

**JOB PROGRESS REPORT
RESEARCH PROJECT SEGMENT**

STATE: Territory of Guam

PROJECT NO.: W-1R-8
SUBPROJECT NO.: W-3
STUDY NO.: 1
JOB NO.: 3

JOB TITLE: Development of a Management Plan for Free-Ranging Water Buffalo on Guam

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

SUMMARY

The Division of Aquatic and Wildlife Resources (DAWR), US Navy (USN), and US Fish & Wildlife Service (USFWS), agreed to initiate a long-term free-ranging Asiatic water buffalo reduction program utilizing immunocontraceptives, as well as the capture and distribution of AWB calves to the public.

BACKGROUND

Population reduction of feral Asiatic Water Buffalo (*Bubalis bubalis*) was initiated with the use of immunocontraceptives on reproductive females (DAWR 1998). Twenty-six feral female Asiatic Water Buffalo (AWB), were treated with porcine zona pellucida (PZP), which resulted in an 86% success rate of inhibiting pregnancy.

Illegal hunting has been a major cause of mortality in the population (Conry 1988), but anti-poaching efforts were expanded on NOA by DAWR conservation officers and the USN since the 1980s, may be responsible for allowing the population to show steady growth. High buffalo densities have resulted in localized habitat damage on Naval Ordinance Annex (NOA) (Conry 1988, Biosystems Analysis Inc. 1989).

OBJECTIVE

- 1) Develop a management plan to control the population size feral AWB on Guam.

PROCEDURES

- 1) Develop a long-term management plan to control AWB populations on NOA through meetings with the USN and USFWS.

RESULTS

Population Control of AWB on NOA

Meetings were conducted in August-September 2000 between the USN, USFWS, and DAWR. The agencies decided to initiate long-term population control of feral AWB utilizing immunocontraception. The preliminary plan is to vaccinate all reproductive aged females beginning in 1 November 2000. Treated females will be identified by horn characteristics or by oil-based paint balls. A second vaccination will be administered 6-12 months after the initial treatment in order to essentially activate the vaccine. Booster shots will be given to treated animals annually thereafter.

In addition, DAWR is working with the Mayor's Council of Guam to coordinate a program that involves the capture and distribution of calves from NOA for public use. Chemical immobilants will be used to sedate newly weaned calves. Calves will then be tested for communicable diseases, e.g., tuberculosis and brucellosis, and branded for public distribution to the Mayor's Council. The Department of Agriculture's Territorial Veterinarian, Dr. Nusbaum, will be assisting DAWR with the capture of such animals.

RECOMMENDATIONS

Continue discussions with the USN and USFWS regarding the management of feral AWB populations.

PROGRAM COST

The estimated cost of the project is \$25,000.

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

LITERATURE CITED

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