

行政院農業委員會林務局委託研究計劃系列 案號：1091A024

雪山坑溪野生動物重要棲息環境植物資源調查
及經營管理建議
成果報告



委託單位：林務局東勢林區管理處

執行單位：國立中興大學森林學系

中華民國一一零年六月

雪山坑溪野生動物重要棲息環境植物資源調查 及經營管理建議

受委託單位：國立中興大學森林學系

研究主持人：曾彥學

協同主持人：曾喜育

研究期程：中華民國一零九年七月至一一零年六月

研究經費：新臺幣玖拾捌萬元

行政院農業委員會林務局東勢林區管理處委託研究

中華民國一一零年六月

(本報告內容純係作者個人之觀點，不應引申為本機關之意見)

摘要

本計畫為延續過去雪山坑溪野生動物重要棲息環境植群以及珍貴稀有維管束植物現況進行調查，以提供做為日後經營管理、保育及教育解說之參考。本計畫共調查 32 個選擇性樣區以及複查並擴大架設過去架設的長期監測樣區，記錄維管束植物 95 科 207 屬 365 種。依矩陣群團分析結果，將本研究及前人調查的共 145 個植物社會分為鬼石櫟—假長葉楠型、假長葉楠—紅檜型、臺灣山香圓型、九芎—黃土樹型、變葉新木薑子型、卡氏櫟—長葉木薑子型—卡氏櫟亞型、卡氏櫟—長葉木薑子型—墨點櫻桃亞型、卡氏櫟型、臺灣杜鵑型、泛能高山茶—白花八角型、木荷—紅檜型、長梗紫麻—白孢子型、假赤楊—長梗紫麻型、茄冬—長梗紫麻型、茄冬—長梗紫麻型、臺灣檫型。另外，比對長期監測樣區植群組成與結構變化，顯示陽性植物僅大徑木留存，優勢種以陰性樹種為主，未來若無重大干擾，植物組成將往演替中後期前進。牛樟族群結構呈鐘型偏左分布，屬於建造期，但族群結構可能受人為干擾影響。本研究一共調查到 17 種珍貴稀有維管束植物。其中，保育等級為接近威脅 (NT) 者有 7 種；易危 (VU) 3 種；瀕危 (EN) 4 種以及資料缺乏 (DD) 3 種。本研究除呈現上述資料外，並對雪山坑溪野生動物重要棲息環境之植群、牛樟及珍貴稀有維管束植物現況提供相關建議，以供日後作為經營管理、保育及解說教育應用上之參考。

關鍵詞：雪山坑溪野生動物重要棲息環境、長期監測樣區、植群調查、珍貴稀有維管束植物、保育

Absract

This project is to continue the investigation at Syueshankeng River Major Wildlife Habitat, which including the current situation of vegetation, long-term monitoring plot, and rare and valuable vascular plants, to provide references for future management, conservation and education explanations. In this project, a total of 32 selective plots were investigated, and the long-term monitoring plots established in the past were reviewed and expanded. It was recorded 365 species, 207 genera and 95 families of vascular plants. According to the result of cluster analysis, 145 vegetation community plots which included this study and former studies were divided into 17 vegetation types as *Lithocarpus lepidocarpus* – *Machilus japonica* var. *japonica* type, *Machilus japonica* var. *japonica* – *Chamaecyparis formosensis* type, *Turpinia formosana* type, *Lagerstroemia subcostata* – *Prunus zippeliana* type, *Neolitsea aciculate* var. *variabilissima* type, *Castanopsis carlesii* – *Litsea acuminata* type – *Castanopsis carlesii* subtype, *Castanopsis carlesii* – *Litsea acuminata* type – *Prunus phaeosticta* var. *phaeosticta* subtype, *Castanopsis carlesii* type, *Rhododendron formosanum* type, *Camellia transnokoensis* – *Illicium anisatum* type, *Schima superba* var. *superba* – *Chamaecyparis formosensis* type, *Oreocnide pedunculata* – *Mallotus paniculatus* var. *paniculatus* type, *Alniphyllum pterospermum* – *Oreocnide pedunculata* type, *Alniphyllum pterospermum* – *Oreocnide pedunculata* type, *Callicarpa formosana* var. *formosana* type and *Zelkova serrata* type. In addition, comparing the long-term monitoring of the plant community composition and structural changes in the sample area, it was shown that the pioneer species were only large-diameter trees remaining, and the dominant species were mainly shade-tolerant species. If there is no major disturbance in the future, the plant composition will advance to the middle and late stages of succession. The population structure of the *Cinnamomum kanehirae* was distributed in a bell shape to the left and which meant it was in the construction period, but the popular structure may be affected by human disturbance. A total of 17 species of precious and rare vascular plants were investigated in this study. Among them, there are 7 species with the

conservation level of Near Threat (NT); 3 species with Vulnerable (VU); 4 species with Endangered Extinction (EN) and 3 species with Data Deficient (DD). In addition to presenting the above-mentioned information, this research provides relevant suggestions on the current situation of the vegetation, *Cinnamomum kanehirae* and rare and vulnerable vascular plants at Syueshankeng River Major Wildlife Habitat for future reference in management, conservation, interpretation and education.

Keywords: Syueshankeng River Major Wildlife Habitat, long-term monitoring plot, vegetation investigation, rare and vulnerable vascular plants, conservation