The Orchid Conservation Alliance 564 Arden Drive Encinitas, CA 92024

May 21, 2014 – The 2014 Brazil trip newsletter.



ORCHID CONSERVATION ALLIANCE

Óla a todos -

The Brazil trip was wonderful! Rosario Almeida Braga, our Brazilian director and Rio de Janeiro resident, put together a great itinerary. Kudos to her! I'll try to give you a diary style taste of the trip.

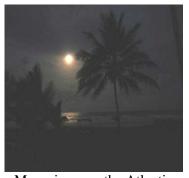
Saturday, 3/15: We flew overnight from Miami, getting more or less sleep, to Salvador. Since we had about 6 hours to kill before the flight to Ilheus, Rosario had organized a van to take us to a nursery very near the airport. It is run by a Taiwanese nurseryman, Hsu, with the help of Rogerio, a Brazilian agronomist. Hsu was out of town, so Rogerio showed us around. The nursery takes advantage of the heat and humidity to grow a lot of dendrobiums and vandas, which are sold throughout Brazil. Rogerio also has an interest in propagating Brazilian stingless bees of, which are taking a beating, as are orchids and everything else, from development and agriculture. He distributes the hives to farmers who are happy to have them for pollinating crops. Their honey, which we sampled, had a delicious fruity flavor. It was somewhat thinner than honey from European bees and needs refrigeration to keep from spoiling. I have kept honey bees in the past, outfitting myself with hat, veil, gloves, jumpsuit, and smoker to keep from getting stung. It was very odd to see Rogerio simply open the hive without any precautions and stick his hand in. After the nursery, we had our first Brazilian lunch, and then it was off to the airport for the flight to Ilheus. Ilheus is a short flight and a small airport. One arrival gate, one departure gate, and any airplane that overshot the runway would be onto the beach in an instant. Our hotel, the Pousada Dos Hibiscus, was also right on the beach and the water was irresistible. Moonrise that evening was over the Atlantic and impossibly romantic. Alas, my wife was home in San Diego.



Rogerio with his bee hives



Inside a stingless bee hive



Moonrise over the Atlantic

www.orchidconservationalliance.org A 501(c)3 corporation

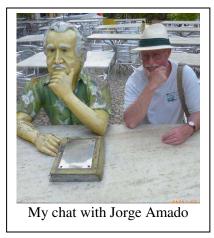
Sunday, 3/16: During the morning we went north a bit and visited Rui Roche, the director of Instituto Floresta Viva which is located just north of Ilheus (http://www.florestaviva.org.br/). In the 1990's surveys of forest biodiversity established that the tree diversity in this part of the Atlantic rain forest was either the first or second highest in the world, depending on who's being asked. In a single hectare, 2.4 acres, there were just over 800 trees with 465 different species. To put that number in perspective, in all of Canada, the US, Mexico, and the Carribean, with over six billion acres, there are fewer than 800 species of trees. Until recently, when all logging in the area was outlawed to preserve the coastal rain forest, many people made a living extracting forest products. Outlawing logging did little to stop tree cutting. It wasn't until the government sent in trucks and carted off the saw mill machinery of 300 mills that logging actually stopped. The goal of Instituto Floresta Viva is to promote eco-tourism and eco-agriculture as well as to simply plant lots of trees to promote reforestation. We saw some of their re-planted pastures and the nursery where the seedlings are grown. To date, they have planted over 100,000 trees and have lots of seedlings ready to go.

For lunch, we visited a former cacao plantation, founded in the 1840's and now an ecotourism destination of the sort that Floresta Viva promotes. The cacao industry in Brazil has been in a very serious slump for about 25 years. A fungal infection causes black pod rot and a 70-80% decrease in yield of pods. Eco-tourism helps to keep farms alive while agronomists try to find a solution. We saw flowering trees and fruiting trees, tried the edible pulp that surrounds the seeds, and toured the 'works' where the seeds are harvested and prepared for shipment to cocoa powder factories. Lunch was accompanied by a juice made from the sweet pulp that surrounds cacao beans. It has a faint lemony taste, with not a hint of chocolate.

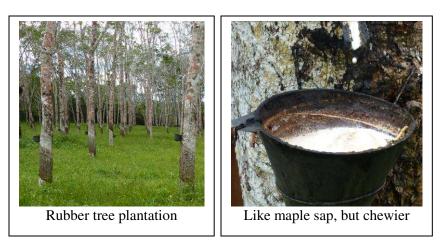
In the afternoon we toured the town of Ilheus, which was once the premier cacao port of Brazil. I am a fan of the Brazilian author Jorge Amado, who lived some time in Ilheus and sited several of his books there. I was pleased to make his acquaintance at an outdoor café, although he was pretty non-communicative. Fans of magical realism might try his "Dona Flor and her two husbands" or "Gabriella, Clove and Cinnamon" among others available in English. Of course, we also visited a chocolate shop, which, naturally, had terrific chocolate.







Monday, 3/17: After breakfast, we headed out for Reserva Serra Bonita, about four hours distant. Along the way we stopped at a roadside rubber tree plantation. Each tree had a little bucket into which flowed sap from an injury to the bark. The sap solidifies into small cakes which are tipped onto the ground when the bucket is near full. Eventually



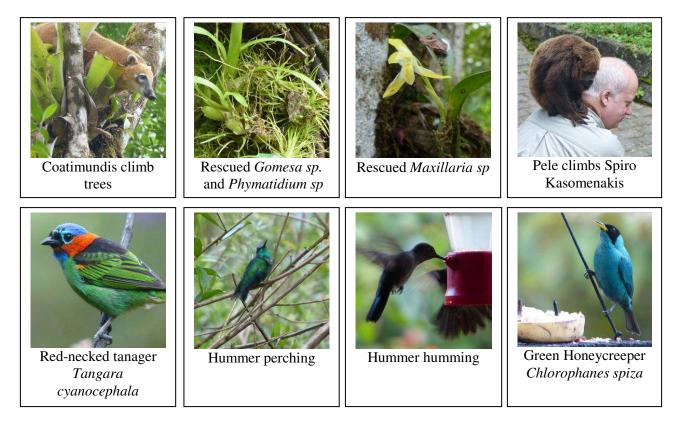
these are collected and made into a wide variety of products. Despite the fact that synthetic rubber accounts for the vast majority of rubber products, natural rubber still makes the highest grade of rubber, being used for race car and airplane tires, surgical gloves and other specialty items.

The road to Serra Bonita started out as a fine road, became rough, then very rough, then smoother but unpaved, and when it got too steep and narrow for our van, we transferred ourselves and the luggage into two four-wheel-drive trucks. After a few more miles, we finally arrived, shaken and stirred, at Reserva Serra Bonita, an absolutely wonderful place in the Atlantic rain forest. I was there first in 2013. After the OCA board decided it was a reserve we should support for its orchid resources, it was a natural destination for an OCA trip to Brazil.

Readers of the OCA web site and my November 2013 newsletter will know that Reserva Serra Bonita is run by the Instituto Uiraçu, the creation of Vitor Becker and his wife Clemira. It is planned to encompass 18,000 acres when fully purchased. Between our initial donation and the very succesful fund raising campaign to which so many of you contributed, we have donated \$50,000 to purchase 250 acres. While this is a small portion of the eventual acreage our donation helped to purchase two key properties, one which encompasses much of the road leading up to the reserve and one which encompasses a forested hillside. The reserve has four buildings, the research center, the dormitory, Vitor and Clemira's house, and their daughter Moema's house. The dormitory has eight rooms enabling up to 32 people to stay in some comfort, meaning electricity, beds, showers, and so forth. The research center is quite large, encompassing a dining area, a meeting/lecture/class room, several small labs for visiting investigators, and Vitor's office, library, and collection room. Vitor Becker is a world renowned lepidopterist with a collection of some 350,000 specimens of neotropical moths. From our website's page on Serra Bonita, you can access lots of other information.

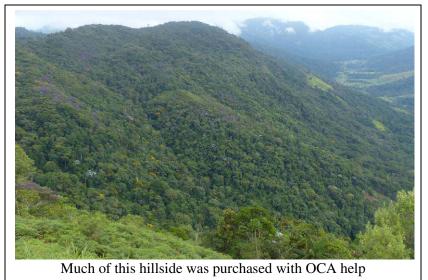
That afternoon we heard lots about the reserve from Vitor and also lots about the educational events Clemira organizes for the locals, especially the school children. Establishing good relationships with the neighbors is always important for the long term success of a reserve. If the locals see that the reserve is a benefit to them and their kids, support from the local population will be very helpful.

After arrival we explored around the buildings, where many orchids found on the trails fallen to the ground have been put into the trees. We also met the resident coatimundi and the howler monkey Pele. Both are quite tame but, as a fellow primate, Pele is more interested in humans than is the coatimundi. Late in the afternoon Vitor hangs up the humming bird feeders and we watched the show as more than 25 hummingbirds competed for sugar water. Other birds come to a feeder with fruit. The Red-necked Tanager is endemic to Brazil, while the Green Honeycreeper occurs also as far west as Ecuador. Dinner, for the humans, is usually a very nice soup, followed by planning for the next day.

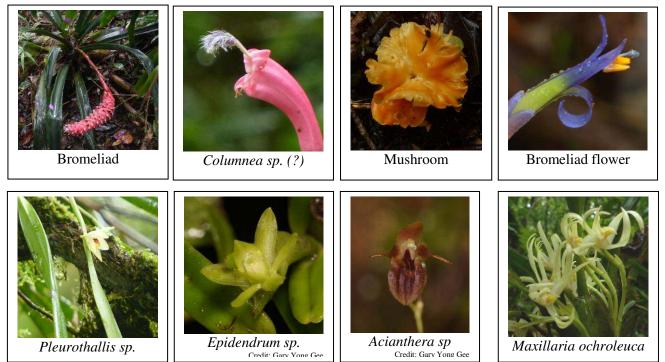


Tuesday, 3/18: After breakfast, it was time to see the reserve. The best place to get the lay of the land is from the base of the TV tower that broadcasts to all the surrounding communities. We piled into a truck to quickly get to the TV tower. After admiring the view, and getting a sense of the reserve, Vitor pointed out a cacao plantation at the lower elevation of the reserve. Several of the low

lying areas surrounding the reserve and the lower parts of the reserve itself are, or have been, cacao plantations. Cacao does not grow above 450 meters and thus the upper areas of the reserve were never cacao. As I noted earlier, a recent fungal disease of decimated cacao cacao has farming in the area. However, with care and good cultivation a profit can be made, especially if the farmer takes advantage of the



niche market for branded chocolate. Vitor has developed a relationship with a Belgian chocolate company that will market chocolate from Serra Bonita as a unique brand, plowing some of the profit back into the reserve. I'll let you know when this chocolate comes to market. On the way back to the research building most of us were dropped off at the beginning of the "Trilha das bromelias." The



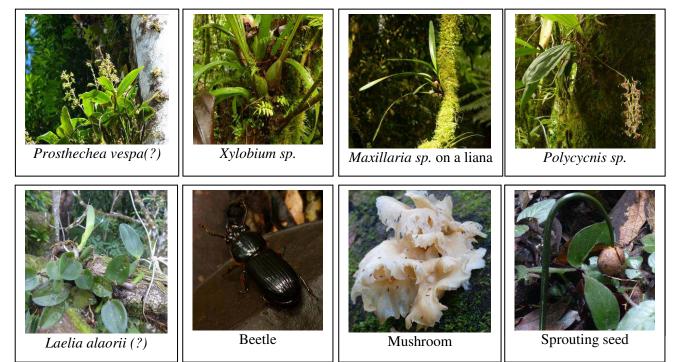
beginning of this trail is through regenerating secondary forest with few orchids or bromeliads, but once into the primary forest, the bromeliads and orchids made themselves pretty obvious, as pictured above. We walk quite slowly since everybody takes a picture of almost every plant, sometimes from several angles. And then the last person on the trail discovers something everybody ahead missed and everybody runs back. So we rarely make a mile an hour but we're there to explore the trail, not to get to the end of it.

We got back to find lunch, the main meal of the day, waiting for us. At Serra Bonita lunch is typically a "feijoada". A feijoada features black beans and rice and is the national dish of Brazil. With the beans and rice comes meat of some kind, usually beef, chicken, or pork, boiled or fried manioc, salad, and "farofa". Farofa is gently fried manioc flour, often with some addition for flavor. The addition can be egg, onions, peas, a little meat, or something similar. Most non-Brazilians I know find farofa an acquired taste; most Brazilians I know wonder how the world gets along without it. Despite the odds, we manage. The late afternoon is best spent writing up notes, annotating photos, talking with Vitor or Clemira, waiting for the hummingbird's dinnertime, or something less vigorous, like napping.

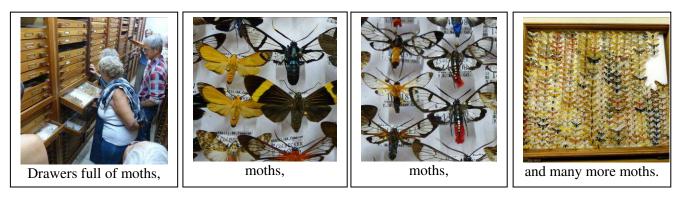
That evening we saw an interesting video about the efforts to bring a mate for Pele to the reserve. Pele is a northern brown howler (*Alouatta guariba guariba*), a critically endangered species of primate. Two Brazilian wildlife agencies and Vitor are collaborating to introduce Pele to a rescued female in an effort to begin a new troop of this species in the Serra Bonita reserve. At present there are thought to be fewer than 300 of these animals alive anywhere. A video about this effort is available on YouTube; search for "Reintroduction of the Alouatta guariba guariba" to see the video

and meet Vitor Becker on video. It is well worth watching to get an idea of this effort and to get a better idea of who Vitor Becker is.

Wednesday, 3/19: The other trail going through mostly primary forest at Serra Bonita is the "Bapeba" trail, named for the very large bapeba tree near the beginning of the trail. The Pouteria bapeba tree is on the International Union for the Conservation of Nature's (IUCN) endangered species list. It occurs only in coastal Bahia. In fact, there are not very many trails at Serra Bonita. Only three main trails and a few short tributaries are kept open for lack of manpower. However, as new acreage is added to the reserve, I believe it would be worthwhile to open a few more trails into the new areas where there is primary forest to find out what is there. Serra Bonita is in a part of Bahia that is one of a few global biodiversity hot spots. Its biological inventory is not well established but I am convinced there is much to be found. For example, Laelia alaorii, now probably Cattleya alaorii, is an orchid also listed on IUCN's redlist of endangered species for Brazil and it is not in the orchid list for Serra Bonita. Yet when I walked the Bapeba trail in 2013 I almost certainly found a specimen of it on a branch that had fallen from a tree! I haven't seen the plant in bloom yet but given the appearance and location it is almost certainly C. alaorii. That specimen is now among the plants established in the garden around the research building and should bloom soon allowing for positive identification. When a bird flies by, it can usually be identified in a few minutes with a picture. Yet an orchid can take more than a year to bloom before it can be identified. Birders have it easy. Some pictures from this trail are below.



That evening we went down to Vitor's collection room to see some of his moth specimens. Look at a few of the pictures below and imagine 350,000 specimens from leaf miners, which are tiny moths as adults, to moths that are 8 inches across. Hard to describe but easy to marvel over.



During our hikes we had collected perhaps 50 orchid specimens from plants fallen along the trail. We spent the afternoon mounting these on trees in the garden and on branches to hang in the trees. During the year the Becker's daughter Moema will be taking photos and flower specimens for identification and entry into the reserve's inventory.

Thursday 3/20 and Friday 3/21: Thusday and Friday were taken up with traveling to the Chapada Diamantina. After breakfast and lots of group photos at Serra Bonita we loaded back into the 4 wheel drive trucks to get back to the bottom of the mountain. Then we got into our van, which carried us to the end of the trip. The driver, Beto, turned out to be the very best driver we have had on any OCA trip, by a wide margin. He was unfailingly helpful, cheerful, and very careful behind the wheel. He never crossed a double yellow line, something unheard of in Brazil.

Thursday we went to Vitoria da Conquista, a non-descript small city. It's biggest surprise was the two establishments that made larger than life fiberglass animals, which they advertised by having the models along the road. A huge bull is the only one can I remember now, but there were others. We passed by too fast to get pictures. Who would have guessed that there would be such a market for fiberglass bulls? And why no fiberglass matadors?

Just before leaving Vitoria da Conquista Friday morning, Cecilia Azevedo joined us. Cecilia is a professor of Natural Sciences at the State University of Southeast Brazil. Among other things she is an expert in the orchids of the Chapada Diamantina. Her knowledge of where to find orchids was very helpful and having found them, she knew what they were.

As we traveled from Serra Bonita near the coast to the Chapada Diamantina, the climate and the vegetation became much drier. At one point we passed through an area of thorny scrub that could easily have been in the American southwest; even cacti were not uncommon as were goats and burros.

We were headed for the Parque Nacional da Chapada Diamantina. Over the next few days we learned some of the history of the park and the region, which I will summarize here. The park is shaped roughly like a very long left foot, with a deep indentation at the instep, wherein resides the town of Mucugé, our destination. The park is some 580 sq mi, about half the size of Yellowstone National Park. The park's highest elevations, 6600+ feet asl, are at the scarp, which runs along the

western border of the park. Generally the park lies between 2600 and 3300 feet asl. Although the park is quite rocky and arid, there are many rivers and waterfalls, which are beautiful sights in the arid landscape. In the park's very isolated central valley there are a few inhabitants and the tiny town of Pati, accessible only on foot. There is only one road which traverses the park, at the instep, enabling passage east to west, through Mucugé.

The other towns we visited, Igatu and Lencois, are along the east side of the park, in its northern half. These towns were all important diamond mining towns, which developed after 1844 when diamonds were discovered. Diamond mining was all placer mining. One can only image what the streams and rivers looked like before the miners got to them and dug all the sediments out of their channels. By 1847 there were 50,000 miners in the Mucuge area; Mucuge now has 11,000 people, well up from its nadir 35 years ago. Production started to decline by 1870, when diamonds were discovered in South Africa. During its heyday, the chapada produced more diamonds than India. After the clear ornamental diamonds were mined out, black industrial diamonds were discovered. These were especially important for the construction of the Panama canal and the first London subways. By 1900 the diamonds were essentially gone and the area sank economically, seeing a resurgence only in the 1980's, when ecotourism began to flourish after the establishment of the park. There are still a very few miners, who must all be professional optimists. One of our group sought out a jewelry store to buy a local diamond. It looks pretty much like a tiny, shiny black pebble, perhaps 1/8th of an inch in diameter. Once, huge fortunes were made from them.

In Mucugé we stayed at Pousada Refugio na Serra; excellent food. good accomodations but kind of buggy in the courtyard, and a very helpful owner. Orchids ? Oh yes, we were there for the orchids, but Mucugé had lots of other interesting sights for example, the 'Byzantine' cemetery, established outside of town during an epidemic in the late 19th century, the church of Santa Izabel, and



Mucugé's Byzantine cemetery.

the quilombo de Dona Nena. A 'quilombo' is a buffet restaurant where you pay by the weight of the food you put on your plate. Excellent food and bananas were free.

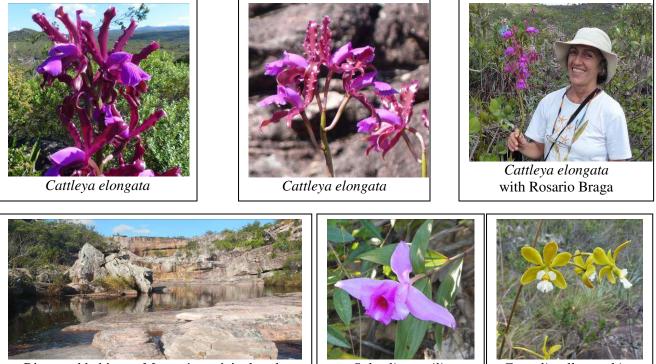
Around Mucugé; Friday 3/21 – Saturday 3/23: The afternoon of our arrival, after settling in at the pousada, we went to the Mucugé municipal park. We also went back to the park on Saturday. This sounds like an in-city park which would be unlikely to have any interesting orchids, but in fact it is quite a large park outside the city, created and managed by the municipality. Within the park are a very nice visitor's center, a mining museum, a demonstration garden, and at least 500 acres, probably more, of cliffs, rivers, waterfalls, and orchids. There were LOTS of *Cattleya elongata* in bloom.

They have very much the growing habit of a rupicolous laelia. (By the way, I am no taxonomist and I am not up on all the latest revisions sorry about that.) My list of the local orchids includes Cat. elongata, Sobralia Sobralia sessilis. liliastrum. *Cyrtopodium flavum*, Acianthera ochreata, Epistephium lucidum, Epidendrum secundum, Cleistes exilis, Laelia bahiaensis, Habenaria fluminensis, Catasetum hookeri, and Thelyschista ghillanyi.



Built under a rock ledge, this former miner's hut has been repurposed as the Mucugé municipal park's visitor center.

By the way, Rosario did not pick that *Cat. elongate* in the picture below. Its roots are firmly in the ground at her feet. That's why it is called 'eeelllooonnngggaaatttaaa.'



River and habitat at Mucugé municipal park.

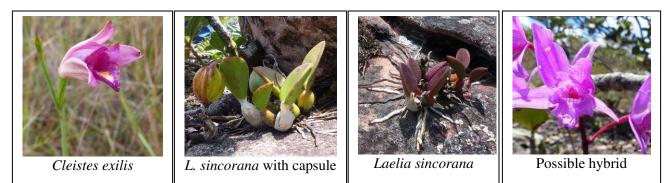
Sobralia sessilis

Encyclia alboxanthina

The western boundary of the national park is the escarpment known as the Serra do Sincorá, for which Laelia sincorana is named. This laelia occurs at higher elevation than the Mucugé municipal park, so on Saturday we took a hike to find Laelia sincorana. We drove about 20 miles north along the western edge of the park to the town of Guiné, a microscopic little town which is near the beginning of a trail up the escarpment. The trail was a nice mile or two long, with superb views to the west of the surrounding countryside, which is quite flat with a lot of agriculture. On the way up the trail we spotted Encyclia patens in a tree, Scaphyglottis scikii, Zygopetalum intermedium,

> www.orchidconservationalliance.org A 501(c)3 corporation

Bulbophyllum sp., Pleurothallis sclerophylla, Prosthecea sp., Cleistes exilis, an orange/red Hippiastrum locally known as the 'bush onion,' and lots of straw flowers. Once we got near the top of the scarp we did find lots of *Laelia sincorana*, although none were in bloom, as well as *Bifrenaria aureofulva*. We also found an orchid, in bloom, that no one was quite sure what it was. The best suggestion has been that it is a natural hybrid of *L. sincorana* with *Laelia diamantinensis*. We saw a number of plants that could have been *L. diamantensis*, but they didn't have flowers (or tags). As an unexpected bonus, we saw some cat tracks in the sandy trail. The guide we had hired for the day said were of a big cat, but which cat he did not know. Margays, ocelots, jaguars, and pumas are said to be in the park, but they are all very rare.



It is always instructive to see how orchids grow in their native habitats, but a little interpretation is sometimes in order. The fact that a *L.sincorana* or a *Cat. elongata* is growing in the full sun on a bare sandstone rock only means that that particular plant can grow there. I doubt that it

would grow there if it could scamper just a few feet away and bury its roots in some cooler, damper environment, but it can't. In her nursery, Rosario's assistant Francisco has developed a good method for potting rupicolous laelias such as *L. sincorana*. It would probably work for *Cat. elongata* as well. In the bottom of a pot, place something coarse that will provide excellent drainage such as half-inch gravel. On top of the gravel place a thin layer of moss, just enough to keep the potting mix from running out. Plant your laelia in a 50-50 mix of potting soil and sand, yes, potting soil and sand. On top of the soil-sand mix, mulch the plant with gravel. This is working very well for me. Also bear in mind the rain patterns of where these plants come from. Winter is cool



and dry, summer is wetter, but the plants are frequently exposed to sun even in the rainy season so that they dry off quickly. While we were driving to the *L. sincorana* habitat, we could see that the plants were enveloped in fog, but by the time we climbed up, the sun was out. Nevertheless, there were puddles in some places and clearly the plants had a drink that morning. The bromeliads that were there all had water in their basins.

Mucugé to Lencois via Igatú; Monday, 3/24: Monday morning, after breakfast, we loaded into our van to go to Lencois via the tiny mining town of Igatú. The road to Igatú was twisty and rough, forcing us to go slow and appreciate the scenery, although, to be fair, the scenery everywhere was

dramatic. One thing many of us noticed, here and elsewhere, were the termite nests. It seems that there are two types of nests; watermelon sized nests on the trunks of trees and much larger nests in the ground. The trees themselves were not being attacked, but apparently were a means to keep the nests above ground, presumably so that they would not flood during rainstorms. I saw one nest on a concrete telephone pole, evidence in itself that the tree/pole was only for support, unless of course there is a Brazilian termite that eats concrete – maybe? The in-ground termite nests were not in the rocky parts of the chapada, but in the sandier, flatter areas. These mounds were six to ten feet high, and twice as broad. Apparently these mounds have many different species of ground dwellers in them, termites, ants, and burrowing mammals, snakes, and birds as well. Most of them are probably centuries old. When we flew from Lencois to Salvador I looked down and could see areas where there were



aggregations of hundreds of these mounds spread out across the chapada. How many termites does it take to make even just one mound, not to mention hundreds?

As I said, Igatú is a tiny little old mining town, enjoying the same of prosperity due resurgence to ecotourism as some of its larger neighbors. We engaged a guide, to benefit from an insider's knowledge and to give the local economy a nudge, and strolled with him through the town. He took us past the former boss man's house, past the church, and to a small mining museum/art gallery/café complex. Well worth a visit the next time you are in the area. There are also several pousadas in town that looked inviting, possibly just the place for



The OCA strolls past the church in Igatú.

an artist to spend a week while plein-air sketching or painting.

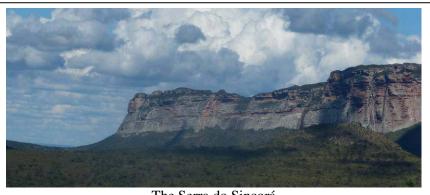
The road out of town was just as rocky and steep as the road into town, but once we hit the main road, we were quickly in Lencois. Lencois is the biggest of the towns around the national park. Due to the diamonds it once even had a French consulate. We stayed at the pousada Villa de Serrano, a pleasant place just across the bridge from the town square. Lencois is hopping. There were plenty of restaurants and lots of people out at night but, according to a local source, still small enough to be essentially crime free because everybody knows everybody in town. I walked into a local jewelry store, with lots of things on open shelves and had to call for someone to come from the back and sell me something. That is indeed a crime free town!

We had two days and three nights in Lencois. The first we visited gruta Lapa Doce, Pai Ignaçio, and a small orchid collection. The second we visited an area called Mucugézinha.

Just to the north of the park, near its western boundary is a mountain called Pai Ignaçio. It is quite a dramatic sight at 3000 feet. It looked like a good place to prospect for orchids. Just to its west, the geology changes dramatically. Instead of the peaks of the Chapada Diamantina, such as Pai Ignaçio or the Serra do Sincorá, the land becomes quite flat and switches from sandstones to limestones. Limestones are often dissolved away by water, with the formation of caves and sinkholes. Familiar examples might be the Carlsbad caverns in New Mexico or the cenotes of Yucatan. Also, to the west, because the land is in the rain

shadow of the mountains of the Chapada Diamantina, the climate is much drier, with cacti, spiny shrubs, and drought resistant palm trees, all typical of Brazil's 'caatinga' habitat. There are not too many orchids in the caatinga, but some vanillas and catasetums often grow in the palm trees.

The grotto we visited, Lapa Doce, is known to extend 14 miles, but it is not yet

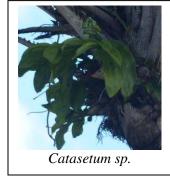


The Serra do Sincorá



Caatinga habitat; palms with vanilla and catasetum shown below

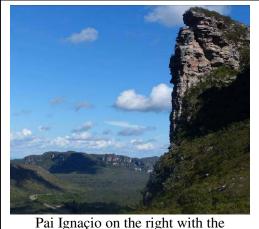




fully explored. The route we took gave us just over half a mile below ground. We stopped at the visitor center and hired a guide, who provided us with lanterns. He explained the difference between a grotto and a cave. A cave has a single entrance and any visit must enter and exit through the same access point. A grotto has separate entrance and exits and one can walk through it. The entrance to and exit from Lapa Doce are both sinkholes, where the roof of the cave-grotto has collapsed. Both were quite steep, but once inside the grotto, the going was very easy. The roof was at least forty feet high, and there were lots of wonderful stalactite and stalagmite formations. Some have names, such as the 'elephant' and the 'chandelier.' At both ends there were bats that fly out at night, and spiders, with very toxic venom, that prey on insects that blunder into the cave. The guide said that he and his

colleagues sometimes sleep over in the caves, but never near the entrances due to the spiders. Deep within the caves there are also a very few blind fish.

After the grotto, we stopped at Pai Ignaçio on the way back to Lencois. Although the view was astonishing, and it seemed that there should be many orchids we did not find too many and nothing new. Not much further on the way back to Lencois we stopped at a small orchid garden, Orquidario do Pai Ignacio. Given the number of plants of Cat. elongata and Encyclia alboxanthina that were in this garden, it was no longer surprising that there were none at Pai Ignaçio. The owner of the garden seems to have collected them all, along with many catasetums, oncidiums. epidendrums, and other species. The orquidario would be a great place to visit if you just want to see everything in one place.

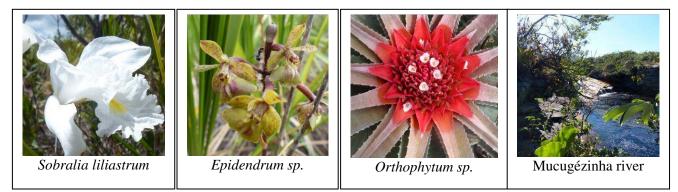


road to Lencois in the left lower corner

I had read in a guide book that an American named Roy Funch lived in Lencois and that he provided the impetus for the creation of the Chapada Diamantina National Park. He sounded like an interesting guy, so I had called him when we arrived and invited him to dinner. Indeed, he is an interesting guy. He first came to Brazil in the mid 70's as a Peace Corps volunteer with an ecologynaturalist background. He was put to work in the capital, Brasilia, writing management plans for the few national parks that existed then. He soon tired of living in a big city working in an office building and started traveling around to see Brazil. When he arrived in Lencois, he fell in love with the town and figured out a way to stay there. At the time, he said, it was a brutally poor town. Diamond mining had been in decline for a century, with nothing to replace it. He explored the area, made his living as a guide, and got to know the countryside. By the time Brazil's military dictatorship was dissolved in 1985 he had made the acquaintance of many lesser officials in the agencies that regulated parks. These officials now rose to power and there was a positive, forward looking attitude in the government. Funch was in the ideal position to exert just enough influence to set in motion the establishment of a new park to protect the Chapada Diamantina. As he told it, on the last day before setting the final boundaries of the park, he and some officials flew in a small plane to overlook where the boundaries had been planned to be. As they were prepared to end the flight, the pilot asked if they didn't want to see some more waterfalls. They did, and the park boundaries were enlarged 40% as a result. Funch was appointed the park's first director, a position he held for 15 years. As a result of establishment of the park, ecotourism in the area has flourished and the town's economy has changed dramatically. As I said, it has lots of restaurants, the three that we ate in were all very good, lots of other shopping, and a thriving ecotourism industry. Now he is enrolled in a Ph.D. program. His thesis will be on the biology of those termite mounds I wrote about. When we go back to the Chapada Diamantina on another OCA trip, we will try to engage Funch as a guide for a day or two. I'm sure he knows every nook and cranny of the place.

For our final day Funch had suggested we check out a locale where the Mucugézinha river comes near the road. The ending '-zinha' converts any name or word to the diminutive; thus, 'little Mucugé river.' On one side of the road, he said, there are lots of orchids, and on the other a

restaurant and very scenic river. It was good advice. Just off the road across from the restaurant we again saw many *Cat. elongata*, and also *Cyrtopodium elisiae*, *Cyrtopodium flavum* with five foot tall canes, *Sobralia liliastrum*, several pleurophthallids, epidendra, and a striking bromeliad, probably a species of *Orthophyton*. After lunch we went down to the river to cool off and chill out for a bit. The scenery was glorious and the water wonderful.



Thursday, 3/27: Thursday we packed up, did some last minute shopping, and got on the plane to fly to Salvador. Except for the fact that the plane was three hours late landing in Lencois, which was annoying but of no real consequence, we got to our hotel in Salvador without incident. We had dinner with Rosa Andrade and Antonio Miranda, Salvadoran friends of Rosario's, who had good recommendations for hotels, restaurants, shopping, music, and acarajé stands; more on these food stands later. Salvador is one of the oldest cities in Brazil. For some 200 years Salvador was the capital of colonial Brazil. It was the center for the importation of slaves and currently has a large afro-brazilian majority. Its history endows it with a strong African cultural heritage which is manifest in the food, the art, the music, and the religion.

Fri, 3/28: Friday was our day to explore Salvador. There are several must-sees in Salvador. One of the most famous churches is Nosso Senhor do Bonfim, or 'Our Lord of the Good End.' Outside the church are many sellers of small, brightly colored cloth bracelets. It is said that if you tie your bracelet to the ironwork fence around the church and make a wish, the wish will come true. So, we added our bracelets to the fence, which has taken on a brightly colored, very shaggy appearance with tens of thousands of strips of cloth tied to it. Inside, the most remarkable feature of the church for me is the room in which supplicants hang effigies of whichever organ is ailing and needs divine intervention. I assure you, a plastic replica of <u>every</u> known organ is hanging there.



www.orchidconservationalliance.org A 501(c)3 corporation One of the old quarters of Salvador that has been remade as a tourist attraction is Pelourinho. Restaurants, historic churches, and shopping are all good in Pelourinho, but it is beset by the aggressive hawking of every tourist oriented tschochke known to man. We spent some time walking through the convent church of Sao Francisco, wherein there are wonderful antique Portuguese tile murals in the cloister and every carving in the church is gilded with gold leaf.



The sea food in Salvador is exceptional, and a good Bahian seafood moqueca is hard to beat. However, for me the iconic Salvadoran dish is acarajé. I am a big fan of street food and acarajé is an omnipresent street food in Salvador. Acarajé is essentially a 3 inch diameter bean fritter. Beans are soaked overnight, then ground fine, some spices and dried shrimp are added, followed by deep frying in a basin of palm oil. Some acarajé have the consistency and heft of a cannonball, but the best are light and fluffy inside with a nicely browned, crunchy surface. They are split open, stuffed with various hot sauces and fillings, and eaten either out of hand or from a plate with a fork. Thanks to Rosa Andrade, Rosario's friend, our hotel was strategically positioned just around the corner from an acarajé stand that is considered by many to have the best acarajé in the city. I snuck off there to check them out, they were indeed excellent, and later took the group to sample them. Not everyone would try the acarajé; their loss.

As I think the reader will realize, an OCA trip is more than orchids. I try to take trips that are varied, with lots of orchids, but also provide a taste of the country we are visiting. In Brazil, Rosario Almeida Braga is our ace-in-the-hole. Many, many thanks go to her. This was Ro's fourth OCA Brazil trip and I know she can do it again. Don't miss it! Many thanks also go my fellow travelers for their excellent company.

One last image – Who was this guy on the street in Pelourinho? Pilgrim, performer, or former OCA member? You never know what Brazil will serve up, but you know it will never be dull.

