



Per Gustav Thingstad and Jan Ove Gjershaug

Norwegian Environmental Agency's «baseline studies 2013» - pilot sub-project: Bird surveys in Natmataung national park

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Bird surveys in Natmataung national park**

**Environmental cooperation between Myanmar
and Norway: Conservation of biodiversity and
improved management of protected areas**

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The current road towards Mindat curves itself gently through the steep wooded slopes, a short distance from the crossroads up to Natmataung (Mt Victoria). Photo: Per Gustav Thingstad

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Summary

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During the period 30.11.-12.12.2013 we conducted a feasibility study in Natmataung national park. Before, during, and after our visit we reviewed the existing bird literature and “birding-trip reports” on the internet from Natmataung, and received some important supplements from the park administration and our own registrations. This resulted in a list consisting of 337 known bird species from the park and its closest surroundings. Together with our local collaborating partners from the park administration we tested and demonstrated different surveys method, including feather sampling from mistnet caught birds for future DNA-analysis (to control the insecure taxonomic status for some of the bird species). Further we initiative a monitor program to reveal the long-term situation and trend for Natmataung's bird species by means of a form we have worked out. This should be given to all birder groups visiting the park, and delivered to the park administration after their stay. It is of outmost importance that the situation for the endemic, rare and charismatic species in the park is supervised. In that connection we have also tried to form an idea of the main threats for biodiversity within the park, in particularly for the diverse avifauna. As earlier reported from other preserved areas in Myanmar agricultural expansion, hunting, over-exploitation of forest and livestock grazing seem to represent problems also in Natmataung, in particularly due to the fact that the shape of the park (long and narrow) creates huge impacts into the park from activities going on in the border zone. Another encroachment in the park's landscape is the ongoing extension of the road going through some of central parts of the park; this upgrading will also cause more undesirable traffic and disturbances on the biodiversity in the park. Today many of the most sought after game species are, according to the local people, only to be found in the “deep forest” in the northern and westernmost parts of the park. Some more complete investigations and status evaluations of these “deep forest” are demanded and should be done in a follow-up project. Further, a success factors for the future management of the park might be to involve some of the local hunters in alternative outcome activities, such as demonstrate and give information about the local nature and culture, and helping and guiding tourists. Hopefully an ecotourism offer (for nature photographers), which we already have discussed in some details with some of the local hunters in different parts of the national park, will turn out to be fruitful. This involves the still locally quite common, according to these hunters, and very charismatic species the Blyth's Tragopan, which we hope can be the new flagship and symbol species in the prospective marketing operations of this park. But we need to test this offer together with the involved local hunters during this bird's display period in April, before this offer hopefully can be carrying through successfully.

Key words: avifauna – status – monitoring – flagship species – threats – management actions – ecotourism

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Content

Summary	3
Foreword	5
1 Introduction	6
2 Background - the study area.....	7
3 The initial project in 2013.....	12
4 Endemic and rare species – potential attraction	13
5 The main threats.....	56
6 A new flagship species - the Blyth’s Tragopan?	61
7 Follow-up works in Natmataung national park	62
8 References	64

Foreword

This pre-project represent a contribution to the bilateral project “Environmental Cooperation between Myanmar and Norway: Conservation of Biodiversity and Improved Management of Protected Areas” between the Ministry of Environmental Conservation and Forestry (MOECAF) in Myanmar and the Norwegian “Miljøverndepartementet” (Ministry of the Environment). This project should give a contribution to strengthen the management of the protected areas and the biodiversity in Myanmar on the national level as well as on the local levels. We would like to give our acknowledgements to all persons from these authorities which have been involved in making our sub-project “Bird surveys in Natmataung National Park” possible to carry out in 2013. In particular we would like to mention director Win Naing Thaw (at Nature and Wildlife Conservation Division, Forest Department, MOECAF) and Dr. Naing Zaw Htun (MOECAF) that arranged the necessary practical details during our visit to Myanmar, and Jan-Petter Hubert Hansen and Morten Ingebrigsten Wedege (Norwegian Environmental Agency) that are leading and coordinating this project from the Norwegian side; Wedege also for his support during our first week in field in Myanmar. Further we would like to thanks the park warden at Natmataung, Tin Mya Soe and his wife, for all the excellent services during our stay, and the park rangers, Maung Nu and Shing Ohm, for their helpfulness and expertise during the field work. Thanks also to Siri Damman from the Rainforest Foundation Norway, the interpreter Law Har Seing Pai and the park ranger and plant expert Shine Man for their co-operation in Natmataung, in particular by facilitating contact with local hunters and compiling information about bird and wildlife, livelihoods, and use of wild plants in communities in the local Chin villages. Further we want to reward our chauffeur, Aung Ling Htan (Bonaventure). His acquainted with the locality was of great importance for the outcome of our pilot work in the area. Thanks also to Ulrich Weber and Ramki Sreenivasan for permission to use their photos of the Blyth’s Tragopan.

Trondheim, 25.01.2014

Per Gustav Thingstad and Jan Ove Gjershaug

1 Introduction

Myanmar still has a high level of species richness and endemism, it contains a significant part of the biodiversity hotspots for the region, and has some of the largest tracts of intact habitat; far more than most of other regions in Southeast Asia. Therefore Myanmar has a great importance for protection of the biodiversity and nature heritage in this part of the world. However, decades of political and economic isolation and sanctions have resulted in low conservation investments. Today things are changing rapidly, the political reforms and shift towards democracy have placed Myanmar in a situation with fast economic development, but also increased investments focused on exploitation of its rich, and relatively intact, natural resources. Together with the ongoing climatic change this is likely to lead to far-reaching negative consequences for the unique natural qualities within Myanmar (Rao *et al.* 2013, Salisbury 2013).

Hunting of wildlife for subsistence and illegal and unregulated trade is widespread in tropical Southeast Asia. This has resulted in declines of many game species, in particularly the bigger ones, but also smaller species are increasingly targeted for food, medicine or pets (Robinson & Bennett 2000, Bennett 2007). In many rural areas an expanding human populations depend on wild meat, and as a consequence game species are in high degree confronted with the risk of overharvesting (Alvard 2000, Rao *et al.* 2011). Recognizing the needs of the local people and involve them in conservation project is therefore of vital importance (Salisbury 2013).

In Myanmar many species are protected by law (Ministry of Forestry 1994); - the *completely protected* may not be hunted without special license, the *protected* may be hunted but only with special permission; all species within the Phasianidae (Peafowls and Pheasants) and Bucerotidae (Hornbills) families belong to those in the former category. However, also in Myanmar hunting and loss of habitats pose serious challenges for preserving viable populations of these bird groups, among others, even across the country's protected areas (Rao *et al.* 2011, 2013). Therefore, as Dr. James Watson puts under stress the saving of "Myanmar's natural wonders for posterity will rely on filling knowledge gaps and correctly anticipating the responses of environment and people in a changing world" (www.sciencedaily.com/releases/2013/07/130730150656.htm)

The goal for a newly started bilateral project "Environmental Cooperation between Myanmar and Norway: Conservation of Biodiversity and Improved Management of Protected Areas", between the Ministry of Environmental Conservation and Forestry (MOECAF) in Myanmar and the Norwegian "Miljøverndepartementet" (Ministry of the Environment, after 1 January 2014 changed name to Ministry of Climate and Environment), is to achieve a strengthen environmental safeguard and investments in conservation in Myanmar, on the national level as well as on the local levels. As a contribution to this bilateral project a pilot project on birdlife in Natmantaung national park was conducted in December 2013. The outcomes of this initial work and some proposed follow-up works are given in this report.

2 Background - the study area

The national park Natmataung (Nat Ma Taung) is located in Chin State of western Myanmar, within the Chin Hills-Arakan Yoma montane forest ecoregion. This mountain range includes the third highest peak, Natmataung (Mt Victoria) in Myanmar (3053 m high), and form a southward extension of the Himalayan mountain range. The range has a mixture of hill savannah and pine forests, but the moist upper parts have also a great proportion of mixed deciduous forest, while at the lower elevations tropical and subtropical forests (hill evergreen forest) are dominating (Figure 1). The park, covering some 720 km², was established in 1994 and should preserve some important watershed areas, the natural forest and mountain ecosystem with its abundant fauna (e.g. mammals, birds, reptiles and butterflies) and flora (not at least orchids). Some of the known bird species are endemic to the region.

According to Myanmar's fourth National Report to UNCBD (United Nations Convention on Biological Diversity) of 2009 the threats for the mountain ecosystems within Myanmar are the possible effects of climatic change, forest fire, soil erosion, landslide and rapid loss of habitat and genetic diversity. Agricultural expansion, hunting, over-exploitation of forest and livestock grazing are also major threats. Also within Natmataung national park several of these threats seem to be of relevance, as the presence of human settlements both inside and in the surroundings of the Natmataung national park (Figure 2) represent an increasingly impact upon the biodiversity (Istituto Oikos and BANCA 2011). In addition to the impact factors already mention, for the local bird-life an extensive use of birdlime seems to play an important challenge; as 186 of the species in the area is estimated to be vulnerable to entrapment with birdlime, among those the poorly-studied endemic and endangered White-browed Nuthatch (Platt *et al.* 2012). To work with the local people (Figure 3), and support the local communities, might be an important issue to prevent further depletion of natural resources and biodiversity in the park.

By 2011, according to Istituto Oikos and BANCA, 299 bird species should have been identified within Natmataung National Park. Accordingly, there exist already important knowledge about the avifauna in Natmataung; some published, but most given as "birding-trip reports" on the internet. The local know-how is also of vital importance to incorporate. According to Naing (2003), beside the endemic White-browed Nuthatch, other verified bird species of particular interest within the park are Mrs. Hume's Pheasant, Blyth's Tragopan, Black-breasted Thrush, Grey-sided Thrush, Broad-billed Warbler, Striped Laughingthrush, Slender-billed Scimitar Babbler, Black-headed Babbler and Grey Sibia. All these are listed as vulnerable or near threatened. The Burmese Tit, recently split from Black-browed Tit, represents another of Myanmar's endemics which is regularly seen within the park.



The Assam Laughingthrush represents one of the most richly coloured bird species from this area. Even though it is quite common in this park, and not considered endangered, it has a very restricted global distribution. Photo: Per Gustav Thingstad



Figure 1. Continue to next side



Figure 1. Upper previous side: A view from the uppermost parts of Natmataung national park where the hill savannah and moist mixed deciduous forest dominating the landscape. Lower previous side: The pine forest (*Pinus kasiya*) just below the peak of Natmataung (Mt Victoria). This side: The mixed (mostly oaks) deciduous forest; together with the pine forest these represent the two dominant forest types within the upper parts of the park. Photo: Per Gustav Thingstad



The Himalayan Buzzard seems to be the most numerous bird of prey in Natmataung national park, at least during the autumn. Photo: Per Gustav Thingstad



Figure 2. Picture of a map showing the distribution and shape of Natmataung national park. Notice the small white dots which represent the small Chin villages in the area, and the red line showing the roads and white lines showing the main tracks.



Figure 3. The Chin people in the Hla Laung Pan village have a genius knowledge about their neighbouring nature and their culture, which they are willing to share with visitors. This is an important resource as an element in making much-coveted ecotourism products. Below to the left is Bu Low and Ling Mang (in front) discussing some of their observations of hornbills with Shing Ohm, and to the right is 85 years old Aung Laing showing his bird and mammal observations from his notebooks, going back for many decades, to among others our interpreter Law Har Seing Pai and the park ranger Shine Man. In co-operation with Siri Damman at the Rainforest Foundation Norway these informations will be given in later reports. Photo: Per Gustav Thingstad

3 The initial project in 2013

We started our initial work by conducting a feasibility study by means of an on-site inspection of the park during the period 30.11.-12.12.2013. Before and after our visit we reviewed the existing bird literature and “birding-trip reports” on the internet from Natmataung. We also received some important supplements from the park administration (“Park Bird List 2002”) as well as from own observations obtained during our stay. Altogether, 337 bird species are known from the park and its closest surroundings by the beginning of 2014 (Table 1). To avoid too many puzzlements due to recently changes in the nomenclature an overview of the alternative used names are also incorporated in Table 1. The sources for the new observations, supplementing the list with 205 species (species no 1 – 205 in Table 1) given by Naing (2003), are shown in Table 2; and some more details about these supplements are given in Table 3.

As “Regnskogfondet” (Rainforest Foundation Norway) plan to support projects for more sustainable livelihood and sustainable use of forest and wildlife resources in Natmataung national park, they are a natural collaborating partner for our work here. The information they gather with regard to hunting, swidden farming and the use of wild plants from the forest habitats in question is of particular significance to our work. Accordingly, during our stay the sampling of the local faunal knowledge was conducted under the Rainforest Foundation Norway project, led by Siri Damman. Here, we will focus on the known occurrence of key species/groups and “charismatic species” in the park, which might be of great importance for further ecotourism products.

Together with our local collaborating partners from the park administration we tested different possible survey methods: mistnets (fowler's nets), phototraps (digital scouting cameras for bird and mammal observations), visual observation by means of binoculars and telescopes, and also some play-back of bird songs. To demonstrate how to sample DNA-material for further BAR-codings we collected one tail feather from each of the birds caught in the mistnets. We also took relevant biometric measurements from these birds before they were set free. Finally we gave recommendations for the documentation procedures of wildlife observations (including photos, sound recording and geo-referenced information etc.) and discussed how to obtain a secure electronic data processing (both of field observations and photo documents).

We also initiated a simple monitoring program for the birds in the park. That can be carried out by park rangers with skilled bird competence when they do their patrol activities, but are mainly address to bird watching groups visiting the park. By encourage all visiting birders to make a semi-quantitative note of the birds they have been registered during their stay in the park, one should obtain a picture of the more long-term trends for the different species/groups within the local bird community. To make it easier for the visiting groups to fill in this information, a form given as a checklist consisting of all the known observed bird species in the area was composed by us, and given to the park administration and the nearby eco-lodges (Table 4). Some of the local tour operators were encouraged to sample this information and deliver it to the park administration. This initiative should be further strengthen and addressed to all bird interested visitors in the park in the future.

4 Endemic and rare species – potential attraction

To obtain an overview of the local bird fauna we visited all the main habitat types in the park during our stay. Altogether we registered 115 bird species (Table 5).

Many of the species showed a quite cryptic behavior, to some extent probably due to the hunting activities mainly going on along the roads and tracks in the area; in the same areas as we stayed during our visits. We have also to call attention to the fact that our stay period was coincident with the winter phase for the birds. Thereby not only the resident species (given by “res” in the “Status” column in Table 1) were staying in the area, but also some migratory species that only spend the winter here. On the other hand, this is a time of the year when most of the birds show little activity. Accordingly they expose themselves less than during the start of the breeding season for most of the native species (March-May). At that time of the year they are marking their territories with song and different kind of displays, which results in a much greater likelihood for discovering them. Due to these circumstances, and our limited familiarity with the sounds of many of the actual birds, we surely disregarded some of the species that were present at our study locations.

Whatsoever, during our visit we gain quite a good insight into which birds that can be catch sight of or not. This is of vital importance for planning good eco-tourism products based upon the local wildlife. So far much of the focus has been set on the endemic White-browed Nuthatch (Figure 4), while other potential more “charismatic species or groups” have been paid less attention. Some other verified bird species of particular interest within the park are Mrs. Hume’s Pheasant, Black-breasted Thrush, Grey-sided Thrush, Broad-billed Warbler, Striped Laughingthrush, Slender-billed Scimitar Babbler, Black-headed Babbler, Burmese Tit, Grey Sibia, Babax, Chin Hills Wren-Babbler and the mythical Blyth’s Tragopan. The hornbills and some bird of prey might also potentially operate as vital attractions for birders.



Figure 4. The White-browed Nuthatch has so far been used as the “flagship” species for the birds being resident within the Natmataung national park. Photo: Per Gustav Thingstad

Table 1. Systematic list of birds in Natmataung national park per January 2014. The taxonomy is according to that given in Robsen's 2008 version of "A field guide to the Birds of South-east Asia".

English name	Scientific name	Differing nomenclature	Species no	Status
() = uncertain observation				
CHINESE FRANCOLIN	<i>Francolinus pintadeanus</i>		279	res
HILL PARTRIDGE	<i>Arborophila torqueola</i>		1	res
RUFIOUS-THROATED PARTRIDGE	<i>Arborophila rufogularis</i>		280	res
MOUNTAIN BAMBOO-PARTRIDGE	<i>Bambusicola fytchii</i>		2	res
BLYTH'S TRAGOPAN	<i>Tragopan blythii</i>		3	res
RED JUNGLEFOWL	<i>Gallus gallus</i>		247	res
KALIJ PHEASANT	<i>Lophura leucomelanos</i>		4	res
MRS HUME'S PHEASANT	<i>Symaticus humiae</i>		5	res
GREY PEACOCK-PHEASANT	<i>Polyplectron bicalcaratum</i>		6	res
COLLARED FALCONET	<i>Microrhax caerulescens</i>		7	res
COMMON KESTREL	<i>Falco tinnunculus</i>		208	
ORIENTAL HOBBY	<i>Falco severus</i>		8	res
PEREGRINE FALCON	<i>Falco peregrinus</i>		234	
BLACK BAZA	<i>Aviceda leucophotes</i>		302	res
CRESTED SERPENT-EAGLE	<i>Spilornis cheela</i>		9	res
WHITE-RUMPED VULTURE	<i>Gyps bengalensis</i>		303	res
HIMALAYAN GRIFFON	<i>Gyps himalayensis</i>		259	
CRESTED GOSHAWK	<i>Accipiter trivirgatus</i>		10	res
SHIKRA	<i>Accipiter badius</i>		217	
BESRA	<i>Accipiter virgatus</i>		11	res
EURASIAN SPARROWHAWK	<i>Accipiter nisus</i>		12	
NORTHERN GOSHAWK	<i>Accipiter gentilis</i>		250	
HIMALAYAN BUZZARD	<i>Buteo burmanicus</i>	COMMON BUZZARD <i>Buteo buteo</i>	13	
BONELLI'S EAGLE	<i>Aquila fasciata</i>	<i>Hieraaetus fasciatus</i>	230	
BLACK EAGLE	<i>Ictinaetus malayensis</i>		14	res

RUFOUS-BELLIED EAGLE	<i>Lophotriorchis kienerii</i>	335	res
ORIENTAL HONEY-BUZZARD	<i>Pernis ptilorhynchus</i>	15	res
MOUNTAIN HAWK-EAGLE	<i>Nisaetus nipalensis</i>	207	res
CHANGEABLE HAWK-EAGLE	<i>Nisaetus cirrhatus</i>	16	res
SLATY-LEGGED CRAKE	<i>Rallina eurizonoides</i>	331	
COMMON COOT	<i>Fulica atra</i>	330	
GREY-HEADED LAPWING	<i>Vanellus cinereus</i>	301	
EURASIAN WOODCOCK	<i>Scolopax rusticola</i>	273	
ASHY WOODPIGEON	<i>Columba pulchricollis</i>	17	res
MOUNTAIN IMPERIAL PIGEON	<i>Ducula badia</i>	206	
ORIENTAL TURTLE-DOVE	<i>Streptopelia orientalis</i>	18	res
SPOTTED DOVE	<i>Streptopelia chinensis</i>	283	res
BARRED CUCKOO-DOVE	<i>Macropygia unchall</i>	218	
EMERALD DOVE	<i>Chalcophaps indica</i>	286	
THICK-BILLED GREEN-PIGEON	<i>Treron curvirostra</i>	265	
YELLOW-FOOTED GREEN-PIGEON	<i>Treron phoenicoptera</i>	235	
WEDGE-TAILED GREEN-PIGEON	<i>Treron spenura</i>	19	res
ALEXANDRINE PARAKEET	<i>Psittacula eupatria</i>	298	res
GREY-HEADED PARAKEET	<i>Psittacula finschii</i>	20	res
RED-BREASTED PARAKEET	<i>Psittacula alexandri</i>	255	
LARGE HAWK-CUCKOO	<i>Hierococcyx sparverioides</i>	21	res
EURASIAN CUCKOO	<i>Cuculus canorus</i>	22	
INDIAN CUCKOO	<i>Cuculus micropterus</i>	23	res
HIMALAYAN CUCKOO	<i>Cuculus saturatus</i>	24	
PLAINTIVE CUCKOO	<i>Cuculus merulinus</i>	229	
ASIAN EMERALD CUCKOO	<i>Chrysococcyx maculatus</i>	25	res
DRONGO CUCKOO	<i>Surniculus lugubris</i>	266	
GREEN-BILLED MALKOHA	<i>Rhopodytes tristis</i>	236	
GREATER COUCAL	<i>Centropus sinensis</i>	219	

LESSER COUCAL	<i>Centropus bengalensis</i>	281	
MOUNTAIN SCOPS-OWL	<i>Otus spilocephalus</i>	220	
COLLARED SCOPS-OWL	<i>Otus letitia</i>	26	res
ORIENTAL SCOPS-OWL	<i>Otus sunia</i>	27	res
COLLARED OWLET	<i>Glaucidium brodiei</i>	28	res
ASIAN BARRED OWLET	<i>Glaucidium cuculoides</i>	29	res
JUNGLE OWLET	<i>Glaucidium radiatum</i>	300	res
BROWN WOOD-OWL	<i>Strix leptogrammica</i>	336	res
HIMALAYAN WOOD-OWL	<i>Strix nivicola</i>	30	res
HODGSON'S FROGMOUTH	<i>Batrachostomus hodgsoni</i>	31	res
GREAT EARED-NIGHTJAR	<i>Eurostopodus macrotis</i>	257	
GREY NIGHTJAR	<i>Caprimulgus jotaka</i>	32	res
LARGE-TAILED NIGHTJAR	<i>Caprimulgus macrurus</i>	221	
INDIAN NIGHTJAR	<i>Caprimulgus asiaticus</i>	222	
SAVANNA NIGHTJAR	<i>Caprimulgus affinis</i>	258	
HIMALAYAN SWIFTLET	<i>Aerodramus brevirostris</i>	33	res
BROWN-BACKED NEEDLETAIL	<i>Hirundapus giganteus</i>	237	
FORK-TAILED SWIFT	<i>Apus pacificus</i>	260	
HOUSE SWIFT	<i>Apus affinis</i>	299	res
RED-HEADED TROGON	<i>Harpactes erythrocephalus</i>	294	res
WHITE-THROATED KINGFISHER	<i>Halcyon smyrnensis</i>	295	res
COMMON HOOPOE	<i>Upupa epops</i>	274	
INDIAN ROLLER	<i>Coracias bengalensis</i>	293	res
BLUE-BEARDED BEE-EATER	<i>Nyctornis athertoni</i>	296	res
BLUE-TAILED BEE-EATER	<i>Meropsis philippineus</i>	297	
GREAT HORNBILL	<i>Buceros bicornis</i>	291	res
RUFIOUS-NECKED HORNBILL	<i>Aceros nipalensis</i>	292	res
GREAT BARBET	<i>Megalaima virens</i>	34	res
LINEATED BARBET	<i>Megalaima lineata</i>	290	res

GOLDEN-THROATED BARBET	<i>Megalaima franklinii</i>	35	res
BLUE-THROATED BARBET	<i>Megalaima asiatica</i>	36	res
SPECKLED PICULET	<i>Picumnus innominatus</i>	37	res
WHITE-BROWED PICULET	<i>Sasia ochracea</i>	38	res
RUFIOUS-BELLIED WOODPECKER	<i>Hypopicus hyperythrus</i>	39	res
FULVOUS-BREASTED WOODPECKER	<i>Dendrocopus macei</i>	40	res
STRIPE-BREASTED WOODPECKER	<i>Dendrocopus atratus</i>	41	res
CRIMSON-BREASTED WOODPECKER	<i>Dendrocopus cathpharius</i>	42	res
GREAT SPOTTED WOODPECKER	<i>Dendrocopus major</i>	288	res
DARJEELING WOODPECKER	<i>Dendrocopus darjellensis</i>	43	res
WHITE-BELLIED WOODPECKER	<i>Dryocopus javensis</i>	238	
GREATER YELLOWNAPE	<i>Chrysophlegma flavinucha</i>	44	res
LESSER YELLOWNAPE	<i>Picus chlorolophus</i>	45	res
STREAK-THROATED WOODPECKER	<i>Picus xanthopygaeus</i>	289	res
GREY-HEADED WOODPECKER	<i>Picus canus</i>	248	
BAY WOODPECKER	<i>Blythipicus pyrrhotis</i>	46	res
LONG-TAILED BROADBILL	<i>Psarisomus dalhousiae</i>	47	res
BLUE-WINGED PITTA	<i>Pitta moluccensis</i>	267	
BLACK-HEADED SHRIKE-BABBLER	<i>Pteruthius rufiventer</i>	48	res
WHITE-BROWED SHRIKE-BABBLER	<i>Pteruthius flaviscapis</i>	49	res
GREEN SHRIKE-BABBLER	<i>Pteruthius xanthochlorus</i>	50	res
BLACK-EARED SHRIKE-BABBLER	<i>Pteruthius melanotis</i>	51	res
LARGE CUCKOO-SHRIKE	<i>Coracina macei</i>	52	res
BLACK-WINGED CUCKOO-SHRIKE	<i>Coracina melaschistos</i>	254	
BAR-WINGED FLYCATCHER-SHRIKE	<i>Hemipus picatus</i>	53	res
GREY-CHINNED MINIVET	<i>Pericrocotus solaris</i>	54	res
LONG-TAILED MINIVET	<i>Pericrocotus ethologus</i>	55	res
SHORT-BILLED MINIVET	<i>Pericrocotus brevirostris</i>	56	res
SCARLET MINIVET	<i>Pericrocotus speciosus</i>	223	res
	<i>Pericrocotus flammeus</i>		

SLENDER-BILLED ORIOLE	<i>Oriolus tenuirostris</i>		57	res
BLACK-HOODED ORIOLE	<i>Oriolus xanthornus</i>		239	
MAROON ORIOLE	<i>Oriolus traillii</i>		58	res
ASHY WOODSWALLOW	<i>Artamus fuscus</i>		59	res
COMMON WOODSHRIKE	<i>Tephrodomis pondicerianus</i>		307	res
YELLOW-BELLIED FANTAIL	<i>Chelidorhynch hypoxantha</i>	YELLOW-BELLIED FAIRY-FLYCATCHER	60	res
WHITE-THROATED FANTAIL	<i>Rhipidura albicollis</i>		61	res
BLACK-NAPED MONARCH	<i>Hypothymis azurea</i>		306	res
ASIAN PARADISE-FLYCATCHER	<i>Terpsiphone paradisi</i>		256	
BLACK DRONGO	<i>Dicrurus macrocerus</i>		305	res
ASHY DRONGO	<i>Dicrurus leucophaeus</i>		62	res
BRONZED DRONGO	<i>Dicrurus aeneus</i>		209	
LESSER RACKET-TAILED DRONGO	<i>Dicrurus remifer</i>		304	res
GREATER RACKET-TAILED DRONGO	<i>Dicurus paradiseus</i>		268	
HAIR-CRESTED DRONGO	<i>Dicrurus hottentottus</i>	SPANGLED DRONGO	63	res
EASTERN JUNGLE CROW	<i>Corvus leuallantii</i>	LARGE-BILLED CROW	64	res
EURASIAN JAY	<i>Garrulus glandarius</i>		65	res
YELLOW-BILLED BLUE MAGPIE	<i>Urocissa flavirostris</i>		66	res
RED-BILLED BLUE MAGPIE	<i>Urocissa erythrorhyncha</i>		67	res
COMMON GREEN MAGPIE	<i>Cissa chinensis</i>		282	res
RUFIOUS TREEPIE	<i>Dendrocitta vagabunda</i>		334	res
GREY TREEPIE	<i>Dendrocitta formosae</i>		68	res
BROWN SHRIKE	<i>Lanius cristatus</i>		264	
BURMESE SHRIKE	<i>Lanius collurioides</i>		69	res
LONG-TAILED SHRIKE	<i>Lanius schach</i>		70	res
GREY-BACKED SHRIKE	<i>Lanius tephronotus</i>		71	
MRS GOULD'S SUNBIRD	<i>Aethopyga gouldiae</i>		72	res
GREEN-TAILED SUNBIRD	<i>Aethopyga nipalensis</i>		73	res
(BLACK-THROATED SUNBIRD)	<i>Aethopyga saturata</i>		74	res

FIRE-TAILED SUNBIRD	<i>Aethopyga ignicauda</i>	75	res
STREAKED SPIDERHUNTER	<i>Arachnothera magna</i>	76	res
YELLOW-BELLIED FLOWERPECKER	<i>Dicaeum melanoxanthum</i>	77	res
FIRE-BREASTED FLOWERPECKER	<i>Dicaeum ignipectus</i>	78	res
SCARLET-BACKED FLOWERPECKER	<i>Dicaeum cruentatum</i>	327	res
(BLUE-WINGED LEAFBIRD)	<i>Chloropsis cochinchinensis</i>	240	
(GOLDEN-FRONTED LEAFBIRD)	<i>Chloropsis aurifrons</i>	79	res
ORANGE-BELLIED LEAFBIRD	<i>Chloropsis hardwickii</i>	80	res
ASIAN FAIRY-BLUEBIRD	<i>Irena puella</i>	81	res
SCALY-BREASTED MUNIA	<i>Lonchura punctulata</i>	82	res
RUSSET SPARROW	<i>Passer rutilans</i>	83	res
OLIVE-BACKED PIPIT	<i>Anthus hodgsoni</i>	84	
LONG-BILLED PIPIT	<i>Antus similis</i>	328	res
FOREST WAGTAIL	<i>Dendronanthus indicus</i>	329	
GREY WAGTAIL	<i>Motacilla cinerea</i>	85	
YELLOW WAGTAIL	<i>Motacilla flava/tschutschensis</i>	333	
WHITE WAGTAIL	<i>Motacilla alba</i>	271	
YELLOW-BREASTED GREENFINCH	<i>Chloris spinoides</i>	86	res
SCARLET FINCH	<i>Haematospiza sipahi</i>	87	res
COMMON ROSEFINCH	<i>Carpodacus erythrinus</i>	88	
DARK-BREASTED ROSEFINCH	<i>Carpodacus nipalensis</i>	89	
BROWN BULLFINCH	<i>Pyrrhula nipalensis</i>	90	res
SPOT-WINGED GROSBEAK	<i>Mycerobas melanozanthos</i>	91	res
BLACK-FACED BUNTING	<i>Emberiza spodocephala</i>	233	
CHESTNUT BUNTING	<i>Emberiza rutila</i>	92	
CRESTED BUNTING	<i>Emberiza lathami</i>	93	res
CHESTNUT-EARED BUNTING	<i>Emberiza fucata</i>	216	
LITTLE BUNTING	<i>Emberiza pusilla</i>	94	
BAR-TAILED TREECREEPER	<i>Certhia himalayana</i>	95	res

RUSTY-FLANKED TREECREEPER	<i>Certhia nipalensis</i>		228
HUME'S TREECREEPER	<i>Certhia manipurensis</i>	BROWN-THROATED TREECREEPER <i>Certhia discolor</i>	96 res
CHESTNUT-VENTED NUTHATCH	<i>Sitta nagaensis</i>		97 res
CHESTNUT-BELLIED NUTHATCH	<i>Sitta cinnamomventris</i>	<i>Sitta castanea</i>	311 res
WHITE-TAILED NUTHATCH	<i>Sitta himalayensis</i>		98 res
WHITE-BROWED NUTHATCH	<i>Sitta victoriae</i>		99 res
VELVET-FRONTED NUTHATCH	<i>Sitta frontalis</i>		312 res
VINOUS-BREASTED MYNA	<i>Acridotheres burmannicus</i>	VINOUS-BREASTED STARLING <i>Stumus burmannicus</i>	246
COMMON MYNA	<i>Acridotheres tristis</i>		270
COMMON HILL-MYNA	<i>Gracula religiosa</i>		100 res
ORIENTAL SKYLARK	<i>Alauda gulgula</i>		101
PLAIN-BACKED THRUSH	<i>Zoothera mollissima</i>		337
LONG-TAILED THRUSH	<i>Zoothera dixonii</i>		102
SCALY THRUSH	<i>Zoothera dauma</i>		103 res
LONG-BILLED THRUSH	<i>Zoothera monticola</i>		278
DARK-SIDED THRUSH	<i>Zoothera marginata</i>		308 res
GREY-WINGED BLACKBIRD	<i>Turdus boulboul</i>		261
CHESTNUT THRUSH	<i>Turdus rubrocanus</i>		104
BLACK-BREASTED THRUSH	<i>Turdus dissimilis</i>		105 res
DUSKY THRUSH	<i>Turdus eunomus</i>		225
GREY-SIDED THRUSH	<i>Turdus feae</i>		106
EYEBROWED THRUSH	<i>Turdus obscurus</i>		107
CHESTNUT-BELLIED ROCK-THRUSH	<i>Monticola rufiventris</i>		108 res
BLUE ROCK THRUSH	<i>Monticola solitarius</i>		285
BLUE WHISTLING-THRUSH	<i>Myophonus caeruleus</i>		109 res
LESSER SHORTWING	<i>Brachypteryx leucophrys</i>		110 res
WHITE-BROWED SHORTWING	<i>Brachypteryx montana</i>		111 res
WHITE-TAILED ROBIN	<i>Myiomela leucura</i>		112 res
WHITE-BELLIED REDSTART	<i>Hodgsonius phaenicuroides</i>		231

(WHITE-RUMPED SHAMA)	<i>Copsychus malabaricus</i>	113	res
SIBERIAN RUBYTHROAT	<i>Luscinia caliope</i>	211	
WHITE-TAILED RUBYTHROAT	<i>Luscinia pectoralis</i>	272	
INDIAN BLUE ROBIN	<i>Luscinia brunnea</i>	114	res
SIBERIAN BLUE ROBIN	<i>Luscinia cyane</i>	284	
DAURIAN REDSTART	<i>Phoenicurus aureus</i>	115	
BLUE-FRONTED REDSTART	<i>Phoenicurus frontalis</i>	116	
BLACK REDSTART	<i>Phoenicurus ochruros</i>	310	
GREY BUSHCHAT	<i>Saxicola ferreus</i>	117	res
PIED BUSHCHAT	<i>Saxicola caprata</i>	241	
HIMALAYAN BLUETAIL	<i>Tarsiger rufiflatus</i>	118	ORANGE-FLANKED BUSH ROBIN <i>Tarsiger cyanurus</i>
GOLDEN BUSH-ROBIN	<i>Tarsiger chrysaeus</i>	253	
WHITE-CROWNED FORKTAIL	<i>Enicurus leschenaulti</i>	119	res
SPOTTED FORKTAIL	<i>Enicurus maculatus</i>	120	res
PALE BLUE FLYCATCHER	<i>Cyornis unicolor</i>	309	res
(HILL BLUE FLYCATCHER)	<i>Cyornis banyumas</i>	121	
BLUE-THROATED FLYCATCHER	<i>Cyornis rubeculoides</i>	263	
(WHITE-TAILED FLYCATCHER)	<i>Cyornis concretus</i>	122	
PYGMY BLUE FLYCATCHER	<i>Muscicapella hodgsoni</i>	210	
RUFIOUS-BELLIED NILTAVA	<i>Niltava sundara</i>	123	res
VIVID NILTAVA	<i>Niltava vivida</i>	226	
LARGE NILTAVA	<i>Niltava grandis</i>	124	res
LITTLE PIED FLYCATCHER	<i>Ficedula westermanni</i>	125	res
ULTRAMARINE FLYCATCHER	<i>Ficedula superciliiaris</i>	262	
SLATY-BACKED FLYCATCHER	<i>Ficedula hodgsonii</i>	126	res
WHITE-GORGETED FLYCATCHER	<i>Ficedula monileger</i>	127	res
SNOWY-BROWED FLYCATCHER	<i>Ficedula hyperythra</i>	128	res
SLATY-BLUE FLYCATCHER	<i>Ficedula tricolor</i>	129	res
TAIGA FLYCATCHER	<i>Ficedula albicilla</i>	244	

GREY-HEADED CANARY-FLYCATCHER	<i>Culicicapa ceylonensis</i>		130	res
VERDITER FLYCATCHER	<i>Eumyias thalassinus</i>		131	res
RUFIOUS-GORGETED FLYCATCHER	<i>Muscicapa strophhiata</i>	<i>Ficedula strophhiata</i>	132	res
DARK-SIDED FLYCATCHER	<i>Muscicapa sibirica</i>		133	res
BLACK-BIBBED TIT	<i>Poecile hypermelaena</i>	<i>Parus hypermelaena</i>	134	res
GREEN-BACKED TIT	<i>Parus monticolus</i>		135	res
YELLOW-CHEEKED TIT	<i>Parus spilonotus</i>		136	res
YELLOW-BROWED TIT	<i>Sylviparus modestus</i>		137	res
BLACK-THROATED TIT	<i>Aegithalos concinnus</i>	RED-CROWNED TIT	138	res
BURMESE TIT	<i>Aegithalos sharpei</i>	BURMESE BUSH TIT, BLACK-BROWED TIT <i>Aegithalos bonvaloti</i>	139	res
CRESTED FINCHBILL	<i>Spizixos canifrons</i>		140	res
STRIATED BULBUL	<i>Pycnonotus striatus</i>		141	res
RED-VENTED BULBUL	<i>Pycnonotus cafer</i>		142	res
BLACK-CRESTED BULBUL	<i>Pycnonotus flaviventris</i>	<i>Pycnonotus melanicterus</i>	224	
FLAVESCENT BULBUL	<i>Pycnonotus flavescens</i>		143	res
ASHY BULBUL	<i>Hemixos flavala</i>		144	res
HIMALAYAN BLACK BULBUL	<i>Hypsipetes leucocephalus</i>	BLACK BULBUL	145	
MOUNTAIN BULBUL	<i>Iox maclellandii</i>	<i>Hypsipetes maclellandii</i>	146	res
ASIAN HOUSE MARTIN	<i>Delichon dasypus</i>		147	
NEPAL HOUSE MARTIN	<i>Delichon nipalense</i>		212	
BARN SWALLOW	<i>Hirundo rustica</i>		232	
WIRE-TAILED SWALLOW	<i>Hirundo smithii</i>		313	res
RED-RUMPED SWALLOW	<i>Cecropis daurica</i>		314	
ABERRANT BUSH-WARBLER	<i>Cettia flavolivacea</i>	<i>Horornis flavolivacea</i>	148	res
CHESTNUT-CROWNED BUSH-WARBLER	<i>Cettia major</i>	LARGE BUSH-WARBLER <i>Oligura major</i>	317	
BROWNISH-FLANKED BUSH-WARBLER	<i>Cettia fortipes</i>	STRONG-FOOTED BUSH-WARBLER <i>Horornis fortipes</i>	287	
ASIAN STUBTAIL	<i>Urosphena squameiceps</i>		213	
YELLOW-BELLIED WARBLER	<i>Abroscopus superciliosus</i>		149	res
BLACK-FACED WARBLER	<i>Abroscopus schisticeps</i>		150	res

MOUNTAIN TAILORBIRD	<i>Phyllergates cucullatus</i>	<i>Orthotomus cuculatus</i>	151	res
BROAD-BILLED WARBLER	<i>Tickellia hodgsoni</i>		152	res
GREY-BELLIED TESIA	<i>Tesia cyaniventer</i>		153	res
CHESTNUT-HEADED TESIA	<i>Tesia castaneocoronata</i>		154	res
BIANCHI'S WARBLER	<i>Seicercus valentini</i>		252	
GREY-CROWNED WARBLER	<i>Seicercus tephrocephalus</i>		155	res
GREY-CHEEKED WARBLER	<i>Seicercus polioyenus</i>		156	res
CHESTNUT-CROWNED WARBLER	<i>Seicercus castaniceps</i>		157	res
GREY-HOODED WARBLER	<i>Phylloscopus xanthoschistos</i>	<i>Seicercus xanthoschistos</i>	158	res
BLYTH'S LEAF-WARBLER	<i>Phylloscopus reguloides</i>		159	res
GREENISH WARBLER	<i>Phylloscopus trochiloides</i>		243	
(TWO-BARRED LEAF-WARBLER)	<i>Phylloscopus plumbeitarsus</i>		160	
EMEI LEAF-WARBLER	<i>Phylloscopus emeiensis</i>		318	
ASHY-THROATED WARBLER	<i>Phylloscopus maculipennis</i>		161	res
BUFF-BARRED WARBLER	<i>Phylloscopus pulcher</i>		162	res
YELLOW-BROWED WARBLER	<i>Phylloscopus inornatus</i>		163	
HUME'S WARBLER	<i>Phylloscopus humei</i>		164	
LEMON-RUMPED WARBLER	<i>Phylloscopus chloronotus</i>		165	
RADDE'S WARBLER	<i>Phylloscopus schwarzi</i>		242	
TICKELL'S LEAF-WARBLER	<i>Phylloscopus affinis</i>		214	
YELLOW-STREAKED WARBLER	<i>Phylloscopus armandii</i>		166	res
DUSKY WARBLER	<i>Phylloscopus fuscatus</i>		269	
(BUFF-THROATED WARBLER)	<i>Phylloscopus subaffinis</i>		167	
SPOT-BREADED PARROTBILL	<i>Paradoxornis guttaticollis</i>		168	res
GREY-HEADED PARROTBILL	<i>Psittiparus gularis</i>		249	res
BUFF-BREADED PARROTBILL	<i>Suthora ripponi</i>	BLACK-THROATED PARROTBILL	169	
WHITE-BROWED FULVETTA	<i>Fulvetta vinipectus</i>	<i>Alcippe vinipectus</i>	170	res
NEPAL FULVETTA	<i>Alcippe nipalensis</i>		171	res
GREY-CHEEKED FULVETTA	<i>Alcippe fratercula</i>		323	res

BROWN-CHEEKED FULVETTA	<i>Alcippe poioicephala</i>	324	res
RUFIOUS-THROATED FULVETTA	<i>Schoeniparus rufogularis</i>	325	res
RUSTY-CAPPED FULVETTA	<i>Schoeniparus dubius</i> <i>Alcippe dubia</i>	172	res
RUFIOUS-WINGED FULVETTA	<i>Pseudominla castaneiceps</i> <i>Alcippe castaneiceps</i>	173	res
CHESTNUT-FLANKED WHITE-EYE	<i>Zosterops erythropleurus</i>	174	
JAPANESE WHITE-EYE	<i>Zosterops japonicus</i>	175	
STRIPE-THROATED YUHINA	<i>Yuhina gularis</i>	176	res
WHISKERED YUHINA	<i>Yuhina flavicollis</i>	177	res
SRIATED YUHINA	<i>Yuhina castaniceps</i>	326	res
GREY-THROATED BABBler	<i>Stachyris nigriceps</i>	178	res
YELLOW-EYED BABBler	<i>Chrysomma sinense</i>	321	res
CHESTNUT-CAPPED BABBler	<i>Timalia pileata</i>	322	res
GOLDEN BABBler	<i>Stachyridopsis chrysaea</i> <i>Stachyris chrysaea</i>	179	res
RUFIOUS-FRONTED BABBler	<i>Stachyridopsis rufifrons</i> <i>Stachyris rufifrons</i>	180	res
CHIN HILLS WREN-BABBler	<i>Spelaornis oatesi</i> LONG-TAILED WREN-BABBler <i>Spelaornis chocolatinus</i>	181	res
SPOTTED WREN-BABBler	<i>Elachura formosa</i> <i>Spelaornis formosus</i>	227	
SCALY-BREASTED WREN-BABBler	<i>Proopyga albiventer</i>	215	
PYGMY WREN-BABBler	<i>Proopyga pusilla</i>	251	
PUFF-THROATED BABBler	<i>Pellorneum ruficeps</i>	319	res
SPOT-THROATED BABBler	<i>Pellorneum albiventre</i>	182	res
SICKLE-BILLED SCIMITAR-BABBler	<i>Xiphirhynchus superciliosus</i> SLENDER-BILLED SCIMITAR BABBler	183	res
LARGE SCIMITAR-BABBler	<i>Pomatorhinus hypoleucos</i> <i>Megapomatorhinus hypoleucos</i>	320	res
SPOT-BREASTED SCIMITAR-BABBler	<i>Pomatorhinus mccllellandi</i> <i>Pomatorhinus erythrocnemis</i>	184	res
WHITE-BROWED SCIMITAR-BABBler	<i>Pomatorhinus schisticeps</i>	185	res
STREAK-BREASTED SCIMITAR-BABBler	<i>Pomatorhinus ruficollis</i>	186	res
CORAL-BILLED SCIMITAR-BABBler	<i>Pomatorhinus ferruginosus</i>	187	res
CHINESE BABAX	<i>Babax lanceolatus</i> MOUNT VICTORIA BABAX <i>Babax woodi</i>	188	res
LESSER NECKLACED LAUGHINGTHRUST	<i>Garrulax monileger</i>	332	res
GREATER NECKLACED LAUGHINGTHRUSH	<i>Garrulax pectoralis</i>	245	

STRIPED LAUGHINGTHRUSH	<i>Strophocinclia virgata</i>	<i>Garrulax virgatus</i>	189	res
BROWN-CAPPED LAUGHINGTHRUSH	<i>Trochalopteron austeni</i>	<i>Garrulax austeni</i>	190	res
ASSAM LAUGHINGTHRUSH (RED-TAILED LAUGHINGTHRUSH)	<i>Trochalopteron chrysopterum</i> <i>Trochalopteron milnei</i>	CHESTNUT-CROWNED LAUGHINGTHRUSH <i>Garrulax erythrocephalus</i> <i>Garrulax milnei</i>	191 192	res res
CRIMSON-FACED LIOCICHLA	<i>Liocichla phoenicea</i>	RED-FACED LIOCICHLA	193	res
HIMALAYAN CUTIA	<i>Cutia nipalensis</i>	CUTIA	194	res
BAR-THROATED MINLA	<i>Chrysominla strigula</i>	CHESTNUT-TAILED MINLA <i>Minla strigula</i>	195	res
RED-TAILED MINLA	<i>Minla ignotincta</i>		196	res
BLUE-WINGED SIVA	<i>Siva cyanouroptera</i>	BLUE-WINGED MINLA <i>Minla cyanouroptera</i>	197	res
SILVER-EARED MESIA	<i>Mesia argentauris</i>	<i>Leiothrix argentauris</i>	198	res
GREY SIBIA	<i>Malacias gracilis</i>	<i>Heterophasia gracilis</i>	199	res
RUFOUS-BACKED SIBIA	<i>Leioptila annectens</i>	<i>Heterophasia annectens</i>	200	res
STREAK-THROATED BARWING	<i>Actinodura waldeni</i>		201	res
RUSTY-FRONTED BARWING	<i>Actinodura egertoni</i>		202	res
BROWN BUSH-WARBLE	<i>Bradypterus luteoventris</i>	<i>Locustella luteoventris</i>	203	res
RUSSET BUSH-WARBLE	<i>Bradypterus mandelli</i>	<i>Bradypterus seebohmi</i> , <i>Locustella mandelli</i>	204	res
COMMON TAILORBIRD	<i>Orthotomus sutorius</i>		275	
RUFESCENT PRINIA	<i>Prinia rufescens</i>		315	res
GREY-BREASTED PRINIA	<i>Prinia hodgsonii</i>		276	
STRIATED PRINIA	<i>Prinia crinigera</i>		316	res
BROWN PRINIA	<i>Prinia polychroa</i>		277	
BLACK-THROATED PRINIA	<i>Prinia atrogularis</i>		205	res

Table 2. References for the first observation of the different bird species

Species no	Reference/comments
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284	Brooks, D. et al. 2003. Birding Myanmar Burma 1.19 March 2003. Surfbirds.com
285	Collaerts et al. 2013
286	Brooks, D. et al. 2003. Birding Myanmar Burma 1.19 March 2003. Surfbirds.com
287	Farrow, D. 2013. Burma 2 - 15 April 2013.
288-290	Park Bird List 2002
291	Locals pers. comm. 2013
292-330	Park Bird List 2002
331	Maung Nu
332-335	Thingstad, Gjershaug, Maung Nu & Ohm 2013
336-337	Paul Holt pers. comm. 2014

Table 3. Details considering the new observations since Naing (2003)

Species no	Details
206	Three were seen near the Chin Village Resort, Mt Victoria March 2003;
207	A single bird was seen near Chin Village Resort, Mt Victoria March 2003 (Brooks). One circling low over Mt Victoria in February 2004 (Bishop); one subadult at higher levels of Mt Victoria January 2012 (Robson)
208	Single bird seen near Chin Village Resort, Mt Victoria March 2003 (Brooks); One at Mt Victoria in 2009 (Myers)
209	A single bird seen in the deciduous forest on Mt Victoria in March 2003 (Brooks 2003). Two observed Mt Victoria on 9th January 2013 (Collaerts 2013)
210	Single birds were seen on two occasions in the evergreen forest on Mt Victoria in March 2003.
211	Observed near the Chin Village Resort, Mt Victoria in March 2003.
212	Five were seen over the evergreen forest on Mt Victoria in March 2003 (Brooks 2003); at least one in a loose hirundine flock at 2100 masl at Mt Victoria in 2006 (Anderson)
213	A single bird was seen in the evergreen forest on Mt Victoria in March 2003.
214	Two birds were seen on two occasions in grassland in the pine forest zone on Mt Victoria in March 2003.
215	Single birds were seen on two occasions in gullies in the pine forest zone on Mt Victoria in March 2003.
216	A single bird was seen among Little Buntings in the pine forest zone on Mt Victoria in March 2003.
217	One displaying over Mt Victoria in February 2004.
218	A single adult male seen at ca 2000 m in Mt Victoria in February 2004.
219	Heard at Mt Victoria in February 2004 (Bishop)
220	Heard on Mt Victoria in February 2004 (Bishop); Tree heard at 1750 masl around Pinewood Villa at Mt Victoria in 2006 (Anderson)
221	One heard near a lodge above Kanpetlet on the lower slopes of Mt Victoria in February 2004 (Bishop)
222	One seen near the lodge above Kanpetlet on the lower slopes of Mt Victoria in February 2004 (Bishop)
223	Two seen on two days at lower elevations on Mt Victoria in February 2004 (Bishop); four seen in the dry dipterocarp forest on the lower slopes of Mt Victoria in 2009 (Myers)
224	Two seen at lower elevations on Mt Victoria in February 2004 (Bishop)
225	A male of the nominate subspecies seen very well on lower slopes of Mt Victoria in February 2004 (Bishop)
226	One on Mt Victoria in February 2004 (Bishop); one male and two females on Mt Victoria in January 2010 (Robson)
227	Two heard in scrubby secondary woodland on Mt Victoria in February 2004 (Bishop)
228	Two seen in upper montane forest in Mt Victoria in February 2004 (Bishop)
229	One heard from the lodge on 13th April 2006 (Talbot)
230	Two seen Mt Victoria on 12th April 2006 (Talbot); one bird in Mt Victoria in January 2013 (Collaerts)

231	Seen near the lodge on 13th April 2006 (Talbot)
232	A few seen at Mt Victoria in 2006 (Anderson)
233	One pair in the evergreen forest at 2300 masl at Mt Victoria in 2006 (Anderson)
234	One seen at Mt Victoria in 2009 (Myers)
235	Quite a large flock seen flying and perched in dry dipterocarp forest in the lower reaches of Mt Victoria in 2009 (Myers)
236	Seen just above Kanpetlet, Mt Victoria in 2009 (Myers)
237	One seen overhead on Mt Victoria in 2009 (Myers)
238	Seen well in flight in the dry dipterocarp forest at the base of Mt Victoria in 2009 (Myers)
239	Quite common on Mt Victoria in 2009 (Myers)
102	Great views in the foothills of Mt Victoria in 2009 (Myers)
240	Probably this species seen flying over at Mt Victoria in 2009 (Myers)
241	Seen daily on Mt Victoria in 2009 (Myers)
242	Many seen on Mt Victoria in 2009 (Myers)
167	A few seen on Mt Victoria in 2009 (Myers); Common at the higher levels of Mt Victoria in January 2010 (Robson)
243	A few seen near the lodge at Mt Victoria in 2009 (Myers);
244	Recorded at Mt Victoria in 2009 (Myers)
245	Observed in the foothills of Mt Victoria in 2009 (Myers)
246	Common in the Mt Victoria area in 2009 (Myers)
247	A single male was seen c. 2450 m on Mt. Victoria, a lot higher than the species has previously been recorded in the region (Robson)
248	Hearth on Mt Victoria in January 2010 (Robson)
249	A flock of about 30 was seen in a bamboo area on Mt Victoria in January 2010 (Robson)
250	Observed at Mt Victoria in December 2009 (Eaton); One bird in Mt Victoria in February 2011 (Eaton)
251	Hearth on the lower slopes of Mt Victoria in December 2011 (Valentine)
252	One bird was seen in forest undergrowth on Mt Victoria in December 2011 (Valentine)
253	One male observed on the lower slopes of Mt Victoria in December 2011 (Valentine)
254	One seen well on Mt Victoria in January 2012 (Robson)
255	A few seen Mt Victoria in February 2012 (Hornbuckle 2012 a)
256	One seen at Mt Victoria in February 2012 (Hornbuckle 2012 a b)
257	Hearth at Mt Victoria in February 2012 (Hornbuckle 2012 a)

258	Hearth at Mt Victoria in February 2012 (Hornbuckle 2012 a); Seen at 2000+ masi in Mt Victoria in January 2012 (Paal)
100	40 observed Mt Victoria in January 2012 (Paal)
259	Two birds photographed in Mt Victoria in January 2012 (Paal); Two birds Mt Victoria January 2013 (Collaerts)
260	Two birds seen Mt Victoria in February 2012 (Paal)
261	Tree birds seen in Mt Victoria in February 2012 (Paal)
262	One observed in Mt Victoria in February 2012 (Hornbuckle 2012 b)
263	One observed in Mt Victoria in February 2012 (Hornbuckle 2012 b)
264	A few observed in Mt Victoria in February 2012 (Hornbuckle 2012 b)
265	One to four observed Mt Victoria on 6-8 January 2013 (Collaerts)
266	One observed in Mt Victoria on 7 January 2013 (Collaerts)
267	One heard in Mt Victoria on 8 January 2013 (Collaerts)
268	One observed in Mt Victoria on 9th January 2013 (Collaerts)
269	One observed in Mt Victoria on 9th January 2013 (Collaerts)
270	A few seen Mt Victoria on 9th January 2013 (Collaerts)
271	One seen in Mt Victoria on 7th January 2013 (Collaerts)
272	Observed in Mt Victoria in February 2013 (Wilson 2013)
273	One individual observed in Mt Victoria in March 2013 (Hobcraft 2013)
274	One migrant on Mt Victoria (2200 masi in March 2013 (Robson)
275	Seen in Mt Victoria in April 2013 (Farrow 2013)
276	Seen at lower altitudes on Mt Victoria in April 2013 (Farrow 2013)
277	Seen at Mt Victoria in April 2013 (Farrow 2013)
278	A singing bird was seen briefly near the top of Mt Victoria in April 2013 (Farrow 2013)
279	Observed Mt Victoria in April 1995 (Robson 1998)
280	Observed Mt Victoria and Trail head, Mindat in April 1995 (Robson 1998)
281	Observed Mt Victoria in April 1995 (Robson 1998)
282	Observed Mt Victoria and Trail head, Mindat in April 1995 (Robson 1998)
283	Naing, Thet Zaw 2003. Forktail 19: 57-62
284	Observed Mt Victoria in March 2003 (Brooks et al. 2003)
285	Observed Mt Victoria in March 2013 (Collaerts et al. 2013)

286	Observed Mt Victoria in March 2003 (Brooks et al. 2003)
287	Seen at Mt Victoria in April 2013 (Farrow 2013)
288-290	Park Bird List 2002
291	Observed more or less yearly by locals
292-330	Park Bird List 2002
331	Observed 1998
332	Observed at Mt Oasis resort, Mindat, December 2013
333	Observed near Eco-lodge, Kanpetlet December 2013
334	Observed near the village Hla Laung Pan in December 2013
335	Observed near the village Hla Laung Pan in December 2013
336-337	Observed in the park Dec. 2013

Table 4. Checklist for bird observed in Natmataung national Park, with space for semi-quantitative statement of the number of individuals of the registered species

Dates:		Name of group:	
Total number of days:		E-mail:	
		Number observed: A = 1 ind./1 pair, B = 2-5 ind., C = 6-10 ind. and D = > 10 ind.	
English name	Scientific name	Differing nomenclature	Number obs.:
() = uncertain observation			
CHINESE FRANCOLIN	<i>Francolinus pintadeanus</i>		
HILL PARTRIDGE	<i>Arborophila torqueola</i>		
RUFIOUS-THROATED PARTRIDGE	<i>Arborophila rufogularis</i>		
MOUNTAIN BAMBOO-PARTRIDGE	<i>Bambusicola fytchii</i>		
BLYTH'S TRAGOPAN	<i>Tragopan blythii</i>		
RED JUNGLEFOWL	<i>Gallus gallus</i>		
KALIJ PHEASANT	<i>Lophura leucomelanos</i>		
MRS HUME'S PHEASANT	<i>Syrnaticus humiae</i>		
GREY PEACOCK-PHEASANT	<i>Polyplectron bicalcaratum</i>		
COLLARED FALCONET	<i>Microhierax caerulescens</i>		
COMMON KESTREL	<i>Falco tinnunculus</i>		
ORIENTAL HOBBY	<i>Falco severus</i>		
PEREGRINE FALCON	<i>Falco peregrinus</i>		
BLACK BAZA	<i>Aviceda leucphotes</i>		
CRESTED SERPENT-EAGLE	<i>Spilornis cheela</i>		
WHITE-RUMPED VULTURE	<i>Gyps bengalensis</i>		
HIMALAYAN GRIFFON	<i>Gyps himalayensis</i>		
CRESTED GOSHAWK	<i>Accipiter trivirgatus</i>		
SHIKRA	<i>Accipiter badius</i>		
BESRA	<i>Accipiter virgatus</i>		
EURASIAN SPARROWHAWK	<i>Accipiter nisus</i>		
NORTHERN GOSHAWK	<i>Accipiter gentilis</i>		
HIMALAYAN BUZZARD	<i>Buteo burmanicus</i>	COMMON BUZZARD <i>Buteo buteo</i>	

BONELLI'S EAGLE	<i>Aquila fasciata</i>	<i>Hieraetus fasciatus</i>
BLACK EAGLE	<i>Ictinaetus malayensis</i>	
RUFIOUS-BELLIED EAGLE	<i>Lophotriorchis kienerii</i>	
ORIENTAL HONEY-BUZZARD	<i>Pernis ptilorhynchus</i>	
MOUNTAIN HAWK-EAGLE	<i>Nisaetus nipalensis</i>	<i>Spizaetus nipalensis</i>
CHANGEABLE HAWK-EAGLE	<i>Nisaetus cirrhatus</i>	<i>Nisaetus limnaeetus, Spizaetus cirrhatus</i>
SLATY-LEGED CRAKE	<i>Rallina eurizonoides</i>	
COMMON COOT	<i>Fulica atra</i>	
GREY-HEADED LAPWING	<i>Vanellus cinereus</i>	
EURASIAN WOODCOCK	<i>Scolopax rusticola</i>	
ASHY WOODPIGEON	<i>Columba pulchricollis</i>	
MOUNTAIN IMPERIAL PIGEON	<i>Ducula badia</i>	
ORIENTAL TURTLE-DOVE	<i>Streptopelia orientalis</i>	
SPOTTED DOVE	<i>Streptopelia chinensis</i>	
BARRED CUCKOO-DOVE	<i>Macropygia unchall</i>	
EMERALD DOVE	<i>Chalcophaps indica</i>	
THICK-BILLED GREEN-PIGEON	<i>Treron curvirostra</i>	
YELLOW-FOOTED GREEN PIGEON	<i>Treron phoenicoptera</i>	
WEDGE-TAILED GREEN-PIGEON	<i>Treron spenura</i>	
ALEXANDRINE PARAKEET	<i>Psittacula eupatria</i>	
GREY-HEADED PARAKEET	<i>Psittacula finschii</i>	
RED-BREASTED PARAKEET	<i>Psittacula alexandri</i>	
LARGE HAWK-CUCKOO	<i>Hierococcyx sparverioides</i>	
EURASIAN CUCKOO	<i>Cuculus canorus</i>	
INDIAN CUCKOO	<i>Cuculus micropterus</i>	
HIMALAYAN CUCKOO	<i>Cuculus saturatus</i>	ORIENTAL CUCKOO
PLAINTIVE CUCKOO	<i>Cuculus merulinus</i>	
ASIAN EMERALD CUCKOO	<i>Chrysococcyx maculatus</i>	
DRONGO CUCKOO	<i>Sumiculus lugubris</i>	ASIAN DRONGO-CUCKOO
GREEN-BILLED MALKOHA	<i>Rhopodytes tristis</i>	<i>Phaenicophaeus tristis</i>

GREATER COUCAL	<i>Centropus sinensis</i>
LESSER COUCAL	<i>Centropus bengalensis</i>
MOUNTAIN SCOPS-OWL	<i>Otus spilocephalus</i>
COLLARED SCOPS-OWL	<i>Otus lettia</i> <i>Otus bakkamoena</i>
ORIENTAL SCOPS-OWL	<i>Otus sunia</i>
COLLARED OWLET	<i>Glaucidium brodiei</i>
ASIAN BARRED OWLET	<i>Glaucidium cuculoides</i>
JUNGLE OWLET	<i>Glaucidium radiatum</i>
BROWN WOOD-OWL	<i>Strix leptogrammica</i>
HIMALAYAN WOOD-OWL	<i>Strix nivicola</i> TAWNY OWL <i>Strix aluco</i>
HODGSON'S FROGMOUTH	<i>Batrachostomus hodgsoni</i>
GREAT EARED-NIGHTJAR	<i>Eurostopodus macrotis</i>
GREY NIGHTJAR	<i>Caprimulgus jotaka</i> <i>Caprimulgus indicus</i>
LARGE-TAILED NIGHTJAR	<i>Caprimulgus macrurus</i>
INDIAN NIGHTJAR	<i>Caprimulgus asiaticus</i>
SAVANNA NIGHTJAR	<i>Caprimulgus affinia</i>
HIMALAYAN SWIFTLET	<i>Aerodramus brevirostris</i> <i>Collocalia brevirostris</i>
BROWN-BACKED NEEDLETAIL	<i>Hirundapus giganteus</i>
FORK-TAILED SWIFT	<i>Apus pacificus</i>
HOUSE SWIFT	<i>Apus affinis</i> LITTLE SWIFT
RED-HEADED TROGON	<i>Harpactes erythrocephalus</i>
WHITE-THROATED KINGFISHER	<i>Halcyon smymensis</i>
COMMON HOOPOE	<i>Upupa epops</i>
INDIAN ROLLER	<i>Coracias bengalensis</i>
BLUE-BEARDED BEE-EATER	<i>Nyctornis athertoni</i>
BLUE-TAILED BEE-EATER	<i>Meropsis philippineus</i>
GREAT HORNBILL	<i>Buceros bicornis</i>
RUFIOUS-NECKED HORNBILL	<i>Aceros nipalensis</i>
GREAT BARBET	<i>Megalaima virens</i>
LINEATED BARBET	<i>Megalaima lineata</i>

GOLDEN-THROATED BARBET	<i>Megalaima franklinii</i>
BLUE-THROATED BARBET	<i>Megalaima asiatica</i>
SPECKLED PICULET	<i>Picumnus innominatus</i>
WHITE-BROWED PICULET	<i>Sasia ochracea</i>
RUFIOUS-BELLIED WOODPECKER	<i>Hypopicus hyperythrus</i> <i>Dendrocopus hyperythrus</i>
FULVOUS-BREASTED WOODPECKER	<i>Dendrocopus macei</i>
STRIPE-BREASTED WOODPECKER	<i>Dendrocopus atratus</i>
CRIMSON-BREASTED WOODPECKER	<i>Dendrocopus cathpharius</i>
GREAT SPOTTED WOODPECKER	<i>Dendrocopus major</i>
DARJEELING WOODPECKER	<i>Dendrocopus darjellensis</i>
WHITE-BELLIED WOODPECKER	<i>Dryocopus javensis</i>
GREATER YELLOWNAPE	<i>Chrysophlegma flavinucha</i> <i>Picus flavinucha</i>
LESSER YELLOWNAPE	<i>Picus chlorolophus</i>
STREAK-THROATED WOODPECKER	<i>Picus xanthopygaeus</i>
GREY-HEADED WOODPECKER	<i>Picus canus</i>
BAY WOODPECKER	<i>Blythipicus pyrrhotis</i>
LONG-TAILED BROADBILL	<i>Psarisomus dalhousiae</i>
BLUE-WINGED PITTA	<i>Pitta moluccensis</i>
BLACK-HEADED SHRIKE-BABBLER	<i>Pteruthius rufiventer</i>
WHITE-BROWED SHRIKE-BABBLER	<i>Pteruthius flaviscapis</i> BLYTH'S SHRIKE BABBLER <i>Pteruthius aeraaiatus</i>
GREEN SHRIKE-BABBLER	<i>Pteruthius xanthochlorus</i>
BLACK-EARED SHRIKE-BABBLER	<i>Pteruthius melanotis</i>
LARGE CUCKOOSHRIKE	<i>Coracina macei</i>
BLACK-WINGED CUCKOOSHRIKE	<i>Coracina melaschistos</i>
BAR-WINGED FLYCATCHER-SHRIKE	<i>Hemipus picatus</i>
GREY-CHINNED MINIVET	<i>Pericrocotus solaris</i>
LONG-TAILED MINIVET	<i>Pericrocotus ethologus</i>
SHORT-BILLED MINIVET	<i>Pericrocotus brevirostris</i>
SCARLET MINIVET	<i>Pericrocotus speciosus</i> <i>Pericrocotus flammeus</i>
SLENDER-BILLED ORIOLE	<i>Oriolus tenuirostris</i>

BLACK-HOODED ORIOLE	<i>Oriolus xanthornus</i>
MAROON ORIOLE	<i>Oriolus trailii</i>
ASHY WOODSWALLOW	<i>Artamus fuscus</i>
COMMON WOODSHRIKE	<i>Teprodornis pondicerianus</i>
YELLOW-BELLIED FANTAIL	<i>Chelidorhynch hypoxantha</i>
WHITE-THROATED FANTAIL	<i>Rhipidura albicollis</i>
BLACK-NAPED MONARCH	<i>Hypothymis azurea</i>
ASIAN PARADISE-FLYCATCHER	<i>Terpsiphone paradisi</i>
BLACK DRONGO	<i>Dicurus macrocerus</i>
ASHY DRONGO	<i>Dicurus leucophaeus</i>
BRONZED DRONGO	<i>Dicurus aeneus</i>
LESSER RACKET-TAILED DRONGO	<i>Dicurus remifer</i>
GREATER RACKET-TAILED DRONGO	<i>Dicurus paradiseus</i>
HAIR-CRESTED DRONGO	<i>Dicurus hottentottus</i>
EASTERN JUNGLE CROW	<i>Corvus leuillanti</i>
EURASIAN JAY	<i>Garrulus glandarius</i>
YELLOW-BILLED BLUE MAGPIE	<i>Urocissa flavirostris</i>
RED-BILLED BLUE MAGPIE	<i>Urocissa erythrorhyncha</i>
COMMON GREEN MAGPIE	<i>Cissa chinensis</i>
RUFOUS TREEPIE	<i>Dendrocitta vagabunda</i>
GREY TREEPIE	<i>Dendrocitta formosae</i>
BROWN SHRIKE	<i>Lanius cristatus</i>
BURMESE SHRIKE	<i>Lanius collurioides</i>
LONG-TAILED SHRIKE	<i>Lanius schach</i>
GREY-BACKED SHRIKE	<i>Lanius tephronotus</i>
MRS GOULD'S SUNBIRD	<i>Aethopyga gouldiae</i>
GREEN-TAILED SUNBIRD	<i>Aethopyga nipalensis</i>
(BLACK-THROATED SUNBIRD)	<i>Aethopyga saturata</i>
FIRE-TAILED SUNBIRD	<i>Aethopyga ignicauda</i>
STREAKED SPIDERHUNTER	<i>Arachnothera magna</i>
	<i>Rhipidura hypoxantha</i> YELLOW-BELLIED FAIRY-FLYCATCHER
	SPANGLED DRONGO
	LARGE-BILLED CROW <i>Corvus macrorhynchos</i>

YELLOW-BELLIED FLOWERPECKER	<i>Dicaeum melanoxanthum</i>
FIRE-BREADED FLOWERPECKER	<i>Dicaeum ignipectus</i>
SCARLET-BACKED FLOWERPECKER	<i>Dicaeum cruentatum</i>
(BLUE-WINGED LEAFBIRD)	<i>Chloropsis cochinchinensis</i>
(GOLDEN-FRONTED LEAFBIRD)	<i>Chloropsis aurifrons</i>
ORANGE-BELLIED LEAFBIRD	<i>Chloropsis hardwickii</i>
ASIAN FAIRY-BLUEBIRD	<i>Irena puella</i>
SCALY-BREADED MUNIA	<i>Lonchura punctulata</i>
RUSSET SPARROW	<i>Passer rutilans</i>
OLIVE-BACKED PIPIT	<i>Anthus hodgsoni</i>
LONG-BILLED PIPIT	<i>Antus similis</i>
FOREST WAGTAIL	<i>Dendronanthus indicus</i>
GREY WAGTAIL	<i>Motacilla cinerea</i>
YELLOW WAGTAIL	<i>Motacilla flava/tschutschensis</i>
WHITE WAGTAIL	<i>Motacilla alba</i>
YELLOW-BREADED GREENFINCH	<i>Chloris spinoides</i> <i>Carduelis spinoides</i>
SCARLET FINCH	<i>Haematospiza sipahi</i>
COMMON ROSEFINCH	<i>Carpodacus erythrinus</i>
DARK-BREADED ROSEFINCH	<i>Carpodacus nipalensis</i>
BROWN BULLFINCH	<i>Pyrrhula nipalensis</i>
SPOT-WINGED GROSBEEK	<i>Mycerobas melanozanthos</i>
BLACK-FACED BUNTING	<i>Emberiza spodocephala</i>
CHESTNUT BUNTING	<i>Emberiza rutila</i>
CRESTED BUNTING	<i>Emberiza lathami</i>
CHESTNUT-EARED BUNTING	<i>Emberiza fucata</i>
LITTLE BUNTING	<i>Emberiza pusilla</i>
BAR-TAILED TREECREEPER	<i>Certhia himalayana</i>
RUSTY-FLANKED TREECREEPER	<i>Certhia nipalensis</i>
HUME'S TREECREEPER	<i>Certhia manipurensis</i> BROWN-THROATED TREECREEPER <i>Certhia discolor</i>
CHESTNUT-VENTED NUTHATCH	<i>Sitta nagaensis</i>

CHESTNUT-BELLIED NUTHATCH	<i>Sitta cinnamoventris</i>	<i>Sitta castanea</i>
WHITE-TAILED NUTHATCH	<i>Sitta himalayensis</i>	
WHITE-BROWED NUTHATCH	<i>Sitta victoriae</i>	
VELVET-FRONTED NUTHATCH	<i>Sitta frontalis</i>	
VINOUS-BREASTED MYNA	<i>Acridotheres burmannicus</i>	VINOUS-BREASTED STARLING <i>Sturnus burmannicus</i>
COMMON MYNA	<i>Acridotheres tristis</i>	
(COMMON HILL-MYNA)	<i>Gracula religiosa</i>	
ORIENTAL SKYLARK	<i>Alauda gulgula</i>	
PLAIN-BACKED THRUSH	<i>Zoothera mollissima</i>	
LONG-TAILED THRUSH	<i>Zoothera dixonii</i>	
SCALY THRUSH	<i>Zoothera dauma</i>	
LONG-BILLED THRUSH	<i>Zoothera monticola</i>	
DARK-SIDED THRUSH	<i>Zoothera marginata</i>	
GREY-WINGED BLACKBIRD	<i>Turdus boulboul</i>	
CHESTNUT THRUSH	<i>Turdus rubrocanus</i>	
BLACK-BREASTED THRUSH	<i>Turdus dissimilis</i>	
DUSKY THRUSH	<i>Turdus eunomus</i>	
GREY-SIDED THRUSH	<i>Turdus feae</i>	
EYEBROWED THRUSH	<i>Turdus obscurus</i>	
CHESTNUT-BELLIED ROCK-THRUSH	<i>Monticola rufiventris</i>	
BLUE ROCK THRUSH	<i>Monticola solitarius</i>	
BLUE WHISTLING-THRUSH	<i>Myophonus caeruleus</i>	
LESSER SHORTWING	<i>Brachypteryx leucophrys</i>	
WHITE-BROWED SHORTWING	<i>Brachypteryx montana</i>	
WHITE-TAILED ROBIN	<i>Myiomela leucura</i>	
WHITE-BELLIED REDSTART	<i>Hodgsonius phaenicuroides</i>	
(WHITE-RUMPED SHAMA)	<i>Copsychus malabaricus</i>	
SIBERIAN RUBYTHROAT	<i>Luscinia calliope</i>	
WHITE-TAILED RUBYTHROAT	<i>Luscinia pectoralis</i>	
INDIAN BLUE ROBIN	<i>Luscinia brunnea</i>	

SIBERIAN BLUE ROBIN	<i>Luscinia cyane</i>
DAURIAN REDSTART	<i>Phoenicurus aureoreus</i>
BLUE-FRONTED REDSTART	<i>Phoenicurus frontalis</i>
BLACK REDSTART	<i>Phoenicurus ochruros</i>
GREY BUSHCHAT	<i>Saxicola ferreus</i>
PIED BUSHCHAT	<i>Saxicola caprata</i>
HIMALAYAN BLUETAIL	<i>Tarsiger rufilatus</i>
GOLDEN BUSH-ROBIN	<i>Tarsiger chrysaeus</i>
WHITE-CROWNED FORKTAIL	<i>Enicurus leschenaulti</i>
SPOTTED FORKTAIL	<i>Enicurus maculatus</i>
PALE BLUE FLYCATCHER	<i>Cyornis unicolor</i>
(HILL BLUE FLYCATCHER)	<i>Cyornis banyumas</i>
BLUE-THROATED FLYCATCHER	<i>Cyornis rubeculoides</i>
(WHITE-TAILED FLYCATCHER)	<i>Cyornis concretus</i>
PYGMY BLUE FLYCATCHER	<i>Muscicapella hodgsoni</i>
RUFOUS-BELLIED NILTAVA	<i>Niltava sundara</i>
VIVID NILTAVA	<i>Niltava vivida</i>
LARGE NILTAVA	<i>Niltava grandis</i>
LITTLE PIED FLYCATCHER	<i>Ficedula westermanni</i>
ULTRAMARINE FLYCATCHER	<i>Ficedula supercilialis</i>
SLATY-BACKED FLYCATCHER	<i>Ficedula hodgsonii</i>
WHITE-GORGETED FLYCATCHER	<i>Ficedula monileger</i>
SNOWY-BROWED FLYCATCHER	<i>Ficedula hyperythra</i>
SLATY-BLUE FLYCATCHER	<i>Ficedula tricolor</i>
TAIGA FLYCATCHER	<i>Ficedula albicilla</i>
GREY-HEADED CANARY-FLYCATCHER	<i>Culicicapa ceylonensis</i>
VERDITER FLYCATCHER	<i>Eumyias thalassinus</i>
RUFOUS-GORGETED FLYCATCHER	<i>Muscicapa strophiate</i>
DARK-SIDED FLYCATCHER	<i>Muscicapa sibirica</i>
BLACK-BIBBED TIT	<i>Poecile hypermelaina</i>
	<i>Parus hypermelaina</i>
	<i>Ficedula strophiate</i>
	<i>ORANGE-FLANKED BUSH ROBIN</i>
	<i>Tarsiger cyanurus</i>

GREEN-BACKED TIT	<i>Parus monticolus</i>	
YELLOW-CHEEKED TIT	<i>Parus spilonotus</i>	
YELLOW-BROWED TIT	<i>Sylviparus modestus</i>	
BLACK-THROATED TIT	<i>Aegithalos concinnus</i>	RED-CROWNED TIT
BURMESE TIT	<i>Aegithalos sharpei</i>	BURMESE BUSHTIT, BLACK-BROWED TIT <i>Aegithalos bonvaloti</i>
CRESTED FINCHBILL	<i>Spizixos canifrons</i>	
STRIATED BULBUL	<i>Pycnonotus striatus</i>	
RED-VENTED BULBUL	<i>Pycnonotus cafer</i>	
BLACK-CRESTED BULBUL	<i>Pycnonotus flaviventris</i>	<i>Pycnonotus melanicterus</i>
FLAVESCENT BULBUL	<i>Pycnonotus flavescens</i>	
ASHY BULBUL	<i>Hemixos flavala</i>	
HIMALAYAN BLACK BULBUL	<i>Hypsipetes leucocephalus</i>	BLACK BULBUL
MOUNTAIN BULBUL	<i>Ix mccllellandii</i>	<i>Hypsipetes mccllellandii</i>
ASIAN HOUSE MARTIN	<i>Delichon dasypus</i>	
NEPAL HOUSE MARTIN	<i>Delichon nipalense</i>	
BARN SWALLOW	<i>Hirundo rustica</i>	
WIRE-TAILED SWALLOW	<i>Hirundo smithii</i>	
RED-RUMPED SWALLOW	<i>Cecropis daurica</i>	
ABERRANT BUSH-WARBLER	<i>Cettia flavovivacea</i>	<i>Horornis flavolivacea</i>
CHESTNUT-CROWNED BUSH-WARBLER	<i>Cettia major</i>	LARGE BUSH-WARBLER <i>Oligura major</i>
BROWNISH-FLANKED BUSH-WARBLER	<i>Cettia fortipes</i>	STRONG-FOOTED BUSH-WARBLER <i>Horornis fortipes</i>
ASIAN STUBTAIL	<i>Urosphena squameiceps</i>	
YELLOW-BELLIED WARBLER	<i>Abroscopus superciliosus</i>	
BLACK-FACED WARBLER	<i>Abroscopus schisticeps</i>	
MOUNTAIN TAILORBIRD	<i>Phyllergates cucullatus</i>	<i>Orthotomus cucullatus</i>
BROAD-BILLED WARBLER	<i>Tickellia hodgsoni</i>	
GREY-BELLIED TESIA	<i>Tesia cyaniventer</i>	
CHESTNUT-HEADED TESIA	<i>Tesia castaneocoronata</i>	
BIANCHI'S WARBLER	<i>Seicercus valentini</i>	
GREY-CROWNED WARBLER	<i>Seicercus tephrocephalus</i>	

GREY-CHEEKED WARBLER	<i>Seiurus poioagenys</i>
CHESTNUT-CROWNED WARBLER	<i>Seiurus castaneiceps</i>
GREY-HOODED WARBLER	<i>Phylloscopus xanthoschistos</i> <i>Seiurus xanthoschistos</i>
BLYTH'S LEAF-WARBLER	<i>Phylloscopus reguloides</i>
GREENISH WARBLER	<i>Phylloscopus trochiloides</i>
(TWO-BARRED LEAF-WARBLER)	<i>Phylloscopus plumbeitarsus</i>
EMEI LEAF-WARBLER	<i>Phylloscopus emeiensis</i>
ASHY-THROATED WARBLER	<i>Phylloscopus maculipennis</i>
BUFF-BARRED WARBLER	<i>Phylloscopus pulcher</i>
YELLOW-BROWED WARBLER	<i>Phylloscopus inornatus</i>
HUME'S WARBLER	<i>Phylloscopus humei</i>
LEMON-RUMPED WARBLER	<i>Phylloscopus chloronotus</i>
RADDE'S WARBLER	<i>Phylloscopus schwarzi</i>
TICKELL'S LEAF-WARBLER	<i>Phylloscopus affinis</i>
YELLOW-STREAKED WARBLER	<i>Phylloscopus armandii</i>
DUSKY WARBLER	<i>Phylloscopus fuscatus</i>
(BUFF-THROATED WARBLER)	<i>Phylloscopus subaffinis</i>
SPOT-BREADED PARROTBILL	<i>Paradoxornis guttaticollis</i>
GREY-HEADED PARROTBILL	<i>Psittiparus gularis</i>
BUFF-BREADED PARROTBILL	<i>Suthora ripponi</i> BLACK-THROATED PARROTBILL <i>Paradoxornis nipalensis</i>
WHITE-BROWED FULVETTA	<i>Fulvetta vinipectus</i> <i>Alcippe vinipectus</i>
NEPAL FULVETTA	<i>Alcippe nipalensis</i>
GREY-CHEEKED FULVETTA	<i>Alcippe fratercula</i>
BROWN-CHEEKED FULVETTA	<i>Alcippe poiocephala</i>
RUFIOUS-THROATED FULVETTA	<i>Schoeniiparus rufogularis</i>
RUSTY-CAPPED FULVETTA	<i>Schoeniiparus dubius</i> <i>Alcippe dubia</i>
RUFIOUS-WINGED FULVETTA	<i>Pseudominia castaneiceps</i> <i>Alcippe castaneiceps</i>
CHESTNUT-FLANKED WHITE-EYE	<i>Zosterops erythropleurus</i>
JAPANESE WHITE-EYE	<i>Zosterops japonicus</i>
STRIPE-THROATED YUHINA	<i>Yuhina gularis</i>

WHISKERED YUHINA	<i>Yuhina flavicollis</i>
SRIATED YUHINA	<i>Yuhina castaniceps</i>
GREY-THROATED BABBLER	<i>Stachyris nigriceps</i>
YELLOW-EYED BABBLER	<i>Chrysomma sinense</i>
CHESTNUT-CAPPED BABBLER	<i>Timalia pileata</i>
GOLDEN BABBLER	<i>Stachyridopsis chrysaea</i> <i>Stachyris chrysaea</i>
RUFIOUS-FRONTED BABBLER	<i>Stachyridopsis rufifrons</i> <i>Stachyris rufifrons</i>
CHIN HILLS WREN-BABBLER	<i>Spelaeornis oatesi</i> LONG-TAILED WREN-BABBLER <i>Spelaeornis chocolatinus</i>
SPOTTED WREN-BABBLER	<i>Eiachura formosa</i> <i>Spelaeornis formosus</i>
SCALY-BREADED WREN-BABBLER	<i>Pnoepyga albiventer</i>
PYGMY WREN-BABBLER	<i>Pnoepyga pusilla</i>
PUFF-THROATED BABBLER	<i>Pellorneum ruficeps</i>
SPOT-THROATED BABBLER	<i>Pellorneum albiventre</i>
SICKLE-BILLED SCIMITAR-BABBLER	<i>Xiphirhynchus superciliaris</i> SLENDER-BILLED SCIMITAR BABBLER
LARGE SCIMITAR-BABBLER	<i>Pomatorhinus hypoleucos</i> <i>Megapomatorhinus hypoleucos</i>
SPOT-BREADED SCIMITAR-BABBLER	<i>Pomatorhinus maclellandi</i> <i>Pomatorhinus erythrocnemis</i>
WHITE-BROWED SCIMITAR-BABBLER	<i>Pomatorhinus schisticeps</i>
STREAK-BREADED SCIMITAR-BABBLER	<i>Pomatorhinus ruficollis</i>
CORAL-BILLED SCIMITAR-BABBLER	<i>Pomatorhinus ferruginosus</i>
CHINESE BABAX	<i>Babax lanceolatus</i> MOUNT VICTORIA BABAX <i>Babax woodi</i>
LESSER NECKLACED LAUGHINGTHRUSH	<i>Garrulax monileger</i>
GREATER NECKLACED LAUGHINGTHRUSH	<i>Garrulax pectoralis</i>
STRIPED LAUGHINGTHRUSH	<i>Strophocincla virgata</i> <i>Garrulax virgatus</i>
BROWN-CAPPED LAUGHINGTHRUSH	<i>Trochalopteron austeni</i> <i>Garrulax austeni</i>
ASSAM LAUGHINGTHRUSH	<i>Trochalopteron chrysopterum</i> CHESTNUT-CROWNED LAUGHINGTHRUSH <i>Garrulax erythrocephalus</i>
(RED-TAILED LAUGHINGTHRUSH)	<i>Trochalopteron milnei</i> <i>Garrulax milnei</i>
CRIMSON-FACED LIOCICHLA	<i>Liocichla phoenicea</i> RED-FACED LIOCICHLA
HIMALAYAN CUTIA	<i>Cutia nipalensis</i> CUTIA
BAR-THROATED MINLA	<i>Chrysominla strigula</i> CHESTNUT-TAILED MINLA <i>Minla strigula</i>
RED-TAILED MINLA	<i>Minla ignotincta</i>

	Siva cyanouroptera	BLUE-WINGED MINLA <i>Minla cyanouroptera</i>
BLUE-WINGED SIVA		
SILVER-EARED MESIA	<i>Mesia argentauris</i>	<i>Leiothrix argentauris</i>
GREY SIBIA	<i>Malacias gracilis</i>	<i>Heterophasia gracilis</i>
RUFOUS-BACKED SIBIA	<i>Leioptila annectens</i>	<i>Heterophasia annectens</i>
STREAK-THROATED BARWING	<i>Actinodura waldeni</i>	
RUSTY-FRONTED BARWING	<i>Actinodura egertoni</i>	
BROWN BUSH-WARBLER	<i>Bradypterus luteoventris</i>	<i>Locustella luteoventris</i>
RUSSET BUSH-WARBLER	<i>Bradypterus mandelli</i>	<i>Bradypterus seebohmi, Locustella mandelli</i>
COMMON TAILORBIRD	<i>Orthotomus sutorius</i>	
RUFESCENT PRINIA	<i>Prinia rufescens</i>	
GREY-BREADED PRINIA	<i>Prinia hodgsonii</i>	
STRIATED PRINIA	<i>Prinia crinigera</i>	
BROWN PRINIA	<i>Prinia polychroa</i>	
BLACK-THROATED PRINIA	<i>Prinia atrogularis</i>	

Table 5. The checklist use for our observations in the park area 2013

Name of group: Thingstad, Gjershaug , Wedege, Maung Nu & Ha Shing Ohm
E-mail: per.thingstad@ntnu.no
Number observed: A = 1 ind./1 pair, B = 2-5 ind., C = 6-10 ind. and D = > 10 ind.

Dates: 1.-11.12.2013
Total number of days: 12

English name	Scientific name	Differing nomenclature	Number obs.:
CHINESE FRANCOLIN	<i>Francolinus pintadeanus</i>		
HILL PARTRIDGE	<i>Arborophila torqueola</i>		A
RUFOUS-THROATED PARTRIDGE	<i>Arborophila rufogularis</i>		
MOUNTAIN BAMBOO-PARTRIDGE	<i>Bambusicola fytchii</i>		
BLYTH'S TRAGOPAN	<i>Tragopan blythii</i>		
RED JUNGLEFOWL	<i>Gallus gallus</i>		
KALIJ PHEASANT	<i>Lophura leucomelanos</i>		
MRS HUME'S PHEASANT	<i>Symaticus humiae</i>		A
GREY PEACOCK-PHEASANT	<i>Polyplectron bicalcaratum</i>		
COLLARED FALCONET	<i>Microhierax caerulescens</i>		
COMMON KESTREL	<i>Falco tinnunculus</i>		B
ORIENTAL HOBBY	<i>Falco severus</i>		
PEREGRINE FALCON	<i>Falco peregrinus</i>		
BLACK BAZA	<i>Aviceda leucphotes</i>		
CRESTED SERPENT-EAGLE	<i>Spilornis cheela</i>		
WHITE-RUMPED VULTURE	<i>Gyps bengalensis</i>		
HIMALAYAN GRIFFON	<i>Gyps himalayensis</i>		
CRESTED GOSHAWK	<i>Accipiter trivirgatus</i>		
SHIKRA	<i>Accipiter badius</i>		
BESRA	<i>Accipiter virgatus</i>		
EURASIAN SPARROWHAWK	<i>Accipiter nisus</i>		
NORTHERN GOSHAWK	<i>Accipiter gentilis</i>		

HIMALAYAN BUZZARD	<i>Buteo burmanicus</i>	COMMON BUZZARD <i>Buteo buteo</i>	B
BONELLI'S EAGLE	<i>Aquila fasciata</i>	<i>Hieraetus fasciatus</i>	
BLACK EAGLE	<i>Ictinaetus malayensis</i>		B
RUFIOUS-BELLIED EAGLE	<i>Lophotriorchis kienerii</i>		A
ORIENTAL HONEY-BUZZARD	<i>Fernis ptilorhynchus</i>		B
MOUNTAIN HAWK-EAGLE	<i>Nisaetus nipalensis</i>	<i>Spizaetus nipalensis</i>	A
CHANGEABLE HAWK-EAGLE	<i>Nisaetus cirrhatus</i>	<i>Nisaetus limnaeetus, Spizaetus cirrhatus</i>	
GREY-HEADED LAPWING	<i>Vanellus cinereus</i>		
EURASIAN WOODCOCK	<i>Scolopax rusticola</i>		A
ASHY WOODPIGEON	<i>Columba pulchricollis</i>		B
MOUNTAIN IMPERIAL PIGEON	<i>Ducula badia</i>		
ORIENTAL TURTLE-DOVE	<i>Streptopelia orientalis</i>		B
SPOTTED DOVE	<i>Streptopelia chinensis</i>		
BARRED CUCKOO-DOVE	<i>Macropygia unchall</i>		B
EMERALD DOVE	<i>Chalcophaps indica</i>		
THICK-BILLED GREEN-PIGEON	<i>Treron curvirostra</i>		
YELLOW-FOOTED GREEN PIGEON	<i>Treron phoenicoptera</i>		
WEDGE-TAILED GREEN-PIGEON	<i>Treron spenura</i>		A
ALEXANDRINE PARAKEET	<i>Psittacula eupatria</i>		
GREY-HEADED PARAKEET	<i>Psittacula finschii</i>		B
RED-BREASTED PARAKEET	<i>Psittacula alexandri</i>		
LARGE HAWK-CUCKOO	<i>Hierococcyx sparveriooides</i>		
EURASIAN CUCKOO	<i>Cuculus canorus</i>		
INDIAN CUCKOO	<i>Cuculus micropterus</i>		
HIMALAYAN CUCKOO	<i>Cuculus saturatus</i>	ORIENTAL CUCKOO	
PLAINTIVE CUCKOO	<i>Cuculus merulinus</i>		
ASIAN EMERALD CUCKOO	<i>Chrysococcyx maculatus</i>		
DRONGO CUCKOO	<i>Surniculus lugubris</i>	ASIAN DRONGO-CUCKOO	
GREEN-BILLED MALKOHA	<i>Rhopodytes tristis</i>	<i>Phaenicophaeus tristis</i>	
GREATER COUCAL	<i>Centropus sinensis</i>		

LESSER COUCAL	<i>Centropus bengalensis</i>	
MOUNTAIN SCOPS-OWL	<i>Otus spilocephalus</i>	
COLLARED SCOPS-OWL	<i>Otus lettia</i>	<i>Otus bakkamoena</i>
ORIENTAL SCOPS-OWL	<i>Otus sunia</i>	
COLLARED OWLET	<i>Glaucidium brodiei</i>	
ASIAN BARRED OWLET	<i>Glaucidium cuculoides</i>	
JUNGLE OWLET	<i>Glaucidium radiatum</i>	
HIMALAYAN WOOD-OWL	<i>Strix nivicola</i>	TAWNY OWL <i>Strix aluco</i>
HODGSON'S FROGMOUTH	<i>Batrachostomus hodgsoni</i>	
GREAT EARED-NIGHTJAR	<i>Eurostopus macrotis</i>	
GREY NIGHTJAR	<i>Caprimulgus jotaka</i>	<i>Caprimulgus indicus</i>
LARGE-TAILED NIGHTJAR	<i>Caprimulgus macrurus</i>	
INDIAN NIGHTJAR	<i>Caprimulgus asiaticus</i>	
SAVANNA NIGHTJAR	<i>Caprimulgus affinis</i>	
HIMALAYAN SWIFTLET	<i>Aerodramus brevirostris</i>	<i>Calocitta brevirostris</i>
BROWN-BACKED NEEDLETAIL	<i>Hirundapus giganteus</i>	
FORK-TAILED SWIFT	<i>Apus pacificus</i>	
HOUSE SWIFT	<i>Apus affinis</i>	LITTLE SWIFT
RED-HEADED TROGON	<i>Harpactes erythrocephalus</i>	
WHITE-THROATED KINGFISHER	<i>Halcyon smyrnensis</i>	
COMMON HOPOE	<i>Upupa epops</i>	
INDIAN ROLLER	<i>Coracias bengalensis</i>	
BLUE-BEARDED BEE-EATER	<i>Nyctornis athertoni</i>	
BLUE-TAILED BEE-EATER	<i>Meropsis philippineus</i>	
GREAT HORNBILL	<i>Buceros bicornis</i>	
RUFOUS-NECKED HORNBILL	<i>Aceros nipalensis</i>	
GREAT BARBET	<i>Megalaima virens</i>	
LINEATED BARBET	<i>Megalaima lineata</i>	
GOLDEN-THROATED BARBET	<i>Megalaima franklinii</i>	
BLUE-THROATED BARBET	<i>Megalaima asiatica</i>	

D

B

SPECKLED PICULET	<i>Picumnus innominatus</i>	
WHITE-BROWED PICULET	<i>Sasia ochracea</i>	
RUFIOUS-BELLIED WOODPECKER	<i>Hypopicus hyperythrus</i>	B
FULVOUS-BREASTED WOODPECKER	<i>Dendrocopus macei</i>	
STRIPE-BREASTED WOODPECKER	<i>Dendrocopus atratus</i>	A
CRIMSON-BREASTED WOODPECKER	<i>Dendrocopus cathpharius</i>	A
GREAT SPOTTED WOODPECKER	<i>Dendrocopus major</i>	
DARJEELING WOODPECKER	<i>Dendrocopus darjellensis</i>	
WHITE-BELLIED WOODPECKER	<i>Dryocopus javensis</i>	
GREATER YELLOWNAPE	<i>Chrysophlegma flavinucha</i>	
LESSER YELLOWNAPE	<i>Picus chlorolophus</i>	
STREAK-THROATED WOODPECKER	<i>Picus xanthopygaeus</i>	
GREY-HEADED WOODPECKER	<i>Picus canus</i>	
BAY WOODPECKER	<i>Blythipicus pyrrhotis</i>	B
LONG-TAILED BROADBILL	<i>Psarisomus dalhousiae</i>	
BLUE-WINGED PITTA	<i>Pitta moluccensis</i>	
BLACK-HEADED SHRIKE-BABBLER	<i>Pteruthius rufiventer</i>	
WHITE-BROWED SHRIKE-BABBLER	<i>Pteruthius flaviscapis</i>	
GREEN SHRIKE-BABBLER	<i>Pteruthius xanthochlorus</i>	D
BLACK-EARED SHRIKE-BABBLER	<i>Pteruthius melanotis</i>	D
LARGE CUCKOOSHRIKE	<i>Coracina macei</i>	
BLACK-WINGED CUCKOOSHRIKE	<i>Coracina melaschistos</i>	
BAR-WINGED FLYCATCHER-SHRIKE	<i>Hemipus picatus</i>	
GREY-CHINNED MINIVET	<i>Pericrocotus solaris</i>	
LONG-TAILED MINIVET	<i>Pericrocotus ethologus</i>	D
SHORT-BILLED MINIVET	<i>Pericrocotus brevirostris</i>	
SCARLET MINIVET	<i>Pericrocotus speciosus</i>	
SLENDER-BILLED ORIOLE	<i>Oriolus tenuirostris</i>	
BLACK-HOODED ORIOLE	<i>Oriolus xanthornus</i>	
MAROON ORIOLE	<i>Oriolus trailii</i>	D
	<i>Pericrocotus flammeus</i>	
	BLYTH'S SHRIKE BABBLER <i>Pteruthius aeralatus</i>	

ASHY WOODSWALLOW	<i>Artamus fuscus</i>		
COMMON WOODSHRIKE	<i>Tephrodomis pondicerianus</i>		
YELLOW-BELLIED FANTAIL	<i>Chelidonyx hypoxantha</i>	Rhipidura hypoxantha	YELLOW-BELLIED FAIRY-FLYCATCHER
WHITE-THROATED FANTAIL	<i>Rhipidura albicollis</i>		A
BLACK-NAPED MONARCH	<i>Hypothymis azurea</i>		
ASIAN PARADISE-FLYCATCHER	<i>Terpsiphone paradisi</i>		
BLACK DRONGO	<i>Dicrurus macrocerus</i>		D
ASHY DRONGO	<i>Dicrurus leucophaeus</i>		
BRONZED DRONGO	<i>Dicrurus aeneus</i>		
LESSER RACKET-TAILED DRONGO	<i>Dicrurus remifer</i>		
GREATER RACKET-TAILED DRONGO	<i>Dicrurus paradiseus</i>		A
HAIR-CRESTED DRONGO	<i>Dicrurus hottentottus</i>		B
EASTERN JUNGLE CROW	<i>Corvus leuallantii</i>		B
EURASIAN JAY	<i>Garrulus glandarius</i>		B
YELLOW-BILLED BLUE MAGPIE	<i>Urocissa flavirostris</i>		
RED-BILLED BLUE MAGPIE	<i>Urocissa erythrorhyncha</i>		B
COMMON GREEN MAGPIE	<i>Cissa chinensis</i>		
RUFOUS TREEPIE	<i>Dendrocitta vagabunda</i>		A
GREY TREEPIE	<i>Dendrocitta formosae</i>		B/C
BROWN SHRIKE	<i>Lanius cristatus</i>		
BURMESE SHRIKE	<i>Lanius colluriooides</i>		
LONG-TAILED SHRIKE	<i>Lanius schach</i>		
GREY-BACKED SHRIKE	<i>Lanius tephronotus</i>		
MRS GOULD'S SUNBIRD	<i>Aethopyga gouldiae</i>		D
GREEN-TAILED SUNBIRD	<i>Aethopyga nipalensis</i>		B
(BLACK-THROATED SUNBIRD)	<i>Aethopyga saturata</i>		
FIRE-TAILED SUNBIRD	<i>Aethopyga ignicauda</i>		D
STREAKED SPIDERHUNTER	<i>Arachnothera magna</i>		
YELLOW-BELLIED FLOWERPECKER	<i>Dicaeum melanoxanthum</i>		A
FIRE-BREADED FLOWERPECKER	<i>Dicaeum ignipectus</i>		C
		SPANGLED DRONGO	
		LARGE-BILLED CROW	
		<i>Corvus macrorhynchos</i>	

SCARLET-BACKED FLOWERPECKER (BLUE-WINGED LEAFBIRD)	<i>Dicaeum cruentatum</i>	
(GOLDEN-FRONTED LEAFBIRD)	<i>Chloropsis cochinchinensis</i>	
ORANGE-BELLIED LEAFBIRD	<i>Chloropsis aurifrons</i>	A
ASIAN FAIRY-BLUEBIRD	<i>Chloropsis hardwickii</i>	
SCALY-BREASTED MUNIA	<i>Irena puella</i>	
RUSSET SPARROW	<i>Lonchura punctulata</i>	
OLIVE-BACKED PIPIT	<i>Passer rutilans</i>	
LONG-BILLED PIPIT	<i>Anthus hodgsoni</i>	D
FOREST WAGTAIL	<i>Anthus similis</i>	
GREY WAGTAIL	<i>Dendronanthus indicus</i>	
YELLOW WAGTAIL	<i>Motacilla cinerea</i>	B
WHITE WAGTAIL	<i>Motacilla flava/utschschensis</i>	A
YELLOW-BREASTED GREENFINCH	<i>Motacilla alba</i>	C
SCARLET FINCH	<i>Chloris spinoides</i>	C
COMMON ROSEFINCH	<i>Haematospiza sipahi</i>	
DARK-BREASTED ROSEFINCH	<i>Carpodacus erythrinus</i>	B
BROWN BULLFINCH	<i>Carpodacus nipalensis</i>	
SPOT-WINGED GROSBEEK	<i>Pyrrhula nipalensis</i>	
BLACK-FACED BUNTING	<i>Mycerobas melanozanthos</i>	
CHESTNUT BUNTING	<i>Emberiza spodocephala</i>	
CRESTED BUNTING	<i>Emberiza rutila</i>	
CHESTNUT-EARED BUNTING	<i>Emberiza lathamii</i>	
LITTLE BUNTING	<i>Emberiza fucata</i>	
BAR-TAILED TREECREEPER	<i>Emberiza pusilla</i>	D
RUSTY-FLANKED TREECREEPER	<i>Certhia himalayana</i>	B
HUME'S TREECREEPER	<i>Certhia nipalensis</i>	
CHESTNUT-VENTED NUTHATCH	<i>Certhia manipurensis</i>	
CHESTNUT-BELLIED NUTHATCH	<i>Sitta nagaensis</i>	
WHITE-TAILED NUTHATCH	<i>Sitta cinnamomventris</i>	
	<i>Sitta himalayensis</i>	
	<i>BROWN-THROATED TREECREEPER</i>	<i>Certhia discolor</i>
		<i>Sitta castanea</i>

WHITE-BROWED NUTHATCH	<i>Sitta victoriae</i>	C
VELVET-FRONTED NUTHATCH	<i>Sitta frontalis</i>	
VINOUS-BREASTED STARLING	<i>Sturnus burmannicus</i>	
COMMON MYNA	<i>Acridotheres tristis</i>	
COMMON HILL-MYNA	<i>Gracula religiosa</i>	A
ORIENTAL SKYLARK	<i>Alauda guilgula</i>	B
LONG-TAILED THRUSH	<i>Zoothera dixonii</i>	
SCALY THRUSH	<i>Zoothera dauma</i>	
LONG-BILLED THRUSH	<i>Zoothera monticola</i>	
DARK-SIDED THRUSH	<i>Zoothera marginata</i>	
GREY-WINGED BLACKBIRD	<i>Turdus boulboul</i>	
CHESTNUT THRUSH	<i>Turdus rubrocanus</i>	
BLACK-BREASTED THRUSH	<i>Turdus dissimilis</i>	
DUSKY THRUSH	<i>Turdus eunomus</i>	
GREY-SIDED THRUSH	<i>Turdus feae</i>	D
EYEBROWED THRUSH	<i>Turdus obscurus</i>	D
CHESTNUT-BELLIED ROCK-THRUSH	<i>Monticola rufiventris</i>	C
BLUE ROCK THRUSH	<i>Monticola solitarius</i>	A
BLUE WHISTLING-THRUSH	<i>Myophonus caeruleus</i>	C
LESSER SHORTWING	<i>Brachypteryx leucophrys</i>	
WHITE-BROWED SHORTWING	<i>Brachypteryx montana</i>	
WHITE-TAILED ROBIN	<i>Myiomela leucura</i>	
WHITE-BELLIED REDSTART	<i>Hodgsonius phaeniceuroides</i>	
(WHITE-RUMPED SHAMA)	<i>Copsychus malabaricus</i>	
SIBERIAN RUBYTHROAT	<i>Luscinia calliope</i>	
WHITE-TAILED RUBYTHROAT	<i>Luscinia pectoralis</i>	
INDIAN BLUE ROBIN	<i>Luscinia brunnea</i>	
SIBERIAN BLUE ROBIN	<i>Luscinia cyane</i>	
DAURIAN REDSTART	<i>Phoenicurus auroreus</i>	
BLUE-FRONTED REDSTART	<i>Phoenicurus frontalis</i>	B

BLACK REDSTART	<i>Phoenicurus ochruros</i>	
GREY BUSHCHAT	<i>Saxicola ferreus</i>	D
PIED BUSHCHAT	<i>Saxicola caprata</i>	
HIMALAYAN BLUETAIL	<i>Tarsiger rufilatus</i>	D
GOLDEN BUSH-ROBIN	<i>Tarsiger chrysaeus</i>	
WHITE-CROWNED FORKTAIL	<i>Enicurus leschenaulti</i>	
SPOTTED FORKTAIL	<i>Enicurus maculatus</i>	
PALE BLUE FLYCATCHER	<i>Cyornis unicolor</i>	
(HILL BLUE FLYCATCHER)	<i>Cyornis banyumas</i>	
BLUE-THROATED FLYCATCHER	<i>Cyornis rubeculoides</i>	
(WHITE-TAILED FLYCATCHER)	<i>Cyornis concretus</i>	
PYGMY BLUE FLYCATCHER	<i>Muscicapella hodgsoni</i>	
RUFIOUS-BELLIED NILTAVA	<i>Niltava sundara</i>	
VIVID NILTAVA	<i>Niltava vivida</i>	
LARGE NILTAVA	<i>Niltava grandis</i>	B
LITTLE PIED FLYCATCHER	<i>Ficedula westermanni</i>	
ULTRAMARINE FLYCATCHER	<i>Ficedula superciliaris</i>	
SLATY-BACKED FLYCATCHER	<i>Ficedula hodgsonii</i>	B
WHITE-GORGETED FLYCATCHER	<i>Ficedula monileger</i>	
SNOWY-BROWED FLYCATCHER	<i>Ficedula hyperythra</i>	
SLATY-BLUE FLYCATCHER	<i>Ficedula tricolor</i>	
TAIGA FLYCATCHER	<i>Ficedula albicilla</i>	
GREY-HEADED CANARY-FLYCATCHER	<i>Culicicapa ceylonensis</i>	
VERDITER FLYCATCHER	<i>Eumyias thalassinus</i>	B
RUFIOUS-GORGETED FLYCATCHER	<i>Muscicapa strophhiata</i>	C
DARK-SIDED FLYCATCHER	<i>Muscicapa sibirica</i>	
BLACK-BIBBED TIT	<i>Poecile hypermelaena</i>	C
GREEN-BACKED TIT	<i>Parus monticolus</i>	B
YELLOW-CHEEKED TIT	<i>Parus spilonotus</i>	
YELLOW-BROWED TIT	<i>Sylviparus modestus</i>	B

ORANGE-FLANKED BUSH ROBIN *Tarsiger cyanurus*

BLACK-THROATED TIT	<i>Aegithalos concinnus</i>	RED-CROWNED TIT	C
BURMESE TIT	<i>Aegithalos sharpei</i>	BURMESE BUSHTIT, BLACK-BROWED TIT <i>Aegithalos bonvaloti</i>	D
CRESTED FINCHBILL	<i>Spizixos canifrons</i>		D
STRIATED BULBUL	<i>Pycnonotus striatus</i>		C
RED-VENTED BULBUL	<i>Pycnonotus cafer</i>		B
BLACK-CRESTED BULBUL	<i>Pycnonotus flaviventris</i>	<i>Pycnonotus melanicterus</i>	B
FLAVESCENT BULBUL	<i>Pycnonotus flavescens</i>		D
ASHY BULBUL	<i>Hemixos flava</i>		
HIMALAYAN BLACK BULBUL	<i>Hypsipetes leucocephalus</i>	BLACK BULBUL	D
MOUNTAIN BULBUL	<i>Ix mccllellandii</i>	<i>Hypsipetes mccllellandii</i>	B
ASIAN HOUSE MARTIN	<i>Delichon dasypus</i>		D
NEPAL HOUSE MARTIN	<i>Delichon nipalense</i>		A
BARN SWALLOW	<i>Hirundo rustica</i>		B
WIRE-TAILED SWALLOW	<i>Hirundo smithii</i>		
RED-RUMPED SWALLOW	<i>Cecropis daurica</i>		A
ABERRANT BUSH-WARBLER	<i>Cettia flavolivacea</i>	<i>Horornis flavolivacea</i>	B
CHESTNUT-CROWNED BUSH-WARBLER	<i>Cettia major</i>	LARGE BUSH-WARBLER <i>Oligura major</i>	
BROWNISH-FLANKED BUSH WARBLER	<i>Cettia fortipes</i>	STRONG-FOOTED BUSH-WARBLER <i>Horornis fortipes</i>	
ASIAN STUBTAIL	<i>Urosphena squameiceps</i>		
YELLOW-BELLIED WARBLER	<i>Abroscopus superciliosus</i>		
BLACK-FACED WARBLER	<i>Abroscopus schisticeps</i>		
MOUNTAIN TAILORBIRD	<i>Phyllogates cucullatus</i>		
BROAD-BILLED WARBLER	<i>Tickellia hodgsoni</i>	<i>Orthotomus cucullatus</i>	
GREY-BELLIED TESIA	<i>Tesia cyaniventer</i>		
CHESTNUT-HEADED TESIA	<i>Tesia castaneocoronata</i>		C
BIANCHI'S WARBLER	<i>Seicercus valentini</i>		
GREY-CROWNED WARBLER	<i>Seicercus tephrocephalus</i>		A
GREY-CHEEKED WARBLER	<i>Seicercus poliogenys</i>		
CHESTNUT-CROWNED WARBLER	<i>Seicercus castaniceps</i>		
GREY-HOODED WARBLER	<i>Phylloscopus xanthoschistos</i>	<i>Seicercus xanthoschistos</i>	B

BLYTH'S LEAF-WARBLER	<i>Phylloscopus reguloides</i>	
GREENISH WARBLER	<i>Phylloscopus trochiloides</i>	C
(TWO-BARRED LEAF-WARBLER)	<i>Phylloscopus plumbeitarsus</i>	
EMEI LEAF-WARBLER	<i>Phylloscopus emeiensis</i>	B
ASHY-THROATED WARBLER	<i>Phylloscopus maculipennis</i>	D
BUFF-BARRED WARBLER	<i>Phylloscopus pulcher</i>	D
YELLOW-BROWED WARBLER	<i>Phylloscopus inornatus</i>	A
HUME'S WARBLER	<i>Phylloscopus humei</i>	
LEMON-RUMPED WARBLER	<i>Phylloscopus chloronotus</i>	
RADDE'S WARBLER	<i>Phylloscopus schwarzi</i>	
TICKELL'S LEAF-WARBLER	<i>Phylloscopus affinis</i>	
YELLOW-STREAKED WARBLER	<i>Phylloscopus armandii</i>	
DUSKY WARBLER	<i>Phylloscopus fuscatus</i>	
(BUFF-THROATED WARBLER)	<i>Phylloscopus subaffinis</i>	B
SPOT-BREASTED PARROTBILL	<i>Paradoxornis guttaticollis</i>	
GREY-HEADED PARROTBILL	<i>Psittiparus gularis</i>	C
BUFF-BREASTED PARROTBILL	<i>Suthora ripponi</i>	
WHITE-BROWED FULVETTA	<i>Fulvetta vinpectus</i>	D
NEPAL FULVETTA	<i>Alcippe nipalensis</i>	
GREY-CHEEKED FULVETTA	<i>Alcippe fratercula</i>	
BROWN-CHEEKED FULVETTA	<i>Alcippe poiocephala</i>	
RUFUS-THROATED FULVETTA	<i>Schoeniiparus rufogularis</i>	
RUSTY-CAPPED FULVETTA	<i>Schoeniiparus dubius</i>	<i>Alcippe dubia</i>
RUFUS-WINGED FULVETTA	<i>Pseudominia castaneiceps</i>	<i>Alcippe castaneiceps</i>
CHESTNUT-FLANKED WHITE-EYE	<i>Zosterops erythropleurus</i>	D
JAPANESE WHITE-EYE	<i>Zosterops japonicus</i>	B
STRIPE-THROATED YUHINA	<i>Yuhina gularis</i>	C
WHISKERED YUHINA	<i>Yuhina flavicollis</i>	D
SRIATED YUHINA	<i>Yuhina castaniceps</i>	B
GREY-THROATED BABBLER	<i>Stachyris nigriceps</i>	D
	BLACK-THROATED PARROTBILL	<i>Paradoxornis nipalensis</i>
	<i>Alcippe vinpectus</i>	

YELLOW-EYED BABBLER	<i>Chrysomma sinense</i>		
CHESTNUT-CAPPED BABBLER	<i>Timalia pileata</i>		
GOLDEN BABBLER	<i>Stachyridopsis chrysaea</i>	<i>Stachyris chrysaea</i>	B
RUFIOUS-FRONTED BABBLER	<i>Stachyridopsis rufifrons</i>	<i>Stachyris rufifrons</i>	
CHIN HILLS WREN-BABBLER	<i>Spelaeornis oatesi</i>	LONG-TAILED WREN-BABBLER	B
SPOTTED WREN-BABBLER	<i>Elachura formosa</i>	<i>Spelaeornis chocolatinus</i>	A
SCALY-BREASTED WREN-BABBLER	<i>Pnoepyga albiventer</i>	<i>Spelaeornis formosus</i>	A
PYGMY WREN-BABBLER	<i>Pnoepyga pusilla</i>		
PUFF-THROATED BABBLER	<i>Pellorneum ruficeps</i>		
SPOT-THROATED BABBLER	<i>Pellorneum albiventre</i>		
SICKLE-BILLED SCIMITAR-BABBLER	<i>Xiphirhynchus superciliosus</i>	SLENDER-BILLED SCIMITAR BABBLER	
LARGE SCIMITAR-BABBLER	<i>Pomatorhinus hypoleucos</i>	<i>Megapomatorhinus hypoleucos</i>	
SPOT-BREASTED SCIMITAR-BABBLER	<i>Pomatorhinus mccllellandi</i>	<i>Pomatorhinus erythrocnemis</i>	
WHITE-BROWED SCIMITAR-BABBLER	<i>Pomatorhinus schisticeps</i>		
STREAK-BREASTED SCIMITAR-BABBLER	<i>Pomatorhinus ruficollis</i>		C
CORAL-BILLED SCIMITAR-BABBLER	<i>Pomatorhinus ferruginosus</i>		
CHINESE BABAX	<i>Babax lanceolatus</i>	MOUNT VICTORIA BABAX	C
LESSER NECKLACED LAUGHINGTHRUSH	<i>Garrulax monileger</i>	<i>Babax woodi</i>	A
GREATER NECKLACED LAUGHINGTHRUSH	<i>Garrulax pectoralis</i>		
STRIPED LAUGHINGTHRUSH	<i>Strophocinclia virgata</i>	<i>Garrulax virgatus</i>	D
BROWN-CAPPED LAUGHINGTHRUSH	<i>Trochalopteron austeni</i>	<i>Garrulax austeni</i>	
ASSAM LAUGHINGTHRUSH	<i>Trochalopteron chrysopteron</i>	CHESTNUT-CROWNED LAUGHINGTHRUSH	D
(RED-TAILED LAUGHINGTHRUSH)	<i>Trochalopteron milnei</i>	<i>Garrulax milnei</i>	
CRIMSON-FACED LIOCICHLA	<i>Liocichla phoenicea</i>	RED-FACED LIOCICHLA	
HIMALAYAN CUTIA	<i>Cutia nipalensis</i>	CUTIA	
BAR-THROATED MINLA	<i>Chrysominla strigula</i>	CHESTNUT-TAILED MINLA	D
RED-TAILED MINLA	<i>Minla ignotincta</i>	<i>Minla strigula</i>	C
BLUE-WINGED SIVA	<i>Siva cyanouroptera</i>	BLUE-WINGED MINLA	B
SILVER-EARED MESIA	<i>Mesia argenteauris</i>	<i>Leiothrix argenteauris</i>	
GREY SIBIA	<i>Malacias gracilis</i>	<i>Heterophasia gracilis</i>	D

RUFIOUS-BACKED SIBIA	<i>Leioptila annectens</i>	<i>Heterophasia annectens</i>	C
STREAK-THROATED BARWING	<i>Actinodura waldeni</i>		B
RUSTY-FRONTED BARWING	<i>Actinodura egertoni</i>		
BROWN BUSH-WARBLER	<i>Bradypterus luteoventris</i>	<i>Locustella luteoventris</i>	
RUSSET BUSH-WARBLER	<i>Bradypterus mandelli</i>	<i>Bradypterus seebohmi</i> , <i>Locustella mandelli</i>	
COMMON TAILORBIRD	<i>Orthotomus sutorius</i>		
RUFESCENT PRINIA	<i>Prinia rufescens</i>		
GREY-BREASTED PRINIA	<i>Prinia hodgsonii</i>		
STRIATED PRINIA	<i>Prinia crinigera</i>		
BROWN PRINIA	<i>Prinia polychroa</i>		
BLACK-THROATED PRINIA	<i>Prinia atrogularis</i>		C

5 The main threats

The current management goals for the park are to conserve the watershed areas of the local rivers and the scenic beauty of natural forests, to preserve the mountain ecosystem and to prohibit illicit hunting; and more specific to preserve the five species of rare birds which can be found only in Myanmar, as well as other native and migratory birds and their habitats, to preserve the rare species of Myanmar orchids, to educate local people to shift from practicing shifting cultivation to cultivating perennial plants and trees and to promote and upgrade the park as an ecotourism attraction.

Therefore, the verification of the main threat factors for the natural biodiversity in the area is of utmost importance, and was given high priority during our initial project. The shape of the protected area represents a challenge in itself; as its long and narrow extension, with a multitude of bends, gives an outstanding border effect into the protected area, not at least due to all the villages that are located within the buffer zone of the park (some is even inside the park, cf. Figure 2). Consequently most of the earlier mentioned threats caused by agricultural expansion (slash-and-burn, cf. Figure 5) and thereby loss of habitat, hunting pressure, over-exploitation of forest (inclusive illegal logging) and livestock grazing must be taken into account, and to some extent also forest fire, soil erosion, landslide and possible effects of climatic change, when possible management enterprises are evaluated.

The outstanding upgrading of the Kanpetlet – Mindat road, going through the park, represents another newly started intervention (Figure 6). From an outsider perspective, the alternative road in the lowland could rather have had this rearmament, and thereby avoided the damages of the scenic beauty of the natural landscape and its biodiversity in the park, caused by this heavy dimensioned road. This might be a result of too little communication between the environmental authorities and “Ministry of Transport and Communication”. As we have understood the latter is responsible for the road works even within the protected areas. This new road might harm the effort to achieve an international status as a world heritage site for this park.

Finally, the diversity of the avian (and mammalian) fauna in Natmataung national park is influenced by a substantial hunting pressure in the area (Figure 7 & 8). If the goal of promoting and upgrading the park as an ecotourism attraction with unique wildlife qualities should be fulfilled, this hunting pressure on the potential bird and mammal attractions must be brought down. This implies not only for the potential flagship species, the Blyth’s Tragopan discussed in the next chapter, but also other “charismatic species” (other pheasants and hornbill etc.). The success factor here is certainly dependent on the outcome from alternatives such as guiding of tourists (small ecotourism-groups, birdwatchers and other biological oriented groups, the Chin culture visitors and “trackers”) and shift from practicing slash-and-burn to more sustainable agriculture (cf. the Rainforest Foundation Norway project). These might represent a long-lasting process as the Chin people have strong cultural traditions associate with hunting (and wildlife seems still to be an important food supplement in their daily diet regardless their protected status), and the Chins have been living in this area a long time before the establishment of the park in 1994. Therefore, from their aspect the park might be looked at as a new restriction compared with their traditional activities in the area.



Figure 5. The slash-and burn practice spreads itself upwards the hillsides at some of the border of the park, and some continue even into the protected area, resulting in habitat loss and potential loss of biodiversity. The “smoke” on the pictures is just an ordinary fog situation. Alongside the roads some illegal logging inside the remaining virgin forest is also taken place (as shown on the lower picture to the right side). Photo: Per Gustav Thingstad



Figure 6. The Kanpetlet – Mindat road goes through the park; the upper pictures show the new construction work and the preparation for the significant extended road by felling the edging forest. This widening of the road represents a severe encroachment in the landscape, in particularly as long as the current road hurls itself with much more gentleness up and down the hills (lower picture). Photo: Per Gustav Thingstad



Figure 7. Different hunting activities represent a long-lasting tradition in the Chin culture; slingshot, bow and arrows, self-made muzzle-loader, gunpowder and bullets are currently in use. In addition the Chin people avail themselves to snares, and at least in some villages they are still practicing use of bird glue (birdlime). Seemingly, most of the surroundings of the trails and roads through the park are under quite a high and continuous hunting pressure, and almost all the bird and mammal species being in the vicinity might be fired at. Consequently, many of the most vulnerability (and charismatic) species are today only to be found within the more remote parts of the park, referred to as the “deep forest” by the local people. Photo: Per Gustav Thingstad



Figure 8. Although December should be the best month for seeing the great hornbills in Natmataung national park we only came across dead remnants during our stay. However, we were offered a fresh skull from a Great Hornbill at a market some distance from the park, indicating that both the meat and the skulls from this bird group are sought after. The hornbills are seeking out some particularly fruit-trees which are known by the local hunters, and thereby making them to an even greater extent vulnerable. Photo: Per Gustav Thingstad



Figure 9. Left: An injured Blyth's Tragopan male from Khonoma Valley in Nagaland, India. Photo: Ulrich Weber. Right: Portrait picture of a colourful male. Photo: Ramki Sreenivasan; Conservation India.



Figure 10. The Blyth's Tragopan points out to be a potential new “flag-ship species” and a symbol for Natmataung national park. We have several meetings with local hunters. With them we discussed an alternative approach to their hunting of this charismatic bird, as they can start to guide small tourist groups to hides at the birds' leking areas during their spring display. The success of such an offer has to be evaluated after a testing period that we are planning to take part in this spring. Photo: Per Gustav Thingstad

6 A new flagship species - the Blyth's Tragopan?

According to Ulrich Weber (in mail Jan. 5th 2014) a few years back, the local tribe in Khonoma Valley in Nagaland (the best known core area for the Blyth's Tragopan), which is tucked into the far north-eastern corner of India at the border of Myanmar, decided to stop hunting, and switched to organic farming and developed ecotourism. A local guide, an incredibly sharp-eyed bird spotter used to be the "chief bird hunter" in Khonoma valley, is now trying to re-educate his hunter fellows to birdguides.

The same effort should be devoted to convince the local hunters in the Chin villages, within or bordering the Natmataung national park, that wildlife can be more valuable alive than dead. As a start on such a process, we discussed the possibilities and interests for substitute some of the hunting yield with income from birding ecotourism with some local hunters being resident closed to Kanpalet and Mindat. According to our own experience from the visit in the area, and also verified during our discussion with the local hunters, the Blyth's Tragopan should be a very suited species to start the focus on. According to the local hunters they know about a considerable numbers of leking places for the tragopan within the park; and they were more than willing to bring nature photographers and ornithologist to beforehand setup hides at the leks. By that way they should earn so much money that it more than compensate for the loss of the hunting yield from the tragopans. Some of these lek sites should even be in the relative short distances from already existing tourist lodges.

The Blyth's Tragopan is a rare bird with a restricted distributions. In addition to Nagaland in India it is known from Manipur in NE India, Myanmar and NW Yunnan in China, where it still may occur in small numbers, with a total population that may numbers only 500 – 5000 individuals (insufficient information, no nest described) and seems to be declining (del Hoyo *et al.* (eds.) 1994). According to new information from Natmataung national park, this park might very well represent one of this vulnerable species last core areas. If so, this tragopan should be very qualified as a colourful symbol species for marketing purpose of the park and its tourist potential.

There exist very few photos of wild Blyth's Tragopans (but see Figure 9). In particular seem photos of displaying males with their outstretched wattles to be lacking, and consequently males in display represent highly attractive and challenging motives for nature photographs. However, the bird is very shy, and accordingly only a few (2 or max. 3) persons can be guided to each lek, were they must stay in completely stillness in the hides during the whole night and during the morning display. It is therefore essential to have more than one lek to offer to the tourists, such as more people can be operated simultaneously. This will also necessitate that a significant amount of leks are protected against hunting at each location if this offer can be given to ecotourists. The time of year for this offer seems to be restricted to the display period (late March to primo May?), but given that the local Blyth's Tragopan populations are spared for the ongoing hunting pressure, they should also be more easily discovered during the rest of the year. We plan to test this product together with our established contacts of local hunters at Kanpalet and Mindat in the beginning av April 2014, and discuss further with them the possible outcome of this offer (Figure 10). Of course the park administration must be further incorporated in this effort process to change the locals attitude towards some of the charismatic wildlife in the park (being of greater value live than dead). The income from "Tragopan tourism" must be shared such as it gains the management of the park, the local villages and the guides (local hunters, gradually hopefully former hunters) being involved, in accordance with international requirements for good ecotourism project.

7 Follow-up works in Natmataung national park

During our stay in Natmataung national park we initiated some follow-up works, which success has to be evaluated by a new visit to the area during this spring season.

Firstly, and probably most significant for achieving the goal of collaborations with the local people in project that can support the communities in such a way that one can prevent further depletion of natural resources and biodiversity in the park, is the started initiative with guiding tours to lek areas of the Blyth's Tragopan. This approach is planned to be tested by us in early April this year. These testing at different localities within the park should reveal the realism to such an ecotourism project. Given some success, it also should clear the way for further birding projects that can convince the locals that living charismatic birds (and mammals) are of greater values than dead ones. This might be the only navigable way to limit the current hunting activities that are far above the sustained yield for most of the bigger birds and game stocks in the area, including the horn-bills and pheasants.

The park warden has expressed that he would like to have some more complete investigation surveys in the more northern parts of Natmataung national park and within "the deep forest", which according to the local people still hold viable populations of most of the birds and mammals being used as game meat in the villages. Today these "deep forest" should be found within the northernmost and western parts of the park, in areas with few human settlements and accordingly much less hunting pressure. Together with a local driver and the local park rangers (which we already have had excellent co-operation with) surveys in some of these "deep forest" should be executed in 2014. These supplementary surveys should give us a greater overview of the representative situation for the whole parks, and not only for those areas in the surroundings of the main road and tracks between the villages, which we have visited so far. By doing this we can disclose the more general status, and the possible problems that might be facing the impending management strategies for the whole park (e.g. those which might be effecting its possibility to obtain a status as a World Heritage area). We will check if these more remote parts of the park are suited, and show more abundance in game adventures. If so, we will give recommendations for possible further offers of good ecotourism products even within these less affected and adapted parts of the park.

The gained experience with, and the progress of, our initiated monitoring program for the birds in the park should be discussed further with the park warden. Simply analyses program for showing the more long-term trends should also be tested. Also the experiences with the game cameras (photo traps) has to be evaluated, in particularly their usefulness in connection to unmask which game species that might seek out the temporary ponds close to the road during, and immediately after, the rainy season (Figure 11).

The documentations and DNA-sampling from birds caught in mistnets, which should be conducted by the experienced rangers during our absence, must also be followed up by us. We have made plans for DNA-analysis of these feathers we are sampling. A few of these might very well disclose to be new sub-species (and even species), being more or less restricted to this southward extension of the Himalayan mountain range, and thereby good candidates for new bird attractions for the park. And lastly, the park administration experience with handling and organizing faunal data and pictures (from "our" projects and from local patrols) into electronic data programs, that should be transferred to the portable laptops we left behind, should be evaluated. If necessary we will give further supervision for these datasets, and their security procedures.



Figure 11. During the monsoon season (May to Sept.) some ponds are filled up with rainwater. Evidently these ponds attract quite a lot of the wild ungulates (particularly in the beginning of the drier period?); as indicated by numerous footprints exposed in the dry mud. A set up with camera-traps in the vicinity of some of these ponds before the monsoon season should reveal important informations about the frequentation of ungulates and possibly also waterfowls in the area during this part of the year. Photo: Per Gustav Thingstad



Beside a diverse avifauna, Natmataung is known for its great diversity of rhododendrons and orchids (here represented by *Rhododendron arboreum* and *Dendrobium longicornu*). Photo: Per Gustav Thingstad

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