

QUEENSLAND DEPARTMENT OF PRIMARY INDUSTRIES
FAUNA CONSERVATION BRANCH BULLETIN No. 12

**MAMMALS AND BIRDS OF THE INGHAM DISTRICT,
NORTH QUEENSLAND**

2. BIRDS

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SUMMARY

A survey of birds in the Ingham district of north Queensland from 1970 to 1973 provided records of 266 species. Habitat type and a measure of frequency for each recorded species are given.

I. INTRODUCTION

In the first paper of this series (Lavery and Grimes 1974), the Ingham district was described and the background given to a fauna survey undertaken from October 1970 to December 1973. In this second paper, the birds recorded during the survey are listed.

II. METHODS

The habitat types and areas studied intensively have been described previously (Lavery and Grimes 1974). Traverses of intensively studied areas were made throughout the study period and specimens collected, using guns, rifles, traps and mist nets. Traverses at night were made with the aid of spotlights. Frequency ratings—abundant, common, uncommon and scarce—were allocated as in the earlier paper for mammals. For seasonal visitors, ratings were applied only to that period when birds were in greatest numbers.

Data on all specimens collected are filed at the Department of Primary Industries' North Queensland Fauna Centre. Specimens of some uncommon species are housed there and at Queensland Museum, Brisbane.

III. RESULTS

Species collected are listed below, together with habitat types and estimated frequency in each of these types. An asterisk indicates that the record is based on the sighting of a species, without collection.

Names for all species follow Lavery (1969).

- Casuarius casuarius* (L.). Cassowary. Closed forest (including margins), common.
- Podiceps ruficollis* (Vroeg). Little grebe. Freshwaters, common.
- **Pelecanus conspicillatus* Temminck. Australian pelican. Freshwaters and saline areas, common.
- **Phalacrocorax sulcirostris* (Brandt). Little black cormorant. Freshwaters, common.
- **Phalacrocorax melanoleucos* (Vieillot). Little pied cormorant. Freshwaters, uncommon.
- Anhinga anhinga* (L.). Darter. Freshwaters, common; saline areas, uncommon.
- **Ardea sumatrana* Raffles. Great-billed heron. Saline areas (mangroves), uncommon.
- **Ardea pacifica* Latham. White-necked heron. Freshwaters, common; open forest (adjacent to freshwaters), uncommon.
- **Ardea novaehollandiae* Latham. White-faced heron. Freshwaters, common; open forest (adjacent to freshwaters), uncommon.
- **Butorides striatus* (L.). Mangrove heron. Saline areas, common.
- **Egretta alba* (L.). White egret. Freshwaters, common; saline areas, uncommon.
- **Egretta garzetta* (L.). Little egret. Freshwaters and saline areas, common.
- **Egretta intermedia* (Wagler). Plumed egret. Freshwaters, abundant; open forest (adjacent to freshwaters), uncommon.
- **Egretta sacra* (Gmelin). Reef heron. Saline areas, common.
- Nycticorax caledonicus* (Gmelin). Nankeen night heron. Freshwaters and adjacent open forest, common.
- **Ixobrychus minutus* (L.). Little bittern. Freshwaters, one seen.
- Ixobrychus flavicollis* (Latham). Black bittern. Freshwaters, uncommon.
- **Xenorhynchus asiaticus* (Latham). Jabiru. Freshwaters, common; saline areas, uncommon.
- **Threskiornis molucca* (Cuvier). Australian white ibis. Freshwaters and adjacent open forest and cultivation, abundant.
- **Threskiornis spinicollis* (Jameson). Straw-necked ibis. Freshwaters and adjacent open forest and cultivation, abundant.
- **Plegadis falcinellus* (L.). Glossy ibis. Freshwaters, common.
- **Platalea regia* Gould. Royal spoonbill. Freshwaters, common.
- **Platalea flavipes* Gould. Yellow-billed spoonbill. Freshwaters, uncommon.
- **Cygnus atratus* (Latham). Black swan. Freshwaters, common.
- **Anseranas semipalmata* (Latham). Magpie goose. Freshwaters, abundant.
- **Dendrocygna arcuata* (Horsfield). Water whistling-duck. Freshwaters (deep), abundant.
- **Dendrocygna eytoni* (Eyton). Grass whistling-duck. Freshwaters and cultivation (mostly grasslands), abundant.
- **Anas superciliosa* Gmelin. Black duck. Freshwaters, abundant.
- **Anas gibberifrons* Muller. Grey teal. Freshwaters, abundant.

- **Chenonetta jubata* (Latham). Maned wood duck. Freshwaters and adjacent cultivation (mostly grasslands), common.
- **Nettapus coromandelianus* (Gmelin). White-quilled pygmy goose. Freshwaters, uncommon.
- **Nettapus pulchellus* Gould. Green pygmy goose. Freshwaters, common.
- **Aythya australis* (Eyton). White-eyed duck. Freshwaters (deep), common.
- **Elanus notatus* Gould. Black-shouldered kite. Cultivation (grasslands and roadsides), uncommon.
- **Aviceda subcristata* (Gould). Crested hawk. Closed forest, uncommon.
- **Milvus migrans* (Boddaert). Fork-tailed kite. Open forest, cultivation and urban, abundant.
- **Lophoictinia isura* (Gould). Square-tailed kite. Open forest, uncommon.
- **Haliaeetus indus* (Boddaert). Red-backed sea eagle. Saline areas and adjacent open forest, uncommon.
- **Haliaeetus sphenurus* (Vieillot). Whistling eagle. Open forest, urban and cultivation, common; saline areas, uncommon.
- Accipiter novaehollandiae* (Gmelin). Grey goshawk. Closed forest, uncommon.
- Accipiter fasciatus* (Vigors and Horsfield). Australian goshawk. Open forest and cultivation, common; closed forest, uncommon.
- **Aquila audax* (Latham). Wedge-tailed eagle. Open forest and cultivation, common.
- **Haliaeetus leucogaster* (Gmelin). White-breasted sea eagle. Saline areas and adjacent open forest and cultivation, uncommon.
- **Circus assimilis* Jardine and Selby. Spotted harrier. Open forest and cultivation (grasslands), uncommon.
- **Circus approximans* Peale. Swamp harrier. Freshwaters, uncommon.
- **Pandion haliaetus* (L.). Osprey. Saline areas, common.
- **Falco peregrinus* Tunstall. Peregrine falcon. Cultivation, uncommon.
- **Falco longipennis* Swainson. Little falcon. Open forest, uncommon.
- **Falco cenchroides* Vigors and Horsfield. Nankeen kestrel. Cultivation, common.
- **Falco berigora* Vigors and Horsfield. Brown hawk. Open forest and cultivation, common.
- Megapodius freycinet* Gaimard. Scrub fowl. Closed forest (including margins), common.
- Alectura lathami* Gray. Brush turkey. Closed forest, open forest, cultivation and saline areas (mangroves), common.
- Coturnix ypsilophorus* Bosc. Brown quail. Open forest and cultivation, common.
- **Excalfactoria chinensis* (L.). King quail. Open forest and cultivation, common.
- **Turnix maculosa* (Temminck). Red-backed button-quail. Open forest, common.
- **Turnix varia* (Latham). Painted button-quail. Open forest (marginal to closed forest), one seen.
- **Grus antigone* (L.). Sarus crane. Freshwaters, uncommon.

- **Grus rubicundus* (Perry). Brolga. Freshwaters and saline areas, abundant; cultivation, uncommon.
- **Rallus philippensis* L. Banded land rail. Freshwaters and adjacent cultivation, uncommon.
- **Rallina tricolor* Gray. Red-necked rail. Closed forest adjacent to freshwaters, scarce.
- **Porzana cinerea* (Vieillot). White-browed crake. Cultivation, scarce.
- **Tribonyx ventralis* Gould. Black-tailed native hen. Freshwaters, one observed.
Amaurornis olivacea (Meyen). Bush-hen. Cultivation (grassland), one collected.
- **Porphyrio porphyrio* (L.). Swamphen. Freshwaters and adjacent cultivation, common.
- **Fulica atra* L. Coot. Freshwaters, uncommon.
- **Ardeotis australis* (Gray). Australian bustard. Cultivation (grasslands), uncommon.
- **Irediparra gallinacea* (Temminck). Lotus bird. Freshwaters, abundant.
- **Haematopus ostralegus* L. Pied oyster-catcher. Saline areas, uncommon.
- **Haematopus unicolor* Forster. Sooty oyster-catcher. Saline areas, one seen.
- **Vanellus miles* (Boddaert). Masked plover. Cultivation and freshwaters, abundant.
- **Pluvialis dominica* (Muller). Eastern golden plover. Freshwaters, one seen.
- **Charadrius ruficapillus* Temminck. Red-capped dotterel. Freshwaters, common.
Charadrius mongolus Pallas. Mongolian sand-dotterel. Saline areas, one collected.
Charadrius leschenaultii Lesson. Large sand-dotterel. Saline areas, two collected.
- **Charadrius melanops* Vieillot. Black-fronted dotterel. Freshwaters, common.
- **Charadrius cinctus* (Gould). Red-kneed dotterel. Freshwaters, uncommon.
Numenius phaeopus (L.). Whimbrel. Saline areas and freshwaters, common.
- **Numenius madagascariensis* (L.). Eastern curlew. Saline areas, abundant.
- **Tringa nebularia* (Gunnerus). Greenshank. Freshwaters, common.
- **Tringa cinerea* (Gueldenstaedt). Terek sandpiper. Saline areas, uncommon.
Tringa hypoleucos L. Common sandpiper. Saline areas, common.
Tringa brevipes (Vieillot). Grey-tailed tattler. Saline areas, common.
Arenaria interpres (L.). Turnstone. Saline areas, uncommon.
- **Gallinago hardwickii* (Gray). Australian snipe. Freshwaters, common.
Calidris tenuirostris (Horsfield). Great knot. Saline areas, abundant.
Calidris ruficollis (Pallas). Little stint. Saline areas, common.
Calidris acuminatus (Horsfield). Sharp-tailed sandpiper. Freshwaters, common.
- **Limicola falconellus* (Pontoppidan). Broad-billed sandpiper. Freshwaters, one seen.
- **Himantopus himantopus* (L.). White-headed stilt. Freshwaters, common.
- **Burhinus magnirostris* (Latham). Southern stone curlew. Open forest and cultivation, common.

- **Esacus magnirostris* (Vieillot). Beach stone curlew. Saline areas, uncommon.
- **Siltia isabella* (Vieillot). Australian pratincole. Cultivation (grasslands) including near freshwaters, common.
- **Larus novaehollandiae* Stephens. Silver gull. Saline areas, common.
- **Chlidonias hybrida* (Pallas). Marsh tern. Freshwaters, common.
- **Gelochelidon nilotica* (Gmelin). Gull-billed tern. Freshwaters and saline areas, uncommon.
- **Sterna sumatrana* Raffles. Black-naped tern. Saline areas, common.
- **Sterna anaethetus* Scopoli. Bridled tern. Saline areas, common.
- **Sterna albifrons* Pallas. Little tern. Saline areas, abundant.
- Sterna bergii* Lichtenstein. Crested tern. Saline areas, common.
- **Ptilinopus regina* Swainson. Red-crowned pigeon. Closed forest, common.
- Ptilinopus superbus* (Temminck). Purple-crowned pigeon. Closed forest, common.
- Ptilinopus magnificus* (Temminck). Wompoo pigeon. Closed forest, abundant.
- **Ducula spilorrhoea* (Gray). Torres Strait pigeon. Closed forest and saline areas, common.
- **Lopholaimus antarcticus* (Shaw). Top-knot pigeon. Closed forest including open forest margins, abundant.
- **Columba livia* Gmelin. Feral pigeon. Urban, uncommon.
- **Columba leucomela* Temminck. White-headed pigeon. Closed forest, common.
- Macropygia phasianella* (Temminck). Brown pigeon. Closed forest, abundant.
- **Streptopelia chinensis* (Scopoli). Indian spotted dove. Cultivation (roadsides), uncommon.
- **Geopelia humeralis* (Temminck). Bar-shouldered dove. Open forest, common.
- **Geopelia striata* (L.). Peaceful dove. Open forest, cultivation and urban, abundant; closed forest (margins), common.
- Chalcophaps indica* (L.). Green-winged pigeon. Closed forest and adjacent open forest, common.
- **Ocyphaps lophotes* (Temminck). Crested pigeon. Closed forest (margins), open forest and cultivation, common.
- **Geophaps scripta* (Temminck). Squatter pigeon. Open forest, uncommon.
- **Trichoglossus haematodus* (L.). Rainbow lorikeet. All habitat types except freshwaters, abundant.
- Trichoglossus chlorolepidotus* (Kuhl). Scaly-breasted lorikeet. All habitat types except freshwaters, common.
- Glosopsitta pusilla* (Shaw). Little lorikeet. Closed forest (margins) and open forest, common.
- Opopsitta diophthalma* (Hombron and Jacquinet). Fig-parrot. Closed forest, common.
- **Calyptorhynchus magnificus* (Shaw). Red-tailed black cockatoo. Open forest, common; saline areas (mangroves), uncommon.
- Cacatua galerita* (Latham). Sulphur-crested cockatoo. Closed forest and open forest, abundant.
- **Aprosmictus erythropterus* (Gmelin). Red-winged parrot. Open forest, two seen.

- **Alisterus scapularis* (Lichtenstein). King parrot. Closed forest (including margins), common.
- Platycercus elegans* (Gmelin). Crimson rosella. Closed forest, common; open forest, uncommon.
- **Platycercus adscitus* (Latham). Pale-headed rosella. Open forest and cultivation (roadsides), common.
- **Cuculus pallidus* (Latham). Pallid cuckoo. Open forest and saline areas, uncommon.
- Cacomantis variolosus* (Vigors and Horsfield). Brush cuckoo. Open forest, uncommon.
- Cacomantis pyrrhophanus* (Vieillot). Fan-tailed cuckoo. Closed forest (margins) and open forest, uncommon.
- Chrysococcyx basalis* (Horsfield). Horsfield bronze cuckoo. Open forest, common.
- **Chrysococcyx malayanus* (Raffles). Little bronze cuckoo. Open forest and saline areas, common.
- Eudynamis cyanocephala* (Latham). Koel. Open forest, common.
- **Scythrops novaehollandiae* Latham. Channel-billed cuckoo. Open forest, common.
- Centropus phasianinus* (Latham). Pheasant coucal. Open forest and cultivation, abundant; closed forest (margins), uncommon.
- **Tyto alba* (Scopoli). Barn owl. Open forest, uncommon.
- **Tyto tenebricosa* (Gould). Sooty owl. Closed forest, scarce.
- Tyto capensis* (Smith). Eastern grass owl. Cultivation (grasslands), uncommon.
- Ninox rufa* (Gould). Rufous owl. Closed forest (adjacent to lowland water-courses), uncommon.
- Ninox novaeseelandiae* (Gmelin). Boobook owl. Closed forest and open forest, common.
- **Podargus strigoides* (Latham). Tawny frogmouth. Open forest, common.
- **Podargus papuensis* Quoy and Gaimard. Papuan frogmouth. Closed forest and saline areas, uncommon.
- Aegotheles cristatus* (White). Owlet-nightjar. Open forest, uncommon.
- Eurostopodus albogularis* (Vigors and Horsfield). White-throated nightjar. Closed forest (margins) and cultivation (roadsides), common.
- Eurostopodus macrurus* Horsfield. Large-tailed nightjar. Closed forest (margins) and open forest, common.
- Collocalia francica* (Gmelin). Grey swiftlet. Closed forest, open forest, cultivation and freshwaters, abundant.
- Chaetura caudacuta* (Latham). Spine-tailed swift. Closed forest, uncommon.
- **Apus pacificus* (Latham). Fork-tailed swift. Closed forest, uncommon.
- **Alcyone azurea* (Latham). Azure kingfisher. Saline areas (mangroves), common; closed forest and open forest (both near freshwaters), uncommon.
- **Alcyone pusilla* (Temminck). Little kingfisher. Freshwaters and cultivation, uncommon.
- **Dacelo novaeguineae* (Hermann). Laughing kookaburra. Closed forest and open forest, common.

- **Dacelo leachii* Vigors and Horsfield. Blue-winged kookaburra. Open forest and cultivation, common.
- Halcyon macleayii* Jardine and Selby. Forest kingfisher. Open forest and cultivation, common.
- Halcyon australasiae* (Vieillot). Sacred kingfisher. Open forest, common.
- **Halcyon chloris* (Boddaert). Mangrove kingfisher. Saline areas, uncommon.
- **Tanysiptera sylvia* Gould. White-tailed kingfisher. Closed forest, uncommon.
- **Merops ornatus* Latham. Rainbow-bird. Open forest and cultivation, abundant.
- Eurystomus orientalis* (L.). Eastern broad-billed roller. Closed forest (margins), open forest and cultivation, common.
- Pitta versicolor* Swainson. Noisy pitta. Closed forest (including margins), common.
- Mirafra javanica* Horsfield. Singing bushlark. Cultivation (grasslands), common.
- Hirundo tahitica* Gmelin. Welcome swallow. All habitat types, abundant.
- **Petrochelidon ariel* (Gould). Fairy martin. Open forest, cultivation, urban and freshwaters, abundant.
- **Anthus novaeseelandiae* (Gmelin). Australian pipit. Cultivation (grasslands), common.
- **Peteropodocys maxima* (Rueppell). Ground cuckoo-shrike. Open forest, uncommon.
- **Coracina novaehollandiae* (Gmelin). Black-faced cuckoo-shrike. Open forest and cultivation, abundant.
- Coracina lineata* (Swainson). Barred cuckoo-shrike. Closed forest (including margins), common.
- Coracina papuensis* (Gmelin). Little cuckoo-shrike. Closed forest (margins), open forest and cultivation, common.
- Lalage leucomela* (Vigors and Horsfield). Varied triller. Saline areas (mangroves), common.
- Zoothera dauma* (Latham). Australian ground thrush. Closed forest (including margins), uncommon.
- Orthonyx spaldingii* Ramsay. Northern chowchilla. Closed forest, abundant.
- Psophodes olivaceus* (Latham). Eastern whipbird. Closed forest, abundant.
- **Gerygone olivacea* (Gould). White-throated warbler. Open forest, common.
- Gerygone igata* (Quoy and Gaimard). Brown warbler. Closed forest, one collected.
- Gerygone magnirostris* Gould. Dusky warbler. Saline areas (mangroves), common.
- Gerygone mouki* (Mathews). Northern warbler. Closed forest, abundant.
- **Acrocephalus stentoreus* (Ehrenberg). Reed-warbler. Cultivation, uncommon.
- **Cisticola exilis* (Vigors and Horsfield). Golden-headed fantail-warbler. Cultivation, common.
- **Malurus amabilis* Gould. Lovely wren. Closed forest, open forest and saline areas, uncommon.
- Malurus melanocephalus* (Latham). Red-backed wren. Open forest and cultivation, common; closed forest (margins), uncommon.
- **Smicrornis brevirostris* (Gould). Weebill. Open forest, uncommon.
- **Sericornis frontalis* (Vigors and Horsfield). White-browed scrub-wren. Open forest (near closed forest), uncommon.

- **Sericornis citreogularis* Gould. Yellow-throated scrub-wren. Closed forest, abundant.
- **Sericornis magnirostris* (Gould). Large-billed scrub-wren. Closed forest, abundant.
- Oreoscopus gutturalis* (De Vis). Fern wren. Closed forest, common.
- **Megalurus timoriensis* Wallace. Tawny grassbird. Cultivation, one seen.
- Microeca leucophaea* (Latham). Jacky winter. Open forest, uncommon.
- Microeca flavigaster* Gould. Lemon-breasted flycatcher. Closed forest (margins) and open forest, common.
- **Peneoanthe pulverulenta* (Bonaparte). Mangrove robin. Saline areas, common.
- Heteromyias cinereifrons* (Ramsay). Grey-headed robin. Closed forest, common.
- Poecilodryas superciliosa* (Gould). White-browed robin. Closed forest (margins), uncommon.
- Eopsaltria australis* (Shaw). Yellow robin. Closed forest (margins) and open forest, common.
- **Eopsaltria capito* Gould. Pale yellow robin. Closed forest, abundant.
- Myiagra rubecula* (Latham). Leaden flycatcher. Open forest and saline areas (mangroves), common.
- **Myiagra cyanoleuca* (Vieillot). Satin flycatcher. Closed forest, uncommon.
- Piezorhynchus alecto* (Temminck and Laugier). Shining flycatcher. Closed forest (margins), uncommon.
- **Seisura inquieta* (Latham). Restless flycatcher. Open forest, one seen.
- Arses kaupi* Gould. Australian pied flycatcher. Closed forest, uncommon.
- Monarcha melanopsis* (Vieillot). Black-faced flycatcher. Closed forest (including margins), common.
- Monarcha trivirgata* (Temminck and Laugier) Spectacled flycatcher. Closed forest (margins), common.
- **Monarcha leucotis* Gould. White-eared flycatcher. Closed forest, uncommon.
- Machaerirhynchus flaviventer* Gould. Boat-billed flycatcher. Closed forest (including margins), uncommon.
- Pachycephala pectoralis* (Latham). Golden whistler. Closed forest and saline areas (mangroves), common; open forest, uncommon.
- Pachycephala rufiventris* (Latham). Rufous whistler. Closed forest (margins) and open forest, common.
- Colluricincla harmonica* (Quoy and Gaimard). Grey shrike-thrush. Open forest, common.
- Colluricincla megarhyncha* (Quoy and Gaimard). Rufous shrike-thrush. Closed forest, open forest and saline areas (mangroves), common.
- Colluricincla boweri* Ramsay. Bower shrike-thrush. Closed forest, common.
- Rhipidura fuliginosa* (Sparrman). Grey fantail. Closed forest (margins) and open forest, common.
- Rhipidura rufifrons* (Latham). Rufous fantail. Closed forest, common.
- Rhipidura rufiventris* (Vieillot). Northern fantail. Closed forest, abundant.
- **Rhipidura leucophrys* (Latham). Willie wagtail. Open forest, cultivation, urban and freshwaters, common.

- Neositta chrysoptera* (Latham). Orange-winged sittella. Open forest, common.
- Climacteris picumnus* (Temminck and Laugier). Brown tree-creeper. Open forest, common.
- Climacteris leucophaea* (Latham). White-throated tree-creeper. Closed forest and adjacent open forest, common.
- Dicaeum hirundinaceum* (Shaw and Nodder). Mistletoe bird. Closed forest (margins) and open forest, common.
- Pardalotus punctatus* (Shaw and Nodder). Spotted pardalote. Open forest, common.
- Paralotus melanocephalus* Gould. Black-headed pardalote. Closed forest (margins) and open forest, common.
- Nectarinia jugularis* (L.). Yellow-breasted sunbird. Saline areas (mangroves), common; urban, uncommon.
- Zosterops lateralis* (Latham). Grey-breasted silvereye. Closed forest (margins) and open forest, abundant.
- Melithreptus lunatus* (Vieillot). White-naped honeyeater. Closed forest (margins) and open forest, common.
- Melithreptus albogularis* Gould. White-throated honeyeater. Open forest and saline areas (mangroves), common.
- Myzomela dibapha* (Latham). Scarlet honeyeater. Open forest, common.
- Myzomela obscura* Gould. Dusky honeyeater. Closed forest (margins), open forest and saline areas (mangroves), common.
- **Acanthorhynchus tenuirostris* (Latham). Eastern spinebill. Closed forest, common.
- Phylidonyris niger* (Bechstein). White-cheeked honeyeater. Closed forest (margins) and open forest, uncommon.
- Ramsayornis modesta* (Gray). Brown-backed honeyeater. Open forest and saline areas (mangroves), common.
- Lichmera indistincta* (Vigors and Horsfield). Brown honeyeater. Open forest, common.
- Meliphaga lewini* (Swainson). Lewin honeyeater. Closed forest and open forest, common.
- Meliphaga notata* (Gould). Lesser Lewin honeyeater. Closed forest (lowland margins), common; saline areas (mangroves), uncommon.
- **Meliphaga gracilis* (Gould). Graceful honeyeater. Closed forest and open forest, common.
- **Meliphaga versicolor* (Gould). Varied honeyeater. Saline areas, common.
- Meliphaga frenata* (Ramsay). Bridled honeyeater. Closed forest and nearby open forest, common.
- Meliphaga fusca* Gould. Fuscous honeyeater. Open forest, common.
- Meliphaga novaehollandiae* (Latham). Yellow-faced honeyeater. Open forest, common.
- Meliphaga macleayana* (Ramsay). Macleay honeyeater, Closed forest, common.
- Meliphaga flava* (Gould). Yellow honeyeater. Open forest, common; urban, uncommon.

- **Stomiopera unicolor* (Gould). White-gaped honeyeater. Closed forest and open forest, common.
- Entomyzon cyanotis* (Latham). Blue-faced honeyeater. Open forest and urban, common; closed forest (margins), uncommon.
- **Philemon novaeguineae* (Muller). Helmeted friar bird. Open forest and saline areas, common.
- **Philemon corniculatus* (Latham). Noisy friar bird. Open forest, common.
- **Philemon citreogularis* (Gould). Little friar bird. Open forest, common.
- **Taeniopygia guttata* (Vieillot). Zebra finch. Cultivation, common.
- **Stizoptera bichenovii* (Vigors and Horsfield). Banded finch. Open forest and cultivation, common.
- Lonchura castaneothorax* (Gould). Chestnut-breasted finch. Cultivation, abundant; open forest and urban, common.
- **Lonchura punctulata* L. Spice finch. Open forest, cultivation and urban, common.
- Aegintha temporalis* (Latham). Red-browed finch. Closed forest (margins), common; open forest, uncommon.
- **Neochmia phaeton* (Hombron and Jacquinot). Crimson finch. Cultivation and adjacent open forest, common.
- **Poephila cincta* (Gould). Black-throated finch. Cultivation, uncommon.
- **Passer domesticus* (L.). House sparrow. Urban, common.
- Aplonis metallica* (Temminck). Australian shining starling. All habitat types except freshwaters, abundant.
- **Acridotheres tristis* (L.). Indian myna. Cultivation and urban, abundant; open forest (margins), uncommon.
- Oriolus sagittatus* (Latham). Olive-backed oriole. Closed forest (margins), uncommon.
- Oriolus flavocinctus* (Vigors). Yellow oriole. Closed forest and saline areas (mangroves), common.
- Sphecotheres vieilloti* Vigors and Horsfield. Southern figbird. Open forest, common.
- Sphecotheres flaviventris* Gould. Yellow figbird. Open forest and cultivation, common.
- Dicrurus hottentottus* (L.). Spangled drongo. Closed forest, open forest and saline areas (mangroves), common.
- **Grallina cyanoleuca* (Latham). Magpie lark. All habitat types, abundant.
- Artamus leucorhynchus* (L.). White-breasted wood swallow. Closed forest (margin), open forest, cultivation and freshwaters, common.
- **Artamus cinereus* Vieillot. Black-faced wood-swallow. Cultivation, uncommon.
- **Cracticus torquatus* (Latham). Grey butcher-bird. Open forest, cultivation and urban, uncommon.
- **Cracticus nigrogularis* (Gould). Pied butcher-bird. Open forest, common.
- Cracticus quoyi* (Lesson). Black butcher-bird. Closed forest and saline areas, common.
- **Gymnorhina tibicen* (Latham). Black-backed magpie. Open forest and cultivation, common.

- **Strepera graculina* (White). Pied currawong. Closed forest, common; open forest, uncommon.
- **Ailuroeetus crassirostris* (Paykull). Catbird. Closed forest, common.
- Scenopoeetes dentiostriis* (Ramsay). Tooth-billed bowerbird. Closed forest, common.
- Prionodura newtoniana* De Vis. Golden bowerbird. Closed forest, common.
- **Ptilonorhynchus violaceus* (Vieillot). Satin bowerbird. Closed forest, uncommon.
- **Chlamydera nuchalis* (Jardine and Selby). Great bowerbird. Open forest, uncommon.
- Ptiloris victoriae* Gould. Victoria riflebird. Closed forest (including margins), common.
- **Corvus orru* Bonaparte. Australian crow. Open forest and cultivation, common.

IV. DISCUSSION

The avifauna of the Ingham district is diverse, as is the mammal fauna (see Lavery and Grimes 1974). The closed forest component of the avifauna, although more abundant both in species and in populations, is less novel than the mammal fauna. The Papuan frogmouth and yellow oriole begin northward distribution ranges from the Ingham district. (The cassowary, sooty owl, little kingfisher, white-tailed kingfisher, lovely wren, boat-billed flycatcher, fuscous honeyeater and Macleay honeyeater have also been recorded in the Townsville district subsequent to Lavery 1968.)

A survey of the Ingham district avifauna affords special opportunities to check thoroughness of surveying and changes in numbers of species. This is because of the long history of substantial ornithological contributions, for example, those by Ramsay 1876a, 1876b, 1877, Lumholtz 1889, Broadbent 1910, Campbell and Barnard 1917, Barnard 1926, and Marshall 1934. Clearly some 100 years of observations provide more records of vagrants, for example, grey heron (*Ardea cinerea* L.), musk duck (*Biziura lobata* (Shaw)), blue-breasted pitta (*Pitta erythrogaster* (Temminck)), northern scrub-robin (*Drymodes superciliaris* Gould), tawny-breasted honeyeater (*Meliphaga chrysotis* (Lesson and Garnot)), star finch (*Neochmia ruficauda* (Gould))—than are likely to be sighted in any one study period.

Species recorded previously but not found in the present study are mostly either species recorded as uncommon or scarce in the nearby Townsville or lower Burdekin River districts, for example, radjah shelduck (*Tadorna radjah* (Garnot)), shoveler (*Anas rhynchos* Latham), little whimbrel (*Numenius minutus* Gould), oriental cuckoo (*Cuculus saturatus* Blyth), golden bronze cuckoo (*Chrysococcyx lucidus* (Gmelin)), barking owl (*Ninox connivens* (Latham)), grey-crowned babbler (*Pomatostomus temporalis* (Vigors and Horsfield)), white-browed wood-swallow (*Artamus superciliosus* (Gould)), raven (*Corvus coronoides* Vigors and Horsfield), or are species primarily distributed inland from the Great Dividing Range. The latter group includes the black-breasted buzzard (*Hamirostra melanosterna* (Gould)), black falcon (*Falco subniger* Gray), grey falcon (*Falco hypoleucos* Gould), red-chested button-quail

(*Turnix pyrrhotorax* (Gould)), banded plover (*Vanellus tricolor* (Vieillot), spotted nightjar (*Eurostopodus guttatus* (Vigors and Horsfield), hooded robin (*Petroica cucullata* (Latham)), shrike-tit (*Falcunculus frontatus* (Latham)) and crested bell-bird (*Oreoica gutturalis* (Vigors and Horsfield)).

Average rainfall conditions prevailed over northern Queensland throughout the study period, apparently lessening drought-induced movements of these vagrant species to coastal areas.

Some separate comment is justified on the mangrove avifauna in view of the attention that this extensive vegetation has received in the Ingham district (Marshall 1934; Webb 1966). The number of species inhabiting saline areas in the district (57) is close to that of the Townsville district (66) (Lavery 1968), particularly if species utilizing mangrove trees rather than tidal flats are considered. The diversity of species is less than in the lower Burdekin River district saline areas, where 98 species are recorded (Lavery and Seton 1974).

Some northern species are distributed southwards to Ingham, for example, the varied honeyeater. Cosmopolitan species inhabiting mangroves at Haughton River and Barratta Creeks in the lower Burdekin River district, for example, the yellow silveryeye (*Zosterops lutea* Gould) and mangrove honeyeater (*Meli-phaga fasciogularis* (Gould)), are more frequently absent or scarce at Ingham, however. Hence, conservation attention should be paid to some less extensive mangrove areas in north-east Queensland as well as those of Hinchinbrook Passage.

The effects of changes by man of fauna habitat in north-east Queensland have been noted elsewhere (Lavery 1968; Lavery and Johnson 1968, 1974; Lavery and Grimes 1974; Lavery and Seton 1974). The present survey indicates not only that introduced species are induced to invade districts by these changes but that distribution of native species also is affected. Thus small populations of the Sarus crane now occur on disturbed habitat near major brologa habitat.

V. ACKNOWLEDGEMENTS

The author thanks Mr. D. Seton, Department of Primary Industries, Ingham, for his assistance.

REFERENCES

- BARNARD, H. G. (1926).—Birds of the Cardwell district, Queensland. *Emu* 26:1-13.
- BROADBENT, K. (1910).—Birds of Cardwell and Herbert River districts (N.Q.). *Emu* 10:233-45.
- CAMPBELL, A. J., and BARNARD, H. G. (1917).—Birds of the Rockingham Bay district, north Queensland. *Emu* 17:2-38.
- LAVERY, H. J. (1968).—Mammals and birds of the Townsville district, north Queensland. 2. Birds. *Qd J. agric. Anim. Sci.* 25:243-54.
- LAVERY, H. J. (1969).—"List of Birds in Queensland". (Winston Churchill Memorial Trust: Canberra.)
- LAVERY, H. J., and GRIMES, R. J. (1974).—Mammals and birds of the Ingham district, north Queensland. 1. Introduction and mammals. *Qd J. agric. Anim. Sci.* 31:383-90.
- LAVERY, H. J., and JOHNSON, P. M. (1968).—Mammals and birds of the Townsville district, north Queensland. 1. Introduction and mammals. *Qd J. agric. Anim. Sci.* 25:29-37.

- LAVERY, H. J., and JOHNSON, P. M. (1974).—Mammals and birds of the lower Burdekin River district, north Queensland. 1. Introduction and mammals. *Qd J. agric. Anim. Sci.* 31:97-104.
- LAVERY, H. J., and SETON, D. (1974).—Mammals and birds of the lower Burdekin River district, north Queensland. 2. Birds. *Qd J. agric. Anim. Sci.* 31:371-82.
- LUMHOLTZ, C. (1889).—"Among Cannibals". (Murray: London.)
- MARSHALL, A. J. (1934).—Bird notes from Rockingham Bay, Queensland. *Emu* 33:242-8.
- RAMSAY, E. P. (1876a).—List of birds met with in north-eastern Queensland, chiefly at Rockingham Bay. *Proc. Zool. Soc. Lond.* 1875. pp 578-603.
- RAMSAY, E. P. (1876b).—List of birds met with in north-eastern Queensland, chiefly at Rockingham Bay. *Proc. Zool. Soc. Lond.* 1876. pp 114-23.
- RAMSAY, E. P. (1877).—List of birds met with in north-eastern Queensland, chiefly at Rockingham Bay. *Proc. Zool. Soc. Lond.* 1877. pp 335-51.
- WEBB, L. J. (1966).—The identification and conservation of habitat-types in the wet tropical lowlands of north Queensland. *Proc. R. Soc. Qd* 78:59-86.

(Received for publication 25 June 1974)

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