

保育類野生動物之疾病監測及死因分析

疾病診斷組

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摘要

2020 至 2022 年蒐集保育類野生動物共 181 隻，包括 88 隻臺灣穿山甲 (*Manis pentadactyla pentadactyla*)、80 隻石虎 (*Prionailurus bengalensis chinensis*)、9 隻歐亞水獺 (*Lutra lutra chinensis*) 及 4 隻臺灣黑熊 (*Ursus thibetanus formosanus*)，樣本來自救援後醫療罔效與路殺個體，經屍體解剖，以組織病理學及分子生物學進行死因分析及疾病檢測。病毒性疾病檢測包括食肉動物小病毒 (carnivore protoparvovirus 1; CPPV-1)、犬瘟熱病毒 (canine distemper virus) 及冠狀病毒 (coronavirus)，僅於 9 隻臺灣穿山甲 (9/88) 及 27 隻石虎 (27/80) 檢測出 CPPV-1，其餘病毒檢測均陰性。臺灣穿山甲的病理病變以肺炎佔最多，約 87.0% (67/77)。石虎及歐亞水獺的死因分析，以路殺及被動物攻擊死亡佔最多，在石虎為 72.5% (58/80) 及在歐亞水獺為 88.9% (8/9)。臺灣黑熊死亡案件分析，75% (3/4) 死因與套索陷阱 (俗稱山豬吊) 及非法槍獵有關。本所持續進行野生動物疾病監測不僅可作為新興人畜共通傳染病之前哨，亦可為野生動物的保育醫學貢獻一份心力。

Disease surveillance and cause-of-death analysis in protected wildlife

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Abstract

The present study provides an overview on the cause of death and potential diseases occurring in 181 free-ranging protected wildlife, submitted for necropsy during 2020 to 2022. The animals, included 88 Formosan pangolins (*Manis pentadactyla pentadactyla*), 80 leopard cats (*Prionailurus bengalensis chinensis*), 9 Eurasian otters (*Lutra lutra chinensis*), and 4 Formosan black bears (*Ursus thibetanus formosanus*), died after intensive treatment or by roadkill. The carcasses were necropsied and sampled for histopathology and molecular analysis. In the results of molecular analysis for viral diseases, carnivore protoparvovirus 1 was detected in 9 Formosan pangolins (9/88) and 27 leopard cats (27/80). All the collected animals were tested negative for coronavirus and canine distemper virus. In histopathology analysis, pneumonia (87%; 67/77) was the most common finding in pangolins. The main cause of death was associated with motor vehicle accidents and animal attack, in leopard cats accounting for 72.5% (58/80) and in Eurasian otters accounting for 88.9% (8/9). The death of Formosan black bears (3/4) was mainly related to the consequence of snare trap (boar sling) and illegal hunting. The implemented wildlife disease surveillance can not only serve as a frontline for emerging zoonotic diseases, but also contribute to wildlife conservation medicine.