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เรื่อง

การประเมินสถานภาพของนกอพยพที่หายากในภาคเหนือของประเทศไทย

Assessing the status of scarce passerine migrants in Northern Thailand

คณะผู้วิจัย

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Abstract

Wetland ecosystems maintain and support vital ecological functions, as well as provide valuable products and services for human activities. Despite their importance, many wetlands, including the Mekong River Basin, have suffered from widespread destruction and degradation. Conserving wetland ecosystems and their resources through a better understanding of wetland ecology and the application of ecologically-sound management is urgently needed.

The Mekong Basin is a major corridor of bird migration but little is known about the passage and wintering habits of many smaller migrants. Due to their habits and cryptic plumage many are difficult to identify and therefore quantifying their numbers and distributions are problematic. We undertook a project at Nam Kham Nature Reserve, situated on a tributary of the River Mekong, to study the migration of birds' through this area. As part of the project we were able to train and demonstrate ringing and associated activities to a wide range of local and international students, ornithologists and government officials.

We caught, ringed, measured and released 1,239 birds of 79 species during our study. Many birds were also retrapped on subsequent visits having either wintered further south or after returning from their breeding grounds. Many interesting species were caught including the first ever record for Thailand of Common Chiffchaff *Phylloscopus colybita* tristris, the second Thai records of Large-billed Reed Warbler *Acrocephalus orinus* and Blyth's Reed Warbler *A. dumotorium* and the second-sixth records of Chestnut-crowned Bush Warbler *Cettia major.*

Keywords: *Acrocephalus*, Chiang Saen, migration, scarce migrant, winter visitor

Acknowledgment

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Principle investigator

May, 2013

INTRODUCTION

Wetland ecosystems maintain and support vital ecological functions, as well as provide valuable products and services for human activities. The biodiversity of the Mekong wetlands is of international significance, including many unique ecosystems and a wide range of globally threatened species such as Giant catfish, Siamese crocodile, Eastern Sarus crane, Giant ibis, and Irrawaddy dolphin**.**

Despite their importance, wetlands in the Mekong River Basin have suffered from widespread destruction due to misuses and abuses. Wetlands are threatened by population growth, increased exploitation of biological resources, timber harvest, and pollution of various forms, development activities and mis-management**.** Conserving wetland ecosystems and their resources through a better understanding of wetland ecology and the application of ecologically-sound management is urgently needed.

The Mekong is a major corridor of bird migration, for example regular autumn passages of raptors are recorded passing through Thailand (Decandido et al. 2008). Passage of smaller migrants although well known is poorly understood and due to their habits and cryptic plumage many are difficult to identify and therefore quantifying their numbers and distributions are problematic.

The Nam Kham Nature Reserve, Chiang Saen, Chiang Rai lies is a tributary of the Mekong less than a kilometer from the main River Mekong itself. Preliminary work at the nature reserve has found there are a large number of birds passing through the area on migration and many of these are poorly known within Thailand. It is also an important Wintering site for a number of species.

The importance of this site for birds was highlighted in 2008. On 27 March the third ever record for science of Large-billed Reed Warbler (*Acrocephallus orinus*) was caught and ringed. This was two years to the day after the species was rediscovered South of Bangkok, 139 years after the only known specimen was collected (Round et al. 2007). In the same session a Paddyfield Warbler (*A. agricola*) was ringed – this was the first confirmed record in Thailand for more than 20 years (Robson, 2000). Just prior to this AJP ringed the second ever Blyth's Reed Warbler (*A. dumetorum*) in Thailand, only a few months after the

first was trapped at Bung Boraphet Non-hunting Area, Nakorn Sawan Province by Royal Forestry Department Researchers. In the same session Thailand's fifth White-tailed Rubythroat (*Luscinia pectorails*) was ringed. The presence of these species alone warrants further research to determine how prevalent they are at the site and to try to determine more about their status. However, the site has recorded a total of six species of *Acrocephalus* warbler in the few brief visits we have made and has turned up further interesting and scarce species including Chestnut-crowned Warbler (*Cettia major*) only the second record for Thailand, the first being on Doi Ang Khang over 30 years ago. It is unlikely that the presence of any of these birds would have been detected without the use of mist-nets under operation by experienced ornithologists.

As well as these little known migrants the site also hosts a wintering flock of Black-faced Bunting (*Emberiza spodocephala*) about which concern has been expressed recently due to drastic declines in their populations. The Red Avadavat (*Amandavum amandavum*) a locally scarce resident may also be under threat. Catching and marking these two species will contribute to our knowledge of their distribution and biological requirements.

Many of these species are elusive, difficult to observe and often impossible to identify in the field. By using mist-netting we will be able to safely catch, mark and release these birds and in the process be able to learn more about their numbers, distributions and migration patterns. Furthermore, we will be training forestry staff and students and other interested parties in techniques of ringing in order to carry on and expand this work so benefiting Thai birds and their habitats.

Funding of this project allowed us to carry out more extensive research at this important site to gain a better understanding of the birds using the area and to train others to undertake bird ringing activities here and elsewhere in Thailand.

Objectives

1. To establish what the main passage migrants occurring at Nam Kham NR.
2. To determine the timing of migrants passing through Nam Kham NR.
3. To better understand the status of some of the rarer species using Nam Kham NR.
4. To establish a baseline for future monitoring of birds using Nam Kham NR.
5. To train students, forestry staff, and locals in ornithology and encourage further research.
6. To highlight the importance of the region for migratory and Wintering birds.

Methods

This study took place at the Nam Kham Nature Reserve, Chiang Saen, Chiang Rai. The 11-Ha site lies on a tributary of the Mekong River. The habitat is a mix of old rice paddies, scrub and grassland surrounding a small ox-bow lake. Major work has been undertaken on the site to increase the habitat for wildlife.

Intensive mist-netting was used to catch and ring as many individuals as possible. All mist netting was carried out by experienced personnel, with decades of experience in safely handling wild birds, using the strictest safeguards and showing utmost consideration for the welfare of the birds. Numbered metal bands were made available from DNP Wildlife Research Division from the stock donated by The Wetland Trust, U.K. Biometrics and moult data were collected for all birds handled, and a copy of all data is deposited at Wildlife Research Division, DNP, Bangkok.

Data on bird biometrics, collected through ringing, will add to the existing dataset on banded birds in Thailand, which is maintained at Wildlife Research Division, Royal Forest Department. The ringing manual will be updated yearly as new data becomes available. Currently the manual includes instructions on ringing and ring sizes.

Results

Regular visits were made to Nam Kham nature reserve to catch and ring birds during the migration and over-wintering periods, September through to May. Prior to each visit habitat management was undertaken in order to prepare areas for setting mist-nets. Mist-nets were then operated for 3-5 days per month. Each month students, staff from the Department of National Parks research division and the nearby Nong Bong Khai Non-hunting area and other interested individuals were invited to attend the ringing sessions for training in catching and ringing birds and for general ornithological interest.

Mist-nets were opened just before dawn and closed mid-to late morning depending on weather conditions. Most birds were caught early in the morning and clear sunny conditions reduced the catches considerably. Furthermore, hot conditions are not suitable for catching birds as they are prone to heat stress and therefore nets were closed earlier on particularly hot days. However, on overcast damp days nets could be operated for longer periods.
The project was overall very successful both for the species and number of birds caught and the number of people attending training sessions.

Personnel from the following institutions visited Nam Kham during mist-netting and ringing sessions. All were given the chance to handle birds and those wishing to were instructed in the safe practices of bird ringing.

Doi Chiang Dao Wildlife Sanctuary – K. Prateep and his team were instrumental in helping with habitat maintenance, preparing net rides, setting nets and assisting with general ringing duties

Nong Bong Khai Non-hunting Area

King Mongkut's Univeristy of Technology Thonburi

Ratchaphat Chiang Rai University

Chiang Mai University

Khon Kaen University

Bird Conservation Society of Thailand

Lanna Bird club

Visiting ornithologists from Sweden, United Kingdom and the United Arab Emirates

A total of 1,239 birds of 79 species were caught and ringed during the course of the study. There were 527 retraps, i.e. birds that were caught on which we had already put rings at an earlier date. This included many migrants that were found to be returning to the site in successive years after they were first caught. This emphasizes the fact that not only does ringing not impede a bird's movements but it also allows for detailed studies of their movements and survival which would be impossible without individual marks.

43 species were migrant or winter visitors to Northern Thailand while the remaining 36 species were local residents or short-distance dispersing birds from elsewhere in the country (Table 1). The top two species caught were Dusky Warbler *Phylloscopus fuscatus* and Siberian Rubythroat *Luscinia calliope* with 373 (30.1 %) and 78 (10.8 %) of records respectively.

Significant Records

We caught one individual of Common Chiffchaff *Phylloscopus colybita* a species previously unrecorded in Thailand. The [description] clearly showed it to be a "Siberian" Chiffchaff *P. c. tristris*.

Chestnut-crowned Bush Warbler, previously known from one specimen collected on Doi Ang Khang, Chinag Mai Province, has proved to be an annual visitor to Northern Thailand with 1-2 records in each year of the study

Likewise, White-tailed Rubythroat, known only from a handful of records from the Chiang Saen area, has been caught annually at Nam Kham.

Timing of migration

Spring passage began in mid-March through to the end of May while Autumn passage extended from late September through to November. The Autumn passage is less well defined as birds are heading to their wintering grounds and have no 'pressure' on them as they do during the Spring passage when they are heading to their breeding grounds where they will face competition for territories and mates. As such many birds filter Southwards more slowly and some do so in stages, not arriving at the true Wintering ground until much later. This appears to be true at Nam Kham of a number of species, in particular the reed warblers (*Acrocephalus* spp.) most of which were not recorded until late December or early January. Further causes of birds arriving later in the season include the drying up of

wetlands elsewhere, a difficult parameter to measure, and cold weather fronts further North. The latter is frequently observed in Thailand with migrant thrushes and elsewhere with species such as bunting but no such data has been collected regarding warbler dispersal.

Moult

All birds trapped and processed were examined for signs of moult; the annual shedding and regrowth of their feathers. Moult, like breeding is a costly part of a bird's annual cycle. For migrating birds there is the extra constraint of needing to fit moult in between their migration and breeding. For many migrating species this therefore takes place relatively rapidly and little is known about it for many species. Our studies at Nam Kham enabled to build up a more detailed picture of moult for several species but in particular that of the Baikal Bush Warbler and the Thick-billed Warbler for which two papers are being preared for international journals.

The moult cycle of Baikal Bush Warbler is quite complex. On arrival in Thailand in late September birds were found to be moulting their primaries and by October all birds had finished moulting. The primary moult was partial and typically half the primaries – the outer five, were left unmoulted. They remained like this until the Spring when they moulted all the old feathers prior to heading North back to their breeding grounds. This, however, is not the complete picture as not all birds fell into this moult pattern. It may be that adults and first year birds (those birds which hatched in the breeding season immediately prior to migrating to Thailand) have different strategies. Work is still in progress to determine if there is any pattern in these cycles.

Previously the data on Thick-billed Warbler moult was ambiguous (REFS) with some records suggesting they moulted before leaving their breeding grounds and other after arriving on their Wintering gorunds. Here we were able to confirm that some, if not all, individuals undertook a complete moult not long after arriving in Thailand. The moult duration was also exceedingly quick at just over five weeks. Many individuals retained some secondary feathers; these feathers are in a protected area of the wing and suffer little wear and as such the birds may save energy by not moulting them at this stage. Alternatively they may find it more useful to moult these feathers in the spring shortly before returning North to their breeding grounds.

Discussion

The project has proved to be highly successful both in terms of personnel trained and the amount of information on bird migration gathered. Training of Thai students and forestry staff will increase the amount of studies on birds throughout the country allowing us to build up a fuller picture of the status of Thailand's birds and how better to protect them.

Data from this project has shown that Northern Thailand is important both as a staging post for migrant birds and also for over-Wintering birds. This is particularly relevant when the conversion rate of land in the area is being carried out at an alarming rate. Even in the last five years since the establishment of Nam Kham as a nature reserve the surrounding areas have been turned into mono-cultures of cassava and pineapple and and evr increasing amount of rubber plantation, all of which are sterile habitats are far as birds and other wildlife are concerned.

We have caught and ringed numerous individuals of several species which were either new a very infrequently recorded in Thailand. This as much due to the methods employed than actual new movements by the birds themselves. Many of these so-called rare birds are just extremely difficult to observe and/or identify in the wild.

Further work is required to understand the finer intricacies of bird migration in Northern Thailand and to understand the migration patterns of some of the scarcer species found in the region.

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We are indebted to Dr Rungsrit Kanjanavanit for allowing us to conduct research on his land and we thank all who helped with netting and habitat maintenance during the course of the project.

OUTPUT

Published**:** Round, P.D., Pierce, A. J., Dymond, J. N., Boonkhwamdee, W. and Rojanadilok, P. (2009) A record of Chestnut-crowned Bush Warbler *Cettia major* from Chiang Saen. *Bird Conservation Society of Thailand Bulletin* 26: 10-11.

IN PRESS: THE FIRST RECORD OF COMMON CHIFFCHAFF IN NORTHERN THAILAND (BIRDINGASIA 2013 (2).

In preparation: Moult of the Thick-billed Warbler *Acrocephalus aedon*

Significant records of migrants in Northern Thailand

The status and moult of Baikal Bush Warbler *Bradypterus davidi* in Northern Thailand.

Recommendations

Benefits for the conservation of biodiversity and future researches?

1. Continue regular mist-netting and ringing sessions to monitor the populations of birds at Nam Kham Nature Reserve.
2. Continue to encourage visitors to the reserve to study birds and other wildlife.

References

Decandido, R., C. Kasorndorkbua, C. Nualsri, C. Chinuparawat and D. Allen. 2008. Raptor Migration in Thailand. BirdingASIA 10: 16–22.

Robson, C. (2000) *A field guide to the birds of South-east Asia.* New Holland, London.

Round, P. D., B. Hansson, D. J. Pearson, P. R. Kennerley and S. Bensch. 2007. Lost and found: the enigmatic Large-billed Reed Warbler *Acrocephalus orinus* rediscovered after 139 years. J. Avian Biol. 38: 133-138.

Appendices

Table 1. A summary of all the birds caught and retrapped at Nam Kham Nature Reserve, Chiang Saen, Chiang Rai Province.

English Name	Scientific Name	New	Retrap	Total
Dusky Warbler	*Phylloscopus fuscatus*	373	293	666
Siberian Rubythroat	*Luscinia calliope*	134	78	212
Streak-eared Bulbul	*Pycnonotus blanfordi*	58	18	76
Thick-billed Warbler	*Acrocephalus aedon*	49	10	59
Baikal Bush Warbler	*Bradypterus davidi*	40	20	60
Taiga Flycatcher	*Ficedula albicilla*	38	8	46
Scaly-breasted Munia	*Lonchura punctulata*	34	0	34
Yellow-browed Warbler	*Phylloscopus inornatus*	34	8	42
White-rumped Munia	*Lonchura striata*	33	0	33
Yellow-bellied Prinia	*Prinia flaviventris*	30	8	38
Sooty-headed Bulbul	*Pycnonotus aurigaster*	28	1	29
Chestnut-crowned Babbler	*Timalia pileata*	28	24	52
Eastern Stonechat	*Saxicola maurus*	29	4	33
Plain Prinia	*Prinia inornata*	24	4	28
Red Avadavat	*Amandava amandava*	23	1	24
Blunt-winged Warbler	*Acrocephalus concinens*	21	9	30
Japanese White-eye	*Zosterops japonicus*	23	1	24
Black-headed Bunting	*Emberiza spodocephala*	18	0	18
Common Tailorbird	*Orthotomus sutorius*	16	11	27
Racket-tailed treepie	*Crypsirina temia*	13	0	13
Oriental Magpie Robin	*Copsychus saularis*	12	2	14
Bluethroat	*Luscinia svecica*	11	0	11
Oriental Reed Warbler	*Acrocephalus orientalis*	10	0	10
Common Iora	*Aegithina tiphia*	10	0	10
Brown Shrike	*Lanius cristatus*	8	4	12
Striated Grassbird	*Megalurus palustris*	8	1	9
Long-tailed Shrike	*Lanius schach*	7	3	10
Black-browed Reed Warbler	*Acrocephalus bistrigiceps*	6	0	6
Common Kingfisher	*Alcedo atthis*	6	1	7
Common Rosefinch	*Carpodacus erythrinus*	6	0	6
Manchurian Bush Warbler	*Cettia canturians*	6	6	12
Plaintive Cuckoo	*Cacomantis merulinus*	5	0	5
Chestnut-crowned Bush Warbler	*Cettia major*	5	7	12
Pallas's Grasshopper Warbler	*Locustella certhiola*	5	0	5
Lanceolated Warbler	*Locustella lanceolata*	5	3	8
Two-barred Greenish Warbler	*Phylloscopus plumbeitarsus*	5	0	5

Grey-crowned warbler	*Seicercus tephrocephalus*	5	1	6
Paddyfield Warbler	*Acrocephalus Agricola*	4	0	4
Purple Sunbird	*Cinnyris asiaticus*	4	0	4
Eurasian Wryneck	*Jynx torquilla*	4	1	5
Greater Painted Snipe	*Rostratula benghalensis*	4	0	4
Chestnut Bunting	*Emberiza rutila*	3	0	3
White-tailed Rubythroat	*Luscinia pectoralis*	4	0	4
Grey-breasted Prinia	*Prinia hodgsonii*	3	0	3
Jerdon's Bushchat	*Saxicola jerdoni*	3	0	3
White-breasted Waterhen	*Amaurornis phoenicurus*	2	0	2
Yellow-eyed Babbler	*Chrysomma sinense*	2	0	2
Olive-backed Sunbird	*Cinnyris jugularis*	2	0	2
Hill Blue Flycatcher	*Cyornis banyumas*	2	0	2
Black Drongo	*Dicrurus macrocercus*	2	0	2
White-throated Kingfisher	*Halcyon smyrnensis*	2	0	2
Black-naped Monarch	*Hypothymis azurea*	2	0	2
Crested Bunting	*Melophus lathami*	2	0	2
Pied Bushchat	*Saxicola caprata*	2	0	2
Green Sandpiper	*Tringa ochropus*	2	0	2
Japanese Sparrowhawk	*Accipiter gularis*	1	0	1
Blyth's Reed Warbler	*Acrocephalus dumetorum*	1	0	1
Large-billed Reed Warbler	*Acrocephalus orinus*	1	0	1
Olive-backed Pipit	*Anthus hodgsoni*	1	0	1
Paddyfield Pipit	*Anthus rufulus*	1	0	1
Pond Heron sp. (Chinese)	*Ardeola sp. (bacchus)*	1	0	1
Greater Coucal	*Centropus sinensis*	1	0	1
White-rumped Shama	*Copsychus malabaricus*	1	0	1
Blue-breasted Quail	*Coturnix chinensis*	1	0	1
Ashy Drongo	*Dicrurus leucophaeus*	1	1	2
Chestnut-eared Bunting	*Emberiza fucata*	1	0	1
Little Bunting	*Emberiza pusilla*	1	0	1
Asian Koel	*Eudynamys scolopacea*	1	0	1
Black-throated Laughingthrush	*Garrulax chinensis*	1	0	1
Peaceful Dove	*Geopelia striata*	1	0	1
Cinnamon Bittern	*Ixobrychus cinnamomeus*	1	0	1
Siberian Blue Robin	*Luscinia cyane*	1	0	1
Green Bee-eater	*Merops orientalis*	1	0	1
Common Chiffchaff	*Phylloscopus colybitus*	1	0	1
White Wagtail	*Motacilla alba*	1	0	1
Rusfescent Prinia	*Prinia rufescens*	1	0	1
Yellow-vented Bulbul	*Pycnonotus goiavier*	1	0	1
White-browed Piculet	*Sasia ochracea*	1	0	1
Barred Buttonquail	*Turnix suscitator*	1	0	1
Total		1239	527	1767

Appendix 2.

(As accepted for publication in BirdingAsia 2013 [2])

The first record of Common Chiffchaff *Phylloscopus collybita* for Thailand

ANDREW J. PIERCE, WORAPHOT BUNKHWAMDI and RUNGSRIT KANJANAVANIT

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On 28 November 2012 we undertook a mist-netting and ringing session at Nam Kham Nature Reserve, Chiang Saen District, Chiang Rai Province in Northern Thailand (20°17'N 100°03'E). At about 09h30 we caught a Common Chiffchaff *Phyllsocopus collybita*, a species previously unrecorded in Thailand. The bird was ringed, measured, photographed, and released upon which it flew away strongly but was not seen subsequently. No calls were heard at any time.

The chiffchaff, which AP was familiar with from the UK., was slightly smaller than Dusky Warbler *P. fuscatus*, several of which we had caught at the same time, with a finer shorter bill and shorter legs. The crown and mantle were greyish-brown with some olive-green in the rump and lower back. The underparts were off-white with some brownish on the flanks (but much less so than on Dusky Warbler). Some yellow at the bend of the wing was striking but otherwise there were no traces of yellow in the plumage. The rectrices and remiges had distinct green fringes and it had no wing bar. The supercilium, in front of the eye, and the sides of the head had a rusty-buff tinge. The bill was almost all black (only the base of the lower mandible and proximal part of the cutting edge of the upper mandible were a paler pinkish) and the legs were blackish with yellow soles to the feet.

Full biometrics and standard wing formula along with a series of photographs were submitted as evidence to the Bird Conservation Society of Thailand Records Committee. The wing length was 58 mm (maximum chord), the wing point was $4^{th} = 5^{th}$ primary and it was emarginated on 3^{rd} - 6^{th} primaries (which ruled out Willow Warbler *P. trochilus* a species recently recorded in south-east Asia). The closely related Mountain Chiffchaff *P. sindianus*, (formerly treated as

conspecific with Common Chiffchaff) has a similar wing formula but browner upperparts, buff flanks, a darker eye-line, less green-tinged coverts and lacks any yellow in the plumage (P. J. Leader pers. comm.).

The lack of green on the mantle, lack of yellow away from the underwing combined to make it a distinct Siberian Chiffchaff *P. c. tristris* the most widely dispersing race of the species. Siberian Chiffchaff normally winters from the northern Indian subcontinent to south-west Asia but has been recorded as a scarce non-breeding visitor or vagrant west to the British Isles and east to Korea and Hong Kong, (Carey *et al*. 2001, Duckworth 2004, Dean *et al*. 2010). In south-east Asia it is a vagrant to west Tonkin with just a single sight record of two individuals (A. Allport in Robson 2002). It was predicted as likely to occur in Thailand by Lekagul and Round (1991).

Nam Kham nature reserve is situated at an elevation of 364 m, on a tributary of the river Mekong near the borders of Burma and Lao PDR, an area known as the Golden Triangle. The 11-ha nature reserve has a mix of habitats including scrub, tall grass surrounding a small oxbow, rice paddy and seasonally wet ponds. The surrounding areas are farmland with an increasing amount of sterile (from a bird's point of view) crops such as pineapple, cassava and rubber. Since recording began in 2008 several rare and difficult-to-observe species have been caught at the site, including the second records for Thailand of Large-billed Reed Warbler *Acrocephalus orinus* (Nimnuan and Round 2008); Blyth's Reed Warbler *A. dumetorum* (Round 2008); and the second and subsequent records of Chestnut-crowned Bush Warbler *Cettia major* (Round *et al*. 2008, one or two of which are now known to winter annually at Nam Kham, with four subsequent records (pers. obs.). Another highly skulking winter visitor, White-tailed Rubythroat *Luscinia pectoralis tschebaiewi*, previously known by a single specimen collected near Bangkok (Riley 1938) was also recorded from the vicinity of Chiang Saen in 1996 (three individuals ringed; S. J. Rumsey pers.comm.), and, on the evidence of subsequent ringing at Nam Kham during 2008-present, has also proved to be more or less annual at the site with seven individuals ringed (pers. obs.).

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REFERENCES

Carey, G. J., Chalmers, M. L., Diskin, D. A., Kennerley, P. R., Leader, P. J., Leven, M. R., Lewthwaite, R. W., Melville, D. S., Turnbull, M. and Young, L. (2001) *The avifauna of Hong Kong*. Hong Kong: Hong Kong Birdwatching Society.

Dean, A., Bradshaw, C., Martin, J., Stoddart, A. and Walbridge G. (2010). *British Birds* 103: 320–338.

Duckworth, J. W. (2004) Eight birds new to DPR Korea. *Forktail* 20: 116–120.

Lekagul , B. and Round, P. D. (1991) *A Guide to the Birds of Thailand.* Bangkok: Saha Karn Bhaet.

Nimnuan, S. and Round, P.D. (2008) Further Thai records of Large-billed Reed Warblers. *Acrocephalus orinus BirdingASIA* 9: 10.

Riley, J. H. (1938) Birds from Siam and the Malay Peninsula in the United States National museum collected by Drs. Hugh M. Smith and William L. Abbott. *U.S. Nat. Mus. Bull*. 172. Smithsonian Institution Washington, D. C.

Robson, C. (2002) From the field. *Oriental Bird Club Bulletin* 36: 61-71.

Round, P. D. (2008) Recent Reports: Late December 2007 to mid-March 2008. *BCST Bulletin* 25: 34-36.

Round, P.D., Pierce, A. J., Dymond, J. N., Boonkhwamdee, W. and Rojanadilok, P. (2009) A record of Chestnut-crowned Bush Warbler *Cettia major* from Chiang Saen. *Bird Conservation Society of Thailand Bulletin* 26: 10-11.