

中文摘要

大雪山及合歡山為高山型國家森林遊樂區，在這些地區棲息著特稀有保育類野生動物-山椒魚。本計畫目的為(1)瞭解大雪山國家森林遊樂區內山椒魚族群的分布、(2)監測合歡山國家森林遊樂區內山椒魚的族群、(3)依監測成果提出合適的山椒魚族群棲地保育管理對策。

在大雪山區及合歡山地區定期進行監測及調查，採用步行徒手翻找調查來尋找山椒魚，並配合個體標記測量，以瞭解族群的動態。本計畫在各項目得到的成果如下：(1)大雪山地區山椒魚族群分布在 231 林道、木馬道、大雪山林道 47K、52K 及西勢山林道等地，共調查到 10 隻個體，種類皆為臺灣山椒魚。以西勢山林道及 231 林道的族群較為穩定。大雪山區發現山椒魚的調查點有海拔高、坡度平坦，樹冠層開闊度低等特色。(2)合歡山國家森林遊樂區的山椒魚族群監測方面，在畢祿林道樣區共捕獲了 45 隻楚南氏山椒魚及 26 隻臺灣山椒魚，主要捕獲個體為成體，7 月數量最多而 12 月最少。在合歡山莊樣區捕獲了 21 隻，皆為楚南氏山椒魚，數量最多為 9 月，最少為 6 月及 2 月。奇萊步道樣區方面，在黑水塘捕獲 1 隻楚南氏山椒魚，在奇萊山屋捕獲 3 隻楚南氏山椒魚。族群估計量在合歡山莊為 1 至 32 隻、畢祿林道為 8 至 105 隻。各樣區山椒魚皆主要利用石頭為遮蔽物，遮蔽物上附著植物在畢祿林道樣區以苔類為主，且不因種類而異，合歡山莊樣區則遮蔽物無附著植物為主。底質使用方面，畢祿林道樣區以腐植土為主，合歡山莊樣區則以碎石為主。畢祿林道的台灣山椒魚與楚南氏山椒魚利用底質的 pH 值及含水量沒有差異。

棲地經營管理上，建議在合歡山莊樣區採行增加地表溼度之措施，以利山椒魚棲息，在木馬道可增加地表的粗質殘材量，以積極措施增加山椒魚的棲地。

英文摘要(Abstract)

Dasyueshan and Hehuanshan Forest Recreation Area are alpine type Forest Recreation Area, and these areas are habitat of endemic rare protected wildlife – hynobiid salamanders. The purposes of this project are (1) to understand the distribution of salamander in Dasyueshan Forest Recreation area, (2) to monitor salamanders populations dynamics in Hehuanshan Forest Recreation area, (3) to make appropriate habitat conservation management strategies according to monitoring results.

We search around Dasyueshan area to find where salamander distributed, all by walking through trail and turn all cover objects along the trail to find salamanders, and with individual marking, morphometric measurements to understand the dynamics of populations. The results are following: (1) Salamander population distributed at mileage 43K , 47K, 52K of Dasyueshan Forest Road, Sishi Forest Road, and 231st Forest Road in Dasyueshan area. All populations are Formosan salamander (*Hynobius formosanus*). (2) In Hehuanshan area, at Pilu Forest Road study site we capture a total of 45 Sonan's salamanders and 26 Formosan salamanders. The majority of captures are adult. Capture number highest in July, lowest in December. Hehuan Villa study site have 21 captures, and Chilaishan study site have 4 captures. Population estimate of Hehuan Villa study site were 1 to 32, of Pilu Forest Road were 8 to 105. Salamanders mainly use stone as cover, plant debris as substrate.

We suggest a soil humidity increasing and coarse woody debris increasing strategy to provide salamanders with high quality habitat.