

**JOB PROGRESS REPORT  
RESEARCH PROJECT SEGMENT**

**STATE:** Territory of Guam

**PROJECT NO.:** W-1R-8  
**SUB-PROJECT NO.:** W-1  
**STUDY NO.:** 2  
**JOB NO.:** 1

**JOB TITLE:** Population Size and Distribution of Wild Pigs on Guam (1460)

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

**SUMMARY**

Examination of hunter logs for Andersen Air Force Base (AAFB) revealed a total of 6,869 hunter sorties, 226 pigs harvested, and a harvest rate of one pig per 15.5 hunter-days. Hunter harvest data were not available for other parts of Guam. Depredation permits allowed 154 pigs to be taken throughout the island in FY00.

**BACKGROUND**

Wild pigs (*Sus scrofa*) are Guam's most important game species in terms of total numbers of animals harvested and have been studied by the Division of Aquatic and Wildlife Resources (DAWR) since 1967 (Conry 1988, DAWR 1967-1999). The wild pig population on Guam originated from domestic *S. scrofa*, which were introduced by the Spanish from the Philippines between 1672 and 1685. Wild pigs are found island-wide, but appear to be most numerous in the secondary limestone forests of the north and the ravine forests of southern Guam. Pigs occur at high enough densities in many forested areas, that rooting and wallowing damage is common and can be quite severe locally. Depredation on agricultural crops is also a problem, especially in southern Guam. About 20-30 animal depredation permits are issued annually to primarily control pig damage. Controlling the effects of pig damage is recognized as an important measure to protect native forest and agricultural resources. Recreational harvest is the primary tool used to control pig numbers and current hunting regulations allow for a year-round season with unlimited take.

**OBJECTIVES**

- 1) To monitor trends in wild pig population size, hunter participation, and harvest.

**PROCEDURES**

- 1) Monitor hunter participation and harvest during the legal hunting season.

- 2) Collect biological data from wild pig kills during the hunting season and from incidental sources such as road kills or confiscated animals.

## RESULTS

### Pig Hunting Statistics

Guam's hunting regulations were revised in January to allow year-round, unlimited take of pigs. Officials at AAFB kept hunting activity and harvest records for FY00 and according to their hunter logs, 2,146.5 hunter-days (3,779 sorties, gun hunting only) were expended at Northwest Field (NWF) and resulted in the harvest of 91 pigs (Table 1). Hunting areas on the main portion of the base (Munitions Storage Area, Tarague basin, and areas near the landfill and to the north and east of the flightline) and Anderson South recorded 1,376.3 hunter-days (3,100 sorties, primarily bow hunting), with 135 pigs killed. NCTAMS remained closed to all hunting.

Table 1. Hunter effort and wild pigs taken on AAFB, during FY00. Data is based on official hunter logs.

<b>NWF, AAFB</b>	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	<b>Total</b>
<b>Gun Hunting</b>													
No. hunter sorties	371	399	283	464	409	486	27	380	353	163	444	-	3779
No. hunter days (8 hr)	245.8	231.8	180.6	275.2	263.9	287.1	11.8	255.1	85.8	76.3	233.1	-	2146.5
Pigs taken	7	14	10	3	12	11	1	12	6	8	7	-	91
Days effort/take	35.1	16.6	18.1	91.7	22.0	26.1	11.8	21.3	14.3	9.5	33.3	-	23.6
<b>Main, AAFB</b>													
<b>Bow Hunting</b>													
No. hunter sorties	260	188	257	245	332	249	228	229	126	46	268	32	2460
No. hunter days (8 hr)	89.1	69.4	96.7	117.5	158.4	109.8	101.0	93.4	55.1	16.0	100.0	12.2	1018.6
Pigs taken	4	1	15	9	9	4	4	8	11	4	9	5	83
Days effort/take	22.3	69.4	6.4	13.1	17.6	27.5	25.3	11.7	5.0	4.0	11.1	2.4	12.3
<b>Gun Hunting</b>													
No. hunter sorties	48	40	48	34	90	160	9	135	30	15	28	3	640
No. hunter days (8 hr)	28.0	9.3	37.4	22.9	45.7	83.7	4.3	89.9	13.1	8.6	13.4	1.4	357.7
Pigs taken	3	3	5	5	10	13	2	6	2	1	2	0	52
Days effort/take	9.3	3.1	7.5	4.6	4.6	6.4	2.2	15.0	6.6	8.6	6.7	-	6.9
<b>Gun Hunting TOTALS</b>													
No. hunter sorties	419	439	331	498	499	646	36	515	383	168	472	3	4409
No. hunter days (8 hr)	273.8	241.1	218.0	298.1	309.6	357.8	16.1	345.0	98.9	84.9	246.5	1.4	2491.2
Pigs taken	10	17	15	8	22	24	3	18	8	9	9	0	143
Days effort/take	27.4	14.2	14.5	37.3	14.1	14.9	5.4	19.2	12.4	9.4	27.4	-	17.4

### Depredation Permits

Twenty-nine animal depredation permits were issued during FY00. Twenty-three permits authorized pig-take in agricultural areas, while two permitted take in suburban areas. Of these, eleven permits were issued to farmers registered with the Guam Department of Agriculture. Four permits authorized pig-take on Federal lands (AAFB, Guam National Wildlife Refuge, NOA, and NCTAMS). Permittees are required to submit a report of all wild pigs taken. Ninety-six pigs were killed on federal lands, while 58 were reported taken on farmlands.

## **RECOMMENDATIONS**

- 1) Continue to monitor the annual pig harvest and hunter participation.
- 2) Hunting at NCTAMS should be reopened.
- 3) Coordinating accurate record keeping and reporting of hunter effort and harvest at military bases is recommended.
- 4) Increase island-wide pig harvest.

## **PROGRAM COST**

The estimated cost of the project is \$15,000.

This report was prepared by: Dana T. Lujan, Wildlife Biologist II.

## **LITERATURE CITED**

Conry, P. J. 1988. Ecology of the wild (feral) pig (*Sus scrofa*) on Guam. Tech. Rept. No. 7. Div. Aquatic and Wildl. Res., Dept. Agric., Mangilao. 60 pp.

Division of Aquatic and Wildlife Resources. 1967-1998. Job Progress Report - Federal Aid to Fish and Wildlife Restoration. Guam Dept. Agric., Mangilao.