

珍愛黑面琵鷺 從解說教育開始

Protection Begins with Education



台江國家公園內的黑面琵鷺 / 黃光瀛攝
Black-faced Spoonbill (*Platalea minor*) in Taijiang National Park. /by Kuang-ying Huang



自1998年開始投入黑面琵鷺的生態研究，迄今已有十餘年的時間。從初期與台南縣七股地區民間朋友成立台灣第一個以黑面琵鷺為名的保育團體（如今已培訓了數百位以上的學生及社區保育志工），到現今台江國家公園的促進成立，這段與牠們從陌生，到相惜相守的歷程走來，著實有許多百感交集的感動與收穫。

Over a decade has passed since I began to get involved in the research of the ecology of Black-faced Spoonbills in 1998. From setting up the first conservation group named after the Spoonbill with some friends in Cigu, Tainan County to promoting the establishment of Taijiang National Park, I feel deeply grateful for the friendship with my colleagues and a fruitful career along the years.

直至2006年前，筆者都待在台南，與當地漁民以及民間保育團體一起執行黑面琵鷺的保育與生態調查。曾經在水面上發現一隻載浮載沉的黑面琵鷺，在漁民朋友的幫忙下，將這隻黑面琵鷺救出讓牠免於溺死的危機，再趕緊依據腳環，通報與此黑面琵鷺失去訊息而心焦如焚的學者，免於那位學者被扣上照護保育動物疏失的誤會。

黑面琵鷺的珍貴，就在於牠是世界上瀕臨絕種的鳥類。在2010年1月的普查中，全世界的紀錄(亦即全亞洲的紀錄)，總族群有2,341隻的數量，而台灣的紀錄為1,280隻，從歷年紀錄看來(1990-2010)，台灣佔有世界族群比例在50-60%之間，可見台灣為黑面琵鷺全世界最重要的渡冬棲地。

既然，台灣是如此舉足輕重的東道主，如何傳遞黑面琵鷺的生態保育教育，自然是非常重要的事。

由於黑面琵鷺在台南市七股鄉的活動範圍，超過22,000公頃，裡面的生態環境包含天候、沙洲、水文、潟湖、溼地、紅樹林、濱海植物、螃蟹、魚類、水鳥、無脊椎生物與浮游動物等，因此，要想成為一位全面性的黑面琵鷺生態解說員，非能簡易達成，必須累積多年的經驗與相關知識。特別當解說的對象是國中、小學生時，有些細節是解說員需要去了解注意的。

在安全性上，七股有一些環境潛在著危機，如在沙洲附近的淺灘，有活潑好動的角眼沙蟹、小腿亂奔的東方環頸鴉、螞蟻雄兵的和尚蟹以及漂亮夢幻的貝殼，常常吸引著大人小孩，不知不覺離岸愈來愈遠，但這些淺灘有可能是孤立的，一旦漲潮，人就很有可能發生被沖走的危險。有機會坐竹筏時，救生衣一定穿好，學生平均坐在船身中，不要隨便起身、手足頭不要跨出船外，待船穩靠岸木板架好，才能起身移動。

降低音量，減少對黑面琵鷺的干擾。其實不只是針對黑面琵鷺，也是一種環境倫理觀念的延伸，只要到了自然環境的野地，安靜不干擾其他生物，是尊重的態度表現。穿著上也儘量配合當地的環境顏色，避免反光、太鮮豔的衣服而給水鳥帶來驚擾。

Up until 2006 I had been staying in Tainan the whole time, conducting ecological surveys and conservation works of Black-faced Spoonbills with local fishermen and several NGOs. We once rescued a spoonbill from drowning and informed the researcher who had attached a ring to the bird's leg of the poor missing fowl, saving the worried scholar from being blamed for his negligence with protected animals.

Black-faced Spoonbills are precious because they are an endangered bird species. According to the 2010 avian census, the worldwide total population of the Spoonbills is only 2,341, among which 1,280 appear in Taiwan. From 1990 to 2010, some 50 to 60% of the world's Black-faced Spoonbills inhabit in Taiwan, indicating that the island has been the most important destination of the winter migration of the Bird.

Such importance has, therefore, made the education on the ecological conservation of the Spoonbills a crucial task for Taiwan.

It's, however, not an easy job to provide well-rounded interpretation and education on the ecology of the Spoonbills, which live in a wide range of over 22,000 hectares in Cigu. It takes years to train an experienced interpreter who is knowledgeable about everything in the area including the climate, sandbanks, hydrology, lagoons, wetlands, mangroves, coastal plants, crabs, fishes, waterfowls, invertebrates, zooplankton, etc., things that must be explained with care and accuracy to younger audience, in particular.

Also important is the education about the safety of visitors to Cigu, where many peppy *Ocyropsis ceratophthalma*, Kentish Plovers (*Charadrius alexandrinus*), Soldier Crabs and seashells would attract adults and children to some individual shallow sand banks farther away from the shore, and put them in danger of being swept away by the tidal waves. Besides, when sitting in a raft, one must put on a life jacket, keep seated in balance, and follow every safety instruction to avoid danger.

Another key to a better protection to the Spoonbills is keeping quiet, which may help reduce the disturbance to the Bird. This is also part of the environmental ethics that holds true in every situation in Nature, where humans should show respect to other life forms by keeping noise down and wearing less flashy clothes whose colors go with the environment.

動作幅度與速度也都不要過大、過快，由於快速的動作會帶來較大的聲響，驚擾自然環境的生物，小朋友快速跑步也會帶來危險，這些都是要避免。想想至國外遊覽自然保護區的經驗，就可發現外國人在行進當中，所有的動作都十分安靜輕巧，只要有做好行前教育，這點相信台灣也能做得到。過程中則別忘了進行有獎問答的方式，提高孩子的學習興趣。之後可再將成果報告分享給所有參與人員，或公布在網頁上，與更多不同領域的解說工作人員討論。

在執行黑面琵鷺保育的多年研究歷程裡，筆者得到了不少當地朋友與漁民的熱情協助。其實，物種保育與當地居民生計間的衝突，並沒有想像中那麼大，最重要的是管理單位在應對上，若能給予適當的尊重，相信當地的相關專業人士，也就會拿出“在地人”最十足的熟悉與熱情，盡力配合。

在台灣，要作單一物種的長久研究並不容易，除了要有一定的熱忱、政府單位的管理與重視、經費來源的支持等外援，還要有最重要的，就是專業人員的培養與訓練，從環境教育的立根中著手，才能真正達到對環境生物的尊重與愛護。🌿

Visitors should also be educated to restrain the intensity and speed of their movements when in a natural reserve. Faster and more intense movements, such as kids running around, would lead to louder noise and more severe disturbance to the wildlife. In other countries, it is common to find visitors keeping quiet and nimble in the wild. That's something we'll be able to do too in Taiwan through education, which may take various forms such as prize games, reports, presentations, Internet postings and discussions.

I had been received great assistance from quite many local residents and fishermen during the years of my conservation work of the Spoonbills. Species conservation, in fact, is not necessarily in conflict with economic development or people's livelihood. Due respect and trust from the administrative agencies would earn locals' support and goodwill in return in promoting ecological conservation.

In Taiwan, long-term research on one single species is such a difficult undertaking that it requires enthusiasm from the researchers, support and funding from the governments, and most of all, education and training of conservation professionals. Only by solid environmental education will all life forms be truly respected and cherished. 🌿

簡介 Profile

劉良力 Liang-li Liu

世界上第一位以黑面琵鷺生態研究為博士論文的保育工作及研究者，與朋友成立的第一個以黑面琵鷺為名的保育團體，已培訓了數百位以上的學生及社區保育志工。目前在開南大學任教於觀光學系，亦具有25年的山岳型國家公園志工經歷。近幾年來積極推動野生動物環境教育、生態旅遊相關產業發展。

Dr. Liu is the first conservationist and researcher in the world that chose Black-faced Spoonbill (*Platalea minor*) as the topic of his Ph.D. dissertation. He and his friends formed the first conservation group that used Black-faced Spoonbill as part of its name, and the group has trained hundreds of students and community conservation volunteers. Liu is currently teaching in the Department of Tourism and Hospitality, Kainan University, and has been a volunteer in Taiwan's high-mountain national parks for 25 years. He has been enthusiastically promoting the environmental education of wild animals and the development of ecotourism in recent years.



劉良力