Common in lowlands

SAXIFRAGACEAE

Heuchera rubescens

in leaf. Scattered

Heuchera sanguinea

between Basaseachic and Chihuahua

SCROPHULARIACEAE

Agalinis peduncularis

common pink flowered sp. Divisadero and Basaseachic

Castilleja patriotica

yellow and orange paintbrush. Divisadero and between

Basaseachic and Chihuahua

Castilleja stenophylla

orange-red fl sp. Divisadero

Mimulus guttatus

Cusarare. Widespread monkey flower

Penstemon apatheficus

Cusarare

Penstemon campanulatus

deep blue fls. Divisadero

Penstemon roseus?

red sp. Divisadero

Penstemon wislizenii

red sp. Cusarare

Seymeria bipinnatisecta

scattered

SOLANACEAE

Solanum spp

Solanum rostratum

several blue-purple flowered species seen

bright yellow flowers, prickly, medium-sized herb. Widespread

STERCULIACEAE

Guazuma ulmifolia

spreading tree with strange hard conelike fruit and alternate ovate leaves. Batopilas

TILIACEAE

Tilia americana

var. *mexicana*. Many trees alongside path to base of Cascada Basaseachic

VERBENACEAE

Glandularia elegans

Lantana camara

Lantana hispida

Verbena pinetorum

phlox-like sp with pink fls. Divisadero

widespread in lowlands

smaller pink flowered sp. Common in lowlands

Divisadero etc

VIOLACEAE

Viola umbraticola?

Lago Ararenco

VISCACEAE

Arceuthobium vaginatum

Phoradendron bolleanum

Phoradendron tomentosum

Phoradendron villosum

on pines by Lago Ararenco

succulent looking sp. Scattered

typical 'mistletoe'. Widespread

pale-flowered, white-berried mistletoe. Scattered

VITACEAE

Vitis arizonica

typical grape vine. Scattered

ZYGOPHYLLACEAE

Kallstroemia grandiflora

Tribulus terrestris

orange fls like cross between Erodium and poppy! Lowlands

small herb with 5-petalled yellow fl, pinnate leaves, painfully spikey fruit! Scattered throughout

Monocotyledons

AGAVACEAE

<i>Agave americana</i>	Teitihuacan (AC only) and El Fuerte and from the Copper Canyon train
<i>Agave applanata</i>	Batopilas Canyon
<i>Agave falcata</i>	from the Copper Canyon train
<i>Agave flexispina (durangensis?)</i>	Batopilas Canyon
<i>Agave havardiana</i>	?or possibly <i>Agave parrasana</i> . Divisadero and Batopilas Canyon
<i>Agave marmorata?</i>	Batopilas Canyon
<i>Agave montana</i>	from the Copper Canyon train and Canyon del Gigante
<i>Agave multifilifera</i>	Batopilas Canyon
<i>Agave palmeri</i>	Batopilas Canyon
<i>Agave pelona</i>	from the Copper Canyon train
<i>Agave scabra</i>	Batopilas Canyon
<i>Agave vilmoriniana</i>	Batopilas Canyon
<i>Yucca aloifolia</i>	Batopilas Canyon
<i>Yucca elata</i>	Batopilas
<i>Yucca flaccida</i>	Batopilas Canyon
<i>Yucca gloriosa</i>	Sierra Gomez where formed superb stands on the hills
<i>Yucca rigida</i>	scattered throughout
<i>Yucca schidigera</i>	Sierra Gomez

ALLIACEAE

<i>Allium glandulosum</i>	Divisadero
<i>Milla biflora</i>	large white fls. Divisadero, Cusarare and Basaseachic

AMARYLLIDACEAE

<i>Hymenocallis pimana</i>	Rio Fuerte
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ANTHERICACEAE

<i>Echeandia flavescens</i>	spikes of small yellow open lily flowers. Scattered
<i>Echeandia ramosissima</i>	spikes of smaller yellow fls. Below La Bufa

BROMELIACEAE

<i>Tillandsia cretacea</i>	large rock dweller with branched spikes of orange fls. Batopilas Canyon
<i>Tillandsia elizabethae</i>	small airplant sp with narrow orange infl, mostly over now. Widespread
<i>Tillandsia erubescens</i>	smallish sp with very glaucous foliage and red and yellow infl. Cascada de Basaseachic

CALOCHORTACEAE

<i>Calochortus venustulus</i>	yellow fl sp. Near Lago Ararenco
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COMMELINACEAE

<i>Commelina erecta</i>	Erect Dayflower. Blue fl. Widespread. Also other <i>Commelina</i> sp
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<i>Tripogandra amplexicaulis</i>	present purple 'tradescantia'. Widespread
CYPERACEAE	
<i>Scirpus americanus</i>	scattered
HYPOXIDACEAE	
<i>Hypoxis mexicana</i>	yellow. Lowlands
IRIDACEAE	
<i>Sisyrinchium</i> spp	various – at least three, yellow and purple-blue sp seen
JUNCACEAE	
<i>Juncus tenuis</i>	scattered
MELANTHIACEAE	
<i>Zigadenus virescens</i>	Basaseachic
NOLINACEAE	
<i>Dasyilirion acrotrichum</i>	Batopilas Canyon
<i>Dasyilirion leiophyllum</i>	Batopilas Canyon
<i>Dasyilirion wheeleri</i>	Batopilas Canyon, Divisadero and from the Copper Canyon train
<i>Nolina biglovii</i>	Batopilas Canyon
ORCHIDACEAE	
<i>Stenorrhynchos aurantiacus</i>	just about over. Large orange fl orchid
PONTEDERIACEAE	
<i>Heteranthera limosa</i>	small blue waterweed. Most water bodies
TYPHACEAE	
<i>Typha domingensis?</i>	scattered on lowlands