

Birds of Phongsaly province and the Nam Ou river, Laos

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Birds were surveyed in Phongsaly province, Laos, during March 1996, September 2003, May 2004, late November–December 2004, and March 2005, focusing on the rivers of the Phou Dendin National Protected Area (NPA), the proposed Nam Lan conservation area, the Phou Taleng provincial conservation area, the Phou Fa forest adjacent to Phongsaly town, high-altitude scrub and grass habitats around the town, and lower-altitude non-forest habitats around Ban Muangyo. During the 1990s, most of the Lao NPAs received a baseline bird survey but Phou Dendin NPA hosted only short reconnaissances.

Several bird species new for Laos were found, reflecting the survey's location (far north of the country) and timing (late autumn and spring migrations). Many other bird species were found for which there are few previous records from Laos. The species of greatest conservation significance was the globally Near Threatened Lesser Fish Eagle *Ichthyophaga humilis*: the Nam Ou basin supports one of the most important populations in South-East Asia. The enigmatic (in Laos) Little Cuckoo Dove *Macropygia ruficeps* was found for the first time in over 50 years in the country, and the only known potentially viable population of Large-billed Crow *Corvus macrorhynchos* in Laos significantly north of Vientiane was documented. Several other bird species of global or national conservation concern were found. Forest birds in the NPA were only patchily investigated and there may be important populations of them, too. Among specifically hunted and otherwise harvested species, major declines of hornbills, parakeets and pigeons have occurred, although pheasants and partridges remain common. Non-forest bird communities were highly imbalanced with the loss, or major decline, of various species such as *Coturnix* quails, *Streptopelia* doves, lapwings, egrets (except on passage), Black-billed Magpie *Pica pica*, Large-billed Crow, sturnids and others. Range and status are documented for several taxa which recent Lao surveys have not usually identified to form, e.g. 'golden-spectacled warbler' *Seicercus burkii* allies and White Wagtail *Motacilla alba* races.

INTRODUCTION

Laos is small (236,800 km²) and landlocked with a human population density lower than in most adjoining countries, although population growth rate remains high at c.2.37%. Although economic development was slow until the 1990s, and lagged far behind that of neighbouring countries, this is now changing. During the five-year period 2001–2005, the Lao economy sustained rapid expansion, averaging GDP growth of 6.24% per year (Committee for Planning and Investment 2006). This is causing (and partly fuelled by) an unprecedented pace of change in habitat and the hunting of commercially valuable species. Laos still retains extensive, largely natural habitat. Laos has three biophysical zones, the Mekong plains, the Annamite mountains, and the northern highlands. The last of these consists of rugged mountain ranges, highly dissected by streams, with only small areas of level land.

Phongsaly province (Fig. 1), at the country's northern tip, typifies the northern highlands. It covers 16,270 km², with c.180,000 people living dispersed across c.600 villages. The province's hills bear the Nam Ou, the largest Mekong tributary in Laos; the rivers join near Louangphabang. Phongsaly and the other northern highland provinces have sustained high levels of shifting cultivation for many decades, probably centuries. Agriculture has particularly affected the small areas of level land, such that no significant areas of natural habitat on gentle terrain remain in the province: in particular, among wetlands and seasonally inundated fringes, all but the smallest have been heavily modified by people. Much of the shifting agriculture has been of frontier, rather than rotational, form, leading to long-term soil impoverishment, and hence only slow forest regeneration on abandoned cultivation. Accurate statistics on extent of cover of different wildlife habitats do not exist for the province, but in essence, old-growth forest, standing

wetlands, and urban areas are scarce, while secondary forest, current and abandoned cultivation, and many small villages predominate.

Laos's birds remain patchily known. Most historical records come from 1919–1949, but political changes meant that for the next four decades very few bird observations were made (Duckworth and Tizard 2003). Much survey during the 1990s found a globally highly significant avifauna, notwithstanding steep declines in many species (Thewlis *et al.* 1998, Duckworth *et al.* 1999, 2002). Historically, Phongsaly was among the better-collected Lao provinces, but received little attention during the 1990s wildlife surveys, which mostly concerned identification and development of a national protected areas system (Berkmüller *et al.* 1995a, 1995b, Duckworth *et al.* 1999, and references therein). Initial selection of potential national protected areas (NPAs) prioritised the largest remaining blocks (>500 km²) of little-degraded forest (Robichaud *et al.* 2001). Extensive shifting cultivation in the northern highlands meant that few NPAs were proposed there. Phou Dendin is the only NPA in the four contiguous provinces of Phongsaly, Louangphabang, Oudomxai and Xiangkhouang (excepting a small part of the Nam Et–Phou Louey complex; Berkmüller *et al.* 1995b). Phou Dendin was little covered during the 1990s wildlife surveys, and this left a significant information gap. Another large knowledge gap, across Laos, concerns contemporary bird status outside NPAs and their vicinity, particularly in the northern highlands (Duckworth *et al.* 2002).

This paper's primary aim is to report direct field surveys of Phongsaly's avifauna in 1996 and 2004–2005, in the context of past records from the province and contemporary information from the rest of Laos. Hill forest birds were de-emphasised (see below), with greater focus on riverine (including the Nam Ou downstream of Phongsaly province), wetland and open-country species.

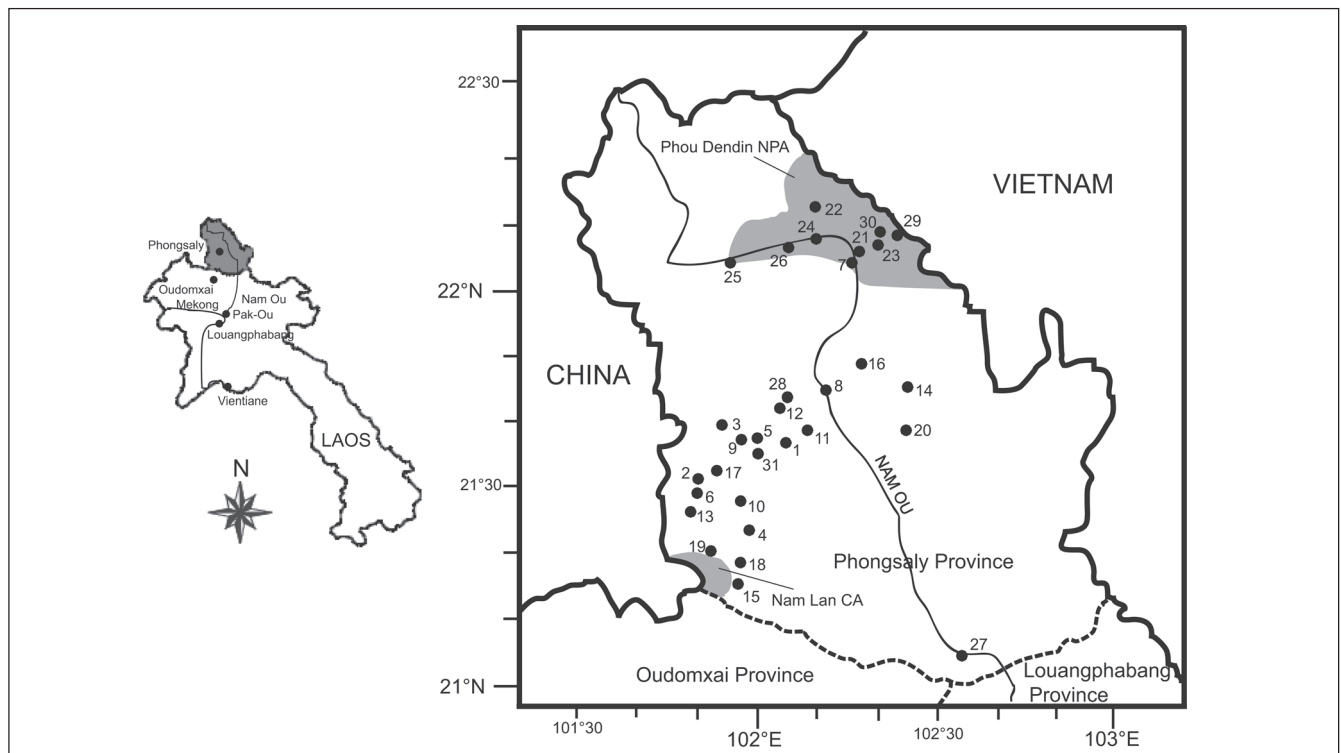


Figure 1. Laos, showing selected survey localities. 1, Ban Bakong; 2, Ban Bomang; 3, Ban Boun-Nua; 4, Ban Boun-Tai; 5, Ban Chicho; 6, Ban Dua; 7, Ban Hathin; 8, Ban Hatxa; 9, Ban Houaylek; 10, Ban Houaytout; 11, Ban Khomen; 12, Ban Khounsouk-Noy; 13, Ban Lak 69; 14, Ban Laophouchai; 15, Ban Long Nay Mai; 16, Ban Mai; 17, Ban Muangyo; 18, Ban Namaek; 19, Ban Naten; 20, Ban Siengnua; 21, Ban Sopkhang; 22, Ban Soppha; 23, Ban Tan; 24, Ban Tatoung; 25, Houay Khanionho mouth; 26, Houay Yoong temple ruin; 27, Khoa; 28, Phongsaly; 29, Phou Dendin; 30, Phou Namla camp; 31, Phou Taleng.

Most fieldwork targeted species of global or national conservation concern, and/or those poorly known in Lao, although JF and AC primarily sought bird tissue samples for phylogenetic and phylogeographic studies. No site in Laos's northern highlands has had intensive bird survey in both non-breeding and breeding seasons since David-Beaulieu's (1944, 1948) landmark studies in Xiangkhouang, and indeed seasonal differences in avifauna remain poorly clarified in Laos, so the 2004–2005 survey covered mid-winter and the early breeding season at the same sites.

Square brackets indicate provisional identifications. Sequence, species limits and nomenclature follow Inskipp *et al.* (1996), with deviations explicitly noted. Scientific names are given in the text only for species not in Appendix 1. Lao national conservation status is taken from Duckworth *et al.* (1999), global assessments from BirdLife International (2004). Division of Laos into North, Centre and South follows Duckworth *et al.* (1999). Place names (see Appendix 2 for locators and altitude) are based on the 1985–1987 series of 1:100,000 maps of the *RDPLao Service Geographique d'Etat* (RDPL SGE) maps with the minor modifications of Thewlis *et al.* (1998), except that: (1) Nakai Plateau and derivatives are spelt thus, not as Nakay; (2) Phongsaly and Phou Fa are used rather than Phongsali and Phou Pha; (3) current villagers' usage replaces map names where the latter are unrecognisable (Appendix 2). These modifications reflect widespread current usage, not necessarily the 'correct' spellings. Coordinates and altitudes, except where stated, are derived from the RDPL SGE maps. Unqualified November and December dates refer to 2004. This document replaces internal reports to the EU 'Phongsaly

Forest Conservation and Rural Development Project'. Many identifications are refined, confirmed or deleted: in all discrepancies, the present paper is definitive.

The following non-standard abbreviations are used, in addition to authors' initials: EU, European Union; E–W Nam Ou, the uninhabited stretch of the Nam Ou that flows west to east, before the inflow of the Nam Khang; FMNH, Field Museum of Natural History, Chicago, U.S.A.; MHNG, Muséum d'Histoire Naturelle, Geneva; MNHN, Muséum National d'Histoire Naturelle, Paris; NHM, Natural History Museum, Tring, U.K.; Nam Lan CA, Nam Lan Conservation Area; NPA, National Protected Area; RDPL SGE, Lao PDR State Geographic Service (map series).

PREVIOUS BIRD SURVEYS IN PRONGSALY PROVINCE AND THE NAM OU

The Kelley-Roosevelts' expedition collected birds and mammals in Phongsaly province over 19 April–5 June 1929 (Bangs and Van Tyne 1930, 1931, Osgood 1932). It stopped at Ban Laophouchai (20–22 April), Phongsaly town (23 April–7 May, mainly around the village of 'Ban Makomen', presumed to be modern Ban Khomen), Ban Muangyo (8–21 May) and Ban Boun-Tai (21 May–2 June) with visits to nearby villages such as 'Long Nai' (presumed to be modern Ban Long Nay Kao; 'kao' often means 'old'/'former'/'original', whereas 'mai' means 'new') on 27 May. It also passed 'Pyn Ho' (presumed to lie in the Nam Paho headwaters) on 19 April, Ban Hatxa on 22–23 April, Ban Boun-Nua on 7 May, 'Kouei Soung' (somewhere in southern Phou Taleng) on 2 June, Ban

Mongchao-Noy on 3 June, Phongsaly (again) on 4 June and Ban Hatxa (again) on 5 June, before departing by the Nam Ou (6–9 June) to the Mekong as far as Savannakhet. The expedition also collected at ‘Phu Den Dinh’ but this was east of the Mekong watershed (Coolidge and Roosevelt 1933: 106–107), hence in Vietnam. It made few records of river birds: Coolidge and Roosevelt (1933: 179) discussed the difficulties in collecting birds in swirling rivers. Few field sightings accompany the specimen list of Bangs and Van Tyne (1931), hampering detection of status changes since 1929. Most of the expedition’s birds are held at FMNH, but a few were donated to MNHN (Table 1). Re-examination of the expedition’s niltavas (Dickinson 1973) and bush warblers *Cettia* and *Bradypterus* (e.g. Dickinson *et al.* 2000) amended identifications in Bangs and Van Tyne (1931), and a few other identifications have been amended, according to the FMNH web-site listing. The haul of *Collocalia*, *Oriolus*, *Coracina*, *Cyornis*, *Zosterops*, *Phylloscopus*, *Seicercus* and small *Stachyris* probably merit a fresh critical look. An even earlier expedition may have collected birds in the province: localities of mammal specimens (in Osgood 1932) show that F. R. Wulsin visited Phongsaly in 1924, but his bird collection has never been written up.

Over 21–28 November 1931, the Legendre Indochina Expedition collected a few birds in the province, from Ban Sopnao (up the Nam Noua) thence to the non-located sites of Ban Hatkham, Kang Pha Ha and Vang Pha Ho (Dickinson 1970a). ‘Hat’ (= beach), ‘Pha’ (= cliff or precipice), and ‘Kang’ (for keng, = rapids) suggest these were sites on the Nam Noua or Nam Ou amid rugged terrain in either Phongsaly or Louangphabang provinces, upstream of Ban Muangngoy, their next site.

Sixty years later, a reconnaissance for protected area planning visited Phou Dendin Proposed Protected Area during 5–12 March 1992. The unpublished trip report (Salter 1992) cannot now be located but (from memory) contained numerous bird records. A short bird survey during 23 May–3 June 1995 was mostly in Phou Dendin NPA with supplementary records from Phou Fa and the Nam Ou (Duckworth *et al.* 1998a). (The bird list in Robichaud and Sounthala [1995] was greatly revised following review of field notes and tapes.) Thewlis *et al.* (1998) detailed all 1992, 1995 and 1996 (see below) records of then key species (species of elevated national conservation concern). Rufous-throated Partridge, Barbacked Partridge, Silver Pheasant, Grey Peacock Pheasant, Crested Kingfisher, Green Cochoa, Hill Myna, Rufous-faced Warbler, Rufous-throated Fulvetta, Whiskered

Yuhina and Spot-breasted Parrotbill were dropped from the revised list of key species (Duckworth *et al.* 1999) and so are not discussed here (but are listed in Appendix 1).

SURVEY SITES

Selection of survey areas

The 1996 visit was part of a nationwide effort to characterise avifauna of the NPA system. Phou Dendin NPA was hence the focus, with survey sites selected to cover the lowest river valleys to the highest peaks. Records from September 2003 came incidentally during professional duties. Sites in May 2004 were chosen to maximise blood sampling opportunities. In November–December 2004, sites were selected to optimise reduction in information gaps for today’s Lao avifauna and conservation needs. The extensive forest-fringed mid-to-wide rivers in Phou Dendin NPA were a high survey priority because most such areas are heavily settled and farmed, and hunting and other harvesting is particularly damaging in them. As two-dimensional habitats, total populations of specialist birds may be low, and opportunities to evade people are limited: rivers are the main transport routes in much of Laos, and their open habitat allows easy shooting. Also, stock (bovids and, increasingly, ducks) and their human and canine attendants make heavy use of rivers, living off the land. The few NPAs which contain or adjoin extensive habitat of this type (Nakai–Nam Theun and adjacent parts of the Nakai Plateau, Xe Pian, Nam Kading and Dong Ampham) all support many threatened birds (Davidson *et al.* 1997, Thewlis *et al.* 1998).

Large areas of mid-altitude grassland are mapped in Phou Dendin NPA, suspected by C. J. Hatten (verbally 2004) to be of ancient origin. (Semi-) natural grasslands barely feature in the NPA system, but have probably contracted greatly in Laos. Limited surveys so far (mainly in Xiangkhouang province) indicate major declines in specialist birds (Duckworth *et al.* 2002). Thus, investigating Phou Dendin NPA’s interior grasslands was intended, but was cancelled through injury. Assessment of hill forest birds in November–December was not a priority: forest bird survey depends heavily on vocalisations, but few species call regularly at this time and even fewer respond to tape-playback. Moreover, evergreen forests in the altitude range of Phou Dendin NPA are well represented in Nam Ha, Nam Et, Phou Loey and Nam Xam NPAs in the northern highlands,

Table 1. Kelley-Roosevelt bird specimens from Phongsaly province donated to MNHN by FMNH.

Species	Locality	Sex	Catalogue number
PIN-TAILED GREEN PIGEON <i>Treron apicauda laotianus</i>	Ban Muangyo	Male	MNHN CG 1930-156
BROWN HORNBILL <i>Anorrhinus tickelli austeni</i>	Ban Muangyo	Male	MNHN CG 1930-160
SPECKLED PICULET <i>Picumnus innominatus malayorum</i>	Phongsaly	Male	MNHN CG 1930-158
SPECKLED PICULET <i>Picumnus innominatus malayorum</i>	Phongsaly	Female	MNHN CG 1930-159
ASIAN PIED STARLING <i>Sturnus contra</i>	Ban Muangyo	Male	MNHN CG 1930-178
STRIATED BULBUL <i>Pycnonotus striatus</i>	Phongsaly	Male	MNHN CG 1930-166
STREAK-BREASTED SCIMITAR BABBLER <i>Pomatorhinus ruficollis albipectus</i>	Ban Muangyo	Male	MHNN CG 1930-167
GREY-CHEEKED FULVETTA <i>Alcippe morrisonia yunnanensis</i>	Phongsaly	Male	MHNN CG 1930-168
BROWN-CHEEKED FULVETTA <i>Alcippe poioicephala</i>	Ban Boun-Tai	Male	MHNN CG 1930-170
CRIMSON SUNBIRD <i>Aethopyga siparaja seheriae</i>	Ban Boun-Tai	Male	MNHN CG 1930-175

Two further specimens, *Alcippe morrisonia fratercula* MNHN CG 1930-169 and *Zosterops palpebrosus* MNHN CG 1930-176, cannot currently be found in the collections of the MNHN; it is unclear whether they came from the Lao or Vietnamese sections of the expedition.

all of which have had baseline bird surveys (Tizard *et al.* 1997, Showler *et al.* 1998b, Davidson 1998, 1999). Each NPA supports important forest bird populations, so Phou Dendin warrants a comparable survey; but in April–May (–June) when birds are breeding and are much more conspicuous. The injury in December meant time was reassigned to several easily accessible areas:

- high-altitude habitats around Phongsaly town, where the most novelties might be expected;
- provincial-level protected forests of Phou Fa and Phou Taleng, where indication of forest bird communities could be gained; and
- valley bottoms around Ban Muangyo, where the Kelley-Roosevelts' expedition (Bangs and Van Tyne 1931) found several presumed resident non-forest species not recorded in Laos during the 1990s surveys, and hence high priorities for further information (Duckworth *et al.* 1999).

In March 2005, the primary aims were to visit these same easily accessible areas to evaluate the extent of seasonal change, and to revisit the highest altitudes of Phou Dendin NPA, identified in December as supporting bird species rather different from the mid-altitude forests.

Phou Dendin National Protected Area

(18–28 March 1996, 30 November–13 December 2004, 13–27 March 2005)

This protected area covers at least 1,310 km² (Robichaud *et al.* 2001), substantially more (semi-) natural habitat than any other survey area. It consists mostly of rugged terrain, with 60% lying above 1,000 m and all over 500 m (Berkmüller *et al.* 1995b), lacks roads and has only one large human settlement (Ban Hathin complex). Only six other villages, all small, are known in the NPA. Particularly upstream of the Nam Khang's inflow, there are large tracts of (semi-) evergreen forest. Abandoned villages and fields are widespread and the former rest-house of (Sala) Pyn Ho, in the centre-east of the NPA (see Bangs and Van Tyne 1931), suggests that a well-used trail formerly traversed the NPA to Vietnam. Today's slash-and-burn gives a mosaic of forest from early regrowth to mature, mixed with shrubland and grass. Grassland burning is reportedly widespread but not universal, with areas not good for grazing unlikely to be fired. The Nam Ou flows fast; its bed has many rock outcrops and some seasonally submerged bushlands. The many sediment bars are extensively silty, and small. There are no long and wide areas of seasonally exposed channel bed. The Nam Ou is quite turbid (visibility <0.5 m in December), reportedly due to a muddy tributary locally called the 'red river'. The Nam Khang, its major tributary, is much clearer.

Informants from Ban Sopkhang said that the water in the E–W Nam Ou at the time of the survey was flowing c. 1 m lower than formerly at that season. In the NPA, the Nam Ou is navigable, but this is hard work and the effort required limits the numbers of people using that stretch of the river. Abandoned village sites and sediment bars serve as night stops for hunters and collectors. Shooting is widespread, but levels of snaring and trapping are unclear. No roads enter the NPA, no doubt the most significant factor in retaining its habitat and wildlife.

In 1996, TT boated up the Nam Ou from Ban Hatxa on 18–19 March, walked from Ban Hathin to Ban Tan on 20 March, spent 21–23 March in high-altitude forest between the village and the Vietnamese border, walked

on 24 March from Ban Tan to Ban Tatoung, then to Ban Sopkhang on 25 March and back to Ban Hathin that evening. He surveyed around Ban Hathin on 26 March. On 27 March he boated up the Nam Ou to the Houay Yoong temple ruin and back, in continuous rain. Driving rain continued to inhibit surveying on 28 March when he boated back from Ban Hathin to Ban Hatxa.

In 2004, the Nam Ou (upstream to 2 km west of the mouth of the Houay Khanionho), the lower Nam Khang, and adjacent forest was covered intensively by JWD and WGR, making much use of boats, during 1–7 December. WGR then made a three-day trip further up the Nam Khang to beyond Ban Soppha, and a three-day walk beyond Ban Tan to the same high-altitude border area as in March 1996, leaving the NPA on 13 December. Over 11–13 December, JWD used the Nam Houn to enter the degraded lower-altitude habitats around the NPA's southwestern margin near Ban Siengnua.

In 2005, there were only 'in transit' observations along the Nam Ou, no visit to the least-disturbed area (the 'E–W Nam Ou'). Instead, the focus, by RE over 12–19 March, was a third visit to the Ban Tan–Vietnam border, for five days. WGR made a five-day (21–25 March) walk to Ban Laophouchai, then via the upper Nam Va to Ban Mai and back to Ban Hatxa, at great pace to overview habitats and interview villagers about mammals. Only incidental records of birds were generated. AC and JF visited the villages of Ban Hathin (18–20 March 2005, 25–26 March 2005), and Ban Sopkhang (21–24 March 2005). Most of their time was devoted to mist-netting, all within 0.5–1 km of these villages.

Phou Fa

(15–17 March 1996, 14 September 2003, 22–24 May, 27–29 November, 10, 15, 26 December 2004, 12, 14–17, 19, 27–28 March 2005)

Phou Fa retains c. 200 ha of hill evergreen forest almost within Phongsaly town, spread over 1,480–1,625 m. Although rather degraded, notably by a hairpin-bending road to the summit, many large trees remain. The variety, from ruderals through to advanced secondary forest, offers diverse habitat for forest birds. It is linked by secondary scrub, in places with many maturing trees, to more extensive secondary forests. Phou Fa is a provincial protected forest under active development as a public cultural recreation area (Phongsaly Provincial Agriculture and Forestry Office verbally 2004). Many day-trippers visit. Bamboo and various other forest products are heavily collected, and catapult-toting children roam its margins. Most observations took place from the road and foot trail, with lengthy stops at viewpoints (overlooking the canopy, fruiting trees and down a landslide), starting at dawn and usually finishing by noon.

Open habitats around Phongsaly town

(intermittently, 27 November–23 December 2004 and 11–24 March 2005)

Phongsaly town is surrounded by vast areas of coarse mixed scrub and ruderals, interspersed with current and fallow fields, tea gardens, tall grass and small wooded coombes. Three trails were walked: northwards towards Ban Khounsouk-Noy (27, 29 November, 8, 14 December, 11, 15, 18 March); southwards towards Ban Bakong (17, 18, 23 December, 13, 19, 24 March); and (branching from the former) eastwards towards Ban Khomen and

Ban Phagnexi (19 December). The Khounsouk trail ran below the Phou Fa forest and had many small wooded streams and annual crop fields, at varying stages of growth, harvest and abandonment, and little tea. There were many excellent vantage points into the scrub and ruderals. The Bakong trail ran through the only extensive area with grass a co-dominant (several km²) and had few copses or streams. Viewing was difficult away from roadside, buffalo-trail and poached (through grazing) areas. The Khomen trail was dominated by dense scrub with more varied habitats a few km beyond Ban Khomen. The tea gardens here were almost bereft of birds, as observed elsewhere (e.g. the Western Ghats, India; T. R. Shankar Raman and D. Mudappa verbally 2002), so no significant time was spent in them. Scrub and ruderal- and grass-dominated areas probably arose as past cultivation reduced fertility. The wooded coombes enhance bird diversity in the 'scrub' and in maintaining 'forest' corridors to Phou Fa. Ban Khomen probably equates to 'Ban Makomen...about 5 km south-southeast of Phong Saly' (Bangs and Van Tyne 1931), whence most 'Phongsaly' Kelley-Roosevelts' bird specimens originated; their species composition shows that the area was predominantly non-forest even then. Coolidge and Roosevelt's (1933) statement that Ban Makomen was 15 km from Phongsaly was presumably in error.

Phongsaly town

(intermittently 15–17 March 1996, September 2003, May, November–December 2004, March 2005)

Many walks, mainly between the Phou Fa Hotel, the EU project compound and the market, at various times of day, helped establish which species were truly urban in Phongsaly town. At several dusks and dawns, the town's two tall red-and-white metal towers (by the post office and by a military base) were checked; elsewhere in Laos and Thailand these sites attract roosting sturnids, raptors and sometimes other birds, presumably because shooting is absolutely prevented. A secondary aim of walking round town was to investigate the cage birds being kept and the extent of wildlife trading in the markets.

Phou Taleng

(9, 16, 21, 22 December 2004, 14, 17, 20, 21 March 2005)

The Phou Taleng forest, straddling the Phongsaly town–Ban Boun-Nua road, officially covers 92.71 km², according to a roadside signboard. As presented by the same signboard, shooting, tree-felling and fires are prohibited. Contiguous forest, much old-growth, probably covers several hundred km² of rugged hills. Its several villages on 1985–1987 RDPL SGE maps are abandoned, including Ban Mongchau-Noy of Bangs and Van Tyne (1931). The road along the whole distance between Ban Chicho and Ban Houaylek now has only a small police post. The village sites now support scrub. Forest altitude ranges from 900 m (or lower) to 1,684 m, but the area above 1,500 m is small. Unusually in Laos, forest with near-natural structure flanks a main road for c. 10–15 km. The road peaks at c. 1,400 m, at the watershed signifying the Phongsaly–Boun-Nua district boundary at 21°37'N 101°57'E. Observations and signs indicated heavy forest product collection: distance to villages may limit volumes of low-value items removed. Observations were made from the road and a well-used forest trail,

somewhat below the main ridge, running south-westward from the district boundary sign.

Ban Muangyo area

(24–25 December 2004, 22–23 March 2005)

Historically, Ban Muangyo provided several non-forest birds with few Lao records, notably Black-headed Munia and Asian Pied Starling. Ban Muangyo stands out on topographic maps for its flat river valley, larger (c. 1 km²) than typical in Phongsaly province, which struck Coolidge and Roosevelt (1933) as 'an interesting variety of country to study'. Ban Boun-Nua and Ban Boun-Tai both have even larger flat areas, but lack a good historical bird baseline. Ban Muangyo's bottom is dominated by paddies (some wet, mostly dry; some replanted, but mostly stubbles during both visits) with small vegetable gardens; no natural plains vegetation persists. They differ from most other paddy land seen in Lao hill areas, e.g. Ban Boun-Nua, because the rivers are barely incised, even in the late dry season, and so are flanked with wet grass (all grazed short) amid gravel and mud shoals. Steep hills rise from the small floodplain.

Two streams were walked: the Nam Hoy to Ban Bomang (24 December, 22 March) and the Nam Tou from Ban Dua to Ban Houaytou (25 December, 23 March). Several roads were driven to seek other good habitat: along a headwater of the Nam Tou to Ban Lak 69; along the Nam Hoy to Ban Namhoy; several miles along the main road from Ban Muangyo towards Ban Boun-Tai; and the entire distance from Ban Muangyo to Ban Boun-Nua. Observations focussed on: streamside grass; weedy stubble; tall stubble; wet stubble; narrow paddy ditches; riverside gravel and grass; vegetable gardens; buffalo wallows and animals (many sturnids forage near bovids); and mud. Necessarily, much of the predominant land—short, dry, relatively non-weedy stubbles—was walked in transit. Adjacent slope forest was covered only through calls heard.

Human use along the roads and in parts of the rivers was very heavy, but many fields were disturbed only once or twice a day, by a buffalo-herder in transit.

Nam Lan Conservation Area and its vicinity

(6–22 and 25–31 May 2004, 4–14 March 2005)

The Nam Lan Conservation Area (c. 100 km²), in Boun-Tai district, is bordered by China on the west, the Nam Lan on the north and the Nam Ngeun on the south. It lies at 600–1,100 m, mostly below 800 m. Rice fields and bamboo stands on the non-protected side of the Nam Lan contrast with old secondary forest and bamboo on the protected side. Few paths enter Nam Lan CA, even near villages, because slopes are so steep. The nine villages within or close to Nam Lan CA mostly lie near the Nam Lan or Nam Ngeun. Ban Naten (8–13 May and 26–27 May 2004, 9–11 March 2005), Ban Long Nay Mai (15–21 May 2004, 5–8 March 2005) and Ban Namaek (28–31 May 2004) all served as mist-netting bases, with two other sites surveyed near Ban Naten, each c. 1 hr walk away: the 'hot springs' (21°19'43"N 101°53'13"E) and the 'bat caves' (21°20'09"N 101°50'31"E). All observations were from altitudes of 650–750 m.

Nam Ou from Louangphabang to Ban Hatxa

(14, 20 March (partial), 30 March–1 April 1996, 25–26 November 2004)

Most breeding birds typical of large river channels have declined in Laos, some to national extinction (Thewlis *et al.* 1998, Duckworth *et al.* 1998b, 1999, 2002), so a slow boat was taken along the Nam Ou between Louangphabang and Ban Hatxa in both 1996 (a three-day journey) and 2004 (two days). The river is heavily settled, and even those parts with the fewest and/or smallest settlements support heavy subsistence activity and passage by cargo/public transport boats. Even by 1929, this area was 'cut-over forest [with] numerous villages' (Coolidge and Roosevelt 1933), and most bank-side habitat remains heavily degraded scrub and ruderals, except for some good karst forest in several stretches. Boats were started shortly after dawn and continued through the day with frequent stops in 1996 but only short stops in 2004.

Incidental observations elsewhere

During 22–29 March 1996, WGR visited the unprotected area between Ban Boun-Nua and Ban Ngay-Tai, partly by vehicle but with most time spent on foot along the Nam Ngay between Ban Ngay-Neua and Ban Ngay-Tai. Observation was hindered by frequent rain, a tight schedule (on one day there was not even time to pause to make notes), and long periods off any trail. Observations were made in various sites in and around Phongsaly town and Ban Boun-Tai during 13–16 September 2003; around Ban Boun-Nua on 16, 23, 25 December 2004 and 21–22 March 2005; in the Phongsaly water supply forest, around the Nam Fan river (c.800 m) on 20 December 2004; in Ban Boun-Tai in both May 2004 and March 2005; and on car journeys between sites, including departure trips to Ban Boun-Nua, Oudomxai and Louangphabang airports.

METHODS

Except for Nam Lan CA, each site was covered by intensive all-day standard field birding, starting from dawn. Some spotlighting (for mammals) on Phou Fa and in Phou Dendin NPA, substantially pre-first-light starts (in March 2004), and listening from tents in Phou Dendin NPA (in December) gave information on night birds. JWD carried tape-playback equipment but luring was little use in December (non-breeding season) although somewhat effective in March. Many observations were made from motor boats along the Nam Ou, Nam Khang and Nam Houn. Paddled, silent, boats were much used in December in Phou Dendin NPA. WGR's extensive village interviews mainly discussed large mammals, but also crows and, sometimes, pheasants and hornbills. JWD's tapes were kindly reviewed by C. R. Robson to check identifications and for overlooked species. AC and JF mist-netted in Nam Lan CA (May 2004 and March 2005), Phou Fa (May 2004 and March 2005) and Phou Dendin NPA (March 2005). Up to fifteen 6–12 m mist-nets were placed in various locations, i.e., near fruiting trees, near streams, at natural breaks in the vegetation and along ridge-tops, in order to maximise the number of species trapped.

BIRDS RECORDED

All species ever recorded from Phongsaly province are listed in Appendix 1. Over 30 species found in 1929 were not confirmed during 1996–2005 (Table 2). Conversely,

the 1996–2005 surveys yielded many species not found historically in the province, including seven species new to Laos, highlighting the inadequacy of the current information base. Captive birds are listed in Table 3; all except Grey-headed Parakeet were also found in the field. Specimens, deposited in MNHN and MHNG, are indicated in Table 4. About 80 bird species not recorded from Laos were mapped as present in Phongsaly province by MacKinnon and Phillipps (2000). This reflected carelessness, not access to new data (Duckworth 2000), so the records are not discussed here, reflecting the policy on these same authors' anomalous Hong Kong records (Carey *et al.* 2001).

Comparing seasons and, especially, sites needs caution because surveyors' experience and precise routes varied. Notably, coverage of Phou Dendin NPA was very different between March 1996, December, and March 2005 (see above). Because no observer had spent significant field time in northern Indochinese highland forests for some years, identification skills evolved during the survey: all site lists surely underestimate significantly the actual birds present.

Text accounts are given only for species in the following categories:

- key species of special national conservation concern as listed in Duckworth *et al.* (1999), with additional non-forest species identified by Duckworth *et al.* (2002) as having apparently declined in North Laos. BirdLife International's (2004) amended global assessments add an additional species (Yellow-breasted Bunting) as being of special concern in Laos.
- records which extend a species's known range, e.g. new for Laos or North Laos, or first post-1950 records; in addition, the first Lao records of Grey-backed Thrush, White-cheeked Starling, Rosy Pipit and Japanese Grosbeak are covered in Duckworth (2006).
- species where the records clarify seasonality of occurrence in Laos.
- species found at unexpectedly low or high altitudes.
- species lacking a recent review of Lao conservation status, where our records suggest one is warranted.
- subspecies readily identifiable in the field, yet most or all recent records were published only at species level.
- species not found for which survey effort is sufficient to infer genuine scarcity or even absence.

SCALY-BREASTED PARTRIDGE *Arborophila charltonii* (Selected records only) **Phou Dendin NPA:** many heard around Ban Tan (c.960 m) in March 2005, confirmed to species by a villager's lure bird; heard up to at least 1,450 m around Phou Namla.

Elsewhere in Laos, Scaly-breasted Partridge occurs below c.800 m, exceptionally to 1,170 m (e.g. Evans and Timmins 1998, Duckworth *et al.* 1999), and a record from northern Thailand at 1,350 m was regarded as exceptional by Deignan (1945). Atypically high-altitude records are particularly surprising in the climatically harsher north of the range. It was not found at other high-altitude sites: at Phou Taleng (mainly 1,100–1,500 m), Bar-backed Partridge (the common congener in Lao mid-altitude hills: Thewlis *et al.* 1998, Duckworth *et al.* 1999) was common, with a single Scaly-breasted Partridge heard far below. Around Ban Muangyo (700–800 m) and in the small, degraded, fragments around Phongsaly town (800–1,440 m) only Bar-backed Partridge was heard. The

Table 2. Species recorded in Phongsaly province in 1929–1931 but not in 1995–2005.

Species	Potential contributory factor to lack of recent records								Context
	Identification difficulties	Passage migrant and/or breeding visitor	Forest species	Restricted ecologically	Difficult to find	Large body, open country	Habitat loss	No obvious reason	
COTTON PYGMY-GOOSE						X	?		X
BARRED BUTTONQUAIL							?	X	
COPPERSMITH BARBET				X					
STORK-BILLED KINGFISHER						X			?
CHESTNUT-WINGED CUCKOO		X							
EURASIAN CUCKOO				?		?		X	?
[GERMAIN'S SWIFLET]	X								
BROWN WOOD OWL	X		X						
GREY NIGHTJAR	X	?				X			
GREEN IMPERIAL PIGEON						X			X
SLATY-BREASTED RAIL		X		X			?		?
BLACK-TAILED CRAKE				X	X		?		?
RUDDY-BREASTED CRAKE		X		X			?		?
PHEASANT-TAILED JACANA		X		X		X	?		?
RED-WATTLED LAPWING						X			X
BLACK BAZA		X							
BLUE-NAPED PITTA			X		X				
BLUE-WINGED PITTA		X	X						
BLACK-BILLED MAGPIE						X			X
BLACK-NAPED ORIOLE	X	?							
DARK-SIDED FLYCATCHER		X							
VIVID NILTAVA	X								
JERDON'S BUSHCHAT							X		
ASIAN PIED STARLING						X			X
CRESTED FINCHBILL								X	
BROWNISH-FLANKED BUSH WARBLER	X								
RUSSET BUSH WARBLER	X								
RUSTY-RUMPED WARBLER		X		X					
YELLOW-STREAKED WARBLER		X							
BLACK-HEADED MUNIA							X		X
YELLOW-BREASTED BUNTING		X							

Potential contributory factor to lack of recent records:

(1) Absence of records does not imply the species has decreased locally

Identification difficulties: potentially present but overlooked through identification difficulties.

Passage migrant and/or breeding visitor: likely to be solely or overwhelmingly a passage migrant through the survey area, and recent surveys may not have overlapped passage timing, and/or a breeding visitor, and not to arrive until April or May.

Forest species: requires significant time in forest and/or skills (e.g. knowledge of vocalisations) to find reliably.

Restricted ecologically: likely to be very restricted, ecologically, within the surveyed areas; hence may well have been overlooked.

Difficult to find: given the methodology used at likely times and places, so may simply have been overlooked.

(2) Absence of records appears to reflect genuine decline in the species, at least locally

Large-bodied bird of open country, i.e. exposed to high levels of persecution

Habitat loss: at sufficient levels to have led to local extinction.

(3) No obvious reason for lack of recent records

No obvious reason: species does not really fulfil any of previous criteria

National comparisons

*Declined nationally: known to have declined nationally or at least in North Laos (Duckworth *et al.* 1999, 2002).*

species was not noted in high-altitude Phou Dendin NPA in 1995 (Duckworth *et al.* 1998a) or 1996 (Appendix 1), and there is no relevant information from the Kelley-Roosevelts' expedition.

MOUNTAIN BAMBOO PARTRIDGE *Bambusicola fytchii*

Phou Dendin NPA: two caged birds, reportedly from nearby hills, Ban Tatoung, 6 December; four captives, Ban Laophouchai, March 2005. **Around Phongsaly town:** a caged pair, 15 March 1996. Bakong trail, group of four, 17 December, and three groups counter-calling, 13 and 19

March 2005. Group of eight, Ban Phagnexi, 19 December. Single groups, Khounsouk trail, 11 and 18 March 2005. **Other:** two captives, Ban Boun-Nua, March 1996.

This species was found near Phongsaly town (FMNH 77540) and around Ban Muangyo (FMNH 77541) in 1929 (Bangs and Van Tyne 1931), but its current national conservation status has been unclear. Galliforms are often assumed to be at elevated risk of extinction through being favoured quarry (e.g. McGowan 2002). This is not so for forest species in Laos, but some of open-country have declined steeply (Thewlis *et al.* 1998, Duckworth *et al.*

Table 3. Captive birds found in Phongsaly province, 2004–2005.

Species	Site, numbers and notes
BAR-BACKED PARTRIDGE <i>Arborophila brunneopectus</i>	Ban Soppha, one; Ban Tatoung, one; Ban Tan, three; Ban Naten, one*, Phongsaly, one*
SCALY-BREADED PARTRIDGE <i>Arborophila charltonii</i>	Ban Tan, one (still present*)
MOUNTAIN BAMBOO PARTRIDGE <i>Bambusicola fytchii</i>	Ban Tatoung, two; Ban Laophouchai*, four
RED JUNGLEFOWL <i>Gallus gallus</i>	Ban Laophouchai*, one
SILVER PHEASANT <i>Lophura nycthemera</i>	Naten*, Phongsaly*
GREY-HEADED PARAKEET <i>Psittacula finschii</i>	Ban Laophouchai*, two
ORIENTAL TURTLE DOVE <i>Streptopelia orientalis</i>	Khoa, two; Phongsaly, two
SPOTTED DOVE <i>Streptopelia chinensis</i>	Phongsaly, one*
CRESTED SERPENT EAGLE <i>Spilornis cheela</i>	Phongsaly, one †*
MOUNTAIN HAWK EAGLE <i>Spizaetus nipalensis</i>	Phongsaly, one
WHITE-VENTED MYNA <i>Acridotheres cinereus</i>	Ban Boun-Nua, one (still present*)
HILL MYNA <i>Gracula religiosa</i>	Khoa, one; Ban Muangyo, six, one*
RED-WHISKERED BULBUL <i>Pycnonotus jocosus</i>	Phongsaly, three †
BLACK-THROATED LAUGHINGTHRUSH <i>Garrulax chinensis</i>	Phongsaly, four (one*); Ban Boun-Tai, one
BLACK-HEADED SIBIA <i>Heterophasia melanoleuca</i>	Phongsaly, one †

The partridges and junglefowl were 'lure birds'; the other species were 'pets'.

All records were from November–December 2004 except * March 2005, † May 2004.

Table 4. Specimens collected from Phongsaly province, 2004–2005.

Species	Locality	Date	Catalogue number
WHITE-BROWED PICULET <i>Sasia ochracea</i>	Ban Hathin, PDD	19 March 2005	MNHN CG 2005-2676 (JF172)
LESSER SHORTWING <i>Brachypteryx leucophrys</i>	Ban Long Nay Mai, NLCA	6 March 2005	MHNG 1922.077 (JF115)
GREY-HEADED CANARY FLYCATCHER <i>Culicicapa ceylonensis</i>	Ban Hathin, PDD	19 March 2005	MHNG 1933.014 (JF170)
HILL BLUE FLYCATCHER <i>Cyornis banyumas</i>	Ban Hathin, PDD	19 March 2005	MNHN CG 2005-2670 (JF171)
HILL BLUE FLYCATCHER <i>Cyornis banyumas</i>	Ban Long Nay Mai, NLCA	5 March 2005	MNHN CG 2005-2672 (JF99)
HILL BLUE FLYCATCHER <i>Cyornis banyumas</i>	Ban Long Nay Mai, NLCA	5 March 2005	MNHN CG 2005-2671 (JF103)
HILL BLUE FLYCATCHER <i>Cyornis banyumas</i>	Ban Sopkhang, PDD	24 March 2005	MNHN CG 2005-2667 (JF221)
BLUE FLYCATCHER sp. <i>Cyornis</i> sp.	Ban Sopkhang, PDD	24 March 2005	MNHN CG 2005-2668 (JF219)
BLUE FLYCATCHER sp. <i>Cyornis</i> sp.	Ban Sopkhang, PDD	24 March 2005	MNHN CG 2005-2669 (JF220)
BROWN-BREADED FLYCATCHER <i>Muscicapa muttui</i>	Ban Sopkhang, PDD	23 March 2005	MHNG 1933.015 (JF205)
BARN SWALLOW <i>Hirundo rustica</i>	Ban Long Nay Mai, NLCA	5 March 2005	MHNG 1922.073 (JF98)
BLYTH'S LEAF WARBLER <i>Phylloscopus reguloides</i>	Ban Hathin, PDD	20 March 2005	MNHN CG 2005-2675 (JF179)
BLYTH'S LEAF WARBLER <i>Phylloscopus reguloides</i>	Ban Long Nay Mai, NLCA	7 March 2005	MNHN CG 2005-2674 (JF126)
BLYTH'S LEAF WARBLER <i>Phylloscopus reguloides</i>	Ban Long Nay Mai, NLCA	6 March 2005	MNHN CG 2005-2673 (JF117)
MARTENS'S WARBLER <i>Seicercus omeiensis</i>	Ban Long Nay Mai, NLCA	6 March 2005	MHNG 1922.078 (JF118)
MARTENS'S WARBLER <i>Seicercus omeiensis</i>	Ban Sopkhang, PDD	23 March 2005	MNHN CG 2005-2677 (JF210)
BIANCHI'S WARBLER <i>Seicercus valentini</i>	Ban Hathin, PDD	19 March 2005	MNHN CG 2005-2678 (JF169)
PUFF-THROATED BABBLER <i>Pellorneum ruficeps</i>	Ban Sopkhang, PDD	21 March 2005	MNHN CG 2005-2679 (JF188)
BUFF-BREADED BABBLER <i>Pellorneum tickelli</i>	Ban Long Nay Mai, NLCA	6 March 2005	MNHN CG 2005-2680 (JF106)
BUFF-BREADED BABBLER <i>Pellorneum tickelli</i>	Ban Long Nay Mai, NLCA	6 March 2005	MHNG 1922.074 (JF107)
BUFF-BREADED BABBLER <i>Pellorneum tickelli</i>	Ban Long Nay Mai, NLCA	6 March 2005	MHNG 1922.075 (JF116)
BUFF-BREADED BABBLER <i>Pellorneum tickelli</i>	Ban Long Nay Mai, NLCA	7 March 2005	MHNG 1922.076 (JF135)
GREY-THROATED BABBLER <i>Stachyris nigriceps</i>	Ban Naten, Nam Lan CA	10 March 2005	MHNG 1922.079 (JF149)
GREY-THROATED BABBLER <i>Stachyris nigriceps</i>	Ban Sopkhang, PDD	24 March 2005	MHNG 1933.017 (JF216)
SPOT-NECKED BABBLER <i>Stachyris striolata</i>	Ban Sopkhang, PDD	24 March 2005	(JF217) (skeleton in preparation)
PURPLE-NAPED SUNBIRD <i>Hypogramma hypogrammicum</i>	Ban Sopkhang, PDD	24 March 2005	MHNG 1933.016 (JF218)

Tissue (breast muscle or liver) was sampled from all specimens, and is preserved at the museum indicated. Numbers between brackets refer to collector's field numbers. MNHN, Muséum National d'Histoire Naturelle, Paris; MHNG, Muséum d'Histoire Naturelle, Genève; NLCA, Nam Lan Conservation Area; PDD, Phou Dendin NPA.

1999, Brickle *et al.* in prep.). Mountain Bamboo Partridge inhabits densely vegetated non-forest (bamboo, scrub and forest edge and degraded areas), and these multiple records within walking distance of a provincial capital imply strong resilience to today's conditions. Moreover, the species remains common (and commonly taken) in and around Nam Ha, Nam Et and Phou Louey NPAs (M. Hedemark and A. Johnson verbally 2005). Other recent surveyors not finding the species probably spent little time in suitable habitats (which look rather unpromising for most key species) and/or did not know its call.

[COMMON PHEASANT *Phasianus colchicus*
Phou Dendin NPA: two (one male), 15 or 16 December, in bamboo and scrub with many pools, seeps, and seasonal streams, north and east of Ban Siengnua, by the mammalogist D. P. Lunde (verbally 2004).

There are no records of Common Pheasant from Laos. The observer, somewhat familiar with the species from America, noted red facial skin hanging down below the bill line, a brownish body, and no apparent neck-ring. The birds flew when flushed, typical for this species but unusual in Laos for *Lophura* and *Polyplectron*. The habitat

seemed suitable for this species, which is known from adjoining East Myanmar and East Tonkin, Vietnam (Robson 2000). No interviewee of WGR described anything fitting Common Pheasant, but except those at Ban Laophouchai, they lived many kilometres from the observation site, in different habitat.]

GREAT BARBET *Megalaima virens*

(*Selected records only*) Four in fruit trees in a Phongsaly town-edge garden on 8 December, one in Ban Boun-Nua town centre on 23 December, and records close to villages elsewhere in November–December, all show surprising proximity to people for such a large bird in Laos, where species of this size-class are heavily hunted. Also, a single along the Bakong trail on 23 December was >2 km from any forest. Recent Lao records come from forest remote from towns (Tizard *et al.* 1997, Davidson 1998, Duckworth *et al.* 1998a, 2002, Evans and Timmins 1998, Showler *et al.* 1998b, R. J. Timmins, M. Hedemark and A. Johnson verbally 2005, P. Davidson *in litt.* 2005; Appendix 1), although it enters Hong Kong gardens with mature trees (Carey *et al.* 2001), and TT now finds it frequently in heavily degraded areas of Louang-Namtha province.

ORIENTAL PIED HORNBILL *Anthracoceros albirostris*

Phou Dendin NPA: heard upstream of Nam Ou camp #2 on 27 March 1996, along the lower Houay Hin on 2 December, and at Nam Ou camp #2 on 4–5 December. A fresh carcass being cooked, Ban Hathin, December, and two birds downstream of the village, 19 March 2005. A primary feather, Ban Tan, December. **Phou Taleng:** heard, 20 March 2005. **Other:** several singles or small groups, Nam Ngay, 23–27 March 1996.

Pied Hornbills in Phou Dendin NPA in May 1995 (Duckworth *et al.* 1998a) were also found only rarely: twice (1–3 birds) in ten days (WGR unpublished data). None was found at Ban Muangyo in 2004–2005, where it was collected in 1929 (FMNH 78004–78005, Bangs and Van Tyne 1931). Hornbills are the only landbirds widely eradicated from remaining (semi-) evergreen Lao forest (Thewlis *et al.* 1998). Pied Hornbill is the most resilient: it was the only hornbill found around Vientiane (Duckworth 1996), in Muong Nhe Nature Reserve of adjacent Vietnam (Nguyen Duc Tu *et al.* 2001), and (of five species previously) in Chiang Mai province of Thailand's northern highlands (Round 1984), but has nonetheless disappeared from most of Thailand (Lynam *et al.* 2006). In the riverine forests of the Hukaung valley, Myanmar, several groups are found per day (JWD, TT unpublished data): habitat similarities with Phongsaly imply the current population there is greatly declined, and indeed densities are low across most of Laos.

GREAT HORNBILL *Buceros bicornis* Globally Near Threatened; At Risk in Laos

Phou Dendin NPA: several tail feathers at a hunters' camp at Nam Ou camp #1, 30 November. In December, two old heads/casques at Ban Tan and one at Ban Hathin.

This hornbill was seen in Phou Dendin NPA (not outside the NPA, *contra* Thewlis *et al.* 1998) in May 1995.

BROWN HORNBILL *Anorrhinus tickelli* Globally Near Threatened; Potentially At Risk in Laos

Phou Dendin NPA: heard 2 km south-east of Ban Hathin on 26 March 1996; along the Nam Khang, a fairly fresh

head at a Hmong paddy at the trailhead to Ban Soppha, 6 December, and a single bird upstream of Ban Tatoung, 8 December. **Other:** one, Nam Ngay, c.5 km north-west of Ban Ngay-Tai, 26 March 1996.

Villagers reported this species to remain locally common in the NPA, but the paucity of records suggests a much-reduced population, and there was only a single record in May 1995, near the Nam Ou (not outside the NPA, *contra* Thewlis *et al.* 1998). None was found in Ban Muangyo in 2004–2005, the only historical site in the province for the species (FMNH 78002–78003, Bangs and Van Tyne 1931).

RUFIOUS-NECKED HORNBILL *Aceros nipalensis* Globally Vulnerable; At Risk in Laos

Phou Dendin NPA: two flew across the Nam La (900–1,100 m), 20 March 1996.

This is the only Globally Threatened species (*sensu* BirdLife International 2004) known from Phongsaly province, so the failure to relocate it in 2004–2005 is of concern. Various villagers indicated it as present in Phou Dendin NPA in 2004–2005, but stated that it was rarer than the other four hornbill species. Like all big hornbills, its local population can only be tiny.

WREATHED HORNBILL *Aceros undulatus* At Risk in Laos

Phou Dendin NPA: singles, Nam Ou near Ban Pumouang, 19 March 1996 (located outside the NPA, in error, by Thewlis *et al.* 1998), and near Ban Hathin, 19 March 2005.

Lao populations are greatly reduced, and widely locally extinct (Thewlis *et al.* 1998).

COMMON HOOPOE *Upupa epops*

Phou Dendin NPA: one Ban Tatoung, on 9 December. **Around Phongsaly town:** one, Khounsouk trail, 14 December. **Other:** two singles and a duo, Nam Ngay, 23–28 March 1996.

Both resident and Palaearctic wintering Hoopoes occur in Laos. The former are now very localised (Duckworth *et al.* 2002), but formerly inhabited Phongsaly province: Bangs and Van Tyne (1931) recorded an adult male, one immature male and two adult females (FMNH 77996–77999) from Ban Boun-Tai during 24–31 May 1929. Around Vientiane migrants depart in March; none remain by May (DVG and JWD unpublished data). The December and March records cannot be distinguished between remnant resident populations in the province and non-breeding visitors. Surveys in May–August would clarify hoopoe status in the province.

DOLLARBIRD *Eurystomus orientalis*

Phou Dendin NPA: common along the Nam Ou during 19–27 March 1996 and 12–27 March 2005; one, Nam Va, 24 March 2005. **Phou Taleng:** one, 21 March 2005. **Nam Lan CA:** one, 9 March 2005, near the 'hot springs'. **Other:** up to three, Nam Ngay, three dates during 23–28 March 1996.

The many sightings in March, in contrast with no records in May, November and December 2004 (Appendix 1) or in April–May 1929 (Bangs and Van Tyne 1931), suggest the species is merely a passage migrant to the province, but it may be a local breeding visitor: it was assessed as common in May 1995 along the Nam Ou both inside and outside Phou Dendin NPA (Duckworth

et al. 1998a). Dollarbird is a wet-season visitor to at least some of North Laos (Duckworth 1996), but has a complex seasonality in the country. The Phongsaly March timing accords with its passage through the Vientiane plain (JWD unpublished data).

BLYTH'S KINGFISHER *Alcedo hercules* Globally Near Threatened; Potentially At Risk in Laos

Phou Dendin NPA: two singles and a duo on the lower Nam Sing on 20 March, and one further up this stream on 21 March 1996 (these dates correct those in Thewlis *et al.* 1998). Singles on the Nam Ou [between Ban Hatxa and Ban Pusum] and near Ban Hathin on 30 November, and at an un-named stream mouth upstream of the Houay Matiaho on 1 December. One, lower Houay Hin, 2 December. Singles, Nam Ou on 12 March 2005, on a small stream near Ban Tan on 18 March 2005, along the upper Nam Va on 24 March 2005 [and along the Houay Ling on 25 March 2005]. One mist-netted Nam Nu near Ban Hathin, 19 March 2005. **Ban Muangyo area:** one, Nam Hoy downstream of Ban Namhoy, 24 December. **Other:** one on a forested stream c.25 km west-north-west of Phongsaly town, 24 March 1996.

The records probably underestimate the Phou Dendin NPA population, because the species usually uses shallow streams of 2–20 m width (Thewlis *et al.* 1998), yet most search effort was along the main Nam Ou. Most sightings were indeed up, or close to the mouths of, tributaries. This population is probably large and contiguous with that found in adjacent Muong Nhe Nature Reserve, Vietnam, by Nguyen Duc Tu *et al.* (2001). The only historical record from the province was from Ban Muangyo (FMNH 77911, Bangs and Van Tyne 1931). Two records are from scrub, but forested rivers might be needed seasonally, and both records were from near forest; so it would be premature to consider the species independent of forest.

ORIENTAL DWARF KINGFISHER *Ceyx erithacus*

Nam Lan CA: two, 'hot springs', 10 May 2004; one, small stream near Ban Namaek, 30 May 2004.

One was collected at Ban Muangyo on 12 May 1929 (FMNH 77910; Bangs and Van Tyne 1931). Duckworth *et al.* (1998a) reviewed Lao records and found very few within November–March, with an upsurge in April. These May records further suggest, through paired visits to the same sites, that the species migrates, although its breeding distribution remains unclear: it was found at the only site in North Laos with suitable habitat investigated recently in the presumed breeding season, June–July (Duckworth 1996).

RUDDY KINGFISHER *Halcyon coromanda* Little Known in Lao PDR

Nam Lan CA: two mist-netted together, 'bat caves', 12 May 2004.

The relatively few past Lao records all fall in April–June, and observation of apparent territoriality suggests breeding, at least in the Annamites (Duckworth *et al.* 1999, Robichaud and Stuart 1999).

BLACK-CAPPED KINGFISHER *Halcyon pileata*

Phou Dendin NPA: singles, Nam Ou near Nam Va mouth, 28 March 1996 and 30 November. **Other:** two singles near Pak-Ou, 25 November.

This species's seasonality in North Laos is unclear. David-Beaulieu (1944) considered it a common resident in Xiangkhouang province, and (p. 179) apparently found it nesting. Robson (2000) stated it wintered throughout South-East Asia, i.e. including North Laos. That only three individuals were seen in November–December supports discussion in Duckworth *et al.* (2002) that mid-winter records are so rare in the Lao northern highlands that it is only a passage migrant, as in the Hukaung valley, northern Myanmar (JWD and TT unpublished data). It overwinters regularly around Vientiane (JWD unpublished data), and, coastally, further north, e.g. Hong Kong (Carey *et al.* 2001). There are no breeding-season records from Phongsaly province (Bangs and Van Tyne 1931, Duckworth *et al.* 1998a; Appendix 1), and if it breeds at all in the province, it must be localised. Formerly it was a more common breeder in Hong Kong (Carey *et al.* 2001), so breeders have perhaps also declined in northern Laos.

CHESTNUT-HEADED BEE-EATER *Merops leschenaulti*

Phou Dendin NPA: common, Nam Ou, 18–28 March 1996. At least ten, Ban Hatxa–Ban Hathin, 17 and 27 March 2005. Two, Ban Hathin, 18–19 and 25 March 2005. Present, Ban Sopkhang, 22 March 2005. **Other:** common, Nam Ou, Khoa–Ban Hatxa, 14–18 March 1996.

Bangs and Van Tyne (1931) reported 11 specimens from Ban Boun-Tai in May–June (FMNH 77965–77978), and it was common in the province in May 1995 (Duckworth *et al.* 1998a). The lack of records in November–December implies strong seasonal movements, presumably out of the province given that the lowest altitudes were covered.

ASIAN KOEL *Eudynamis scolopacea*

Phou Dendin NPA: one, Nam Ou, Ban Hathin–Ban Hatxa, 27 March 2005. **Nam Lan CA:** singles heard, Ban Long Nay Mai–Ban Boun-Tai, 8 March and Ban Boun-Tai–Ban Naten, 9 March 2005. **Other:** one over the road near the Oudomxai province border, 1 June 2004.

Asian Koel was historically common in the northern highlands (e.g. David-Beaulieu 1944) and was collected in Ban Muangyo on 9 May 1929 (FMNH 77778–77779; Bangs and Van Tyne 1931), but in 1996–2005 was found only sparsely in the spring calling period. March records could even relate to passage birds, but the June sighting suggests at least local breeding. Evidently Koels declined greatly in the province during the past half-century, reflecting absence or scarcity of their breeding hosts (corvids and sturnids). Koel seems otherwise recently unrecorded from the northern highlands (Pasquet 1997, Tizard *et al.* 1997, Davidson 1998, Duckworth *et al.* 1998a, 2002, Showler *et al.* 1998b, Brooks and Sørensen 2001, DVG and TT unpublished data) making the Phongsaly birds of significance, especially as it also occurs in adjacent Muong Nhe Nature Reserve, Vietnam (Nguyen Duc Tu *et al.* 2001). It remains widespread and, in a few places, common, in South and Central Laos (Thewlis *et al.* 1996, Davidson *et al.* 1997, Cunningham 1998, Duckworth *et al.* 1998a, Evans and Timmins 1998, Round 1998, Steinmetz *et al.* 1999, Evans *et al.* 2000a, Evans 2001), and may be on the brink of (re-)colonising Vientiane city (JWD unpublished data).

GREY-HEADED PARAKEET *Psittacula finschii*

Phou Dendin NPA: two captives, Ban Laophouchai, 23

March 2005. **Around Phongsaly town:** a chained young bird, 15 March 1996.

The lack of field sightings suggest a tenuous provincial status for Grey-headed Parakeet. It was collected at Ban Boun-Tai (FMNH 77816) and (four) Ban Laophouchai (FMNH 77817–77820; Bangs and Van Tyne 1931), and Coolidge and Roosevelt (1933) mentioned ‘great flocks of green parrots’ along the Nam Ou, in stark contrast to the total lack of sightings of any parakeet in 1996–2005. (The flocks might have been or included Red-breasted Parakeet *P. alexandri*, recorded recently from adjacent Muong Nhe Nature Reserve of Vietnam: Nguyen Duc Tu *et al.* 2001.) Indeed, in the northern highlands all recent parakeet records are of captives, around Nam Ha NPA and, quite regularly during 2005, in Nam Tha and Vieng Phou Kha districts of Louang-Namtha province (Tizard *et al.* 1997, TT unpublished data). Previously it was locally common at mid-altitude in Xiangkhouang province (David-Beaulieu 1944), but even in 1938–1939, in the upper Lao Mekong and Louangphabang, Delacour and Greenway (1940b) found only young captives (at Ban Nam Kheung-Kao and Lo-Tiao). Large populations of Grey-headed Parakeets remain in South and Central Laos (Thewlis *et al.* 1996, Davidson *et al.* 1997, Cunningham 1998, Duckworth *et al.* 1998a, Evans and Timmins 1998, Steinmetz *et al.* 1999, Evans *et al.* 2000a, Evans 2001), but the only recent field record from the North is from the Nam Chat/Nam Phan Provincial Protected Area, Bolikhamxai province (Tizard 1996).

WHITE-THROATED NEEDLETAIL *Hirundapus caudacutus*
Nam Lan CA: 4–5, Nam Lan near Ban Naten, 8–9 May 2004; one, Ban Long Nay Mai, 23 May 2004.

This is a scarce passage migrant in North Laos (Duckworth *et al.* 1999, Robson 2000). Most Lao spring records are before mid-May (JWD unpublished data) and the latest spring date in Hong Kong is 11 May (Carey *et al.* 2001).

BROWN-BACKED NEEDLETAIL *Hirundapus giganteus*
(Selected records only) **Around Phongsaly town:** two, [14] and 26 December, Phou Fa; six, 18 December, Bakong trail; four, 19 December, Khomen trail; two unidentified needletails, Nam Fan, 20 December. **Other:** three unidentified needletails, Ban Hatxa, 30 November.

This swift occurs widely in Laos, including Phongsaly province (FMNH 77861–77867; Bangs and Van Tyne 1931, Duckworth *et al.* 1999; Appendix 1). Robson (2000) stated that it was ‘possibly only [a] breeding visitor to some (more northerly) areas [of South-East Asia]’. Regular records around Phongsaly town in December suggest year-round presence even in northernmost Laos.

ASIAN PALM SWIFT *Cypsiurus balasiensis*
(Selected records only) Of the sites palm swifts were found at in the province (Appendix 1), they were common only around villages (both current and abandoned) along the Nam Ou in December. This is one of the most ubiquitous Lao village birds, yet Phongsaly town evidently lacked it, and it was rare or unrecorded around Ban Muangyo and Ban Boun-Nua. This probably does not reflect persecution, because it was one of few common urban Lao birds in the early 1990s, when sustained, almost indiscriminate, hunting brought town bird populations to their lowest ebb; and it was not found in the town by

Bangs and Van Tyne (1931). Apart from a single flock of three heading north over Phou Taleng on 21 March 2005, the highest recorded palm swifts on the current survey were at only c.840 m (at Ban Namhoy). The palm trees with which they apparently associate elsewhere in Laos were not seen in Phongsaly town, Ban Muangyo or Ban Boun-Nua, and this may explain the pattern.

LARGE OWLS *Ketupa* spp., **SPOT-BELLIED EAGLE OWL** *Bubo nipalensis* and **BROWN WOOD OWL** *Strix leptogrammica*

Phou Dendin NPA: a fish owl carrying a fish across the Nam Ou downstream of the Houay Hin mouth at 08h00, 4 December. An owl heard (*hoo-hoo-roo*, all notes about one pitch) at Nam Ou camp #2, 4–5 December. A probable fish owl near Ban Laophouchai, 23 March 2005. **Around Phongsaly town:** one heard (*hooo-hoo(pr)oooo*, in relative timing and emphasis of the two notes and pause, just as the two introductory notes of Common Wood Pigeon *Columba palumbus* song in U.K.) from a small, degraded copse below the Bakong trail, 18 December. Heard, similar in call, Phou Fa, 19 March 2005. A Spot-bellied Eagle Owl for sale in Ban Pangxo in September 2003, reportedly caught locally in a net. **Ban Muangyo area:** heard, 22 March 2005; call similar to that of 18 December. **Nam Lan CA:** a fish owl carrying a fish into a tree hole by the Nam Lan near the ‘hot springs’, 10 March, and one over the Nam Lan near the ‘bat caves’, 12 March 2005. **Other:** two large owls along the Nam Ngay, 26 March 1996.

Duckworth *et al.* (1999) listed all large owls except Brown Wood Owl *S. leptogrammica* as Potentially At Risk in Laos or Little Known in Laos. Difficulties of visual detection and identification are compounded by only weak knowledge of vocalisations, including possible overlap between species. Large owls (as a group) are seen noticeably rarely along Lao forest rivers compared with, e.g., India, and have presumably declined. They seem to be sought as ‘living trophies’ in Laos and remains are sometimes found at hunters’ camps. A freshly killed Brown Wood Owl in Oudomxai market on 14 December 2004 (WGR) seems to be the first recent record for North Laos, although it was previously found in Xiangkhouang (David-Beaulieu 1944), and Phongsaly town on 29 April 1929 (Bangs and Van Tyne 1931). There are few recent records of Spot-bellied Eagle Owl *B. nipalensis* for Laos (Duckworth *et al.* 1999). Tawny Fish Owl *K. flavipes* was collected in adjacent Vietnam (Muong Mo) in 1929 (Bangs and Van Tyne 1931) and recently found in Muong Nhe Nature Reserve (Nguyen Duc Tu *et al.* 2001). It may well occur in Phongsaly province, as might Brown Fish Owl *K. zeylonensis*, but no other resident large owl is expected. Wherever possible, birds should be sound-recorded for later identification, and cast feathers or other remains collected for museum comparison.

ASHY WOOD PIGEON *Columba pulchricollis* Little Known in Laos.

Nam Lan CA: a flock of five near the ‘bat caves’, 11 March 2005.

This is only the second Lao record (see Duckworth *et al.* 2002), but there are two subsequent records: 1–2 caged birds at Pakxan, Bolikhamxai province, in June–July 2005 (T. E. Hansel *in litt.* 2005), and a flock of at least 55–70+ in (semi-)evergreen forest, near a mineral lick within 0.5 km of Ban Houaysan, southern Nakai–Nam Theun

NPA (17°50'N 105°30'E), at c.580 m, on 5 November 2005 (WGR unpublished data).

ORIENTAL TURTLE DOVE *Streptopelia orientalis*

Phou Dendin NPA: six near Ban Hathin, 26 March 1996; 2–3, Nam Ou upstream of Houay Hin mouth, 2 December; one downstream of there, 4 December; 3–4, Ban Tatoung, 6 December; three, Nam La, 10 and 12 December; c.15, Ban Siengnua, 10 December; one, lower Nam Houn, 13 December; one, Nam Ou, 12 March, two near Ban Hathin, 18 March, and two downstream of Ban Pusum, 19 March 2005. **Around Phongsaly town:** [one, Khounsouk trail, 8 December]. Bakong trail, 1–4 birds on all three visits in March 2005. Several and two birds caged in Phongsaly town in September 2003 and on 11 December respectively. **Other:** two caged in Khoa, 26 November.

This dove occurs across Laos, but current distribution is patchy (e.g. Thewlis *et al.* 1996, Tizard 1996, Davidson *et al.* 1997, Evans and Timmins 1998, Duckworth *et al.* 1998a, Walston and Vinton 1999, Steinmetz *et al.* 1999, Evans *et al.* 2000a). Large declines have occurred at least locally in North Laos: in Xiangkhouang province, it was formerly fairly common in winter (David-Beaulieu 1944), yet during winters 1998–2000 none was found (Duckworth *et al.* 2002). There are recent records from a few sites in the northern highlands (Tizard *et al.* 1997, Davidson 1998, Showler *et al.* 1998b). A review of historical and recent records, including seasonality (there are probably both resident and visiting populations) across Laos, is needed. Bangs and Van Tyne (1931) collected it frequently in adjacent Tonkin to mid-March, but found none in Laos during April and May. In this context, the provisional report from the Nam Ou on 31 May 1995 (Duckworth *et al.* 1998a, WGR unpublished data) needs corroboration. In Hong Kong it is solely a migrant, and April records are regular with small numbers into May in most years (Carey *et al.* 2001).

SPOTTED DOVE *Streptopelia chinensis*

Phou Dendin NPA: Ban Hathin, [one, 20 March 1996; six, 30 November]; two, 18 March 2005. Nam La, 18 on 10 December, three on 12 December. One near Ban Tan, 18 March 2005. **Around Phongsaly town:** one, caged, March 2005. **Ban Muangyo area:** one 6 km south, 27 December. **Nam Lan CA:** one, Ban Long Nay Mai, 7 March 2005. **Other:** 1–2 by the Nam Ou around Ban Hatxa and downstream, 14 and 30 March 1996. Two, Nam Ngay near Ban Ngay-Tai, 26 March 1996. One a few miles after Ban Boun-Tai and two 69 km before Ban Paknamnoy (with two *Streptopelia* sp.), 27 December. Two at Ban Boun-Gnang, four just north of Ban Boun-Tai, two 8 km south of Ban Boun-Tai and two 3 km north-west of Ban Namli, on 26 March 2005.

There were only a few records of unidentified *Streptopelia* (including several in Ban Boun-Nua–Ban Ngay Tai, March 1996); Spotted Dove is scarce and localised in the province. Large populations of Spotted Dove persist in South and Central Laos (Duckworth 1996, Thewlis *et al.* 1996, Davidson *et al.* 1997, Cunningham 1998, Duckworth *et al.* 1998a, Evans and Timmins 1998, Round 1998, Showler *et al.* 1998a, Steinmetz *et al.* 1999, Walston and Vinton 1999, Evans *et al.* 2000a, Evans 2001), and it was found in all surveys of the northern highlands although it was not generally assessed as common there (Tizard *et al.* 1997, Davidson 1998, Showler *et al.* 1998b, Brooks

and Sørensen 2001, Duckworth *et al.* 2002), including previously in Phou Dendin NPA (one by the Nam Ou, 25 May 1995; Duckworth *et al.* 1998a, WGR unpublished data). In some areas, the species occurs only as occasional wanderers, e.g. Vientiane city and nearby rural areas (Duckworth and Tizard 2003; DVG and JWD unpublished data) and in Xiangkhouang province, where it was formerly common, recent surveys failed to find it (David-Beaulieu 1944, Duckworth *et al.* 2002). Bangs and Van Tyne (1931) reported only one specimen from Phongsaly (FMNH 77703), with no comment on abundance, so it is unclear whether the current scarcity in superficially suitable habitats reflects a naturally low population or a recent reduction.

RED COLLARED DOVE *Streptopelia tranquebarica*

Phou Dendin NPA: [two, lower Nam Khang, 6 December]. **Phou Taleng:** one by the road (c.1,300 m), 16 September 2003. **Other:** one on a sandbar c.3 hours down the Nam Ou from Khoa, 31 March 1996.]

A large post-breeding population in North Laos (attributed to winter visitors by David-Beaulieu 1944) seems to have declined greatly (Duckworth *et al.* 2002). Historical status in Phongsaly province is unclear: the Kelley-Roosevelts' expedition visited in May, so their lack of records is uninformative.

LITTLE CUCKOO DOVE *Macropygia ruficeps* Potentially At Risk in Laos

Phou Dendin NPA: [one, Nam Ou downstream Houay Hin mouth, 4 December]. Two singles at c.1,500 m near Phou Namla, 17 March 2005.

These are the first recent Lao records, despite several multi-week surveys of presumably suitable habitat (Tizard *et al.* 1997, Showler *et al.* 1998b, Davidson 1998, 1999), of a species historically recorded widely in the North, and sometimes called common (Delacour and Jabouille 1927, Delacour 1929, Delacour and Greenway 1940b, David-Beaulieu 1944, Dickinson 1970a, 1970b). It was collected at Ban Muangyo on 15 May 1929 (FMNH 75322; Bangs and Van Tyne 1931). It is unclear either why it would have been overlooked recently, or what factor could have caused a decline so much stronger than in other hill forest pigeons, which each remain throughout their historical Lao range, albeit reduced in numbers.

POMPADOUR GREEN PIGEON *Treron pompadora* At Risk in Lao PDR

Nam Lan CA: a small flock near the 'hot springs' (c.670 m), 10–11 May 2004, perched conspicuously, allowing solid identification.

Both this species and the similar Thick-billed Green Pigeon *T. curvirostra* were previously collected in Ban Boun-Tai (*T. pompadora* FMNH 77732; *T. curvirostra* FMNH 75319 and 77733–77736; Bangs and Van Tyne 1931). The 'hot springs' are salty and the species is known to visit salt licks (Baptista *et al.* 1997). Although recorded fairly widely in Laos historically (Meyer de Schauensee 1934, Thewlis *et al.* 1998 and references therein), the only two other sites with recent records are both near Vientiane: Sangthong district (Duckworth 1996) and the lower Nam Ngum plain in 2005 (M. K. Poulsen and JWD unpublished data). Previous Lao records in hilly terrain are from below 300 m, with observations up to 600 m only in level areas.

MOUNTAIN IMPERIAL PIGEON *Ducula badia* (Selected records only) **Nam Lan CA:** 30 on 12 May 2004 and a flock of c.130 on 11 March 2005, near the 'bat caves'.

Most daily counts in Laos are below 20 birds (JWD, WGR, TT unpublished data), as were the other records on the present surveys (Appendix 1), and the species is undoubtedly below carrying capacity in most areas. Declines have also been claimed in Thailand (Baptista *et al.* 1997), but are neither widespread nor severe enough to consider the species as even nationally near-threatened (Round 2000).

RIVER LAPWING *Vanellus duvaucelii* At Risk in Laos

Phou Dendin NPA: singles near Ban Hathin, 19 and 28 March 1996 (within the NPA, *contra* Thewlis *et al.* 1998).

River Lapwing has declined in Lao tributaries with dense human settlement (Duckworth *et al.* 1998b, 2002). Its historical status on the Nam Ou is unclear: it was recorded from Vang Pha Ho, upstream of Ban Muangngoy (Dickinson 1970a), but Bangs and Van Tyne (1931) largely ignored river channel species in the Nam Ou (see above). In the 1990s, up to six were found on every visit to the Phongsaly Nam Ou (March 1992, May 1995, March 1996; Thewlis *et al.* 1998). The Hatxa–Hathin stretch provided all the 1995–1996 spring records (WGR and TT unpublished data), but none was seen there in 2004–2005, despite much more boat travel. The Nam Ou is too narrow and the channel too simple for birds to be overlooked. Human activity in suitable habitat is high, hence the species's apparent recent local extinction.

GREY-HEADED LAPWING *Vanellus cinereus* Potentially At Risk in Laos

Phou Dendin NPA: twelve, Nam Khang mouth, 27 March 1996 (within the NPA, *contra* Thewlis *et al.* 1998).

Other: along the Nam Ou, two duos between Khoa and Ban Hatxa, 14 March, and one upstream of Ban Hatxa, 28 March 1996; groups of 17, nine, and one, upstream of Ban Hatxa, 17 March 2005. Near Ban Boun-Tai, c.5, 13 September 2003. Ban Boun-Nua, three, 16 December, and eleven, 23 December.

Most paddies around Ban Boun-Nua and Ban Boun-Tai were not checked, so numbers might be much underestimated. Grey-headed Lapwing seems to be regular on the Nam Ou only on passage, yet on the Mekong at similar latitudes many winter (Duckworth *et al.* 2002).

LESSER FISH EAGLE *Ichthyophaga humilis* Globally Near Threatened; At Risk in Laos

Phou Dendin NPA: singles upstream of Nam Ou camp #2, 27 March 1996 and at Nam Khan mouth, 28 March 1996. 1–2 between Nam Va and the mouth of the Nam Long, and one just downstream of Ban Hathin, on 30 November. One, probably two, [and feathers of a butchered bird at a hunters' camp] at 22°05'N 102°10'E (measured by GPS) and two singles between there and the Houay Hin mouth on 1 December. Two a little upstream of the Houay Hin mouth on 2 December, and 1–2 there, one near Hat Chan, and one near the Houay Khanionho mouth on 3 December. Two just downstream of the Nam Hin mouth, one upstream of the Houay Matiaho mouth, and two at Nam Ou camp #2 on 4 December. Singles at this last site and at Nam Ou camp #1 on 5 December. One c.2 km up the Nam Khang on 6 December, and 2–3 on that river, Ban Tatoung–Ban

Soppha trailhead on 6–8 December. Singles, Ban Hathin and Nam Long mouth–Nam Va on 7 December. Two singles, and two *Ichthyophaga* sp., Houay Hin mouth–Nam Va mouth, 13 December. One just upstream of Ban Siengnua (Nam Houn) on 12 December. All sites are on or beside the Nam Ou, except, as indicated, on the Nam Houn and Nam Khang. In March 2005, only Ban Hatxa–Ban Hathin was covered; three singles were seen. **Other:** one *Ichthyophaga* sp., Nam Ngay, 26 March 1996.

These 2004 figures show at least eight territories along the Nam Ou (nearly all suitable habitat was covered), two along the Nam Khang (only half covered), and one along the Nam Houn (less than a third), suggesting the three rivers might support c.15 territories. Mapped width of river and adjacent forest cover suggest possible territories on the Nam Va (one) and Nam Paho (1–2). If the narrower rivers also support breeders, the NPA population might well exceed 20 pairs. The Nam Ngay sighting indicates that rivers outside the NPA also hold fish eagles, but mapped stream sizes and habitat cover suggest that numbers are probably smaller. In late spring 1995 in Phou Dendin NPA, single Lesser Fish Eagles were found at two sites between the Nam Va mouth and Ban Hathin, with three singles between Ban Sopkhang and the Houay Yoong temple; plus a further *Ichthyophaga* sp. along the lower Nam La (Thewlis *et al.* 1998, amended by WGR unpublished data). The higher numbers in 2004 probably just reflect better coverage, not an increase; persistent rain blighted the only day in 1996 in the key stretch, that upstream of the Nam Khang's mouth. Almost all birds were aged; none was an immature. This might indicate poor reproduction (but in the presumably healthy population of Hukaung Valley, all birds observed along the main rivers were also adult: JWD and TT unpublished data) so future observers should age birds and record the precise locality of all sightings, and attempt to find nests and evaluate their success.

Nakai–Nam Theun NPA and adjacent Nakai Plateau hold 4–10 territories (Thewlis *et al.* 1998) and the Xe Kong basin (of Laos, Cambodia and Vietnam, including the Sesan and Srepok) a few dozen (R. J. Timmins verbally 2005). The species is scarce and localised in Cambodia (Poole 2001), Thailand (P. D. Round *in litt.* 2005) and Vietnam (J. Tordoff *in litt.* 2005); no other Indochinese population may reach comparable density. Phou Dendin NPA probably supports the largest Lao population of Lesser Fish Eagle, one of the most significant in mainland South-East Asia (although the Hukaung Valley, north Myanmar, has many more; JWD and TT unpublished data), certainly in Indochina. In Nepal it is now very rare (assessed as Nationally critically endangered) following prolonged decline, and it is rare all over the Indian subcontinent (Baral and Inskipp 2004), so the Phongsaly population may be highly significant for continental Asia.

Fish eagles are nationally threatened because they need forested large watercourses, among the most threatened habitats in Laos (Thewlis *et al.* 1998). Large rivers are fishing sites and access routes and seasonal camps for rural Lao, and so their birds are more in contact with people than are interior forest species. Fish eagles are large, easily seen and hence tempting targets: they perch for long periods in riverside trees, rather than soaring high, out of gun range. No population sources in remote habitats exist to repopulate accessible areas. Nesting

habits, not known in Laos, may, if typical of large raptors, expose them to robbery. Hence, Thewlis *et al.* (1998) found the species 'now reduced to a few isolated populations in the least-disturbed drainage basins (Xe Kong, Nam Theun, Nam Ou and perhaps others) between which dispersal may be limited. Each is vulnerable by nature of its small size'. No new large populations have been found in Laos; a few birds were seen in Dong Khanthung proposed NPA (Round 1998) and the known extent of the Xe Kong population was expanded by Davidson *et al.* (1997) and Duckworth *et al.* (1999).

Historically, the species was collected near Phou Dendin NPA on the Nam Na river, Vietnam (Bangs and Van Tyne 1931). Surveys have been inadequate to tell whether birds still occur there (J. Tordoff *in litt.* 2005), but if they do, the Phou Dendin NPA population would have greater resilience to extinction.

VULTURE

A 'vulture' reportedly killed in Phongsaly district in winter 1997–1998 was exhibited for a few days at a district office (O. Ducourtieux verbally 2003). Resident vultures are extinct across most of South-East Asia (Pain *et al.* 2003), with no recent records from North Laos. Long-distance migrant Cinereous Vulture *Aegypius monachus* and Himalayan Griffon *Gyps himalayensis* presumably occur, but have not yet certainly been recorded from Laos. A 58-year-old in Ban Hathin reported that when he was 10–15 years old, there were a few vultures in the area, 'with red bills', but none remains today.

EURASIAN SPARROWHAWK *Accipiter nisus*

Around Phongsaly town: [Phou Fa, a female, 10 December; Khounsouk trail, one, 14 December.] Bakong trail, a female, 18 December. **Ban Muangyo area:** Ban Muangyo, a female, 24 December.

Two birds seen very well allowed the first recent certain Lao records, after a few provisional sightings (Duckworth *et al.* 1998a, 2002). Perhaps more birds than usual arrived in Laos in winter 2004–2005: on 8 March 2005 a female at Bung That Louang, Vientiane (JWD unpublished data) was well away from previous Lao sites.

GREY-FACED BUZZARD *Buteo indicus*

(*Selected records only*) **Around Phongsaly town:** Phou Fa, an immature, 15 December, and an adult and immature, 26 December. Bakong trail, two, 17 December, and one, 18 December. Trail to the Nam Fan, one, 20 December. **Ban Muangyo area:** Ban Namhoy, one, 24 December 2004. Some other unidentified raptors seen in December may have been this species.

Evidently this raptor winters in Phongsaly province, although Robson (2000) classed it as only a passage migrant to North and Central Laos, and it may do so regularly: there are also December–February records from Nam Kading NPA and nearby (Duckworth *et al.* 1998a, JWD unpublished data), the Kelley-Roosevelts' Expedition collected one from adjacent Vietnam (Lai Chau) on 28 February 1929 (Bangs and Van Tyne 1931), and it was also recorded in mid-winter from northern Thailand (Deignan 1945). It is, however, only a passage migrant in Hong Kong (Carey *et al.* 2001). Records in March 2005 (Appendix 1) included several in the same precise spots as in December, presumably involving the same individual birds.

CHANGEABLE HAWK EAGLE *Spizaetus cirrhatus*

Phou Dendin NPA: two near Ban Hathin, 18 March 2005, seen for several minutes by telescope on the opposite bank of the Nam Ou; neither had a crest.

The only previous records from the Lao northern highlands, from David-Beaulieu (1944), are in doubt: he stated that the birds had long crests and he saw no dark-phase birds, whereas in Annam and Cochinchina they had crests only exceptionally, and dark birds were common. It was not then clear that *Spizaetus* had two species in Indochina, Mountain Hawk Eagle *S. nipalensis* with a long crest and Changeable Hawk Eagle with no substantial crest and a common dark morph. Ripley (1953) re-examined one of David-Beaulieu's specimens and confirmed that it was indeed a Mountain Hawk Eagle. Hence, the northernmost previous Lao record was from the Nam Chat/Nam Phan provincial conservation area (Tobias 1997), and there are no records from adjacent China or northern Vietnam (Robson 2000). Deignan (1945) rejected the only claim from northern Thailand, but although in Thailand it is mainly a bird of plains and lower hills it does occur on lower Doi Inthanon where, as here, it is locally sympatric with Mountain Hawk Eagle (P. D. Round *in litt.* 2005).

[COLLARED FALCONET *Microhierax caerulescens*

Phou Dendin NPA: heard, broadleaved evergreen forest on Phou Namla (c.1,500 m), 14 and 15 March 2005.

Collared Falconet is known in Laos only from the plains north to Vientiane (Duckworth 1996, Cunningham 1998, Duckworth *et al.* 1999, Evans *et al.* 2000a and references therein). Elsewhere in South-East Asia it may live up to 1,830 m (Deignan 1945, Robson 2000), and RE, very familiar with the species's calls from Thailand (Eve 1990), did not try to see the birds. Robson (2000) gave no records from nearby northern Vietnam or China.]

PIED FALCONET *Microhierax melanoleucos* Little Known in Laos

Phou Dendin NPA: [singles, Nam Ou near the Houay Khanionho mouth, 3 December; c.3 km upstream of the Nam Hin mouth, 3 December; Nam Ou camp #2, 4 December; Ban Tatoung (Nam Khang), 6 December; and] Nam Ou downstream of Ban Hathin, 27 March 2005. One falconet sp., upper Nam Va, 24 March 2005. **Around Phongsaly town:** singles near Ban Pangxo, 26 November [over Ban Bakong, 18 December, and over Phou Fa, 26 December].

Based on range and habitat of falconets in Laos in Duckworth *et al.* (1999; see above), all birds in December were assumed to be Pied Falconet. Following the report of Collared (above), November–December 'Pied Falconets' were reviewed and only one was supported by identification notes. This is, by far, the biggest known area in Laos supporting Pied Falconet, albeit apparently sparsely. A low density is typical: there are often only 1–2 contacts even on a multi-week survey (Laos: Thewlis *et al.* 1998, Duckworth *et al.* 1999; Vietnam: R. J. Timmins verbally 2005). The lack of previous records from the province is surprising, although it was collected in adjacent Vietnam (Muong Moun in late March 1929, Bangs and Van Tyne 1931). Occupied areas ranged from the Nam Ou valley at c.450 m to the summit of Phou Fa at 1,625 m, and included forest, streamside and degraded former cultivation, close to or far from towns.

PEREGRINE FALCON *Falco peregrinus*

Other: one at a large karst, middle Nam Ou (1–2 km downstream of Ban Pakbak), 25 November.

South-East Asia supports wintering Palaearctic migrants and residents (Robson 2000). This bird's 'oily' black-brown upperparts, large black cap including most of the cheeks, and heavily dark-streaked off-white underparts fitted very closely a young *F. p. ernesti*, known in South-East Asia only from Tonkin; residents from the Thai–Malay peninsula into north-east Thailand, morphologically similar to *F. p. ernesti*, are perhaps an undescribed race (Robson 2005). The Nam Ou lies between the two populations.

Peregrine is widespread in Laos in favoured habitat (Thewlis *et al.* 1996, Cunningham 1998, Duckworth *et al.* 1998a, 2002, Parr and Parr 1998, Walston and Vinton 1999, Steinmetz *et al.* 1999, Evans *et al.* 2000a, Duckworth and Tizard 2003, JWD unpublished data), but there are no Lao specimens of non-Palaearctic races, and few recent records gave subspecies. Robson (2000) excluded Laos from the breeding range, but Duckworth *et al.* (1999) left the matter open, citing a pair of 'one of the resident races' from Savannakhet town. Breeding populations, if indeed occurring, may be rare and threatened.

CATTLE EGRET *Bubulcus ibis*

Ban Muangyo area: Ban Muangyo: one, with buffaloes, 24 December and 22 March 2005. **Other:** c.15 on 13 September (and some unidentified egrets), and one on 17 September 2003, near Ban Boun-Tai.

Autumn passage egrets occur throughout Laos, but midwinter records are exceptional away from a few sites (Duckworth *et al.* 2002; C. Wood verbally 2005). This reflects hunting pressure: numbers rose rapidly at both Ban Sivilai, Thulakhom district, Vientiane province, and at Pakxan, Bolikhamxai province, following its near-cessation (Parr and Parr 1998; J. W. K. Parr *in litt.* 2000, C. Wood verbally 2005).

BLACK-CROWNED NIGHT HERON *Nycticorax nycticorax*
Potentially At Risk in Laos

Other: Ban Boun-Nua: several heard, after dark, on 21 March 2005.

These birds flew to riverside paddies well after dark, presumably from a secluded day roost. The few recent published records from Laos were reviewed in Duckworth *et al.* (1999). Also, around Vientiane it is frequent in August–October, but very rare at other times, including spring (DVG and JWD unpublished data).

CINNAMON BITTERN *Ixobrychus cinnamomeus*

Phou Dendin NPA: a weak juvenile on a gravel spit in the heavily forested E–W Nam Ou, upstream of the Houay Matiaho, 1 December; caught by hand-thrown net; an adult female on a Nam La river rock, amid paddies and scrub, 10 December; a male, upper Nam Va, 24 March 2005. **Ban Muangyo area:** a female, Ban Dua, 23 March 2005.

Cinnamon Bittern is usually listed as resident in Laos (e.g. Robson 2000), but in Vientiane breeding areas birds occur only from mid-late April to September–October (DVG and JWD unpublished data). Ongoing review traced only the following Lao records from November–March: resident, although commoner in April–September, in Xiangkhouang province (David-Beaulieu

1944); one, 12 March 1996, Sangthong district, Vientiane (Duckworth 1996); several lowland records from Dong Hua Sao NPA, February 1996 (Evans *et al.* 2000a); and one, Nong Tha, Vientiane (a breeding area), 7 March 2005 (JWD unpublished data). Moreover, in Central Annam, Cinnamon Bittern was found to be 'rare, if not absent, in Quangtri during the winter, becoming numerous in the spring' (Delacour and Jabouille 1925), and is extremely rare in Hong Kong in November–early April (Carey *et al.* 2001). Around Chiang Mai, northern Thailand, it showed a seasonal absence, but one different in timing: it occurred during mid-January–October (Deignan 1945). Winter distribution in Laos remains unclear: these winter records were along forest rivers, a habitat not much checked on the Vientiane plain.

HOODED PITTA *Pitta sordida*

Nam Lan CA: one mist-netted, 10 May 2004, near Ban Naten.

The only other Lao records are of two from Ban Boun-Tai in May 1929 (Bangs and Van Tyne 1931; FMNH 78230–78231), only 15 km from Ban Naten; common in Phou Dendin NPA in May 1995 (Duckworth *et al.* 1998a); and frequent in Dong Ampham NPA (South Laos) in May 1997 (Davidson *et al.* 1997, Robson 1997). The paucity of records no doubt reflects more this pitta's late spring arrival and limited survey during May–July (the assumed calling season) than any genuine scarcity.

LONG-TAILED SHRIKE *Lanius schach*

Phou Dendin NPA: two singles, Nam La and trail to Ban Tan, 10–12 December, [and two singles, Nam Pha, 6–8 December]; one, Ban Namong, 21 March 2005. None by the Nam Ou in December, but one on 12 March 2005.

Around Phongsaly town: one on 24 May 2004. Seen daily on all trails surveyed in December; but in March 2005, only one record: two, Bakong trail, 19 March 2005.

Ban Muangyo area: two, Ban Muangyo–Ban Bomang, 24 December. Ban Dua, one, 24 December, four, 25 December; two songsters, 23 March 2005. **Other:** singles, [near Ban Ngay-Nua, 26 March 1996]; Ban Boun-Tai, 4 March and Ban Boun-Tai–Ban Long Nay Mai, 5 March 2005; beside the Nam Ou, near Ban Noua, 26 November. Three roadside singles in the Ban Muangyo–Ban Boun-Tai–Ban Paknamnoy stretch, 27 December. One near Ban Kachet (Louangphabang province), 27 December.

Long-tailed Shrike has a curious Lao distribution. Around and south of Vientiane it is very scarce (Thewlis *et al.* 1996, Duckworth *et al.* 1998a, Evans and Timmins 1998, Round 1998, Walston and Vinton 1999), being unrecorded by some long surveys (Duckworth 1996, Tizard 1996, Davidson *et al.* 1997, Cunningham 1998, Showler *et al.* 1998a, Steinmetz *et al.* 1999, Evans *et al.* 2000a, Evans 2001). By contrast it is locally common in North Laos, at Ban Latsen in Xiangkhouang province; Muang Xaisomboun; the Upper Lao Mekong; Nam Xam NPA; Nam Et–Phou Louey NPAs, and Nam Ha NPA (Tizard *et al.* 1997, Showler *et al.* 1998b, Davidson 1998, Duckworth *et al.* 2002). It is not, however, simply a northern or highland species: it was formerly common in Bangkok (Round and Gardner *in press*) and inhabits Xe Pian NPA's extreme lowlands (Thewlis *et al.* 1996). Understanding the Lao distribution is further complicated by the previously unsuspected seasonality in the present records: many fewer birds were seen, especially around

Phongsaly town, in March than in December. It is unclear whether the birds left or simply became more elusive. The species is believed sedentary in Hong Kong (Carey *et al.* 2001), but Deignan (1945) found a distinct pattern on the Chiang Mai plain (northern Thailand), with birds absent in early March–mid-July. He suspected movement to higher ground, but this cannot bear on Phongsaly status. It may never have been numerous in the province in spring: in 1929 it was listed only for Ban Laophouchai and near Phongsaly town (FMNH 80104), at c.800 m, by Bangs and Van Tyne (1931). It has recently declined around Bangkok (Round and Gardner in press), and has not been recorded in Vientiane since 1995 (Duckworth *et al.* 1998a; JWD unpublished data). Whatever factors drive the Thai decline may operate in Laos, urging a review of historical records and clarification of current status. Birds were mostly in open secondary areas, with Grey-backed Shrike in the taller, denser and more woody secondary growth.

[INDOCHINESE GREEN MAGPIE *Cissa hypoleuca* Potentially At Risk in Laos

Around Phongsaly town: Phou Fa, one, 28 November.

The observer (WGR) saw no black-and-white tertial patterning, ruling out *C. chinensis* (frequent in Phongsaly province: Appendix 1). However, the bird showed only briefly and, given the great geographical and ecological separation from Phongsaly to other known Lao records, identification is provisional. Lao records before 1997 came only from Champasak and Attapu provinces, but it was later found north to the Nam Chat/Nam Phan Provincial Protected Area in Bolikhamxai province, although very locally and at lower densities (Dickinson 1970a, Duckworth *et al.* 1999). Occurrence even in far northern Laos is reasonable, because the species inhabits adjacent China (Robson 2000).]

LARGE-BILLED CROW *Corvus macrorhynchos*

Phou Dendin NPA: two, Ban Pumouang, 19 March 1996; one, 3 hr walk east of Ban Hathin, 20 March, one upstream of the Nam La mouth, 27 March, and two singles and a duo, Ban Hathin–Ban Pusum, 28 March 1996. Duos, Ban Hathin and near Ban Sopkhang, 30 November; six, near Nam Ou camp #2 and two, near Houay Hin mouth, 1 December; five, upstream of Houay Hin mouth, 2 December; three, upstream of the Nam Hin, two near Hat Chan, and one near 22°03'N 101°55'E (GPS), 3 December. Two, downstream of Houay Hin, one near Nam Ou camp #2, 4 December; five, Nam Ou camp #2, 5 December; 1–2, Ban Sopkhang, 5–7 December; two, Ban Tatoung (Nam Khang), 6–7 December; eight, Ban Hathin, 7 December. Nam Khang, Ban Tatoung–trailhead to Ban Soppha, 16 on 6 December, 13 on 9 December. At least four, Nam La, 10 December. Two, Ban Tan (well inland of the Nam Ou), 10 or 12 December. Three near Ban Siengnua (Nam Houn), 11 December. Seven, Nam Ou, Ban Hatxa–Ban Hathin, 17 March 2005; recorded Ban Hathin, 18 March; one, Ban Sopkhang, 21 March 2005. Heard near Ban Houangtaye, 22 March and Ban Laophouchai–Nam Va, 24 March 2005. **Around Phongsaly town:** five near Ban Bakong (a highland area well away from any large stream), 18 December. **Other:** two, Nam Ngay, Ban Ngay–Nua–Ban Ngay–Tai, 26 March 1996. Along the Nam Ou outside Phou Dendin NPA, one near Ban Hatxa, 14 March 1996, 1–2 nearby on 20 March 1996, two, 1 hr

journey upstream, 18 March 1996, and two groups of 1–2, 2–3 hr downstream of Khoa, 30 March 1996. Two downstream of the Nam Va mouth, 7 December; five, Ban Sopong, three, Ban Hatkao, and three near Nam Houn mouth, 11 December; five Ban Sopong, 13 December. Two far from the Nam Ou (near the Nam Li permanent stream) near Ban Namli, 27 December. Much less intensive observation in March 2005 found with up to five on all four days along the Nam Ou, and singles near Ban Houangtaye and the upper Nam Va. All sites are on/near the Nam Ou except where stated.

Duckworth *et al.* (1999) overlooked this crow as a key species, yet, except in Phongsaly province, no viable population is known in Laos north of the Pakxan–Nam Ngum plain, following widespread declines; many historical sources called the species common, even in towns (Duckworth *et al.* 2002, Bezuijen 2006, C. Wood, M. Hedemark and A. Johnson verbally 2005, JWD, WGR, TT unpublished data). (Assessment as ‘common’ on the Louang–Namtha plain in Tizard *et al.* [1997] was an error, and none was seen there in several months in 2005: TT unpublished data). Across Laos, crows are among the species most frequently mentioned when villagers are asked which species of wildlife have declined (T. E. Hansel verbally 2004). Bangs and Van Tyne (1931) collected one crow along the Nam Ou on 7 June 1929 (FMNH 78560), but as Coolidge and Roosevelt (1933) mentioned a ‘flock of crows...like a small black cloud’, some way upstream of Khoa, it is safe to assume that they were common. In surveyed parts of Phongsaly province in May 1995, status resembled that in 2004: five singles between Khoa and Ban Hatxa on 23 May, and small flocks of up to four in Phou Dendin NPA, especially along the Nam Ou (Duckworth *et al.* 1998a, WGR unpublished data).

Figures above give minima in winter 2004–2005 of 46 for the NPA Nam Ou and associated streams upstream of Ban Hatxa, 14 for the stretch downstream to and up the Nam Houn, five near Phongsaly town and two in the far south of the province. Records along small rivers and near interior villages suggest that many more birds live in non-visited parts of the NPA, and, based on records away from the Nam Ou, perhaps widely in the province. This substantial population (in Lao terms) should not breed complacency. Crows were discussed with villagers widely in and around the NPA, and information is surely reliable: no other species is confusable, crows are conspicuous, apparently have a single unique Lao name (*nok ka*), and are of economic interest (as a presumed fish, chick, or crop thief). Informants were prompted to think about status around forest rivers, not just villages, and all reported major declines within living memory, some explicitly stating that although crows are still regularly seen, previously there were many more. Most suggested no cause for decline, but a boatman attributed it to poisoning by fishermen (through treated dead fish left by the Nam Ou). Other villagers felt that such poisoning, certainly occurring, could not be widespread or sustained enough to drive such declines. Hmong informants in Ban Tatoung speculated upon a disease outbreak. Crows seen perched and flying low right beside various villages, and remaining unflushed close to passing boats, lent objective supporting to villagers’ unanimous statements that they neither shot nor ate crows (that crows eat carrion was a reason given at least twice). The near-total loss of crows from urban and agricultural habitats from North Laos happened before

1980 (Duckworth and Tizard 2003), so long ago as to hamper meaningful discussions on causation with today's people away from Phongsaly. Until it is clear why populations are so low, the possibility remains that the factor(s) responsible is/are also impacting less visible species of scavenger or predator.

ASHY WOODSWALLOW *Artamus fuscus*

Phou Dendin NPA: one, Ban Tan–Ban Tatoung, 24 March 1996; two, lower Nam Khang, 25 March 1996. Singles, Nam Ou–Ban Tan, 13 March 2005, and downstream of Ban Hathin, on 27 March 2005. **Around Phongsaly town:** three, Bakong trail, 19 March 2005.

Ashy Woodswallow was recorded near Phongsaly town (FMNH 80072–80073) and at Ban Laophouchai (FMNH 80074) in April–May 1929 by Bangs and Van Tyne (1931), and in Phou Dendin NPA in May 1995 (two near the Nam La: Duckworth *et al.* 1998a). The lack of records in November–December, despite specific searches and long periods in suitable habitat, suggests the species is absent in winter, and indeed Delacour and Jabouille (1931) stated that it occurred in northern Indochina only in spring and summer. The 'resident' status in Duckworth *et al.* (1999) and Robson (2000) is hence misleading, at least for some Lao populations.

SHORT-BILLED MINIVET *Pericrocotus brevirostris*

Nam Lan CA: a male and female near Ban Long Nay Mai (c.740 m) on 15 May 2004.

Species identification was based on the wing-pattern observed on the perched birds. This sighting is lower than previously known in Laos (above 1,080 m; Duckworth *et al.* 1999), reflecting records at 750 m in Vietnam (Hill 2000).

YELLOW-BELLIED FANTAIL *Rhipidura hypoxantha*

Phou Dendin NPA: one in a mixed-species flock, Ban Sopkhang (c.510 m), 6 December. Common, Ban Tan–Vietnamese border (c.1400–1,600 m), 16–17 March 2005.

The previous lowest Lao record was only c.1,700 m (Duckworth *et al.* 2002) although Robson (2000) recorded wintering birds in South-East Asia as low as 180 m, and it is common at c.200 m in mid-winter in the Hukaung Valley, Myanmar (JWD and TT unpublished data).

ASIAN PARADISE FLYCATCHER *Terpsiphone paradisii*

Phou Dendin NPA: singles, Ban Tan–Ban Tatoung, 24 March 1996; near Ban Hathin, 26 March 1996; Ban Tan–Nam Ou, 18 March 2005; near Ban Sopkhang, 23 March 2005. **Around Phongsaly town:** Phou Fa, one, 23 May 2004. **Nam Lan CA:** two, Ban Naten, 10 May; one, Ban Naten–Ban Boun-Tai, 13 May; singles, Ban Long Nay Mai, 17, 19 and 20 May, three, including a juvenile, Ban Namaek, 29, 30 and 31 May 2004.

All May 2004 records and that on 23 March 2005 were *T. p. indochinensis*, which is assumed to be a breeding visitor to North Laos, while *T. p. incei* was not listed for the country (Robson 2000). However, both were collected by David-Beaulieu in September 1938 in Xiangkhouang province (*indochinensis*: MNHN CG 1940-140 and MNHN CG 1940-150; *incei*: MNHN CG 1940-141 and 1940-145 to 1940-149). All Phongsaly surveys in March–September found the species (Bangs and Van Tyne 1931, Duckworth *et al.* 1998a; Appendix 1), so the lack of records

in November–December, despite ample time in suitable habitat, corroborates the winter emigration of *T. p. indochinensis* from North Laos (David-Beaulieu 1944, Robson 2000).

BROWN DIPPER *Cinclus pallasii* Potentially At Risk in Laos
Phou Dendin NPA: on the Nam Ou, singles near Ban Pumouang on 19 March 1996, near the Nam Long mouth on 28 March 1996, downstream of the Nam Long mouth on 30 November and upstream of Ban Pumouang on 19 March 2005. One on the Nam Pha, near Ban Soppha, on 7 December.

Recent Lao records of Brown Dipper come from six survey areas, including Phou Dendin NPA (Thewlis *et al.* 1998, who erroneously sited the 1996 records outside the NPA), but in only two was it common, and there only locally so (Duckworth *et al.* 1999). This scarcity reflects rarity in northern Thailand (Deignan 1945), although it can be common in Vietnam at similar latitude (e.g. Vogel *et al.* 2003). Distribution in Phou Dendin NPA is localised, with Nam Ou records being at similar sites in each year (in 1995, there were singles along the lower Nam Khan on 24 May and the lower Nam Long on 25 May: WGR unpublished data). The only records from the higher hills, a single and a duo along the upper Nam La (upstream of Ban Tan), on 27 May 1995 (WGR unpublished data) come from the wettest survey month: possibly, dippers leave the higher streams in the dry season.

BLACK-BREASTED THRUSH *Turdus dissimilis* Little Known in Laos

Around Phongsaly town: Phou Fa: at least one with 20–30 thrushes on 27 November, two with three thrushes on 10 December, and one with another thrush on 15 December; probably absent during the March 2005 survey. **Phou Taleng:** at least two with five thrushes on 9 December; at least one on 21 December; at least two on 22 December; probably present on 17 March 2005; at least three, probably nine or more, on 20 March 2005. **Nam Lan CA:** one, Ban Long Nay Mai, 5 March 2005.

These counts are minima: most thrushes are shy in Laos, so only c.20% were identified to species. Many Asian thrushes give a mutually similar *seeih* call; all identified birds in December were Black-breasted excepting two single Eyebrowed Thrushes and 1–2 Grey-backed Thrushes. Many fewer were identified in March, and whether Black-breasted was still the commonest is unclear. No recent survey found Black-breasted Thrush in an NPA, except for three probable records, Nakai–Nam Theun NPA, November–December 1998 (Robichaud and Stuart 1999); most records were from markets (Thewlis *et al.* 1998, Duckworth *et al.* 1999, 2002), including a single male in Oudomxai town in February 2005 (C. Wood *in litt.* 2005). These records are the only field evidence that the species is ever widespread and numerous in Laos. Most *Turdus* that winter in Thailand seem to be irregular and irruptive in occurrence (Round 1983) and the same is presumably true in Laos, so it is unclear whether the province is particularly suitable for the species, or whether winter 2004–2005 simply brought many birds to Laos. Robson (2000) thought that it might breed in North Laos, but Bangs and Van Tyne (1931), collecting in late April–early June, found none in Laos, and the present surveys shed no light.

GREY-WINGED BLACKBIRD *Turdus bouboul* Little Known in Laos

Around Phongsaly town: a male south-east of Ban Maochaoulouang (c.1,300 m), 19 December.

The only previous Lao records are from two historical localities and of a dead bird in a market in 2000, all in the North (Delacour and Greenway 1940b, David-Beaulieu 1944, Duckworth *et al.* 2002). The present bird was seen only in flight, when the wing patches looked white, not the grey typical of this species. However, NHM specimens vary in patch colour. Almost all have some white, and one, an undated specimen from Darjeeling, India (NHM 81.5.1.794) is effectively all-white; two from Bhutan (NHM 1939.1.17.480, November, and NHM 1933.11.16.598, July) are almost as pale.

LESSER SHORTWING *Brachypteryx leucophrys*

(Selected records only) **Nam Lan CA:** one collected (MHNG 1922.077) on 6 March 2005 near Ban Long Nay Mai (c.740 m).

Duckworth *et al.* (1999) gave a lower altitude for Laos of 1,000 m, but Deignan (1945) recorded it down to c.350 m in northern Thailand, and considered it relatively independent of altitude, if forest was suitable.

BROWN-BREASTED FLYCATCHER *Muscicapa muttui*

Phou Dendin NPA: two mist-netted together near Ban Sopkhang (c.560 m) on 22 March 2005, one collected (MHNG 1933.015).

This is the first Lao record of this flycatcher, which breeds in south-west China and W Tonkin (Vietnam) generally at 1,220–1,645 m (Robson 2000).

PALE-CHINNED FLYCATCHER *Cyornis poliogenys*

Nam Lan CA: an adult mist-netted and photographed near Ban Namaek on 31 May 2004.

This species, previously unrecorded in Laos, is resident in Myanmar and south-west China. This individual's morphology corresponds with *C. p. laurentei* of south Yunnan (La Touche 1921): absence of grey on the head, and a dull fulvous chin and upper throat.

PURPLE COCHOA *Cochoa purpurea* Little Known in Laos

Around Phongsaly town: a male, Phou Fa, 10 December.

The only previous Lao record is of nine freshly killed birds in a North Lao market on 12 February 1999 (Duckworth *et al.* 2002). This bird is notoriously difficult to see (although this individual perched for many minutes in the open mid-storey), hindering assessment of its actual status in Phongsaly and indeed Laos.

PURPLE-BACKED STARLING *Sturnus sturninus*

Other: a male at Ban Boun-Nua on 22 March 2005.

The only three previously published Laos records are from the North (Duckworth *et al.* 2002 and references therein), but it is much under-recorded: in Vientiane city it is quite common on passage, especially in September (DVG and JWD unpublished data).

BLACK-COLLARED STARLING *Sturnus nigricollis*

Other: at least two downstream of Khoa on 30 March 1996.

One was collected by Bangs and Van Tyne (1931; FMNH 80160) upstream of Khoa on 7 June 1929, but

the only other records from the province are provisional identifications of groups of eight and two downstream of Khoa on 5 June 1995 (WGR unpublished data). It is now very localised across the Lao northern highlands (Tizard *et al.* 1997, Showler *et al.* 1998b, Brooks and Sørensen 2001, Duckworth *et al.* 2002; TT unpublished data), paralleling the status of *Acridotheres mynas* (see below).

COMMON MYNA *Acridotheres tristis*

Other: two in Ban Boun-Tai on 25 May 2004 and 5 March 2005.

This myna is so scarce across the Lao northern highlands, following steep decline (reviewed in Duckworth *et al.* 2002), that all records from there should be collated. The only historical record from Phongsaly province is a specimen from Ban Muangyo in mid-May 1929, with no comment on abundance (FMNH 80159; Bangs and Van Tyne 1931). In north Xaignabouli province in March 2004, Common Myna was quite widespread (Xaignabouli town, Hongsa district town, Ngeun district town and adjacent large villages, and Xienghon district town) and in places quite common, but many non-forest birds seemed more common than elsewhere in North Laos (DVG unpublished data). A few in Oudomxai town centre in September 2003 contrasted with none elsewhere in the province (DVG unpublished data). In Louangphabang town in December 2003, DVG (unpublished data), despite heavy searching, found only one small group, which on behaviour may have been escaped cagebirds. Seven there on 24 November 2004, also the result of intensive searching, seemed wild (JWD unpublished data). In Louang-Namtha it is very scarce: TT (unpublished data) in several months in 2005 found only a duo for a few weeks in spring in Louang-Namtha town, and two in Muang Sing.

WHITE-VENTED MYNA *Acridotheres cinereus*

Other: a caged bird in Ban Boun-Nua in December and in March 2005. [Along the Nam Ou, at least twelve downstream of Khoa, and four birds two hours' further downstream, on 30 March 1996; one myna sp. in this reach on 20 March 1996; three on a buffalo, close to Ban Noua, on 26 November.] Crested Myna *A. cristatellus*, never recorded from North Laos (Robson 2000), but known from adjacent Vietnam, in Muong Nhe Nature Reserve (Nguyen Duc Tu *et al.* 2001), was not excluded from bracketed (i.e. provisional) identifications.

As elsewhere in North Laos, including where they were historically common (see Duckworth *et al.* 2002), resident non-forest sturnids are now rare in Phongsaly province: the search for Asian Pied Starling in damp paddies and grass around buffaloes covered just the habitats this myna (and Black-collared Starling) uses in, e.g., Champasak province. Historically, four White-vented Mynas were collected at Ban Muangyo in mid-May 1929 (Bangs and Van Tyne 1931), with one at Ban Sopnao in November 1931 (Dickinson 1970a); and there were five contacts of 1–3 birds (Crested Myna not ruled out) along the Nam Ou between Khoa and the Nam Va mouth during 23–24 May 1995 (Duckworth *et al.* 1998a, WGR unpublished data). The few recent Lao records significantly north of Vientiane include a few in Bokeo and at Ban Latsen, Xiangkhouang province (Duckworth *et al.* 2002), and one caged in Louang-Namtha town in September 2003, but with no wild-living mynas there (DVG unpublished data)

or in several months of 2005 (TT unpublished data). The three largest non-forest sturnids have recently increased rapidly in and around Vientiane city: during the 1990s, White-vented Myna and Black-collared Starling were absent, and Common Myna was scarce (Duckworth 1996, Thewlis *et al.* 1996, Duckworth *et al.* 1998a, DVG and JWD unpublished data). These recently expanded populations are far stronger than anywhere else visited in North Laos (DVG, TT unpublished data), but similar increases will presumably occur in Louangphabang and other large northern towns. Any records of any of the three species from the northern highlands warrant documentation. As elsewhere in Laos (e.g. Thewlis *et al.* 1998), Hill Myna *Gracula religiosa*, a forest species, persisted despite the loss of open-country mynas.

CHESTNUT-VENTED NUTHATCH *Sitta nagaensis* Little Known in Laos

Phou Dendin NPA: one in broadleaved evergreen forest around Phou Namla (c.1,500 m), 16 March 2005.

Although known from adjacent to Phongsaly in West Tonkin, Vietnam (Robson 2000), the only previously known Lao population is in Bolaven Plateau (South Laos) pine forest (Duckworth *et al.* 1998a).

FIRE-CAPPED TIT *Cephalopyrus flammiceps*

Phou Taleng: a flock of 35 on 22 December.

The three previous Lao records come from the Mekong in mid-winter (Delacour and Greenway 1940b, Duckworth *et al.* 1999, 2002), but this tit is more typical of montane forest (Robson 2000). This is by far the largest flock recorded in Laos to date. (A listing for Phou Fa in Robichaud and Sounthala [1995] was in error: Duckworth *et al.* [1999].)

SAND MARTIN *Riparia riparia* / PALE MARTIN *Riparia diluta*

Other: over the Nam Ou, one, Ban Muangngoy, 25 November, and two downstream of the Nam Va mouth, 7 December.

Past 'Sand Martin' records from Laos rarely considered Pale Martin. The Nam Ou birds seemed paler than Sand Martins in Vientiane (rare in winter, but an abundant passage migrant: Duckworth *et al.* 2002, JWD unpublished data), but this is insufficient for identification as Pale Martin (not yet known from Laos).

PLAIN MARTIN *Riparia paludicola* At Risk in Laos

Other: at least five on 30–31 March 1996 in a rugged stretch of the middle Nam Ou.

The lack of Plain Martin records in 2004–2005, especially on the November Nam Ou survey, begs explanation. Bangs and Van Tyne (1931) reported the species 'common' at Ban Muangngoy in May 1929, yet we found none there. In December 1999 many were found along the Upper Lao Mekong (Duckworth *et al.* 2002), indicating there is no winter absence from far-northern Laos. The Nam Ou is narrower than the Mekong, but much further north, in the Hukaung Valley, Myanmar, Plain Martin is locally abundant over pools, agriculture and fallows around rivers as narrow as 5 m in mid-winter (JWD and TT unpublished data). Further information is needed, because the species has declined in South and Central Laos (Thewlis *et al.* 1998), and may also be doing so in the North.

WIRE-TAILED SWALLOW *Hirundo smithii* Potentially At Risk in Laos

Other: 14 along the Mekong between Louangphabang and Pak-Ou, two between Pak-Ou and Ban Houayluang, and two midway between this village and the mouth of the Nam Likna; all on 25 November.

This restriction to the lower Nam Ou echoes that in summer 1929 (Bangs and Van Tyne 1931; FMNH 78295–78299) when it was noted only downstream of Ban Thenkhen, c.35 km from the upstream-most record in 2004 (Appendix 1). It disappears on the Mekong around this latitude, too (Duckworth *et al.* 2002). Numbers along the Nam Ou are insignificant compared with those further south in Laos (see Thewlis *et al.* 1998).

STRIATED SWALLOW *Hirundo striolata*

(Selected records only) **Phou Dendin NPA:** a dozen, Ban Tatoung, 6–7 December. Small numbers, Nam Pha and Nam La, 6–12 December. Five, Ban Siengnua, 12 December. **Other:** locally abundant along the Nam Ou downstream of Ban Muangngoy. Also at least one, and probably fifty, along the Mekong between Louangphabang and the mouth of the Nam Ou on 25 November.

These November–December birds resembled the large, dark, heavy-flying race *H. s. stanfordi*, the widespread presumed resident breeder of Laos and northern Thailand (Robson 2005), often found by wide rivers near karst and other rugged topography (JWD and TT unpublished data). JWD noted none of this taxon in March 2005, but visited no suitable habitat. The many hundred birds of either this species or Red-rumped Swallow *H. daurica* seen in March 2005 in and around Phongsaly town and at Ban Muangngoy (Appendix 1) were a different taxon. At a distance, they looked and sounded like Red-rumped Swallows in Korea (where only Red-rumped occurs: Robson 2000) and, presumed to be this species, in and around Vientiane. However, a few birds (in a flock of 240) studied at Ban Boun-Tai market on 26 March 2005 lacked a rufous hind-collar and so, on characters in Robson (2005), seem to be a race of Striated Swallow, perhaps *H. s. mayri*, a winter visitor to northern South-East Asia (Robson 2005), which is extremely difficult to separate on field views from *H. daurica* (Lynam *et al.* 2006: 207). TT also found birds in March 1996 to be widespread but to defy easy identification compared with birds elsewhere in Laos. In-hand examination is necessary for further resolution. A heavy passage upstream along the Nam Ou on 29 March 1996 and a general northerly movement apparent on some days in March 2005 suggested that some, at least, were on migration. *H. s. stanfordi* was recorded from Phongsaly town on 24 April 1929 (FMNH 78290) and the Nam Ou downstream of Ban Muangngoy on 10 June 1929 (FMNH 78289) by Bangs and Van Tyne (1931; as *H. d. striolata*). There seem to be no Lao specimens of *H. s. mayri*.

STRIATED PRINIA *Prinia criniger* / BROWN PRINIA *Prinia polychroa*

Phou Dendin NPA: one between the Phou Namla camp and Ban Tan, 17 March 2005. **Around Phongsaly town:** Bakong trail: one on 18 December, two on 23 December.

These two species look very similar; either would be a major extension of known range. Striated Prinia is not known from Indochina, although it inhabits adjacent Myanmar (Robson 2000). Brown Prinia, common in southern Indochina, is not known from North Laos,

excepting a provisional report from Vientiane (Duckworth and Tizard 2003 and references therein). In Laos at least, it is strongly associated with deciduous dipterocarp forest, mainly in the lowlands (Duckworth *et al.* 1999).

CHESTNUT-HEADED TESIA *Tesia castaneocoronata*

Phou Dendin NPA: between Ban Tan and the Vietnamese border, one on 23 March 1996, two singles on 11 December and singles on 16–17 March 2005 (all at 1,400–1,600 m).

The only other Lao records are a few sightings in 1997 in Nam Ha NPA (Tizard *et al.* 1997, P. Davidson *in litt.* 2005, TT unpublished data). All birds were seen well and the observers were already familiar with this readily identifiable species.

ARCTIC WARBLER *Phylloscopus borealis*

Phou Dendin NPA: one, silent, not trapped, in Ban Hathin on 26 March 2005.

This is an early date: the main passage in Hong Kong, roughly at the same latitude, is during the first half of May with regular April records; the earliest date ever is 30 March (Carey *et al.* 2001). A much smaller dataset suggests a similar May peak in Vientiane (JWD unpublished data). There are occasional mid-winter records from nearby lowlands, e.g. one in Hong Kong on 24–25 December 1987 (Carey *et al.* 2001) and two at Houay Nhang, Vientiane, on 19 January 1993 (Thewlis *et al.* 1996), but none from the Lao northern highlands.

BLYTH'S LEAF WARBLER *Phylloscopus reguloides*

(*Selected records only*) **Phou Dendin NPA:** one (MNHN CG 2005-2674) collected on 20 March 2005 near Ban Hathin. **Nam Lan CA:** two (MNHN CG 2005-2673 and CG 2005-2674) collected on 6 and 7 March 2005 near Ban Long Nay Mai.

There were many sight records assigned to Blyth's Leaf Warbler *sensu* Inskipp *et al.* (1996). The three specimens were assigned by molecular analysis to *Phylloscopus goodsoni*, *sensu* Olsson *et al.* (2005) who divided the former '*P. reguloides*' into three species; their *P. goodsoni* includes *P. g. goodsoni* of Hainan and *P. g. fokiensis* (of East China) which share similar Cytochrome-b sequences. Especially since these birds were taken in March, when many taxa are moving, it should not be assumed that this taxon predominated among 'Blyth's Leaf Warblers' found on the surveys; on ranges hypothesised in Olsson *et al.* (2005), much denser sampling is needed. Although Blyth's Leaf Warbler is very close morphologically to the newly described Emei Leaf Warbler *P. emeiensis*, according to Alström and Olsson (1995), Emei Leaf Warbler was never observed feeding 'in the typical *P. reguloides* manner (the latter often looks on the undersides of branches, frequently hanging almost vertically head-down'. Only birds showing this behaviour were identified during the current surveys as Blyth's Leaf Warbler *sensu lato*, but it remains unclear which of the taxa distinguished by Olsson *et al.* (2005) forage in this fashion.

YELLOW-VENTED WARBLER *Phylloscopus cantator*

Phou Dendin NPA: singles, Ban Tatoung, 7 December; [near Ban Soppha, 8 December;] and near Ban Tan (c.800–900 m), 11 December.

One near Ban Hathin (Phou Dendin NPA) on 25 May 1995 was listed as provisional in Duckworth *et al.*

(1998a) and was omitted by Thewlis *et al.* (1998), but there is no doubt over identification (Duckworth *et al.* 1999, WGR unpublished data). A new taxon (now called *P. c. pernotus*) was described from a bird collected at Ban Muangyo on 19 May 1929 (FMNH 78011; Bangs and Van Tyne 1930). This date implied local breeding, as suspected elsewhere in the northern highlands by Davidson (1998), so it was surprising not to find the species in March 1996 or 2005.

GREY-CROWNED WARBLER *Seicercus tephrocephalus*

Alström and Olsson (1999) and Martens *et al.* (1999) reclassified the nominal 'golden-spectacled warbler *S. burkii*' into several species. Their divergent conclusions caused confusion over identification, particularly as some information in Robson (2000) is incorrect. Recent surveys in Laos pre-dated these revisions, so the Lao distribution of each segregated species remains poorly known (as for the rest of South-East Asia). Ranges in Robson (2005), somewhat speculative pending comprehensive review of available data, suggest four species should occur in Laos: Grey-crowned Warbler, Martens's Warbler, Plain-tailed Warbler *S. soror* and Bianchi's Warbler. Hence, these birds were a focus of survey in mid-late December 2004 and in March 2005, but not, unfortunately, during the river survey in December; hence there is too little information to characterise status of different forms at lower altitudes. Grey-crowned Warblers were identified through a single but slightly rippling *chrrrp* call, lacking the 'clean' sound of Martens's Warbler, but otherwise rather similar. In November–December, such birds were common in scrub and occurred in forest, often at higher altitudes. By March, they were markedly scarcer at the survey sites, being recorded on only 2–3 observation days. Records from lower areas included one along the lower Nam Khang on 7 December, two singles in scrub around Ban Boun-Nua on 23 December, one around Ban Muangyo on 24 December, and one at Ban Dua on 25 December. They used both under- and mid-storey of forest. Robson's (2000) listing for North Laos was based on a skin in the NHM from Nape, Bolikhamxai province, in 1928; but *S. omeiensis* was not excluded from this identification (C. R. Robson *in litt.* 2005). Based on calling birds in 2004–2005, this is the common wintering form of the Vientiane plain (JWD unpublished data). The Kelley-Roosevelts' three birds from Phongsaly on 24 April were all assigned to this form by Bangs and Van Tyne (1931), but this needs re-evaluation because it pre-dates the discovery of Martens's Warbler.

MARTENS'S WARBLER *Seicercus omeiensis*

Birds were assigned in the field to Martens's Warbler based on call, a 'clean'-sounding *chip*. Most records in December, when it was recorded widely, came from middle altitudes, but there were highland records at Phou Taleng on 22 December and on Phou Fa on 28 November, 15 and 26 December. In March there were sight records only from Phou Taleng, where it was more common than it had been in winter. In addition, the Cytochrome-b sequences of two collected specimens, MHNG 1922.078 from Ban Long Nay Mai (Nam Lan CA) on 6 March 2005, and MNHN CG 2005-2677 from Ban Sopkhang (Phou Dendin NPA) on 23 March 2005, were identical to published sequences of Martens's Warbler. Most birds were within a few feet of the ground, and only rarely went

much above eye-level. Hence, they are presumably susceptible to mist-netting compared with related species. Historical records and specimens have not yet been fully reviewed, and it is unclear if this hitherto unrecognised form has previously been collected in Laos.

BIANCHI'S WARBLER *Seicercus valentini*

Bianchi's Warblers were identified in the field through a wistful-sounding *heu* note. A collected specimen (MNHN CG 2005-2678; 19 March 2005, from Ban Hathin) had Cytochrome-b sequence corresponding with published data to *S. v. latouchi*. Apart from the collected specimen and one field record at Ban Sopkhang on 5 December, all records came from high altitudes, as did the only other recent Lao record, from Xiangkhouang (Duckworth *et al.* 2002); but effort on this genus on the main lowland survey, of the Phou Dendin rivers in December, was minimal, so its true lowland status is unclear. Most birds recorded were in forest rather than scrub, the single along the Bakong trail being in a small wooded coombe. There was no obvious difference in abundance or distribution between December and March surveys. Most birds were in the mid-storey, occasionally moving into the lower canopy or taller bushes of the understorey. Historical records and specimens have not yet been fully reviewed, although there are at least two historical Lao specimens (from Bokeo and Xiangkhouang provinces) in the NHM (C. R. Robson *in litt.* 2000).

STRIATED GRASSBIRD *Megalurus palustris*

Ban Muangyo area: two together, Ban Dua, 25 December, in rank herbage and tall grass near the river; two there, in subsong and in separate territories, 23 March 2005.

This species has an enigmatic Lao distribution. Historically, it was collected only at Ban Muangyo and in Xiangkhouang province (Delacour and Jabouille 1927, Bangs and Van Tyne 1931, David-Beaulieu 1944, Dickinson 1970a) and from an untraced locality (d'Orléans 1894). It still inhabits both these upland areas (Duckworth *et al.* 2002, these data). Other modern records come from the Mekong bank in Vientiane town and in the Pakxan wetlands during 1992–1995 (Thewlis *et al.* 1996, Duckworth *et al.* 1998a), the Mekong plain of Sangthong district in 1996 (Duckworth 1996) and the upland rank grass of Xaisomboun in 1999 (Duckworth *et al.* 2002). It has abandoned the Vientiane town site and probably Pakxan (C. Wood verbally 2005, JWD unpublished data). The lack of records from the Mekong and other wetlands in South and Central Laos is surprising: the species inhabits wetlands around Phnom Penh (Thomas and Poole 2003) and Bangkok, where it has declined (Round and Gardner *in press*). Its decline in Vientiane might reflect only local habitat change, but a more extensive factor (e.g. the widespread burning of grass in the late dry season) cannot be excluded. In Nepal it is now rare (assessed as Nationally endangered), threatened by loss and degradation of habitat (Baral and Inskipp 2004).

HWAMEI *Garrulax canorus*

Phou Dendin NPA: one, lower Nam Khang, 25 March 1996. **Around Phongsaly town:** three, Khounsouk trail, 14 December; two groups totalling five birds, Bakong trail, 18 December, at least one there, 23 December; several groups there, 19 and 24 March 2005. At least one

near Ban Phagnexi, 19 December. At least one, trail to the Nam Fan, 20 December.

Evidently common in the scrub, ruderals and coarse grass around Phongsaly town, Hwamei was also recorded from two sites in the province in April–May 1929 (Bangs and Van Tyne 1931). It is a much-sought cagebird, recently added to Appendix II of the Convention on International Trade in Endangered Species (CITES), so it seems prudent to collate all field records in Laos.

STREAK-BREASTED SCIMITAR BABBLER *Pomatorhinus ruficollis*

(*Selected records only*) A bird mist-netted near Ban Long Nay Mai (Nam Lan CA) on 6 March 2005 in morphology more resembled White-browed Scimitar Babbler *P. schisticeps* than it did most Streak-breasted Scimitar Babblers at MNHN (n=25), the exceptions being MNHN CG 1940-921 (January 1939, Taloun, Louangphabang province) and MNHN CG 1940-923 (Bokeo province). The throat to belly lacked any streaks and were particularly white by comparison with Streak-breasted Scimitar Babblers from Xiangkhouang province, Phongsaly province (Ban Muangyo; MNHN CG 1930-167) and Tonkin. While the plumage thus resembles White-browed, the red iris and the proportionate bill-length fit Streak-breasted, and a hybrid cannot be ruled out. Hence, the plumage-based identification of White-browed Scimitar Babbler from Phou Dendin NPA in May 1995 in Duckworth *et al.* (1998a) should be modified to refer to this species-pair. Geographical plumage variation in Indochina in these two scimitar babblers, both with numerous races, is puzzling. The mist-netted bird's unstreaked underparts contrasted with clear streaks on the Ban Muangyo bird and very heavy streaking on specimens from Tonkin, while specimens from Xiangkhouang province and Yunnan (China) are not so streaked and show various amount of buff-grey on the breast. Plumage varies even within a locality as shown by specimens from Taloun, January 1939 (MNHN CG 1940-921, 1940-924 and 1940-925), and also apparent under field viewing in central Laos (Duckworth *et al.* 1998a). Morphologically typical Streak-breasted Scimitar Babblers were found widely during the 1996–2005 surveys (Appendix 1) but too few were seen well enough to assess the proportion lacking visible underpart streaking.

[SLENDER-BILLED SCIMITAR BABBLER *Xiphirhynchus superciliosus*

Phou Dendin NPA: one, 15 March 2005, seen briefly near the Phou Namla camp, at a grassy ridge with *Alnus nepalensis* trees and bushes, surrounded by forest.

This would be the first record for Laos; the species inhabits various adjacent areas (Robson 2000). The bird perched on a horizontal branch of a low tree, with its body to the observer's side. Through binoculars at c. 30 m range was seen a dark passerine with a conspicuous long curved bill. No other possible species fits this description, but because the view was so brief, the record is kept provisional.]

CUTIA *Cutia nipalensis*

Phou Dendin NPA: a group of four and a duo, Phou Namla camp–Vietnam border (c. 1,500 m), 15 March 2005.

This is the first recent record from North Laos, although *Cutia* was recorded in Xiangkhouang province by David-Beaulieu (1944; referring to a Delacour and Greenway specimen, winter 1938–1939; MNHN CG 1940-977), and recently from the high Annamites of South and Central Laos (Timmins and Vongkhamheng 1996, Evans and Timmins 1998). The lack of 1990s records from the northern highlands in Tizard *et al.* (1997), Showler *et al.* (1998b) and Davidson (1998, 1999) is odd, because surveys covered forest at suitable altitudes.

CHESTNUT-FRONTED SHRIKE BABBLER *Pteruthius aenobarbus*

(Selected records only) **Phou Dendin NPA**: one near Ban Hathin (c.550 m) on 26 March 1996. **Nam Lan CA**: one near Ban Long Nay Mai (c.740 m) on 7 March 2005.

This species generally occurs in Laos above 900 m, locally down to 700 m (Duckworth *et al.* 1999).

BLACK-HEADED SIBIA *Heterophasia melanoleuca*

Around Phongsaly town: a flock of 4–6 near the summit of Phou Fa, 14 September 2003; a captive in the town on 24 May 2004. **Nam Lan CA**: one near Ban Long Nay Mai, 6 March 2005.

These are the first North Lao records of grey-backed birds, sometimes separated as Black-headed Sibia *H. desgodinsi*. Grey-backed forms are otherwise known in Laos only from the Bolaven Plateau (Engelbach 1932, Dickinson 1970a; *H. m. engelbachi*) and Phou Ahyon (Timmins and Vongkhamheng 1996; presumably *H. d. kingi*, Robson 2005), but occur north to central China (Robson 2000), with *H. m. tonkinensis* in Tonkin (Robson 2000, Vogel *et al.* 2003). Previous North Lao records of the complex came only from Nam Ha NPA, of a black-backed form, 'Dark-backed Sibia' *H. melanoleuca sensu stricto* (Tizard *et al.* 1997, Duckworth *et al.* 1999).

RUFOUS-BACKED SIBIA *Heterophasia annectans*

(Selected records only) **Nam Lan CA**: one near Ban Long Nay Mai (c.740 m) on 16 May 2004.

This bird usually lives above 1,000 m, although it winters in north Myanmar down to 215 m (Robson 2000).

YELLOW-VENTED FLOWERPECKER *Dicaeum chrysorrheum* (Selected records only) **Around Phongsaly town**: one south-east of Ban Maochaoulouang (c.1,300 m), 19 December.

This exceeds the upper altitudinal limits in Duckworth *et al.* (1999; Laos) of 980 m, and Robson (2000; South-East Asia) of 1,100 m, but a single non-breeding season record means little.

YELLOW-BELLIED FLOWERPECKER *Dicaeum melanoxanthum* Little Known in Laos

Around Phongsaly town: a female in the Phou Fa Hotel garden, all day, on 14 December; not found subsequently.

There are only three previous Lao records of this species, all from the northern highlands, and including occurrence in towns (David-Beaulieu 1948, Davidson 1998).

EURASIAN TREE SPARROW *Passer montanus*

Nam Lan CA: recorded in Ban Naten on 12 May 2004, daily in Ban Long Nay Mai on 17–21 May 2004 and 5–8 March 2005, and Ban Namaek on 29–30 May 2004.

Around Phongsaly town: recorded in the town (no information on numbers) on 23 May 2004. An unidentified *Passer* on 16 March 2005. **Other**: two in Ban Boun-Nua on 16 December; six on the same buildings on 22 March 2005. Recorded in Ban Boun-Tai on 6, 15, 22 and 24 May 2004; 4–5, 13–14 and 26 March 2005. Several, Ban Bouamphom, 26 March 2005.

This species's rarity in eastern Phongsaly province defies easy explanation. Phongsaly is by far the largest Lao town visited by JWD or WGR lacking widespread resident sparrows, the more surprising because tree sparrows were collected there (FMNH 80382–80386) and in Ban Muangyo (FMNH 80388–80398) in 1929 (Bangs and Van Tyne 1931). Search effort was very high in Phongsaly town and Ban Boun-Nua in December 2004 and March 2005, and high in Ban Muangyo (December) and in Nam Ou villages (several, December, but only Ban Hathin, March 2005). In late December and in March 2005, observers on car journeys looked hard for sparrows, and found them only (and easily) in Ban Boun-Tai and further south-west. The lack of records hence reveals absence or extreme scarcity at these eastern sites during December and March. The status difference between west and east of the province does not reflect seasonal movement, given the uneven distribution within March 2005; and young had fledged in Phongsaly town by 25 April 1929 (Bangs and Van Tyne 1931), so birds must have been present in March then. The upper altitudinal limit of 1,350 m for Laos in Duckworth *et al.* (1999) overlooked these Phongsaly town records. The sparrowless Nam Ou villages lie well under 1,000 m, as does Ban Muangyo, a large longstanding town amid paddies, in which sparrows would certainly abound were they in or south of Vientiane. Duckworth *et al.* (1999) stated that the species is 'not yet in many of the smaller and/or more remote settlements'; while literally true, factors other than village size and remoteness can evidently render a settlement unsuitable.

WHITE WAGTAIL *Motacilla alba*

Recent primary sources from Laos rarely separated White Wagtail records to race, and specimens have not been critically reviewed. Three forms were found on the surveys.

The scarcest form was '*M. a. ocularis*' (*M. a. lugens*, rare in South-East Asia and scarce in Hong Kong [Carey *et al.* 2001, Robson 2005] was not ruled out): two first-winters at the Phou Fa Hotel, 27 November–15 December and one there, 18 March 2005; two (one an adult) on a town-centre roof, 10 December; one, Ban Muangyo, 22 March 2005 [one on a Nam Ou shingle bar near Ban Hatxa, 26 November]. In Vientiane, this form is only a passage migrant (JWD unpublished data), although it winters at nearby Pakxan (C. Wood verbally 2005) and in Hong Kong is more common in mid-winter than in autumn (Carey *et al.* 2001); at all surveyed Lao sites it is much scarcer than *M. a. leucopsis*. In contrast to Phongsaly, Deignan (1945) considered it to avoid towns in northern Thailand.

Along the Nam Ou and tributaries in Phou Dendin NPA in late 2004, *M. a. alboides* abounded. It was scarcer downstream of Ban Hatxa, and on the Nam Houn was much outnumbered by *M. a. leucopsis*. It occurred the length of the Nam Ou and five were seen on 25 November on the Mekong between Louangphabang and Pak-Ou. It was not recorded in Phongsaly town, and there were only

two paddy records: an adult by the Nam Hoy (24 December) and a first-winter at Ban Dua (25 December). Birds were usually in duos, and in December, at sites where this race was outnumbered by *M. a. leucopsis*, mixed duos, clearly interacting together, were seen often. Breeding evidence throughout December included females presenting to males, sexual chasing, and a bird carrying apparent nest material on 7 December. The species was common along the Nam Ou in March 2005, with at least half the birds being *M. a. alboides*. In Laos this race was formerly confounded (e.g. in Duckworth *et al.* 1999) with Mekong Wagtail *M. samveasnae*. Pending specimen review, the southernmost Lao record of *M. a. alboides* is of a single on 5 January 2005 in Vientiane, where it is very scarce (JWD unpublished data). The race may be almost sedentary: it is unrecorded in Hong Kong (Carey *et al.* 2001). WGR (in Duckworth *et al.* 1998a) discovered the species breeding in Laos, along the Nam Ou in May 1995, and identity as *M. a. alboides* is now confirmed.

In late 2004, *M. a. leucopsis* was the most numerous race on the Nam Ou south of Phou Dendin NPA, by standing water (e.g. paddies) and slow streams (e.g. at Ban Muangyo), and along the Nam Houn, even though the latter essentially resembled the narrow upper Nam Ou, where *M. a. alboides* greatly predominated. It was present in all the Nam Ou and tributaries boated in Phou Dendin NPA, but was scarce in the fastest-flowing parts. A few used the same areas of Phongsaly town as '*M. a. ocularis*'. The few records in March 2005 (three singles at Ban Muangyo on 22 March and several along the Nam Ou on 12–19 March) suggested that most wintering birds had left by mid-March. This reflects the first birds returning to northern Korea by mid-March with passage almost over by early April (JWD unpublished data). This is by far the most numerous race on the Vientiane plain, and probably in similar habitats throughout Laos (Duckworth *et al.* 1999, JWD unpublished data). Some birds with pale grey backs might have been *M. a. baicalensis*, but back colour in *M. a. leucopsis* varies with age and sex (Deignan [1945] noted the great variation shown in winter in Thailand) and there was no obvious discontinuity, so identity of the pale grey-backed birds is left open; *M. a. baicalensis* has not been recorded from Laos with certainty.

CITRINE WAGTAIL *Motacilla citreola*

Ban Muangyo area: at least three, Ban Muangyo–Ban Bomang, 22 March 2005. **Other:** two, Ban Boun-Nua, 25 December.

This is a regular visitor to the Mekong in Vientiane and upstream, but these are only the second and third 'inland' Lao records (Thewlis *et al.* 1996, Duckworth *et al.* 1998a, 1999, 2002, Duckworth and Tizard 2003).

CRESTED BUNTING *Melophus lathami*

Phou Dendin NPA: two, Ban Tan–Vietnamese border, 22–23 March 1996. One or more near Ban Sopong, 21 March 2005. **Around Phongsaly town:** up to c.12 on almost every visit to the Bakong trail, both December and March 2005; in the latter month, song was at high levels and at least one female was seen carrying nesting material. [Probably heard on 19 December near Ban Khomen.]

Crested Bunting was collected in the breeding season 1929 at Ban Muangyo (FMNH 80399), at Phongsaly

town (FMNH 80403–80408, presumably around Ban Khomen) and Ban Laophouchai (FMNH 80401–80402; Bangs and Van Tyne 1931). At two other historical collection sites in Laos, the Nakai Plateau and Xiangkhouang province, it has not recently been found, despite extensive observations at appropriate season in the former, and visits to the precise area, but not perhaps in the same season, of the latter (Delacour 1929, David-Beaulieu 1944, Evans and Timmins 1998, Duckworth *et al.* 1998a, 2002). Oustalet's (1898) assessment, as well distributed in Xiangkhouang province and around Louangphabang, seems not to be applicable today. The other Lao historical localities (Taloun, east of Louangphabang; and Lo-Tiao, Bokeo province: Delacour and Greenway 1940b) have not been visited recently. It was found on three surveys in the northern highlands (Tizard *et al.* 1997, Davidson 1998, and these 1996 Phongsaly records). It uses hill grass, ruderals and scrub, which are widespread in Laos and may even be expanding, but a clearer view of Lao conservation status is merited: much of its habitat is burnt annually, and the bunting was highly localised around Phongsaly, always being found along one 2 km stretch of one trail but almost never anywhere else. This spot had the most extensive tall grass of any survey area of Phongsaly town, and subsequent observations in the Hukaung Valley, Myanmar, were all in stands of tall grass (JWD and TT unpublished data). Tall grass is now very restricted on the Nakai Plateau (R. J. Timmins *in litt.* 2006), suggesting a cause for decline, but habitat information is limited for other historical sites.

TRISTRAM'S BUNTING *Emberiza tristrami*

Phou Dendin NPA: [one, Nam Ou camp #2 on 4 December;] two near Ban Tan (c.620 m), 12 December. **Around Phongsaly town:** [one, Phou Fa, 10 December;] one, Bakong trail, 18 December; [two singles, Khomen trail, 19 December].

These are the first recent Lao records; historical records came only from Xiangkhouang province (David-Beaulieu 1944). It is often very skulking, and its *tic* call resembles several congeners (including Little Bunting, common in Phongsaly province); hence it may be somewhat overlooked. Numbers fluctuate in the region (C. R. Robson *in litt.* 2004); perhaps more than usual arrived in autumn 2004.

Notes on selected species not found

The lack of recent records of the following species is, or may be, of conservation significance. Further surveys of Phongsaly province and the Nam Ou should particularly seek them.

JAPANESE QUAIL *Coturnix japonica* and BLUE-BREASTED QUAIL *C. chinensis* Little Known in Laos (both)

Both quails may have declined in Laos, perhaps greatly (Duckworth *et al.* 2002, Duckworth and Tizard 2003, Brickle *et al.* in prep.), so potential habitat was checked when possible. Blue-breasted Quail was collected in adjacent Vietnam (Mao Xao Ping, early April 1929) by Bangs and Van Tyne (1931). Buttonquails remain much commoner than quails in Laos, and it was surprising not to find Barred Buttonquail, which was collected in Phongsaly in April–May 1929 (Bangs and Van Tyne 1931).

COTTON PYGMY-GOOSE *Nettapus coromandelianus* At Risk in Laos

A Cotton Pygmy-goose was collected at Ban Hatkham (? upper or middle Nam Ou) in November 1931 (Dickinson 1970a). The lack of recent records from the survey area reflects a major national decline, especially in the North (Duckworth *et al.* 1999). The only recent North Lao records are of three on the Mekong in southern Xaignabouli province on 2 October 2004, and one at Nong Pen, Vientiane municipality, on 8 October 2004 (DVG, JWD and RE unpublished data). Possibly, the species was only a passage migrant to the survey area, but elsewhere in the northern highlands (e.g. Xiangkhouang: David-Beaulieu 1944) it certainly has declined.

STORK-BILLED KINGFISHER *Halcyon capensis*

Stork-billed Kingfisher is readily found from boats and was recorded from three localities in the province and/or along the Nam Ou in 1929 (FMNH 77907–77909; Bangs and Van Tyne 1931). The brief 1995 survey of Phongsaly province, and extensive observations in 1999–2000 along the Upper Lao Mekong also failed to find the species in historical localities (Duckworth *et al.* 1998a, 2002). The only recent records from the northern highlands may be those from the Nam Tha plain in Tizard *et al.* (1997), where TT (unpublished data) again found the species frequently in March 2005. Further south in Laos it has also declined in the Nam Kading basin, where it was locally frequent in 1995, but visits to the same reaches at the same season in 2005 found no birds (Duckworth *et al.* 1998a, Timmins and Robichaud 2005). During the 1990s, it was widespread and locally common south of Vientiane (Duckworth 1996, Thewlis *et al.* 1996, Davidson *et al.* 1997, Cunningham 1998, Duckworth *et al.* 1998a, Evans and Timmins 1998, Round 1998, Evans *et al.* 2000a, Evans 2001) and it remains regularly present a little to the north, at Ban Sivilai and the Nam Ngum reservoir (DVG and JWD unpublished data). It has also declined greatly in parts of India (Trivedi and Soni 2006)

EURASIAN CUCKOO *Cuculus canorus*

A male and a female Eurasian Cuckoo were collected at Ban Laophouchai on 21 April 1929 (FMNH 77804), and ‘a number [were] heard calling in March and April in...Laos’ (Bangs and Van Tyne 1931). The only other Lao information is David-Beaulieu’s (1944) observations in Xiangkhouang province: a male collected at Ban Nonghet on 1 May 1940 with statement that in April–May it sang commonly from the peaks of wooded hillocks in this area, entirely deforested except for limestone hills, but was very rare in the province away from this site. Ban Nonghet has not been revisited, but Ban Laophouchai was visited in late March 2005 and other deforested areas, but perhaps not of precisely similar habitat, were covered widely. The lack of recent Lao records may partly reflect the fact that field separation of non-singing birds from Oriental Cuckoo *C. saturatus* is almost impossible (there are records of Eurasian/Oriental Cuckoos in, e.g., Thewlis *et al.* 1996), but the substantial recent bird survey in the northern highlands during the known song period suggests that, as judged by David-Beaulieu (1944) for Xiangkhouang, it is very localised in Laos, or it has declined.

GREEN IMPERIAL PIGEON *Ducula aenea* At Risk in Laos
Four Green Imperial Pigeons were collected at Ban

Muangyo in 1929 (FMNHN 75317, FMNH 77715, FMNH 77716, FMNH 408975; Bangs and Van Tyne 1931) and one at Ban Muangyoy in 1931 (Dickinson 1970a). Ban Muangyo was covered well enough in 2004–2005 to be sure this species has now disappeared, as it has throughout most of North and Central Laos (Thewlis *et al.* 1998) and much of Thailand (Lynam *et al.* 2006).

WOOD SNIPE *Gallinago nemoricola* Globally Threatened: Vulnerable; Little Known in Laos

Streams of Phou Dendin NPA potentially suitable for this snipe were not navigable by boat: it needs thick cover (Robson 2000), and banks in the boated stretches were rather open. There were few survey records of Eurasian Woodcock or Scaly Thrush, both seen readily from boats on the Nakai Plateau’s shaded streams, the location of the only recent Wood Snipe records in Laos (Duckworth *et al.* 1998a), and both found by other means in Phou Dendin NPA. Hence, this snipe could well have been overlooked.

RED-WATTLED LAPWING *Vanellus indicus*

Red-wattled Lapwing formerly inhabited Ban Muangyo and other parts of the province (FMNH 77644–77650; Bangs and Van Tyne 1931). Previously common across suitable habitat in North Laos, it is now very rare (Duckworth *et al.* 2002; C. Wood, M. Hedemark and A. Johnson verbally 2005, for additional areas). Habitat at Ban Muangyo looks still suitable, and persecution no doubt removed the species, as it evidently almost has across North Laos. Fortunately, large populations remain in (semi-)natural habitat of Central and, particularly, South Laos (Duckworth *et al.* 2002).

GREY-HEADED FISH EAGLE *Ichthyophaga ichthyaetus* Globally Near Threatened; At Risk in Laos

This fish eagle is rarer in Laos than is Lesser Fish Eagle (see above). Historical assessments perhaps confused the two (Thewlis *et al.* 1998), and modern field guide pictures, notably that in widest use in Laos during the 1990s (Lekagul and Round 1991) under-emphasise the prominence of the white ventral area in overhead adult Lesser Fish Eagle. Observers new to the genus habitually identify overhead adults as ‘Grey-headed’, unless/until they see the upperside which allows easy separation. Hence, perhaps, the various 1990s Lao provisional Grey-headed Fish Eagle records in Thewlis *et al.* (1998). With some overlap, Grey-headed inhabits standing and sluggish wetlands of the level lowlands, with Lesser more on hill rivers (Round 1998, Poole 2001). The Nam Ou’s rugged nature fits our identification of all fish eagles as Lesser; the provisional Grey-headed Fish Eagle records from the Nam Ou (in Thewlis *et al.* 1998) may have been in error. Recent listing of Grey-headed Fish Eagle from adjacent Vietnam, in Muong Nhe Nature Reserve, by Nguyen Duc Tu *et al.* (2001) does not imply regular presence, and historically only Lesser Fish Eagle was collected in that region (e.g. Bangs and Van Tyne 1931).

BLACK STORK *Ciconia nigra* At Risk in Laos

Black Stork has not been recorded from Phongsaly province, but the Kelley-Roosevelts’ Expedition visited too late in spring to record this seasonal migrant. Historically, it was a common winter visitor to far-northern Laos (Delacour and Greenway 1940b), but there are few

recent records (Duckworth *et al.* 2002). The Phou Dendin Nam Ou and tributaries are North Laos's biggest expanse of prime Black Stork habitat (mid-width forest rivers with many sandbars and other channel features, as shown by observations in the Hukaung Valley, North Myanmar; JWD and TT unpublished data). The lack of records during the December river survey suggests that there is no significant population, and it is likely that there is no longer a regular wintering population in Laos away from the tiny one on the Nakai Plateau (Duckworth *et al.* 2002).

BLACK-BILLED MAGPIE *Pica pica* Little Known in Laos
The only certain Lao record of Black-billed Magpie is from Phongsaly town, a male on 26 April 1929 (FMNH 78547; Bangs and Van Tyne 1931), but there are other suggestions of occurrence (Bingham and Thompson 1901, Engelbach 1927, implicitly contradicted by Engelbach 1932). This conspicuous bird, with prominent, accessible nest, must be very vulnerable to human interference, and it may now be extinct in Laos. Similarly, in Vietnam it is now very rare (J. C. Eames verbally 1998), although formerly 'very common', occurring south to Cape Varella (Delacour *et al.* 1928) and 'most common in Tonkin and the greater part of Annam, but only on the plains...in the parks, in Hanoi, they were very numerous' (Delacour and Jabouille 1925).

ASIAN PIED STARLING *Sturnus contra* Little Known in Laos

Asian Pied Starling was historically recorded in Laos only from the Mekong fringe of Bokeo (Delacour and Greenway 1940b) and Ban Muangyo in mid-May 1929 (Bangs and Van Tyne 1931) where eight specimens were collected (FMNH 80125–80131, MNHN CG 1930–178, including two juveniles). Although recent surveys of Ban Muangyo did not include May, the rarity of resident non-forest sturnids in the Lao northern highlands suggests this species is extinct in Ban Muangyo. A recent search of Bokeo found no birds (Duckworth *et al.* 2002). The only recent Lao record is from Pakxan, where it was seen only once in several years (C. Wood *in litt.* 2003), perhaps a wandering flock from Thailand. Although in northern Thailand, it was 'one of the commonest birds in the cultivated lowland districts of all the northern provinces' (Deignan 1945), it is now 'very scarce' there (Round and Jukmongkol 2006).

BLACK-HEADED MUNIA *Lonchura malacca* Little Known in Laos

A male Black-headed Munia from Ban Muangyo on 17 May 1929 (FMNH 80371, Bangs and Van Tyne 1931) is the only certain Lao record up to 2006, but there are other suggestions of occurrence (Engelbach 1927, implicitly contradicted by Engelbach 1932, Duckworth and Tizard 2003). It is unlikely that the species was overlooked at Ban Muangyo in 2004–2005: calls are distinctive and freely given, although more thorough search, preferably in May, is needed to confirm current status. Recent observations in Hukaung Valley, Myanmar, were all in or beside tall grassland of seasonally inundated plains, a habitat at Ban Muangyo all converted to paddies. The munia no doubt disappeared with the loss of this habitat. As the latter is now very limited in Laos, the munia is probably exceedingly rare there; the only recent record is from the artificial tall grass habitat

of a wetland margin at Nong Souy, Savannakhet province (16°31'N 105°12'E), where eight were found on 13 April 2007 (JWD unpublished data).

Three other non-forest species were not found for which Phongsaly province is within their geographical range and habitat seemed suitable: Daurian Redstart *Phoenicurus auroreus*, Blue-fronted Redstart *P. frontalis* and Russet Sparrow *Passer rutilans*. These also merit a national status review and increased survey attention.

DISCUSSION

Bird communities of the surveyed areas

Rivers of Phou Dendin NPA

Phou Dendin NPA supported all four Globally Near Threatened species found on the surveys. Two are strongly associated with rivers: Blyth's Kingfisher and Lesser Fish Eagle; the latter's population is of very high national, and probably of high international, conservation significance. Other key species of this habitat may now be locally extinct, e.g. Black Stork, or have been overlooked, e.g. Wood Snipe. The province's Large-billed Crows, probably centred on the NPA, form the only potentially viable population known in Laos significantly north of Vientiane. Numbers of common riverine birds were high, particularly given the limited time on shaded rivers, and consequent few records of Eurasian Woodcock, snipes and thrushes. Sandpipers and plovers were unexpectedly scarce, and the tiny population of River Lapwing surviving into the mid-1990s now seems to be extinct. Other than a flock of 60–80 green pigeons on 19 March 1996, the small numbers of most treepies, hornbills and pigeons suggests only low populations, presumably through hunting. Among large aerial birds, only raptor numbers matched those in other large evergreen forests in Indochina.

Phou Fa

Despite being only 200 ha, degraded, and close to a provincial capital, Phou Fa held a few forest birds rarely found in Laos, e.g. Black-breasted Thrush and Purple Cochoa. Seasonal altitudinal movement seemed substantial (see below). These findings no doubt stem from the extensive secondary scrub and regenerating tree cover linking to degraded forest several kilometres distant. Forest birds mixed with open habitat species (e.g. various bulbuls) through the 'edge effect', and Phou Taleng, similar in topography and altitude, gives clues to what Phou Fa has probably lost. There were still Mountain Imperial Pigeons and Pin-tailed Green Pigeons around Phongsaly town in 1929 (Bangs and Van Tyne 1931), but they have not been found recently.

Open habitats around Phongsaly town

The many species in the mosaic of scrub, ruderal, grass and small-scale cultivation included none of obvious conservation priority. These habitats cover large parts of North Laos, and those few birds of conservation concern in them are probably in decline through hunting pressure, not habitat loss (although the effects of widespread burning in the late dry season [= breeding season] on nesting birds remain unclear). The many guns and catapults around the town mean that the common residents in this particular

area are doubtless among the most resilient species. Those under wide national decline were also not found here, or were very scarce: sturnids, quails, parakeets, *Streptopelia* doves and Large-billed Crow. The almost total lack of sparrows from Phongsaly town (and indeed from other towns and villages of the eastern province) is unexplained. These habitats did, however, provide records of various species where the regular range only just extends south into northernmost Laos.

Phou Taleng

Surveys were too short to characterise Phou Taleng's bird community. Winter status remained unclear through low call and especially song levels, and even in March, various forest species were only just returning or becoming conspicuous. Hunting, although driving declines, has not yet eradicated all susceptible species. Three species of pigeons in December, in tiny groups (maximum two birds for *Ducula* and *Treron*, and one for *Macropygia*), had almost disappeared by March 2005. Seasonal emigration may have occurred, but hunting in the interim might simply have killed off the birds. Among hornbills, only Oriental Pied Hornbill was heard, and only once. Raptor numbers seemed low. Galliform numbers, by contrast, were high, with groups of Silver Pheasant, Red Junglefowl or *Arborophila* partridges flushed every hour or two when walking off-road in December. Crispy leaf-litter ruled out silent passage in March, but many Grey Peacock Pheasants, Bar-backed Partridges and some Red Junglefowl were calling then. December and March bird-lists were nowhere near complete: the last morning in each month found 10–11 species 'new' for the respective season. Woodpeckers, laughingthrushes, babblers (notably wren babblers), tesias, pittas and shortwings were all scarce or, more likely, under-recorded. Surveys during April–June, lasting over a week, are needed to inventory the area's breeding community. Phou Taleng's forests, although only c. 100 km², may be able to maintain many species because they span 900–1,650 m, thus allowing seasonal altitudinal movement by forest-dependent species.

Valley bottoms around Ban Muangyo

Many historically recorded species have been lost. Conversion of plains tall grassland may explain the lack of Black-headed Munias and Jerdon's Bushchats. Mid-winter egrets, resident raptors, rallids and *Streptopelia* doves were very rare, and no quails, parakeets, resident sturnids (notably Asian Pied Starling) or Large-billed Crows were found at all; all are susceptible to off-take. Oriental Pied and Brown Hornbills, Grey-headed Parakeet, Green Imperial Pigeon and Red-wattled Lapwing, all collected in 1929 here or nearby, are presumably locally eradicated through hunting, as they are across much of Laos. Bangs and Van Tyne (1931) also recorded Thick-billed Green Pigeon, Cinnamon Bittern, White-breasted Waterhen, Ruddy-breasted Crake (nearby), Slaty-breasted Rail and Pheasant-tailed Jacana, which may also have declined around Ban Muangyo, or may simply occur only seasonally. Habitat suggests that even species such as Green Peafowl *Pavo muticus* and storks would formerly have occurred; all have shown huge declines across Laos (Thewlis *et al.* 1998). These bottoms are so small that these major losses are unsurprising. The several interesting species recorded were noteworthy

through being scarce in Laos because the country is at the edge of their range (Rosy Pipit, Eurasian Sparrowhawk). It remains desirable to re-survey the area, and other bottoms (e.g. Ban Boun-Tai and Ban Boun-Nua) in May, for a better comparison of current with past bird populations and a final effort to find Asian Pied Starling and Black-headed Munia.

Nam Lan CA

Nam Lan CA had two pigeons (Ashy Wood Pigeon and Pompadour Green Pigeon) in decline or little known in Laos and very good numbers of Mountain Imperial Pigeon. All are presumably heavily hunted in the area: at least six gunshots were heard in one afternoon (11 March 2005) around the main pigeon ('bat caves') site. Fish owls were the only river specialist found. Neither hornbills nor parakeets were found, and while they may survive (as heavily hunted birds, across Laos they tend to persist only far from villages, yet surveys were all close to villages), it can be in only very small numbers: the villages held no captives or hunting trophies (by contrast, these were obvious in Phou Dendin NPA villages). This probably reflects the heavy collection (of adults and nestlings) and small size (100 km²) of the conservation area. No non-forest sturnids or Large-billed Crows were found: these are generally easily recorded if present, so absence of records probably indicates their local extirpation. In contrast, various other unrecorded species such as forest corvids (*Dendrocitta* and *Cissa*) may simply have been overlooked. The survey underestimates bird species richness in Nam Lan CA because land above 750 m was not visited, the observers were new to the region, and the main aim was to collect tissue samples for genetic analysis, with general bird surveys being incidental.

Nam Ou between Ban Hatxa and its mouth, Pak-Ou

The only birds of conservation significance downstream of Ban Hatxa were a few Large-billed Crows. Habitat suggests that River Lapwing and perhaps Great Thick-knee *Esacus recurvirostris* and terns would have bred formerly; heavy, widespread human activity has eradicated them. Even small waders were scarce: visits in March 1996 and November 2004 combined gave only one *Charadrius* plover, a single Little Ringed Plover some hours' downstream of Khoa on 30 March 1996. Jerdon's Bushchat is common in the adjacent Mekong, occurring near Pak-Ou, but can be very difficult to find in mid-winter (Thewlis *et al.* 1998, Duckworth *et al.* 2002); bushland in the Nam Ou itself may be too restricted to support it, or it might have been overlooked. The Nam Ou below Ban Hatxa, under current human use, seemingly has negligible bird conservation significance. Non-Palaeartic Peregrine Falcon and mid-winter Sand/Pale Martins are known by few other Lao records, but may have been previously somewhat overlooked. Species typical of rockier, faster streams, Plumbeous Water Redstart, Slaty-backed Forktail and Crested Kingfisher, were almost restricted to the stretch upstream of Khoa.

Comparison of recent with historical records

Over 30 species found in 1929–1931 were not found during 1995–2005 (Table 2). Understanding why they were not may clarify conservation needs. For some species the lack of recent records probably reflects genuine scarcity

but some plausibly may simply have been overlooked. Germain's Swiftlet, Grey Nightjar, Black-naped Oriole, Vivid Niltava and two bush warbler species are all difficult to distinguish under typical field conditions from similar species; for most of these, unidentified individuals that were potentially of the species were found. Surveys may not have been seasonally apt for some passage migrants (perhaps Grey Nightjar, Black Baza, Dark-sided Flycatcher, Rusty-rumped Warbler, Yellow-streaked Warbler, Yellow-breasted Bunting), wet-season breeding visitors (Blue-winged Pitta and perhaps Black-naped Oriole), or one or other (Chestnut-winged Cuckoo, Slaty-breasted Rail, Ruddy-breasted Crake, Pheasant-tailed Jacana). Surveys in May in 1995 and 2004 did not cover the wetland habitats favoured by some of these species and involved inexperienced observers. Brown Wood Owl and two pitta species are readily overlooked unless specifically searched for. Black-tailed Crake is simply difficult to find. Various species unrecorded recently are probably ecologically quite restricted in the survey sites, e.g. lower-altitude species such as Coppersmith Barbet, and might be found by more extensive survey.

Large- and medium-bodied birds of open or edge habitats are exposed to very heavy hunting. For Cotton Pygmy-goose, Green Imperial Pigeon, Red-wattled Lapwing and Asian Pied Starling, declines are well established at a national or North Laos level (Thewlis *et al.* 1998, Duckworth *et al.* 1999, 2002), although this is only now becoming clear for Stork-billed Kingfisher and Black-billed Magpie. Black-headed Munia has probably declined through specific habitat loss.

Some species are difficult to categorise. Barred Buttonquail is unlikely to have declined: it remains common around Vientiane. Sighting rates vary strongly with season although it is unclear whether through changes in behaviour, microhabitat use or wider movements (JWD unpublished data). Coppersmith Barbet has disappeared from Vientiane (Duckworth and Tizard 2003), except as an occasional post-breeding visitor (DVG unpublished data) but remains so common in less-settled areas (e.g. Duckworth 1996, Thewlis *et al.* 1996, Evans and Timmins 1998, Evans *et al.* 2000a, Evans 2001) that it is unlikely to have been lost from Phongsaly (indeed, at Ban Muangyo, a distant calling bird was probably this species). The status of Eurasian Cuckoo remains obscure in Laos (see above). Jerdon's Bushchat is ecologically odd in Laos (Duckworth *et al.* 1999), with two breeding habitats: it is abundant in seasonally inundated bushland of large river channels (but upstream of Khoa the river does not expose sufficiently large areas of bushland) but also breeds in mid- and high-altitude scrub, and while more difficult to find (Duckworth *et al.* 2002), it is strange that none was seen given the extent of apparent suitable habitat and time spent in it. The historical record (FMNH 79645), from Ban Muangyo, probably represented a third habitat-type, as used in Thailand (Round 1988) and Hukaung valley, Myanmar (JWD and TT pers. obs.): seasonally inundated tall grass plains (also the predominant habitat of Black-headed Munia). No such habitat remains at Muangyo. In the absence of obvious threats to Crested Finchbill, it is perhaps most likely that it was simply overlooked.

Seasonal differences at each site

Altitudinal migration is barely documented Laos. Four visits to Phou Fa in late November and December 2004

characterised the conspicuous bird species present as very different from those recorded during the hot months (May and September, supplemented by May 1995 observations). Discounting inconspicuous species (e.g. Lesser Shortwing) and long-distance migrants (e.g. Asian Paradise-flycatcher), nine species found in May and/or September were not present in the cold months: White-browed Piculet, Lesser Yellownappe, Crested Serpent Eagle, White-throated Fantail, Black-naped Monarch, [Hill] Blue Flycatcher, Grey-headed Canary Flycatcher, Silver-eared Mesia and Black-headed Sibia. All except Black-headed Sibia were found in the cold season at lower altitudes. These nine species represent fully a third of the 26 'resident' forest species recorded during May and September. If this proportion is appropriate for the Lao montane forest avifauna as a whole, retaining lower-altitude forests is critical to prevent the decline of montane breeding bird communities.

Observations in March 2005 found four of the December absentees listed above (White-browed Piculet, Black-naped Monarch, Grey-headed Canary Flycatcher and Silver-eared Mesia) and (not recorded in November, December, May or September) Oriental Honey-buzzard, Great Tit and Buff-barred Warbler. Perhaps some breeding species were yet to return (behaviourally, the breeding season was only just starting for most species present), while September-only species (e.g. Black-headed Sibia) perhaps occur only as post-breeding dispersers. In fact, the recorded 'resident' Phou Fa avifauna was poorer in March than December, because Speckled Piculet (?), Great Barbet, Long-tailed Broadbill (?), Orange-bellied Leafbird, Maroon Oriole (?), Large Cuckooshrike (?), Grey-eyed Bulbul, Yellow-bellied Warbler (?), Striated Yuhina and Streaked Spiderhunter had all 'gone'. With only two March visits, sampling error might just account for absences among species marked (?) above, but all listed species were prominent enough in December for their 'absence' in March to be striking; many other (unlisted, above) 'residents' recorded (less frequently) in December, but not in March, may also have left. Some wintering birds gone 'missing' by March are widespread highland forest breeders in the province and perhaps Phou Fa, while at appropriate altitude, is too small and/or degraded for them to breed. There may thus be a second component of seasonal movement on Phou Fa, the arrival of 'resident' species into lower-quality habitats in winter, which leave the following spring to breed in larger blocks of habitat, even if at similar altitude. And some winter species may simply have been shot out by March, rather than emigrated.

Phou Taleng, at similar altitude to Phou Fa, also showed only limited similarity in 'resident' forest birds recorded in the two seasons. Discounting seasonal callers (e.g. Grey Peacock Pheasant, various cuckoos), Barred Cuckoo Dove, Wedge-tailed Green Pigeon, Large Cuckooshrike, Black-winged Cuckooshrike, Whiskered Yuhina seemingly left the surveyed area between December 2004 and March 2005, while White-browed Piculet, Bronzed Drongo, Black-naped Monarch, Pale Blue Flycatcher evidently arrived. Many more species were recorded only at one season (Appendix 1), but not often enough to distinguish genuine loss from sampling effects.

Among 'residents' of scrub around Phongsaly town, Speckled Piculet, Orange-bellied Leafbird, Bronzed

Drongo, Yellow-bellied Warbler and Little Spiderhunter all 'left' between December 2004 and March 2005, while Oriental Honey-buzzard and Great Tit 'arrived'. As with Phou Taleng, many further species were recorded in only one season but with samples too small to conclude a genuine status change. As with Phou Fa, departures may reflect return to less degraded habitats for breeding, rather than altitudinal movement.

Effective conservation planning for montane birds demands accurate understanding of seasonal movements. To disentangle the three effects of altitudinal movement, expansion into degraded areas in winter, and death through the winter, observations must cover a mix of large and small forest blocks at several altitudes, and be of sufficient intensity to characterise each site in each of winter (December–January), the breeding season (May–June) and the post-breeding dispersal (August–September).

Conservation issues

The level plains that could support standing wetlands and tall grassland have, given the province's general ruggedness, largely or totally been converted to agriculture, and their specialist birds are probably the most declined in the province. Despite such major decreases, reflected across Laos, most non-forest birds are of low international conservation significance, being mostly widespread within and even outside South-East Asia. By contrast, many forest species of Phongsaly have restricted global ranges. The massive habitat loss in Thailand, Vietnam and Yunnan province (China), means that Laos holds many significant populations, now threatened by ongoing habitat loss.

Birds throughout Laos are widely hunted as food, for so many years that specific traps and methods have arisen for even small species, both of forest (e.g. Large Niltava *Niltava grandis*: David-Beaulieu 1944: 103) and open areas (e.g. Barn Swallow: Evans *et al.* 2000b). Even so, and even with the ready availability of firearms during and after the war with America, there is no good evidence for declines in closed-forest birds within remaining habitat, except for hornbills and perhaps some pigeons and owls (Thewlis *et al.* 1998, Duckworth *et al.* 1999, 2002, Brickle *et al.* in prep.), presumably because of the large size of remaining habitat blocks. By contrast, only a few hardy species (most obviously, Eurasian Tree Sparrow, Common Tailorbird and Asian Palm Swift) persisted in early 1990s Lao towns. In Vientiane and perhaps other large towns of lowland south and central Laos, rapid economic development has given children and youths less time to roam around with catapults ready to fire at any vertebrate within range, and there are now many fewer guns in civilian hands. Hence, urban populations of mynas, bulbuls, doves and raptors are expanding rapidly (DVG and JWD unpublished data). In Phongsaly town, small groups with guns and catapults remain at least a daily sight. The urban birdlife mostly comprises winter migrants (e.g. White Wagtail, Blue Rock Thrush, Yellow-browed Warbler), replenished each year, although Barn Swallows and Common Tailorbirds survive. The swallow is culturally protected: it nests in occupied village houses, within easy rodding reach, but the birds and nests are usually left unmolested, as seen in 1996–2005 in villages of various ethnicity (although Ban Long Nay Mai villagers had caught three swallows inside a house). The

proximity of Phou Fa and the large expanse of scrub, ruderals and other uncultivated land, with their diverse avifauna could allow rapid repopulation of Phongsaly town by birds, in a way unknown in the lowland towns, surrounded as they are by paddies. More damaging than shooting and catapulting (which can be avoided behaviourally by animals, particularly in forest) are snaring and other forms of trapping. Levels were not assessed at the survey sites.

Shots were heard many times each December morning at Phou Taleng and in the non-forest habitats some way out of Phongsaly town, rather less often in March, and species taken largely through shooting (e.g. hornbills, pigeons) were very scarce at all survey sites (especially Phou Taleng) except perhaps in Nam Lan CA. Ground-dwelling gamebirds vulnerable to snaring remain common: the many hunters' piles of plucked feathers in Phou Taleng were nearly all of species readily shot (bulbuls, treepies, pigeons, drongos etc.); only one (a partridge) was of a species typically snared. Snaring might be less predominant in Phongsaly's forests than elsewhere in Laos.

Captive birds (Table 3) were in proportionately fewer houses in Phongsaly town than in Vientiane, but unconcealed individuals of large, protected species such as Mountain Hawk Eagle (and even Asian Black Bear *Ursus thibetanus*) suggest little current compulsion to comply with national laws. Sporadic checks on Phongsaly main market showed only several Great Barbets (Y. Varelides verbally 2004, A. Hassanin verbally 2004) in December 2004 and several roasted medium-sized birds (including owls) and a Bar-backed Partridge in March 2005. No wildlife was seen on several visits to Ban Hatxa quay. Whether this indicates low volumes of trade, or that wildlife markets do exist but were not found (they may be covert) is unclear.

Conservation survey needs

The following are roughly prioritised according to likely conservation significance of findings to enhance understanding of the province's potential role in national-level bird conservation needs. Equivalent or greater priorities may exist in parts of the province not yet surveyed.

- Survey of shaded forest rivers, notably in Phou Dendin NPA, in both winter (notably for Wood Snipe) and breeding season (for fish eagles and Blyth's Kingfisher). Stretches 2–30 m wide, with little-degraded fringing forest, and relatively inaccessible by boat (through rapids) are the highest priorities.
- Survey of forests and high-altitude grasslands of Phou Dendin NPA, in winter and the breeding season. In the context of heavy forest loss in neighbouring countries, Phou Dendin NPA no doubt retains important populations of many species, especially given its large size and ecological contiguity from lowlands to peaks. Specific survey targets include quails, Common Pheasant, Rufous-necked Hornbill, Blyth's and Ruddy Kingfishers, large owls, wood pigeons, Little Cuckoo Dove, green pigeons, Black-tailed Crake, Blue-fronted Robin *Cinclidium frontale*, Purple Cochoa, White-tailed Nuthatch *Sitta himalayensis*, Yellow-billed Nuthatch *S. solangiae*, Brown-throated Treecreeper *Certhia discolor* and various laughingthrushes and babblers.

- Searches across the province for quails, Common Hoopoe (breeding), Green Imperial Pigeon, Red-wattled Lapwing, Black-billed Magpie, Large-billed Crow, resident non-forest sturnids, Russet Sparrow, Red Avadavat *Amandava amandava*, Black-headed Munia and weavers *Ploceus*. Survey should focus on any plains and valley bottoms which retain (semi-) natural non-forest habitat or traditional agricultural practices. No species is of global significance. Red Avadavat, not yet recorded from Laos, is listed because it occurs in adjacent Vietnam, in Muong Nhe Nature Reserve (Nguyen Duc Tu *et al.* 2001); it has declined steeply in Indochina and northern Thailand (C. M. Poole, P. D. Round verbally 2003).

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Species	Notes	Year, month and location																		
		2004/2004/Nov	2004/2004/Dec	2004/2005/Dec	2004/2005/Dec	2004/2005/Dec	2004/2005/Dec	2004/2005/Dec	2004/2005/Dec	2005/2004/Mar	2004/2005/Dec	2004/2005/Dec	2004/2005/Dec	2005/2004/Mar	2005/2004/Mar	2005/2004/Mar	2003/2003/Sep			
		Louangphabang Nam Ou	Phongsaly Nam Ou (not PDD)	Low-lying Phou Dendin NPA	Interior Phou Dendin NPA	Nam Houm & south PDD	Phou Fa	Phongsaly town	Phongsaly scrub	Phongsaly town and surrounds	Phou Taleng	Ban Muangyo etc.	Ban Boun-Nua	Ban Boun-Tai	Ban Naten	Ban Long Nay Mai	Ban Namaek	Ban Boun-Tai to Pak Namnoy	Phou Fa	Elsewhere
COMMON/ GREATER FLAMEBACK <i>Dinopium javanense</i> / <i>Chrysocolaptes lucidus</i>	4			C/		.P														
PALE-HEADED WOODPECKER <i>Gecinulus grantia</i>				[P]/												P/				
BAY WOODPECKER <i>Blythipicus pyrrhotis</i>			P	P/P	P/P	.P														
GREAT SLATY WOODPECKER <i>Mulleripicus pulverulentus</i>				P/																
GREAT BARBET <i>Megalaima virens</i>				F/P	.C	P/P	C/	P/	F/F	.P	C/C	.C	P/	P/P	P/P	P/				CAGE
[LINEATED BARBET <i>Megalaima lineata</i>]																				
GOLDEN-THROATED BARBET <i>Megalaima franklinii</i>					.C															
BLUE-THROATED BARBET <i>Megalaima asiatica</i>	5			C/P	.C	./[P]	C/[C]		F/[C]	P/P	C/C	./[C]	./[P]	P/P	P/P	P/P	P		P	P
[MOUSTACHED BARBET <i>Megalaima incognita</i>]	6			./[P]											[P/P]	./[P]				
BLUE-EARED BARBET <i>Megalaima australis</i>											.P	.P								
COPPERSMITH BARBET <i>Megalaima haemacephala</i>												./[P]								
ORIENTAL PIED HORNBILL <i>Anthracoceros albirostris</i>				OP	P/						.O									
GREAT HORNBILL <i>Buceros bicornis</i>				REM/																
BROWN HORNBILL <i>Anorrhinus tickelli</i>					P/															
RUFIOUS-NECKED HORNBILL <i>Aceros nipalensis</i>																				
WREATHED HORNBILL <i>Aceros undulatus</i>					.P															
COMMON HOOPOE <i>Upupa epops</i>				P/					O/											
ORANGE-BREASTED TROGON <i>Harpactes oreskios</i>					P/	P/P														
RED-HEADED TROGON <i>Harpactes erythrocephalus</i>					P/	P/P	.P													
INDIAN ROLLER <i>Coracias benghalensis</i>									O/			P/P	P/							
DOLLARBIRD <i>Eurystomus orientalis</i>					.P	.P	.P				.O					P/				
BLYTH'S KINGFISHER <i>Alcedo hercules</i>				[P]	F/P	.P	.P						P/							
COMMON KINGFISHER <i>Alcedo atthis</i>			C	C	C/P	P/P	C/C		O/			C/C	.P		P/					P
BLUE-EARED KINGFISHER <i>Alcedo meninting</i>															.P					
COMMON/BLUE-EARED KINGFISHER <i>Alcedo atthis</i> / <i>A. meninting</i>	4														.P					

Species	Notes	Year, month and location																					
		2004 Nov	2004 Dec	2004/ Dec/ Mar	2004/ Dec/ Mar	2004/ Dec/ Mar	2004/ Dec/ Mar	2004/ Dec/ Mar	2004/ Dec/ Mar	2005/ Mar/ May	2004/ Dec/ Mar	2004/ Dec/ Mar	2004/ Dec/ Mar	2005/ Mar/ May	2005/ Mar/ May	2005/ Mar/ May	2004 May	2004 May	2004 May	2004 May	2004 Dec/ Mar	2003 Sep	2003 Sep
ASHY WOODSWALLOW <i>Artamus fuscus</i>				.P	.P					.P													
BLACK-NAPED ORIOLE <i>Oriolus chinensis</i>																							
BLACK-NAPED / SLENDER-BILLED ORIOLE <i>Oriolus chinensis</i> / <i>O. tenuirostris</i>	4													.P							.P		
MAROON ORIOLE <i>Oriolus traillii</i>	15		P	C/	P/C	P/	O/		O/		C/C	P/											
ORIOLE <i>Oriolus</i> sp(p).				.P																			
LARGE CUCKOOSHRIKE <i>Coracina macei</i>				[P]P	P/C	.P	F/				C/												
[INDOCHINESE CUCKOOSHRIKE <i>Coracina polioptera</i>]	16							[P]/															
BLACK-WINGED CUCKOOSHRIKE <i>Coracina melaschistos</i>	16												F/										
INDOCHINESE / BLACK-WINGED CUCKOOSHRIKE	4, 16			C/	P/	P/							P/										
ROSY MINIVET <i>Pericrocotus roseus</i>									.P				.P										
ROSY / SWINHOE'S / ASHY MINIVET <i>P. roseus</i> / <i>P. cantonensis</i> / <i>P. divaricatus</i>	4, 17		P		P/				.F		.O	.P											
GREY-CHINNED MINIVET <i>Pericrocotus solaris</i>	18								[P]/		.P												
LONG-TAILED MINIVET <i>Pericrocotus ethologus</i>	18			[P]P							.P			P/									
SHORT-BILLED MINIVET <i>Pericrocotus brevirostris</i>	18																				.P		
SCARLET MINIVET <i>Pericrocotus flammeus</i>				P	C/C	P/C	C/	C/P	F/[P]		C/C									P/	[P]/		P
NON-SCARLET MINIVET <i>P. solaris</i> / <i>ethologus</i> / <i>brevirostris</i>	4, 18				.P				O/		F/F												
MINIVET <i>Pericrocotus</i> sp(p).	4, 10			P/P		.C			.P	P/	.P			P/	.P	P/P							
BAR-WINGED FLYCATCHER-SHRIKE <i>Hemipus picatus</i>				C/P	P/P				F/P	.F	.P		P/		P/								P
YELLOW-BELLIED FANTAIL <i>Rhipidura hypoxantha</i>				P/	.LC																		
WHITE-THROATED FANTAIL <i>Rhipidura albicollis</i>				P	C/P	P/C	C/P		O/C	P/P	O/C	P/			P/P	.P	P						P
BLACK DRONGO <i>Dicrurus macrocercus</i>													P/		.P	.P							
ASHY DRONGO <i>Dicrurus leucophaeus</i>	19		C	C	C/C	.C	C/P	C/C	C/C		C/C	P/			P/P	.P						P	P
BRONZED DRONGO <i>Dicrurus aeneus</i>				P	C/P	P/LC	C/		F/	.C					.P	P/P	P						
LESSER RACKET-TAILED DRONGO <i>Dicrurus remifer</i>					P/C						P/C												
SPANGLED DRONGO <i>Dicrurus hottentottus</i>				.C	.P	.P	O/				.O	.P			P/	.P							

Species	Notes	Year, month and location																		
		2004/ Nov	2004/ Dec	2004/ Mar	2004/ Dec	2004/ Mar	2004/ Dec	2004/ Mar	2004/ Dec	2004/ Mar	2004/ Dec	2004/ Mar	2004/ Dec	2004/ Mar	2004/ Dec	2004/ Mar	2004/ Dec	2003/ Sep	2003/ Sep	
		Louangphabang Nam Ou	Phongsaly Nam Ou (not PDD)	Low-lying Phou Dendin NPA	Interior Phou Dendin NPA	Nam Houn & south PDD	Phou Fa	Phongsaly town	Phongsaly scrub	Phongsaly town and surrounds	Phou Taleng	Ban Muangvo etc.	Ban Boun-Nua	Ban Boun-Tai	Ban Naten	Ban Long Nay Mai	Ban Namaek	Ban Boun-Tai to Pak Namnoy	Phou Fa	Elsewhere
SIBERIAN BLUE ROBIN <i>Luscinia cyane</i>				[P]/P												P/.				
ORANGE-FLANKED BUSH ROBIN <i>Tarsiger cyanurus</i>	26						C/O				O/.									
ORIENTAL MAGPIE ROBIN <i>Copsychus saularis</i>		C	C	F/F		C/P			O/LF	/P		C/C	/P	P/P	P/P	P/P	P	P/P		
WHITE-RUMPED SHAMA <i>Copsychus malabaricus</i>			P	[P]/P	P/P	P/.					P/.	P/.				P/P		P/P		
WHITE-CAPPED WATER REDSTART <i>Chaimarrornis leucocephalus</i>			P	LC/P	O/.	LC/.														
PLUMBEOUS WATER REDSTART <i>Rhyacornis fuliginosus</i>		LC	C	C/C	LC/LC	C/.			O/.			C/.				P/.	P/.			
WHITE-BELLIED REDSTART <i>Hodgsonius phaenicuroides</i>									F/P											
WHITE-TAILED ROBIN <i>Myiomela leucura</i>				/P								P/.								
SLATY-BACKED FORKTAIL <i>Enicurus schistaceus</i>			C	C/C	LC/.	C/P			O/.			O/.				P/P		P		
WHITE-CROWNED FORKTAIL <i>Enicurus leschenaulti</i>				C/P	LC/P	C/P			O/.	/P	P/.	O/.				/P	P	/P		
GREEN COCHOA <i>Cochoa viridis</i>																				
PURPLE COCHOA <i>Cochoa purpurea</i>							P/.													
COMMON STONECHAT <i>Saxicola torquata</i>	27	P		/P					LC/LC			C/C	C/.	P/.	P/.					P
PIED BUSHCHAT <i>Saxicola caprata</i>												F/C	/P	P/.						
JERDON'S BUSHCHAT <i>Saxicola jerdoni</i>																				
GREY BUSHCHAT <i>Saxicola ferrea</i>				P/P	P/.				LC/C	/O	C/.		P/.	P/.						
CHESTNUT-TAILED STARLING <i>Sturnus malabaricus</i>									/P			/F								
PURPLE-BACKED STARLING <i>Sturnus sturninus</i>														/P						
WHITE-CHEEKED STARLING <i>Sturnus cineraceus</i>				O/.																
ASIAN PIED STARLING <i>Sturnus contra</i>																				
SMALL STARLING <i>Sturnus sp(p).</i>	4					/P														
BLACK-COLLARED STARLING <i>Sturnus nigricollis</i>																				
COMMON MYNA <i>Acridotheres tristis</i>																	P/P			
WHITE-VENTED MYNA <i>Acridotheres cinereus</i>			[O]														CAGE/ CAGE			
HILL MYNA <i>Gracula religiosa</i>				/P													CAGE/ CAGE			

Species	Notes	Year, month and location																		
		2004/	2004/	2004/	2004/	2004/	2004/	2004/	2004/	2005/	2004/	2004/	2004/	2005/	2005/	2005/	2004/	2004/	2003/	2003/
		Nov	Dec	Mar	Mar	Mar	Mar	Mar	Mar	Mar	May	Mar	Mar	Mar	May	May	May	May	May	Sep
		Louangphabang Nam Ou	Phongsaly Nam Ou (not PDD)	Low-lying Phou Dendin NPA	Interior Phou Dendin NPA	Nam Houm & south PDD	Phou Fa	Phongsaly town	Phongsaly scrub	Phongsaly town and surrounds	Phou Taleng	Ban Muangyo etc.	Ban Boun-Nua	Ban Boun-Tai	Ban Naten	Ban Long Nay Mai	Ban Namaek	Ban Boun-Tai to Pak Namnoy	Phou Fa	Elsewhere
CHESTNUT-VENTED NUTHATCH <i>Sitta nagaensis</i>					/P															
CHESTNUT-BELLIED NUTHATCH <i>Sitta castanea</i>	28										P/P									
VELVET-FRONTED NUTHATCH <i>Sitta frontalis</i>					P/P						F/F			P/.		P/.				
FIRE-CAPPED TIT <i>Cephalopyrus flammiceps</i>											P/.									
GREAT TIT <i>Parus major</i>			P	P/P			/P	P/P	/F	P/P		P/C	P/P	P/P						
YELLOW-CHEEKED TIT <i>Parus spilonotus</i>					/P						P/F									
SULTAN TIT <i>Melanochlora sultanea</i>																				
SAND / PALE MARTIN <i>Riparia riparia / R. diluta</i>	11	P	O																	
PLAIN MARTIN <i>Riparia paludicola</i>																				
DUSKY CRAG MARTIN <i>Hirundo concolor</i>																				
BARN SWALLOW <i>Hirundo rustica</i>		C	C	LFC	/P	C/C	P/C	C/C	LC/C	P/P		C/C	C/C	P/P	P/P	P/P	P	P/P		
WIRE-TAILED SWALLOW <i>Hirundo smithii</i>		LC																		
STRIATED SWALLOW <i>Hirundo striolata</i>	11	C	O	O/.	P/.	P/.														
RED-RUMPED / STRIATED SWALLOW <i>H. daurica / H. striolata</i>	4, 29	P		/P	/P	P/P	/P		/C	/F		/C	P/P						/P	
ASIAN HOUSE MARTIN <i>Delichon dasypus</i>	30			/P				P/.	F/P[C]		F/P[F]	P/P	P/.							
HOUSE MARTIN <i>Delichon sp(p)</i>	4				P/.	/P	/P		/P	/O	/P									
CRESTED FINCHBILL <i>Spizixos canifrons</i>																				
STRIATED BULBUL <i>Pycnonotus striatus</i>											P/.									
BLACK-HEADED BULBUL <i>Pycnonotus atriceps</i>																	P/.			
BLACK-CRESTED BULBUL <i>Pycnonotus melanicterus</i>		P	P	C/C	/P	P/P	C/C	C/.	F/O	P/P	C/F	P/.	P/P	P/P	P/P	P	P/.			P
RED-WHISKERED BULBUL <i>Pycnonotus jocosus</i>		P	C	CP	LC/LC	C/C	F/.	C/.	C/C	P/P	C/.	C/C	CP	P/P	P/P	P/P	P		P	P
BROWN-BREASTED BULBUL <i>Pycnonotus xanthorrhous</i>					LC/LC				F/C											
SOOTY-HEADED BULBUL <i>Pycnonotus aurigaster</i>	31	P	C	F/F	LC/P	CP	O/.	C/.	C/C	P/.		C/C	P/P	P/P	P/P	P/P	P	P/P		
FLAVESCENT BULBUL <i>Pycnonotus flavescens</i>					P/F				C/C	P/F										
PUFF-THROATED BULBUL <i>Alophoixus pallidus</i>				CP	CP	C/C	C/C		O/.	P/P	C/C			P/P	P/P	P/P	P			

(b) records from before 2003

Species	Notes	Year, month and location															
		1996 Mar	1996 Mar	1996 Mar	1996 Mar	1996 Mar	1996 Mar	1995 May/ Jun	1995 May/ Jun	1931 Nov	1929 May	1929 May/ Jun	1929 Apr/ Jun	1929 Jun	1929 Apr	1929 Apr/ Jun	1929 Apr
RUFIOUS-THROATED PARTRIDGE <i>Arborophila rufogularis</i>	53			CAGE				P									
BAR-BACKED PARTRIDGE <i>Arborophila brunneopectus</i>	53		P					P	F								
SCALY-BREASTED PARTRIDGE <i>Arborophila chartonii</i>			P			C		C									
MOUNTAIN BAMBOO PARTRIDGE <i>Bambusicola fytchii</i>			CAGE	CAGE							1		1				
RED JUNGLEFOWL <i>Gallus gallus</i>			C		P	P	C	C	C		2	2		1			
SILVER PHEASANT <i>Lophura nycthemera</i>	2, 53						P	P	P		1			5			
GREY PEACOCK PHEASANT <i>Polyplectron bicalcaratum</i>	53		C		P		C	C	C								
COTTON PYGMY-GOOSE <i>Nettapus coromandelianus</i>											1						
GARGANEY <i>Anas querquedula</i>							P										
BARRED BUTTONQUAIL <i>Turnix suscitator</i>														2			
SPECKLED PICULET <i>Picumnus inominatus</i>								P	P				1	4			
WHITE-BROWED PICULET <i>Sasia ochracea</i>													1	2			
GREY-CAPPED PYGMY WOODPECKER <i>Dendrocopos canicapillus</i>							P	[P]									
RUFIOUS WOODPECKER <i>Celeus brachyurus</i>									P		5	5	1				
LESSER YELLOWNAPE <i>Picus chlorolophus</i>								P			4	1					
GREATER YELLOWNAPE <i>Picus flavinucha</i>											3	2					
LACED WOODPECKER <i>Picus vittatus</i>											1						
GREY-HEADED WOODPECKER <i>Picus canus</i>																	
COMMON/ GREATER FLAMEBACK <i>Dinopium javanense / Chrysocolaptes lucidus</i>	4		P						P								
PALE-HEADED WOODPECKER <i>Gecinulus grantia</i>														1			
BAY WOODPECKER <i>Blythipicus pyrrhotis</i>			C			P	P		P				1	1			
GREAT SLATY WOODPECKER <i>Mulleripicus pulverulentus</i>			P				P		[P]		2						
GREAT BARBET <i>Megalaima virens</i>			[C]			[P]		P						2			
[LINEATED BARBET <i>Megalaima lineata</i>]									[P]								
BLUE-THROATED BARBET <i>Megalaima asiatica</i>			[C]	P		[P]	C	P	P	P (PF)	6	7	3				

Species	Notes	Year, month and location															
		1996 Mar	1996 Mar	1996 Mar	1996 Mar	1996 Mar	1996 Mar	1995 May/ Jun	1995 May/ Jun	1931 Nov	1929 May	1929 May/ Jun	1929 Apr/ Jun	1929 Jun	1929 Apr	1929 Apr/ Jun	1929 Apr
		Ban Boun-Nua- Ban Ngay-Tai	Phongsaly town and surrounds	Phongsaly Nam Ou	Louangphabang Nam Ou	Low-lying Phou Dendin NFA	Interior Phou Dendin NFA	Within Phou Dendin NFA	Outside Phou Dendin NFA	All sites	Ban Muangyo	Ban Boun-Tai	Phongsaly	Nam Ou	'Pyn Ho'	Ban Hatxa	Ban Laophouchai
SPOTTED DOVE <i>Streptopelia chinensis</i>		P	P			P		P			1						
RED COLLARED DOVE <i>Streptopelia tranquebarica</i>						[P]											
BARRED CUCKOO DOVE <i>Macropygia unchall</i>							P			1			1				
LITTLE CUCKOO DOVE <i>Macropygia ruficeps</i>											1						
EMERALD DOVE <i>Chalcophaps indica</i>		P	P					[P]		1	2	2					
POMPADOUR GREEN PIGEON <i>Treron pompadora</i>													1				
THICK-BILLED GREEN PIGEON <i>Treron curvirostra</i>								[P]			7	5				1	
PIN-TAILED GREEN PIGEON <i>Treron apicauda</i>								P					5				
GREEN PIGEON <i>Treron sp(p).</i>	4			P		P	P										
GREEN IMPERIAL PIGEON <i>Ducula aenea</i>										1	3						
MOUNTAIN IMPERIAL PIGEON <i>Ducula badia</i>							P	C					9		2		
SLATY-BREASTED RAIL <i>Gallirallus striatus</i>	55										1	1					
WHITE-BREASTED WATERHEN <i>Amaurornis phoenicurus</i>					P				P		6	2		1			
BLACK-TAILED CRAKE <i>Porzana bicolor</i>														1			
RUDDY-BREASTED CRAKE <i>Porzana fusca</i>	55												1				
COMMON SANDPIPER <i>Actitis hypoleucos</i>				P	P	P				1							
PHEASANT-TAILED JACANA <i>Hydrophasianus chirurgus</i>												2					
LITTLE RINGED PLOVER <i>Charadrius dubius</i>					P												
RIVER LAPWING <i>Vanellus duvaucelii</i>	53					P		O		1							
GREY-HEADED LAPWING <i>Vanellus cinereus</i>	53			P		P											
RED-WATTLED LAPWING <i>Vanellus indicus</i>											5	2					
OSPREY <i>Pandion haliaetus</i>				P		P											
BLACK BAZA <i>Aviceda leuphotes</i>													1				
ORIENTAL HONEY-BUZZARD <i>Pernis ptilorhynchus</i>				P				F									
LESSER FISH EAGLE <i>Ichthyophaga humilis</i>	53					P		F									
CRESTED SERPENT EAGLE <i>Spilornis cheela</i>		P	P		P	P					1						

Species	Notes	Year, month and location															
		1996 Mar	1996 Mar	1996 Mar	1996 Mar	1996 Mar	1996 Mar	1995 May/ Jun	1995 May/ Jun	1931 Nov	1929 May	1929 May/ Jun	1929 Apr/ Jun	1929 Jun	1929 Apr	1929 Apr/ Jun	1929 Apr
		Ban Boun-Nou- Ban Ngay-Tai	Phongsaly town and surrounds	Phongsaly Nam Ou	Louangphabang Nam Ou	Low-lying Phou Dendin NPA	Interior Phou Dendin NPA	Within Phou Dendin NPA	Outside Phou Dendin NPA	All sites	Ban Muangyo	Ban Boun-Tai	Phongsaly	Nam Ou	'Pyn Ho'	Ban Hatxa	Ban Laophouchai
BLUE WHISTLING THRUSH <i>Myophonus caeruleus</i>					P			0		1							
ORANGE-HEADED THRUSH <i>Zoothera citrina</i>								P					1				
SIBERIAN THRUSH <i>Zoothera sibirica</i>													2				
SCALY THRUSH <i>Zoothera dauma</i>			P			P	P			1							
EYEBROWED THRUSH <i>Turdus obscurus</i>													4				
THRUSH <i>Turdus</i> sp(p).			P		P												
LESSER SHORTWING <i>Brachypteryx leucophrys</i>													5				
DARK-SIDED FLYCATCHER <i>Muscicapa sibirica</i>													1				
MUGIMAKI FLYCATCHER <i>Ficedula mugimaki</i>													1				
SLATY-BACKED FLYCATCHER <i>Ficedula hodgsonii</i>							P										
RUFIOUS-GORGETED FLYCATCHER <i>Ficedula strophiatea</i>			P				P										
RED-THROATED FLYCATCHER <i>Ficedula parva</i>						P							2				
WHITE-GORGETED FLYCATCHER <i>Ficedula monileger</i>													2				
LITTLE PIED FLYCATCHER <i>Ficedula westermanni</i>							P						1				
BLUE-AND-WHITE FLYCATCHER <i>Cyanoptila cyanomelana</i>								P									
VERDITER FLYCATCHER <i>Eumyias thalassina</i>							P						3				
LARGE NILTAVA <i>Niltava grandis</i>							P										
RUFIOUS-BELLIED NILTAVA <i>Niltava sundara</i>							P										
VIVID NILTAVA <i>Niltava vivida</i>	24												1				
HAINAN BLUE FLYCATCHER <i>Cyornis hainanus</i>		P			[P]	P		P			7	4					
PALE BLUE FLYCATCHER <i>Cyornis unicolor</i>											2		1				
HILL BLUE FLYCATCHER <i>Cyornis banyumas</i>	54										2		1				1
BLUE FLYCATCHER <i>Cyornis</i> sp(p).	4	P						P									
GREY-HEADED CANARY FLYCATCHER <i>Culicicapa ceylonensis</i>		C	P		P	P	P	C			2		2				
SIBERIAN RUBYTHROAT <i>Luscinia calliope</i>						P							13				
SIBERIAN BLUE ROBIN <i>Luscinia cyane</i>													3				

Species	Notes	Year, month and location															
		1996 Mar	1996 Mar	1996 Mar	1996 Mar	1996 Mar	1996 Mar	1995 May/ Jun	1995 May/ Jun	1931 Nov	1929 May	1929 May/ Jun	1929 Apr/ Jun	1929 Jun	1929 Apr	1929 Apr/ Jun	1929 Apr
		Ban Boun-Nua- Ban Ngay-Tai	Phongsaly town and surrounds	Phongsaly Nam Ou	Louangphabang Nam Ou	Low-lying Phou Dendin NPA	Interior Phou Dendin NPA	Within Phou Dendin NPA	Outside Phou Dendin NPA	All sites	Ban Muangyo	Ban Boun-Tai	Phongsaly	Nam Ou	'Pyn Ho'	Ban Hatxa	Ban Laophouchai
BARN SWALLOW <i>Hirundo rustica</i>		C	P	C	P	P	P	LC	C		1	6	5	1			
WIRE-TAILED SWALLOW <i>Hirundo smithii</i>															4		
STRIATED SWALLOW <i>Hirundo striolata</i>	11												1	1			
RED-RUMPED / STRIATED SWALLOW <i>Hirundo daurica</i> / <i>H. striolata</i>	29	P		C	C	P	P										
ASIAN HOUSE MARTIN <i>Delichon dasypus</i>							P										
HOUSE MARTIN <i>Delichon sp(p)</i> .	4		P		P												
CRESTED FINCHBILL <i>Spizixos canifrons</i>													6				
STRIATED BULBUL <i>Pycnonotus striatus</i>													4				
BLACK-HEADED BULBUL <i>Pycnonotus atriceps</i>								[P]									
BLACK-CRESTED BULBUL <i>Pycnonotus melanicterus</i>		P		P	P		P	[P]		2	4						
RED-WHISKERED BULBUL <i>Pycnonotus jocosus</i>		C	P	C	P	C	P	C	LC	3		2					
BROWN-BREASTED BULBUL <i>Pycnonotus xanthorrhous</i>							P	[P]				8					
SOOTY-HEADED BULBUL <i>Pycnonotus aurigaster</i>	31	C				P	P	P		2		3					
FLAVESCENT BULBUL <i>Pycnonotus flavescens</i>							P					6				1	
PUFF-THROATED BULBUL <i>Alophoixus pallidus</i>		C			P	P		C	C	5	3	1					
GREY-EYED BULBUL <i>Iole propinqua</i>		[P]				P		C		7	3	2					
ASHY BULBUL <i>Hemixos flavala</i>						P	P	C		2		5					
MOUNTAIN BULBUL <i>Hypsipetes mcclllandii</i>												5					
BLACK BULBUL <i>Hypsipetes leucocephalus</i>		P				P	P	P				1				2	
HILL PRINIA <i>Prinia atrogularis</i>			P					C				16					
RUFESCENT PRINIA <i>Prinia rufescens</i>								P									
GREY-BREASTED PRINIA <i>Prinia hodgsonii</i>		[P]	P			P		P		1		2					
YELLOW-BELLIED PRINIA <i>Prinia flaviventris</i>								P		1		5					
PLAIN PRINIA <i>Prinia inornata</i>										1		2					
CHESTNUT-FLANKED WHITE-EYE <i>Zosterops erythropleurus</i>	34							P									
ORIENTAL WHITE-EYE <i>Zosterops palpebrosus</i>	34, 54							[P]		1		6					

Species	Notes	Year, month and location															
		1996 Mar	1996 Mar	1996 Mar	1996 Mar	1996 Mar	1996 Mar	1995 May/ Jun	1995 May/ Jun	1931 Nov	1929 May	1929 May/ Jun	1929 Apr/ Jun	1929 Jun	1929 Apr	1929 Apr/ Jun	1929 Apr
		Ban Boun-Nua- Ban Ngay-Tai	Phongsaly town and surrounds	Phongsaly Nam Ou	Louangphabang Nam Ou	Low-lying Phou Dendin NPA	Interior Phou Dendin NPA	Within Phou Dendin NPA	Outside Phou Dendin NPA	All sites	Ban Muangyo	Ban Boun-Tai	Phongsaly	Nam Ou	'Pyn Ho'	Ban Hatxa	Ban Laophouchai
YELLOW-BELLIED WARBLER <i>Abroscopus superciliaris</i>																	5
STRIATED GRASSBIRD <i>Megalurus palustris</i>											4						
WHITE-CRESTED LAUGHINGTHRUSH <i>Garrulax leucolophus</i>		P			P	C	P	C			1	2	1				
GREATER NECKLACED LAUGHINGTHRUSH <i>Garrulax pectoralis</i>						P		P									
BLACK-THROATED LAUGHINGTHRUSH <i>Garrulax chinensis</i>								P			1	4	2				
HWAMEI <i>Garrulax canorus</i>						P						2					1
WHITE-BROWED LAUGHINGTHRUSH <i>Garrulax sannio</i>													8				1
LAUGHINGTHRUSH <i>Garrulax</i> sp(p).	4					P											
BUFF-BREASTED BABBLER <i>Pellorneum tickelli</i>		P	P			P		C			1						
PUFF-THROATED BABBLER <i>Pellorneum ruficeps</i>						P		P				6	2				
LARGE SCIMITAR BABBLER <i>Pomatorhinus hypoleucos</i>											2						
SPOT-BREASTED SCIMITAR BABBLER <i>Pomatorhinus erythrocnemis</i>													4				2
STREAK-BREASTED SCIMITAR BABBLER <i>Pomatorhinus ruficollis</i>	46					[P]	P	P			1	2					
RED-BILLED SCIMITAR BABBLER <i>Pomatorhinus ochraceiceps</i>								[P]									
CORAL-BILLED SCIMITAR BABBLER <i>Pomatorhinus ferruginosus</i>								P									
LIMESTONE WREN BABBLER <i>Napothera crispifrons</i>					P												
EYEBROWED WREN BABBLER <i>Napothera epilepidota</i>											1						
RUFIOUS-FRONTED BABBLER <i>Stachyris rufifrons</i>	48, 54												3				
RUFIOUS-FRONTED/ RUFIOUS-CAPPED BABBLER <i>Stachyris rufifrons</i> / <i>S. ruficeps</i>	4, 48		P			P		P									
GOLDEN BABBLER <i>Stachyris chrysaea</i>			P														
GREY-THROATED BABBLER <i>Stachyris nigriceps</i>		P	P		P			P				3	4				
SPOT-NECKED BABBLER <i>Stachyris striolata</i>						P					1						
STRIPED TIT BABBLER <i>Macronous gularis</i>		C	[P]		P	P	P	C	C		1	3	2				
CHESTNUT-CAPPED BABBLER <i>Timalia pileata</i>						P		C			2		7				
YELLOW-EYED BABBLER <i>Chrysomma sinense</i>							P	P					1				

Species	Notes	Year, month and location																
		1996 Mar	1996 Mar	1996 Mar	1996 Mar	1996 Mar	1996 Mar	1995 May/ Jun	1995 May/ Jun	1931 Nov	1929 May	1929 May/ Jun	1929 Apr/ Jun	1929 Jun	1929 Apr	1929 Apr/ Jun	1929 Apr	
		Ban Boun-Nua- Ban Ngay-Tai	Phongsaly town and surrounds	Phongsaly Nam Ou	Louangphabang Nam Ou	Low-lying Phou Dendin NFA	Interior Phou Dendin NFA	Within Phou Dendin NFA	Outside Phou Dendin NFA	All sites	Ban Muangyo	Ban Boun-Tai	Phongsaly	Nam Ou	'Pyn Ho'	Ban Hatxa	Ban Lao-phouchai	
SILVER-EARED MESIA <i>Leiothrix argentauris</i>			P				P	P	P (PF)				14					
WHITE-BROWED SHRIKE BABBLER <i>Pteruthius flaviscapis</i>							P	P										
CHESTNUT-FRONTED SHRIKE BABBLER <i>Pteruthius aenobarbus</i>						P					1							
SPECTACLED BARWING <i>Actinodura ramsayi</i>													8				2	
BLUE-WINGED MINLA <i>Minla cyanouroptera</i>							P						3					
RUFIOUS-THROATED FULVETTA <i>Alcippe rufogularis</i>	53					P					1	3						
BROWN-CHEEKED FULVETTA <i>Alcippe poioicephala</i>						C	P	[P]			4	2						
GREY-CHEEKED FULVETTA <i>Alcippe morrisonia</i>		P	P			[P]	[P]	[C]	[P] (PF)		2	13						
RUFIOUS-BACKED SIBIA <i>Heterophasia annectans</i>							P						1					
LONG-TAILED SIBIA <i>Heterophasia picaoides</i>							P								1			
STRIATED YUHINA <i>Yuhina castaniceps</i>				P	P	P	P	C					8					
WHISKERED YUHINA <i>Yuhina flavicollis</i>	53						P						2					
BLACK-CHINNED YUHINA <i>Yuhina nigrimenta</i>											2							
WHITE-BELLIED YUHINA <i>Yuhina zantholeuca</i>						P	P	P			2	1						
GREY-HEADED PARROTBILL <i>Paradoxornis gularis</i>							P	P					2					
SPOT-BREASTED PARROTBILL <i>Paradoxornis guttaticollis</i>	53						P						4					
PLAIN FLOWERPECKER <i>Dicaeum concolor</i>		[P]				P	C	P			3	1						
FIRE-BREASTED FLOWERPECKER <i>Dicaeum ignipectus</i>		[P]											3					
FLOWERPECKER <i>Dicaeum sp(p).</i>	4		P															
RUBY-CHEEKED SUNBIRD <i>Anthreptes singalensis</i>							P						1					
PURPLE-NAPED SUNBIRD <i>Hypogramma hypogrammicum</i>											2							
MRS GOULD'S SUNBIRD <i>Aethopyga gouldiae</i>							P											
BLACK-THROATED SUNBIRD <i>Aethopyga saturata</i>	51			P		P	P				4	2	4					
CRIMSON SUNBIRD <i>Aethopyga siparaja</i>		P	P	P	P			[P]					1					
LITTLE SPIDERHUNTER <i>Arachnothera longirostra</i>									P		1	1						
STREAKED SPIDERHUNTER <i>Arachnothera magna</i>						P	P	P			1	2						

Species	Notes	Year, month and location															
		1996 Mar	1996 Mar	1996 Mar	1996 Mar	1996 Mar	1996 Mar	1995 May/ Jun	1995 May/ Jun	1931 Nov	1929 May	1929 May/ Jun	1929 Apr/ Jun	1929 Jun	1929 Apr	1929 Apr/ Jun	1929 Apr
		Ban Boun-Niun- Ban Ngay-Tai	Phongsaly town and surrounds	Phongsaly Nam Ou	Louangphabang Nam Ou	Low-lying Phou Dendin NPA	Interior Phou Dendin NPA	Within Phou Dendin NPA	Outside Phou Dendin NPA	All sites	Ban Muangyo	Ban Boun-Tai	Phongsaly	Nam Ou	'Pyn Ho'	Ban Hatxa	Ban Laophouchai
EURASIAN TREE SPARROW <i>Passer montanus</i>												11		5			
FOREST WAGTAIL <i>Dendronanthus indicus</i>												1					
WHITE WAGTAIL <i>Motacilla alba</i>				C	P	C		LC	C								
<i>M. a. alboides</i>				P		C											
<i>M. a. leucopsis</i>					P	P											
YELLOW WAGTAIL <i>Motacilla flava</i>												3					
GREY WAGTAIL <i>Motacilla cinerea</i>		LC	C	P	C	P											
RICHARD'S PIPIT <i>Anthus richardi</i>		C				P					2		2				
PADDYFIELD PIPIT <i>Anthus rufulus</i>											7	2					
OLIVE-BACKED PIPIT <i>Anthus hodgsoni</i>		P			P	P	C							1			
WHITE-RUMPED MUNIA <i>Lonchura striata</i>		P			P	P					1	2	3				1
SCALY-BREASTED MUNIA <i>Lonchura punctulata</i>		C				P											
BLACK-HEADED MUNIA <i>Lonchura malacca</i>											1						
COMMON ROSEFINCH <i>Carpodacus erythrinus</i>		P				P	P						2				2
SPOT-WINGED GROSBEEK <i>Mycerobas melanozanthos</i>	58							P			2						
CRESTED BUNTING <i>Melophus lathami</i>							P				1		6				2
LITTLE BUNTING <i>Emberiza pusilla</i>		P				P							2				
YELLOW-BREASTED BUNTING <i>Emberiza aureola</i>											1		1				
CHESTNUT BUNTING <i>Emberiza rutila</i>						P							1				

Key

Cells for 1995–2005, abundance assessments based on days in suitable habitat using techniques suitable to find the species: 'C' = common (recorded daily, often in large numbers), 'F' = frequent (recorded on most days), 'O' = occasional (recorded on fewer than half the days), 'P' = present, but abundance not assessed, '.' = not recorded (in many cases, this cannot be taken as even weakly suggestive of genuine absence); 'L' (prefix) = evidently localised even within suitable habitat. Cells for 1929–1931: the number indicates the number of specimens collected.

Many columns give two assessments, separated by a slash (/): this indicates the status in two survey periods respectively, as indicated in the 'months' row.

[] = Provisional record; brackets round a species's name indicate all records present and past should be considered provisional.

All codes in the cells of the table refer to wild, living birds except REM = only recorded as remains in the field; CAGE = only recorded as living bird in captivity.

Modern sites, 1996–2005

Louangphabang Nam Ou = the Nam Ou between its mouth and Muang Koa (1996) or Ban Muangngoy (2004).

Phongsaly Nam Ou (not PDD) = the Nam Ou between Muang Koa (1996) or Ban Muangngoy (2004) and the mouth of the Nam Va.

Low-lying Phou Dendin NPA = the surveyed Nam Ou upstream of the Nam Va mouth; includes the Nam Khang to Ban Tatoung and adjacent forest within 1–2 km and up to c.800 m.

Interior Phou Dendin NPA = hill and mountain habitats of Phou Dendin NPA, north of the Nam Va.

Nam Houn & south PDD: the Nam Houn and Phou Dendin NPA south of the Nam Va.

Phou Fa = Phou Fa forest area, as bounded by the park (records from some surveys are listed under 'Phongsaly town and surrounds').

Phongsaly town = the garden of the Hotel Phou Fa, the EU project compound, the intervening road and the remainder of the urban area. The list is not complete; birds common in the adjacent scrub or in Phou Fa forest were not necessarily noted (records from some surveys are listed under 'Phongsaly town and surrounds').

Phongsaly scrub = the trails out of the town to various villages (see text).

Phongsaly town and surrounds = observations from Phou Fa, the town and hotel gardens (from March 1996, May 2004, in part March 2005, where records could not all be ascribed to the more precise categories).

Ban Boun-Tai to Pak Namnoy = road journey from Ban Boun-Tai to Pak Namnoy, 27 December 2004 and 26 March 2005.

Elsewhere 2003 = incidental records from various parts of Phongsaly, Boun-Tai and Boun-Nua districts, 13–17 September 2003.

Other named sites, see text.

Other recent records (previously published)

1995, Outside Phou Dendin NPA = Nam Ou downstream of Phou Dendin NPA, and (marked '(PF)') Phou Fa, Phongsaly town, 23–24 May and 2–3 June 1995. The valuable records of Salter (1992) are not incorporated, because no copies of the report can now be found.

Historical

1931 = the Legendre Indochina Expedition (Dickinson 1970a), pooling records from all localities in Phongsaly province and/or along the Nam Ou.

1929 = the Kelley-Roosevelts' expedition (Bangs and Van Tyne 1931).

There are probably also specimens from F. R. Wulsin but these have never been written up and so are not entered in this table.

Footnotes to species

- The record from Phou Taleng was of a bird calling in a valley far below.
- A subspecies with males very white in plumage.
- Birds at Ban Long Nay Mai and Ban Namaek fitted *P. i. malayorum*.
- Abundance assessment excludes individuals identified to species.
- Head pattern of race *M. a. davisoni*. An oft-apparent dark moustachial stripe seemed to be due to a fold in the feathering extending from the gape.
- Provisionally identified by ear on the basis of song.
- Domestic birds were widespread in 2004–2005, but no evidence was found of feral populations (i.e. wild-breeding birds not owned by anybody); previous reports did not rule out free-flying domestic birds.
- Additionally, one was seen between Ban Boun-Nua and Phongsaly town in May 2004.
- Includes at least one sighting published as potentially a Grey-headed Fish Eagle; see text.
- Lesser Kestrel *F. naumanni* was not always eliminated, but has not recently been recorded from Laos.
- See text for racial identification.
- Winter-plumage pond herons cannot be identified in the field (Robson 2000); on geographical grounds, all were probably Chinese Pond Heron.
- All November–December birds were a race other than *L. c. lucionensis*; but the latter accounted for all May 2004 records.
- All birds resembled *L. s. tricolor* in plumage.
- Several adult males were seen; none was *O. t. nigellicauda*, which might also occur (see Robson 2000).
- Field identification of Indochinese and Black-winged Cuckooshrikes is challenging (Robson 2000). Most birds fitted the latter, but at least one had white stripes down the sides of the under-tail, supposedly indicating Indochinese.
- Field identification of Ashy, Rosy and Swinhoe's Minivets is challenging (Robson 2000), especially because birds are often seen only in overhead flight and share similar calls.
- Grey-chinned, and, especially, Long-tailed and Short-billed Minivets are difficult to separate in the field (Robson 2000). Most sightings were left unidentified.
- Hundreds of birds were seen; all were dark-cheeked. White-cheeked forms occur in North Laos mainly or entirely on passage (JWD unpubl.). *D. l. hopwoodi* was identified at Ban Long Nay Mai in May 2004.
- One photographed in November or December at Ban Boun-Tai was race *M. s. pandoo*.
- All birds seen well in November–December (about half the total) had yellow bills, and were a race other than *M. c. caeruleus*.
- The 2004–2005 netting records fitted *B. l. carolinae*.
- All birds seen well appeared to be Rufous-bellied rather than Fujian Niltava *N. davidi*: the rich orange underparts extended right to the vent, and the entire crown shone blue.
- A Phongsaly specimen listed in Bangs and Van Tyne (1931) as Fujian Niltava was reidentified as this species by Dickinson (1973).
- Only the very few identified visually ruled out White-tailed Rubythroat *L. pectoralis*, likely to occur in Laos, which calls like Siberian Rubythroat (Robson 2000).
- All blue males seen were *T. c. rufilatus*, rather than the nominate; the latter has also occurred recently in North Laos (JWD unpubl.).
- A few were clearly *S. t. stejnegeri*, the common wintering form of lowland Laos, but some seemed to be *S. t. przewalskii*, a localised breeder in Laos.
- All birds resembled *S. c. tonkinensis*.
- These birds were not *H. striolata stanfordi*; see text for further discussion.
- Northern House Martin can be difficult to separate, but viewing conditions were often excellent and birds sometimes called; Northern, if present at all, was at best very scarce.
- A red-vented form.
- In 2004–2005, dozens of birds were seen well and all except one (at Phou Fa on 10 December) were a black-headed form.
- All birds seen well resembled *P. i. extensicauda*, rather than *P. i. herberti* of (e.g.) Vientiane.
- Identification of white-eyes to species in Laos (other than well-marked Chestnut-flanked) is difficult; skins at NHM show imperfect congruence in the different plumage features usually suggested to assist identification, and calls vary between Lao localities from birds which all look like Japanese White-eye (JWD unpubl.). Hence, birds with prominent yellow central belly bands have been assigned to Oriental, and 'white-eye sp(p)'. used for birds lacking visibly chestnut flanks or such a band.
- The only bird seen showed neither a yellow supercilium nor a well-marked yellow frons; on underpart pattern it was identified as Slaty-bellied Tesia. Confirmation is desirable.
- Some birds strongly washed yellow below and greenish above suggested the possibility of Tickell's Leaf Warbler *P. affinis* (never recorded from Indochina); but variation in these characters seemed to be continuous, and calls fitted far better those of Buff-throated Warbler, as described in Robson (2000).
- Clearly not Pallas's Leaf Warbler; outside Phou Dendin NPA, few records could exclude Lemon-rumped Leaf Warbler *P. chloronotus*; this is probably less likely (see Duckworth *et al.* 1999, Lynam *et al.* 2006: 112), but previous records have not yet been fully reviewed. Known as *P. sichuanensis* by Inskipp *et al.* (1996), but see Martens and Eck (1995).
- On calls, some/most birds may have been *P. t. trochiloides* and/or *P. t. obscuratus*, rather than *P. (t.) plumbeitarsus*, the common wintering form of lowland Laos, and to which the Kelley-Roosevelts' specimens are now assigned.
- This species (probably paraphyletic, as currently defined: Olsson *et al.* 2005) is difficult to distinguish from several similar taxa. Birds were identified (which were of non-yellow race[s]) by trunk- and bough-clinging behaviour, apparently not shown by Emei Leaf Warbler (Alström and Olsson 1995). See also White-tailed Leaf Warbler.
- Much brighter than the apparent Blyth's Leaf Warblers in the area, so probably the nominate, not the duller *P. d. disturbans*, which might also occur. Three Kelley-Roosevelts' specimens originally identified as Blyth's Leaf Warbler are now reassigned to *P. d. davisoni*. See also Blyth's Leaf Warbler
- Pending clarification of the taxonomic status of Indochinese karst breeding populations akin to this species, identification is kept provisional. Silent birds are probably indistinguishable in the field.
- A distinctive form, tape-recorded.
- 'Golden-spectacled Warbler' is a complex of similar species; see text.
- One bird (from 600 m) seemed to show a yellow chin and may have been White-spectacled Warbler *S. affinis*, not yet certainly recorded in Laos.
- All the few birds seen were of the pale-cheeked, 'typical', form.
- White-browed *P. schisticeps* and Streak-breasted Scimitar Babbler perhaps intergrade; see text.
- The 2005 netting record fitted *N. e. amyae*.
- Rufous-fronted and Rufous-capped Babblers are very similar (Robson 2000) but those seen well (except one in Phou Dendin NPA) showed facial features of Rufous-fronted. Moreover, Bangs and Van Tyne (1931) identified only Rufous-fronted among Phongsaly specimens. Past Lao sight records identified as Rufous-capped warrant critical review; status elsewhere in the northern highlands is uncertain (e.g. Davidson 1998, 1999).
- Bangs and Van Tyne (1931) omitted the locality details of Kelley-Roosevelts' specimens; all came from Vietnam.
- Potentially present among the many unidentified dull-plumaged flowerpeckers seen and heard in November–December 2004.
- Other congeners potentially overlooked; only c.20% of *Aethopyga* individuals were identified to species.
- The several species which call with a *tic* note.
- Thewlis *et al.* (1998) detailed the 1992, 1995 and 1996 records.
- Kelley-Roosevelts' specimens housed in FMNH warrant checking to confirm species identification.
- Specimens listed under Ban Boun-Tai actually come from 'Long Nai'.
- The series of ten bush warblers reported by Bangs and Van Tyne (1931) as *Homochlamys fortipes davidiana* was re-examined by P. C. Rasmussen (*in litt.* 1999) and found to contain both *C. fortipes* and *C. flavolivacea oblitus*.
- Bangs and Van Tyne (1931) listed two specimens of *Tribura luteoventris* from Phongsaly; Dickinson *et al.* (2000) found them both to be *Bradypterus mandelli* (= *B. seebohmi* in Inskipp *et al.* 1996).
- A record of Yellow-billed Grosbeak *Eophona migratoria* from Phongsaly in 1996 given in Duckworth (1999) was in error (TT unpublished data).

APPENDIX 2

Gazetteer of localities visited and mentioned in Phongsaly province, and selected other sites

Name used here	Map name	Other names	Altitude	Coordinates
Ban Bakong	Ban Bakong	Ban Bokong (local)	1,140–1,320 m	21°37'N 102°05'E
Ban Bomang	Ban Bomang	Ban Xiengpi (local) ⁴	680 m	21°31'N 101°51'E
Ban Bouamphom	Ban Bouamphom		560 m	21°07'N 102°09'E
Ban Boun-Gnang	Ban Boun-Gnang		555 m	21°24'N 101°58'E
Ban Boun-Nua	Ban Boun-Nua	Boun Neua (BVT)	960 m	21°38'N 101°54'E
Ban Boun-Tai	Ban Boun-Tai	Boun Tai (BVT, Osg)	560 m	21°23'N 101°58'E
Ban Chicho	Ban Chicho		1,080 m	21°36'N 102°01'E
Ban Dua	Ban Dua		690 m	21°29'N, 101°51'E
Ban Hathin	Ban Sing ³		510–600 m	22°03'N 102°16'E
Ban Hatkao	Not marked		420 m	c. 21°38'N 102°15'E
Ban Hatkham	Not traced	Ban Hat Kham (Leg)	Not traced	Not identified in source (Leg)
Ban Hatxa	Ban Hatxa	Hatsa (BVT)	440–500 m	21°44'N 102°12'E
Ban Houangtay	Not marked		980 m	21°45'N 102°22'E *
Ban Houaylek	Not marked		1,000 m	21°38'N 101°55'E
Ban Houayluang	Ban Houayluang		330 m	20°14'N 102°20'E
Ban Houaylo-Nua (abandoned)	Ban Houaylo-Nua		1,390 m	21°38'N 101°57'E
Ban Houayseun	Ban Houangtaigne		980 m	21°44'N 102°21'E
Ban Houaytou	Ban Houaytou		700 m	21°28'N 101°50'E
Ban Kachet	Ban Kachet		410 m	20°34'N 102°21'E
Ban Khomen	Ban Khomen	Makomen (BVT); Ban Komen (local)	1,100–1,480 m	21°39'N 102°08'E
Ban Khounsouk-Noy	Ban Khounsouk-Noy	Ban Khounsouk (local)	1,240–1,400 m	21°43'N 102°07'E
Ban Kiou	Ban Kiou		1,000 m	21°42'N 102°17'E
Ban Lak 69	Not marked		800 m	c. 21°27'N 101°47'E
Ban Laophouchai	Ban Laophouchai ¹	Lao Fou Tchai (BVT); Lao Fou Chai (Osg)	1,120 m	21°46'N 102°24'E
Ban Long Nay Kao	Ban Naignang	Long Nai (BVT)	710 m	21°16'N 101°56'E
Ban Long Nay Mai	Ban Pangkhai-Nua		740 m	21°14'N 101°55'E
Ban Mai	Ban Mai		920 m	21°49'N 102°20'E
Ban Maochaoulouang	Ban Maochaoulouang	Ban Mongchau (local)	1,300–1,360 m	21°40'N 102°05'E
Ban Mongchau-Noy	Ban Mongchau-Noy	Muang Chao Noy (BVT)	1,200 m	21°36'N 101°59'E
Ban Muangngoy	Ban Ngoy-Nua	Muong Ngoi (BVT, Leg), Ban Ngoy (BCI)	340 m	20°42'N 102°40'E
Ban Muangyo	Ban Muangyo	Muong Yo (BVT, Osg), Ban Yo (local)	680 m	21°31'N 101°51'E
Ban Namaek	Ban Namaek		640 m	21°18'N 101°58'E
Ban Namhoy	Not marked		720–800 m	21°33'N 101°49'E
Ban Namhua	Ban Namhua		840 m	22°08'N 102°16'E
Ban Namli	Not marked ⁵		750 m	21°13'N 102°06'E
Ban Namong	Ban Sensoukkha		920 m	21°42'N 102°16'E
Ban Naten	Ban Naten		670 m	21°20'N 101°52'E
Ban Ngay-Nua	Ban Ngay-Nua		720 m	21°50'N 101°54'E
Ban Ngay-Tai	Ban Ngay-Tai		540 m	21°51'N 102°02'E
Ban Noua	Ban Noua		390 m	21°04'N 102°40'E
Ban Pakbak	Ban Pakbak		360 m	20°34'N 102°35'E
Ban Paknamnoy	Ban Sinxai		440 m	21°06'N 102°15'E
Ban Pak-Ou	Ban Pak-Ou	Pak Hou (BVT), Pak Ou (BCI)	275 m	20°03'N 102°13'E
Ban Pangxo	Ban Pangxo		880 m	21°43'N 102°10'E
Ban Phagnexi	Ban Phagnexi		1,260 m	21°39'N 102°09'E
Ban Pumouang	Not marked		460 m	21°55'N 102°19'E
Ban Pusum	Ban Pusum		420 m	21°52'N 102°16'E
Ban Siengnua	Not marked		470 m	21°39'N 102°25'E
Ban Sombun	Ban Xiengpi ⁴		700 m	21°32'N 101°50'E
Ban Sopkhang	Ban Ouang		510–720 m	22°06'N 102°16'E
Ban Sopnao	Ban Sopnao	Sop Nao (Leg)	400 m	21°10'N 102°46'E
Ban Sopong	Ban Hatko		420 m	21°40'N 102°15'E
Ban Soppha	Not marked		640 m	22°12'N 102°09'E
Ban Tan	Not marked		620–1,000 m	22°07'N 102°20'E
Ban Tatoung	Ban Tang (abandoned)		500–812 m	22°09'N 102°13'E
Ban Thenkhen	Ban Thenkhen	Ban Ten Khen (BVT)	315 m	20°28'N 102°32'E
Ban Xaewlixou	Not marked		800 m	22°12'N 102°04'E
Hat Chan	Not marked		590 m	22°03'N 101°58'E
Houay Hin mouth	mouths of Houay Hinnoy + H. Hinlo	Ban Soppong (abandoned)	580–650 m	22°04'N 102°03'E

Name used here	Map name	Other names	Altitude	Coordinates
Houay Khanionho mouth	Houay Khanionho mouth		605 m	22°03'N 101°56'E
Houay Ling	Houay Ling	Nam Deng (local)	600 m	21°50'N 102°19'E
Houay Matiaho mouth	Houay Matiaho mouth		550 m	22°05'N, 102°06'E
Houay Yoong temple ruin	Not marked		550 m	22°06'N 102°08'E *
Kang Pha Ha	Not traced		Not traced	Not identified in source (Leg)
Khoa	Khoa	Muong Khoua (BVT); Muang Koa (BCI)	395 m	21°04'N 102°31'E (town)
Kouei Soung	Not traced		Not traced	Not identified in source (BVT)
Louangphabang	Louangphabang	Many variant spellings in use	260 m	19°54'N 102°08'E
Nam Fan	Nam Fan		800–1,000 m	21°40'N 102°08'E
Nam Houn mouth	Nam Houn mouth		420 m	21°36'N 102°19'E
Nam Hoy	Nam Hoy		680 m	Flows through Ban Muangyo
Nam Hua mouth	Nam Hua mouth		520 m	22°07'N 102°15'E
Nam Khan mouth	Nam Khan mouth		480 m	21°58'N 102°19'E
Nam Khang mouth	Nam Khang mouth		510 m	22°06'N 102°15'E
Nam La mouth	Nam La mouth		510 m	22°04'N 102°16'E
Nam Lan	Nam Lan		670 m	Flows through Ban Naten
Nam Likna mouth	Nam Likna mouth	Nam Na (local)	390 m	20°21'N 102°26'E
Nam Long mouth	Nam Long mouth		490 m	21°59'N 102°18'E
Nam Ngay	Nam Ngay		550–750 m	Ban Ngay-Tai–Ban Ngay-Nua
Nam Ngeun	Nam Ngeun		640 m	Flows through Ban Namaek
Nam Noua	Nam Noua		390–400 m	Flows through B. Sopnao and B. Noua
Nam Nu mouth	Nam Nu mouth		As Ban Hathin	As Ban Hathin
Nam Ou	Nam Ou	Nam Hou (BVT); Nam Hau (Leg); Namu (Osg)	275–605 m	Flows through many survey sites
Nam Ou camp #1	Not marked		520 m	22°06'N 102°14'E *
Nam Ou camp #2	Not marked		550 m	22°05'N 102°09'E *
Nam Paho mouth	Nam Paho mouth		600 m	21°41'N 102°29'E
Nam Pan mouth	Nam Pan mouth		470 m	21°57'N, 102°19'E
Nam Pha	Nam Bangkho		640 m	As Ban Soppa
Nam Sing mouth	Nam Sing mouth	Nam Sin (local)	510 m	As Ban Hathin
Nam Tou	Nam Nou		690 m	Flows through Ban Dua
Nam Va mouth	Nam Va mouth	Ban Muangva	460 m	21°54'N 102°20'E
Oudomxai	Xai	Oudomxay	640 m	20°41'N 101°59'E
Phongsaly	Phongsali	Phong Saly (BVT, Osg)	1,380–1,440 m	21°41'N 102°06'E
Phou Dendin	Phou Dendin ²		(up to 1,948 m)	22°09'N 102°22'E
Phou Fa	Phou Pha		1,440–1,625 m	as Phongsaly
Phou Namla camp	Not marked		1,350–1,600 m	22°09'N 102°19'E *
Phou Taleng	Not named specifically		900–1,500 m	see Phou Thonghinho
Phou Thonghinho	Phou Thonghinho		(up to 1,684 m)	21°34'N 101°59'E
Pyn Ho	Not marked	Pin Ho, Sala Pyn Ho, Sala (all BVT)	Probably 1,200+ m	perhaps up the Nam Paho?
Taloun	Ban Kioutloun–Gnai ⁶		1,400 m	19°35'N 102°14'E
Vang Pha Ho	Not traced		Not traced	Not identified in source (Leg)

Key

Sources for other names: BCI = Thewlis *et al.* (1998); BVT = Bang and Van Tyne (1931); Leg = the Legendre Expedition (Dickinson 1970a); local = phonetic rendition of name in current local use; Osg = Osgood (1932).

Altitudes given as a range reflect the actual locations of bird observations.

Coordinates were taken from the RDPL SGE 1: 100,000 topographic maps; see below), except those marked * which were taken with a GPS. For streams, coordinates of the mouth are given (indicated as such) when significant lengths were surveyed (indicated in the text). For streams visited at only a point or short length, that site's coordinates are given.

- 1 Another Ban Laophouchai lies at 22°19'N 102°24'E, but both distance from Ban Hatxa and altitude given in Bangs and Van Tyne (1931) indicate that they visited the southern of the two.
- 2 At least two further peaks called Phou Dendin are mapped, at 22°16'N 102°37'E and 22°17'N 102°37'E, rising to 1,533 m and 1,614 m respectively.
- 3 Ban Muanghat-hin (map name) lies a little upstream of Ban Hathin (map name, Ban Sing) and these are now effectively contiguous.
- 4 A village mapped as Ban Xiengpi a little to the north-west of map-named Ban Bomang is in the position of today's Ban Sombun.
- 5 A village mapped as Ban Namli lies c.2 km south-west of the present position.
- 6 Very different coordinates and altitude were given for this site by Thewlis *et al.* (1998), who however stated that they had not located the site on RDPL SGE maps. The directions of Delacour and Greenway (1940a: 19–20) for Taloun point to the village of this name, which also fits in terms of terrain and altitude.