

CHIAPAS' AMAZING ORCHIDS: AN ORCHID CONSERVATION ALLIANCE 'ORCHIDS IN THE WILD' TOUR

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THE ORCHID CONSERVATION ALLIANCE (OCA) is a grassroots organization dedicated to the conservation of wild orchids. We do this by establishing forest reserves to preserve in-situ habitats in places like Ecuador, Colombia, and Brazil. Since 2006, the OCA has successfully raised over \$300,000, which, together with more than \$200,000 in matching funds from the Rainforest Trust, has protected more than 3,250 acres of prime rainforest. One of the most important ways that the OCA raises money is by leading *Orchids in the Wild*® tours. These tours are open to all and are designed to showcase orchids in their native habitats, in addition to showing the factors, such as deforestation, that imperil their continued existence. Tour participants range from interested backyard orchid growers to professional orchid scientists. The tours are hosted by guides who are experts on the local orchid flora and are accompanied by at least one OCA director.

Last year, I asked my friend and Mexican orchid expert, Dennis Szeszko, if he could plan a Mexican orchid tour itinerary on behalf of the OCA. Dennis has spent over five years studying the native orchids of Mexico State in central Mexico and wrote a beautiful book on Mexican orchids, *La Orquideoflora Mexiquense*. Most recently, he founded a company (MAS Orchids) that is breeding and developing new varieties of Mexican *Barkeria* orchids that will be sold as pot plants for the commercial flower market. Dennis was receptive to my request and suggested we focus on Chiapas, a southern Mexican state bordering on Guatemala, which at present is considerably safer than other regions of Mexico that continue to be savaged by rampant criminal gangs and drug cartels. Dennis crafted a fascinating itinerary that would take the tour participants to most of Chiapas' biomes and allow them to get a first-hand view of some of Mexico's most emblematic and celebrated orchid species.

The adventure began in Villahermosa, a mid-sized city that is the capital of Tabasco state. Our driver met the group of 15 at the airport, and we were soon whisked off to Palenque about 90 minutes away. After driving through a vast tropical savanna, we eventually crossed the Usumacinta River and headed into Chiapas. It was at this point that we could see the topography begin to change and the foothills of the Central Chiapas Highlands started to rise from the coastal plains.

We stayed near the archeological site of the Mayan Ruins of Palenque. The forest here is protected, and we were awakened in the morning by the guttural growling of howler monkeys and the squawking of parrots

and macaws in the trees above our heads. After a quick breakfast, we set off for the ruins, a five-minute drive down the road.

Palenque is a Classic Period Mayan city whose zenith was between 225 BC to 799 AD. The reasons for its decline have been fiercely debated, but, at some point, the city was abandoned, and the jungle vegetation engulfed the stone temples, palaces, and monuments. Excavation and restoration began in the 1900s and accelerated in the last 30 years, but current estimates hint that a scant five percent of the total city extension has been uncovered. The Ruins are in a national park, and so there are abundant birds and wildlife in the trees that shade the ruins. We spent the afternoon scrambling up and down the temples, climbing over rock walls, and photographing the incredible carvings and plaster decorations that embellish the buildings. Towards the end of the day, we walked down to the site museum that contained a lot of the ceramic pottery, jade jewelry, and intricately carved lintels that were recovered at the Ruins. One of the highlights was seeing a reproduction of the sarcophagus of Pakal, the most powerful ruler of Palenque. The original lies at the base of a narrow flight of stairs entombed within the Temple of the In-



Gongora unicolor and friend.

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Waterfall in the Lacanjá jungle.

scriptions. This temple is the only known Mayan ruin in the New World that has a burial chamber within it. After finishing our visit to the ruins and the museum, I walked outside the museum to wait for the rest of the group to finish. While sitting on a bench, my eyes were drawn to the crown of a tree with three brilliant scarlet macaws eating some fruit. It was then that I spotted our first orchid plants of the trip, a *Trichocentrum andrea-num*, several *Gongora* sp. and an *Encyclia* sp.

The next day we left Palenque and headed toward Lacanjá. We took the road that parallels the Usumacinta River that forms a large portion of the southern border between Mexico and Guatemala. This road also skirts the Montes Azules Biosphere Reserve. This jungle is one of the largest expanses of high-canopy tropical rainforest in Central America. While en route to our jungle lodge, we stopped at the Cascadas de Roberto Barrios, a series of waterfalls and plunge pools near the eponymous village. The bright blue color of the water is due to the high mineral content of water flowing over karstic bedrock. The accumulation of calcium deposits over centuries has created interesting travertine formations that cascade downstream following the course of the river. We walked down a trail adjacent to the river and enjoyed the many pristine waterfalls and basins hidden in the jungle with village children playing in the water. Our group found a large but unoccupied pool at the base of one of the larger waterfalls and enjoyed a lovely swim to cool us off from the intense tropical heat. As we relaxed and floated in the water, we were delighted to see *Encyclia bractescens* in full bloom high in the tree branches over the river. Other orchids grow-

ing there included *Chysis bractescens*, *Encyclia incumbens*, *Cycnoches ventricosum*, *Gongora leucochila*, *Maxillaria (Trigonidium) egertonianum*, *Maxillaria variabilis*, *Prosthechea cochleata*, *Sobralia fragrans*, *Stanhopea* sp., and *Trichocentrum ascendens*.



Encyclia bractescens



Prosthechea cochleata



Lycaste cochleata



Brassia maculata



Specklinia grobyi

We left the waterfalls in the early afternoon and arrived around dusk to the community of Lacanjá Chan-sayab, where we would spend the next few days. Our eco-camp consisted of primitive but comfortable cabins overlooking a gorgeous blue-green river with dense primary growth jungle on both banks. Surrounding the cabins was the dense jungle, and here we found a large number of orchids, including *Bletia tenuifolia*, *Brassia maculata*, *Campylocentrum micranthum*, *Coryanthes speciosa*, *Cynoches egertonianum*, *Encyclia bractescens*, *Epidendrum diffusum*, *Epi. imantophyllum*, *Gongora leucochila*, and *Gga. unicolor*, *Ionopsis utricularioides*, *Lycaste cochleata*, *Maxillaria densa*, *Max. pulchra*, *Notylia orbicularis*, *Oncidium sphacelatum*, *Acianthera (Pleurothallis) hondurensis*, *Prosthechea cochleata*, *Specklinia grobyi*, *Spe. tribuloides*, *Stanhopea ruckeri*, the tiny *Erycina (Psygmorchis) pusilla*, and the even tinier *Lepanthes disticha*.

The next morning, we set out for the ancient Mayan city of Yaxchilán. Yaxchilán was thought to have been one of the most powerful Mayan city-states in the region and frequently saw bloody, internecine conflict with the nearby rival city-states of Tikal and Palenque. This city was strategically located on an oxbow peninsula of the Usumacinta River and could be easily defended because the river flowed around most of the city's perimeter. Unfortunately, this also made our access to the Ruins difficult. We had to drive a short distance from our eco-lodge to a port town on the Usumacinta river, Frontera Corozal, and from there hire two boats to take our group downstream. As we made our way down the river, our boat driver pointed out the spider and howler monkeys in the trees, river crocodiles lounging on the sandy banks, and all manner of birds such as parrots, egrets, toucans, and herons along the way. As we approached the pier near the ruins of the city, we could easily make out signs of the earlier Maya civilization, including large stone structures built next to the river (possibly an access control gate) and mounds of stones now covered in tree roots and vegetation (likely former temples and palaces). We disembarked from our boats and climbed up the river bank to the park entrance.

The feeling one gets when you set foot in the grand plaza of Yaxchilán is eerie because the site has few tourists and the shade of the jungle canopy completely shrouds the ruins. Visitors feel like they are walking



Staircase at Yaxchilan.

back in time or like Indiana Jones discovering a lost city. We climbed to the highest point of the ruins to survey the landscape and to try to get a sense of how the city was laid out. At the top of the hill was the most extensive and best-preserved temple with an ornate roof comb decorating the vaulted roof.

Yaxchilán is best known for its intricately carved lintels and stelae that feature snakes, jaguars, warriors, rulers and scenes of ritualistic sacrifice. These stone carvings were once brightly painted and in a few tucked away corners it is still possible to see glimpses of the brilliant red and blue pigments that the Mayan artists used.



Epiphytes at Yaxchilan.



Oncidium sphacelatum in a tree in Yaxchilán.

The site has many labyrinthine underground passageways that require a headlamp to explore. Inside the damp, humid spaces there are large colonies of bats, whip-spiders (best described as a hybrid cross between a scorpion and a tarantula, if you can imagine) and huge cockroaches. Not surprisingly, I opted to get out of the underworld and instead, basked in the high shade of the enormous *Ceiba pentandra* trees whose branches were encrusted with massive clumps of epiphytic flora including orchids, bromeliads, peperomias and cacti. At the very top of one of the large trees, we observed an enormous specimen plant of *Oncidium sphacelatum* with hundreds of yellow flowers cascading down its arched six-foot long inflorescences. In another tree, we were lucky enough to see the large bronze-yellow flowers of *Encyclia alata* in full bloom.

Finally, exhausted from climbing too many temple staircases, we made our way back to the boats, and headed back upstream. Since the Usumacinta River forms the border between Guatemala and Mexico, we took advantage of the shared border to land on the opposite bank and drop into a roadside restaurant in Guatemala (no passports needed) for a quick lunch of fried chicken.

After lunch, we returned to Mexico and drove back to our camp. On the way back, we got to see a troop of howler monkeys in a tree that had a large *Catasetum integerrimum*. About two minutes later, a jaguarundi

ran across the road directly in front of our bus. Seeing a wild cat in its natural habitat is very difficult to do, so we were very fortunate. We finally returned to our camp to enjoy our dinner and later to retire to our cabins to rest after a long day.

Within minutes of kicking off my shoes, two of the trip participants who were staying in the cabin next to mine came and knocked on my door. They were worried about some strange orange and black creatures on the ceiling of their cabin, and they wanted to know if they were dangerous. Immediately upon entering their room, I realized why there was all this commotion. The black creature was unmistakably a large scorpion, but it wasn't until after closer scrutiny that I saw that the orange and black creature had a brood of newborn, tawny-orange babies on her back. The male and female scorpions were face-to-face in a pincer-to-pincer courtship embrace. Needless to say, this revelation resulted in a bit of excitement, and I summoned some help to clear the room. Luckily, one of the trip participants is an experienced arachnid keeper (he has kept and bred whip-spiders as pets), and he had no problem scooping up the scorpions with a trash can. I watched from my window as he released them into the gloom of the inky jungle night and was rewarded with the sight of two large rodents, the spotted pacas (known locally as tepezcuintle, *Cuniculus paca*) in the nearby woods.

After breakfast the next day, we set out on a jungle

hike with a local Lacandón Indian guide. The Lacandón people are an indigenous tribe that attests to be direct descendants of the Mayans and is also one of the most isolated and culturally conservative of Mexico's native peoples. They prefer to live deep in the jungle away from modern, Western civilization. They are hunter-gatherers who use their knowledge of the rainforest in the way that we use a refrigerator, pantry, and medicine cabinet. They are experts at identifying plants and animals and are gentle, peace-loving stewards of their ancestral lands where fewer than 1,000 of their extended clan now live.

Our guide's name was Daniel Chankin. Daniel was dressed in a simple, flowing, white cotton tunic that extended to his knees, his long black hair neatly tied back in a ponytail. His son, Brayan, similarly dressed, came along on the hike. The father explained that his son was learning about the forest and the ways of his people so that one day in the future he could also be a guide. We set off through the rainforest, on an easy, flat trail, crossing bridges over numerous rivulets as we went. Daniel would stop every few minutes to tell us about different plants in the forest and how they had been used traditionally as foods, medicine or weapons. One tree exuded a sap that was used as glue, another a resin that was used to heal wounds of childbirth. Another had sharp spines which would cause a severe burning sensation if touched. We saw a few orchids along the way, including an impressive *Chysis bractescens* in full bloom and a *Gongora unicolor*. A large mound covered in moss and tree roots was an unexcavated Mayan structure, of which there are still thousands in this jungle. Daniel was asked if the Lacandón people still eat monkey. He replied, "No, we don't, but spider monkeys are best grilled while howlers are best stewed."



Chysis bractescens

After a few hours of exploration, we reached a roaring river with brilliantly greenish-blue water below a truly magnificent waterfall. Several of the large tree branches over the river were covered with large clumps of orchids, and we could see dozens of *Encyclia bractescens* in bloom. Along the banks of the river, there was a large nest of leaf-cutter ants that a few of us watched as they went about their harvesting work. After our hike, we returned to our jungle lodge and had an early dinner so that we would have time to do a night hike which would allow us to see animals and insects that could not be observed during the day.

After dinner, a different Lacandón guide took our group for a walk in a different part of the jungle. Before setting out, he pulled a large hand-rolled cigar out of his pocket. He lit it, but instead of inhaling as all of us were expecting he exhaled and blew tobacco smoke over our feet and ankles. This is a traditional way to fend off the biting insects. It must have worked, as I only had a few bites despite walking in sandals the entire way. As we made our way down the trail, he pointed out more waterfalls, fireflies, glowing spiders, birds, and rodents. We got to see a four-eyed opossum creeping through the branches of a tree and some jungle paths used by tapirs. At the end of the trail was another glorious waterfall and on a small hill just above the waterfall, we looked down into a cenote, or sinkhole, that had resulted from the collapse of the limestone bedrock. The ancient Maya had used this one for sacrificial offerings.



Scorpion with a brood of newborn, tawny-orange babies on her back.



Bonampak Ruins.

The next day, we left the Lacanjá lodge and headed to Bonampak, the final Mayan ruin of the trip. While this site is much, much smaller than either Yaxchilán or Palenque and the temples are not nearly as impressive; it is particularly famous for the murals that are painted inside three rooms of the main temple. The murals, when they were first excavated, looked like they had been painted as recently as yesterday. Unfortunately, the humidity of the jungle and tourism has caused more damage in the last 50 years than they suffered in their first 1,200 years and the paintings are no longer as vivid or spectacular. The first room depicted scenes of tribute and dance, but the other two rooms were quite gruesome, with paintings of human torture (some poor fellow having his fingernails pulled out, ouch!), human sacrifice, and ritual blood-letting. As in Yaxchilán, the huge trees surrounding the temple were covered with



Lycaste aromatica

epiphytes (vines, bromeliads, various orchid species including *Encyclia alata*, *Epidendrum stamfordianum*, and *Prosthechea livida*) and hosted an enormous colony of *Montezuma Oropendola* (*Psarocolius montezuma*). The nests of these birds look like large bags hanging from the branches, and the strange gurgling songs of the male were unforgettable.

To exit the site, one needed to walk down a spectacular allée of old-growth ceiba and chicle (*Manilkara zapota*) trees that were probably 120-150 feet (37-46 meters) tall. This led to a clearing in the forest that ran for 1,000 feet (305 meters) in each direction and was a jungle airstrip for small bush propeller planes. Dennis had made arrangements to spare us a grueling eight-hour drive around southern Chiapas to our next destination, Comitán, and instead of the boring and tedious circumnavigation of the southern tip of Mexico, we would



Lago Pojoj, Montebello Lakes Park.

fly out in small planes over the jungle. Our bus driver, meanwhile, would not be so lucky. He would make the long drive along with our luggage and meet us at our hotel later that evening. This was my first trip ever in a small four-seater plane, and it was an experience I will treasure for the rest of my life.

Right at the appointed time, we heard and then saw two small planes on the horizon. They quickly landed and circled back to meet our group. Both planes would have to make two trips to accommodate all of us. I was on the first sortie and had the good fortune to sit in front next to the pilot. We taxied out on the narrow, and seemingly much too short airstrip, turned around, and then the pilot pulled out all the stops in the throttle and headed at top speed down the grassy strip. Just as we approached a stand of trees, he pulled back on the control stick and magically we were in the air, soaring above the jungle. The view was absolutely magnificent. Below us was the rich emerald-green jungle canopy, the monotony of the vegetation only briefly interrupted by the branching of the many electric-blue tributaries of the Usumacinta River. It was a single, unbroken expanse of green as far as the eye could see with no visible roads or villages. We flew over Miramar Lake (the largest natural lake in Chiapas) and then as we proceeded west, the landscape changed dramatically, becoming much drier and with obvious signs of anthropogenic disturbance. In what seemed like no time at all, we landed at the “airport” on the outskirts of Comitán, a small town almost 1,000 meters in elevation higher

than when we started our flight. We were met briefly by some armed soldiers who checked our identification and noted our arrival in a logbook and were then taken in a small minivan to the town’s central plaza. Comitán, like Palenque and San Cristobal, is one of Mexico’s celebrated *Pueblos Magicos* (Magic Towns), a curated collection of Mexican villages or towns whose cultural, historical, gastronomical, or natural treasures have been deemed exceptional by the Ministry of Tourism. The town square was beautiful, surrounded by grand colonial buildings, the municipal palace, and enticing cafes and restaurants. In the central plaza, there was a well-tended garden with sculptures where people were enjoying the sunny day.

When the second wave of travelers arrived from their bush plane transfers and our entire group was back together again, we got back onto our bus and drove east to a famous national park called the *Lagunas de Montebello*. This park has 59 multicolored lakes nestled in picturesque, forested mountains. At one time, the montane rainforests and “elfin” forests in this park were considered to be the single most biodiverse ecosystem in Mexico. Published studies indicate that 333 distinct orchid species had been located in the park and adjacent buffer areas. Some areas had over 100 orchid species in one hectare! Sadly, a massive fire caused by slash-and-burn agriculture in 1998 destroyed most of the best orchid habitat, even though the land was ostensibly protected in a national park. In Mexico, we have seen that mass tourism and conservation seem to be



Results of slash-and-burn agriculture.



Oncidium leucochilum



Epidendrum parkinsonianum



Epidendrum erectifolium

mutually exclusive. One of the lakes in the park, Lago Internacional, straddles the border between Mexico and Guatemala, and once again, we were able to walk (about 100 yards) into Guatemala without a passport. Along the path were several *Bletia purpurea* in bloom and numerous colorful *Tillandsia* species in the pine trees. We visited the "Orquideario," a sampling of some of the park's orchids kept in a shade house next to the ranger station, but sadly the majority of the collection was in poor condition; it might have been better described as an orchid cemetery! There were a few plants of *Arpophyllum giganteum*, *Lycaste aromatica*, *Scaphyglottis fasciculata*, and *Stanhopea graveolens* in bloom.

We left the park with some beautiful vistas and sad memories, but it was a perfect example of why orchids need their wild habitats protected. Just a quick 15-minute drive from the park entrance, we arrived at our hotel for the night. As we walked into the hotel, we were all instantly enchanted by the Parador-Museo Santa Maria. This was a former coffee plantation and 17th-century hacienda that had been converted into a



Zephyranthes aff. *Grandiflora*, rain lilies

luxury boutique hotel. The hotel grounds featured a lovely garden, pool, separate restaurant and bar areas, and even a chapel converted into a museum to house the owner's collection of iconographic paintings. It was easy to forget we were in the 21st century; this was a well-deserved pampering after our eco-lodge, communal bathrooms and scorpions!

After breakfast the next day, we headed west towards the town of Tenam Puente. The habitat had changed entirely from the low elevation rainforest and high elevation pine forest of the past few days. We were now in a region with vegetation characterized as a deciduous thorn forest, a dry subtropical forest characterized by seasonally leafless, spindly trees and bushes, and the occasional cactus growing on impoverished soils. At first glance, this seemed like an unlikely area to find orchids. We stopped at the bottom of a large hill covered with spiny trees, and after asking permission to walk on the property, set off on one of the side roads into the bush. Despite appearances, the trees here bore many orchids. Almost instantly, we began to find *Encyclia incumbens* (*aromatica*), *Isorchilus carnosiflorus*, *Laelia anceps*, *L. superbiens*, *Domingoa* (*Nageliella*) *purpurea*, *Nidema boothii*, *Oncidium leucochilum*, *Onc. maculatum*, and a massive specimen of *Epidendrum parkinsonianum*. There were numerous plants of *Epidendrum erectifolium*, a green-flowered species belonging to the Difforme group. After several hours of exploring we returned to the bus. A second stop was not as productive, yielding only one enormous *Oncidium leucochilum*, a *Bletia pur-*



Cuitlauzina pulchella

purea, and a few *Zephyranthes* rain lilies.

After lunch at an attractive roadside restaurant near Teopisca, we explored some of the surrounding oak-pine forests (~2,100 meters [7,000 feet] in elevation), finding *Barkeria spectabilis*, *Cuitlauzina pulchella*, *Encyclia incumbens*, *E. selligera*, *Epidendrum radioferens*, *Oncidium leucochilum*, *Nemaconia glomerata*, *Prosthechea ochracea*, *Psh. panthera*, and two terrestrial orchid species, a spiranthes-like species called *Aulosepalum pyramidale*, as well as *Sarcoglottis schaffneri*. The final stop of the day was a trail next to the main highway, where we found an orange-flowered *Jacquiniella cobanensis*, more *Encyclia selligera*, and several lovely *Barkeria spectabilis* with large, pink flowers. One of the trees was covered with tufts of *Isorchilus latibracteatus* and clumps of an un-



Barkeria spectabilis



Jacquiniella cobanensis



Tillandsia eizii

©Dennis Szeszko



Trichopilia tortilis

©Mary Gerritsen

identified *Dichaea* sp. We also got to see the spectacular *Tillandsia eizii*, the largest species of this bromeliad genus with its glorious pendant inflorescences that can reach eight feet in length.

Finally, we arrived in the magic town of San Cristóbal de las Casas, famous for its stately colonial buildings, colorful markets, historical Santo Domingo church, and indigenous villages that ring the surrounding high mountain peaks. A recent earthquake had severely damaged some of these historic buildings, and there were visible cracks in the masonry and stucco. After dinner at a little restaurant overlooking the town square, we retired to the Santa Lucia Hotel for the evening. The hotel featured lovely, quiet rooms, and a lobby furnished with colorful textiles and hand-hewn furniture. We would spend two nights here to catch our breaths and relax.



Specklinia picta (formerly *marginata*)

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Rhynchostele bictoniensis

©Dennis Szeszko



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Epidendrum cnemidophorum

Late in the afternoon, some of us had an opportunity to visit Orquídeas Moxviquil on the outskirts of San Cristobal. This is an impressive and well-managed public garden that features orchids and bromeliads from the different bioregions of Chiapas. It also functions as a sanctuary since orchids that are seized from illegal collectors are donated to this facility by the state

government. The orchid collection, established in 1994, began as one man's (Craig 'Cisco' Dietz) private refuge for orchids and other epiphytes that were being destroyed as a result of agricultural expansion, burning, and other causes of deforestation. His vision, with help from the local and international community, resulted in the creation of this wonderful garden. Thousands of rescued orchids and other epiphytes have been placed on the trees, creating a living museum of rare or endangered plants and giving rise to a unique world for visitors and academics alike. The orchids, trees, and bromeliads were all healthy, robust plants, and many were in bloom at the time of our visit including *Speckinlia picta* (formerly *marginata*), *Trichopilia tortilis*, *Rhynchostele bictoniensis*, and *Epidendrum cnemidophorum*. Hopefully, these efforts at *ex situ* conservation will help to conserve the biological diversity of Chiapas. In contrast to the sad orchidarium that we saw at the Montebello Lakes National Park, this garden was well worth visiting!

After leaving San Cristobal the next morning, we headed west towards the city of Tuxtla Gutierrez, and then south to Jaltenango. In Jaltenango, we were met at a gas station by Eduardo Martinez and Heber Diaz. These two men would be our botanical and wildlife guides, respectively, for the next few days of our itinerary at El Triunfo Biosphere Reserve. El Triunfo is the largest and most diverse extant cloud forest in Central America, with a total area of nearly 120,000 hectares (296,527 acres).

We left the majority of our luggage on the bus, and each of us packed just a small overnight bag and a backpack with our camera equipment to take with us. Most of us loaded into the back of an open cargo truck



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Vegetation at El Triunfo research station.



©Dennis Szeszko

Rhyncho스테le cordata

while two lucky people got to sit in the cabin with the truck driver. It was a hot and dusty two-hour drive on a “road” that involved innumerable switchbacks and the fording of five or six small rivers to reach the trailhead for the El Triunfo Biosphere Reserve. Some of us got to sit on hard wooden benches in the back while the remainder of the trip participants stood upright the entire time gripping the sides of the truck as we lurched over bumps and ruts in the road. We passed an abandoned coffee plantation and processing facility before arriving at a small parking area at the end of the road. Waiting for us, there were a few mules with their muleskinners, a cooler with some lukewarm water, and a few snacks. Even though we had already driven on paved roads for four hours and had an additional two-hour jaunt up the mountain in the truck on an unpaved trail, we still had a long trek of 9.3 miles UP the mountain to reach the El Triunfo research station. Luckily, the mules carried the luggage, food, water, and other supplies. Absolutely everything that we needed for the next three days at the research station needed to be brought in by mule caravan. Additionally, each of us also had to carry a personal backpack with water, guidebooks, snack and camera gear. The group set off up the hill, with repeated warnings to watch where we stepped to avoid upsetting a venomous pit viper (*Cerrophidion godmani*) that is quite common along the trail. Several of the trip participants managed to observe the venomous snakes in the underbrush along the sides of the trail. They are so common that it turns out that the guides weren’t exaggerating when they told us to be careful! Our group started the hike in a single file but quickly spread out along the length of the trail owing to the difference in fitness levels of the participants, with the younger members rapidly climbing the trail and the remainder following along at our own pace. One of us, who had become quite carsick on the way up to the trailhead, took the easy way up and got to ride one of the mules. (Whoops! I’m told the dignity of OCA’s president is being undermined here. He was not carsick; his illness began before the truck ride and lasted for 24 hours after arriving at El Triunfo. Carsick, indeed! – Peter S. Tobias)

The beginning of the trail was not very scenic since the path cut through what remained of the coffee plantation that had been transformed into patches of agricultural land, but we soon climbed above that into a gorgeous primary forest with enormous trees, blooming *Epiphyllum* cacti, cycads, trees covered with *Tillandsia*, and other bromeliads, orchids, and lots of birds. El Triunfo is well known to birding enthusiasts since it is possible to observe resplendent quetzals, horned guanans, toucanets, trogons, tanagers, and other colorful birds. Although we were the first orchid tourist group that our outfitting guide service had taken to the reserve, the flora here, with emphasis on the orchids, has been extensively studied.

All of us began to tire as the afternoon wore on, but a few of us got lucky and were able to ride the last mile or so on one of the mules that had come back to pick up the stragglers. Exhausted and hungry, we finally made it up to the crest of the ridgeline and down the gentle rolling slope to the lodge. We had some electricity (solar powered) to charge our devices and a fantastic support staff of local villagers who prepared the meals for our extended group, including the guides, park rangers, and muleskinners. After our arduous day of traveling and hiking, nearly everyone fell asleep soon after supper.

Surrounding the lodge are trails that lead to all the cardinal points of the compass that direct hikers to different microclimates and habitats. For instance, one is a steep climb up the mountain to an “elfin” forest which after we crested the ridgeline some of us were able to see the blue waters of the Pacific Ocean off in the distance. Another trail headed south towards Tapachula at the Mexican border with Guatemala. Other trails climbed to different parts of surrounding mountains, all of which had slightly different mixes of birds, plants, and animals depending on their orientation, vegetation, and elevation. Over the next few days, we would have the opportunity to hike several of these trails.

Our first trek was up to a ridge to reach an “elfin” forest habitat. There were many ericaceous shrubs, and the trees were gnarled and stunted on account of the winds and poor soil in this forest (hence the descriptive moniker), but all of them were host to a majestic mix of epiphytic orchids, including tiny *Lepanthes*, *Specklinia*, *Stelis* and *Trichosalpinx* species. We also saw two species of *Rhyncho스테le*: *Rhyncho스테le cordata* (*Odontoglossum cordatum*) and *Rst. rossii* (*Odontoglossum rossii*). Although many of the orchids did not have flowers, we were able to identify all of them to at least the generic rank, including *Brassavola*, *Dichaea*, *Elleanthus*, *Epidendrum*, *Gongora*, *Jacquinella*, *Prosthechea*, *Comparettia* (*Scelochilus*), and *Trichopilia*. Some of the more interesting things that we saw were a gigantic specimen-sized clump of *Mormodes nagelii*, blooming plants of *Maxillaria cucullata* and *Max. soconuscana* and the tell-tale leaves of two terrestrial orchid species, likely *Goodyera striata* and *Govenia alba* (*Govenia mutica*).



Maxillaria cucullata

We saw trees of aguacatillo (*Persea caerulea*) that form the basis for the quetzal's diet and also the enigmatic devil's hand tree (*Chiranthodendron pentadactylon*), a species that is sympatric with high elevation cloud forest habitat throughout Southern Mexico. Many of the larger trees were covered with masses of orchids, most of which we were told were either *Arpophyllum giganteum* or *Arpo. giganteum* subsp. *alpinum*. It would have been stunning to see those in bloom. We heard the cell-phone-like buzzing calls of the horned guan, and I managed to catch a glimpse of the tail feathers of a male resplendent quetzal as it glided from one tree to another across my field of vision. Along the trail, we were shown fresh tracks of a tapir and the paw prints of a jaguar at a stream crossing along with the mutilated spiny pelt of a recently deceased porcupine that was likely discarded by a jaguar as inedible. We also managed to disturb a small king snake, *Lampropeltis* sp., (thankfully not the venomous pit viper that occurs here) dozing under an overhanging log.

The abundant birdlife here resulted in the separation of the group into two camps: the birders and the orchid nuts. This turned out to be an advantageous division, since spotting and photographing birds requires patience and quiet, whereas spotting orchids often involves shouts of glee and summoning others in the group! The birders were able to spot mountain trogons, flycatchers, woodpeckers, hummingbirds, and other colorful species. While the orchids were plentiful everywhere we went, relatively few were in bloom. Our

guides told us that the best time to come to see blooming plants was in December or January, although it is frigid at that time. That will have to be another trip.

Nevertheless, we had a magnificent few days in this incredible forest, and we were sad to leave it. Every single person in the group concurred that getting here was difficult (to say the least) but that the unparalleled experience was wholeheartedly worth the strenuous exertion. After a delicious molé for breakfast, we headed back down the mountain doing the whole route in reverse.

The next day we set out for the El Ocote Biosphere Reserve, a botanically rich area north of Tuxtla. Along the way, we stopped to pick up Julio, a local guide who provided for his family by illegally collecting wild orchids to sell in the local markets. Although we disagreed with his livelihood and source of income, he did know where to find the orchids. We were hoping that by paying him well to show us where the orchids grew, we could demonstrate firsthand that there was more money in orchid conservation than in orchid trafficking. Unfortunately, it is unlikely that Julio will get enough orchid tourists to provide a sustainable income.

Our first stop was an enormous sinkhole, known as Sima de las Cotorras, whose sheer vertical cliffs were used as nests by hundreds of squawking green parakeets (*Aratinga horochlora*). From time to time, the large, noisy flock of parakeets would fly up to the top of the sinkhole, circle around it for a few minutes, then return to the forest below. In protected overhangs on the limestone walls of the sinkhole, we could see ancient cave paintings and handprints thought to be over 10,000 years old. There is a rocky trail that circumnavigates the edge of the sinkhole, and as our group walked along the circuit, we found several different *Encyclia* species (*E. alata* subsp. *virella* (formerly *belizensis*), *E. guatemalensis*, *E. parviflora*) in bloom. In the canopy of the leafless trees, we spotted the six- to eight-foot inflorescences of *Myrmecophila tibicinis*, as well as *Clowesia russelliana*, *Cyrtopodium macrobulbon*, *Oncidium maculatum*, and *Onc. lindleyi*, and several large mule-ear type "oncidiums" (likely *Trichocentrum andreanum*). After lunch at a small restaurant overlooking the sinkhole, Julio directed us to large ravine adjacent to the highway just outside the reserve. On a large rock outcropping was a massive clump of *Maxillaria tenuifolia* in full bloom, as well as a number of *Epidendrum* (*Oerstedella*) *macdougallii* intermingled among the grasses, some tiny pleurothallids, and several beautiful *Tillandsia streptophylla*. In a large tree nearby, we found *Encyclia bracteescens*, *Laelia rubescens* as well as *Rhyncholaelia glauca*. In the ditch next to the road, a small stand of *Bletia purpurea* made for a great photo-op.

One of our guides from El Triunfo, Eduardo Martinez, had offered to show us an isolated karstic outcropping called Wizard's Peak where he had spent many years botanizing and studying its orchid flora. His goal was to demonstrate to our group the richness of orchid



Trichocentrum luridum

species at this site and to eventually petition the state or federal government to have the area protected.

Although it is only 20 miles as the crow flies from Tuxtla Gutierrez to the Wizard's Peak, it took over two hours to get there. It was a long, slow trip down a bumpy, gravel and dirt road, and our bus driver was cringing at some of the dips and hills in the road. Our first stop was the home of the mayor of the local community, or ejido, to seek permission to drive through the area. The mayor had a lovely little area behind his house with a few orchids in bloom (*Isochilus latibracteatus*, *Lockhartia verrucosa*, *Lycaste aromatica*, and *Prosthechea radiata*) that his wife proudly showed to us. We waved goodbye, and then we were on our way again, making our way up an even rougher road towards a high, tree-covered ridge that we could see in the distance. Eventually, we left the ejido and entered privately owned land. The way became so rough that rather than risk damage to our bus, we finally had to stop and continue our ascent on foot. At the area where we parked, the cloud forest was being deforested to plant crops such as coffee and corn.

Even with most of the native vegetation destroyed, there were large, remnant trees that had been spared to provide shade for the young coffee plants, and they were covered with epiphytes. Though the plants were high in the trees, we could make out *Laelia superbiens*, as well as unidentified species of *Mormodes* (likely *Morm. tuxtlenensis*), *Maxillaria*, *Trichocentrum*, and species of *Oncidium*, *Prosthechea*, and *Encyclia*. We were also lucky to see the three extremely rare species that are on Mexico's Red List for endangered species: *Rossioglossum williamsianum*, *Epidendrum alabastriatum*, and *Epi. skutchii*. *Tillandsia* plants were abundant here as well, including the striking *Tillandsia flabellata* and the rare *T. elusiva*. As we made our way up the road, we encountered a dead tropical rattlesnake (*Crotalus durissus*), apparently run over by a truck.

Eventually, we entered an area that was an active coffee plantation with a small worker's village and cof-

fee production facility. The road climbed steeply after this, and at the top of the next ridge, there was a scene of utter devastation, with huge trees lying on the ground, their epiphytic flora of bromeliads and orchids dying in front of our eyes. Sadly, this area was being actively cleared for a new coffee plantation. Several in the group had dropped out at the point, while a few of us bravely soldiered on to try and reach the area that Eduardo wanted us to see. Exploring the remaining vestiges of the forest revealed many small *Chamaedorea* palms, but exhaustion had set in, and only two of our group, not including the guide, made it to the top of the mountain as initially planned. At the top of the mountain in the cloud forest habitat, there were many pleurothallids, a sighting of *Prosthechea pygmaea* and the ultra-rare *Rossioglossum beloglossum*, as well as a *Trichocentrum luridum*. According to Eduardo, there are 111 species of orchids in 55 genera. These numbers are astounding considering the small size of the place, but something needs to be done quickly to protect the site because it is being destroyed.

When we made our way back down the trail to the road, we approached the small village we had seen on the way up. We were told in no uncertain terms and rather brusquely (with particular emphasis by a man wielding a large, vicious-looking machete) that we were to follow him back to the village. Wondering what was going on, we followed the machete-armed man over to the village, only to find the rest of our group in a nervous cluster outside the largest building in the area. The agitated villagers were extremely upset about our "trespassing" on the land and had called the landowner. Fortunately, they recognized Eduardo, and now that someone fluent in both English and Spanish was able to speak with them, we were able to sort out the difficulties. We learned that the villagers here were illegal Guatemalan refugees and that recently some strangers had come onto their land and had attempted to abduct some of the young girls from their village. Apparently, human trafficking is all too common in this area, and we could not blame them for being nervous about our presence, even though we were only armed with cameras. We were escorted from their property by a small group of men carrying very real rifles. Needless to say, that was an episode of the trip I will not forget.

The next adventure was a visit to a small state park, just inside the El Ocote Biosphere Reserve, called Laguna Bélgica. The "lake," which was more of a swamp, had a number of trails around the perimeter and over some of the surrounding hills. The forest here was quite beautiful, with lots of large, old, epiphyte-encrusted trees. We found some new species here we had not encountered previously including *Dinema polybulbon*, *Maxillaria pulchra*, *Max. tonsoniae*, *Max. uncatata*, *Macrocclinium bicolor*, *Ornithocephalus inflexus*, *Phloeophila peperomioides*, and a tiny, tiny *Platystele* species. There were lots of other orchids high up in the trees and a cool trapdoor spider's nest off to one side of the trail. The guide



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Phloeophila peperomioides

at the park learned that a member of our group was a beekeeper and offered to take us to visit his friend who was harvesting the honey of Mayan stingless bees. He showed us the difference in structures between the hives of the two different *Melipona* bee species, and we bought some samples of the Mayan honey to take home with us.

Our last day before heading home was spent at the Tuxtla zoo, which I highly recommend to anyone visiting this city. The zoo is beautifully laid out with most of the exhibits taking maximum advantage of the topography to have the animals as close as possible to visitors without resorting to putting the animals in cages. The zoo focuses on the native fauna of Chiapas and features a black jaguar, toucans, Mexican crocodiles, king vultures, the resplendent quetzal, and many of the other species found in this part of the world. Later that day we traveled to Chiapas' fourth and last magic town for lunch. Chiapa de Corzo is the oldest settlement in Chiapas, dating to 1528, and was established as a trading post on the Grijalva River. It was the capital of the state until its proximity to water proved its Achilles' heel as its population was soon decimated by malaria. As the finale, we celebrated the successful conclusion of our trip with a fantastic meal at one of the leading restaurants in Tuxtla Gutierrez, Otilia, that served gourmet versions of traditional Chiapanecan cuisine.

In my opinion, the OCA Chiapas trip was a resounding success. Our participants were able to visit parts of Mexico that are either generally inaccessible or the logistics are so complicated that it would be impossible to plan the trip on their own. The Orchids in the Wild® tours offered by the OCA makes it possible to visit places like El Triunfo Biosphere Reserve and fly over the jungle in a bush plane because it handles all of the challenges to find and hire the best local guides and outfitting services for the trips that we sponsor. As a result, our participants visited some of the most important archeological sites of the Mayan world; traveled to most of the major biomes in Chiapas; spotted thousands of

orchids in the wild; observed rare animals and birds in their native habitat; saw amazing vistas and landscapes; and experienced the beauty and history of Chiapas' magic towns. Our visits to both reserves and also wild areas that are without any formal protection emphasize the critical need for the preservation of primary habitats for orchids. Preserving the habitat conserves everything, including the orchids and other flowering plants, bromeliads, ferns, trees, birds, pollinators, fungi, and other organisms so critical to a functioning ecosystem. I hope that by sharing this adventure with you, you will consider traveling with us in the future to see Orchids in the Wild!✿

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About the Author



Mary Gerritsen currently works as an independent biotechnology consultant, her "retirement" after a long career in the pharmaceutical/biotechnology industry. However, much of her free time now involves orchids in some fashion or another. Mary has a large collection of miniature orchids and numerous "normal-sized" species. In addition to growing orchids,

Mary likes to see and photograph them in their native habitats, and this has led to expeditions to various parts of the USA and Canada and around the world.

In addition to her interest in orchids and their habitats, Mary has written, with co-author and photographer, Ron Parsons, a number of books on orchids including *Masdevallias: Gems of the Orchid World*; *A Compendium of Miniature Orchid Species*; *A Bay Area Guide to Orchids and Their Culture*; and *The American Orchid Society Guide to Orchids and their Culture*. Mary and Ron also coauthored a book on a genus of North American wildflowers: *Calochortus*; *Mariposa Lilies and their Relatives*.

Mary is the chief financial officer of the Orchid Conservation Alliance, serves on the board of directors of Orchid Digest, and is a past president of the San Francisco and the Peninsula Orchid Societies.

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