



Forestry Administration



World Pheasant Association

Cambodian Galliformes Conservation Programme

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Monthly Report

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Summary

Cambodia is home to 14 species of Galliformes of which four are considered to be globally threatened. The most important areas for Galliformes within Cambodia are the Eastern Plains, Northern Plains and Southwest Cambodia. Between 18th and 25th April 2006, we undertook ornithological, trapping and questionnaire surveys to establish the status and threats to Galliformes, particularly the Chestnut-headed Hill-partridge, in the Damnak Sla area, Koh Kong Province within the Central Cardamom Mountains, Southwest Cambodia. We established the presence of six galliform species by the ornithological and questionnaire surveys and a direct observation. All species occurred at medium densities with Siamese Fireback, Silver Pheasant, Scaly-breasted Hill-partridge, Chestnut-headed Hill-partridge and Red Junglefowl being the most numerous.

1. Study areas

Between 18th and 25th April 2006 the study was based in the Damnak Sla area in Koh Kong province, within the Central Cardamom Mountain range in Southwest Cambodia. The area is far from any large villages, but 18 families reside within the area. Damnak Sla is located on a plateau at around 250 m asl, surrounded by high mountains that are primarily covered by the dense and semi-dense forests. At this study area we surveyed all galliform species, but we were primarily concerned with collecting information on Chestnut-headed Hill-partridge.

2. Methods

Three methods were used to record the presence of Galliformes, assess their numbers and establish their threats. These were ornithological and questionnaire surveys and a direct observation.

2.1 Ornithological surveys

Surveys were undertaken between 18th and 25th April 2006 using a combination of transects (to establish presence) and point-counts (to measure abundance). Each transect took about 90 minutes to walk, started at 05:30 and 16:30 and finished at 07:30 and 18:30 respectively. In addition we undertook surveys at other times as local hunters had informed us that Chestnut-headed Hill-partridge also calls before going to roost in mid-morning (09:00-10:00) and late afternoon (15:00-16:00). During the surveys, when a bird was heard calling its direction, estimated distance from the observer and its position (recorded by a Geographical Positioning System (GPS)) was recorded. During the surveys the presence of other important non-galliform bird species was also recorded.

2.2 Questionnaire survey of local people and hunters

A questionnaire survey of local communities was also undertaken to collect information on their perceived status of Galliformes, their distribution and to ascertain their threats.

The village elders and senior hunters specifically and more generally other village people and hunters were shown pictures of Galliformes in the Guide to Birds of Southeast Asia, and the Guide to Birds of Cambodia and asked the following questions:

How many species of Galliformes are there in the area?
How many individuals of each species are there in the area?
How many individuals of each species are hunted in the area?
How many hunters are there in the area?
How many hunters come from outside area?
What hunting methods do they use?
How many traps are set in the area?
How many traps did each hunter set in the area?
Where did they sell hunted birds?
When did hunters always hunt green peafowl and collect its chicks?
How many days are traps set in the area?
Would they hunt if alternative food were provided?
What alternative food would they like?
Do you think it is important to protect the wildlife around their village?
Do you prefer Green Peafowl? Why?

2.3 Direct Observation

In order to collect some direct observation information we used motorbikes to travel at slow speed along available roads. Surveys were undertaken along both sides of three roads, covering at least 10 km.

3. Results

3.1 Information on Galliformes

The results from the ornithological and questionnaire surveys and direct observation are summarised in Table 1, 2 and 3. Between 18th and 25th April 2006, we walked eleven transects, during which five species of Galliformes were heard calling at fifty locations. Also, a female Siamese Fireback and three individual Red Junglefowl were observed directly along transects and the old roads in the study area. Information from the questionnaires revealed that Chestnut-headed Hill-partridge was thought to be present only in small numbers on the higher elevations above 400 m asl during the raining season and near the water at lower elevations during the dry season. It was heard calling from twelve locations. Siamese Fireback was thought to be more numerous than Chestnut-headed Hill-partridge, being found on the top of high hills. It was heard callings from one location. Silver Pheasant was thought to be more numerous than Siamese Fireback, predominantly being observed on the slopes of the hills. It was heard callings from nine locations. Scaly-breasted Hill-partridge were heard callings from sixteen locations occurring at elevations lower than 400 metres asl. It was thought that this species was widespread and common throughout the study area. Red Junglefowl was heard calling from twelve locations. It was thought that the species is common throughout the study area, but was less numerous than Scaly-breasted Hill-partridge.

Table 1 Summary information from the ornithological surveys undertaken in the Damnak Sla area within the Central Cardamom Mountains during 18th to 25th April 2006

Species	Number of Transect	Number of birds heard	Number of birds seen
Chinese Francolin <i>Francolinus pintadeanus</i>	11	0	0
Orange-necked Hill-partridge <i>Arborophila davidi</i>	11	0	0
Chestnut-headed Hill-partridge <i>Arborophila cambodiana</i>	11	12	0
Scaly-breasted Hill-partridge <i>Arborophila chloropus</i>	11	16	0
Red Junglefowl <i>Gallus gallus</i>	11	12	0
Silver Pheasant <i>Lophura nycthemera</i>	11	9	0
Siamese Fireback <i>Lophura diardi</i>	11	1	0
Germain's Peacock Pheasant <i>Polyplectron germaini</i>	11	0	0
Grey Peacock Pheasant <i>Polyplectron bicalcaratum</i>	11	0	0
Green Peafowl <i>Pavo muticus</i>	11	0	0
Bar-backed Partridge <i>Arborophila brunneopectus</i>	11	0	0
Rain Quail <i>Coturnix coromandelica</i>	11	0	0
Japanese Quail <i>Coturnix japonica</i>	11	0	0
Blue-breasted Quail <i>Coturnix chinensis</i>	11	0	0



Numerous signs of scratching by Chestnut-headed Hill-Partridge were observed in the Damnak Sla area, Koh Kong province in Central Cardamom Mountains, Southwest Cambodia

Table 2 Summary information from the questionnaire surveys undertaken in the Damnank Sla area within the Central Cardamom Mountains during 18th to 25th April 2006

Species	Numbers thought to occur	Numbers hunted
Chinese Francolin <i>Francolinus pintadeanus</i>	0	0
Chestnut-headed Hill-partridge <i>Arborophila cambodiana</i>	10000+	2000
Orange-necked Hill-partridge <i>Arborophila davidi</i>	0	0
Scaly-breasted Hill-partridge <i>Arborophila chloropus</i>	10000++	2000
Red Junglefowl <i>Gallus gallus</i>	10000	800
Silver Pheasant <i>Lophura nycthemera</i>	10000+	90
Siamese Fireback <i>Lophura diardi</i>	7000	50
Germain's Peacock Pheasant <i>Polyplectron germaini</i>	0	0
Grey Peacock Pheasant <i>Polyplectron bicalcaratum</i>	0	0
Green Peafowl <i>Pavo muticus</i>	0	0
Bar-backed Partridge <i>Arborophila brunneopectus</i>	0	0
Rain Quail <i>Coturnix coromandelica</i>	0	0
Japanese Quail <i>Coturnix japonica</i>	0	0
Blue-breasted Quail <i>Coturnix chinensis</i>	0	0

Table 3 Summary information from the direct observation undertaken in the Damnak Sla area within the Central Cardamom Mountains during 18th to 25th April 2006

Species	Numbers of roads	Numbers of birds observed
Chinese Francolin <i>Francolinus pintadeanus</i>	3	0
Orange-necked Hill-partridge <i>Arborophila davidi</i>	3	0
Chestnut-headed Hill-partridge <i>Arborophila cambodiana</i>	3	0
Scaly-breasted Hill-partridge <i>Arborophila chloropus</i>	3	0
Red Junglefowl <i>Gallus gallus</i>	3	3
Silver Pheasant <i>Lophura nycthemera</i>	3	0
Siamese Fireback <i>Lophura diardi</i>	3	1
Germain's Peacock Pheasant <i>Polyplectron germaini</i>	3	0
Grey Peacock Pheasant <i>Polyplectron bicalcaratum</i>	3	0
Green Peafowl <i>Pavo muticus</i>	3	0
Bar-backed Partridge <i>Arborophila brunneopectus</i>	3	0
Rain Quail <i>Coturnix coromandelica</i>	3	0
Japanese Quail <i>Coturnix japonica</i>	3	0
Blue-breasted Quail <i>Coturnix chinensis</i>	3	0

3.2. Threats to Galliformes

The information we collected on the numbers of Galliformes hunted in the study areas clearly show that illegal trapping is a major threat to the status and conservation of many species. Trapping is undertaken by some non-wood collectors and hunters from within and outside the local community in order to provide supplementary food during the period that they reside within the forest and occasionally to sell at the provincial market. This usually involves setting as many as 2000 traps per hunter along old trails and near water to opportunistically trap any ground dwelling animals or birds. Not all species are equally affected by hunting, with those that are easy to catch and are desirable for meat (Chestnut-headed Hill-partridge, Scaly-breasted Hill-partridge and Red Junglefowl) being especially targeted by hunters. The main purpose of this trapping is to provide food for the hunter, and their families and villagers.

Another threat to Galliformes in the area we surveyed is habitat degradation by forest clearance to provide area for cultivation. Possibly of more concern is that not only does clearing destroy habitats, but it also opens up access to the forest, causes disturbance and cultivators also hunt Galliformes for food and start cooking fires and burn the dead trees, which may spread and cause further forest damage. The collection of non-timber products (kraesna wood, rattans, resins, fruits) and food (plants, fish, etc) principally causes disturbance but in addition these foraging parties hunt Galliformes for food whilst in the forest and start cooking fires. They are usually accompanied by dogs into the forest. This adds to the disturbance problems, may spread disease to wildlife. They sometime carried domestic chicken with them into the forest. This is able to may spread the avian influenza to the wild birds.



The neck-hold and leg-hold traps set by local hunters and hunters from the outside community in the Damnak Sla area, Koh Kong province within the Central Cardamom Mountains, Southwest Cambodia

3.3. Other Bird Species

In addition to recording galliform species, other important non-galliform bird species were also recorded and are summarised in Tables 4.

Table 4 Summary information of important general species observed within the Damnak Sla area in the Central Cardamom Mountains, Southwest Cambodia, during 18th to 25th April 2006

Species	Scientific Names	Status
Mountain Imperial Pigeon	<i>Ducula badia</i>	Very Common
Green Imperial Pigeon	<i>Ducula aenea</i>	Common
Common Kestrel	<i>Falco tinnunculus</i>	Rare
Oriental Pied Hornbill	<i>Anthracoceros albirostris</i>	Very Common
Black-headed Bulbul	<i>Pycnonotus atriceps</i>	Common
Black-crested Bulbul	<i>Pycnonotus melanicteruss</i>	Common
Orange-backed Woodpecker	<i>Reinwardtipicus validus</i>	Rare
Greater Coucal	<i>Centropus sinensis</i>	Common
Changeable Hawk Eagle	<i>Spzaetus cirrhatus</i>	Very Rare
Black Drongo	<i>Dicrurus macrocercus</i>	Common
Dusky Broadbill	<i>Corydon sumatranus</i>	Rare
Greater Racket-tailed Drongo	<i>Dicrurus paradiseus</i>	Common
Slender-billed Crow	<i>Corvus enca</i>	Rare
White-tailed Flycatcher	<i>Cyornis concretus</i>	Rare
Red-eyed Bulbul	<i>Pycnonotus brunneus</i>	Rare
White-crested Laughingthrush	<i>Garrulax leucolophus</i>	Very Common
Coppersmite Barbet	<i>Megalaima haemacephala</i>	Very Common
Spotted Dove	<i>Streptopelia chinensis</i>	Common
Dollarbird	<i>Eurystomus orientalis</i>	Common
Crested Treeswift	<i>Hemiprocne coronata</i>	Very Common

