



Birds

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Chapter 7

Birds

Han Lianxian, Carol Inskipp, Li Zhumei and Shen Xiaoli

Summary

A total of 164 bird species were recorded including six species of Galliformes reported by local villagers. Four globally threatened birds were recorded during the survey including two species listed as Vulnerable, Chinese Monal and Sichuan Jay, and two species listed as Near Threatened, Chinese Grouse and White-eared Pheasant (Birdlife International 2000). Overall, bird species were significantly under-recorded during the RAP survey, partly because the survey was carried out in the post-breeding season for many species. It is also likely that many summer visitors and breeding altitudinal migrants had already departed the site prior to our survey.

At Site 1 (Danba), 100 species of 10 orders and 26 families were recorded. The number of bird observations made at in Danba County was much reduced by prolonged rain and low cloud and mist experienced on a few days during the survey. At Site 2 (Kangding), 99 species of 28 families and 8 orders were recorded. The number of species is less than expected, likely due to the relatively high human population and other frequent human activities such as farming and herb collection. Birds here were afraid of people, indicating a weaker conservation consciousness among local villagers. At Site 3 (Yajiang), 104 species of 28 families and 10 orders were recorded. In Yajiang County, the altitudinal range covered by the bird RAP teams was higher than at the other sites (3650-4400m).

Introduction

Birds have been shown to be useful indicators of the biological diversity of a site. Their taxonomy and global geographical distribution are relatively well documented in comparison to other taxa (ICBP 1992), which facilitates their identification and permits rapid analysis of the results of an ornithological study. The conservation status of most avian species has been reasonably well assessed (BirdLife International 2000), facilitating the comparison of surveyed. Furthermore, birds are among the most charismatic species, which can aid in the presentation of conservation recommendations to policy makers and stakeholders.

Methods

During the RAP survey, we tried to cover many different habitats and a wide altitude range within each site in order to document the greatest number of bird species. Surveys were carried out daily between 7:30 and 18:00 with one hour's break at around noon. Bird surveys were conducted by two groups, each made up of two specialists and nature reserve and forestry department staff who received training during the survey. Members of each group are listed in Table 7.1.

Table 7.1 Members of China RAP bird survey groups.

| | Team Leaders | Team Members |
|---------|------------------------------|---------------------------------------------|
| Group A | Han lianxian Liu zhumei | Gong tianjian Tang hao Wang zhongming |
| Group B | Carol Inskipp Shen xiaoli | Liang chunpin |

The two groups were based at camp sites in different survey areas in Danba County and were based together at the other two sites in Kangding and Yajiang counties. When at the same camp sites, the two groups set out in different directions each day and results were combined afterwards. Three methods were used.

(1)Route surveys. Searching for birds with binoculars while walking slowly along trails, roads and abandoned logging roads. Birds were identified visually and by vocalizations. The species name, number of individuals and habitat type were recorded for each observation made. Furthermore, group B recorded the altitude of each observation, immature birds and evidence of breeding, such as parents feeding young. There were no limitations set between the distance where the bird occurred and the route of the observers. Species with distinctive vocalizations were recorded even if an individual of that species was not directly observed. Species that were not observed well enough to be certain of their identification were ignored. Each route at the three sites covered a length between 500 m and 10 km and was surveyed one to three times. Some routes were repeated by both groups, but on different days.

(2)Interviews. Local people often have a very good knowledge of some large and valuable species present in an area. Most information about such birds, mainly game birds, was collected by interviewing local people and showing them bird pictures in the field guide. Care was taken during questioning so as not to influence responses. Three to five people were interviewed at each site.

(3)Mist-netting. Mist-netting, a valuable tool for detecting skulking understory species, was a secondary method used in this survey. Mist-netting was used by Group A in Kuiyong valley (Site 1) and near Tongling village (Site 2). Birds caught in nets were released after identification.

Site 1 Danba (Aug 21-27). Besides two days spent traveling to and from the site, during which some bird observations were made, five full days were spent on the bird survey. Group A surveyed Kuiyong valley and Group B surveyed the Dingguoshan Mountain area. Habitats surveyed comprised forests, alpine rangelands, streams, valleys, farmland and villages.

Site 2 Kangding (Aug 28 – Sept 3). Besides two days spent traveling to and from this site, five full days were spent on the bird survey. Bird surveys were carried out along the three main gorges. Habitats surveyed included forests, alpine rangelands, streams, valleys, farmlands and villages.

Site 3 Yajiang (Sept 5-10). Besides two days spent traveling, four full days were spent for bird surveys. Habitats surveyed include forests, alpine rangelands, streams, valleys, farmlands and villages.

Results

A total of 164 bird species were recorded from all sites by Groups A and B including six species of Galliformes reported by local villagers (Appendix 4). At Site 1 (Danba), 100 species of 10 orders and 26 families were recorded by the two groups. At Site 2 (Kangding), 99 species of 28 families and 8 orders were recorded and at Site 3 (Yajiang) 104 species of 28 families and 10 orders were recorded. Birds are designated globally threatened or near-threatened according to BirdLife International (2006).

Danba County

The globally threatened, endemic and national class-one protected Chinese Monal was reported to be fairly common at high altitude by local people. White-eared Pheasant, which is endemic and near-threatened, was heard in the Dingguoshan mountain area where it was reported to be fairly common by villagers. Local people also reported this pheasant in the Kuiyong valley. Koklass Pheasant was recorded by both groups in Dingguoshan Mountain and Kuiyong Valley. Several other gamebirds were recorded by interviewing villagers. One individual of the globally threatened and endemic Sichuan Jay was reported by James Sanderson in the Dingguoshan Mountain area. This species has a restricted distribution in parts of Qinghai, Gansu and Sichuan. Other endemic species recorded at this site included Giant Laughingthrush, Rufous-tailed Babbler, Chinese Babax (the latter two species only recorded by Group B in the Dingguoshan Mountain area). The near-endemic Chinese Nuthatch was also found in the Dingguoshan Mountain area and may well be a range extension for this species.

Kangding County

The endemic and near-threatened Chinese Grouse, the endemic Buff-throated Partridge and the uncommon Lady's Amherst Pheasant were recorded by the RAP team. Another nine gamebird species were reported by local people including the globally threatened and endemic Chinese Monal and near-threatened and endemic White-eared Pheasant.

Other endemic species recorded at this site were Rusty-breasted Tit which has a restricted range, Rufous-tailed Babbler and Chinese Babax. Speckled Wood Pigeon is fairly common, indicating the secondary forest is recovering well. Himalayan Griffons were seen every day. Some of them were immature birds practicing flying. The cliffs high on the mountain probably provides nest sites for some of individuals.

Yajiang County

The near-threatened and endemic White-eared Pheasant was the most prominent species of all the gamebirds observed at this site. The species was encountered four times by the RAP team. The largest group met with comprised 60 individuals. The near-threatened, endemic and nationally class-one protected species, Chinese Grouse was also seen here. Local people reported the presence of the globally threatened and endemic Chinese Monal. Other endemic species recorded at this site were Giant Laughingthrush and Chinese Babax.

All the birds in Decha township, Yajiang including gamebirds, birds of prey and Passeriformes (small birds) are tame and easy to approach. Birds of prey recorded here include Himalayan Griffon, Lammergeier and Golden Eagle.

Derbyan Parakeet was observed during the RAP survey. It only occurs in the eastern Himalayan and Hengduan mountains and is the most northerly distributed of all parrots. Local people reported that it occurs here regularly. Some Chinese keep Derbyan Parakeets as pets, which has led to a population decline and reduction in the distribution of the species. Although it is now a national class-two protected species, illegal hunting and trade in Derbyan Parakeet still exists. The distribution area and population of Derbyan Parakeet has been decreasing relatively quickly in recent years.

Discussion

In Kuiyong valley (Site 1, Danba), heavily logged before 1998, cutting blanks and logging roads remain. However, vegetation here has recovered well as a result of little human disturbance since the logging ban. In the Dingguoshan Mountain area, viewed as sacred by Tibetan Buddhists and protected by local people, extensive primary forests remain. These forests have high potential for bird diversity. The number of species observed in the Dingguoshan Mountain area was slightly higher than that in Kuiyong valley. Local people are Tibetan and apparently practice Buddhism. There was no evidence of bird persecution and birds were tame in the Kuiyong valley area including around Dongma village where the small village fields and gardens contain a varied bird population. The bird biodiversity and abundance in this area are moderate among the three sites. However bird species and the number of bird observations were significantly under-recorded according to the historical records in the Hengduan Mountains. This was partly because the survey was carried out in the post-breeding season for many species, except those in the sub-alpine and alpine zones. Resident birds were therefore relatively quiet as they had stopped singing. It is also likely that many summer visitors and breeding altitudinal migrants had already moved down before our survey and were no longer present at the site. The number of bird observations made at in Danba county was also much reduced by prolonged rain and low cloud and mist experienced on a few days during the survey.

The typical topography of Site 2 (Tongling village, Bangta township, Kangding County) is gorges. This site extended to lower altitudes than the other two sites. There was heavy commercial logging, mainly in the 1980s and 1990s until the logging ban in 1998. Due to the lower elevation, vegetation has recovered fairly well, but most broadleaf forests are grazed and broadleaf forests near Tongling village are severely degraded and reduced to shrubberies with scattered trees. The relatively high human population and other frequent human activities such as farming and herb collection are causing obvious impacts on the environment. The number of species recorded here was less than that we expected. Birds here were afraid of people, indicating the poor conservation consciousness of local villagers. Members of the RAP team found children using catapults and playing with immature birds. Men with dry food and dogs were met en route the alpine zone and seemed to be going hunting. Another reason for the lower than expected number of observations was the timing of the survey. The breeding season was over for the large majority of species at this site. The weather was reasonable to good for most of the time spent in the field. Interviews carried out by Shen Xiaoli revealed that local people hardly practice Tibetan Buddhism and that villagers use pesticides once or twice per year, a practice which may well be reducing bird populations.

The altitudinal range (3650–4400m) covered at Site 3 (Decha township, Yajiang County) was higher than that covered at the other sites. There is a history of commercial logging at the site, but the scale and intensity of this activity has been lower at Yajiang than at the other two sites, thus more primary vegetation remains. The number of bird individuals observed was highest at this site. Birds are tame here and easy to observe at close range. Local people are actively practicing Buddhism which advocates protecting wild animals and respecting nature. A total of 104 species of 10 orders and 28 families was recorded here.

Conservation Recommendations

The vegetation of Dingguoshan Mountain, Danba County is well protected due to the influence of the Dingguoshan monastery. Despite past logging, the vegetation of Kuiyong valley has now recovered well. Dingguoshan monastery has a strong influence on local people and contributes to the conservation of environment and wildlife. A forest station is in charge of the natural forest management at present. With a sparse population and most human activities centralized at lower altitudes, it is feasible to create a new nature reserve here. Gamebirds should be the priority species for conservation as several endemic and threatened species occur in the area. We also suggest the local forestry department carry out studies on the population and behavior of the Sichuan Jay as little is known about its distribution and ecology. A conservation awareness program especially targeted at local people who have grazing animals and collect mushrooms and herbs would be valuable. It would also be useful to educate children and adolescents in the local school on the threatened wildlife in their valley and the importance of conserving them. Field outings and information on common bird species could be included.

Farm houses and farmlands are scattered at Site 2 in Kangding County. Several dams are being built along the river. Conservation consciousness is relatively low here compared to the other two sites. It is not appropriate to create a new nature reserve in the near future. Conservation measures should reinforce the ongoing projects already being implemented by the central government, such as protecting the natural forest and the Green for Grain project. A conservation awareness program for local people is urgently needed. A program carried out in the local school would be most useful. The administrative department should enforce the penalty for illegal hunting that continues here. Furthermore, considering that a number of people are coming from outside the township for dam construction work, specific conservation awareness and education on wildlife protection should be provided. If it is possible to persuade farmers to reduce the intensity of pesticide use or to use biological methods of pest control, this could also be helpful for bird conservation.

The vegetation in Decha Township, Yajiang is fairly intact and in better condition than at the other two sites. This site was rich in bird species and numbers. Local people have high conservation awareness. It is the most promising site amongst the three sites that have been surveyed for creating a new nature reserve. Several species of endemic and/or threatened gamebirds occur here including the White-eared Pheasant which is quite common in this area. The proposed nature reserve would be important in protecting gamebirds and other wildlife in sub-alpine forests and on alpine grasslands. Further biodiversity surveys are recommended before creating a new nature reserve here. May to June would be good months to carry out such a survey for birds. Further surveys are recommended to document the distribution, population and habitat requirement for Derbyan parakeet in Yajiang. A conservation awareness program in lower Decha school focusing on threatened and endemic as well as the more common birds occurring in the valley would be valuable.

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