

**JOB PROGRESS REPORT  
RESEARCH PROJECT SEGMENT**

**STATE:** Territory of Guam

**PROJECT NO.:** W-1R-7  
**SUB-PROJECT 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, 1998 to September 30, 1999

**SUMMARY**

Black francolins (*Fancolinus francolinus*) were detected on 19 of 23 (83%) 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 francolins were detected on 19 of 23 (83%) spring bird surveys conducted in May (Table 1). Six survey routes had decreases, 11 routes had increases of which four had increases of one or more birds, and 6 routes had no change in the number of birds per

count. Francolins were found on 8 of 12 routes in northern Guam, an increase of one route from FY98 (DAWR 1998). They were found 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 1999. Values in the trend column are the difference between the average station count between years. (Ave. = average)

<b>Survey Location</b>	<b>No. of Stations</b>	<b>No. Birds Observed</b>	<b>1998 Ave./Station</b>	<b>1999 Ave./Station</b>	<b>Trend in Average 99-98</b>
<b>NORTHERN</b>					
Tarague	10	0	0.00	0.00	0.00
MSA	10	11	0.02	1.10	1.08
NWF	10	14	0.10	1.40	1.30
NCTAMS	10	19	0.50	1.90	1.40
Capital Improvement Road	10	0	0.00	0.00	0.00
MT. Santa Rosa	10	2	0.30	0.20	-0.10
Y Sengsong Road	10	0	0.00	0.00	0.00
Two Lovers	10	27	1.70	2.70	1.00
Andersen South	10	3	0.50	0.30	-0.20
Navy Golf Course	10	33	3.00	3.30	0.30
Barrigada Hill	10	30	1.60	3.00	1.40
Toto Pipeline	8	0	0.25	0.00	-0.25
<b>SOUTHERN</b>					
Nimitz Hill	10	45	4.00	4.50	0.50
Reserve Craft Beach Raod	4	0	0.00	0.00	0.00
Orote Point	6	16	4.33	2.67	-1.66
Pulantat	10	29	2.60	2.90	0.30
Cross Island Road	10	30	4.00	3.00	-1.00
Ordnance Annex	10	53	3.50	5.30	1.80
Umatac	10	36	3.40	3.60	0.20
Dandan	7	35	4.80	5.00	0.20
Ija	8	45	6.38	5.63	-0.76
Merzio	4	22	4.25	5.50	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 FY98. Two southern routes, Ija (5.63 birds per station) and Ordnance Annex (5.30 birds per station), recorded the highest number of birds per station for the entire island (Table 1). The Navy Golf Course route recorded the largest number of birds per station (5.00 birds per station) for northern Guam.

Francolins became noticeably more common on parts of Andersen Air Force Base during FY99, especially at Pati Point and in the Munitions Storage Area, where they were recorded for the first time.

### Depredation Permits

In southern Guam, the abundance of black francolins has lead to the issuance of depredation permits to control the numbers of birds near cultivated areas to reduce crop damage. Francolins are known to peck at fruits, such as watermelon, to obtain moisture, which renders the fruit unmarketable. Under these permits, 23 males and 15 females were killed by farmers.

### **RECOMMENDATIONS**

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

### **PROGRAM COST**

The estimated cost of the black francolin project under W-1R-7 is \$15,000.

### **LITERATURE CITED**

Division of Aquatic and Wildlife Resources. 1998. Job Progress Report. Federal Aid to Fish and Wildlife Restoration. Div. Aquatic Wildlife Res., Dept. Agric., Mangilao.

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