

# Incidental wetland bird observations from Attapu and Savannakhet provinces, Lao PDR, March–June 2005

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During incidental bird observations at four sites in South and Central Lao People's Democratic Republic (Xe Pian National Protected Area, Bung Pulone/Bung Khe wetlands, Xe Champon wetlands and Bung Hor) in March–June 2005, I recorded 91 species (excluding taxa identified to genus only), including Green Peafowl *Pavo muticus* (Vulnerable) and 3 Near Threatened species: Lesser Fish Eagle *Ichthyophaga humilis*, Darter *Anhinga melanogaster* and Yellow-breasted Bunting *Emberiza aureola*.

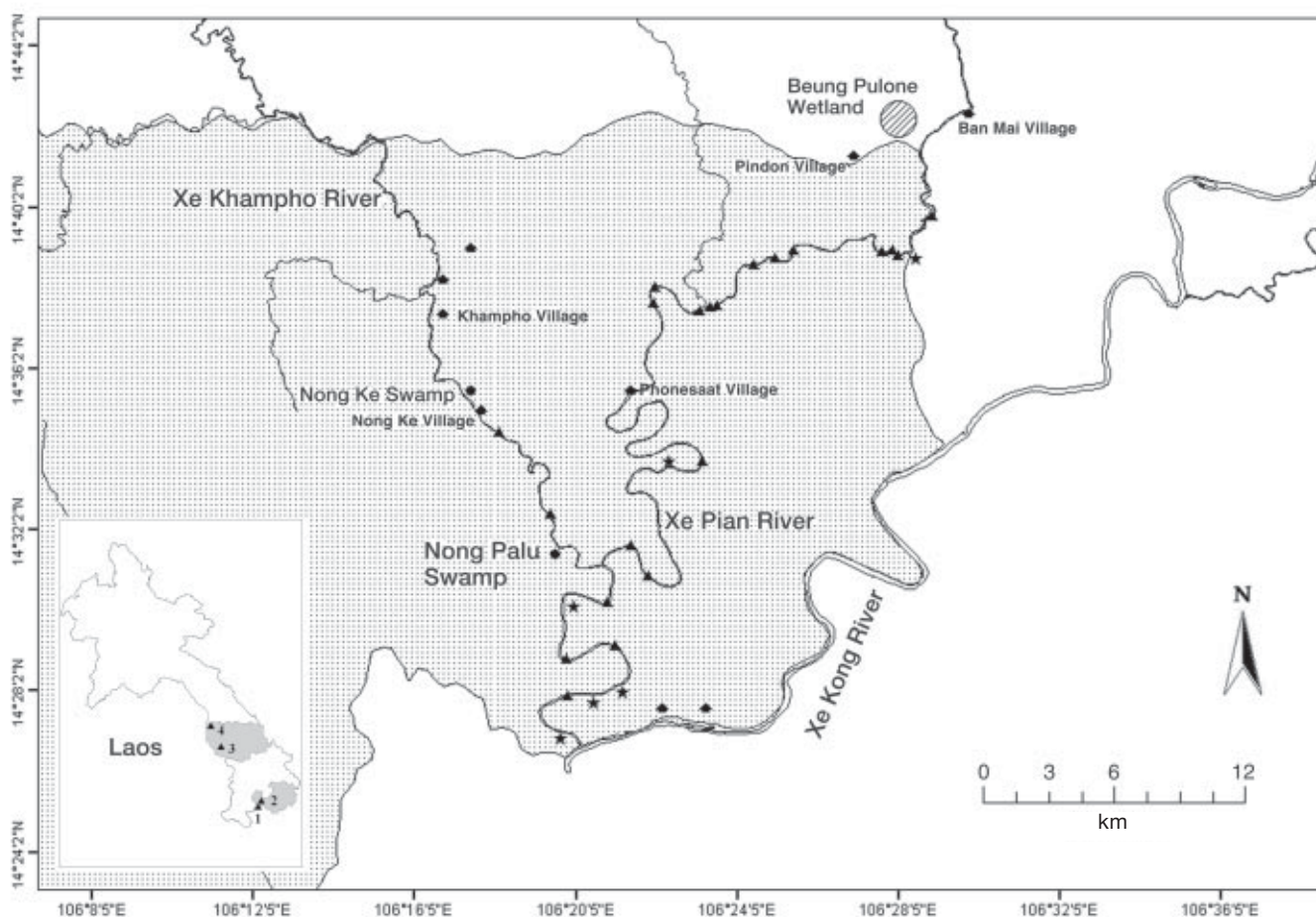
## INTRODUCTION

During a programme of national crocodile surveys in 2005 (Bezuijen *et al.* 2005), I recorded incidental observations of birds during March–June (the late dry season and early wet season) in four wetland sites in Lao People's Democratic Republic (hereafter 'Laos'). Published information on the avifauna of these sites was collected 8–55 years previously. Visits to each site were brief (0.5–5 days/site). IUCN Red List categories (Vulnerable, Near Threatened etc.) follow BirdLife International (2005). Nationally threatened species are listed as 'At Risk in Laos', 'Potentially At Risk in Laos' or 'Little Known in Laos' (Duckworth *et al.* 1999b). The spelling of site names follows

the *Service Geographique d'Etat* (1:200,000) topographic map series for Laos (Appendix 1) and largely accords with Thewlis *et al.* (1996, 1998). Site names are given in full, i.e. including the Laos prefix for river ('xe'), pond ('nong'), lake ('bung'), swamp ('kout') or village ('ban').

## STUDY SITES

Two sites were visited each in South and Central Laos (*sensu* King *et al.* 1975, Duckworth *et al.* 1999a) (Fig. 1). In Xe Pian National Protected Area (NPA), observations were made along the Xe Pian river from the Xe Pian/Xe Kong confluence to Ban Mai village (75 km), the Xe



**Figure 1.** Map of Xe Pian NPA (shaded area) \*=Darter sighting; triangle=seasonal fishing camp; solid circle=swamp; solid square+triangle=village. Inset shows wetland sites visited in March–June 2005; 1: Xe Pian NPA; 2: Bung Pulone/Bung Khe; 3: Xe Champon wetlands; 4: Bung Hor.

**Table 1.** Summary of survey sites and dates in 2005.

Site	Region	Province	Coordinates	Dates
Xe Pian NPA* (Xe Pian and Xe Khampho rivers, Nong Palu lake)	South Laos	Attapu	14°31'N 106°21'E	31 May–4 June
Bung Pulone/Bung Khe lakes (north-east border of Xe Pian NPA)	South Laos	Attapu	14°44'N 106°24'E	2–6 April
Xe Champhon wetlands	Central Laos	Savannakhet	16°22'N 105°13'E	14–16 March
Bung Hor lake	Central Laos	Savannakhet	16°59'N 104°54'E	17 March

\*NPA = National Protected Area

Khampho river from the Xe Pian/Xe Khampho confluence to Ban Nongkhe village (12 km), and Nong Palu, a 1.9 ha seasonal lake that was dry at the time of visit (Table 1). The Xe Pian and Xe Khampho are 20–50 m wide, slow-flowing with scattered sandbars, and fringed by little-degraded evergreen and deciduous forest and bamboo stands. During the visit, river levels were relatively low (0.5–3 m deep) and 3–10 m of banks was exposed. The second site was the Bung Pulone/Bung Khe complex, a series of >5 permanent and seasonal lakes (including Bung Pulone, Bung Khe, Nong Kham Miem, Nong Hoi and Nong Koung Hape) 1.6–35 ha in size, with open water or thickly vegetated surfaces, within dry dipterocarp forest. These lakes are located on the Xe Pian floodplain, outside the north-east border of Xe Pian NPA. Bung Pulone and Bung Khe were 2–3 m deep at the time of visit.

The third site was the Xe Champhon wetlands, comprising part of the Xe Champhon river and several (>5) permanent and seasonal lakes/ponds (including Kout Mark Peo, Kout Tao, Kout Xe Hat and Kout Phinoy, 0.5–11 ha in size and 0.5–4 m deep), and one artificial lake (Bung Cheo, 67 ha). Here the Xe Champhon river is 15–20 m wide with sandy, steeply sloping banks and, at the time of visit, was reduced to a series of non-flowing pools 0.5–1 m deep. This site was within a rural landscape of degraded secondary forest, shrubland and bamboo, rice fields, burnt and cleared land, and with extensive invasion of the exotic weed *Mimosa pigra*. The fourth site was Bung Hor, a permanent, 40 ha lake located on the Xe Bangfai river floodplain, and which was 1.5 m deep at the time of visit, with an open (unvegetated) surface. Banks were largely cleared of native vegetation and supported rice terraces, with the nearest forest over 300 m away.

In all sites, bird observations were made opportunistically, often during brief walks in the mornings (06h00–08h00 hours) and afternoons (16h00–18h00). Bung Hor was only visited for three hours. In Xe Pian NPA, river travel was by motorised boat, which almost certainly reduced detectability of some birds, compared with a paddled boat.

## RESULTS

Bird species observed during site visits are listed in Appendix 2. Records are detailed below for species that are globally or nationally threatened, or for which the current records provide new information on their status or distribution in Laos.

In Xe Pian NPA, various bird surveys were conducted from 1992–1993, 1995, 1996, 2000 and 2001 (Thewlis *et al.* 1996, 1998, Duckworth *et al.* 1998b, Evans *et al.*

2000, M.K. Poulsen *in litt.* 2005). Of potential conservation concern, the current visit failed to record some threatened species recorded along the same or nearby river sections in previous dry seasons, e.g. Masked Finfoot *Heliopais personata*, River Tern *Sterna aurantia*, Lesser Fish Eagle *Ichthyophaga humilis*, Purple Heron *Ardea purpurea*, White-shouldered Ibis *Pseudibis davisoni* and vultures. Efforts were made in the current visit to scan all sandbars, where River Lapwing *Vanellus duvaucelii* may be easily observed (Duckworth *et al.* 1998a), but none was recorded. Similarly, in March 1993, Nong Palu was partially grazed/trampled by domestic buffalo, but retained tall reedbeds and shrubs, and a roosting colony of 50 unidentified weavers (Thewlis *et al.* 1996). In the current visit, the lake was entirely trampled and grazed by domestic buffalo, retained only a low (<0.5 m) cover of grasses, and no weavers were observed. It is possible that some riverine species were present but not recorded, owing to the loud engine noise of the survey boat and/or low survey effort in the current visit.

For the Bung Pulone/Bung Khe lakes, previous bird records were from a two-day visit in 1997 (Davenport *et al.* 1997). Wetlands 35 km to the west were surveyed for birds in 1992–1993 (Timmins *et al.* 1993). For the Xe Champhon wetlands, the most recent documented bird records were by David-Beaulieu (1949–1950), who in the 1940s surveyed and recorded 318 bird species in the lower catchment of the Xe Banghiang river (of which the Xe Champhon is a tributary). The presence of globally threatened bird species in the 1940s (David-Beaulieu 1949–1950), and sighting of an unidentified cormorant in the current visit (below) warrant new bird surveys in this region. At Bung Hor, no detailed bird surveys have yet been conducted; the site and nearby wetlands were visited several times by Baird (2001), who reported large flocks of ducks.

## SIGNIFICANT RECORDS

### GREEN PEA FOWL *Pavo muticus*

Vulnerable; At Risk in Laos. Train plumes (from recently hunted specimens) were observed in Xe Pian NPA on 1 June, at a border police post (Xe Kong/Xe Pian confluence) and a fishing camp (Xe Pian/Xe Khampho confluence) near a 1995 record (Evans and Timmins 1996). At the Bung Pulone/Bung Khe site, residents of Ban Pindon (Fig. 1) stated this species is opportunistically hunted for local consumption and that groups of 3–5 individuals are 'commonly seen'. Three were heard calling here on 30 January 1997 (Davenport *et al.* 1997). Eastern Xe Pian NPA is one of several nationally important sites for this species, which is widely hunted for food (Evans and Timmins 1996, Evans *et al.* 2000).

**LESSER WHISTLING-DUCK** *Dendrocygna javanica*

This species was observed in all survey sites. A flock of 1,700 at Bung Hor on 17 March is perhaps the largest documented flock to date in Laos (see Duckworth *et al.* 1999a). The 'large' numbers of ducks here in 2001 were attributed to strict community regulations on hunting (Baird 2001). A flock of 250 individuals was observed at the Bung Pulone/Bung Khe site (4 April); in 1992–1993, flocks of 150–450+ were observed at wetlands 35 km to the west (Timmins *et al.* 1993). The size, congregatory habits and attachment to wetlands of this species all indicate it could be at risk from hunting, and a clearer understanding of its national conservation status is warranted.

**SPOT-BILLED DUCK** *Anas poecilorhyncha*

Nine seen at Bung Hor on 17 March, and 1–3 individuals/day recorded at the Xe Champhon wetlands on 14–16 March are the first records in Central Laos (see Evans *et al.* 2000).

**DUCK** sp.

A silhouetted duck seen at the Xe Pian/Xe Khampho confluence on 2 June seemed larger than Lesser Whistling or Spot-billed Duck, and may have been a White-winged Duck *Cairina scutulata*. Breeding populations of this globally Endangered species were observed in the park during 1992–1995 (Evans *et al.* 1997).

**STORK-BILLED KINGFISHER** *Halycon capensis*

This species was observed daily along the Xe Pian and Xe Khampho rivers. One was recorded at the Bung Pulone/Bung Khe site on 3 April. Although this species has not previously been listed of national conservation concern, there is recent evidence for widespread declines in the last decade in North and north-central Laos (Timmins and Robichaud 2005, Fuchs *et al.* in prep.).

**COMMON KINGFISHER** *Alcedo atthis*

Two were recorded along the Xe Pian river on 2–3 June. The many previous records from South Laos were from August–April, and the species was considered a non-breeding winter migrant (Thewlis *et al.* 1996). The current records may indicate some individuals are resident in Laos, as proposed for North Laos by David-Beaulieu (1944).

**RED-BREASTED PARAKEET** *Psittacula alexandri*

Up to three individuals/day were observed regularly at all sites except Bung Hor. The species was previously common at survey sites in and near Xe Pian NPA and in Savannakhet Province (Thewlis *et al.* 1996, Robichaud 1998). The distribution and abundance of this species appear to have declined in Laos (Duckworth *et al.* 1999a).

**LESSER FISH EAGLE** *Ichthyophaga humilis*

Near Threatened; At Risk (Laos). One adult was seen at Bung Pulone on 4 April; this is within the region of South Laos identified as nationally important for this declining species by Thewlis *et al.* (1998).

**DARTER** *Anhinga melanogaster*

Near Threatened; At Risk in Laos. Seven were counted along 75 km of the Xe Pian river on 31 May and 1 June, five of them between the Xe Pian/Xe Kong and Xe Pian/Xe Khampho confluences (18 km) (Fig. 1). This reach

was wider and deeper than upstream from the Xe Pian/Xe Kong confluence, but otherwise appeared similar in habitat. No Darters were recorded along the Xe Khampho, which is narrower and shallower than the Xe Pian. There are previous April–May records in this region, in 1995 and 1998 (Thewlis *et al.* 1998, Duckworth *et al.* 1999a), and local reports from the Xe Kong (Fig. 1) in December 1997 (Robichaud 1998). Local communities in Xe Pian NPA reported that they sometimes consume Darters, which were historically resident in Laos; recent records suggest the species has declined significantly and is now a non-breeding visitor (Thewlis *et al.* 1998).

**CORMORANT** *Phalacrocorax* sp.

One silhouetted cormorant was seen at Bung Cheo (Xe Champhon wetlands) on 15 March. Little Cormorant *P. niger* occurred in this region in the 1940s (David-Beaulieu 1949–1950), and the only recent published Lao records are from South Laos in 1996 (Evans *et al.* 2000). Great Cormorant *P. carbo* has never been recorded in Central and South Laos, but is likely to occur at least occasionally given the large numbers in parts of inland Cambodia (e.g. Goes and Chamnan 2002).

**GREAT EGRET** *Casmerodius albus*

One was seen in Xe Pian NPA on 31 May–4 June. The seasonal status of egrets in Laos is unclear; they are thought to be winter visitors/passage migrants, with no historical evidence or current indication of nesting in Laos by any species (Duckworth *et al.* 2002), although Little Egrets were recorded during the summer in the 1960s and 1980s in North Laos by W. W. Thomas (Duckworth and Tizard 2003).

**WOOLLY-NECKED STORK** *Ciconia episcopus*

At Risk in Laos. One was seen along the Xe Pian river on 31 May. None was seen at the Bung Pulone/Bung Khe site, although seven were observed here on 30 January 1997 (Davenport *et al.* 1997). Xe Pian NPA is a national stronghold for this species, which is highly threatened in Laos by hunting (Duckworth *et al.* 1999a).

**BLACK-AND-RED BROADBILL***Cymbirhynchus macrorhynchos*

One was seen leaving a nest along the Xe Pian river on 4 June. The nest was suspended at the end of a bamboo stem, 5 m above the river. This species was common in previous surveys in Xe Pian NPA, but has a very restricted national distribution (Thewlis *et al.* 1998).

**LARGE-BILLED CROW** *Corvus macrorhynchos*

Up to five individuals/day were recorded along the Xe Pian and Xe Khampho rivers and at Bung Pulone/Bung Khe wetlands. None was recorded at the Xe Champhon wetlands and Bung Hor, although this species was historically abundant in Savannakhet province (David-Beaulieu 1949–1950). Its current status in South and Central Laos is unclear, but it may be in decline, as in North Laos (Duckworth *et al.* 2002).

**BLUE-THROATED FLYCATCHER** *Cyornis rubeculoides*

Clear views were obtained of an adult *Cyornis* flycatcher with an entirely dark blue-black throat, in semi-evergreen forest along the Xe Pian river on 3 June. This apparently constitutes the second Laos record of a dark-throated



form of Blue-throated Flycatcher (after one in 1998 in Central Laos: P. Davidson in Duckworth *et al.* 1999a). This may refer to *C. r. dialilaema*, a resident in north-east Thailand (Robson 2000).

#### FUJIAN/RUFOUS-BELLIED NILTAVA

*Niltava davidi/sundara*

*N. davidi*: Potentially at Risk in Laos. Clear views were obtained of a male niltava in semi-evergreen forest along the Xe Pian river on 2 June. For either Fujian or Rufous-bellied Niltava, this record is unusual for being in summer and in a lowland area, and is among the few records for South Laos (Duckworth *et al.* 1999a).

#### BLACK-COLLARED STARLING *Sturnus nigricollis*

Up to four individuals/day were seen at Ban Phonesaat (Xe Pian NPA), Bung Pulone/Bung Khe lakes and Xe Champhon wetlands (Fig. 1). This species was historically abundant in Savannakhet province (David-Beaulieu 1949–1950), where its current status is unclear but it may be in decline, as in North Laos (Duckworth *et al.* 2002, Duckworth and Tizard 2003, Fuchs *et al.* in prep.).

#### WHITE-VENTED MYNA *Acridotheres cinereus*

Up to four individuals/day were recorded in the Bung Pulone/Bung Khe lakes and Xe Champhon wetlands. This species was historically abundant in Savannakhet province (David-Beaulieu 1949–1950), where its current status is unclear but it may be in decline, as in North Laos, where it has declined greatly (Duckworth *et al.* 2002, Duckworth and Tizard 2003, Fuchs *et al.* in prep.).

#### YELLOW-VENTED BULBUL *Pycnonotus goiavier*

Several seen at Ban Phonesaat on 3 June appear to represent the fifth record for Laos. The first two records were in nearby Champasak province in 1996, and two were recorded at Don Som island in August 1997 (Cunningham 1998, Evans *et al.* 2000, Evans 2001, Robson 2005).

#### HOUSE SPARROW *Passer domesticus*

Four in the Xe Champhon wetlands on 16 March constitute the first published record for Central Laos, and the first non-urban Lao record. The species is a recent colonist to Laos (Duckworth *et al.* 1999a).

#### YELLOW-BREASTED BUNTING *Emberiza aureola*

Near Threatened. A flock of 400 individuals was seen at Bung Cheo (Xe Champhon wetlands) on 13 March. This is one of the largest flocks recorded recently in Laos (see Duckworth *et al.* 2000, Duckworth and Tizard 2003). 'Very large' flocks were previously recorded in this region of Savannakhet province in the 1940s (David-Beaulieu 1949–1950). A flock of 80 was observed in the north region of Xe Pian NPA in December 1992 (T. D. Evans verbally 2005).

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## REFERENCES

- Baird, I. G. (2001) The protected crocodiles, wetlands and forests at Ban Beung Boua Thong and Ban Nao Neua, Xiabouli District, Savannakhet Province, South Lao PDR. *Crocodile Specialist Group Newsletter* 20(2): 22–23.
- Bezuijen, M.R., Phothithay, C. Hedemark, M. and Chanrya, S. (2005) Preliminary status review of the Siamese Crocodile (*Crocodylus siamensis* Schneider, 1801) (Reptilia: Crocodylia) in the Lao People's Democratic Republic. Vientiane: Living Aquatic Resources Research Centre (Government of Lao PDR), Wildlife Conservation Society & Mekong Wetlands Biodiversity Conservation and Sustainable Use Programme.
- BirdLife International (2005) Species factsheets. Available at [www.birdlife.org/datazone](http://www.birdlife.org/datazone).
- Cunningham, P. (1998) Khone island bird observation report. Vientiane: unpublished report to CESVI and CPAWM.
- Davenport, D., Tizard, R. and Phommavongsa, V. (1997) Trip report: Ban Mai. Vientiane: Wildlife Conservation Society.
- David-Beaulieu, A. (1944) *Les oiseaux du Tranminh*. Hanoi: Université Indochinoise.
- David-Beaulieu, A. (1949–1950) Les oiseaux de la province de Savannakhet (Bas-Laos). *Oiseau et R.F.O.* 19: 41–84, 153–194 and 20: 9–50.
- Duckworth, J. W., Davidson, P., Evans, T. D., Round, P. D. and Timmins, R. J. (2002) Bird records from Laos, principally the Upper Lao/Thai Mekong and Xiangkhouang province, in 1998–2000. *Forktail* 18: 11–44.
- Duckworth, J. W., Davidson, P. and Timmins, R. J. (1999a) Birds. Pp. 69–160 in J. W. Duckworth, R. E. Salter and K. Khounboline, compilers. *Wildlife in Lao PDR. 1999 Status Report*. Vientiane: IUCN-The World Conservation Union, Wildlife Conservation Society & Centre for Protected Areas and Watershed Management.
- Duckworth, J. W., Salter, R. E. and Khounboline, K., compilers (1999b) *Wildlife in Lao PDR. 1999 Status Report*. Vientiane: IUCN-The World Conservation Union, Wildlife Conservation Society & Centre for Protected Areas and Watershed Management.
- Duckworth, J. W., Timmins, R. J. and Evans, T. D. (1998a) The conservation status of the River Lapwing *Vanellus duvaucelii* in South Laos. *Biol. Conserv.* 84: 215–222.
- Duckworth, J. W. and Tizard, R. J. (2003) W. W. Thomas's bird records from Laos, principally Vientiane, 1966–1968 and 1981–1983. *Forktail* 19: 63–84.
- Duckworth, J. W., Tizard, R. J., Timmins, R. J., Thewlis, R. M., Robichaud, W. G. and Evans, T. D. (1998b) Bird records from Laos, October 1994–August 1995. *Forktail* 13: 33–68.
- Evans, T. D. (2001) Ornithological records from Savannakhet province, Lao PDR, January–July 1997. *Forktail* 17: 21–28.
- Evans, T. D. and Timmins, R. J. (1996) The status of the Green Peafowl *Pavo muticus* in Laos. *Forktail* 11: 11–32.
- Evans, T. D., Robichaud, W. G. and Tizard, R. J. (1997) The White-winged Duck *Cairina scutulata* in Laos. *Wildfowl* 47: 81–96.
- Evans, T. D., Towll, H. C., Timmins, R. J., Thewlis, R. M., Stones, A. J., Robichaud, W. G. and Barzen, J. (2000) Ornithological records from the lowlands of South Laos during December 1995–

- September 1996, including areas on the Thai and Cambodian borders. *Forktail* 16: 29–52.
- Fuchs, J., Cibois, A., Duckworth, J. W., Eve, R., Robichaud, W. G., Tizard, T. and van Gansberghe, D. (in prep.) A review of bird records from Phongsaly province and the Nam Ou river (Laos).
- Goes, F. and Chamnan, H. (2002) *The status and conservation of large waterbirds on the Tonle Sap Great Lake, Cambodia 2000–2001*. Phnom Penh: Wildlife Conservation Society-Cambodia Program.
- Inskipp, T., Lindsey, N. and Duckworth, W. (1996) *An annotated checklist of the birds of the Oriental Region*. Sandy, U.K.: Oriental Bird Club.
- King, B. F., Dickinson, E. C. and Woodcock, M. (1975) *A field guide to the birds of South-East Asia*. London: Collins.
- Robichaud, W. G. (1998) WCS internal trip report: Dakchung Plateau, Xekong province, and lowlands near Attapeu; 9–21 December 1997. Vientiane: Wildlife Conservation Society Lao Program.
- Robson, C. (2000) *A field guide to the birds of South-East Asia*. London: New Holland.
- Robson, C. (2005) From the field. *BirdingASIA* 3: 77–85.
- Thewlis, R. M., Duckworth, J. W., Anderson, G. Q. A., Dvorak, M., Evans, T. D., Nemeth, E., Timmins, R. J. and Wilkinson, R. J. (1996) Ornithological records from Laos, 1992–1993. *Forktail* 11: 47–100.
- Thewlis, R. M., Duckworth, J. W., Evans, T. D. and Timmins, R. J. (1998) The conservation status of birds in Laos: a review of key species. *Bird Conserv. Internat.* 8 (Suppl.): 1–159.
- Timmins, R. J., Evans, T. D. and Duckworth, J. W. (1993) A wildlife and habitat survey of Xe Pian proposed protected area, Champassak, Laos. Unpublished report by LSFP/IUCN to the National Office for Nature Conservation and Watershed Management, Government of Lao PDR.
- Timmins, R. J. and Robichaud, W. G. (2005) Birds and mammals of conservation concern in the area of the proposed Nam Theun 1 hydropower project - assessment and recommendations. Unpublished report to Electrowatt-Ekono Ltd.

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## APPENDIX 1

Gazetteer of survey localities in Lao PDR mentioned in text

Province	District	Coordinates	Description	1:200,000 map sheet
<b>Xe Pian National Protected Area</b>				
Attapu	Sanamxay	14°30'52"N 106°20'55"E	Confluence Xe Pian/Xe Khampho rivers	D-48-XVII ('Ban Sompoy')
Attapu	Sanamxay	14°26'23"N 106°20'18"E	Confluence Xe Pian/Xe Kong rivers	D-48-XVII ('Ban Sompoy')
Attapu	Sanamxay	14°31'10"N 106°19'43"E	Nong Palu lake	D-48-XVII ('Ban Sompoy')
Attapu	Sanamxay	14°34'44"N 106°17'51"E	Ban Nongkhe village	D-48-XVII ('Ban Sompoy')
Attapu	Sanamxay	14°38'48"N 106°28'34"E	1 Darter (Xe Pian, 31 May)	D-48-XVII ('Ban Sompoy')
Attapu	Sanamxay	14°33'39"N 106°22'10"E	1 Darter, 1 White-necked Stork (Xe Pian, 31 May)	D-48-XVII ('Ban Sompoy')
Attapu	Sanamxay	14°29'58"N 106°19'56"E	2 Darter (Xe Pian, 1 June)	D-48-XVII ('Ban Sompoy')
Attapu	Sanamxay	14°27'54"N 106°21'15"E	1 Darter (Xe Pian, 1 June)	D-48-XVII ('Ban Sompoy')
Attapu	Sanamxay	14°27'41"N 106°20'28"E	1 Darter (Xe Pian, 1 June)	D-48-XVII ('Ban Sompoy')
Attapu	Sanamxay	14°26'50"N 106°19'41"E	1 Darter (Xe Pian, 1 June)	D-48-XVII ('Ban Sompoy')
<b>Bung Pulone/Bung Khe lakes complex outside Xe Pian NPA</b>				
Attapu	Sanamxay	14°42'21"N 106°28'06"E	Bung Pulone lake	D-48-XI ('Attapu')
Attapu	Sanamxay	14°41'49"N 106°28'18"E	Bung Khe lake	D-48-XI ('Attapu')
Attapu	Sanamxay	14°41'11"N 106°28'27"E	Nong Kham Miem lake	D-48-XI ('Attapu')
Attapu	Sanamxay	14°42'03"N 106°26'25"E	Nong Hoy pond	D-48-XI ('Attapu')
Attapu	Sanamxay	14°42'20"N 106°26'01"E	Nong Koung Hape pond	D-48-XI ('Attapu')
Attapu	Sanamxay	14°41'19"N 106°27'34"E	Ban Pindon village	D-48-XI ('Attapu')
Attapu	Sanamxay	14°42'07"N 106°29'55"E	Ban Mai village	D-48-XI ('Attapu')
<b>Xe Champhon wetlands</b>				
Savannakhet	Champhon	16°20'48"N 105°12'19"E	Bung Cheo lake	E-48-XXXIV ('Ban Kengkok')
Savannakhet	Champhon	16°20'43"N 105°13'24"E	Xe Champhon river	E-48-XXXIV ('Ban Kengkok')
Savannakhet	Champhon	16°21'10"N 105°13'12"E	Kout Mark Peo lake	E-48-XXXIV ('Ban Kengkok')
Savannakhet	Champhon	16°20'57"N 105°13'20"E	Kout Tao lake	E-48-XXXIV ('Ban Kengkok')
Savannakhet	Champhon	16°21'26"N 105°13'01"E	Kout Xe Hat lake	E-48-XXXIV ('Ban Kengkok')
Savannakhet	Champhon	16°20'39"N 105°13'30"E	Kout Phinoy lake	E-48-XXXIV ('Ban Kengkok')
Savannakhet	Champhon	16°21'25"N 105°13'05"E	Kout Noy lake	E-48-XXXIV ('Ban Kengkok')
<b>Bung Hor lake</b>				
Savannakhet	Xaibouli	16°59'04"N 104°54'20"E	Bung Hor lake	E-48-XXVII ('Xeno')

## APPENDIX 2

Bird species recorded in four wetland sites in Central and South Lao PDR, March–June 2005

Species	Status*	Xe Champhon	Bung Hor lake	Xe Pian NPA	Bung Pulone/Bung Khe
		14–16 March	17 March	31 May–4 June	2–6 April
CHINESE FRANCOLIN <i>Francolinus pintadeanus</i>				x	
RED JUNGLEFOWL <i>Gallus gallus</i>		x		x	x
GREEN PEAFOWL <i>Pavo muticus</i>	AR			x	
LESSER WHISTLING-DUCK <i>Dendrocygna javanica</i>		55	1700	3	250
SPOT-BILLED DUCK <i>Anas poecilorhyncha</i>		3+	9		
RUFIOUS WOODPECKER <i>Ceelus brachyurus</i>				x	
LESSER YELLOWNAPE <i>Picus chlorolophus</i>				x	
LACED/STREAK-THROATED WOODPECKER <i>Picus vittatus/xanthopygaeus</i>				x	
BLACK-HEADED WOODPECKER <i>Picus erythropygius</i>					x
COMMON FLAMEBACK <i>Dinopium javanense</i>					x
LINEATED BARBET <i>Megalaima lineata</i>				x	x
ORIENTAL PIED HORNBILL <i>Anthracoceros albirostris</i>				x	
INDIAN ROLLER <i>Coracias benghalensis</i>				x	x
COMMON KINGFISHER <i>Alcedo atthis</i>		x		x	
STORK-BILLED KINGFISHER <i>Halcyon capensis</i>				x	x
WHITE-THROATED KINGFISHER <i>Halcyon smyrnensis</i>		x		x	
CHESTNUT-HEADED BEE-EATER <i>Merops leschenaulti</i>		x		x	x
ASIAN KOEL <i>Eudynamis scolopacea</i>				x	x
GREEN-BILLED MALKOHA <i>Phaenicophaeus tristis</i>		x		x	
GREATER COUCAL <i>Centropus sinensis</i>		x		x	x
LESSER COUCAL <i>Centropus bengalensis</i>		x		x	x
RED-BREASTED PARAKEET <i>Psittacula alexandri</i>		1–3/day		1–3/day	1–3/day
UNIDENTIFIED SWIFTLET <i>Collocalia</i> sp(p).		x			
BROWN-BACKED NEEDLETAIL <i>Hirundapus giganteus</i>				x	x
CRESTED TREESWIFT <i>Hemiprocne coronata</i>				x	
COLLARED SCOPS OWL <i>Otus bakkamoena</i>		x			
ASIAN BARRED OWLET <i>Glaucidium cuculoides</i>		x		x	x
LARGE-TAILED NIGHTJAR <i>Caprimulgus macrurus</i>		x			
SPOTTED DOVE <i>Streptopelia chinensis</i>		x		x	x
UNIDENTIFIED GREEN PIGEON <i>Treron</i> sp(p).				x	
WHITE-BREASTED WATERHEN <i>Amaurornis phoenicurus</i>		x		x	x
COMMON MOORHEN <i>Gallinula chloropus</i>		x			
COMMON GREENSHANK <i>Tringa nebularia</i>			1		1
GREEN SANDPIPER <i>Tringa ochropus</i>		1			
RED-WATTLED LAPWING <i>Vanellus indicus</i>		x		x	
BLACK BAZA <i>Aviceda leuphotes</i>				1	1
LESSER FISH EAGLE <i>Ichthyophaga humilis</i>	AR				1
CRESTED SERPENT EAGLE <i>Spilornis cheela</i>				x	x
PIED HARRIER <i>Circus melanoleucos</i>		8			
EURASIAN MARSH HARRIER <i>Circus aeruginosus</i>		2			
SHIKRA <i>Accipiter badius</i>		x			
UNIDENTIFIED HAWK <i>Accipiter</i> sp(p).				x	
DARTER <i>Anhinga melanogaster</i>	AR			7	
UNIDENTIFIED CORMORANT <i>Phalacrocorax</i> sp.		1			
LITTLE EGRET <i>Egretta garzetta</i>		4			x
GREAT EGRET <i>Casmerodius albus</i>		2		1	

Species	Status*	Xe	Bung Hor	Xe Pian	Bung Pulone/
		Champhon	lake	NPA	Bung Khe
		14-16 March	17 March	31 May-4 June	2-6 April
CATTLE EGRET <i>Bubulcus ibis</i>					x
CHINESE POND HERON <i>Ardeola bacchus</i>		x		x	x
WOOLLY-NECKED STORK <i>Ciconia episcopus</i>	AR			1	
BLUE-WINGED PITTA <i>Pitta moluccensis</i>				x	
BLACK-AND-RED BROADBILL <i>Cymbirhynchus macrorhynchos</i>				x	
GOLDEN-FRONTED LEAFBIRD <i>Chloropsis aurifrons</i>					x
EURASIAN JAY <i>Garrulus glandarius</i>					x
RED-BILLED BLUE MAGPIE <i>Urocissa erythrorhyncha</i>				x	x
RACKET-TAILED TREEPIE <i>Crypsirina temia</i>		x		x	
LARGE-BILLED CROW <i>Corvus macrorhynchos</i>				1-5/day	1-5/day
BLACK-NAPED ORIOLE <i>Oriolus chinensis</i>					x
BLACK-HOODED ORIOLE <i>Oriolus xanthornus</i>				x	x
BLACK DRONGO <i>Dicrurus macrocerus</i>		26			
BRONZED DRONGO <i>Dicrurus aeneus</i>		x		x	x
SPANGLED DRONGO <i>Dicrurus hottentottus</i>		x		x	
GREATER RACKET-TAILED DRONGO <i>Dicrurus paradiseus</i>		x		x	x
BLACK-NAPED MONARCH <i>Hypothymis azurea</i>				x	x
ASIAN BROWN FLYCATCHER <i>Muscicapa dauurica</i>					x
FUJIAN/RUFOUS-BELLIED NILTAVA <i>Niltava davidi/sundara</i>	PR/-			1	
WHITE-TAILED FLYCATCHER <i>Cyornis concretus</i>		x			
BLUE-THROATED FLYCATCHER <i>Cyornis rubeculoides</i>		x			
GREY-HEADED CANARY FLYCATCHER <i>Culicicapa ceylonensis</i>		x			
ORIENTAL MAGPIE ROBIN <i>Copsychus saularis</i>		x		x	
WHITE-RUMPED SHAMA <i>Copsychus malabaricus</i>		x		x	x
COMMON STONECHAT <i>Saxicola torquata</i>		x			x
BLACK-COLLARED STARLING <i>Sturnus nigricollis</i>		1-4/day		1-4/day	1-4/day
VINOUS-BREASTED STARLING <i>Sturnus burmannicus</i>				x	
WHITE-VENTED MYNA <i>Acridotheres grandis</i>		1-4/day			1-4/day
HILL MYNA <i>Gracula religiosa</i>				x	x
BARN SWALLOW <i>Hirundo rustica</i>		x			
RED-RUMPED/STRIATED SWALLOW <i>Hirundo daurica/striolata</i>		x			
BLACK-CRESTED BULBUL <i>Pycnonotus melanicterus</i>					x
STRIPE-THROATED BULBUL <i>Pycnonotus finlaysoni</i>					x
YELLOW-VENTED BULBUL <i>Pycnonotus goiavier</i>				x	
RUFESCENT PRINIA <i>Prinia rufescens</i>					x
UNIDENTIFIED WHITE-EYE <i>Zosterops</i> sp(p).		x			
ASIAN STUBTAIL <i>Urosphena squameiceps</i>		x			
UNIDENTIFIED BUSH WARBLER <i>Bradypterus</i> sp(p).		x			
COMMON TAILORBIRD <i>Orthotomus sutorius</i>				x	
DARK-NECKED TAILORBIRD <i>Orthotomus atrogularis</i>		x		x	x
DUSKY WARBLER <i>Phylloscopus fuscatus</i>		x			
YELLOW-BROWED WARBLER <i>Phylloscopus inornatus</i>		x			x
GREENISH/ARCTIC WARBLER <i>Phylloscopus trochiloides/borealis</i>		x			
WHITE-CRESTED LAUGHINGTHRUSH <i>Garrulax leucolophus</i>				x	x
PUFF-THROATED BABBLER <i>Pellorneum ruficeps</i>		x			
STRIPED TIT BABBLER <i>Macronous gularis</i>		x			x
INDOCHINESE BUSHLARK <i>Mirafra (assamica) marionae</i>					x
SCARLET-BACKED FLOWERPECKER <i>Dicaeum cruentatum</i>					x
UNIDENTIFIED FLOWERPECKER <i>Dicaeum</i> sp(p).		x			

Species	Status*	Xe Champhon	Bung Hor lake	Xe Pian NPA	Bung Pulone/Bung Khe
		14–16 March	17 March	31 May–4 June	2–6 April
OLIVE-BACKED SUNBIRD <i>Nectarinia jugularis</i>				x	x
HOUSE SPARROW <i>Passer domesticus</i>		x			
YELLOW WAGTAIL <i>Motacilla flava</i>					x
RICHARD'S PIPIT <i>Anthus richardi</i>		x			
SCALY-BREASTED MUNIA <i>Lonchura punctulata</i>		x			
YELLOW-BREASTED BUNTING <i>Emberiza aureola</i>		400			

\*Conservation status in Laos (Duckworth *et al.* 1999): At Risk in Laos (AR); Potentially at Risk in Laos (PR); Little Known in Laos (LK).  
 Symbols: 'x' - field record (number of individuals not recorded); number of individuals given for a single observation of a species recorded only once in a site or, peak numbers/day (for sites with multiple days of records).