The Orchid Conservation Alliance 564 Arden Drive Encinitas, CA 92024



ORCHID CONSERVATION ALLIANCE

June 28, 2013

Dear OCA Member -

The OCA's First Trip to China.

The OCA trip to southern China ended about a month ago and I had been waiting for some major insight resulting from the trip to present itself before writing to you. However, the bolt of lightning hasn't flashed yet into my consciousness, so in the interest of not holding the good hostage to the perfect, I will just get to it and tell you about the trip. Our trip was led by Holger and Wenqing Perner. They are the proprietors of Hengduan Mountains Biotechnology, Ltd., a company in Chengdu, Sichuan, that is the only company in China raising seed grown native Chinese orchids.

First, to orient you, see the map at right. The map shows the southernmost three Chinese provinces, Guangxi, Guangdong (Canton), and Fujian. The Tropic of Cancer runs from just to the north of Nanning in Guangxi Province, where our trip started, to Shantou on the coast. Thus our trip started in the tropics, but most of it was just to the north, outside the official tropics. However, almost anywhere we were the weather was warm to hot and moist to steamy. Our trip was



scheduled to start just before the monsoon started, but the monsoon was early this year and we frequently had some light rain. We spent most of our time in Guangxi province and then flew to Fujian in the east. The trip ended in Xiamen, although while in that area we were mostly outside Xiamen to the north-east. In China, Nanning at 6.8 million and Xiamen at 2.4 million are relatively small cities, relative to Shanghai at 23 million and Beijing at 20 million.

I and a few of the other OCA travelers had arrived in Nanning a day early to recover from travel fatigue, so we had the chance to explore a little. It is a very Chinese city with the usual western commercial influences. Not quite next door to each other, but well within strolling distance, are Starbucks, McDonald's, Pizza Hut, and KFC, and also several take out shops selling chicken feet and duck's heads; East is meeting West. The streets were filled with people on motor scooters, but the ambience felt strange. It was quiet and the air seemed clean, not like Italian cities with their motor scooters. Upon closer inspection the scooters were 95% electric; it does make a difference. As the beginning of the trip, on May 9, we visited a couple in Nanning who had converted the balconies and the rooftop of their apartment, a small but very nicely kept fifth floor walkup, to growing

orchids. Their rooftop greenhouse was approximately 500 square feet. Apparently there are very few orchid societies in China. Orchid growers principally interact over the internet, trading growing advice and plants through websites devoted to gardening. This couple, Luo Zhen and Lan MeiMei, had created interesting wonderfully tidy, well grown spaces containing mostly orchids but also a large collection of stag horn ferns, some vines, other ornamentals, many succulents in perfectly geometrical arrangements, and a very unusual cycad. They were kind enough to share a few pups from the cycad with a couple of our travelers. Their orchid collection focused on Chinese dendrobiums, but was also quite broad, going all the way to Brazilian rupicolous laelias. Luo Zhen has an interesting way of growing large numbers of dendrobiums. Around a 2" PVC pipe, from three to six feet long, he wraps several layers of palm fronds and then secures many copies of the same dendrobium at two or three inch intervals. These are hung from wires in horizontal ranks. Unfortunately they were out of bloom when we visited, but they must be magnificent masses of flowers when blooming. Later in the trip we visited a commercial nursery of Chinese cymbidia and a factory for the growth of medicinal Anectochilus formosanus. Thus this was the only ornamental collection we saw.

The next day we hit the road for a long day on the bus going to the northwest corner of Guangxi province to the town of Leye. I will just say it now: I have never been on an orchid trip that had too little bus

riding. Even in tiny Ecuador, I soon tire of riding the bus. China is bigger! The bus was fine, quiet, air conditioned, and well stocked with water, soft drinks, and fruit, and a safe driver. He just needed to go about five times faster. Of course, then we would soon all have been dead. There are lots of mountains in southern China and the roads, while really quite good, are still twisty mountain roads, not for speeding. We did stop for lunch and a photo op; see photot at right. The scenery through which we drove became ever more rugged karst hills. Karst is limestone, severely eroded so that pinnacles and cliffs rise up everywhere. You can also see some terracing on the near hill side.



The next morning we headed still further Raist landscape in Guangar northwest to the Yachang Orchid Reserve. You may have read about Yachang in Orchids magazine. It is not open to the general public because that would mean a huge influx of tourists that the infrastructure couldn't possibly handle. Because of the Perner's connections we were able to enter the reserve as a study expedition, and it certainly was worthwhile. Entry to the reserve is takes one along a concrete path with many rescued orchids placed on trees for easy viewing. Here were *Dendrobium fimbriatum* and *loddegesii*, *Vanda concolor*, and *Cymbidium aloifolium*. However, what we came here for and that we found in the forest growing





lithophytically was *Paphiopedilum hirsutissimum*.

We saw many large clumps of plants, sometimes numbering in the hundreds, and apparently there are less www.orchidconservationallaince.org

accessible clumps of thousands of plants. And, they were i an astonishing sight. There were other orchids in bloom al hirsutissima. Among these were Liparis chaparensis, Phol Calanthe argento-striata.

After the *Paph*. hirsutissimum extravaganza, we to Known in Mexico as a *cenote*, sinkholes are formed when This one seemed pretty large (See below). It was about 20 path that went around the sinkhole, looking for orchids and not in bloom we saw Luisia teres and Cym. lancifolium, pic

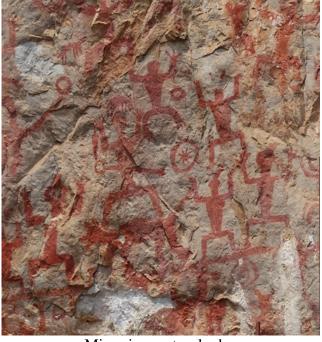
The next morning the day's goal was to return to N







Luisia teres



Ming river petroglyphs.



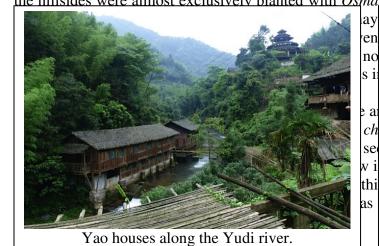
Nanning several of us went to Starbucks and bought instant coffee. Because each room in the hotels had an electric tea kettle, it was always possible to make a quick cup of coffee – Ahhhh!

The next morning, which by now was Monday May 13, we drove southwest to the Ming river, very near the Vietnamese border, where we visited the Longrui nature reserve. Our goal here was to find Paph. concolor, which grows on the cliffs in full sun. Our first attempt was to take a boat down the Ming river, looking out for the plants but also to see some petroglyphs which are preserved here. The petroglyphs were easy to see and, for me, easy to interpret. They are saying "If you come any



further up this river you will run into a lot of us and we will rain rocks and spear on your heads." Fortunately, the petroglyphs were painted some 2000 or more years ago and the people who painted them are probably now the people running the boats taking tourists to see them. Unfortunately, we were unable to find any Paph. concolor. Probably they were there somewhere on the cliffs, but without being in bloom they were hard to spot. We tried at a second nearby spot to find the plants, using a description published by Jack Fowlie 30 years ago. Again, we did not find Paph. concolor, but we did find a large mat of Den. loddegesii or aphyllum covering a rock and some other out of bloom orchids.

After this we headed off to the northeast corner of Guangxi and the city of Guilin. "Guilin" translates as "Fragrant Forest" and the name refers to the many *Osmantha fragrans* that are in the area and the city. In places the hillsides were almost exclusively planted with *Osmantha frangrans*. Unfortunately these were not in bloom





At the end of the valley we arrived at the Yao village. Ch maintained some form of their identity, often in quite elderly village.



two more. The houses were almost exclusively wood, many with wonderful wooden screens rather than glass.







As you can see from the photo at right, this Yao village is a fairly quiet place.

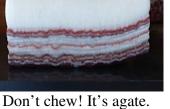
Leaving the Yao village we drove to Longshen where we stayed the night. That evening there was a furious thunderstorm during which the power went out. Most of us were gathered in the Perner's room looking at a slide show of Chinese orchids. Fortunately the hotel had a backup generator. Even if we had all had flashlights, the electronic locks to our rooms wouldn't have worked.

After the night in Longshen we visited the Longji Rice Village. As any reader will suppose, rice is not hard to come by in China and during our drives we certainly saw many terraced rice fields. However, we were entirely unprepared for the scale of the rice terraces we found at Longji. Our bus parked several kilometers from the village and we took one of the village's tourist buses to the foot of the trail up along the terraces and through the Longji Rice Village. Longji is much more tourist oriented than the Yao village we visited and the trail up through the village was lined with tourist stalls selling lots of local crafts, such as combs made from buffalo horn, agate slabs cut at the right angle to look like a slab of bacon, and tubers of the orchid *Gastrodea elata*, sold for medicinal purposes, (What purpose? Do I have to spell out everything for you?) all shown on the next page. The horn combs relate to the custom of the women in Longji who grow their hair to ankle length and then wind it on top of their heads in a very intricate knot. The scale of the terracing at Longji is astonishing. The photos on the next page show a part of the terracing which continues down the hill out of sight and that the terraces are entirely kept by hand, and surely were originally built by hand. These terraces are centuries old. One has to wonder at the care with which the water in these terraces is maintained. It is easy to image that a major rain storm, such as we experienced in Longshen, and which damaged an upper level terrace would cause a cascade of damage to all the terraces below.

Speaking of rice, it was interesting to note that the meals we ate did not make a major feature of rice, and generally rice was not served without being requested. As explained by Holger Perner, rice is considered a very plain food, and the restaurants where we ate did not want to insult any of their customers by implying that their customers had such plain tastes as to want rice. Thus, if your boss is Chinese, do not serve your boss rice! Only peasants live on rice.









Gastrodea elata





After another night in Guilin we packed up and drove to the Li river at Zhu Jiang where we took a three hour boat trip through the karst landscape to Yangshuo. This boat trip is a very popular Chinese tourist experience. Our boat, which took perhaps 200 people, was only one of 50 or 60 lined up at the piers along the shore. The scenery is indeed spectacular. The weather was a little misty with occasional showers, so my picture is not as colorful as the souvenir photo books. Mostly we braved the weather and searched the cliffs for orchids. Alas, no success. It does seem likely that there are orchids in the trees and on the tops of the hills where they are protected from collection and



agriculture by the terrain. At the end of the boat ride we came to Yangshuo which is as classic a tourist town as was ever designed. Parts of it were very pleasant with tree lined streets harboring cafes and shops. Parts of it were unabashed tourist trap with aggressive sellers. I sampled the street food, something I always like to do, and had what I can only describe as a classic Guatemalan pupusa made with Chinese ingredients; I must learn the Chinese name. It was excellent. I always watch the vendors for a bit before sampling and make sure that whatever I buy is freshly and thoroughly cooked. Most people on our trips think I'm crazy, but so far, I've not had a mishap from street food anywhere I've been from Tijuana to Yangshuo. No one on our trip got sick from the food, wherever we ate.

After staying the night in Yangshuo we drove back to Guilin for an airplane ride to Xiamen, Fujian province, on the southeast coast of China, just across the straits from Taiwan. The flight was uneventful. As in the US, no bottles of water through security, but we didn't have to take off our shoes. Dinner in Xiamen was in our hotel's Korean restaurant. Wow. And next time will somebody please warn me that the meat grilled at the table, eaten wrapped in lettuce leaves with kim chee and other veggies, is merely the appetizer for the huge sea food hot pot that follows?

In north-east Fujian we saw two examples of another ethnic group's life style. These are the houses of the Hakka people, a migratory group originating in Shanxi in northern China who fled various threats south and west until they stretch now from Taiwan to Hainan and Sichuan. The houses are known as Toulous and their principal characteristic is that they are castle like, with thick walls, only one entrance, and a communal courtyard in the center. Many are circular, although some are square or rectangular. Most are still occupied, although tourist visitors are a welcome source of income. Both sites we visited have limited drive up access in that one's bus parks at some distance from the Toulou and you then ride the tourist bus to the village at which point you are free to walk around, look in, buy stuff, take pictures, and just be a genuine tourist.

During the time we spent in Fujian we also visited two orchid sites. One was a small nursery where



The entrance to a Toulou



The Huaiyuanlou Toulous



Inside a Toulou



Teas and other things for sale



The tea lady



An antique wood stove

traditional Chinese cymbidiums were grown for sale. The second site was a factory where Anoectochilus cf. formosanus was grown in large quantity for medicinal use. To my surprise all the plants grown here are grown under fluorescent lights in sterile culture on nutrient agar exactly as orchid seeds are planted. However, rather than seed, 1-2cm sections of the stems are scattered in the flasks where they root and grow to maturity. We estimated, by counting the number of flasks in a small section of the growing space, that this factory had some 210,000 flasks under lights. At maturity the plants are harvested, dried, and packaged for use as a tea. Yes, of course we sampled the tea. It had a sort of earthy, tea like taste that would have been dramatically improved by addition of honey, lemon, and rum. Its use is prescribed for problems of the lungs and liver, high blood pressure, snake bite, some cancers, pain, and high blood sugar. I purchased enough packages of the tea so that at the end of the trip dinner each OCA traveler could have a package of the tea as an official orchid trip souvenir.

This China trip marks the OCA's 7th Orchids in the Wild trip and probably my 20th orchid safari. I have to say that I have never regretted going on a trip or disliked any of the people on them. Travelling to see orchids rather than historical monuments always takes me to places that few other people visit and shows me beautiful parts of the world. Fellow travelers have been unfailingly generous with their knowledge of plants and places. I can always be sure of learning something knew from them. They are interested in things outside of themselves and that makes all the difference. Of course, there are arrogant, obnoxious, unpleasant people in the orchid world, but they never show up on these trips! I'm guessing we have very few of those people in the OCA. If you already know everything, are interested largely in yourself and your comforts, and have no curiosity about

nature, why would you join an organization that has generosity as its first prerequisite and choose to go on a potentially buggy, bumpy, two week bus ride? Those are pretty strict selection criteria.

So, if you have actually read this far, you must be one of the chosen few. You should know that we have several trips outlined for the next two years. In 2014 we are thinking to organize a trip to Brazil in the spring to see *Cattleya guttata* in the sand dunes of Espriritu Santo and in the fall to South Africa, Madagascar, and the World Orchid Conference. In 2015 we are thinking of a spring trip to Thailand or Sichuan China and a fall trip to Peru. Let me know what you would be interested in. How about Costa Rica? Stay tuned.

One last word about the state of orchids in the wild and conservation in China. First of all, China is a large place and I have only had one look at a very small part of it. From slide shows I have seen, other parts of China still have more of nature preserved than the two southern provinces we visited. Agriculture, development, and a lot of people to be housed and fed have been hard on the orchids in Guanxi and Fujian just as they have been everywhere else in the world. However, the topography is such that there are inaccessible places and orchids are likely to persist there. We did not see any private reserves such as OCA trips have visited in South America. However, patterns of land tenure in China, especially recently, have not been conducive to establishment of such preserves. I doubt that there is any role the OCA can play in China except to keep visiting, keep searching for reserves, and show that there is a market, albeit small, for orchid ecotourism.