TRAVEL NOTES OF A HERPETOLOGIST'S JOURNEY TO CHINA

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During August and September of 1985 I travelled to mainland China and visited several sites of possible interest to fellow BHS members. My journey was sponsored by the USA National Academy of Sciences and the Chinese Association of Science and Technology. During this period I presented lectures in five different cities, participated in two meetings, conducted field studies, and consulted with Chinese colleagues.

Beginning August 25 I attended the Sino-Japanese Herpetological Symposium in Guangzhou (formerly called Canton), a short distance northwest of Hong Kong. In attendance were 15 Japanese, 7 Americans, 1 Swiss and about 55 mainland Chinese. This meeting was sponsored jointly by the Chinese Society of Herpetologists and the Herpetological Society of Japan. The host institution was the South China Normal University. All local arrangements were handled by the energetic university president, Pan Jionghua, a well-known ichthyologist who occasionally publishes in herpetology, and the program was skilfully planned by Zhao Ermi, China's leading herpetologist. The scientific sessions consisted of four days of papers covering all aspects of amphibian and reptile biology (systematics, faunistics, venoms, ecology, behavior, physiology, development, reproduction and conservation). Most papers were presented in English, and if they were in Chinese there was sequential translation into English. A total of 68 papers was presented. Those by Chinese participants were concurrently published in *Acta Herpetologica Sinica* (volume 4, pages 81-356, 1985), except for seven papers yet to be issued. The quality of the papers presented was very good and time was set aside for substantive discussions after each one.

During the evenings there were congenial banquets — fabulous gourmet delights, one with 18 different courses — as well as technical videotape and motion picture presentations and a cruise on the Pearl River. All non-Chinese participants ate and slept in the Foreign Guest House, a very comfortable on-campus hotel overlooking a beautiful lotus-covered pond that was complete with water snakes *(Enhydris).* Two days of local tours followed, including one to the Dinghu Lake Mountain Forest Reserve and to Sevenstar Crags, in a karst region in Zhaoqing.

Following these activities on the mainland, a field trip was taken to Hainan Island, a survey tour to see the fauna and flora of this remote tropical isle that had been planned to take five days. We were the first foreign herpetologists to be permitted to visit the island in many decades. Hainan is at the southernmost part of China, located only 250km off the Vietnamese coast and having the highest mean annual temperatures of any region in China (25°C). The north end of the island is an open plain whereas the south is primarily covered in rugged mountains. The first extensive series of amphibians and reptiles to be collected in Hainan were those taken by the American Clifford H. Pope in 1922-23 and by Malcolm A. Smith, the first president of BHS, in 1922. Our group followed or crossed the Pope and Smith trails on several occasions.

We arrived by jet aircraft on September 1 in the capital city of Haikou, on the north end of the island. We travelled in two large buses but later had to transfer to smaller ones in order to fit the very narrow mountain roads in the interior. We first visited the South China Institute of Tropical Crops; it is located near Nadoa which had been Pope's island headquarters. The plantation was teeming with lizards (e.g. *Calotes, Hemidactylus, Takydromus*). Later that day we moved up into the highlands in the southwest part of the island, to the Ba Wangning Mountain Range. We stayed at a training camp for forestry personnel, located at about 1100m. It was a rather spartan place but even with the warm beer and cold showers we felt very comfortable given the

remoteness of this tropical site. At night we were successful in finding many frogs, lizards and snakes including *Bungarus.* The next day we went to higher elevations nearby, to a lush forest covered with epiphytes. There were large portions of the forest that had been reforested with pines which were being tapped for resin. It was in these southern mountain ranges that Malcolm Smith did most of his collecting.

Our large group was subdivided into smaller parties of more effective size and specialized by individual interest. Of course, the "snake group" got the best lizards, the "turtle group" the best frogs, etc. Among the most interesting taxa we found were *Eublepharis lichtenfelderi, Trimeresurus stejnegeri, Ptyas korros, Calotes,* and several kinds of anurans *(Amolops, Bufo).* After a strenuous day in the field we had a wonderful banquet at the forestry station which included whole frog and also turtle soup; the turtle was probably local *Trionyx steindachneri,* based on a foot in my bowl!

We next travelled to the southernmost tip of the island, to the "Border of the Earth" historic site west of San-ya and, after a short night's rest, drove up the east side of the island back to Haikou, thus encircling the entire island, in order to catch our return flight to Guangzhou. Unfortunately a typhoon intervened and all transportation to the mainland was cancelled. Thus stranded at a hotel in Haikou, we borrowed projectors from Hainan University and held an impromptu meeting and continued to do so for two days until our flight was eventually re-scheduled and we returned to Guangzhou on September 7.

Following the meeting and field trip I travelled alone throughout China and among other places I visited were two herpetological research centres. Fujian Teachers University is located in Fuzhou, a coastal city located midway between Shanghai and Hong Kong, and directly opposite Taiwan. I spent a week here, at a meeting hosted by Ding Han-po, the titular head of the Laboratory of Developmental Biology. Although officially emeritus, Prof. Ding remains active in supervising students and research projects. This group, consisting of ten staff plus five Masters students, also includes Zhang Zing, who, like Ding, specializes in herpetology. This group is very active in research and publication, often publishing in their university's own science journal. Among their projects there are many of herpetological interest such as mechanisms of fertilization in frogs, amphibian hybridization, karyotyping of frogs, and snake embryology. On the same campus there is a museum of natural history which includes a preserved collection of 3500 amphibians and reptiles curated by Cheng Ji. Most specimens are from the home province, Fujian.

The other herpetological research centre that I visited is in Chengdu, the capital of Sichuan Province. The Sichuan basin of central China is a rich agricultural region, surrounded on all sides by picturesque mountains. The Chengdu Institute of Biology is a division of Academia Sinica, the Chinese Academy of Sciences. I spent five days in Chengdu, hosted by Zhao Ermi and his staff at the institute. Prof. Zhao is deputy director of the institute and head of the herpetology unit. This unit consists of Jiang Yao-ming, the deputy head, and several principal staff members (Tian Wan-shu, Huang Qing-yun, and Hu Qi-xiong) plus 17 others of whom three are Masters students. The herpetology program at the institute was initiated by the late Liu Cheng-chao the herpetologist justly renowned for his book "Amphibians of Western China", published in 1950. Prof. Liu's widow, Hu Shuqin, is herself a well-known specialist on frogs but is now retired from the institute. Together, they published the standard work on the frogs and toads of China, issued in 1961, a book now being revised for publication by Prof. Zhao.

Herpetology is the only area of basic research at the institute in Chengdu and, though it is one of the smallest units, its research interests are very broad, encompassing systematics, distribution, and faunistics of the entire country. Most staff work on

specific taxonomic groups, especially frogs, salamandrids, and poisonous snakes, using classical as well as the most modern techniques such as karyology, electrophoresis, and venom electrophoretograms. In addition to well-equipped laboratories, the unit curates a collection of 80,000 amphibians and reptiles collected throughout China. The quality of herpetological research being conducted at the institute is outstanding and, given the size of the staff, the Chengdu group can justly be called the leading centre of its kind in China and one of the largest anywhere in the world. Adding to the leadership of the Chengdu group is the fact that the quarterly journal *Acta Herpetologica Sinica* is edited and published there. This is a journal of high standard which has provided a crucial medium forum for publication by herpetologists throughout China and, from the standpoint of the world scientific community, it is the single most important product of the Chinese herpetological community.

In addition to my time in Chengdu, I spent three days on a delightful field trip to Mt. Emei, about 150km southwest of the capital city. Travel is still slow and difficult in this part of China, so we did not reach Emei until late on the first day and we slept in cabins at the base of the mountain. The next day we travelled a rugged road to an elevation of about 1300m where, in still, clear pools, we collected the hynobiid salamander *Batrachuperus longdongensis,* taking a clue from the local children who catch them on fishing line baited with pieces of earthworm. Apparently this species is not hunted for food, but does have reputed medicinal value in relieving constipation! Professor Zhao and I were accompanied on this trip by one of the Chengdu staff, Wu Guan-fu, a most accomplished field collector who first began working for Professor Liu in 1953. Here we also collected the anurans *Amolops mantzorum, Bufo wrighti* and some other frogs. Elsewhere, at a site somewhat lower on the slopes of Mt. Emei, Mr. Wu showed us a pool in which he had collected *Andrias davidianus,* the famous giant salamander. Surprisingly, the site was not the shallow stream filled with flat rocks that I had expected but a very deep, clear pool with the most beautiful turquoise blue water rushing swiftly off the side of the mountain. Reportedly, giant salamanders are being bred and raised for commercial purposes in Hubei Province; in 1984 alone, 2200kg of salamanders were produced in one farm consisting of only eight fish ponds located alongside a natural stream.

The impression one gets, even from such a brief visit, is that herpetological activity in mainland China is very great, both in terms of quality and quantity. The Guangzhou symposium was the first international herpetological meeting ever held in China. Not only was it conducted in a highly professional manner, but the scope of the papers presented by the Chinese participants makes it clear that the study of amphibians and reptiles is progressing very rapidly in that country.

Ed. note: Prof. Adler is co-founder of the Society for the Study of Amphibians and Reptiles in USA and visited China on a special study fellowship. As Secretary-General of the first World Congress on Herpetology (WCH), he also met with leading herpetologists at the Sino-Japanese Herpetological Symposium at Guangzhou (Canton). The meeting followed-on from one with other WCH Committee members at the 1985 European Herpetological Meeting in Prague, Czechoslavakia, during the week before. Prof. Zhao Ermi, the leading herpetologist in China, was entertained by Prof. Adler the year before at the joint SSAR/Herpetologists' League/American Society of Ichthyologists and Herpetologists 1984 meeting in Norman, Oklahoma, USA, where he gave a special invited lecture on the Chinese herpetofauna. Prof. Adler has been a BHS member since 1956.