Chapter 6

Reptiles and Amphibians

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Summary

Because the season was not suitable for herpetological field surveys, we recorded only 10 species of amphibians and six species of reptiles during 20 days of field work. Our results show that the herpetological diversity was higher at the Danba and Yajiang sites compared to the Kangding site. At Site 2 (Kangding), we collected a giant horned toad (*Megophrys* sp.) that we had never found before which is possibly new to science. Unfortunately, we collected only one specimen. At Site 3 (Yajiang), hundreds of individuals of a torrent frog (*Amolops* sp.) were found under the rocks near streams and rivers, some were even found in the mountains, hundreds of meters from streams and rivers. Comparing our specimens with other Amolops species, the observed species shows a different color pattern, and the tympanum is absent. Further study is needed to confirm the taxonomic status of these two species. Additionally, one recorded species is listed as Vulnerable (Alpine stream salamander, *Batrachuperus tibetanus*) and one as Near Threatened (Plateau frog, *Nanorana pleskei*) by the IUCN (IUCN 2006).

Introduction

Western Sichuan lies in the northern part of the Trans-Himalaya Mountain range, part of the Mountains of Southwest China, designated one of 34 global Biodiversity Hotspots (Mittermeier et al. 2004) by Conservation International. Ganzi Prefecture, composed of 18 counties, makes up the main part of western Sichuan. Due to its rich herpetological fauna, over the past 130 years numerous herpetologists, both Chinese and foreign, have investigated this region, recording 84 species of amphibians and more than 80 species of reptiles, 34 species of which are endemic to this region (Fei and Ye 2001, Zhao 2003). Although Western Sichuan has been well investigated for herpetofauna, because of its large size and complex environment, there is still value in additional investigation.

Methods

We used line-sampling along the banks of lakes, ponds, streams and rivers. During daytime, we overturned rocks in or near water, while at night we searched for animals directly using a flashlight. We sampled terrestrial animals using line-transect sampling. During the day, in addition to direct observation we also overturned rocks, dead trees, etc. searching for reptiles. At night we walked along a road for a given distance, searching for toads with the use of a flashlight, noting all observations. We conducted interviews with local people using colored atlas photos to describe species and obtain information.

Specimens were identified according to Zhao, Huang and Zong 1998, Zhao, Zhao and Zhou 1999, Fei and Ye 2001, Zhao 2003, and others. All specimens were preserved in 75% alcohol.

Study Sites

Site 1 (Danba). Dongma valley, Dingguo Hill and Kuiyong valley of Danba County were investigated (elevation of survey region ranges from 2800 m to 4800 m). The habitats studied in Danba County included grassland, high mountain shrub, conifer forest, conifer and broad-leaf forest, shrub-grass, meadow, plantations, abandoned buildings, residential areas and hardwood and broad-leaf forest.