

**JOB PROGRESS REPORT
RESEARCH PROJECT SEGMENT**

STATE: Territory of Guam

PROJECT NO.: W-1R-6
SUBPROJECT NO.: W-2
STUDY NO.: 2
JOB NO.: 1

JOB TITLE: Population Size and Distribution of Black Francolin on Guam (1460, 1430)

PERIOD COVERED: October 1, 1997 to September 30, 1998

SUMMARY

Black francolin (*Francolinus francolinus*) were detected on 18 of 23 (78%) survey routes conducted throughout Guam. Six routes had decreases, eleven routes had increases including four routes with increases of 1 or more birds, and six routes had no change in the number of francolin recorded.

BACKGROUND

In 1961, 171 black francolin were introduced to southern Guam as part of the Foreign Game Bird Introduction Program of the U.S. Fish and Wildlife Service. Surveys conducted in 1980 indicated the population was adequately established in most parts of southern Guam to open a hunting season. Regulations were promulgated to open a 1-month season in December 1981 with a 4-bird daily limit and a 20-bird season limit. Francolin populations continued to increase from 1980-1982, but hunting pressure remained low, probably because of the unfamiliarity of the hunting public with the sporting qualities of the bird. With the bird population increasing and little hunting pressure, the francolin season and bag limits were further liberalized in FY83 to a 2-month split season, one month in January and one month in July, and the bag limit was increased to 5 birds per day with no season limit. Revisions to the francolin season were again made in FY90, extending the season from January 1 to February 28 and from July 1 to August 31. Francolin hunting has increased in popularity and Guam hunters are successfully harvesting birds during the open seasons.

OBJECTIVES

To determine current relative abundance and current distribution of black francolin on Guam and monitor population trends.

PROCEDURES

Conduct annual island-wide spring bird surveys (five-minute station counts) to monitor distribution and status of francolin throughout the island.

RESULTS

Spring Bird Surveys

Black francolin were detected on 18 of 23 (78%) spring bird surveys conducted during May 1998 (Table 1). Six survey routes had decreases, 11 routes had increases of which

four had increases of 1 or more birds per station, and 6 routes had no change in the number of francolin recorded per count. Francolins were found on 9 of 12 routes in northern Guam, an increase of 1 from last year's results. Birds were recorded on 9 of 11 surveys south of Route 4, which was no change from last year.

Table 1. Numbers of black francolin detected per count and average numbers of birds detected per station as detected in spring bird surveys at various locations on Guam during May 1998. Values in the trend column are the difference between the average station count between years. (Ave. = average)

| Survey Locations | No. Stations | No. Birds Observed | 1997 Ave./ Station | 1998 Ave./ Station | Trend in Average 98-97 |
|--------------------------|--------------|--------------------|--------------------|--------------------|------------------------|
| NORTH SURVEYS | | | | | |
| Tarague | 10 | 0 | 0.00 | 0.00 | 0.00 |
| MSA (formerly CWSA) | 10 | 2 | 0.00 | 0.20 | 0.20 |
| NWF | 10 | 1 | 0.30 | 0.10 | -0.20 |
| NCTAMS | 10 | 5 | 1.50 | 0.50 | -1.20 |
| Capitol Improvement Road | 10 | 0 | 0.50 | 0.00 | -0.50 |
| Mt. Santa Rosa | 10 | 3 | 0.00 | 0.30 | 0.30 |
| Y Sengsong Road | 10 | 0 | 0.00 | 0.00 | 0.00 |
| Two Lover's Point | 10 | 1.7 | 0.90 | 1.70 | 0.80 |
| Andersen South | 10 | 5 | 0.50 | 0.50 | 0.00 |
| Navy Golf Course | 10 | 30 | 2.50 | 3.00 | 0.50 |
| Barrigada Hill | 10 | 16 | 1.50 | 1.60 | 0.10 |
| Toto Pipeline | 8 | 2 | 0.25 | 0.25 | 0.00 |
| SOUTH SURVEYS | | | | | |
| Nimitz Hill | 10 | 40 | 3.40 | 4.00 | 0.60 |
| Reserve Craft Beach Road | 4 | 0 | 0.00 | 0.00 | 0.00 |
| Orote Point | 6 | 26 | 1.17 | 4.33 | 3.16 |
| Pulantat | 10 | 26 | 3.00 | 2.60 | -0.40 |
| Cross Island Road | 10 | 40 | 1.50 | 4.00 | 2.50 |
| Naval Magazine | 10 | 35 | 1.90 | 3.50 | 1.60 |
| Umatac | 10 | 34 | 2.70 | 3.40 | 0.70 |
| Dandan | 10 | 48 | 5.50 | 4.80 | -0.20 |
| Ija | 8 | 51 | 4.13 | 6.38 | 2.25 |
| Merizo | 4 | 17 | 5.50 | 4.25 | -1.25 |
| Cocos Island | 10 | 0 | 0.00 | 0.00 | 0.00 |

The results from all survey routes combined showed an increase in francolin numbers observed as compared to FY97. Two southern routes, Ija (6.38 birds per station) and Dandan (4.80 birds per station), recorded the highest number of birds per station for the entire island. The Navy Golf Course route recorded the largest number of birds per station (3.00 birds per station) for northern Guam.

Black francolin populations remain well established throughout southern Guam and in shrub-grass habitats in central and northern Guam.

RECOMMENDATIONS

Continue to monitor francolin population status, distribution, and hunter harvest.

PROGRAM COST

The estimated cost of the black francolin project under W-1R-6 is \$7,000.

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