



特別企畫
Special Report

從世界看金門 保育生態棲地的力行者

Kinmen —
the Go-Getter for Habitat Conservation

金門國家公園是我國第一座以維護戰役史蹟、文化資產為主，並兼具保育自然資源的國家公園。從1995年成立以來，金管處的重點工作相較於台灣其他國家公園管理處而言，涵括的領域範圍較為廣泛，不僅要保育地形地質、動物與植物資源，還必須針對金門特有的人文與戰役史蹟進行保存維護。

今年金管處的重要保育工作成果，在自然資源方面，包括執行「湖沼生態系統之調查與評估」、「金門佛法僧目鳥類調查(三)」、「金門烈嶼海岸地質地形調查」、「金門鳥類對農業產業之影響及因應對策之研究」、「金門國家公園物種監測方法及調查技術之評析與建議」、「金門環頸雉暨相關棲息生態環境調查」的6項委託研究計畫；在人文史蹟的維護上，則進行「金門傳統建築的裝飾藝術調查研究」、「金門傳統祠廟建築之比較研究」。

Kinmen National Park is the first national parks in Taiwan that emphasizing on the war history, cultural heritage as well as natural resources. Since its establishment in 1995, its major tasks have covered more fields than other parks, including the conservation of landform, geology, animal and plant resources plus preservation of cultural and historic sites of war.

The major achievements of conservation in KMNP include 6 commissioned natural resource researches and evaluation on "Lake Ecosystems", "Birds of Coraciiformes in Kinmen", "Geological Landforms of Coastal Liewu in Kinmen", the "Influence of Birds over Agriculture in Kinmen and the Corresponding Strategy" and the "Ecological Environment of the Habitat of *Phasianus colchicus*", in addition to 2 cultural researches on "Decoration Art of Traditional Architecture" and "Comparison among Traditional Shrine Architecture" of Kinmen.

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1 瓊林壁上的風獅爺 (金管處提供, 安世中攝)
The Wind Lion God of Cyonglin (by Shi-jhong An, provided by KMNP)

2 栗喉蜂虎在金門築巢繁衍 (金管處提供, 廖東坤攝)
Merops philippinus make nets in Kinmen (provided by KMNP)





調查多樣性生態棲地據點

金門列島與台灣本島皆位處亞熱帶地區，但因金門的區位靠近中國大陸，生態系有別於台灣，其候鳥與植生的種類皆與台灣大不相同，加上金門當地有許多土地為私有土地，政府無法全面性強制進行保育工作。為此，金管處必須捨棄區域性大型生態棲地的保育方式，改為採取日本行之有年、成效卓越的「生態據點」保育模式，對湖沼、埤塘等零星存在的多樣性生態棲地，建立生態據點以進行保育工作。

今年金管處的「湖沼生態系統之調查與評估」委託案，即是因應維護多樣性生態棲地的需求而規劃執行。金管處自成立以來，首度針對金門地區非軍事危險性區域的湖沼、埤塘等據點，進行空間基礎資料建立，並調查地形、水系等重要生態環境因子，評估出具保育價值及可行性的湖沼及埤塘區域；之後再針對這些保育據點，提出保育的可能性評估與具體保育方法。再者，還可將部分據點和生態旅遊結合成為生態教育空間，可收多方成效。

Survey on Biodiversity and Biotope Bases

Though located in the same subtropical area, the geographical nearness to Chinese mainland makes the difference in ecosystems, migratory birds and vegetation species between the islands of Kinmen and the island of Taiwan. A large portion of land of Kinmen is private, and the government cannot enforce conservation policy on it. Hence Kinmen National Park Headquarters follows the successful Japanese mode of “biotope bases” by establishing separate habitats in regions of lakes and ponds.

This year's commissioned case of research “Survey and Evaluation on Lake Ecosystems” is carried out on the demand of protecting habitats of biodiversity. It is the first basic database of lakes and ponds located in non-military zones of Kinmen. Surveys on the eco-environmental factors of landforms and water systems are made, followed by evaluation of lakes and ponds with conservational value and feasibility. Conservational possibility and concrete measures are suggested then, while some bases can be combined with ecotourism into a space for eco-education.

水獺生態旅遊

生態旅遊是今年國家公園整體推廣環境教育的重點項目，金管處選定與金門湖沼生態系統息息相關、且屬瀕臨絕種保育類動物的水獺為其重點推廣，規劃以水獺主題的生態旅遊活動，希望國人共同關心水獺的棲息環境，並一同推動生態保育。

金管處規劃的水獺生態旅遊活動中，首先推出的是「搭乘觀光公車認識水獺故鄉」的生態之旅，帶領遊客搭乘金門觀光公車B線（古寧頭戰場線），行經雙鯉濕地水獺生活區域，向遊客宣導水獺生態與保育現況；而雙鯉濕地自然中心原有的解說導覽及自行車行程，也同時加入水獺棲地介紹。值得一提的是，金管處在籌劃水獺生態旅遊活動時，跳脫以往規劃模式，以創意發想擬定出「尋找水獺之家民宿」、「水獺之歌創作」等一系列活動，希望從寓教於樂之中，引導遊客體認環境教育與生態保育的重要性。

Otter Ecotourism

With ecotourism the promotional emphasis of this year's overall environmental education of all national parks, KMNP chooses *Lutra lutra* (Otter) as its focus, which is closely related with its lake ecosystem and an endangered protected animal. Through ecotourism with otters as the major theme, it is expected that the public would concern about the environment of otters' habitat and promote eco-conservation together.

The first of the otter ecotourism programs is the "bus ride to the home of otters". Tourists may join the Route B (Guningtou Line) bus tour to Shuangli Wetlands Nature Center, while the existing guided tour and bicycle tour in the Center are included in the otter habitat introduction. The most noteworthy part of the program is that visitors can realize the significance of environmental education and eco-conservation via a series of fun and creative activities.

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1 雙鯉湖是水獺主要棲地之一（金管處提供，周民雄攝）

The Shuangli Lake is one of the otter habitats (by Ming-hsiung Chou, provided by KMNP)

2 金門是候鳥重要的過境及度冬地區（金管處提供）

Kinmen is an important stopover site for migrating birds (provided by KMNP)

3 雙鯉濕地自然中心（金管處提供，李筱梅攝）

Shuangli Wetlands Nature Center (by Hsiao-mei Lee, provided by KMNP)





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1 水獺之家民宿 (金管處提供, 陳淑儀攝)
Otter Houses in Kinmen
(by Shu-yi Chen, provided by KMNP)

2 金門觀光公車搭配自行車遊古寧頭聚落 (金管處提供)
Tourists may join the Kinmen bus ride and bicycle tour to visit Guningtou village (provided by KMNP)

金門國家公園近年推展多棟特色民宿，而水獺之家民宿即與此活動結合，並在其中挑出最佳代言民宿成為水獺之家，且陸續推出水獺加盟店，讓遊客前往民宿住宿消費時，皆可對水獺有更進一步的認識。而有感於水獺的稀有與珍貴，由金管處解說課陳秀竹所創作的水獺之歌，更是加強遊客對水獺的認識與印象。

為了鼓勵金門民眾參與水獺保育，金管處招募地方長老、民眾與小朋友共同參加水獺解說的培訓，成為第一線水獺生態旅遊服務人員，到自然中心進行水獺生態旅遊介紹。金管處也印製了水獺生態旅遊摺頁，標出水獺基本資料及棲地位置圖、水獺生態旅遊路線，以及水獺之家、水獺加盟店民宿等資料，讓遊客能更容易親身了解水獺的生態。

Many characteristic B&Bs participate in this program and become franchised “Otter Houses”. Visitors will have further understanding when staying at these B&Bs. The Otter Song written by Hsiu-chu Chen of Interpretation and Education Section of KMNP will impress the visitors even more with the knowledge about this rare species.

To encourage public participation, the park headquarters invites the young and the old to the training of otter ecotourism guides at the Nature Center. Pamphlets with otter ecotourism introduction are given out to inform visitors about the basics of otters, map of their habitats, ecotourism routes, Otter Houses and franchised B&Bs.



水獺 *Lutra lutra*

科別 貂科
學名 *Lutra lutra*
英文俗名 Eurasian Otter

Family Name Mustelidae
Popular Name Eurasian Otter



台灣本島曾出現水獺的蹤跡，然因環境過度開發，導致目前只剩下金門地區仍見水獺族群。金門的水獺屬歐亞水獺，頭及軀幹長57~70公分，尾長35~40公分，頭部短而寬，頸部並不明顯，身體圓長而四肢短，四肢均有5趾，趾間有蹼膜；背部體色呈栗褐色，嘴唇、喉嚨和腹部中央為淡灰色，鼻頭裸露部分則顏色較深。

水獺習慣在夜間活動，擅長游泳且可在陸地行走，以活魚為主食，喜歡在水質佳、少干擾、食物豐富的水陸交界地帶出沒，並在水邊遮蔽性良好的地方築巢，如洞穴、樹叢、涵管等，有時也會自行挖洞居住。

Otters used to be found on the island of Taiwan but disappeared due to over development, and now they can be seen only in Kinmen. Kinmen otters are related to Eurasian otters, with the head and body 57 to 70 cm in length and a tail 35 to 40 cm in length. Its head is short and broad with an indistinctive neck on a long, round torso. 5 webbed toes grow on each of its 4 short limbs. Its back is chestnut brown, the lips, throat and central abdomen are light grey, and the naked part of its nose is darker.

Otters are nocturnal creatures, good swimmers and able to move on land. They feed on live fish, move around in borders between water and land with abundant food and nice water but little disturbance. They make nests at sheltered places by the water, e.g. a cave in the tree, bushes, pipes and sometimes they'd dig a hole to live in.

栗喉蜂虎 *Merops philippinus*

科別 蜂虎科
學名 *Merops philippinus*
英文俗名 Blue-tailed Bee-eater

Family Name Meropidae
Popular Name Blue-tailed Bee-eater



屬於熱帶鳥類、被譽為「金門夏日精靈」的栗喉蜂虎，是金門有限的夏候鳥種類中，數量最多且會群聚生殖的鳥類。每年3、4月由中國大陸雲南、廣東、廣西及南洋一帶飛抵金門度夏、繁衍，直到10月初才飛返。因為飛行路徑未經過台灣，所以台灣本島未能發現牠的蹤影。

栗喉蜂虎的身長為30公分，有著栗紅色的喉部、黑色過眼線、藍綠色為主的羽毛，其尾巴中央更有特長的中央尾羽，外型豔麗突出。牠們的空中覓食技巧高超，在金門築巢繁衍時，會選擇在沒有植被的山谷沖蝕溝、海岸陡峭的沙壁、沙質的農田田埂或散兵坑，以及具有陡峭面的大型沙堆。

A tropical species, *Merops philippinus* are the most populated of the few summer migratory birds in Kinmen. They are nicknamed "Kinmen's summer elf", and they always proliferate in groups. These *Merops philippinus* fly from Yunnan, Guangdong, Guangxi every March or April to spend the summer and proliferate in Kinmen until October. Taiwan is not on their route of flight and has not been visited by them.

Merops philippinus have the body 30cm, skillful in finding preys in the air. They have attractive looks with chestnut red throat, black eye lines, blue-green plume and a long tail feather in the center of the tail. When they make nests, they'd choose valley ditches without vegetation, steep sand walls on the coast, sandy aisles in the paddy field and large sand dunes with a precipitous wall.