

## LISTS OF SPECIES

### Birds, Babuyan Islands, province of Cagayan, Northern Philippines: New island distribution records.

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**Abstract:** We present new bird distribution records from the Babuyan Islands in northern Philippines, gathered during recent biotic survey efforts in the area. This information represents a significant step towards a detailed understanding of the biodiversity of the region. We report three subspecies not previously recorded from the country: *Ceyx erithaca erithaca*, *Turdus chrysolaus orii*, and *Motacilla alba leucopsis*, providing new information about migratory patterns in the region. We also provide the first published records from the islets of Mabag and Barit, based on specimens in the collections of the U.S. National Museum of Natural History. With these records, the resident avifauna of this island group is relatively well-known, which will provide a firm foundation for planned studies of systematics and taxonomy of the bird fauna of the region.

#### Introduction

The Philippines have been the subject of intensive biodiversity studies, particularly in the middle twentieth century (Taylor 1934; Inger 1954; Rand and Rabor 1957) and again in recent years (Heaney et al. 1991; Rickart et al. 1993; Brown et al. 1996; Heaney et al. 1999; Brown et al. 2000; Balete et al. 2006; Brown et al. 2007). Nonetheless, several key areas of the country remain little-studied, with only historical or cursory recent attention to their biota, as is evidenced by recent papers documenting new island records (Redman 1993; Allen 2006; Allen et al. 2006; Peterson 2007) and even new species (Kennedy et al. 1997; Kennedy et al. 2001; Allen et al. 2004). This contribution continues the series, presenting new records and natural history notes from several visits to the Babuyan Islands north of Luzon, as well as from unpublished specimens in the U.S. National Museum of Natural History (USNM) from collections in 1989-1990. The goal is to continue to build a solid, evidence-based picture of bird distributions in the Philippines.

#### Methods

This contribution summarizes records from four principal sources, all based on collecting and inventory efforts in the Babuyan Islands north of

the main body of the Philippine islands. In 9-11 March 2006, a team of four biologists visited Camiguin Norte, working at Barangay Balatubat (18°54'29" N, 21°51'54" E) and Limandok in Barangay Balatubat, establishing a field camp at 270 m (18°55'44" N, 21°53'56" E; 5-9 March); Asked, on Babuyan Claro (19°30'47" N, 121°11'31" E; on 12-14 March); and Calayan in the lowlands at Macarra (19°17'38" N, 121°24'32" E; 16-19 March) and uplands at 320 m (Longog in Barangay Magsidel, 19°19'52" N, 121°26'20" E; 19-21 March). In September 2006, CO visited Dalupiri, working at Nipa Creek (19°6'7" N, 121°13'23" E; 12-13 September) and Manolong Creek (19°5'6" N, 21°14'28" E; 15-17 September). In February 2007, CO and a larger team visited Camiguin Norte, working again at Barangay Balatubat (6 February) and in a distinct part of the island (Kaurigan in Barangay Balatubat, 18°54'7" N, 21°54'32" E; 6-17 February).

Voucher specimens were collected under gratuitous permits issued by the Department of Environment and Natural Resources – Protected Areas and Wildlife Bureau (DENR-PAWB). We also include incidental observations from short trips made since 2004 by CO on Fuga on 19-21

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May 2005, by CO and MJCVC on Calayan in October 2005, and by MJCVC on Calayan in March 2005. Finally, we include new and interesting records from specimens collected in 1989–1990 in the collections of the USNM.

In general, we summarize the current state of distributional knowledge of each species, indicating literature sources (K = Kennedy et al. 2000; A = Allen et al. 2006), although information from the Batanes Islands may not be completely up to date, as we believe unpublished records to exist from more recent trips. As Kennedy et al. (2000) presented no records from Mabag and Barit islands, both small islands west of Fuga, all Mabag and Barit specimen records from U.S. National Museum of Natural History are new. Most landbird records are backed by new series of scientific specimens deposited at the University of Kansas Natural History Museum (KUNHM); catalog numbers are cited for specimens when they constitute new records.

### Species Accounts

#### *Aythya fuligula*

Known from Batan, Calayan (K). Ten individuals sighted by CO and ATP on small lake on Pamoctan, a small islet off the coast of Camiguin Norte, on 11 March 2006.

#### *Rallina eurizonoides*

Endemic race *R. e. alvarezii* was described from specimens from Batan and occurs on Sabtang as well (K). Birds from Fuga appear to belong to the nominate race (Kennedy and Ross 1987), while records from Camiguin Norte are of unknown race (A). A series of seven specimens collected on Camiguin Norte at Kauringan on 8–12 February 2007 (KUNHM 98986–91, 99377) was compared with two paratypes of *R. e. alvarezii* (USNM 58210–1) and with a male specimen of the nominate subspecies from northern Luzon (USNM 54222). In general, we noted only variable differences between the reference material of *R. e. eurizonoides* and *R. e. alvarezii*. Our material from Camiguin Norte was clearly closest to the nominate subspecies, in the lighter dark olive of the back and lighter cinnamon of the head and throat. Camiguin Norte specimens also coincided with the reference individual of *R. e. eurizonoides*

in having broader white barring on the underparts, but we are concerned about the degree to which such a character is likely to be wear-dependent.

#### *Scolopax* sp.

The recently described *S. bukidnonensis* was recently recorded on Babuyan Claro (April 2004; Allen et al. 2006). Woodcocks were sighted and photographed on Calayan by R. Hutchinson and J. Eaton in February 2005 (pers. comm.), and CO flushed two woodcocks on Camiguin Norte in February 2007. The identity of these woodcocks needs further investigation.

#### *Larus argentatus*

Known in the Philippines from only two old records on Luzon, in 1896 and in 1928 (K). An immature individual sighted on 21 October 2005 along the coast at Tugod, Calayan, by CO and MJCVC, and documented with video footage.

#### *Streptopelia bitorquata*

Known from Calayan and Fuga (K), and from Dalupiri (A). Collected on Mabag on 4 March 1990 (USNM 635307, 635313).

#### *Chalcophaps indica*

Known from Batan, Calayan, Camiguin Norte, Ivojos, Fuga, and Sabtang (K), and from Pamoctan, Babuyan Claro, and Dalupiri (A). Collected on Mabag on 3 and 5 March 1990 (USNM 635143, 635305, 635162) and on Barit on 7 March 1990 (USNM 635186).

#### *Ptilinopus leclancheri*

Known from Batan, Calayan, Camiguin Norte, and Sabtang (K), and from Pamoctan (A). Collected at Naguilian, Fuga, on 12 March 1990 (USNM 635219, 635222, 635225, 635457–8; latter two identified as *P. occipitalis*, but likely referable to this species); these records are probably best assigned to race *P. l. longialis*.

#### *Tyto capensis*

Known from Batan and Sabtang (K). One sighted by CO in grassland near Modoc, Fuga, on 19 May 2005.

#### *Otus elegans*

Known from Batan, Calayan, and Sabtang (K). Several individuals netted in secondary forest at Limandok, Camiguin Norte, on 5–8 March 2006 (KUNHM 97155, 97239, 97240, 97241).

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### *Ninox scutulata*

Migrant race *N. s. japonica* known from Batan, Calayan, Camiguin Norte, and Fuga; race *N. s. florensis* from Calayan, unknown race from Fuga (K). Resident race *N. s. randi* collected on Dalupiri on 19 March 1990 (USNM 635295), at Limandok, Camiguin Norte on 9 March 2006 (KUNHM 97233) and at Mambit, Camiguin Norte, on 19 May 1989 (USNM 607324). These records represent a northward extension of the range of the resident race, previously known only on Luzon and other islands in the central and southern Philippines.

### *Todiramphus chloris*

Known from Batan, Camiguin Norte, Fuga, Itbayat, Ivojos, Sabtang, and Y'ami (K), and from Pamoctan, Babuyan Claro, and Calayan (A). Collected on 4 and 6 March 1990 on Mabag (USNM 635151, 635179, 635317).

### *Ceyx erithaca*

*C. e. motleyi* is the only race known to occur in the Philippines, where it is confined to the western part of the country (Mindoro, Palawan, Tawi-tawi). The nominate race migrates south from Bhutan and southern China to peninsular Malaysia mainly in August–September and flies back north in March (del Hoyo et al. 2001). A female *C. e. erithaca*, the first record of this race in the country, was collected on Calayan Island on 17 May 2007, thanks to a local resident who caught the bird about 6 days earlier along the southern coast of the island (KUNHM 110759).

### *Upupa epops*

Known from Batan (K). Sighted along the coast at Asked, Babuyan Claro, on March 2006 by J. Fernandez, and along coast at Poblacion, Calayan, on 14 March 2005 by MJC.V.

### *Pericrocotus divaricatus*

Known from Calayan (K). Five sighted in cultivated areas near Asked, Babuyan Claro, on 14 March 2006.

### *Lanius cristatus*

Known from Batan, Calayan, and Fuga (K), and from Babuyan Claro, Camiguin Norte, Dalupiri, and Pamoctan (A). Collected on Mabag on 4 and 6 March 1990 (USNM 635155, 635308, 635176), and on Barit on 5 March 1990 (USNM 635326).

### *Terpsiphone atrocaudata*

Known from Batan, Itbayat, Ivojos, and Sabtang (K). Collected on Naguilian, Fuga, on 11 March 1990 (USNM 635209). Sighted on several occasions around Limandok, Camiguin Norte, in March 2006 by R. Fernandez.

### *Microscelis amaurotis*

Endemic race *M. a. batanensis* known from Batan, Ivojos, Sabtang, and Babuyan Claro; endemic race *M. a. fugensis* known from Calayan, Dalupiri, and Fuga; endemic race *M. a. camiguinensis* known from Camiguin Norte (K) and probably from Pamoctan (A). *M. a. fugensis* collected on Mabag on 3–9 March 1990 (USNM 635133–42, 635146, 635148–50, 635156–61, 635177–8, 635183–4, 635302–4, 635309, 635318–24, 635327–9, 635336–41, 635354), and on Barit on 5–6 March 1990 (USNM 635169, 635173).

### *Urosphena squameiceps*

One netted in secondary forest at Limandok, Camiguin Norte, on 7 March 2006 (KUNHM 97265), only the second Philippine record of the species (Curio et al. 2001 recorded it on 9 October 1999 on Panay Island).

### *Zoothera dauma*

Known from Batan and Fuga (K). Netted in secondary forest in Limandok, Camiguin Norte, on 6 March 2006 (KUNHM 97274) and in Kauringan, Camiguin Norte, on 7–13 February 2007 (KUNHM 98953–98956, 99051). Collected on Dalupiri on 15 March 1990 (USNM 635233), on Mabag on 4 March 1990 (USNM 635153), on Barit on 5–6 March 1990 (USNM 635164, 635334) and on Calayan in March 1990 (USNM uncatalogued).

### *Turdus pallidus*

Known from Calayan and Fuga (K). Collected on Dalupiri on 15–19 March 1990 (USNM 635234, 635251, 635264, 635266, 635296), on Mabag on 3–6 March 1990 (USNM 635131, 635154, 635174), on Barit on 5 and 7 March 1990 (USNM 635165, 635187), and on Camiguin Norte on 9 February 2007 (KUNHM 99052).

### *Turdus chrysolaus*

Known from Batan, Calayan, and Fuga (K), and from Camiguin Norte and Pamoctan (A). Individuals apparently referable to race *T. c. orii* netted

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in secondary forest at Limandok, Camiguin Norte on 5-9 March 2006 (KUNHM 97151, 97275-84, 98168) and at Kauringan on 8-14 February 2007 (KUNHM 98967-79), which would be the first record of this subspecies in the Philippines, although identifications should be confirmed via molecular studies. Collected on Dalupiri on 14-19 March 1990 (USNM 635227-8, 635231-2, 635238-40, 635250, 635253, 635262-3, 635267, 635269-70, 635276, 635287-8, 635297, 635540, 635548, 635550-1, 635553, 635608-10), on Mabag on 3-7 March 1990 (USNM 635132, 635144-5, 635147, 635163, 635175, 635181-2, 635185, 635314-6, 635325), and on Barit on 5-7 March 1990 (USNM 635166-8, 635172, 635335, 635342-6). Careful comparative racial identification of these specimens is needed, again backed up by molecular studies.

### *Monticola solitarius*

Known from Batan, Calayan, Sabtang, and Y'ami (K), and from Babuyan Claro, Camiguin Norte, and Pamoctan (A). Collected on Fuga on 7-11 March 1990 (USNM 635191, 635197, 635347), on Dalupiri on 15-19 March 1990 (USNM 635241-2, 635258-61, 635289, 635549, 635611), and on Mabag on 9 March 1990 (USNM 635188).

### *Muscicapa dauurica*

Netted in gallery forest along Manolong Creek on Dalupiri on 16 September 2006 (KUNHM 98737), the first record of this migratory species in the Batanes-Babuyan region.

### *Motacilla alba*

Known from Batan and Calayan (K). One referable to *M. a. lugens* (based on presence of black eyestripe; solid black patch on breast; black crown, nape and back) was sighted by CO and ATP along a small lake on Pamoctan on 11 March 2006. Subspecies *M. a. leucopsis* (based on presence of solid black patch on breast; black crown, nape and back; and absence of black eyestripe) sighted and video-documented along the shoreline at Poblacion, Calayan, on 12-20 October 2005, the first record of this race in the Philippines.

### *Anthus gustavi*

Known from Calayan (K). Individuals collected on Dalupiri on 17-18 March 1990 (USNM 635278, 635280) and along Nipa Creek on Dalupiri on 13 September 2006 (KUNHM 98735-6).

### *Emberiza sulphurata*

Known from Calayan and Luzon (K), and on Batan (Haribon Foundation 1999, in Mallari et al. 2001), and in San Mariano, Isabela, northeast Luzon, on 19 March 2004 (M. Prins, unpubl.). Collected on Dalupiri on 14-15 March 1990 (USNM 635226, 635243).

## Discussion and conclusions

Most of the new and interesting records presented herein are of species that winter in the Philippines, and are thus more or less expected to be found in the Babuyan Islands. A few vagrant species, namely *Larus argentatus*, *Urosphena squameiceps*, *Muscicapa dauurica*, and *Ceyx erithaca*, were also encountered.

We report new island records for several resident taxa (*Ptilinopus leclancheri*, *Streptopelia bitorquata*, *Chalcophaps indica*, *Tyto capensis*, *Halcyon chloris*). However, these records do not appear to represent significant extensions of known distributional areas, as all are already known from farther north and south in the region. Further surveys in this island group are probably unlikely to reveal new resident taxa, unless they are quite cryptic.

Nonetheless, although approaching well-known ornithologically, the Babuyan and Batanes island groups remain as important areas of avian diversity. An endemic rail was discovered on Calayan recently (Allen et al. 2004), and 18 endemic subspecies are recognized there, although their distinctiveness is variable. However, preliminary surveys of phenotypic variation suggest that treating these forms as subspecies may understate rates and degrees of avian endemism in the region (Peterson 2006). A comprehensive review of resident avian taxa in the region taking advantage of new molecular tools and new specimen material is under development (CO, unpubl. data).

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