

Finless porpoises in Wuhan, China

by Milla Fok and Tracy Pang

In the internship programme organized by the Ocean Park Conservation Foundation Hong Kong (OPCFHK) and the Swire Institute of Marine Science (SWIMS), we worked on a conservation project on two endemic cetaceans, the Yangtze Finless Porpoise (*Neophocaena phocaenoides asiaorientalis*) (Fig. 1) and the Baiji (*Lipotes vexillifer*) (Fig. 2), in the Yangtze River and Poyang Lake with the Institute of Hydrobiology (IHB) of The Chinese Academy of Sciences in China.

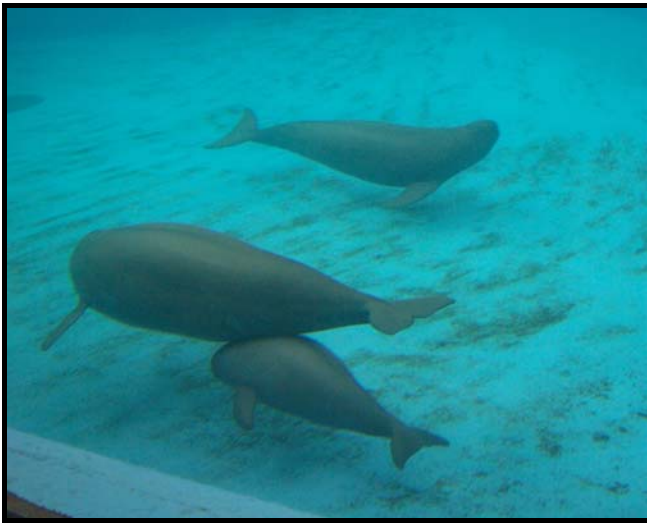


Fig. 1. The Yangtze Finless Porpoise (*Neophocaena phocaenoides asiaorientalis*)



Fig. 2. The Baiji (*Lipotes vexillifer*)

The Yangtze Finless Porpoise and the Baiji are freshwater cetaceans which inhabit the main stream of the middle and lower reaches of Yangtze River. They used to be widely distributed in Dongting and Poyang Lakes. Unfortunately,

with the rapid growth in fisheries boat, traffic and the dredging industry, their populations decreased rapidly. Recent surveys could not locate any Baiji, and it was estimated that only about two to three hundred porpoises still inhabit Poyang Lake.

To evaluate the impacts of human activities on the cetacean's survival, visual and acoustic studies on their populations and daily movements are crucial for effective conservation measures in the future.

We took part in a five-day vessel-based daytime survey (17 to 21 November 2005) in the outlet of Poyang Lake and the adjacent area connecting the Yangtze River (Fig. 3 & 4). During zig-zag line transects and fixed-point surveys, the number and size of each group of porpoises, their distance from our boats and time of the day were recorded. In total, over 200 porpoises, but not one Baiji, were sighted. Acoustic data-loggers were also lowered into the river to record the ultrasonic signals emitted by porpoises. By comparing visual observations and acoustic data, a correlation is hopefully to be developed for future estimation of the numbers of cetaceans during night-time acoustic surveys



Fig. 3. Survey area encircled



Fig. 4. Survey boat

The major reason for the rapid reduction in the cetacean populations is thought to be habitat destruction. Before our trip, we had no idea about how much the sand-dredging activities were deteriorating the porpoise's habitat. Hundreds of huge barges and dredgers were seen during our short stay in Poyang Lake (Fig. 5, 6 & 7). Dredging activities have been so prevalent in Poyang Lake in recent years with the increasing demand for sand from coastal developing regions like Shanghai. In addition to the serious pollution problem, propellers of the barges do, occasionally, hurt or even kill the cetaceans by cutting into their bodies.



Fig. 5. A dredger



Fig. 6. Barges marching towards Poyang Lake



Fig. 7. Two similar barges with (left) and without (right) a full load of sands.

Recent studies indicated that there may be no interaction between the populations in the Lake and the River. This may be attributable to the infrastructure and other construction work at the mouth of the Poyang Lake (Fig. 8), making porpoise populations from either side of the bridges unwilling to pass them, especially during dry season when the river is narrower. This isolation effect could intensify the hardships experienced by the already depressed populations.



Fig. 8 Poyang Lake bridge and another bridge under construction nearby

We also visited the Baiji Dophinarium, the headquarters for captive breeding and research on the Baiji and Finless Porpoise. There are 5 porpoises, including one calf, living in the captive pools (Fig. 9). The calf is about a meter long. Its birth in July overwhelmed the world and is a breakthrough toward successful captive breeding techniques of Yangtze Finless Porpoise. With growing concern over declining populations of Yangtze Finless Porpoise in the Yangtze River, Poyang Lake and Dongting Lake, release of captive individuals may, hopefully, be able to save the declining population from extinction.



Fig. 9. Captive freshwater finless porpoise in Baiji Dophinarium

The Wuhan Baiji Conservation Foundation was launched in 1996, aimed at sourcing financial support and raising awareness amongst the general public towards the conservation of the mammals. Two national Baiji reserves, one semi-natural, protection stations and provincial reserves

have been set up to house Baiji and Finless Porpoise and provide a disturbance-free habitat for them to reproduce.

We would like to express our gratitude to the OPCFHK and SWIMS for their support of such a meaningful programme. Special thanks to Dr. Kexiong Wang and Mr. Zhuo Wei from IHB for their patience and guidance during our internship; their passion in conserving these lovely creatures has really impressed us.

The bird fauna of Lung Fu Shan and the University of Hong Kong

by Hung Tun Hei, Sung Yik Hei, Fu Wing Kan, Yuen Pui Yu
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Lung Fu Shan Country Park is the latest designated Country Park in Hong Kong and is situated right behind our university. Lung Fu Shan is almost entirely covered by secondary forest and exotic tree plantation (AFCD, 2006). Whilst many fellow students visited this area while bird watching for the course 'Ecology of Hong Kong' last year, we are some of the ENS students who are particularly keen on bird watching and have returned to Lung Fu Shan regularly in our spare time. In the past year, we found that Lung Fu Shan is indeed a bird paradise. Over the last winter, we recorded rare and uncommon species such as Mugimaki Flycatcher (*Ficedula mugimaki*), Black-winged Cuckoo-shrike (*Coracina metaschistos*), Asian Stubtail Warbler (*Urosphena squameiceps*) and Streak-breasted Scimitar Babbler (*Pomatorhinus ruficollis*). On 14 February 2006, Allen To discovered the rare Brown-headed Thrush (*Turdus chrysolaus*) along the little path right next to the University Drive. Since then, this little path and the surrounding area have become our favourite birding sites with more than 7 thrush species seen. On 23 March 2006, Fu and Sung recorded a rare Ferruginous Flycatcher (*Muscicapa ferruginea*), the first record at Lung Fu Shan (Fig. 1). Furthermore, Hung, Fu and Chloe Ng saw a Grey-crowned Warbler (*Seicercus tephrocaphalus*) at Lung Fu Shan on 31 March 2006. If this record is accepted by the Hong Kong Bird Watching Society, it will be the second record of this species in Hong Kong.

In addition to the bird records we have made since last year, we have reviewed the literature and compiled a bird list of Lung Fu Shan and HKU (Table 1). A total of 90 species have been recorded so far. These include some locally rare and uncommon species such as the Blacked-winged Cuckoo-shrike, Eurasian Hooby, Grey Treepie, Plumbeous Redstart, Ferruginous Flycatcher and Brown-headed Thrush (Fig. 2). According to AFCD (2006) there are more than 150 bird species in Lung Fu Shan, although there was no detailed species list in the AFCD report. Useful references are Lock (2000) and So (1996, 2000).



Fig.1. Ferruginous Flycatcher (Photo: Billy Hau)

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Fig.2. Brown-headed Thrush (Photo: Allen To)