# **BUFF-THROATED PARTRIDGE CONSERVATION PROJECT**

## Conservation and ecology of Buff-throated partridge, in Yajing country, Ganzi Tibetan Autonomous Prefecture, Sichuan, P.R.China

#### Progress Report for The Rufford Small Grants Foundation

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# 'Conservation and ecology of Buff-throated partridge, in Yajiang country, Ganzi Tibetan Autonomous Prefecture, Sichuan, P.R.China'

# **Project leader:** Dr Jianghong Ran, Assistant Professor of Zoology in Sichuan University;

#### Work-to-date

Although the project 'Conservation and ecology of Buff-throated partridge' has only been running for a few months, all members took lots of work in this period, good progress has already been made. Nan Yang, Yu Xu and Kai Zhang carried out field surveys from 10<sup>th</sup> June to 8<sup>th</sup> September and collected data about buff-throated partridge for estimating the relative abundance of the buff-throated partridge in the sacred and non- scared areas in breeding seasons. We listed the bird species and carried out a comparison in the sacred and non-sacred areas of Pamuling; we also carried out a comparison between forest types. This allowed us to see if there are some special species that are found only in the sacred areas.

#### Estimate the relative abundance

The sacred area, defined as the mountains which are connected to monasteries and protected by local people, ranges from 3,550 m to 4,250 m above sea level. Some mountains in the vicinity of the sacred area, the habitat characteristics (e.g. altitude, vegetation structure) which are similar with the sacred area, were chose as non-scared area. To analyze habitat use of the partridge, the habitats in scared and non-scared area were classified into four types of vegetation: (1) Coniferous forests, (2) Oak forests, (3) Deciduous broad-leaved and coniferous mixed forests, and (4) Rhododendron shrubberies.

The abundance of the buff-throated partridge was accessed via indirect techniques recording the number of signs of a species' presence (e.g. feathers, pecks, dusting sites and faeces) along designated trails at a pace of ca. 2 km hr -1. Although this method does not assume recognition of individual birds, which is very difficult for such an elusive species as the buff-throated partridge, the individual birds being encountered were still recorded. The indices of abundance are standardized by survey effort, e.g. the number of signs observed per survey time (encountered efficiency).

In the results, we compared the encountered efficiency of different vegetation types in the same area, and compared encountered efficiency of same vegetation types between different areas.

A total of 9 trails were undertaken, of which 4 are situated in sacred areas and 5 in non-sacred areas. In sacred areas, signs were encountered more frequently in rhododendron shrubberies than other three vegetation types. In contrast, in non-sacred area, signs were encountered less frequently in rhododendron shrubberies than other three vegetation types (Fig.1). Encountered efficiency (No. /hour) in rhododendron shrubberies in sacred areas was obviously more than those in non-sacred areas, while encountered efficiency in other three habitats did not differ

between the two areas. Data gathered thus showed that average encountered efficiency in sacred areas (9.0) was slightly higher than in non-sacred areas (7.58).

The Buddhist monks from nearby monasteries were very enthusiastic in the field work and they also were very interested regarding the conservation of the buff-throated partridge and its habitats. Nevertheless, we found some factors affecting the activities and habitat of the partridge in this survey, e.g. people entered intensively the Scared forests to collect mushroom.

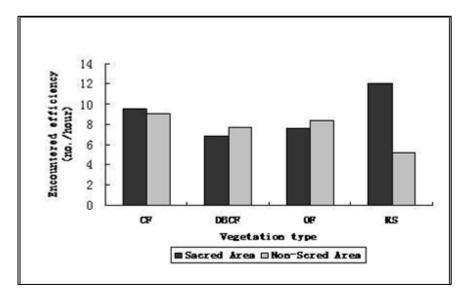


Fig.1 Encountered efficiency in different habitats in the Sacred and Non-Sacred Areas, CF=Coniferous forests, DBCF=Deciduous broad-leaved and coniferous mixed forests, OF=Oak forest, RS=Rhododendron shrubberies

## Survey bird species

## 1. Method:

Line intercept method was mainly used in this survey. To survey bird species, the habitats in scared and non-scared area were classified into five types: (1) Alpine Meadow, (2) Oak forests, (3) Coniferous forests, (4) Deciduous broad-leaved and coniferous mixed forests, and (5) Rhododendron shrubberies. The habitat characteristics in the Scared Areas are similar to the Non-scared Areas and we choose three sample lines which were 4-10 kilometers in the Scared Areas and Non-scared Areas, each line was surveyed 5 times. Each sample was composed with three persons and observed by Nikon35x10 telescope. We noted the birds flying, feeding, calling and other behavior as well as the species of birds, the number and distribution of habitats and altitude. When we found national protected birds we will use GPS locating.

## 2. Taxonomic composition of bird species:

According to the Classification System of Zheng Guangmei's A Checklist on the Classification and Distribution of the Birds of China, during the 89 species of birds that recorded in the survey belong to 10 order 25 family (Annex 2). The Passerriformes has absolute superiority in total number which has 63 species 15 families and occupies 60% of the bird family and 70.79 % of the species. In this survey we found a total of

birds 89 species 25 families in Scared Forest, 30 species 13 families in Non-scared Forest (Table 1) .

Table 1: Taxonomic composition	of bird	species	recorded	in	Sacred	and
Non-scared Areas of Pamuling						

	Family		Species	
Order	Sacred Areas	Non-sacred Areas	Sacred Areas	Non-sacred Areas
FALCONIFORMES	1		5	
GALLIFORMES	2	1	6	3
COLUMBIFORMES	1	1	2	1
PICIFORMES	1		1	
CUCULIFORMES	1		1	
STRIGIFORMES	1		1	
APODIFORMES	1		3	1
UPUPIFORMES	1		1	
PICIFORMES	1	1	6	2
PASSERRIFORMES	15	10	63	23

### 3. National Protected and Endemic Species in China:

During this survey twelve national protected birds were found (Annex 1). There are three I-class national protected birds in the Scared Areas, Lammergeier Gypaetus barbatus, Buff-throated Partridge Tetraophasis szechenyii, Chinese Grouse Bonasa sewerzowi and one in the Non-scared Areas, Buff-throated Partridge; Nine II- class national protected birds in the Scared Areas, they are Cinereous Vulture Aegypius monachus, Pied Harrier Circus melanoleucos. Black-eared Kite Milvus Lineatus, Upland Buzzard Buteo hemilasius, Blood Pheasant Ithaginis cruentus, White Eared Pheasant Crossoptilon crossptilon, Koklass Pheasant Pucrasia macrolopha, Derbyan Parakeet Psittacula derbiana, Sichuan Wood Owl Strix davidi;

Two in Non-scared Areas, they are Blood Pheasant *Ithaginis cruentus*, White Eared Pheasant *Crossoptilon crossptilon*; There are ten China endemic species in Scared Areas, they are Buff-throated Partridge *Tetraophasis szechenyii*, Chinese Grouse *Bonasa sewerzowi*, White Eared Pheasant *Crossoptilon crossptilon*, Sichuan Wood Owl *Strix davidi*, Chinese Thrush *Turdus mupinensis*, Rufous-tailed Babbler *Chrysomma poecilotis*, Giant Laughing thrush Garrulax maximus, Elliot's Laughing thrush Garrulax elliotii, Chinese Fulvetta *Alcippe striaticollis*, Crested Tit Warbler *Leptopoecile elegans*, Five in Non-scared Areas, they are Buff-throated Partridge *Tetraophasis szechenyii*, White Eared Pheasant *Crossoptilon crossptilon*, Giant Laughing thrush *Garrulax maximus*, Elliot's Laughing Fulvetta *Alcippe striaticollis*, Crested Tit Warbler *Leptopoecile elegans*, Five in Non-scared Areas, they are Buff-throated Partridge *Tetraophasis szechenyii*, White Eared Pheasant *Crossoptilon crossptilon*, Giant Laughing thrush *Garrulax maximus*, Elliot's Laughing thrush *Garrulax maximus*, Elliot's Laughing thrush *Garrulax elliotii*, Chinese Fulvetta *Alcippe striaticollis*.

In the results, we can see the species and numbers of the birds, especially China national protected birds and endemic species, the Scared Areas was apparently more than Non-scared Areas.

Dr Jianghong Ran (Project leader) spent time in Pamuling in 2006. During this time he was able to lay the foundations for fieldwork in 2008 to 2009. In addition, Dr Ran was much concerned about other animals and environmental consciousness of the local

people. He also kept contact with the Pamuling Monastery Wildlife Conservation Association and Yajiang Forestry Bureau.

#### Immediate Future Plans

- Fieldwork by Nan Yang, Yu Xu and Kai Zhang is scheduled to start in October and November.
- Survey bird species in the sacred and non-scared areas in winter.
- Commence assess threats to buff-throated partridge and the habitat in Winter.

Nan Yang, Yu Xu and Kai Zhang

27 September 2008

- Annex1. Richness of national protected birds of different habitats of Pamuling in Summer
- Annex2. The birds in Scared and Non-scared of Pamuling in Summer
- Annex3. The GPS Point of national protected birds of Pamuling in Summer

Annex 4: List of figures

Species			Habitat					
	PG	ED	AM	OF	CF	DBCF	RS	Overall
Cinereous Vulture Aegypius monachus	II		1	1				2
Lammergeier Gypaetus barbatus	Ι		1	1				2
Pied Harrier Circus melanoleucos	II		2					2
Black-eared Kite Milvus Lineatus	II		1					1
Upland Buzzard Buteo hemilasius	II		1					1
Chinese Grouse Bonasa sewerzowi	Ι	$\checkmark$			3		4	7
Buff-throated Partridge Tetraophasis szechenyii	Ι	$\checkmark$	38	23	32	4	15	112
Blood Pheasant Ithaginis cruentus	II		27	12	20		4	63
White Eared Pheasant Crossoptilon crossptilon	II	$\checkmark$		10	10			20
Koklass Pheasant Pucrasia macrolopha	II		1					1
Derbyan Parakeet Psittacula derbiana	II		4		2			6
Sichuan Wood Owl Strix davidi	II	$\checkmark$		1				1

Annex 1. Richness of national protected birds of different habitats of Pamuling in Summer

COMMENT:

ED: Endemic AM=Alpine Meadow

CF= Coniferous forests

PG: Protected Grade

OF=Oak forests

DBCF=Deciduous broad-leaved and coniferous mixed forests RS= Rhododendron shrubberies

# Annex 2. The birds in Scared and Non-scared Areas of Pamuling in Summer

Species	Scared	Non-scared	Altitude	AM	OF	CF	DBCF	RS
	Areas	Areas						
Cinereous Vulture Aegypius monachus	1		4200	$\checkmark$	$\checkmark$			
Lammergeier Gypaetus barbatus	2		4200	$\checkmark$	$\checkmark$			
Pied Harrier Circus melanoleucos	2		4200	$\checkmark$				
Black-eared Kite Milvus Lineatus	1		4200	$\checkmark$				
Upland Buzzard Buteo hemilasius	1		4180	$\checkmark$				
Chinese Grouse Bonasa sewerzowi	6		4143			$\checkmark$		
Buff-throated Partridge Tetraophasis szechenyii	72	40	3800-4180	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$
Tibetan Partridge Perdix hodgsoniae	2		3800-4200			$\checkmark$		$\checkmark$
Blood Pheasant Ithaginis cruentus	53	10	3800-4180	$\checkmark$	$\checkmark$	$\checkmark$		
White Eared Pheasant Crossoptilon crossptilon	10	10	3900-4200			$\checkmark$		
Koklass Pheasant Pucrasia macrolopha	1		4170	$\checkmark$				
Snow Pigeon Columba leuconota	20	18	4200			$\checkmark$		
Hill Pigeon Columba rupestris	6		4150			$\checkmark$		
Derbyan Parakeet Psittacula derbiana	4	2	3600-4200	$\checkmark$		$\checkmark$		
Eurasian Cuckoo Cuculus canorus bakeyi	2		4000-4180			$\checkmark$		
Sichuan Wood Owl Strix davidi	1		4130		$\checkmark$			
White -throated Needletail Aerodramus caudacutus	4		3900-4200	$\checkmark$		$\checkmark$		
Fork-tailed Swift Apus pacificus	2		3900-4200	$\checkmark$				
Common Hoopoe Upupa epops	2		4140	$\checkmark$				
Grey-headed Woodpecker Picus canus	1		3900-4170			$\checkmark$		
Black Woodpecker Dryocopus martius	1	1	3800-4160		$\checkmark$		$\checkmark$	
White-winged Woodpecker Picoides major	1	1	4000-4140		$\checkmark$	$\checkmark$		
Darjeeling Woodpecker Picoides darjellensis	1		3970			$\checkmark$		
Rufous Woodpecker Celeus brachyurus	1		4070			$\checkmark$		
Three-toed Woodpecker Picoides tridactylus	1		3980			$\checkmark$		

Red-rumped Swallow Hirundo daurica	2		3800-4200	$\checkmark$				
Asian House Martin Delichom dasypus	3	2	3800-4200	$\checkmark$				
Grey Wagtail Motacilla cinerea	1		4130	$\checkmark$				
Yellow Wagtail Motacilla citreola citreola	1		4140	$\checkmark$				
White Wagtail Motacilla alba	7		4145	$\checkmark$				
Olive-backed Pipit Anthus hodgsoni	4		4050	$\checkmark$	$\checkmark$			$\checkmark$
Rosy Pipit Anthus roseatus	1		4150	$\checkmark$				
Grey-backed Shrike Lanius tephronotus	1	2	3800-4140		$\checkmark$	$\checkmark$		
Eurasian Jay Garrulus glandarius	2	2	3800-4100		$\checkmark$	$\checkmark$	$\checkmark$	
Black-billed Magpie Pica pica	1		4150	$\checkmark$		$\checkmark$		
Red-billed Choush Pyrrhocorax pyrrhocorax	2		4100-4170	$\checkmark$		$\checkmark$		
Rook Corvus frugilegus	3		4160	$\checkmark$		$\checkmark$		
Commen Raven Corvus corax	4		4150	$\checkmark$		$\checkmark$		
Daurian Jackdaw Corvus dauuricus	8		3900-4170	$\checkmark$		$\checkmark$		
Large-billed Crow Corvus macrorhynchos	12	6	3900-4250	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$
Carrion Crow Corvus corone	10	4	3900-4250	$\checkmark$	$\checkmark$	$\checkmark$		
Winter Wren Troglodytes troglodytes	1		4150		$\checkmark$			
Robin Accentor Prunella rubeculoides	1		4100			$\checkmark$		$\checkmark$
Rufose-breasted Prunella strophiata	2	2	4000-4300	$\checkmark$		$\checkmark$		$\checkmark$
Brown Accentor Prunella fulvescens	1		4150	$\checkmark$				
Rufous-tailed Robin Luscinia sibilans	2		4170					$\checkmark$
White-tailed Rubythroat Luscinia pectoralis	1		4100			$\checkmark$		
Orange-flanked Bush Robin Tarsiger cyanurus	2		4150					$\checkmark$
Black Redstart Phoenicurus ochruros	1		4100		$\checkmark$			
Hodgson's Redstart Phoenicurus hodgsoni	2	1	4000		$\checkmark$	$\checkmark$		
Blue-fronted Redstart Phoenicurus frontalis	2	2	3900-4130		$\checkmark$			
White-throated Redstart Phoenicurus schisticeps	6	2	3800-4140	$\checkmark$	$\checkmark$	$\checkmark$		
White-bellied Redstart Hodgsonius phoenicuroides	2		3800-4200				$\checkmark$	$\checkmark$

Long-tailed Thrush Zoothera dixoni	2		4000-4140			$\checkmark$		$\checkmark$
Kessler's Thrush <i>Turdus kessleri</i>	3		4100-4170	$\checkmark$	$\checkmark$			
Chinese Thrush Turdus mupinensis	1		4140					$\checkmark$
Rufous-capped Babbler Stachyris ruficeps	1		4140					$\checkmark$
Rufous-tailed Babbler Chrysomma poecilotis	2		4160					$\checkmark$
Chinese Babax Babax lanceolatus	8	6	3800-4150		$\checkmark$	$\checkmark$		$\checkmark$
Elliot's Laughing thrush Garrulax elliotii	6		4000-4192	$\checkmark$	$\checkmark$	$\checkmark$		
Giant Laughing thrush Garrulax maximus	33	15	3700-4140	$\checkmark$	$\checkmark$	$\checkmark$		
White-browed Fulvetta Alcippe vinipectus	3	3	3900-4200		$\checkmark$	$\checkmark$		
Chinese Fulvetta Alcippe striaticollis	4	1	3900-4140		$\checkmark$			$\checkmark$
Eastern Crowned Warbler Phylloscopus coronatus	4	4	4100		$\checkmark$	$\checkmark$		
Tickell's Leaf Warbler Phylloscopus affinis	3		4100			$\checkmark$		
Dusky Warbler Phylloscopus fuscatus	2	3	4000-4150			$\checkmark$		
Pallas's Leaf Warbler Phylloscopus proregulus	3		4130		$\checkmark$			
Lemon-rumped Warbler Phylloscopus chloronotus	2		3800-4140			$\checkmark$	$\checkmark$	
Blyth's Leaf Warbler Phylloscopus reguloides	1	2	4050			$\checkmark$		
Crested Tit Warbler Leptopoecile elegans	4		3900-4120	$\checkmark$		$\checkmark$		
White-browed Tit Warbler Leptopoecile sophiae	11		3900-4180	$\checkmark$		$\checkmark$		
Goldcrest Regulus regulus	1		4000			$\checkmark$		
Great Tit Parus major	10		4000-4200		$\checkmark$	$\checkmark$		
Coal Tit Parus ater	13	9	3800-4200	$\checkmark$	$\checkmark$	$\checkmark$		
Rofous-vented Tit Parus rubidiwentris	3	3	3900-4140		$\checkmark$	$\checkmark$		
Grey-crested Tit Parus dichrous	4	2	3800-4200		$\checkmark$	$\checkmark$		
Black-browed Tit Aegithalos bonvaloti	13	20	4000-4100		$\checkmark$			
Eurasian Nuthatch Sitta europaea	1		3900			$\checkmark$		
Bar-tailed Treecreeper Certhia himalayana	1		3800-4100			$\checkmark$	$\checkmark$	
Pine Grosbeak Pinicola enucleator	20		4100			$\checkmark$		
Streaked Rosefinch Carpodacus rubicilloides	2		4000-4150	$\checkmark$		$\checkmark$		

Vinaceous Rosefinch Carpodacus vinaceus	2		4100	$\checkmark$		$\checkmark$		
Beautiful Rosefinch Carpodacus pulcherrimus	9	5	3900-4180	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$
Pink-rumped Rosefinch Carpodacus eos	4		3900-4160	$\checkmark$				
White-browed Rosefinch Carpodacus thura	15	5	3800-4200	$\checkmark$	$\checkmark$	$\checkmark$		
Common Rosefinch Carpodacus erythrinus	2	4	4000-4120	$\checkmark$		$\checkmark$		
Three-banded Rosefinch Carpodacus trifasciatus	4		4000-4160				$\checkmark$	
Red Crossbill Loxia curvirostra	1		4140			$\checkmark$		
Grey-headed Bullfinch Pyrrhula erythaca	1		4150	$\checkmark$				

OF=Oak forests

AM=Alpine Meadow CF= Coniferous forests

COMMENT:

DBCF=Deciduous broad-leaved and coniferous mixed forests RS= Rhododendron shrubberies

# Annex 3. The GPS Point of national protected birds of Pamuling in Summer

Species	Quantity	Latitude (N)	Longitude (E)	Altitude
Cinereous Vulture Aegypius monachus	1	30.09875	101.17812	4200
Lammergeier Gypaetus barbatus	2	30.10214	101.18311	4200
Pied Harrier Circus melanoleucos	2	30.10145	101.19418	4200
Black-eared Kite Milvus Lineatus	1	30.10039	101.19623	4200
Upland Buzzard Buteo hemilasius	1	30.10179	101.18796	4180
Chinese Grouse Bonasa sewerzowi	2	30.10392	101.18552	4143
Chinese Grouse Bonasa sewerzowi	4	30.10274	101.18311	4129
Buff-throated Partridge Tetraophasis szechenyii	3	30.10149	101.18348	4122
Buff-throated Partridge Tetraophasis szechenyii	2	30.10114	101.8927	4113
Buff-throated Partridge Tetraophasis szechenyii	2	30.10114	101.19537	4121
Buff-throated Partridge Tetraophasis szechenyii	3	30.10038	101.19613	4132
Buff-throated Partridge Tetraophasis szechenyii	3	30.10039	101.19623	4137
Buff-throated Partridge Tetraophasis szechenyii	6	30.10181	101.18123	4134
Buff-throated Partridge Tetraophasis szechenyii	3	30.10188	101.19314	4136
Buff-throated Partridge Tetraophasis szechenyii	2	30.10161	101.19524	4138
Buff-throated Partridge Tetraophasis szechenyii	3	30.10009	101.19618	4130
Buff-throated Partridge Tetraophasis szechenyii	3	30.10218	101.18229	4151
Buff-throated Partridge Tetraophasis szechenyii	2	30.10211	101.18286	4141
Buff-throated Partridge Tetraophasis szechenyii	14	30.10194	101.18827	4123
Buff-throated Partridge Tetraophasis szechenyii	2	30.10128	101.18945	4117
Buff-throated Partridge Tetraophasis szechenyii	4	30.09956	101.19517	4191
Buff-throated Partridge Tetraophasis szechenyii	4	30.10958	101.17545	4049
Buff-throated Partridge Tetraophasis szechenyii	3	30.09555	101.168	4008
Buff-throated Partridge Tetraophasis szechenyii	2	30.09612	101.1669	4007
Buff-throated Partridge Tetraophasis szechenyii	3	30.09497	101.16454	3974

3	30.10247	101.20685	4170
3	30.10039	101.21545	4187
3	30.09995	101.21708	4159
2	30.099	101.21492	4157
2	30.09878	101.21372	4165
3	30.09284	101.21053	4157
3	30.09654	101.2102	4153
2	30.09504	101.195	4078
4	30.10209	101.20495	4159
1	30.10189	101.18348	3800
12	30.10736	101.17718	4064
8	30.10097	101.19595	4040
8	30.09712	101.17435	4065
11	30.10179	101.1813	4074
4	30.10145	101.19418	4134
10	30.10194	101.18827	4123
10	30.10128	101.18945	4117
10	30.10923	101.17571	4050
10	30.09612	101.1669	4007
1	30.10002	101.1742	3900-4200
6	30.09638	101.20964	4078
1	30.09551	101.20914	4130
	3   3   2   3   2   3   3   2   3   3   2   4   12   8   8   11   4   10   10   10   10   10   10   10   10   10   10   10	3   30.10039     3   30.09995     2   30.099     2   30.09878     3   30.09284     3   30.09654     2   30.09504     4   30.10209     1   30.10189     12   30.10736     8   30.10097     8   30.10179     4   30.10179     4   30.10145     10   30.10194     10   30.10128     10   30.10923     10   30.09612     1   30.10002     6   30.09638	3   30.10039   101.21545     3   30.09995   101.21708     2   30.099   101.21492     2   30.09878   101.21372     3   30.09284   101.21053     3   30.09654   101.2102     2   30.09504   101.2102     2   30.09504   101.202     2   30.09504   101.195     4   30.10209   101.20495     1   30.10189   101.18348     12   30.10736   101.17718     8   30.10097   101.19595     8   30.09712   101.17435     11   30.10179   101.1813     4   30.10179   101.18827     10   30.10128   101.18945     10   30.10923   101.17571     10   30.10923   101.17571     10   30.09612   101.1669     1   30.10002   101.1742     6   30.09638   101.20964

## Annex 4: List of figures (© Nan Yang)



Plate 1: Mr Nan Yang was measuring the nest of Buff-throated Partridge; Plate 2: Mr. Yu Xu was collecting field data in Pamuling;



Plate 3: Mr. Kai Zhang was collecting field data in Pamuling; Plate 4: Mr Nan Yang was watching one family of Buff-throated Partridge.



Plate 5: Prof. Dr. Jochen Martens who comes from Institute of Zoology, University of Mainz visited Pamuling; Plate 6: The bird watching was taking pictures in Scared Areas of Pamuling;



Plate 7: Buff-throated Partridge in Scared Areas of Pamuling; Plate 8: Buff-throated was hatching in the nest that was built in the Alpine Oak;



Plate 9: The nest of Buff-throated Partridge on the Spruce; Plate 10: The nestlings of Buff-throated Partridge;



Plate 11: Intensive collection of mushrooms in the August; Plate 12: The Tibetans and mushroom that they collected in the Scared Forest in Pamuling;



Plate 13: The Tibetans turn around the Scared Mountain everyday and throw foods at Buff-throated Partridge;

Plate 14: The Tibetans gathered in Pamuling for the traditional Kermis on 25<sup>th</sup> in the lunar calendar of China;



Plate 15: The Giant Laughing thrush in Scared Areas of Pamuling; Plate 16: The Streaked Rose finch in Scared Areas of Pamuling;



Plate 17: The White-browed Rose finch in Scared Areas of Pamuling Plate 18: The Tibetan Partridge in Scared Areas of Pamuling;



Plate 19: The Rhesus Macaque family in Scared Areas of Pamuling (More than 60 Rhesus Macaque in a family); Plate 20: The Blood Pheasant in Scared Areas of Pamuling.

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