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Ornithological Observations during a (preliminary) Philippines Conservation Expedition in 1993

Ornithologische Beobachtungen während einer Artenschutz vorbereitenden Philippinen-Expedition 1993

By **Eberhard Curio**

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Summary

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The Philippine biota are both among the most species-rich and the most threatened in the world. To assess the potential for species conservation the Arbeitsgruppe für Verhaltensforschung (=Animal Behaviour Research Group) undertook a two months faunistic survey of birds in the Philippine West-Central Visayas (Masbate, Ticao, Negros) and Leyte, with short visits to Bohol and Cebu. This paper lists a number of chance observations:

1) Species known from other islands in the Philippines were found to occur also on one or two of the islands visited: Masbate (11), Ticao (2, including one report of locals), Negros (3), Leyte (3, including an as yet unidentified *Munia* species), Bohol (2), and Cebu (1, parelleling an as yet unpublished finding by P. Magsalay and R. Rigor). It was discussed whether the new species records represent stable populations or the chance sightings of stragglers from other islands. Two species *(Geopelia striata, Halcyon pileata)* were found for the first time on two islands, thus indicating that they are extending their ranges.

2) In three, possibly four species new colour pattern variants were observed. While in two cases theses may involve atypical mutants, there is reason to believe the existence of a new form (or species) of flycatcher (resembling or belonging to *Culicicapa helianthea)* on Masbate.

3) Among 1 to 3 breeding records for 19 species (including one non-native) there are 3 *(Rhipidura cyaniceps, Sitta frontalis, Nectarinia jugularis)* that extend the hitherto known breeding season into July and August.

4) In one place (Tugbo watershed area, Masbate), an unprecedented multi-species chorus singing was regularly observed. Singers behaved so unobtrusive that only one *(Rhipidura cyaniceps)* could be identified.

5) Human imitations of distress calls, otherwise attracting birds of many species into view, failed to do so in two places (Masbate, Ticao) where the ruse was tried.

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6) There was a dearth of observations on larger species (hornbills, fruit pigeons, parrots), especially on Negros. Furthermore, the Tarictic Hornbill *(Penelopides [panini] ticaensis)*, is almost certainly extinct on denuded Ticao, while the extant population on denuded Masbate *(P. [panini] panini)* must be critically endangered. Based on the threat from extinction for many species that depend for their existence on forests, a list of measures is drawn up that should be implemented by all means and without delay. While some measures require funding others need political decisions.

Zusammenfassung

Curio, E. (1994): Ornithologische Beobachtungen während einer Artenschutz vorbereitenden Philippinen-Expedition 1993. Ökol. Vögel 16: 613-623.

Die Lebensgemeinschaften der Philippinen gehören zu den artenreichsten und zugleich den bedrohtesten der Welt. Um die Möglichkeiten zum Artenschutz auszuloten, unternahm die Arbeitsgruppe für Verhaltensforschung eine zweimonatige avifaunistische Expedition auf die West- und Zentral-Visayas (Masbate, Ticao, Negros) sowie Leyte, mit Abstechern nach Bohol und Cebu. Die vorliegende Mitteilung gibt eine Reihe von Zufallsbeobachtungen, einschließlich vieler Neunachweise, wieder:

1) Arten, die man von anderen Philippineninseln kannte, fanden wir auf 1 bis 2 der besuchten Inseln: Masbate (11), Ticao (2), Negros (3), Leyte (3, einschließlich einer noch unbestimmten *Munia-Art)*, Bohol (2) und Cebu (1, in Bestätigung einer noch unveröffentlichten Beobachtung von P. Magsalay und R. Rigor). Es wird erörtert, ob die Neunachweise stabile Populationen widerspiegeln oder Zufallsfunde von »Irrgästen« benachbarter Inseln. Zwei Arten *(Geopelia striata, Halcyon pileata)* wurden erstmals auf gleich zwei Inseln gesehen, vielleicht infolge einer umfassenderen Arealausweitung.

2) Bei drei, vielleicht sogar vier Arten zeigten sich neue Färbungsvarianten. Während diese in zwei Fällen Mutanten sein könnten, handelt es sich im dritten Fall um eine neue Form eines Fliegenschnäppers (ähnlich oder zugehörig zu *Culicicapa helianthea)* auf Masbate.

3) Unter 1 bis 3 Brutnachweisen von 19 Arten, einschließlich einer fremden, sind 3 *(Rhipidura cyaniceps, Sitta frontalis, Nectarinia jugularis)*, die die bisher bekannte Brutzeit in den Juli und August ausdehnen.

4) An einem Ort (Tugbo-Wassereinzugsgebiet, Masbate) kam es regelmäßig zu einem bisher beispiellosen mehrartlichen Chorsingen. Die Sänger verhielten sich dabei so heimlich, daß nur einer *(Rhipidura cyaniceps)* bestimmt werden konnte.

5) Menschliche Nachahmungen von Notrufen, die sonst viele Arten in Sichtnähe locken, versagten an zwei Orten (Masbate, Ticao), wo sie erklangen.

6) Es mangelte an Beobachtungen größerer Arten (Nashornvögel, Fruchttauben, Papageien), besonders auf Negros. Ferner ist der Tariktik-Hornvogel *(Penelopides [panini] ticaensis)* so gut wie sicher auf dem entwaldeten Ticao ausgestorben; die noch lebende Population *(P. [panini] panini)* auf dem ebenso nackten Masbate muß äußerst bedroht sein. Ausgehend vom Bedrohungsrisiko für viele vom Wald abhängige Arten werden Gegenmaßnahmen empfohlen, die unverzüglich und vorbehaltlos umzusetzen wären. Einige der Maßnahmen erfordern Geld, andere »nur« politische Entscheidungen.

Introduction

The Philippines are unusually rich in endemic vertebrates (Hauge et al. 1986). For example, 33% of all 556 bird species are confined to this archipelago (Dickinson et al. 1991, Oliver & Wirth 1993). Among the world's 221 Endemic Bird Areas (EBAs=areas with more than one ›restricted range‹ [=r.-r.] species, i.e. species with breeding ranges below 50,000 km^2), 9 lie in the Philippines. When adjusting endemicity to the total number of r.-r. species, the Philippines rank top in the world. Among all countries with at least 100 r.-r. species, the Philippines have the highest percentage (> 90%) of endemics among these species (Bibby et al. 1992).

Against this background, the threat to the Philippine biota due to deforestation gives cause for the most serious concern. Among the 42 bird species that are currently listed as threatened, and/or critically endangered, 34 (=81%) are Philippine endemics (Collar & Andrew 1988). This figure does not include subspecies and, thus, greatly underestimates the number of taxa threatened. Furthermore, many taxa currently treated as subspecies probably merit full species status, e.g. several hornbills (see Kemp 1988). Hence, when judged from their proportion in the country's avifauna as a whole the endemics suffer above and beyond the more widely distributed species. Based on the demise of many Philippine bird and mammal species, Oliver & Wirth (1993) pinpointed conservation priorities (see also Hauge et al. 1986). Hotspots that merit every conservation effort include the West-Central Visayas (Panay, Negros, Guimaras, Cebu, Masbate, Ticao) and Mindoro.

Prompted by Oliver & Wirth's review, three of our research group (B. Feil, A. Flasskamp, E.C.) set out to contribute to conservation efforts in the Philippines. In 1993 we initiated a survey of the avifauna of islands about which little or no data had been gathered in recent times. Therefore we concentrated our efforts on Masbate (8 days), Ticao (4.5 days), Negros (7.5 days), and Leyte (8 days). The visit to Negros was intended to complement observational studies conducted by the Cambridge University Rainforest Project 1991 to the West Visayas (Brooks et al. 1992). On Negros we visited Mt. Talinis (Quernos de Negros) area (5 days), Mt. Canlaon NP (2.5 days), but in a different part (Mambucal area, Wasay Entrance Station) than that surveyed by the Cambridge team. The visit to this latter area, however, was marred by the poor accessibility to the more valuable dipterocarp forest, which was difficult to reach because of the rains then prevailing; the station itself was surrounded by secondary or degraded primary forest. Overall we lost virtually three whole days due to heavy rains (1 on Ticao, 1 in Talinis, 1 in Leyte), in addition to many hours of abortive hiking due to shorter rains.

Prior to the aforementioned trips we also paid short visits to Bohol (3.5 days) and Cebu (twice one day).

During our brief stays on Cebu and Leyte, only two of us (B. Feil, A. Flasskamp) were engaged in full- or part-time field work. On all other islands, all three of us (including E.C.) took part in the surveys. The method employed consisted of recording birds by sight and sound as widely as possible, only once relying on feather remains of a kill of a raptor *(Treron vernans,* Bohol). The books by duPont (1971) and Gonzales & Rees (1988) served as identification guides, while taking into account corrections of the former by Scharringa & Inskipp (1991). The species list given below also includes a few data from interviews with local people.

Species or subspecies of conservation concern (Collar & Andrew 1988) are indicated by*.

The English and scientific names are taken from Dickinson et al. (1991). Since birds were identified by sight I shall refrain from giving the subspecies names, though these may be inferred from their distributional ranges (Dickinson, et al. 1991). This paper is based on and extends an expedition's report (Curio 1993).

Based on our findings I will give some recommendations for conservation in the future.

Abbreviations:

Br = Brooks, Evans, Dutson, Anderson, Asane, Timmins & Toledo (1992);
DKP = Dickinson, Kennedy & Parkes (1991).
dP = duPont (1971).
Cambridge University Rainforest Project 1991 = Cambridge Expedition, the Negros part of which is covered by Brooks et al. (1992).

New Species Records

In the account of species by islands I follow the arrangements of DKP.

Bohol

The Rajaha Sikatuna NP comprises of 9,000 ha of (pristine?) forest. We explored it near the former Environmental Management Sector Station of the DENR, including the area of the Scouts' Camp. Additionally, we spent several hours in the Chocolate Hills.

- Scarlet Minivet, *Pericrocotus flammeus*, Rajaha Sikatuna NP; hitherto known only from Negros, Samar, Leyte and other Philippine islands (and extralimitally) (DKP).
- White-winged Cuckoo-shrike, *Coracina ostenta*, Rajaha Sikatuna NP; hitherto known only from Guimaras, Negros, Panay (DKP).
- House Swift, *Apus affinis*, Chocolate Hills; hitherto known only from Camiguin Norte, Luzon, Mindoro, Negros (DKP).

Masbate

Places visited

Gently rolling pasture land or fields interspersed with creeks lined with dense bush and secondary forest. On hill tops and in ravines between adjacent hills, there are patches of ± primary forest, each of a few hectares in size. Due to their shyness fruit pigeons were most easily identified from a distance when they perched in strips of forest bordering pastures. They did not allow approach from elevated pastures that sloped down to strips of forest along creeks.
The **Calasuche** mangrove swamps are the most extensive ones on Masbate that, apart from the crab and fish ponds, had more or less fallen dry. The ponds contain many dead trees. Frequent ›pump boat‹ traffic on the river lagoon.
The **Tugbo watershed area** comprises ca. 100 ha partially primary dipterocarp forest that has been altered on ridges by planting Abaka *(Musa textilis)* in patches. This forest borders to another 100 ha of reforested woodland. We surveyed only the old, more rewarding forest by walking on then dry creeks. The whole area comes closest in character to the forest that once covered most of the island.

The primary forest is also home to at least one colony of a large fruitbat, i.e. probably the endangered *Acerodon jubatus*, which though was not known to occur on Masbate prior to our visit (Mickleburgh et al. 1992). Being the largest surviving Philippine fruit bat, its identity was guessed by us because of its large body size. Yet *Pteropus vampyrus* is another possibility (Oliver in litt.).

- Intermediate Egret, *Egretta intermedia*, mangrove swamps of Calasuche. Uncommon winter visitor, recorded from other Philippine islands so far (DKP).
- Pied Harrier, *Circus melanoleucos*, 7-R-Ranch, Matipuron, near Milagros; seen in extensive grassland; widespread in Philippines, including nearby Ticao (DKP).
- White-breasted Swamp-hen, *Amaurornis phoenicurus*, 7-R-Ranch as above; widespread in Philippines (DKP).
- Yellow-breasted Fuit Dove, *Ptilinopus occipitalis*, widespread in Philippines (DKP).
- Zebra Dove, *Geopelia striata*, 7-R-Ranch as above; widespread in Philippines (DKP), and extending its range here (Parkes, in litt., 1994). (See also p. 000).
- Island Swiftlet, *Collocalia vanikorensis*, 7-R-Ranch as above; widespread in Philippines, including nearby Cebu (DKP).
- Black-capped Kingfisher, *Halcyon pileata*, 7-R-Ranch as above; seen and heard twice when giving its monosyllabic calls. In view of the early date (16 July), the record necessitates to revise the view of *H. pileata* being known as a rare winter visitor or autumn passage migrant to or in the SE Philippines (DKP).
- Rufous-lored Kingfisher, *Halcyon winchelli*, mangrove swamps of Calasuche; listed for many other Philippine islands by DKP.
- Black-headed Tailorbird, *Orthotomus samarensis*, Calasuche as above, in partly dead flooded trees; listed so far for Bohol, Leyte and Samar (DKP) whilst being regarded as subspecies *O. nigriceps samarensis* by dP (1991), with neither authority listing Masbate among home islands of either form.
- Citrine Canary-Flycatcher, *Culicicapa helianthea*, Calasuche as above, in well-foliated trees on non-flooded ground. Possibly new form (see below). Recorded from several larger islands nearby (DKP).
- Tree Sparrow, *Passer montanus*, 7-R-Ranch as above. Not listed for Masbate by DKP, yet ›expanding its range in the Philippines‹ (Parkes, in litt., 1994). Everywhere when observed by us (Manila, Ticao, Negros), this sparrow occupies the habitat in cities and suburbs that elsewhere in its native range is inhabited by the House Sparrow *(Passer domesticus)*. There were flocks on bare roads, far away from trees and cover.

Ticao

Places visited

Monreal, a village; **Matang Tubig** south of Monreal, essentially farmland with coconut groves.
Hacienda Batuan (=Sitio Baladingdan=Famosa Ranch).

This latter ranch, about 2 km south of Monreal along the coast, is farmland with patches of forest and scrub. The owner, Mr. How, struggles to protect the remnant tiny patches of forest left on his farm and the extended coconut groves from encroachment by the tenants whom he employs as labourers. The price paid in this struggle is extremely high: 3 of Mr. How's farm managers (›encargados‹) have been killed by tenants in a row. In their zest for protection, the managers had dutifully destroyed the encroaching tenants' livelyhood and properties, thus precipitating the revenge. Being communal murders, the cases were never resolved (S. CANTELA pers. comm., Monreal).

Kumavit is a peninsula of the NE coast of Ticao to be reached by boat from Monreal. This hilly, and rugged limestone area ascends steeply to ca. 100 m a.s.l. from the landing place. The forest is relatively dense though probably nowhere primary in nature. It is dotted with old trees.

Biton is hilly country W of Monreal, half an hr. by boat. The valleys between the ridges are cultivated with coconut groves at the bottom and crops, e.g. cassava, being grown even on steep hillsides. Dense forest is restricted to the hill tops.

- Osprey, *Pandion haliaetus,* seen near shore between Biton and Kumavit. Hitherto not listed for Ticao, yet from several other Philippine islands (two subspecies, DKP)
- Tabon Scrubfowl, *Megapodius cumingi,* reported to occur on San Miguel Island off the NW tip of Ticao (interview data); this island, the tiniest and most northerly of the Ticao complex, appared forested in the same way as the main island of Ticao. Reported by locals to occur no longer on Ticao. Both islands not listed by DKP.

Cebu

Central Cebu National Park contains the last 10 ha patch of primary forest receiving intense attention by the PWWCF (=Philippine Wetland and Wildlife Conservation Foundation, Inc.) and the DENR. Given the largely deforested state of the island, the park may be a last refuge for some of the 14 Cebu endemics (P. MAGSALAY, pers. comm.; e.g. DUTSON et al. 1993).

- Little Spiderhunter, *Arachnothera longirostra,* seen together with P. MAGSALAY and R. RIGOR. Not listed by DKP though known from several nearby islands.

Negros

Places visited

Mount Talinis, Palinpinan, PNOC Geothermal Site

This area (1,000 m a.s.l.) lies on a slope facing Mt. Talinis, one of the peaks of the Quernos de Negros (1,903 m a.s.l.). Most of the records that follow were made from the PNOC (Philippine National Oil Corporation) construction road winding uphill among geothermal power plants. A few records (e.g. *Stachyris nigrorum)* are from a

rugged ridge ascending to 1,300 m a.s.l. above it. The area is still well forested, excepting the cultivated valley sloping down from the construction road. Also there are illegally maintained patches of Abaka plantations *(Musa textilis)* and Kogon grassland uphill, despite the laudable intention of the PNOC management to protect the forest under their jurisdiction (a substantial part of the Mt. Talinis area). Their forest guard, however, is patrolling the construction road solely, with threats from kaingineros (people cultivating the previously forested, degraded grassland) keeping him out of the forest (locals, verbal comm.)
Our survey of five days supplements that of the Cambridge Expedition two years before. They stayed for one day in the PNOC Valencia area at essentially the same altitude, perhaps 5 km (straightline distance) away from our study area (Br.).

Mount Canlaon, Wasay Entrance Station of National Park, 1100 m a.s.l.
Dumaguete, Campus Silliman University

- Plaintive Cuckoo, *Cacomantis merulinus,* only heard and only at dusk (18.18 – 18.23 hrs) and dawn (5.45 hrs.). Not listed by DKP, but identification certain since the related *C. variolosus* can be excluded by voice alone as found in 1995 (unpublished). There is a recent sight record of *C. merulinus* by Evans et al. (1993).
- Island Swiftlet, *Collocalia vanikorensis,* Dumaguete City, Campus of Silliman University. Not listed by DKP for Negros but for nearby Cebu.[1)]
- White-cheeked Starling, *Sturnus cineraceus;* three birds (Mt. Talinis) and four birds (Mt. Canlaon) in bare tree tops in cultivated land and secondary forest, respectively. Identification needs confirmation (Kennedy, in litt., 1993). Known as a are winter visitor from the Far East (DKP). The gregarious habit and the type of habitat suggest the identification to be correct.
- Scarlet-collared Flowerpecker, *Dicaeum retrocinctum,* 1 male seen in scrub near the construction road of the PNOC, Mt. Talinis. The unmistakable pattern of 3 red markings insteated of 1, exclude confusion with *D. australe haematostictum,* a possibility favoured by both Parkes (in litt., 1994) and Brooks (in litt., 1994) when being unaware of this qualification. Hitherto not listed for Negros and regarded single island endemic on Mindoro (DKP). A recent sight record on a new expedition of mine, on Mt. Mandalagan (N Negros), lends confidence to this observation (August 1994).

[1)] A whole day observation with fine weather (8 August) on the campus of Silliman University revealed spatial segregation of both species. *C. vanikorensis* was flying above ca. 40 m, i.e. the tops of 73 yr. old *Acacia* sp. trees. By contrast, *A. affinis* used the space just below it, cruising at crown level, often using stereotyped routes, through the *Acacia* canopy. On two days, two *C. vanikorensis* visited repeatedly the dim hallway of Hibbard Hall, from 8 to 20 m from the main entrance. The larger of the two clung to the back of the other that perched on a fluorescent light, or at a ledge at the ceiling. Before landing the riding bird uttered ›tick‹ calls, additionally one of the two ›trr‹. Thereafter preening or feeding movements of the ›rider‹, directed towards the head of the juvenile (?) occurred for minutes. The rider also preened itself.

Leyte

Places visited

Mt. Pangasugan, a mountainous forest complex right inland from the Visayas State College of Agriculture (=VISCA) near Baybay. We explored the foothills up to a height of ca. 200 m a.s.l. along a dried creek.

Lake Danao area, one day, slightly a.s.l.

Campus of **VISCA**, slightly a.s.l.

- Zebra-Dove, *Geopelia striata*, common on the VISCA campus. Not listed by DKP (but see comment above).
- Black-capped Kingfisher, *Halcyon pileata*, at forest edge along creek. Hitherto not recorded for Leyte by DKP, see comment above.
- Grey-headed Mannikin, *Munia caniceps* (?), a large flock of ca. 50 birds on campus road on 21. August. Grey head not visible from a distance, yet coloration distinct from all four estrildines known to occur in the islands (DKP). Not seen during four weeks in 1991 by J. Martens (in litt., 1993).

Breeding Records

Part of the breeding observations to follow extends both the season of monthly breeding records in DKP (Table 5) and the most recent records given by Evans et al. (1993, Appendix VI). A record is assumed to extend earlier ones when the time of egg-laying is estimated or known to deviate accordingly; this assumes the Philippines to be one unitary synchronized breeding area, which they are not (see below). Such records are marked with * below.

- * *Phapitreron leucotis:* bird incubating on nest 3 m off ground beside ± dry river bed on 20 Jul, Tugbo Area, Masbate.
- *Collocalia vanikorensis:* 1 nearly full-grown juvenile fed by an adult on 8 Aug, Dumaguete, Negros.
- *Penelopides panini:* 1 fledgling (near-to-fledging) being handraised, on 17 Jul, from near Matipuron, Masbate.
- *Lalage nigra:* ♀ carrying food on 18 Jul, near Matipuron, Masbate.
- *Pycnonotus goiavier:* 2 different adults seen carrying food, 1 juvenile with immature tail, 18 Jul, near Matipuron, Masbate. 1 pair carrying food 26 Jul, Biton, Ticao.
- *Oriolus chinensis:* inferential observation in that 2 adults were chasing, over a long distance, a crow that carried a nestling, 26 Jul, Biton, Ticao.
- * *Sitta frontalis:* 1 juvenile (?) begged food from a flockmate by following it closely, fluttering its wings, 1 Aug, Mt. Talinis, Negros.
- *Copsychus saularis:* Adult carrying insect food, 19 Jul, Mangrove swamp of Calasuche, Masbate.
- *Saxicola caprata:* 1 juvenile in immature plumage, heavily dotted below, 18 Jul, near Matipuron, Masbate.

– * *Rhipidura cyaniceps:* female building nest ca. 7 m above ± dry river bed in rather open place; male came to visit nest several times a day; sang often; 20 Jul, Tugbo Area, Masbate.
– *Hypothymis azurea:* 4 juveniles in same immature, heavily dotted plumage, but otherwise full-grown, 2 and 3 Aug, Mt. Talinis, Negros.
– *Sarcops calvus:* adult carrying dragonfly, 11 Aug, Mt. Canlaon NP, Negros.
– *Aplonis panayensis* or *A. minor:* 2 adults visiting nest hole in dead tree, among other such trees, in fish pond, 19 Jul, mangrove swamp of Calasuche, Masbate.
– *Pachycephala philippinensis* pair engaged in courtship feeding, 12 Jul, Rajaha Sikatuna NP, Bohol.
– *Anthus novaeseelandiae:* adult carrying food, 18 Jul, Matipuron, Masbate.
– * *Nectarinia jugularis:* female building nest in small tree, dismantling to this end another conspecific nest in a similar tree ± 20 m away, on flooded ground of fish ponds, 19 Jul, mangrove swamp, Calasuche, Masbate. – Another female collected spiders' webs near ground, 20 Jul, Tugbo Area, Masbate.
– *Aethopyga siparaja:* juvenile male in transient plumage (brown with many red streaks), 3 Aug, Mt. Talinis, Negros.
– *Dicaeum* sp.: 2 juveniles recently fledged, with yellow undersides and yellow-orange bills, one begging from or threatening the other with open bill, 3 Aug, Mt. Talinis, Negros.
– *Zosterops montanus:* 3 times a different adult carrying insect (caterpillar) food, 1 and 3 Aug, Mt. Talinis, Negros.
– *Lonchura malacca:* 2 eggs incubated in solitary nest at road side, 12 Jul, Rajaha Sikatuna NP, Bohol.

There were striking differences between islands in terms of breeding activities. In the Tugbo Area lowland forest there was much singing by several species. By contrast, there was virtual silence on the other islands visited. With the exception of *Oriolus chinensis* that was abundant and highly vocal everywhere there was little song though breeding of several species was (still?) underway. In terms of its ± virgin nature and its altitude the Tugbo Area is best compared with the similarly intact forest of the foothills of Mt. Pangasugan (Leyte). Yet, with the exception of vigorous singing and courting of *Geopelia striata,* silence prevailed on Leyte. Even on Ticao, so close to Masbate, there was a dearth of song. Data on breeding are still too scanty as to permit a comparison of the annual rhytm of breeding species by species. However, it seems clear that there are recognizable inter-island differences (see also DKP for *Pithecophaga jefferyi).*

Multi-species Chorus Singing

The largely intact dipterocarp lowland forest of the Tugbo Area on Masbate sported a most peculiar song behaviour. For periods of about half an hour very little song was heard, apart from one or two larger species with loud song; one of the latter was the Philippine coucal *(Centropus viridis).* When suddenly, during this virtual silence, a songbird started singing its strophes, 2 or 3 other species including the blue-headed

fantail *(Rhipidura cyaniceps),* joined it after a few seconds (i.e. within 1 or 2 strophes of the beginner). The fantail did not start this chorus singing. The chorus of 3 or 4 species continued singing for 1-2 min (estimation to the nearest 10 s) and then stopped for another 25-45 min. After that there was another bout of chorusing. Chorus singing phased out within seconds, as it had started.
Before, during and after chorusing, singers behaved so unobtrusive that I could not identify their species, apart from the fantail mentioned (probably the male of the building female, see above). There seemed to take part only one individual, maximally two, of each species. There was no indication that species avoided to overlap in time with their songs, a tactic to evade masking of one's own song by songs from conspecifics (WASSERMAN 1977) or other species (FICKEN et al. 1974, CODY & BROWN 1969). This underscored the impression of participants to render their chorus as conspicuous (complex?) as possible. Nowhere else (Europe, Queensland, Ecuador, Panama, Jamaica, Kenya, Tonga, Fiji) have I ever witnessed such multi-species chorus singing which certainly deserves closer study.

New Plumage Colour Patterns

On three of the islands visited I noticed a number of odd plumage colour patterns three of which must be regarded new since they differ clearly from description in dP.

1. Elegant Titmouse, *Parus elegans.* In the Mt. Talinis area, at 1300 m a.s.l., an individual was plain *white* in all plumage parts that are habitually yellow (1 August). It foraged in a mixed flock with *Culicicapa helianthea* and *Phylloscopus trivirgatus* at a height of 12-15 m. Near the PNOC construction road, i.e. ca. 2 km from point of observation, and at Mt. Canlaon, the normal form of *Parus elegans* has been seen a couple of times. None of the nine races described from various islands displays a colouration like the odd bird mentioned (dP).

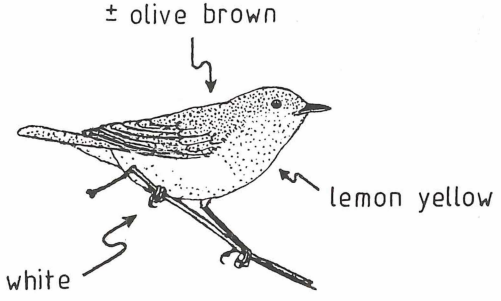

Fig. 1. Passerine resembling *Culicicapa helianthea* in the Mangrove swamp of Calasuche, Masbate (19 July 1993). Belly and undertail coverts white, not lemon yellow as in *C. helianthea* and as on breast of the new form where it extends upward to about a line running through the eye, another difference to (all?) *C. helianthea.* Colour of upper side including tail olive brown. From field sketches.

2. Citrine Canary-Flycatcher, *Culicicapa helianthea*: Apart from being new for Masbate, this flycatcher was common in the canopy of denser stands of trees (ca. 8-12 m high) in the mangrove swamp of Calasuche (19 July). All birds seen had a white belly instead of having their entire underside yellow as depicted in dP (Fig. 1). The back was more olive-brown. All birds seen moved about singly, yet there was a paucity of the species with whom this flycatcher is forming flocks elsewhere. None of the four races described has a bicoloured underside like the Masbate birds.

3. Black-Naped Monarch, *Hypothymis azurea*: This wide-spread species was most often observed in mixed flocks, together with *Zosterops montanus* and *Z. nigrorum*, in the Mt. Talinis area (Negros). I always failed to see the black nape in the male, even under the best light conditions. Both races described when examined in the hand have been shown to possess it (dP).

4. Purple-throated Sunbird, *Nectarinia sperata*: A male was observed in coconut groves near the VISCA (21 August, Leyte). The bird had a white instead of a yellow belly, a feature that none of the six races, including nominate *N. s. sperata* from Leyte (dP), or the four races recognized by others with *N. s. trochilus* ascribed to Leyte (DKP), appear to have. In other respects the male seen conformed partially to the colour plate 78 (race?) in dP: Crown dark green, throat violet, breast red, wings (plus upper back?) iridescent green (?), lower back reddish brown (plate: green). There were no further observations of this sunbird on Leyte or elsewhere. While there is some acceptable uncertainty about the metallic shining portions of the plumage, the colouration of the belly, being due to a pigment in most sunbirds, was clearly different from the description mentioned.

The significance of the foregoing account of deviant plumage patterns remains problematical. The scarcity of observations in two cases (nos. 1. and 4.) appears compatible with single phenodeviants (mutants?) underlying them. The intensive collecting in the past on Negros and Leyte would appear to dispel the idea of stable polymorphismus as viable explanations. This idea, or, that of a still undescribed new taxon cannot be put off in the case of the Masbate Citrine Canary-flycatcher (no. 2). *All* individuals seen were deviant in regard of the existing descriptions of the species. Therefore a closer look at this island form appears rewarding.

The ineffectiveness of Decoy Distress Calls

North American and European bird observers employ a variety of squeaks and other (squealing) noises to attract birds into view. Among such noises the imitations of distress calls are particularly effective; the natural distress calls are broadly similar among species and are interspecifically attractive (Stefanski & Falls 1972). The lured species tend to mob at the caller, thereby harassing, to its benefit, at the predator that has seized it and elicited calling by the victim (Rohwer et al. 1976). By making sucking movements on the back of a hand, this decoy noise is apparently mimicking distress calls as it elicits qualitatively the same behaviour as they do.

When thus mimicking distress calls on Masbate (Matipuron area, secondary farmland forest) and Ticao (Hacienda Batuan, primary/secondary forest patch) there was no response. (I had used the ruse with success in German forests and with Darwin's finches in Galapagos). From where I uttered the squeaks birds were within hearing range. The question of the responsiveness, or lack thereof, of Philippine woodland birds to decoy distress calls deserves further study.
Another noise, dubbed onomatopoetically ›spshing‹ by SMITH (1975), also attracts forest passerines into view. It thereby elicits largely silent curiosity. It is thought to mimic contact calls that enhance mixed flock formation, at least in the neotropics. When tried by EVANS et al. (1993) on Mindanao, ›spshing‹ noise attracted a small mixed flock, including a *Stachyris* babbler (as yet undescribed). It remains unknown how often EVANS et al. tried the ruse in the Philippines, and, more importantly, whether what they had called ›pishing‹ was not actually decoy distress calling rather than ›spshing‹; EVANS et al. were apparently unaware of Smith's (1975) paper as is indicated by using a different spelling. A similar uncertainty surrounds an observation by GONZALES & KENNEDY (1990). By ›pishing‹ and ›squeaking‹ they evoked brief approaches by *Stachyris latistriata* on Panay.

Discussion

The discussion to follow focuses on the conservation aspects and the species inventories underlying them. It will be concluded by a list of recommendations for conservation measures.
The ecological and behavioural findings have been sufficiently commented upon in the respective results sections.

Failure to record species

From the Philippine islands visited by us many more species are known than were recorded by us. Several of those missed by us were certainly present since there were quite a number of unidentified songs. What about the others? One obvious explanation is rareness, either for reasons of a species' ecology, or due to human impact. Natural rareness may be more apparent than real if, for example, we had not searched the same habitats as others before us. This may apply to *Stachyris speciosa* on Negros that was recorded 78 times (›number of bird-days‹ for that species) at three sites by BROOKS et al. (1992) (=Br). One of these sites includes Mt. Canlaon NP but a different locality (Guintubdan) to ours (Wasay). Further, the Cambridge team comprised of seven observers, we only three (in two groups) and, we were on Negros, for a about 25% of the time they spent in the field. Hence, the species may not have been truly rare but may have a patchy distribution. Another discrepancy is more noteworthy. Br found *Stachyris nigrorum* in the Mt. Talinis area, though at a different site (Valencia), to be quite common (76 ›bird-days‹), whereas we saw it only once. Again, distributional differences between the two sites cannot be ruled out but density fluctuations among years (1991/1993) may be another viable explanation.

Of more concern are gross differences concerning a whole taxonomic group. We did not see any of the five Apodidae encountered by Br on Negros. Admittedly, bad weather and poor visibility may have been one reason for our failure in the Talinis area. However, neither of the two species I carefully identified during an entire day in Dumaguete City *(Apus affinis, Collocalia vanikorensis)* were seen by Br. This would bring the total number of Apodidae on Negros within two years to seven.
Incidentally, Br do not mention in their baseline list of forest resident species *Cacomantis merulinus* and *Oriolus chinensis* both of which are listed for Negros and were aurally recorded by us. The fact that many other species found by Br but not by us is best ascribed to the brevity of our stay and to chance. Similar explanations certainly hold for our others island surveys on Bohol, Masbate, Ticao and Leyte, for which many more species are known than we have observed (DKP). However, for the more conspicuous ones among the non-recorded species other reasons are likely to hold (see below).

New Records

Despite the intense ornithological work done in the Philippines we could record a number of new localities for bird species known to occur on other islands. In one case, an estrildine finch *(Lonchura caniceps?)* that is distinct from all four estrildines so far recorded, was found on Leyte; yet the species' identity is still to be confirmed. The number of new sightings (11) on Masbate exceeds all others of our single island surveys. This large number of new records is perhaps understandable in view of relatively few visits to this island by trained observers during recent times (W. OLIVER pers. comm.). This applies similarly to Ticao where only two new records are documented, however. Our visit to this island was of shorter duration and handicapped by rains.
Apart from the puzzling mannikin and *Rhipidura javanica* mentioned above all new records concern few observations *(Sturnus cineraceus, Culicicapa helianthea)* or just one observation as in most cases. Among the new records, only *Sturnus cineraceus* was seen in two disjunct sites (Mt. Talinis, Mt. Canlaon), and *Halcyon pileata* was recorded from two islands; all others in just one site or island. The scarcity of observing the newly recorded birds raises the question of whether they represent stable populations or are rare straggler from (mostly) nearby islands. Two facts support the first assumption. (1) Apart from five larger, nonpasserine species *(Egretta intermedia, Pandion haliaetus, Circus melanoleucos,* two pigeons), all new records pertain to passerines and a swift. It is obvious that so far smaller species went undetected more easily. (2) Many other sightings of species known to occur on the islands where we found them were also made just once. On Negros, the Cambridge Expedition found several species in numbers far in excess of what we found, and they sighted many more species (Br). This would be expected in view of their much longer visit by seven people, instead of three, and to six instead of two rural sites. However, even the Cambridge Expedition lists several species as seen very rarely or not at all (Br). Such a low encounter rate would be in line with the often low density of tropical species, but other ecological explanations may apply equally well (see previous section).

Also there may have occurred new invasion attempts since the last surveys of well-researched islands prior to our visits. However, the sheer number of our new records would seem to stretch this view a bit too far. Uncommon winter visitors *(Egretta intermedia, Sturnus cineraceus)* should be omitted from consideration.
The idea of recent invasion by species from other islands should not be discounted entirely. For an invasion to be successful both the attributes of the potential invader *and* the recipient community are important (PIMM 1987, LODGE 1993). Colonists from speciose (=species-rich) communities appear to succeed better than those from less-speciose ones (LODGE 1993). Given similar species-richness of the larger Philippine islands considered here, the idea of successful recent invasions cannot be ruled out. Moreover, island faunas being notoriously impoverished would not discourage colonization from other islands nearby, or more commonly, on the prevailing route from the source mainland (refs. in WILLIAMSON 1983).
Island faunas may not be saturated according to the classical MACARTHUR-WILSON equilibrium, the more so the larger they are (WILLIAMSON 1983). Especially consumers below the top of the food pyramid such as insectivores, nectarivores and frugivores, i.e. the majority of the new records, may leave room for foreign species to invade: By putting up nest boxes Pied Flycatchers *(Ficedula hypoleuca)* were made to settle in a Scandinavian area where they did not occur previously. As a result, the densities of the other native insectivores did not decrease (ENEMAR & SJÖSTRAND 1972). Hence, even on the mainland, guilds of consumers need not be saturated.

Species of Conservation Concern

The list of species found (see above and Appendix) displays several conspicuous absences: on Negros, *Gallicolumba keayi, Ducula* ssp., *Ptilinopus* ssp., *Treron pompadora, Phapitreron amethystina, Caloenas nicobarica; Cacatua haematuropygia, Prioniturus discurus, Thanygnathus* ssp., *Loriculus philippensis; Penelopides panini, Aceros waldeni.* Some of these have been seen by the Cambridge Expedition at the same time of the year, but in such low numbers (e.g. *Aceros waldeni* near Mt. Talinis), and others not at all (several of the pigeons, *Cacatua, Tanygnathus* ssp.), so that our negative findings tend to underpin those results. In no case have we seen any of the endemic Negros species of conservation concern as listed by OLIVER & WIRTH (1993), i.e. Negros Bleading-heart, the two hornbills (one of which *[Aceros waldeni]* still occurs on Panay, too), the White-throated Jungle-flycatcher *(Rhinomyias albigularis),* though we did not work in the Negros area where the latter species may have its last patch of occurrence (Br).
Since, except for the flycatcher, the other species mentioned are all large and therefore hunted or trapped for the pet trade, i.e. hornbills, parrots and pigeons (Br), our failure to record them may indicate that they are extinct or critically endangered. This is underscored by the observation that the parrots in the Quernos region have noticeably declined in numbers over about the past decade (E. ALCALA, pers. comm.). (The MACE & LANDE [1991] criteria of the degree of threat cannot be applied safely for want of the relevant population sizes.)

The other Negros species of conservation concern (Collar & Andrew 1988) may have been overlooked because of their unobtrusive and/or nocturnal habits.
A similar situation holds for the Northern Visayas of which we visited Masbate and Ticao. Though the Tarictic Hornbill *(Penelopides p. panini)*, i.e. the same subspecies as on Negros and Panay (DKP), still survives, its situation must be precarious; what little forest is left is highly fragmented and invisible on satelite images (Collins et al. 1991). For these reasons, the Ticao endemic form (P. *[panini] ticaensis)* may be extinct, since the forest remnants when added up are necessarily smaller than those on the larger Masbate. I may add that the size of Ticao was still prohibitive to surveying even a substantial fraction of it but interviews with locals in the Monreal area gave no hints at the Tarictic's survival.
The endangered Red-vented Cockatoo *(Cacatua haematuropygia)* is seen on Masbate during the summer time (Appendix), however, its breeding there is not confirmed. We have no information for this species on Ticao. – That apparently the forest remnants on Ticao are still big enough to harbour *Tanygnathus lucionensis* came as a surprise so that one can hope for its survival on Masbate, too.
On Leyte, we did not see the Philippine eagle *(Pithecophaga jefferyi)*, the species of the greatest conservation concern over there, though it should occur there (DKP). Even reaching higher up Mt. Pangasugan in 1991 than we did yielded the same negative result during weeks of birding (Martens in litt.). Since the entire mountain massif is still well forested all the forest species recorded for Leyte shoult still exist. Our observations show this to hold for *Prioniturus discurus* and *Loriculus philippensis*, i.e. two species of a wider distribution in the archipelago. Further, both species of hornbill *(Penelopides panini, Buceros hydrocorax)* still exist (Martens in litt.) and at times (both species?) come down to feed on bananas (J. Margraf, pers. comm.).
Single island endemics are particularly vulnerable. Risk of extinction would be less if they would occur or, by translocation made to occur on another island as well. In this regard the new records of the Mindoro Scarlet-collared Flowerpecker *(Dicaeum retrocinctum)* for Negros is perhaps good news. However, this must be tempered by the uncertainty about the species' population status on this island (see above).

Recommendations for Conservation

Of the 190 species resident on Negros, 142 are forest-dependent. Significantly, among 32 of these forest species that were not recorded by the intense searches of the Cambridge Expedition eight are threatened or near-threatened by extinction (Br). This alarming news is underscored by the fact that we also failed to locate the latter species. It is further significant that we failed entirely to record on Negros any of the endemic pigeons and any parrot or hornbill, i.e. perhaps because of hunting pressure for food or the bird trade. Because of their size all of these more conspicuous species can have been hardly overlooked (see also section Failure to record species). Therefore there is serious concern that they are extinct or threatened. A similar situation applies to the endemic hornbill on Ticao *(Penelopides [panini] ticaensis)* that is probably globally extinct and to the precarious state of the conspecific *T.p. panini* and the parrots on denuded Masbate. Both Bohol and Cebu received visits too short as to

allow one to judge on species of conservation concern. However, alarm over the Cebu endemics has been clearly sounded by the Philippine Wetlands & Wildlife Conservation Foundation (PWWCF) cited by OLIVER & WIRTH (1993, see also DUTSON et al. 1993).
To halt further irreversible loss of threatened species or, for that matter, devastation of whole island biota in the Western and Northern Visayas (Negros, Guimaras, Panay; Tablas, Romblon, Sibuyan, Masbate, Ticao) and on Mindoro, the following measures are recommended and should be implented by all possible means:

Negros:

- Increase protection of the remaining forest blocks in the Quernos de Negros, Mt. Canlaon NP, and Ban-ban, possibly under the IPAS scheme. Measures required include:
- Equipping forest guards and the direction of the national, provincial and communicipality offices of the DENR and thos of the PNOC with, for example, wireless communication systems, vehicles and arms.
- Launching public awareness campaigns explaining the need for wildlife protection, perhaps with the Writhed-billed Hornbill *(Aceros waldeni)* as a flagship species (Br).
- Relocating *kaingineros* infringing on protected areas, as e.g., on Mt. Canlaon NP (Br).
- Introduce and/or implement existing regulations restricting hunting and commercial inset collecting.
- Survey of vertebrates, especially globally threatened birds, on Mt. Mandalagan, Mt. Patag, Mt. Silay, and Hinob-an (see also Br).
- Contingent on these surveys, or even independently, initiate captive breeding programs for the most endangered endemics, e.g. Negros Bleeding-heart *(Gallicolumba keayi)*, White-throated Jungle-flycatcher *(Rhinomyias albigularis)*, Spotted Imperial-pigeon *(Ducula carola)*, to mention only those at species level. At the subspecies level, the situation is even more alarming since in the Western Visayas many more are at stake, the majority of which are found on Negros (see Br [Table 7]).
  This list would become even much longer, by at least 14 more subspecies, if the Northern Visayas (Masbate, Romblon, Sibuyan, Tablas and Ticao) would be included (Br). The two former species are globally threatened (like *G. platenae* and *Ducula mindorensis* on Mindoro).

Negros, Masbate, Ticao, Cebu:

- Set aside all remnant patches of forest, even if secondary, as new reserves; and instigate effective protection measures in these areas (e.g. Central Cebu National Park, where the need for better protection is sadly underscored by the recent location of a field in the centre of the park; P. MAGSALAY, pers. comm.!). Thus preserving the forest at Ban-ban on Negros is of crucial importance to save the White-throated Jungle-flycatcher *(Rhinomyias albigularis)* from extinction (Br).

Negros, Panay, Masbate (Ticao?):

- Implementation of nest protection incentive schemes for hornbills on Negros, Panay *(Aceros waldeni)*, and Masbate *(Penelopides p. panini)* following the pioneering model for the Philippine Eagle *Pithecophaga jefferyi*. In the likely event that old trees suitable for nesting are in short supply (e.g. Masbate), artificial nest boxes should be provided (as recommended by the Taxon Advisory Group for hornbills in Singapore, 1991 [K. Brouwer in litt.]).
- Enlist support of land owners to promote conservation management of forest and wildlife in privately owned forest areas.
- Habitat restoration of cleared areas, especially in and near protected lands, should be encouraged, and the habitual practice of planting of exotic trees such as *Gmelina* sp. and *Swietenia* sp. (Mahogany) should be actively discouraged – particularly in biologically sensitive areas. Instead Philippine native trees should be used of which there are many species that are light-tolerant, growing fast and yielding valuable timber (e.g. VISCA-GTZ-Ecology Program, J. Margraf, pers. comm.). Only the latter species will be of optimal benefit to Philippine wildlife.

Birds are but one though very important component of a country's fauna. Preserving Philippine indigenous birds also has obvious implications for the enhanced protection of other terrestrial vertebrates. There are strong convergent trends in the taxonomic uniqueness of the major islands in terms of all four terrestial vertebrate classes and doubtless many other groups, e.g. all 49 species of Philippine swallowtail butterflies, other invertebrates and even plants (Hauge et al. 1986). Hence, setting aside an island's remnant forests would at the same time help preserve a substantial fraction of that island's biota.

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Appendix

Species observed, listed by islands, in addition to the new island records mentioned in the text. The localities of the islands where species have been encountered can be found in Curio (1993). An asterisk * precedes species of conservation concern.

Bohol

Gallinula chloropus (heard), *Streptopelia bitorquata, Treron vernans, Centropus viridis, Collocalia troglodytes* (?), * *Penelopides panini, Hirundo tahitica, Coracina ostenta* or *C. mcgregori, Dicrurus balicassius, Hypsipetes philippinus, Pachycephala philippinensis, Artamus leucorhynchus, Sarcops calvus, Dicaeum trigonostigma, Zosterops everetti, Lonchura leucogastra, Lonchura malacca, Passer montanus, Collocalia vanikorensis.*

Masbate

Ardea purpurea, Egretta sacra, Butorides striatus, Haliastur indus, Gallus gallus, Ducula aenea, Phapitreron leucotis, Chalcophaps indica, Treron pompadora (?), *Treron vernans, Streptopelia bitorquata,* * *Cacatua haematuropygia* (summer months in corn fields according to locals, interview data), *Centropus bengalensis, Centropus viridis, Collocalia vanikorensis, Halcyon chloris, Halcyon winchelli, Merops viridis, Merops philippinus,* * *Penelopides panini* (juvenile [short of fledging?] being raised on 7-R-Ranch; from unknown nest on Masbate), *Hirundo tahitica, Corvus macrorhynchus, Lalage nigra, Hypsipetes philippensis, Pycnonotus goiavier, Dicrurus balicassius, Oriolus chinensis, Parus elegans, Saxicola caprata, Copsychus saularis, Cisticola exilis, Acrocephalus arundinaceus* (?), *Orthotomus derbianus* (listed by DKP for other Philippine islands, hence, confusion with similar and more widespread *O. castaneiceps* is possible that has also been recorded from Masbate. Parkes [in litt. 1994] regards the observation as ›undoubtedly‹ *O. castaneiceps.) Orthotomus samarensis* (listed so far for Bohol, Leyte and Samar [DKP], whilst dP apparently regards this bird as *O. nigriceps samarensis* with neither authority listing Masbate among home islands of either form), *Cyornis rufigastra, Hypothymis azurea, Ficedula narcissina* (?), *Rhipidura javanica, Rhipidura cyaniceps, Anthus novaeseelandiae* [probably not Olive Tree-Pipit, *A. hodgsoni,* according to DKP], *Artamus leucorhynchus, Lanius schach, Sarcops calvus, Aplonis panayensis (A. minor?), Nectarinia jugularis, Nectarinia sperata, Lonchura malacca, Dryocopus javensis, Dicaeum trigonostigma, Dicaeum australe, Zosterops nigrorum.*

Ticao

Ichthyophaga ichthyaetus (1 captive in Monreal, reported to have come from Kumavit peninsula 2 years ago. Not listed for Ticao by DKP), *Haliastur indus, Streptopelia bitorquata, Geopelia striata, Chalcophaps indica, Tanygnathus lucionensis* (juvenile pet in Monreal; Balungban Province = locality of origin derived from interview), *Centropus viridis, Halcyon chloris, Hirundo tahitica, Dircrurus ballicassius, Oriolus chinensis, Corvus macrorhynchus, Lalage nigra, Hypsipetes philippinus, Pycnonotus goiavier, Orthotomus derbianus* (only *O. castaneiceps* known to occur on Ticao [DKP]), *Rhipidura javanica, Rhipidura cyaniceps, Artamus leucorhynchus, Sarcops calvus, Nectarinia jugularis, Aethopyga shelleyi, Dicaeum trigonostigma, Passer montanus, Lonchura malacca.*

Cebu

Streptopelia bitorquata, * *Copsychus cebuensis, Cyornis rufigastra, Hypsipetes philippinus, Sarcops calvus, Nectarinia jugularis, Zosterops everetti.*