

雪山坑溪野生動物重要棲息環境生物多樣性與 指標生物監測模式：哺乳類與鳥類

Biodiversity and Indicator Species Monitoring of the
Syu-shan-keng Wildlife Important Habitat: Mammals and Birds



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摘要

於 2013~2014 年，使用沿線觀察、捕捉、自動照相機、蝙蝠偵測器，以及自動錄音機 5 種調查方式，於雪山坑溪野生動物重要棲息環境以及大安溪事業區 107 林班進行調查，哺乳類總共記錄 7 目 13 科 35 種，包含 15 種特有種與 13 種特有亞種，保育類有瀕臨絕種保育類台灣黑熊 (*Ursus thibetanus formosanus*)、珍貴稀有保育類台灣野山羊 (*Capricornis swinhoei*)、食蟹獾 (*Herpestes urva*)、穿山甲 (*Manis pentadactyla pentadactyla*)，其他應予保育類白鼻心 (*Paguma larvata taivana*)、山羌 (*Muntiacus reevesi micrurus*)、台灣獼猴 (*Macaca cyclopis*)。鳥類總共記錄 73 種，包含瀕臨絕種保育類熊鷹 (*Nisaetus nipalensis*)、林鵰 (*Ictinaetus malayensis*) 與遊隼 (*Falco peregrinus*)、珍貴稀有保育鳥類 10 種以及其他應予保育鳥類 8 種。彙整歷年調查，雪山坑溪野生動物重要棲息環境應有哺乳類 41 種，鳥類 100 種，若納入大安溪事業區 107 林班調查資料，哺乳類有 45 種，鳥類 104 種，物種相當豐富，其中食蟲性蝙蝠有 21 種，保育類總共有瀕臨絕種保育類 1 種哺乳類與 3 種鳥類，珍貴稀有保育類 3 種哺乳類與 18 種鳥類，其他應予保育類 3 種哺乳類與 9 種鳥類，共計 37 種保育類哺乳類與鳥類。

長期監測模式建議使用自動照相機、錄音調查與蝙蝠偵測器作為調查工具，於監測樣點與路線每次進行一年之監測資料收集，其中蝙蝠偵測器建議於 540 林道末端以及麻必浩溪進行四季之調查。540 林道為最適合執行之長期監測路線，可經由監測站於 1 日之內到達多數監測樣點，並可同步達到巡守之功能。

根據調查結果提出雪山坑溪野生動物重要棲息環境變更為野生動物保護區之評估與比較，並建議將大安溪事業區 107 林班納入保護範圍內，及進一步調查周遭林班生物資源調查，加強調查瀕臨絕種保育類石虎 (*Prionailurus bengalensis chinensis*) 族群於此區之族群與保護區利用狀況，以利評估周遭其他林班是否納入保護範圍內。

關鍵字：雪山坑溪野生動物重要棲息環境、自動照相機、錄音調查、哺乳類、鳥類、野生動物保護區

Abstract

Mammal and bird surveys were conducted in the Syu-shan-keng Wildlife Important Habitat and the 107 compartment of the Da-an-si Working Circle using observation, small mammal and bat trapping, camera traps, bat detectors, and long-duration acoustic recording from 2013 to 2014. Total 35 mammal species belong to 7 orders and 13 families 35 were documented, including 15 endemic species and 13 endemic subspecies. Of these 35 mammal species, protected mammals in the critically endangered category includes the Formosan black bear (*Ursus thibetanus formosanus*), while the valuable and rare category includes the Formosan serow (*Capricornis swinhoei*), the crab-eating mongoose (*Herpestes urva*), and the Chinese pangolin (*Manis pentadactyla pentadactyla*); and the other protected category includes the gem-faced pam civet (*Paguma larvata taivana*), the Reeves's muntjac (*Muntiacus reevesi micrurus*), and the Formosan macaque (*Macaca cyclopis*). 73 bird species were found, including the Hodgson hawk eagle (*Nisaetus nipalensis*), the Indian black eagle (*Ictinaetus malayensis*), and the peregrine falcon (*Falco peregrinus*) in the critically endangered category. Compiling this survey with records from literatures, the Syu-shan-keng Wildlife Important Habitat has at least 41 mammal species and 104 bird species. If the adjacent 107 compartment of the Da-an-si Working Circle are included, this area should have at least 45 mammals, which consist of 21 insectivorous bats, and 104 birds. Protected species include 1 mammal and 3 birds in the critically endangered category, 3 mammals and 18 birds in the valuable and rare category, and 3 mammals and 9 birds in the other protected category contributing to 37 protected species in total.

The 540 logging road is the best access for long term monitoring of this area.

Most monitoring sites could be reached within 1 day from the monitor station at the end of the 540 logging road. Camera trapping, unattended acoustic recording, and bat detectors are suggested methods for long term monitoring and should be conducted for 1 year during each monitor survey.

Based on research findings, suggestions for upgrading the Syu-shan-keng Wildlife Important Habitat to wildlife reserve was proposed and it is suggested to include the adjacent 107 compartment of the Da-an-si Working Circle. Further surveys are needed for adjacent compartments to assess whether these compartments have the endangered leopard cat (*Prionailurus bengalensis chinensis*) population and should be included in this protected area system.

Keywords: Syu-shan-keng Wildlife Important Habitat, camera traps, unattended acoustic recording, mammal, bird, wildlife reserve