



South China Tiger Field Survey Travelogue

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Bittersweet is the only word that comes to mind when I try and reflect upon my experiences as part of the South China tiger survey. As field advisor on the field survey component of the South China Tiger Protection Program, I felt disappointed after realizing the current, harsh realities concerning the status of wild South China tigers yet enlightened from the small glimpse I was offered into the fascinating culture and customs of rural China. It was a constant physical, mental and emotional challenge for all involved as two completely different cultures, and drastically different research philosophies, found somewhat common ground in an ongoing cooperative effort to survey and document tiger presence/absence. It was an adventure in every sense providing a continuous influx of difficult situations,

remarkable feats, unthinkable cuisine, and countless unforgettable moments.

As someone fortunate enough to have experienced all these amazing and amusing sights, sounds, and smells, I feel honored and obligated to attempt to share them. I hope that these photos and dialogue will not only inform readers of the current conservation realities and status of wild South China tigers but also provide a short escape into the lifestyles and lore of rural southern China, a place still relatively unscarred by modern technology and tourism. For more detailed site descriptions and/or survey results, please check out my 'field notes from South China' and our final report, soon to be posted.

My journey actually began in Indonesia in late February 2001, where I ventured into the jungles of Sumatra in Way Kambas National Park with Dr. Tilson's Sumatran Tiger Project staff. I was shown first-hand tiger survey and monitoring methodology from identifying fresh tiger sign (we observed prints, feces and ground scrapes) to remote camera placement, set-up, and care. We used simple camping equipment in the jungle, plastic tarps for shelter, a small stove and... well that's about it!

Camp site at Way Kambas National Park (below)
Tiger hunting crossbow (bottom right)
Monitoring unit and camera (bottom left)



From Indonesia, I flew directly north to Fujian province in South China. I spent the next two weeks in Qing Liu County. The habitat consists of a patchwork of forest stands, which are mostly conifer plantations used for timber and sap extraction. A small quantity of secondary, broad-leaf forest remains but is isolated and logged. Recent tiger trace reports led forestry officials to believe South China tigers may still roam the remaining forest. We were led into the forest by an old hunter, who also displayed his father's old tiger hunting crossbow. The bow, last used in the 1970's, is completely made of bamboo. It was hidden off a forest trail used by tigers and triggered by a passing animal breaking a line of string or hair. The arrow was poisoned and would deliver a broadside blow. It was said to be very effective.

Ironically, I found many similarities with our remote camera placement and function, except being non-lethal, of course. We would deploy monitoring units and cameras on forest trails, identified by experienced hunters or woodsmen as possible tiger routes. A passing animal would break the infrared beam and trigger the camera to 'shoot', harmlessly capturing them.



On March 19-22, I reunited with U.S. advisors Dr. Tilson and Dr. Philip Nyhus along with 33 Chinese Forestry officials and biologists in Longyan County in central Fujian, near Meihuashan National Park and Tiger Breeding and Naturalization Center. We had all convened to conduct a workshop with tiger survey methods being presented by the U.S. advisors and recent tiger trace reports by our Chinese colleagues representing Fujian, Zhejiang, Jiangxi, Hunan, Sichuan, Guangdong and Guizhou provinces. Many found Dr. Nyhus' GIS presentation quite fascinating.



Immediately following the workshop, we collectively pointed our sights west to begin the field work in Yihuang county, central Jiangxi province. A local man was allegedly killed by a tiger in 1999 while hunting for snakes after dark. The long bus ride through remote countryside took us back in time to see how some parts of China remain relatively unchanged and unaltered from modern technology.



Dr. Tilson could only stay a few days and I quickly put our field plan into action. Soon after his departure, five Chinese field staff and I headed out to the trailhead where we were to begin our hike into the mountain reserve. With the assistance of numerous porters, we hauled all our field equipment into the 229 km² mountainous expanse of Yihuang South China Tiger Reserve.

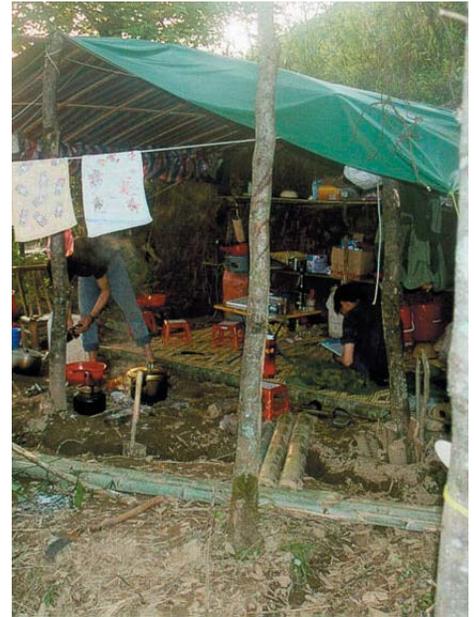
Little did we know we would spend the initial two weeks in a small village, located in the heart of the reserve, as we patiently waited for the rain to let up and mist to lift. I think even our host's pig suffered from the rainy season doldrums. However, it served as a good time to interview local informants regarding inhabiting wildlife, livestock management practices and land use patterns. We were also able to meet with local school children to discuss tiger conservation issues and attitudes.

Workshop in Longyan County (below)
Field staff at Yihuang South China Tiger Reserve (bottom right)
Village in Yihuang South China Tiger Reserve (bottom left)



We finally got our own field house up and functional, set away from the distractions of village life. It sat on an abandoned rice terrace at 800 meters fully equipped with bamboo walkways (to avoid the relentless mud), a propane stove, a small sleeping quarters (not pictured), a lifetime supply of candles, a gong for wake-up call at 6:00am, and a Chinese checkers board game. After construction, a few of us enjoyed some Zhumzhi, local-made rice and sugar balls wrapped in bamboo leaves.

It wasn't long before we had ground surveys underway and our first camera trap line up and running, six separate camera stations in all. After 2 months of operation our cameras unfortunately only yielded 2 photos of wildlife this sambar and many pictures of people and cattle.



Field house outside of village (below)
Camera trap line (left)
Camera trap photo of a sambar (bottom)



Dr. Tilson returned in mid June with Greg Breining, an American author interested in producing some articles and a book about the project, and Dr. Hu Defu, a professor at Beijing Forestry University and the Chinese advisor on the project. Xiao Huang, my field companion and student of Dr. Hu, and I met them down in Yihuang county city prior to embarking on a brief 3-day field trip to our camp in the mountains. We stocked up on food from the local merchants selling a wide variety of grub from live chickens and river eels to fresh fruit and vegetables. A regular street-side grocery store!

We gave our colleagues a tour of the mountain villages and the landscape, at least what we could see through the mist. We also investigated the bamboo shoot machines that compress



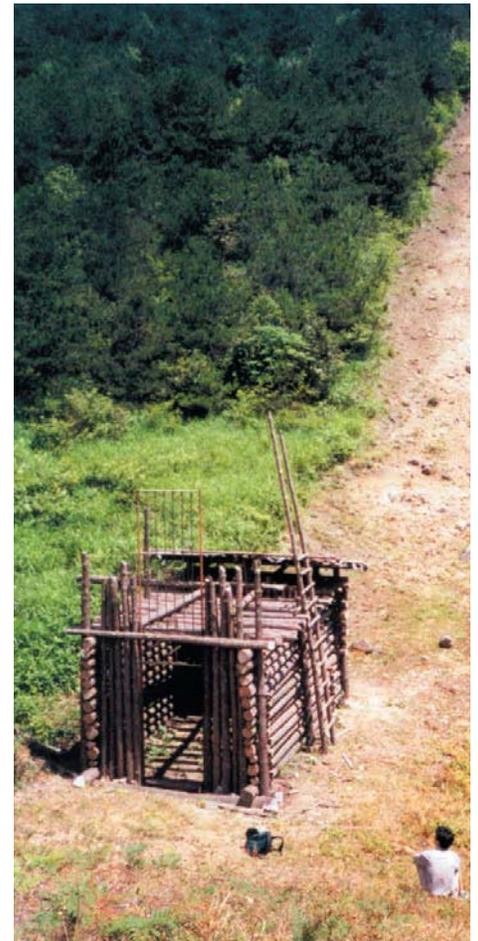
the freshly extracted shoots to drain the water before sending them to market. We found these ‘bamboo factories’ and family-managed bamboo stands to be very prevalent both inside and outside the reserve boundary. The forest seemed teeming with people during the bamboo shoot harvest season from March – May and we were told by the local forestry staff “where you find bamboo, you will find people”. Unfortunately, a high proportion of reserve habitat was bamboo.

We moved on to neighboring Le’an County in Jiangxi for a day. We got a chance to meet with the local forestry staff to discuss the reserve’s current partitions; recent tiger trace reports, and inhabiting prey. Although we observed a timber cutting station near the reserve border, this area sounded and even looked more promising than Yihuang. We hoped we would have time to revisit and do some ground surveys. A curious old woman looked on as we passed by.

Mountain village landscape (below)
Timber cutting near reserve border (bottom right)



With the short timeline, we had to move on, this time heading northeast to Zhejiang province, the northern neighbor of Fujian. We met with the forestry officials at Baishanzu National Reserve and spent 3 days conducting rapid tiger assessments in the 109 km² reserve. We observed the plantation monocultures covering the ridges, out-competing the native grasses. We also visited a live tiger trap, built by the local forestry staff. We were told two others are situated along ridgeline firebreaks within the park. Each was equipped with a trap door and live goat bait. To date, nothing has been caught.



Moving westward, we crossed back over northern Jiangxi province before reaching Hunan province, birthplace of Chairman Mao Zhedong. We stopped in the capital of Changsha before routing north to Taoyuan County to investigate some recent tiger reports. We met with local Environmental Protection Agency (EPA) officials and were shown some plaster casts made by Deng Xuejian, a professor at Hunan Normal University, last year in nearby Wuyunjie Reserve. Though large enough for tiger, the prints had a peculiar look to them, almost like someone made them with a pop can and their fingers. Our research permits did not allow us access to the EPA-controlled reserve.

Plantation monocultures out competing the native grasses (top left)
Tiger trap (top right)
Plaster casts from Wuyunjie Reserve (bottom left)

I was permitted to visit the reserve for 2 days later in the month with Deng and Xiao Huang. We observed no sign of wildlife and lots of bamboo harvest. Our host in the forest toasted me at dinner for making the journey. Ganbei, the Chinese word for Bottoms-up!



We regrouped in Changsha with the SFA officials. Dr. Tilson parted ways and returned to Beijing with Dr. Hu en route back to America. Greg, Xiao Huang and I headed north again, this time all the way to the border with northern neighbor Hubei province to visit the 667 km² Hupingshan National Park. We met with Liao Xiansheng, reserve manager, who led us through the reserve on a 3 day rapid assessment with stopovers at a stone house monitoring station and a mountain village home. We also observed the heavily settled buffer zone, providing for some of Hupingshan's 27,000 inhabitants. On the last night, I sat outside our host's home and wrote about the days' findings.

Settled buffer zone in Hupingshan (top)
Nights spent reading at monitoring station (bottom)



It was a long ride home (20 hours in the air to be exact) and Dr. Tilson and I regrouped to discuss future options for survey work.

It wasn't long before preparations were made to head back and revisit Hupingshan to deploy cameras. Finding strategic locations to place these units is not always easy and usually requires extensive time in the field, especially in the rugged mountains of South China where covering even moderate distances takes time.

I returned alone in late October and was rejoined by Xiao Huang in Beijing before boarding the train down to Changsha. We met briefly with Hunan Forestry officials in Changsha before making the 8-hour drive north into the remote mountains where Hupingshan is located. We spent the first week meeting with local informants to discuss and document tiger and prey traces, land use and livestock management. We also met with locals to simply advocate tiger conservation handing out Minnesota Zoo tiger postcards. Following our systematic survey approach, we then conducted ground-truthing surveys, led by Liao Xiansheng who has over 25 years experience in the reserve, in search for optimal locations to set-up cameras. We used the stone house monitoring station as a base camp since it was located up near the core boundary, away from the settlements. Here we spent many nights reading and writing under candlelight since the fall season has brought much shorter (and colder) days. The evening foot-washing tradition was a warm joy when nighttime temperatures would typically drop below freezing.



Dr. Tilson and Greg again joined us in mid November up at our mountain home. We shared many wonderful meals with our mountain hosts usually consisting of pork and fresh vegetables and the occasional home brew, rice or corn-fermented alcohol. Checking our cameras one last time before our departure, we were happy to get pictures of a wild pig, golden pheasant, leopard cat and tufted deer, in just one month. However, we also had a plethora of people and dog pictures vastly outnumbering the wildlife and very indicative of the human activity in Hupingshan. I said goodbye to our mountain hosts and we all trekked back down the steep trail (dropping 1200 meters in less than 5 km) to our pick-up spot along the road in the valley below.



Interviews via photos and lifescale print diagrams (top right)
 Tufted deer photo from camera trap (left)
 Last day in Hupingshan overlooking uninhabited valley (bottom left)

Throughout our survey, we also investigated tiger reports in other areas on day trips. Somehow, we always seemed to attract a crowd whether it was local villagers anxious to offer their opinions and tag along while we investigated tiger trace reports or curious children just wanting to see the 'big nose' in town, an evident rarity. We met with the informants and gave short interviews via photos and life-scale print diagrams in order to determine what was actually witnessed. Many people would refer to all cat photos (tiger, leopard, clouded leopard) as 'lahou' or Chinese word for tiger and could not say exactly which one they witnessed. This widespread realization instilled skepticism towards the numerous 'lahou' reports in southern China. Many trace measurements and casts were also much too small for tiger or too faint to see. Unfortunately, none of these reports could be verified as tiger.

Although it would be impossible to say with 100 percent certainty that every single living, breathing wild South China tiger has been extirpated, we firmly concluded following our survey that there are no viable South China tiger populations (>50 individuals) remaining anywhere in its historical range. We suggest surveys continue, however, it is imperative that we move towards establishing and implementing a scientifically sound, yet feasible recovery plan rather than focusing efforts and funds on scouring the rugged mountains for a few possible survivors. This restoration process will involve a captive breeding strategy for reintroduction and proposed release site prey and habitat rehabilitation. Obviously this will be a very complex, controversial, long-term endeavor but hope and optimism must power this mission. For the tigers, we must act today because tomorrow may be too late.

I remember my last day in Hupingshan well. A long moment overlooking one of few uninhabited valleys we surveyed, wondering what the future would bring for the South China tiger.

