

Ecology of the White-browed Nuthatch *Sitta victoriae* in Natmataung National Park, Myanmar, with notes on other significant species

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Surveys were carried out in temperate pine and oak forest at 2,450–3,054 m in Natmataung National Park, Myanmar during November 2001–July 2002. A total of 197 species were recorded in or around the park, including the Endangered White-browed Nuthatch *Sitta victoriae*, three Vulnerable species (Mrs Hume's Pheasant *Syrnaticus humiae*, Blyth's Tragopan *Tragopan blythii*, Grey-sided Thrush *Turdus feae*), six Near Threatened species and four species recorded for the first time in West Myanmar. The first detailed observations on the ecology, foraging and breeding behaviour of the White-browed Nuthatch were carried out, and three nests were found. White-browed Nuthatches were usually seen alone (66.3% of observations), and mainly in *Quercus semecarpifolia* trees (50%). Gleaning insects from mosses, lichens and epiphytes was the commonest foraging technique (87.6% of observations).

INTRODUCTION

Natmataung (Mount Victoria) National Park is located at 21°19'N 93°55'E in Mindat district, Chin state, in the southern Chin Hills of West Myanmar. It covers an area of 723 km² of mountainous terrain, including Mount Victoria (3,054 m), the highest mountain in west and central Myanmar. The park falls within the Eastern Himalayas Endemic Bird Area (Stattersfield *et al.* 1998). Chin State is characterised by subtropical montane forest, with tropical moist forest in the west. However, the park is distinguished by its temperate montane forest (David 1964). The park has three seasons: a long rainy season with an annual rainfall >1,000 mm; a cold season with snowfall; and a short summer with temperatures up to 20°C.

White-browed Nuthatch *Sitta victoriae* is listed as Endangered because it has a very small range, and a population which is inferred to be declining (BirdLife International 2000). It is one of four bird species strictly endemic to Myanmar, and it is found only from the area around Mount Victoria (Robson 2000). The species is totally protected in Myanmar under the Wildlife Act of 1994.

The Chin hills were first explored ornithologically by Lieutenant H. Wood, who visited Mount Victoria and nearby areas during the winter of 1901–1902 (Wood and Finn 1902). Following Wood's initial findings, Colonel G. Rippon spent several months on Mount Victoria in 1904 collecting a large number of specimens (Robson *et al.* 1998). A German team spent six months on Mount Victoria and collected 6,000 specimens in 1937 (Stresemann and Heinrich 1940). In 1980, J. A. Sayer surveyed the park, but failed to find White-browed Nuthatch (Sayer 1983). Robson *et al.* (1998) found 164 species in the park in March–April 1995. No studies have focused specifically on White-browed Nuthatch, so I studied the bird fauna of the park from 1997 to 2000, and investigated the ecology and breeding behaviour of the White-browed Nuthatch (Naing 1999, 2000).

METHODS

The study area was located in the south-eastern part of Natmataung national park. A 12 km transect route was set up, starting at a point 17 km east of Kanpetlet township (at 2,450 m) and ending at the Mount Victoria summit (3,054 m). The vegetation along the transect was dominated by tall open pine forest *Pinus khasiya* mixed with oak *Quercus semecarpifolia* and rhododendron *Rhododendron arboreum*. Dwarf bamboo *Arundinaria racemosa* also occurs in the understorey and in thickets open areas. Above 2,700 m the forest was dominated by *Quercus semecarpifolia*, with abundant epiphytes, lichens, mosses, orchids and ferns. Field surveys were carried out with the help of volunteers, by walking along the transect during November 2001, March, April and July 2002, for c.15 days per month. When White-browed Nuthatches were observed, the number of individuals, altitude, vegetation, foraging behaviour and any breeding behaviour were recorded.

RESULTS AND DISCUSSION

A total of 206 species were recorded in or around Natmataung National Park (see Appendix). White-browed Nuthatches were recorded at 2,450–3,005 m, which matches the altitude of 2,500–3,000 recorded by Stresemann and Heinrich (1940). Most observations were of single individuals (66.3% of 483 observations), with pairs forming 28.3% of observations, and flocks (of up to four individuals) forming 5.3%. The main tree species used were *Quercus semecarpifolia* (50% of 483 observations), *Rhododendron arboreum* (16.4%), *Lyonia ovalifolia* (8%), *Lithocarpus dealbatus* (6%), *Pinus khasiya* (5.2%) and *Alnus nepalensis* (4.8%). White-browed Nuthatches fed on small insects which were usually gleaned from mosses, lichens and epiphytes (87.6% of 250 foraging observations), or probed from behind dislodged bark (10.4%). Most foraging observations were in the outer branches (69.6%), and less frequently on the inner branches (19.6%) or trunks (10.8%).

Table 1. Additional species of interest recorded in Natmataung National Park, Myanmar.

Species	Status	Records
Species of conservation interest		
Mrs Hume's Pheasant <i>Syrnaticus humiae</i>	VU	One male seen in mixed pine-oak forest at 2,510 m on 6 April
Blyth's Tragopan <i>Tragopan blythii</i>	VU	A total of nine heard at 2,510–2,750 m on 16 March–15 April and a group of one male and two females seen at 2,680 m on 10 April
Black-breasted Thrush <i>Turdus dissimilis</i>	NT	A flock of 7–9 at 2,510 m in March–April
Grey-sided Thrush <i>Turdus feae</i>	VU	Three flocks of 5–15 at 2,040–2,550 m on 12 March–16 April
Broad-billed Warbler <i>Tickellia hodgsoni</i>	NT	Heard daily and seen occasionally at 2,450–2,745 m throughout the survey
Striped Laughingthrush <i>Garrulax virgatus</i>	NT	Three in dwarf bamboo <i>Arundinaria racemosa</i> at 2,340 m on 15 November and at 1,910 m on 17 March
Slender-billed Scimitar Babbler <i>Xiphirhynchus superciliosus</i>	NT	One at 2,735 on 30 March and five at 2,753 on 15 April
Black-headed Shrike Babbler <i>Pteruthius rufiventer</i>	NT	A male at 2,400 m on 10 April and a pair at 2,520 m on 21 July
Grey Sibia <i>Heterophasia gracilis</i>	NT	Several seen at 1,910–3,025 m throughout the survey
First records for west Myanmar		
Oriental Scops Owl <i>Otus sunia</i>		Adult rufous morph in pine forest at 1,980 m on 12 November
Grey-backed Shrike <i>Lanius tephronotus</i>		Two at 1,930 m on 10 March and one at 2,000 m on 21 April
Grey-cheeked Warbler <i>Seicercus poliogenys</i>		Two at 1,980 m on 28 November
Dark-breasted Rosefinch <i>Carpodacus nipalensis</i>		Seven at 2,520 m on 24 November and one at 2,550 m on 14 April

Three nests were found: (1) at 2,750 m on 12 March 2002 when a female was found nest-building in the cavity of an inner branch of a *Quercus semecarpifolia* tree at a height of 10 m; (2) at 2,510 m on 3 April when a nest with chicks was found in an inner branch of a *Q. semecarpifolia* tree at a height of 4 m; and (3) at 2,750 m on 7 April when a nest with chicks was found in the trunk of a *Rhododendron arboreum* tree at a height of 6 m. The first nest was built (by the female only) in about six days. None of the nests had mud plastered around the entrance hole, unlike many other *Sitta* species. Only females were seen to enter the nest-hole to feed chicks. In April, three flocks each with two recently fledged young were observed.

Nine other species of conservation interest were recorded (threat status is taken from BirdLife International 2000) and four other species were recorded for the first time in west Myanmar (Smythies 1953, King *et al.* 1975, Robson 2000).

A total of 78 villages with a population of c.12,000 (in 1996) are located in the park. Shifting cultivation and illegal logging cause annual habitat loss of 2,025 ha (Shein Gay Ngai 1996). Fires started by local people during the dry season also threaten the forests in Natmataung national park. In addition, birds are hunted using guns, snares (for tragopans and pheasants) and gum traps (for smaller birds). Improved protection should be afforded to the park, and environmental awareness programmes should be initiated to discourage burning and hunting.

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APPENDIX

Species record in Natmataung National Park, Myanmar.

Species	Category	Status	Abundance				Altitude (m)
			Nov	Mar	Apr	Jul	
HILL PARTRIDGE <i>Arborophila torqueola</i>		Res	R	U	U		Up to 3,005 *
MOUNTAIN BAMBOO PARTRIDGE <i>Bambusicola fytchii</i>		Res	U	U	U	U	Up to 2,580
BLYTH'S TRAGOPAN <i>Tragopan blythii</i>	VU	Res		R	U		Up to 2,750
KALI PHEASANT <i>Lophura leucomelanos</i>		Res	R	R	U	R	Up to 2,510
MRS HUME'S PHEASANT <i>Syrnaticus humiae</i>	VU	Res			R		2,470
GREY PEACOCK PHEASANT <i>Polyplectron bicalcaratum</i>		Res	X				2,320 *
SPECKLED PICULET <i>Picumnus innominatus</i>		Res			X		1,935 *
WHITE-BROWED PICULET <i>Sasia ochracea</i>		Res	X				1,910 *
FULVOUS-BREASTED WOODPECKER <i>Dendrocopos macei</i>		Res	X	X		X	Up to 2,110
STRIPE-BREASTED WOODPECKER <i>D. atratus</i>		Res	X	X			Up to 2,165
RUFIOUS-BELLIED WOODPECKER <i>D. hyperythrus</i>		Res	C	C	C	C	Up to 2,750
CRIMSON-BREASTED WOODPECKER <i>D. cathpharius</i>		Res	X		R		Up to 2,550
DARJEELING WOODPECKER <i>D. darjellensis</i>		Res	R	R	U	U	Up to 2,750
LESSER YELLOWNAPE <i>Picus chlorolophus</i>		Res	X		X	X	1,910
GREATER YELLOWNAPE <i>P. flavinucha</i>		Res	X	X		X	Up to 2,320
BAY WOODPECKER <i>Blythipicus pyrrhotis</i>		Res	R	R	R	X	Up to 2,750
GREAT BARBET <i>Megalaima virens</i>		Res	A	A	A	A	Up to 2,647
GOLDEN-THROATED BARBET <i>M. franklinii</i>		Res	A	A	A	A	Up to 2,750
BLUE-THROATED BARBET <i>M. asiatica</i>		Res			U		2,510
LARGE HAWK CUCKOO <i>Hierococcyx sparverioides</i>		Res		X	X	X	Up to 2,385
EURASIAN CUCKOO <i>Cuculus canorus</i>		BV	X		X		Up to 1,980
INDIAN CUCKOO <i>C. micropterus</i>		Res	X				1,910
ORIENTAL CUCKOO <i>C. saturatus</i>		BV			X		1,920
ASIAN EMERALD CUCKOO <i>Chrysococcyx maculatus</i>		Res			R		2,380
GREY-HEADED PARAKEET <i>Psittacula finschii</i>		Res	X		X		1,910 *
HIMALAYAN SWIFTLET <i>Collocalia brevirostris</i>		Res			X		2,150
ORIENTAL SCOPS OWL <i>Otus sunia</i>		Res	X				1,980
COLLARED SCOPS OWL <i>O. bakkamoena</i>		Res	X				1,985
TAWNY OWL <i>Strix aluco</i>		Res				R	2,510
COLLARED OWLET <i>Glaucidium brodiei</i>		Res				R	2,515
ASIAN BARRED OWLET <i>G. cuculoides</i>		Res				X	1,910
HODGSON'S FROGMOUTH <i>Batrachostomus hodgsoni</i>		Res				X	1,910
GREY NIGHTJAR <i>Caprimulgus indicus</i>		Res			X		2,380
ASHY WOOD PIGEON <i>Columba pulchricollis</i>		Res	R	U	U	R	Up to 2,550
ORIENTAL TURTLE DOVE <i>Streptopelia orientalis</i>		Res	X	X	X		Up to 1,925
SPOTTED DOVE <i>S. chinensis</i>		Res	X		X	X	Up to 1,940
WEDGE-TAILED GREEN PIGEON <i>Treron sphenura</i>		Res	R			U	2,510
ORIENTAL HONEY-BUZZARD <i>Pernis ptilorhynchus</i>		Res		X			1,990
CRESTED SERPENT EAGLE <i>S. pilornis cheela</i>		Res			R		2,400
CRESTED GOSHAWK <i>Accipiter trivirgatus</i>		Res		X			1,910
BESRA <i>A. virgatus</i>		Res	X				1,925
EURASIAN SPARROW HAWK <i>A. nisus</i>		WV	R				2,585
COMMON BUZZARD <i>Buteo buteo</i>		WV	C	C	C		2,728
BLACK EAGLE <i>Ictinaetus malayensis</i>		Res	C	C	C	R	Up to 3,015
CHANGEABLE HAWK EAGLE <i>Spizaetus cirrhatus</i>		Res			R		2,520
COLLARED FALCONET <i>Microhierax caerulescens</i>		Res		X			Up to 2,310 *
ORIENTAL HOBBY <i>Falco severus</i>		Res		X			1,915 *
LONG-TAILED BROADBILL <i>Psarismus dalhousiae</i>		Res		X	X		2,000
ASIAN FAIRY BLUEBIRD <i>Irena puella</i>		Res	X				2,340
[GOLDEN-FRONTED LEAFBIRD <i>Chloropsis aurifrons</i>]		Res					2,545 *
ORANGE-BELLIED LEAFBIRD <i>C. hardwickii</i>		Res	X		X		1,910

Species	Category	Status	Abundance				Altitude (m)
			Nov	Mar	Apr	Jul	
BURMESE SHRIKE <i>Lanius colluriooides</i>		Res		X			1,995 *
LONG-TAILED SHRIKE <i>L. schach</i>		Res	X	X			2,080
GREY-BACKED SHRIKE <i>L. tephronotus</i>		NR		X	X		Up to 2,000
EURASIAN JAY <i>Garrulus glandarius</i>		Res	C	C	C	C	Up to 2,585
YELLOW-BILLED BLUE MAGPIE <i>Urocissa flavirostris</i>		Res	C	C	C	R	Up to 2,750
RED-BILLED BLUE MAGPIE <i>U. erythrorhyncha</i>		Res	X	X		X	Up to 1,940 *
GREY TREEPIE <i>Dendrocitta formosae</i>		Res	X	X	X	X	Up to 2,130
LARGE-BILLED CROW <i>Corvus macrorhynchos</i>		Res	C	C	C	C	Up to 2,550
ASHY WOODSWALLOW <i>Artamus fuscus</i>		Res			X		1,910
SLENDER-BILLED ORIOLE <i>Oriolus tenuirostris</i>		Res	X				1,910
MAROON ORIOLE <i>O. traillii</i>		Res	R	R	U		Up to 2,710 *
LARGE CUCKOOSHRIKE <i>Coracina macei</i>		Res		U	U	U	Up to 2,710 *
GREY-CHINNED MINIVET <i>Pericrocotus solaris</i>		Res			X		2,350 *
LONG-TAILED MINIVET <i>P. ethologus</i>		Res	A	A	A	A	Up to 2,750
SHORT-BILLED MINIVET <i>P. brevirostris</i>		Res		X			2,130
BAR-WINGED FLYCATCHER-SHRIKE <i>Hemipus picatus</i>		Res		X			1,980 *
YELLOW-BELLIED FANTAIL <i>Rhipidura hypoxantha</i>		Res	A	A	A	A	Up to 2,528
WHITE-THROATED FANTAIL <i>R. albicollis</i>		Res	C	C	C	C	Up to 2,750
ASHY DRONGO <i>Dicurus leucophaeus</i>		Res	C	C	C		Up to 2,750 *
SPANGLED DRONGO <i>D. hottentottus</i>		Res	X	X			Up to 1,995
CHESTNUT-BELLIED ROCK THRUSH <i>Monticola rufiventris</i>		Res	C	C	C	C	Up to 2,700 *
BLUE WHISTLING THRUSH <i>Myophonus caeruleus</i>		Res	U	U	U	U	Up to 2,700
LONG-TAILED THRUSH <i>Zoothera monticola</i>		?	C	U	U		Up to 2,518
SCALY THRUSH <i>Z. dauma</i>		Res	U	U	U	U	Up to 2,518
BLACK-BREASTED THRUSH <i>Turdus dissimilis</i>	NT	Res		U	U		2,510
CHESTNUT THRUSH <i>T. rubrocanus</i>		WV		X			2,310
GREY-SIDED THRUSH <i>T. feae</i>	VU	WV		U	U		Up to 2,550
EYEBROWED THRUSH <i>T. obscurus</i>		WV	U	R	R		Up to 2,518
LESSER SHORTWING <i>Brachypteryx leucophrys</i>		Res			R		2,550 *
WHITE-BROWED SHORTWING <i>B. montana</i>		Res		R			2,746 *
VERDITER FLYCATCHER <i>Eumyias thalassina</i>		Res	C	C	C	C	Up to 2,740 *
DARK-SIDED FLYCATCHER <i>Muscicapa sibirica</i>		Res		R		R	2,510
SLATY-BACKED FLYCATCHER <i>Ficedula hodgsonii</i>		Res		C	C		Up to 2,750 *
RUFIOUS-GORGETED FLYCATCHER <i>F. strophitata</i>		Res	A	A	A	R	Up to 2,865
WHITE-GORGETED FLYCATCHER <i>F. monileger</i>		Res	X				1,910
SNOWY-BROWED FLYCATCHER <i>F. hyperythra</i>		Res	U	C	C	R	Up to 2,750 *
LITTLE PIED FLYCATCHER <i>F. westermanni</i>		Res	R	R	R	R	Up to 2,530
SLATY-BLUE FLYCATCHER <i>F. tricolor</i>		Res		C	C	R	Up to 2,750 *
LARGE NILTAVA <i>Niltava grandis</i>		Res	C	C	C	U	Up to 2,520
RUFIOUS-BELLIED NILTAVA <i>N. sundara</i>		Res	R	U	R	R	Up to 2,720 *
[WHITE-TAILED FLYCATCHER <i>Cyornis concretus</i>]		NR				X	1,910 *
[HILL BLUE FLYCATCHER <i>C. banyumas</i>]		NR		U	R	R	Up to 2,750 *
GREY-HEADED CANARY FLYCATCHER <i>Culicicapa ceylonensis</i>		Res	R	R	R		Up to 2,720
INDIAN BLUE ROBIN <i>Luscinia brunnea</i>		Res	X			X	Up to 1,967
ORANGE-FLANKED BUSH ROBIN <i>Tarsiger cyanurus</i>		WV	A	A	A		Up to 2,985
[WHITE-RUMPED SHAMA <i>Copsychus malabaricus</i>]		Res		X			1,930 *
DAURIAN REDSTART <i>Phoenicurus aureus</i>		WV	R	R			Up to 2,585
BLUE-FRONTED REDSTART <i>P. frontalis</i>		?	A	A	A		Up to 2,750 *
WHITE-TAILED ROBIN <i>Miomela leucura</i>		Res			R	X	2,480 *
WHITE-CROWNED FORKTAIL <i>Enicurus leschenaulti</i>		Res	X				1,920
SPOTTED FORKTAIL <i>E. maculatus</i>		Res	X				1,920
GREY BUSHCHAT <i>Saxicola ferrea</i>		Res	A	A	A	A	Up to 3,054 *
[HILL MYNA <i>Gracula religiosa</i>]		Res		X			2,010 *
CHESTNUT-VENTED NUTHATCH <i>Sitta nagaensis</i>		Res	A	A	A	A	Up to 2,810

Species	Category	Status	Abundance				Altitude (m)
			Nov	Mar	Apr	Jul	
WHITE-TAILED NUTHATCH <i>S. himalayensis</i>		Res		R	R		Up to 2,500
WHITE-BROWED NUTHATCH <i>S. victoriae</i>	EN	Res	U	C	C	U	Up to 3,005
BAR-TAILED TREECREEPER <i>Certhia himalayana</i>		Res	A	A	A	A	Up to 2,890
BROWN-THROATED TREECREEPER <i>C. discolor</i>		Res	C	C	C	C	Up to 2,610
BLACK-BIBBED TIT <i>Parus (palustris) hypermelaena</i>		Res	C	C	C	C	Up to 2,710
GREEN-BACKED TIT <i>P. monticolus</i>		Res	C	C	C	C	Up to 2,654
YELLOW-CHEEKED TIT <i>P. spilonotus</i>		Res		R			2,500
YELLOW-BROWED TIT <i>Sylviparus modestus</i>		Res		R	R		Up to 3,010
BLACK-THROATED TIT <i>Aegithalos concinnus</i>		Res		R	R		Up to 2,450
BLACK-BROWED TIT <i>A. bonvaloti</i>		Res	A	A	A	A	Up to 2,985
ASIAN HOUSE MARTIN <i>Delichon dasypus</i>		WV	A	A	A		Up to 2,518
CRESTED FINCHBILL <i>Spizixos canifrons</i>		Res	C	C	C	C	Up to 2,720 *
STRIATED BULBUL <i>Pycnonotus striatus</i>		Res	A	A	A	A	Up to 2,560
RED-VENTED BULBUL <i>P. cafer</i>		Res	X	X	X	X	1,910 *
FLAVESCENT BULBUL <i>P. flavescens</i>		Res	X	X	X	X	1,910
ASHY BULBUL <i>Hemixos flavala</i>		Res		X			1,816
MOUNTAIN BULBUL <i>Hypsipetes mccllellandii</i>		Res		R	R		Up to 2,518
BLACK BULBUL <i>H. leucocephalus</i>		WV	U	U	U		Up to 2,518
HILL PRINIA <i>Prinia atrogularis</i>		Res		A	A	A	Up to 2,750 *
CHESTNUT-FLANKED WHITE-EYE <i>Zosterops erythropleurus</i>		WV	R				2,550
JAPANESE WHITE-EYE <i>Z. japonicus</i>		WV	R			R	2,550
CHESTNUT-HEADED TESIA <i>Tesia castaneocoronata</i>		Res	A	A	A	A	Up to 2,810 *
GREY-BELLIED TESIA <i>T. cyaniventer</i>		Res	U	U	U	U	Up to 2,520
ABERRANT BUSH WARBLER <i>Cettia flavolivacea</i>		Res		C	C		Up to 2,700 *
BROWN BUSH WARBLER <i>Bradypterus luteoventris</i>		Res	A	A	A	A	Up to 2,750
RUSSET BUSH WARBLER <i>B. seebohmi</i> [= <i>B. mandelli</i>]		Res	C	C	C	C	Up to 2,500 *
MOUNTAIN TAILORBIRD <i>Orthotomus cuculatus</i>		Res	X		X	X	Up to 2,150
[BUFF-THROATED WARBLER <i>Phylloscopus subaffinis</i>]		NR			U		Up to 2,550
YELLOW-STREAKED WARBLER <i>P. armandii</i>		Res		R			2,510
BUFF-BARRED WARBLER <i>P. pulcher</i>		Res	A	A	A	A	Up to 3,020
ASHY-THROATED WARBLER <i>P. maculipennis</i>		Res		U	R		Up to 2,975
LEMON-RUMPED WARBLER <i>P. chloronotus</i>		?	X				1,910
YELLOW-BROWED WARBLER <i>P. inornatus</i>		WV		X			2,365
HUME'S WARBLER <i>P. humei</i>		WV	A	A	A		Up to 2,780 *
[TWO-BARRED WARBLER <i>P. (trochiloides) plumbeitarsus</i>]		WV	X				1,910 *
BLYTH'S LEAF WARBLER <i>P. reguloides</i>		Res	R	U	U		Up to 2,550
GREY-CROWNED WARBLER <i>Seicercus (burkii) tephrocephalus</i>		Res	R	U	U	U	Up to 2,745
GREY-HOODED WARBLER <i>S. xanthoschistos</i>		Res	X	X	X		Up to 2,080
GREY-CHEEKED WARBLER <i>S. poliogenys</i>		Res	X				1,980
CHESTNUT-CROWNED WARBLER <i>S. castaniceps</i>		Res		R			2,500
BROAD-BILLED WARBLER <i>Tickellia hodgsoni</i>	NT	Res	U	U	U	U	Up to 2,745
BLACK-FACED WARBLER <i>Abroscopus schisticeps</i>		Res	X				2,335
YELLOW-BELLIED WARBLER <i>A. superciliaris</i>		Res		X			1,910
STRIPED LAUGHINGTHRUSH <i>Garrulax virgatus</i>	NT	Res	X	X			Up to 2,340
BROWN-CAPPED LAUGHINGTHRUSH <i>G. austeni</i>		Res	A	A	A	A	Up to 2,980
CHESTNUT-CROWNED LAUGHINGTHRUSH <i>G. erythrocephalus</i>		Res	A	A	A	A	Up to 2,980
[RED-TAILED LAUGHINGTHRUSH <i>G. milnei</i>]	NT	Res		R			2,510
RED-FACED LIOCICHLA <i>Liocichla phoenicea</i>		Res		X	X	X	Up to 2,340
SPOT-THROATED BABBLER <i>Pellorneum albiventre</i>		Res	X			X	1,910
SPOT-BREADED SCIMITAR BABBLER <i>Pomatorhinus erythrocnemis</i>		Res		X			1,910
WHITE-BROWED SCIMITAR BABBLER <i>P. schisticeps</i>		Res	X			X	Up to 2,050
STREAK-BREADED SCIMITAR BABBLER <i>P. ruficollis</i>		Res	C	C	C	C	Up to 2,750 *
CORAL-BILLED SCIMITAR BABBLER <i>P. ferruginosus</i>		Res			X		1,910
SLENDER-BILLED SCIMITAR BABBLER <i>Xiphirhynchus superciliaris</i> NT		Res		R	R		Up to 2,755

Species	Category	Status	Abundance				Altitude (m)
			Nov	Mar	Apr	Jul	
LONG-TAILED WREN BABBLER <i>Spelaeoris chocolatinus</i>		Res	C	C	C	C	Up to 2,750
RUFIOUS-FRONTED BABBLER <i>Stachyris rufifrons</i>		Res	X				2,045
GOLDEN BABBLER <i>S. chrysaea</i>		Res	U	U	U	U	Up to 2,750
GREY-THROATED BABBLER <i>S. nigriceps</i>		Res		X			1,910
CHINESE BABAX <i>Babax lanceolatus</i>		Res	C	C	C	C	Up to 2,730
SILVER-EARED MESIA <i>Leiothrix argentauris</i>		Res	X	X	X	X	1,910
CUTIA <i>Cutia nipalensis</i>		Res	R	R	R	R	Up to 2,500
BLACK-HEADED SHRIKE BABBLER <i>Pteruthius rufiventer</i>	NT	Res			R	R	Up to 2,520
WHITE-BROWED SHRIKE BABBLER <i>P. flaviscapris</i>		Res		X	X	X	Up to 2,340
GREEN SHRIKE BABBLER <i>P. xanthochlorus</i>		Res	U	R	U	R	Up to 2,750
BLACK-EARED SHRIKE BABBLER <i>P. melanotis</i>		Res		R	R	R	2,558
RUSTY-FRONTED BARWING <i>Actinodura egeroni</i>		Res	U	U	U	U	Up to 2,548
STREAK-THROATED BARWING <i>A. waldeni</i>		Res		R	R		Up to 2,750
BLUE-WINGED MINLA <i>Minla cyanouroptera</i>		Res	C	C	C	C	Up to 2,520
CHESTNUT-TAILED MINLA <i>M. strigula</i>		Res	A	A	A	A	Up to 2,840
RED-TAILED MINLA <i>M. ignotincta</i>		Res	C	C	C	C	Up to 2,750
RUFIOUS-WINGED FULVETTA <i>Alcippe castaneiceps</i>		Res	A	A	A	C	Up to 2,713
WHITE-BROWED FULVETTA <i>A. vinipectus</i>		Res	A	A	A	A	Up to 3,040
RUSTY-CAPPED FULVETTA <i>A. dubia</i>		Res	U	U	U	U	Up to 2,518
NEPAL FULVETTA <i>A. nipalensis</i>		Res	X			X	Up to 2,340
RUFIOUS-BACKED SIBIA <i>Heterophasia annectans</i>		Res			X	X	Up to 2,265
GREY SIBIA <i>H. gracilis</i>	NT	Res	A	A	A	A	Up to 3,025
WHISKERED YUHINA <i>Yuhina flavicollis</i>		Res	C	C	C	C	Up to 2,585
STRIPE-THROATED YUHINA <i>Y. gularis</i>		Res	A	A	A	A	Up to 3,010
SPOT-BREASTED PARROTBILL <i>Paradoxornis guttaticollis</i>		Res		X	R		Up to 2,548
BLACK-THROATED PARROTBILL <i>P. nipalensis</i>		Res	U	C	C	U	Up to 2,518
ORIENTAL SKYLARK <i>Alauda gulgula</i>		WV		R	R		Up to 3,054
YELLOW-BELLIED FLOWERPECKER <i>Dicaeum melanoxanthum</i>		Res		R			2,500
FIRE-BREASTED FLOWERPECKER <i>Dicaeum ignipectus</i>		Res	C	U	U	R	Up to 2,520
MRS GOULD'S SUNBIRD <i>A. gouldiae</i>		Res	X	R			Up to 2,510
GREEN-TAILED SUNBIRD <i>A. nipalensis</i>		Res	U	C	C	R	Up to 2,609
[BLACK-THROATED SUNBIRD <i>A. saturata</i>]		Res	C	C	C	U	Up to 2,550 *
FIRE-TAILED SUNBIRD <i>Aethopyga ignicauda</i>		Res	A	A	A	A	Up to 3,054
STREAKED SPIDERHUNTER <i>Arachnothera magna</i>		Res		X		X	1,910
RUSSET SPARROW <i>Passer rutilans</i>		Res			R		2,550
GREY WAGTAIL <i>Motacilla cinerea</i>		WV				X	1,910
OLIVE-BACKED PIPIT <i>Anthus hodgsoni</i>		BV	A	A	A		Up to 2,860 *
SCALY-BREASTED MUNIA <i>Lonchura punctulata</i>		Res		X	X	X	1,915 *
YELLOW-BREASTED GREENFINCH <i>Carduelis spinoides</i>		Res	C			C	Up to 2,550 *
DARK-BREASTED ROSEFINCH <i>Carpodacus nipalensis</i>		NR	R		R		Up to 2,550
COMMON ROSEFINCH <i>C. erythrinus</i>		WV	U	U	R		Up to 2,550
SCARLET FINCH <i>Haematospiza sipahi</i>		Res			X		1,910
BROWN BULLFINCH <i>Pyrrhula nipalensis</i>		Res	U	U		R	Up to 2,520 *
SPOT-WINGED GROSBEAK <i>Mycerobas melanozanthos</i>		Res	X				2,330
CRESTED BUNTING <i>Melophus lathami</i>		Res	X			X	Up to 2,340
LITTLE BUNTING <i>Emberiza pusilla</i>		WV	C	C	A		Up to 2,610 *
CHESTNUT BUNTING <i>E. rutila</i>		WV	C	C	R		Up to 2,510

Key

Square brackets indicate unconfirmed records

R = Rare (1–3 sightings); U = Uncommon (4–10 sightings); C = Common (generally regularly seen); A = Abundant; X = sighting outside the study area
 Res = resident; WV = winter visitor; BV = breeding visitor; ? = recorded (status uncertain); NR = New record for west Myanmar; * Higher than the altitudinal range previously known in South-East Asia

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