

**JOB PROGRESS REPORT
RESEARCH PROJECT SEGMENT**

STATE: Territory of Guam

PROJECT NO.: W-1R-8
SUBPROJECT NO.: W-4
STUDY NO.: 1
JOB NO.: 1

JOB TITLE: Survey and Inventory of Non-Game Birds in the Mariana Islands

PERIOD COVERED: October 1, 1999 to September 30, 2000

SUMMARY

Surveys conducted by the Division of Aquatic and Wildlife Resources (DAWR) counted 11 resident and migrant species of birds during spring island-wide bird counts. However, Mariana crows and Black noddie terns were not detected at all for FY00. A pond on Maneggon Golf Course yielded a Common moorhen nest with 7 eggs, 2 adults and juveniles, while Micronesian starling numbers did not change compared to the counts made during FY99. Noteworthy migratory bird observations include: Common mallard (~16); Garganey mallard (1); American widgeon (1); Peregrine falcon (1); Osprey (~1); White-tailed tropicbird (1); Masudaira's storm petrel (1); Sharp-tailed sandpipers (7-12); Long-billed dowitcher (1); Ruff (3-7); Oriental pratincole (1); Black-headed gulls (2); Common tern (3); Black-naped tern (1); Fork-tailed swifts (3); and Barn swallows (1-5) for FY00. In addition, the first record of a Blue breasted quail was made after it was flushed out of hiding at Mt. Santa Rosa, northern Guam.

BACKGROUND

Brown treesnake (BTS) predation has been identified as the major factor in the decline of Guam's native bird species during the last few decades (Savidge 1987, Conry 1988, Engbring and Fritts 1988). Census data from a variety of sources have documented the extirpations of 8 species, while 4 others have undergone severe population decreases, both in terms of overall numbers and geographic range (DAWR 1963-98, Engbring and Ramsey 1984, Wiles et al. 1995).

Common moorhens (*Gallinula chloropus guami*) continue to be scattered throughout the southern and central parts of Guam, with relatively recent population estimates placed at 100-125 birds (Stinson et al. 1991, Ritter 1997).

Guam swiftlets occur primarily in one large colony on Naval Ordnance Annex (formerly Naval Magazine, NOA). In addition, three much smaller colonies are known to occur on NOA, Lumuna district of Yigo, and in the vicinity of Mt. Sasalaguan in Merizo (DAWR 1987-1998, Wiles et al. 1995).

Micronesian starlings persist in two small populations on Andersen Air Force Base (AAFB) and Yigo, while smaller numbers of Starlings occur on Cocos Island (DAWR 1991-1998, Wiles et al. 1995).

Recovery plans have been written for each of these species except the Micronesian starling (Beck and Savidge 1990, U.S. Fish and Wildlife Service 1991a, 1991b). In addition, the island continues to retain small to moderate numbers of several other resident bird species, as well as migratory shorebirds, seabirds, and waterfowl (Stinson et al. 1997a, b).

OBJECTIVES

- 1) To continue status surveys and natural history studies as called for in the recovery plans for Guam's endangered native birds (Beck and Savidge 1990, U.S. Fish and Wildlife Service 1991a, 1991b).

PROCEDURES

- 1) Spring bird counts were conducted on 23 routes throughout Guam during June. Locations of survey route are presented in DAWR (1987). These surveys consisted of 5-minute station counts at up to 10 stations per route. The numbers of birds seen or heard are recorded per species at each station.
- 2) Visit manmade or natural ponds, large ephemeral ponds, Fena Lake, shorelines, and grassy fields, e.g., adjacent to airport runways, recording the kinds and number of migrant birds seen.

RESULTS

Roadside and Spring Bird Counts

Results from the FY00 spring bird counts are presented in Table 1, with 11 species recorded. Mariana crows and Black noddies, were not detected in the count this year, but domestic Rock doves were detected for the first time in FY00. Mariana crow and Island swiftlet statistics are reported in Project W-1R-8, Subproject W-4, Study 1, Jobs 2 and 3 respectively. In addition, Philippine turtle doves and Black francolin statistics are reported in Project W-1R-8, Subproject W-2, Studies 1 and 2, Job 1 respectively.

Common Moorhens

A Common moorhen nest, containing 7 eggs, was found in a man-made pond on the Manengon Hills Golf Course on 1 June 2000. In addition, two adults and juveniles, were observed and not determined to be associated with this nest. Another man-made pond in the vicinity contained an old and a recently built nest. No subsequent visits were made to determine the status of the new nest.

Table 1. Mean numbers of birds recorded per station along surveys routes in northern and southern Guam. Abbreviations are: YEBI - Yellow bittern; BLFR - Black francolin; BBQU - Blue-breasted quail; BRNO- Brown noddy; FATE - fairy tern; PTDO - Philippine turtle-dove; BLDR - black drongo; MIST - Micronesian starling; ETSP - Eurasian tree sparrow; GOPL – Golden plover. BLFR and PTDO are also discussed in their respective reports.

Survey Location	NO. Stat	YEBI	BLFR	BBQU	BLDR	BRNO	ETSP	FATE	GOPL	MIST	PTDO	RODO
North Surveys												
Tarague	10	0.00	0.40	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.40	0.00
CWA	10	0.00	1.00	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.30	0.00
NWF	10	0.00	2.50	0.00	0.00	0.00	0.60	0.00	0.00	0.00	1.00	0.00
NAVCAMS	10	0.00	2.80	0.00	0.50	0.00	0.90	0.00	0.00	0.00	0.10	0.00
Cap. Improve. Rd.	10	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.30	0.00
Mt. Santa Rosa	10	0.10	1.60	0.00	1.10	0.00	3.50	0.00	0.00	0.10	1.00	0.00
Y Sengsong Rd.	10	0.00	0.60	0.00	0.00	0.00	4.00	0.00	0.00	0.00	0.10	3.10
2-Lover's Point	10	0.00	3.00	0.00	0.50	0.00	3.00	0.00	0.00	0.00	0.00	0.00
Andersen South	10	0.30	0.70	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00
Navy Golf Course	10	1.40	4.40	0.00	0.00	0.00	1.50	0.00	0.10	0.00	0.60	0.00
Barrigada Hill	10	1.67	2.40	0.00	0.10	0.00	3.78	0.00	0.00	0.00	0.00	0.00
Toto Pipeline	8	0.00	0.38	0.00	0.13	0.00	1.63	0.00	0.00	0.00	0.75	0.00
South Surveys												
Nimitz Hill	10	0.00	5.00	0.10	0.00	0.00	1.40	0.00	0.00	0.00	0.00	0.00
RCBR	4	0.00	0.50	0.00	0.25	0.00	5.25	0.00	0.00	0.00	3.00	0.00
Orote Point	6	0.00	6.17	0.00	1.50	0.00	2.00	0.00	0.00	0.00	0.50	0.00
Pulantat	10	1.80	5.30	0.00	0.00	0.00	3.70	0.00	0.00	0.00	0.30	0.00
Cross Island Rd	10	0.00	2.50	0.00	0.00	0.00	3.80	0.00	0.00	0.00	0.20	0.00
NOA	10	0.00	6.60	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.20	0.00
Umatac	10	0.10	6.00	0.00	0.00	0.00	1.10	0.00	0.00	0.00	0.00	0.00
Dandan	8	0.50	6.38	1.63	0.00	0.00	7.25	0.00	0.00	0.00	1.50	0.00
Ija	8	0.50	7.38	1.60	0.00	0.00	1.25	0.00	0.00	0.00	0.75	0.00
Merizo	4	0.00	7.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cocos Island	10	0.00	0.00	0.00	0.00	0.70	0.50	9.60	0.00	2.50	2.40	0.00

Native Doves

No confirmed reports of White-throated ground-doves (*Gallicolumba xanthonura*) or Mariana fruit-doves (*Ptilinopus roseicapilla*) were made in FY00.

Micronesian Starlings

Micronesian starlings continue to exist in the AAFB area, north of Mount Santa Rosa, and Cocos Island. On Cocos Island, numbers of starlings observed in station counts remained the same at 2.8 birds per station.

Seabirds

Noteworthy records of birds for Guam in FY00 were made from September 1999 to February 2000. A White-tailed tropicbird (*Phaethon lepturus*) was found at Flora Pago Estates, Chalan Pago, on 7 February 2000 and released at a later date. A second White-tailed tropic bird was observed offshore of Agat on 16 February 2000. A Masudaira's storm petrel

(*Oceanodroma matsudairae*) was observed several km west of the southern village of Umatac on 16 February 2000.

Waterfowl

There were a number of migratory waterfowl species sighted during FY00. Several sightings of Common mallards (*Anas platyrhynchos*) were made from December 1999-January 2000, which included: 2 males and 9 females in a concrete-lined pond on AAFB (6 December and again on 27-29 December 1999); 5-6 mallards at the Guam International Airport ponding basin (a short time after December dates); and 1 bird remained at the same location (15 January 2000). An American wigeon (*Anas americana*) male in breeding plumage was observed at the Guam International Airport ponding basin on 3 February 2000 and a Garganey mallard (*Anas querquedula*) was observed at the Agfayan Bay fishponds, Inarajan, on 18 December 1999.

Birds of Prey and Quail

Several birds of prey sightings were reported in FY00. Separate sightings of a single Osprey (*Pandion haliaetus*) flying were made several hours apart (probably the same bird) over the Talofofu Bay fishponds and Fena Reservoir on 2 January 2000. A Peregrine falcon (*Falco peregrinus*) was seen at the Guam International Airport on 13 January 2000. A single Blue-breasted quail (*Coturnix chinensis*) was flushed out of hiding on Mount Santa Rosa, Yigo, on 4 May 2000. This observation is the first known sighting of this species in northern Guam in at least 20 years.

Migratory Shorebirds

There were several observations of migratory shorebirds in FY00. A group of 7-12 Sharp-tailed sandpipers (*Calidris acuminata*) were observed southwest of the airport at the Tiyan concrete pads on 27-28 October 1999. An immature Long-billed dowitcher (*Limnodromus scolopaceus*) with distinctive plumage was observed in a carabao wallow at the 12 Group on NOA, COMNAVMAR, on 22 November 1999. A group of 3-7 Ruff (*Philomachus pugnax*), were seen at the Tiyan concrete pads from 27 September 1999 to 14 February 2000. An Oriental pratincole (*Glarola maldivarum*) was observed on the airfield at the Guam International Airport from 27 September 1999 to 14 February 2000.

Terns and Gulls

Several species of terns and gulls were observed during the migration season in FY00. Two sightings of a single Black-headed gull (*Larus ridibundus*) were made at the Agfayan Bay fishponds, Inarajan on 18 December 1999 and at Dungcas beach on 26 December 1999. A single Common tern (*Sterna hirundo*) was observed at Sasa Bay, Piti Harbor on 10 October 1999 and two birds were observed on 13-14 February 2000. A Black-naped tern (*Sterna sumatrana*) was also observed at Sasa Bay, Piti Harbor from 13-27 February 2000.

Swifts and Swallows

Two species of swifts and swallows were observed during the migration season in FY00. Three Fork-tailed swifts (*Apus pacificus*) were observed at Pati Point on 13 November 1999. Several groups of 1-5 Barn swallows (*Hirundo rustica*) were observed at the main airfield of AAFB, Guam International Airport, and on the north side of Talofoto village. The group in Talofoto had been reported to be present for 1-2 weeks according to a village resident.

RECOMMENDATIONS

Develop, continue, and implement the following for FY01:

- 1) Methods for BTS control.
- 2) Habitat improvement and development programs.
- 3) Predator controls on Cocos Island until complete eradication of monitor lizards and feral cats are attained.
- 4) Common Moorhen (reinstated) census.
- 5) Annual census of resident birds on Guam.
- 7) Monitoring Guam's shores and oceans for seabirds.
- 8) Monitoring areas favored by migrant birds.

PROGRAM COST

The estimated cost of the project is \$44,000.

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