

**GUAM DIVISION OF AQUATIC AND  
WILDLIFE RESOURCES**

**ANNUAL PERFORMANCE REPORTS**

**FY 2005**

January 23, 2006

Division of Aquatic and Wildlife Resources  
Department of Agriculture  
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**GUAM FISH AND WILDLIFE  
COORDINATION  
FW-3C-13**

## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** FW-3C-13

**Grant name:** Guam Fish and Wildlife Coordination

**Project number and name:** C-1, Job 1. Coordination of Guam's Fish and Wildlife Programs

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual or Estimated <u>X</u>
<b>Federal :</b>	\$187,675	\$111,717
<b>State</b>	-0-	
<b>Other:</b>		
<b>Total Federal:</b>	\$187,675	\$111,717
<b>Total match</b>	-0-	-0-
<b>Total project:</b>	\$187,675	\$111,717

**5. Objectives:**

To plan, coordinate, supervise, and administer all Sport Fish and Wildlife Restoration Programs during the granting period.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

The projects supervised by this program are funded from Wildlife Restoration and Sport Fish Restoration Funds, Endangered Species Section 6 Funding including Safe Harbor, NOAA grants, State Wildlife Grant Funding, and locally available money from the Conservation Fund.

**7. Describe how the objectives were met. See “Supplemental Information” for additional requirements and “Attachments” for specialized tables.**

The objectives were met by the following:

1. The Chief insured the attendance of staff at meetings focused on natural resource issues, planned and documented activities pertaining to fish and wildlife programs. The Chief of DAWR and his personnel represented the Department of Agriculture with the following duties: 1) All regulatory matters relating to fish and wildlife resources. This frequently entailed meetings with other local and federal agencies, including the US Navy and Air Force; 2) Administration and coordination responsibilities, which are 50% contributed by local funds; 3) the Chief and the Division's Administrative Officer attended the Federal Assistance Coordinator's meeting in Idaho. The Chief also participated in the Western Chiefs Summit Meeting.
2. Staff was tasked with submitting documents including grant proposals, grant agreements, and performance reports pertaining to all funding sources. The documentation included annual Grant Agreements for 1) Project FW-3C-12, Guam Fish and Wildlife Coordination, which covers the administration and coordination of the Division's Federal Aid programs and which is jointly funded by Wildlife and Sport Fish funds; 2) Project F-1-R, Guam Sport Fish Investigations, which covers sport fish research, and survey and activity and which funded with Sport Fisheries (DJ) funding; and 3) W-1-R, Guam Wildlife Investigations, which covers wildlife research and survey activity. In addition, annual Grant Agreements were prepared for the Division's various Fisheries Development and Endangered Species Recovery (Section 6) projects. The State Wildlife Grants were extended or obligated to fund wildlife projects.
3. Wildlife: Wildlife Staff made 18 trips to Rota to implement and follow-up Guam Rail releases on Rota. Staff made 19 trips to Rota as part of Guam's Mariana crow translocation project.
4. Fisheries: Fisheries Supervisor J. Gutierrez also attended the Fisheries Data Coordinating Meeting in Honolulu, HI, the Coral Reef Ecosystem Plan Team Meeting in Honolulu, HI, the Habitat Equivalency Analysis Workshop in Honolulu, Hawaii, and the Western Pacific Resiliency Workshop in Palau. Fisheries biologist T. Flores and R. Tibbatts attended trips sponsored by the Western Pacific Management Council for their annual plan team meetings in Honolulu, HI. Biologist T. Flores also attended a Cetacean workshop in Honolulu, HI.

**8. Discuss differences between work anticipated in grant proposal and grant**

**agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.** If you did work under this grant that was not captured in the discussion above or if you were unable to accomplish some of the work anticipated in the granting documents, please explain the differences in approach, results, and costs.

**9. List any publications or in-house reports resulting from this work.** Provide citations, including status (indicate if not completed), note any that are included with this report, and note where reports or publications may be obtained.

**Division of Aquatic and Wildlife Resources. 2005. Coordination of Guam's Fish and Wildlife Programs. Guam, Department of Agriculture. Annual Report.**

**Name, title, phone number, and e-mail address of person compiling this report:**

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**Annual Project Performance Report**  
Guam Division of Aquatic and Wildlife Resources (GDAWR)  
FY 2005

**1. State:** Guam

**Grant number:** FW-3C - 13

**Grant name:** Guam Fish and Wildlife Coordination

**Project number and name:** Sub-project C-2, Public Information, Education and Outreach on Guam's Sport Fish and Wildlife Restoration Programs and Endangered Species Programs.

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam: Islandwide

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

<b>Source</b>	<b>Budgeted</b>	<b>Actual or Estimated X</b>
<b>Federal :</b> _____	\$49,901	\$35,613
<b>State</b>	-0-	
<b>Other:</b> _____	-0-	
_____		
<b>Total Federal</b>	\$49,901	\$35,613
<b>Total match</b>	-0-	-0-
<b>Total project:</b>	\$49,901	\$35,613

**5. Objectives:**

To inform and educate the public of the need to conserve, restore, and wisely manage the island's aquatic and wildlife resources and of the Federal Assistance programs supporting this effort

**6.** If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project. N/A

**7. Describe how the objectives were met. See "Supplemental Information" for**

**additional requirements and “Attachments” for specialized tables.**

The objectives were met by the following activities during FY05:

A) The Guam Division of Aquatic & Wildlife Resources (GDAWR) endangered species, coral reef ecology (esp. toxic marine sea creatures), and fish and wildlife conservation presentations were delivered to: public and private elementary schools; middle schools; high schools; University of Guam (UOG) classes; 4-H Club; Island Girl Power, and Department of Parks and Recreation (DPR) Summer Camp. Presentations incorporated one or more of the following live animals: Guam rail; Mariana fruit bat; brown tree snake (BTS); Coqui frog (25 presentations); monitor lizard and marine invertebrates and fish. Numbers of presentations in FY05: public and private schools; shopping centers; University of Guam (UOG) = 3; a coral reef workshop (March '05) = 1; summer camps = 8; Guam Community College (GCC) = 1; science fairs = 2; and DPR = 4. The GDAWR sections conducted the following number of presentations: Conservation Officers = 20; Fisheries = 35; and Wildlife = 42. Aquatic presentations were observed and critiqued by the Resource, Education and Information officer for preparation, adequacy and use of teaching aids, and delivery style.

B) Distribution of 5,000 color posters on the reef and pelagic fishes of Guam to public upon request at the main office, especially to fishermen during inshore and offshore surveys. The Sport Fish Restoration Program funded the development and production of the posters. Four-thousand fish posters were reprinted for 2005 distribution with fish photographs and identification (ID) update on the eight- banded grouper and the parrot fish *Chlorurus frontalis*.

C) Distribution of colored flyers on the flora, fauna, and habitats of Guam to the public and private schools and to the general public upon request.

D) Distribution of Mariana fruit bat posters to the public upon request and replenished the posters that were previously supplied to schools.

E) Displays on aquatic and wildlife conservation programs were set up during Earth Week=1; UOG Charter Day = 1; Arbor Day = 1; Island Pride Day = 6; the March 2005 Coral Reef Symposium = 1; the monthly AmeriCorps presentations under the direction of the Department of Parks and Recreation = 10; and other similar events.

F) Media coverage of the Division's programs and activities, such as: newspaper (6); radio-talk shows (8); and television news articles relative to Coqui frogs / Brown Tree Snake control efforts (2). In addition, articles were featured in the newspaper (one each) that focused on the following: the Guam rail (2); Micronesian kingfisher (2); and Mariana crow (1); fishing activities; and the enforcement of fish and wildlife laws and the marine preserve areas.

G) Development of press releases, feature articles, and participation in media conferences on various conservation topics included: interaction between man made events (grass

burning) and reef/fish results (siltation); digital image capture and archiving the resource of existing slide film libraries was accomplished with a 6.3MP digital camera; various projects on land; recovery of the Marine Preserves and 'key wording' digital files. The GDAWR Web Master expanded the Internet Home Page with current reports and images of endangered species. Developed, in conjunction with Guam Visitors Bureau (GVB), water-proof fish identification (ID) cards and four reinforced concrete kiosks with fish ID's, hazardous marine life information, Tumon Bay Marine Preserve map with preserve rules and safety tips. GDAWR hosted the annual kid's fishing derby and a guided snorkel tour of the Tumon Bay Marine Preserve for Legislature members.

**8) Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds. N/A**

**9) List any publications or in-house reports resulting from this work:**

Newspaper (Guam PDN and Marianas Variety) covered environmental events, such as Earth Week, UOG Charter Day, Arbor Day, Island Pride Day, Guam Fishing Derby, Anti-Arson/Erosion information and other similar events,

**Name, title, phone number, and e-mail address of person compiling this report;**

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## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 05

**1. State:** Territory of Guam

**Grant number:** FW-3C-13

**Grant name:** Guam Fish and Wildlife Coordination

**Project number and name:** C-3: Generator Cost Share with Division of Forestry and Soil Resources

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2004

**3. Location of work:** Guam

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual ___ or Estimated ___
<b>Federal :</b>	<b>\$50,000</b>	\$0
<b>State</b>	<b>0</b>	
<b>Other:</b>		
_____		
_____		
<b>Total Federal:</b>	<b>\$50,000</b>	\$0
<b>Total match</b>	<b>0</b>	-0-
<b>Total project:</b>	<b>\$50,000</b>	\$0

**7. Objectives:**

To provide reliable power supply to the Administration Section of DAWR during Guam's frequent power outages due to storms, earthquakes, and other adverse conditions. The total estimated cost is \$100,000.

**8. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

N/A

**7. Describe how the objectives were met. See "Supplemental Information" for additional requirements and "Attachments" for specialized tables.**

The objectives were not met because the Forestry and Soil Resources Division (FSRD) did not have the funding for their share of the project. Alternate methods of implementing this project including cost sharing with FSRD and other divisions using the building but are not part of the DAWR federal assistance program.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.** If you did work under this grant that was not captured in the discussion above or if you were unable to accomplish some of the work anticipated in the granting documents, please explain the differences in approach, results, and costs.

**9. List any publications or in-house reports resulting from this work.** Provide citations, including status (indicate if not completed), note any that are included with this report, and note where reports or publications may be obtained.

**Division of Aquatic and Wildlife Resources. 2005. Coordination of Guam's Fish and Wildlife Programs. Guam, Department of Agriculture. Annual Report.**

**Name, title, phone number, and e-mail address of person compiling this report:**

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**SPORT FISH RESTORATION**  
**FY 2005**  
**F-1R-13**

**Annual Project Performance Report**  
Guam Division of Aquatic and Wildlife Resources (GDAWR)  
FY 2005

**1. State:** Territory of Guam

**Grant number:** F-1R-13

**Grant name:** Guam Sport Fish Investigations

**Project number and name:** Project 1. Management of Guam's Marine Fisheries Resources, Job 1. Offshore Fisheries Program

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Island of Guam

**4. Costs:**

Source	Budgeted	Actual or Estimated <u>X</u>
<b>Federal :</b> _____	\$62,239	\$42,888
<b>State</b>	- 0 -	
<b>Other:</b> _____	- 0 -	
_____		
<b>Total Federal</b>	\$62,239	\$42,888
<b>Total match</b>	- 0 -	-0-
<b>Total project:</b>	\$62,239	\$42,888

**5. Objectives:**

- a. To monitor the health of Guam's reef, bottom, and pelagic fishery resource by conducting 192 offshore surveys each year at the three largest boat launching facilities on island.
- b. To continue gathering limited biological data that will add to a long-term historical database on Guam's fish species by conducting 192 offshore surveys over a one-year period at the three largest boat launching facilities on island.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.** N/A

**7. Describe how the objectives were met. See “Supplemental Information” for additional requirements and “Attachments” for specialized tables.**

GDAWR conducted 192 offshore surveys including offshore creel surveys at the Agana Boat Basin (four a month), the Agat Marina (twice a month), and the Merizo Pier (twice a month), as well as participation surveys conducted four (4) times a month around the entire island to obtain data on island-wide boat based activity. This data is expanded to estimate the amount of fish harvested by boat-based methods, and to identify trends in the fishery.

During FY 2005, the 192 surveys were conducted, collecting data primarily on pelagic, bottom, and reef fish species per various fishing methods. Improving the program to integrate both offshore and inshore datasets is ongoing and should be completed in 2006. Upgrading the offshore program to Visual Foxpro should be completed early 2006.

Inputting historical data prior to 1982 to the present has not been completed. Less than five (5) years of data remains to be inputted. The Pacific Island Science Center (or Western Pacific Fishery Information Network) is in the process of upgrading the offshore expansion program to Visual Foxpro. This process should be completed in 2006, and should then allow for historical data lacking complete information to be inputted. The Pacific Islands Science Center currently is assisting GDAWR with finalizing the offshore expansion program, although more pressing issues are currently being addressed other than inputting the historical data. This inputting, based on upgrading the current offshore expansion system and enabling the system to allow offshore data lacking complete fishery information, should be completed in FY06.

Collecting fishery data at Ylig was attempted in 2005, including time to encourage fishermen using the ramp to participate. Current fishery issues have become so contentious that collecting information from boaters fishing out of Ylig regularly was not possible. Other avenues to collect data to improve the annual estimation of offshore fisheries need to be considered, possibly a difficult task. The current offshore collection program will remain at the three primary ports.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

**9. List any publications or in-house reports resulting from this work.**

- a. Guam. Bottomfish and Seamount Groundfish Fisheries of the Western Pacific Region, 2004 Annual Report. Western Pacific Regional Fishery Management Council. Honolulu, Hawaii.

- b. Guam. Pelagic Fisheries of the Western Pacific Region, 2004 Annual Report. Western Pacific Regional Fishery Management Council. Honolulu, Hawaii.

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**Annual Project Performance Report**  
Guam Division of Aquatic and Wildlife Resources (GDAWR)  
FY 2005

**1. State:** Territory of Guam

**Grant number:** F-1R-13

**Grant name:** Guam Sport Fish Investigations

**Project number and name:** Project 1. Management of Guam's Marine Fisheries Resources. Job 2. Inshore Fisheries Participation, Effort, and Harvest Surveys

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam, Island-Wide

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual or Estimated <u>X</u>
<b>Federal : Sport Fish Restoration</b>	\$122,696	\$29,166
<b>State</b>	-0-	
<b>Other:</b>	-0-	
<b>Total Federal</b>	\$122,696	\$29,166
<b>Total match</b>	-0-	-0-
<b>Total project:</b>	\$122,696	\$29,166

**5. Objectives:**

- A. To monitor the health of Guam's reef and bottom fishery resource by conducting 192 inshore surveys each year along the coastline of Guam.
- B. To continue gathering limited biological data that will add to a long-term historical data base on Guam's fish species by conducting 192 inshore surveys each year along the coastline of Guam.
- C. To monitor the health of Guam's reef and bottom fishery resource by conducting 24 aerial surveys each year along the coastline of Guam.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.** N/A

**7. Describe how the objectives were met. See “Supplemental Information” for additional requirements and “Attachments” for specialized tables.**

#### Inshore Survey

A total of 192 inshore creel and participation surveys (96 creel surveys and 96 participation surveys) were conducted along Guam’s shoreline during FY 05. From preliminary inshore expansions, the total estimated inshore harvest for FY 05 was approximately 39.6 metric tons (mt). Hook and line was the most practiced method accounting for approximately 31.5% or 12.5 mt of the total harvest. Although commonly practiced, hook and line was not the most efficient method for harvesting fish. Catch per unit effort (CPUE) for hook and line was 0.09 kg/gr-hr (kg/gh). Other top harvest methods include gill netting with a harvest of 8.1 mt and CPUE of 0.63 kg/gh and snorkel spear with a harvest of 7.8 mt and CPUE of 0.67 kg/gh. The most efficient method was surround netting with a CPUE of 3.4 kg/gh.

Overall, the three most harvested families harvested were Carangidae, Acanthuridae, and Mullidae with 7.2 mt, 6.9 mt, and 4.1 mt. The three most harvested species were *Caranx i’e* with 3.8 mt, *Naso unicornis* with 3.1 mt, and *Octopus cyanea* with 2.7 mt.

The maintenance of the Visual FoxPro inshore database program is ongoing. A new computer was purchased by GDAWR, and it currently serves as the main entry station for the inshore program. The National Oceanic and Atmospheric Administration (NOAA) provided GDAWR with a computer to back-up inshore, offshore, commercial fisheries, and marine preserve database files. GDAWR and NOAA are constantly fine-tuning and updating the Visual FoxPro system to ensure its continued performance.

#### Aerial Survey

A total of 23.5 aerial surveys were conducted during FY 05 to obtain information on fisher participation in locations outside of the designated participation route around Guam. One aerial survey was half completed when it was cancelled because of inclement weather conditions. From preliminary inshore expansions, a total of 934 fishers and 845 gears were observed within inshore regions 1 – 4 (See attached map). The majority of the fishers were observed within region 1 followed by region 3. Overall, hook and line method had the highest number of fishers (550) using 561 gears.

A total of 872 animals were observed on aerial surveys. Turtles comprised the majority of these observations with 733 sightings followed by dolphins with 99 sightings. Four-hundred and ninety-eight turtle were observed from Achang River to Fofos Island (Location 51).

This report contains a brief summary of Guam's inshore fishery. The Division of Aquatic and Wildlife Resources (DAWR) will be writing a more comprehensive report, which explains the inshore fishery in more detail.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs. N/A**

**9. List any publications or in-house reports resulting from this work.**

Porter, V., Leberer, T., Gawel, M., Burdick, D., Gutierrez, J., Torres, V., and Lujan, E. 2005. "The State of the Coral Reef Ecosystems of Guam" in *The State of Coral Reef Ecosystems of the United States and Pacific Freely Associated States: 2005*. NOAA Technical Memorandum NOS NCCOS 11. NOAA/NCCOS Center for Coastal Monitoring and Assessment's Biogeography Team. Silver Spring, MD. 522pp.

Porter, V., Leberer, T., Gawel, M., Burdick, D., Gutierrez, J., Torres, V., and Lujan, E. 2005. *Status of the Coral Reef Ecosystems of Guam*. University of Guam Press, Mangilao. Technical Report 113. 80pp.

Abraham, T., Beger, M., Burdick, D., Cochrane, E., Craig, P., Fenner, D., Golbuu, Y., Gutierrez, J., Hasurmai, M., Houk, P., Idip, D., Jacobson, D., Joseph, E., Keju, T., Kelty, R., Kuartei, J., Leberer, T., Palik, S., Penland, L., Pinca, S., Porter, V., Rikim, K., Starmer, J., Trianni, M., Victor, S., Whaylen, L. 2004. "The Status of the Coral Reefs in Micronesia" in *Status of Coral Reefs of the World: 2004*, Clive Wilkinson ed. Australian Institute of Marine Science, Townsville, Australia.

**Name, title, phone number, and e-mail address of person compiling this report:**

Jay Gutierrez, Acting Assistant Chief, (671) 735-3955, jaytgutierrez@yahoo.com

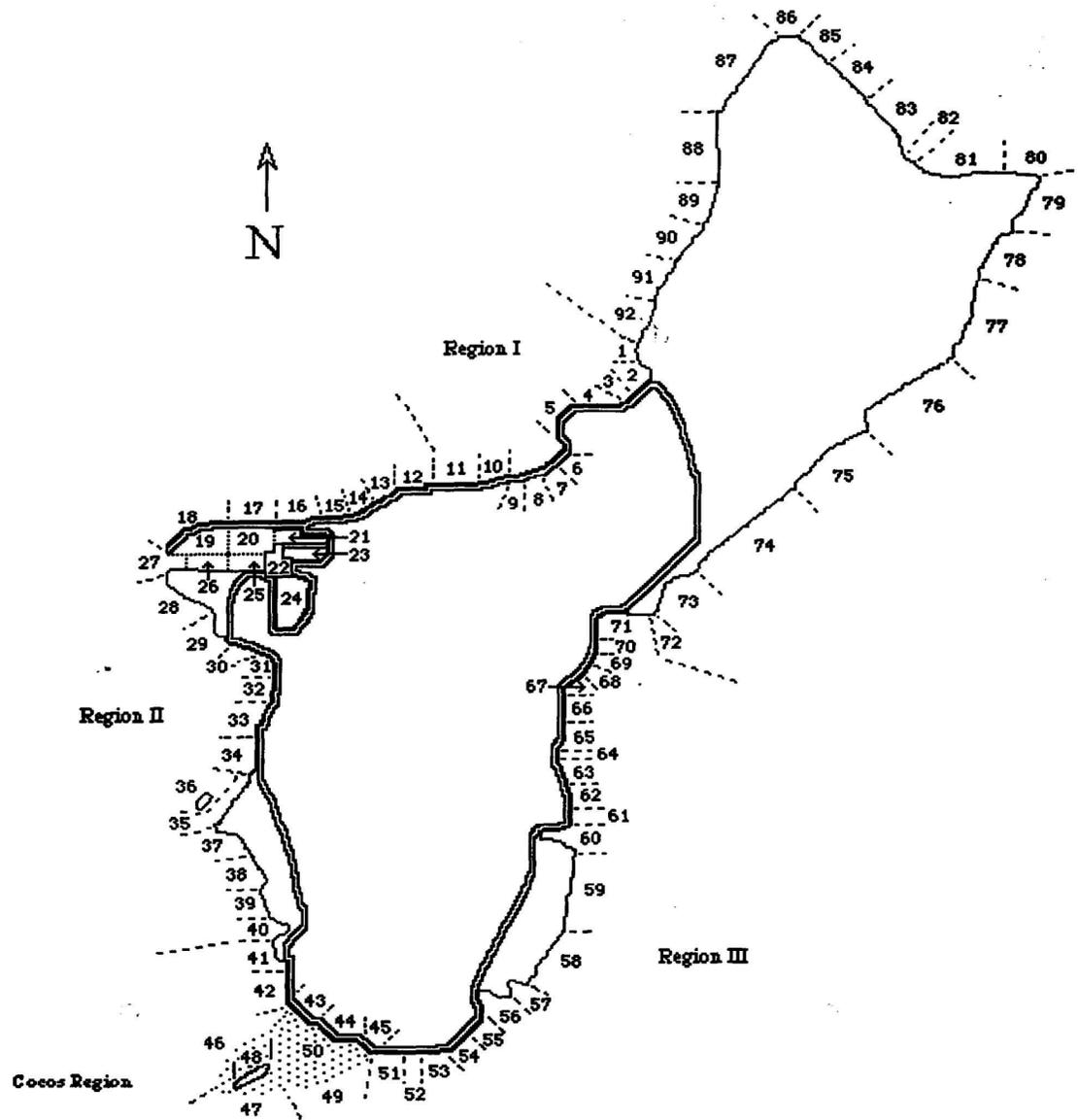


Figure 1. Inshore Fisheries "Participation Survey" Route and Location Codes.

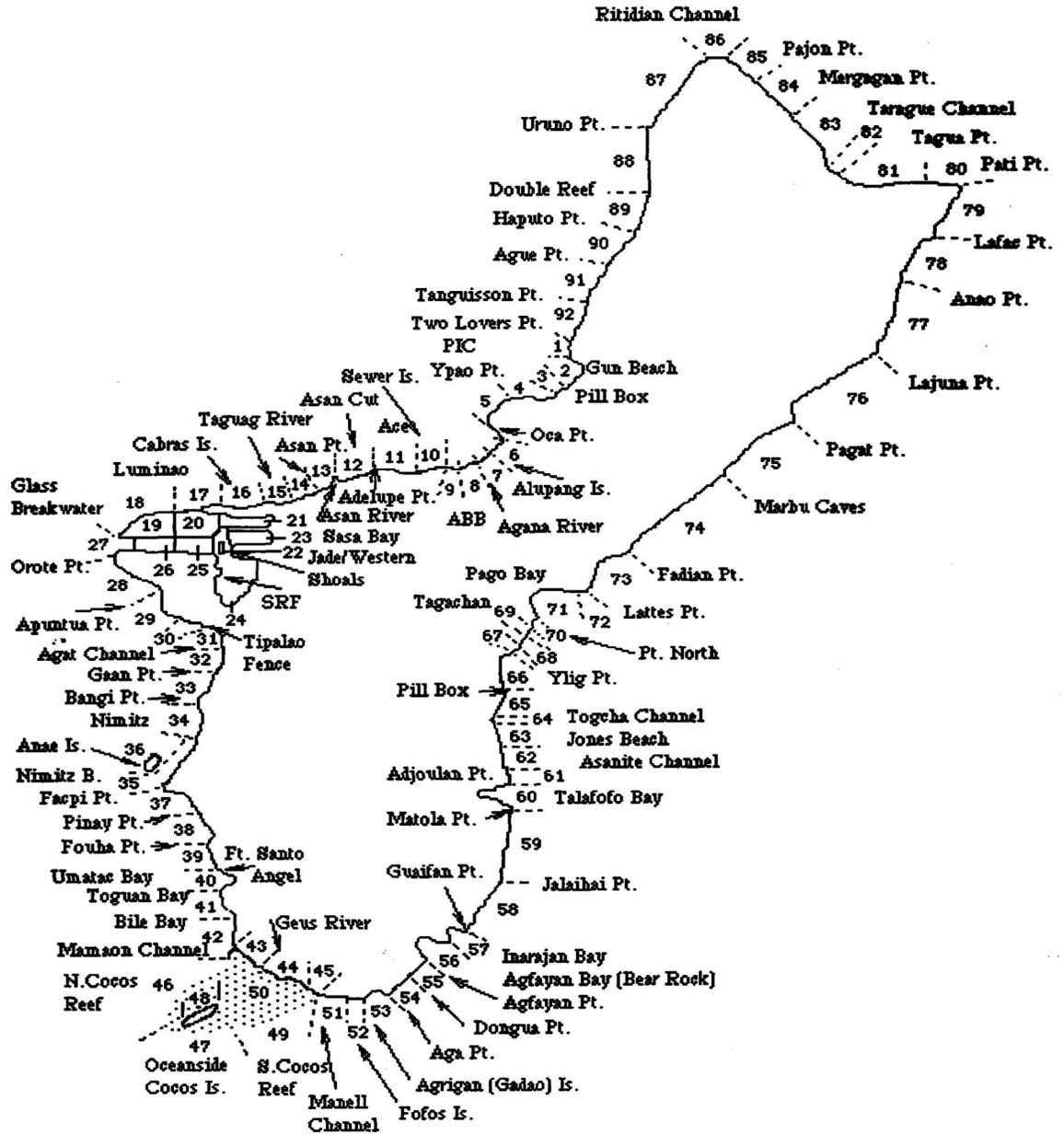


Figure 2. Inshore Survey Location Codes with Landmarks.

**Annual Project Performance Report**  
Guam Division of Aquatic and Wildlife Resources (GDAWR)  
FY 2005

**1. State:** Guam

**Grant number:** F-1R-13

**Grant name:** Guam Sport Fish Investigations

**Project number and name:** Project 1, Management of Guam's Marine Fisheries Resources. Job 3. Inshore Kid's Fishing Derby

**2. Report Period:** October 1, 2005 to September 30, 2006

**Report due date:** December 31, 2005

**3. Location of work:** Guam: Islandwide

**4. Costs:**

Source	Budgeted	Actual <u>or Estimated</u> <b>X</b>
<b>Federal :</b>	\$ 14,237.00	\$7,085
<b>State</b>	-0-	
<b>Other:</b>	-0-	
<b>Total Federal</b>	\$ 14,237.00	\$7,085
<b>Total match</b>	-0-	-0-
<b>Total project:</b>	\$ 14,237.00	\$7,085

**5. Objectives:**

- A. To teach sport fishing, provide new fishers with a positive fishing experience, and foster in them a conservation and management ethic by hosting two kid's fishing derbies each year for 75 participants at an appropriate site along the coastline of Guam.
- B. To provide an opportunity for parents and children to learn about and practice basic fishing skills, including knot-tying and casting by hosting fishing clinics and fishing derbies.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.** N/A

**7. Describe how the objectives were met. See “Supplemental Information” for additional requirements and “Attachments” for specialized tables.**

The objectives were met by holding a two day derby at the Asan War in the Pacific National Historical Park. The two days (Saturday and Sunday-July 9 and 10, 2005) were selected based on estimated tides from the Guam Tide chart book; high tides being better for fishing. The fishing derbies were held from 9:00 a.m. to 11:00 a.m. The number of participants expected was 75 per day, or 150 total. Participants, ages 7-12, were given a safety briefing, as well as a briefing on the rules of the derby prior to the start of the event. A total of 79 kids participated in the derby; fifty kids attended the first day, and only 19 kids attended the second day.

**8. Discuss differences between work anticipated in grant proposal and grant agreement and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

**9. List any publications or in-house reports resulting from this work.**

Please refer to the DAWR Website at ([http—www.guamdawr.org](http://www.guamdawr.org)) and Fisheries section annual reports (2005)

**Name, title, phone number, and e-mail address of person compiling this report:**

Mr. Nathaniel Estoy Martin, Fisheries Biologist I, (671) 735-3986,  
[nathanemartin@hotmail.com](mailto:nathanemartin@hotmail.com)

**Annual Project Performance Report**  
Guam Division of Aquatic and Wildlife Resources (GDAWR)  
FY 2005

**1. State:** Guam

**Grant number:** F-1R-13

**Grant name:** Guam Sport Fish Investigations

**Project number and name:** Project 2. Management of Guam's Freshwater Fisheries Resources. Job 1. Freshwater Monitoring Program

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam, Islandwide

**4. Costs:**

Source	Budgeted	Actual or Estimated <u>X</u>
<b>Federal :</b> _____	\$44,170	\$11,897
<b>State</b>	-0-	
<b>Other:</b> _____	-0-	
_____		
_____		
<b>Total Federal</b>	\$44,170	\$11,897
<b>Total match</b>	-0-	-0-
<b>Total project:</b>	\$44,170	\$11,897

**5. Objectives:**

- A. To monitor the freshwater fishery resource by surveying seven rivers once per year in three watersheds for analysis and comparison between watersheds.
- B. To develop a recreational fishery based on native species in Guam's rivers by surveying seven rivers once per year in three watersheds over a five-year period.
- C. To develop educational materials to heighten public interest in native species found in freshwater ecosystems.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.** N/A

**7. Describe how the objectives were met. See “Supplemental Information” for additional requirements and “Attachments” for specialized tables.**

The Guam Division of Aquatic and Wildlife Resources (GDAWR) conducted surveys to determine the effects of dam (Fena Reservoir) on tropical river fauna. Visual surveys were conducted in randomly chosen quadrats in both experimental (impacted by the dam) and control (not affected by the dam) rivers, and physical data were collected in order to determine species composition, organism density, and habitat characteristics. Data was entered into a spreadsheet so statistical analyses can be performed to compare data from experimental and control rivers to baseline data that were collected in FY 1997.

GDAWR surveyed 6 rivers and 3 ponds in which the freshwater fauna was unknown, and entered the data into a database. The goal of this survey is to produce a comprehensive inventory of Guam’s freshwater biological resources, and to provide a baseline for future environmental work in the rivers. Consequently, new biological information was collected from the six rivers and three ponds.

**8. Discuss differences between work anticipated in grant proposal and grant agreement and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs. N/A**

**9. List any publications or in-house reports resulting from this work.**

Please refer to the DAWR Website at ([http—www.guamdawr.org](http://www.guamdawr.org)) and Fisheries section annual reports (2005)

**Name, title, phone number, and e-mail address of person compiling this report:**

Rodney Brent Tibbatts, Fisheries Biologist I, (671) 735-3987, [brent.tibbatts@gmail.com](mailto:brent.tibbatts@gmail.com)

**Annual Project Performance Report**  
Guam Division of Aquatic and Wildlife Resources (GDAWR)  
FY 2005

**1. State:** Territory of Guam

**Grant number:** F-1R-13

**Grant name:** Guam Sport Fish Investigations

**Project number and name:** Project 2. Management of Guam's Freshwater Fisheries Resources. Job 2. Fena Reservoir Fisheries Monitoring

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam: Fena Reservoir

**4. Costs:**

Source	Budgeted	Actual or Estimated X
Federal :_Sport Fish Restoration	\$5,841	\$1,562
State	- 0 -	
Other:	- 0 -	
<b>Total Federal</b>	\$5,841	\$1,562
<b>Total match</b>	- 0 -	-0-
<b>Total project:</b>	\$5,841	\$1,562

**5. Objectives:**

To monitor the freshwater fishery in Fena Lake by conducting a stock assessment, using electrofishing and mark-recapture methodology, over a five-year period.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.** N/A

**7. Describe how the objectives were met. See “Supplemental Information” for additional requirements and “Attachments” for specialized tables.**

Objectives were not met, primarily because the Navy did not allow access to Naval Magazine. Consequently, no work was conducted to meet expectations.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs. N/A**

**9. List any publications or in-house reports resulting from this work. N/A**

**Name, title, phone number, and e-mail address of person compiling this report:**

R. Brent Tibbatts, Fisheries Biologist I, (671)-735-3987, brent.tibbatts@gmail.com

**Annual Project Performance Report**  
Guam Division of Aquatic and Wildlife Resources (GDAWR)  
FY 2005

**1. State:** Territory of Guam

**Grant number:** F-1R-13

**Grant name:** Guam Sport Fish Investigations

**Project number and name:** Project 2. Management of Guam's Freshwater Fisheries Resources. Job 3. Masso Reservoir Fisheries Monitoring

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Piti, Guam

**4. Costs:**

Source	Budgeted	Actual or Estimated X
Federal : _Sport Fish Restoration	\$8,565	-0-
State	- 0 -	
Other:	- 0 -	
<b>Total Federal</b>	\$8,565	-0-
<b>Total match</b>	- 0 -	
<b>Total project:</b>	\$8,565	-0-

**5. Objectives:**

To monitor the freshwater fishery resource in Masso reservoir and to develop a management plan for a recreational fishery on the lake by conducting mark-recapture studies on a yearly basis to collect biological information of the freshwater fisheries resource.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.** N/A

**7. Describe how the objectives were met. See “Supplemental Information” for additional requirements and “Attachments” for specialized tables.**

During FY 2005, the Guam Division of Aquatic and Wildlife Resources (DAWR) did not conduct monitoring within Masso Reservoir. GDAWR sent a draft Memorandum of Understanding (MOU) to the Ancestral Lands Commission (ALC) in June 2005 and is waiting for ALC to review and approve the MOU before proceeding with the project.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs. N/A**

**9. List any publications or in-house reports resulting from this work. N/A**

**Name, title, phone number, and e-mail address of person compiling this report:**

R. Brent Tibbatts, Fisheries Biologist I, (671)-735-3987, [brent.tibbatts@gmail.com](mailto:brent.tibbatts@gmail.com)

**Annual Project Performance Report**  
Guam Division of Aquatic and Wildlife Resources (GDAWR)  
FY 2005

**1. State:** Territory of Guam

**Grant number:** F-1R-13

**Grant name:** Guam Sport Fish Investigations

**Project number and name:** Project 3. Technical Assistance. Job 1. Technical Assistance to Activities Affecting Guam's Fish Resources

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam: Islandwide

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual or Estimated <u>X</u>
<b>Federal : Sport Fish Restoration</b>	\$177,416	\$132,966
<b>State</b>	-0-	
<b>Other:</b>	-0-	
<b>Total Federal</b>	\$177,416	\$132,966
<b>Total match</b>	-0-	
<b>Total project:</b>	\$177,416	\$132,966

**5. Objectives:**

To provide technical information and increase public awareness on sport fishing and related issues to the public, the private sector, and local and federal government agencies on the island of Guam, as needed each year, through written comments and attendance at meetings.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.** N/A



**7. Describe how the objectives were met. See “Supplemental Information” for additional requirements and “Attachments” for specialized tables.**

During FY 2005, the Fisheries Section reviewed 47 project proposals, including developmental plans, environmental assessments, environmental impact statements, and permit applications. Fisheries Staff attended 150 meetings and made 40 field inspections to review these proposals. Fisheries personnel maintained good working relationships with the Department of Land Management, Department of Parks and Recreation, Guam Bureau of Statistics and Plans (formerly the Bureau of Planning), Guam Environmental Protection Agency, Guam Hotel & Restaurant Association, Guam Visitor's Bureau, University of Guam, U.S. Army Corps of Engineers (ACOE), National Park Service, U.S. Fish and Wildlife Service, Western Pacific Regional Fisheries Management Council, National Marine Fisheries Service, Natural Resources Conservation Service, U.S. Navy, U.S. Coast Guard, and U.S. Air Force regarding matters of environmental concern.

Various Fisheries staff actively served as members of the following groups: Western Pacific Regional Pelagic Plan Monitoring Team, Western Pacific Regional Bottomfish Plan Monitoring Team, Western Pacific Regional Coral Reef Ecosystem Plan Monitoring Team, Guam Coral Reef Initiative Advisory Group, Guam Watershed Planning Committee, Mitigation Working Group, Marine Preserve Eco-permitting Working Group, and Guam Seashore Reserve Working Group.

The Fisheries Section also provided the following technical assistance in FY 05:

1. Technical support to the Division's Agricultural Development Services (ADS), which represents the Department and the Division on the Application Review Committee (ARC), to review applications for rezoning, variances, and various types of development as they pertain to fisheries concerns.
2. Information to the Western Pacific Regional Fisheries Management Council (WESPAC) and the Plan Monitoring Team (PMT) on projects for bottomfish, pelagic fisheries and coral reefs. Staff attended 5 off-island, Council-related meetings.
3. Provided recommendations to the Guam Seashore Reserve Plan, which would help protect Guam's resources from various developmental activities.
4. Responses to requests for information on bills and laws and regulations pertaining to fish, endangered species, fishing and importation of fish.
5. Thirty-five (35) presentations on fisheries resources and marine conservation to schools and organizations during the year.

**8. Discuss differences between work anticipated in grant proposal and grant**

**agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs. N/A**

**9. List any publications or in-house reports resulting from this work. N/A**

**Name, title, phone number, and e-mail address of person compiling this report:**

Jay Gutierrez, Acting Assistant Chief, (671) 735-3955, [jaytgutierrez@yahoo.com](mailto:jaytgutierrez@yahoo.com)

**Annual Project Performance Report**  
Guam Division of Aquatic and Wildlife Resources (GDAWR)  
FY 2005

**1. State:** Territory of Guam

**Grant number:** F-1R-13

**Grant name:** Guam Sport Fish Investigations

**Project number and name:** Project 4. Biological Surveys. Job 1. Visual Stock Assessment Surveys of Marine Preserves and Control Sites

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam: Achang Reef Flat Marine Preserve, Piti Bomb Holes Marine Preserve, Tumon Bay Marine Preserve, Asan Bay, Pago Bay, Cocos Lagoon, backside of Cocos Lagoon, and East Agana Bay

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual or Estimated <u>X</u>
<b>Federal : Sport Fish Restoration</b>	\$68,820	\$44,344
<b>State</b>	0	
<b>Other:</b> _____	0	
_____		
<b>Total Federal</b>	\$68,820	\$44,344
<b>Total match</b>	0	-0-
<b>Total project:</b>	\$68,820	\$44,344

**5. Objectives:**

- A. To evaluate the effect on sport fish populations caused by the creation of five marine preserves where fishing is restricted or prohibited by conducting fish counts and timed-swim counts on 40 permanent transects located in reef flat and lagoon habitats in Achang Reef Flat Marine Preserve, Piti Bomb Holes Marine Preserve, Tumon Bay Preserve, Asan Bay, Pago Bay, and Cocos Lagoon, every two years.

- B. To evaluate the effect on sport fish populations caused by the creation of five marine preserves where fishing is restricted or prohibited by conducting fish counts, timed-swim counts, and video-transects/quadrants on 40 permanent transects located at the 20', 30', 40', and 50' depth contours of the fore reef slopes in Achang Reef Flat Marine Preserve, Piti Bomb Holes Marine Preserve, Tumon Bay Preserve, Asan Bay, and the backside of Cocos Lagoon, every two years.
- C. To monitor "spill-over" effects on sport fish populations caused by the creation of five marine preserves by conducting additional creel surveys at sites adjacent to Achang Reef Flat Marine Preserve and Piti Bomb Holes Marine Preserve each year.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.** N/A

**7. Describe how the objectives were met. See "Supplemental Information" for additional requirements and "Attachments" for specialized tables.**

During this reporting period, the Guam Division of Aquatic and Wildlife Resources (GDAWR) continued collecting the third set of marine preserve data within the preserve and non-preserve areas. Fish counts were conducted along 50 transects by 2 divers/snorkelers on Achang reef flat (8 transects), the Piti Reef Flat (10 transects), the Cocos Lagoon (8 transects), the Pago Bay reef flat (8 transects), the Piti fore-reef (8 transects), and the Asan fore-reef (8 transects) in order to determine fish density. Counters recorded the number of species and individuals, and the approximate size of each fish. Nineteen 30-minute timed-swim counts were conducted in the vicinity of the transects on the Achang reef flat (2 timed-swim counts), the Piti Reef Flat (4 timed-swim counts), the Cocos Lagoon (3 timed-swim counts), the Pago Bay reef flat (2 timed-swim counts), the Piti fore-reef (4 timed-swim counts), and the Asan fore-reef (3 timed-swim counts) in order to determine species diversity. Scoping for site selection was carried out in Tumon Bay Marine Preserve, East Agana Bay, and Asan Bay. These sites will be established early in the next fiscal year. Due to a lack of personnel, GDAWR was not able to conduct video transects within the fore-reef slope sites this year, but plan to revive this transect method during the next fiscal year.

GDAWR staff continued to conduct surveys adjacent to the marine preserves in order to monitor spillover. Spillover data were collected opportunistically during other surveys, such as participation surveys or other creel surveys when fishermen are observed fishing adjacent to the Achang Reef Flat Marine Preserve and Piti Bomb Holes Marine Preserve. Because the collection of spillover data is sparse and has not been consistent, GDAWR will discontinue collecting this information until a more consistent and effective way to obtain the data is decided upon.

GDAWR, in conjunction with NOAA, worked on developing a database for the marine preserve data. The development of the database involves a two step process: the data entry section and the report section. The data entry section of the database has been completed, and DAWR is entering data to test the database to determine if there are any problems with the program. Thus far, no problems have been encountered. The report portion of the database is estimated to be completed before the end of September 2006.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs. N/A**

**9. List any publications or in-house reports resulting from this work.**

Division of Aquatic and Wildlife Resources. 2004. Biological Surveys: Visual Stock Assessment Surveys of Marine Preserves and Control Sites. Guam, Department of Agriculture.

Division of Aquatic and Wildlife Resources. 2003. Two Year Marine Preserve Report. Guam, Department of Agriculture.

Porter, V., Leberer, T., Gawel, M., Burdick, D., Gutierrez, J., Torres, V., and Lujan, E. 2005. "The State of the Coral Reef Ecosystems of Guam" in *The State of Coral Reef Ecosystems of the United States and Pacific Freely Associated States: 2005*. NOAA Technical Memorandum NOS NCCOS 11. NOAA/NCCOS Center for Coastal Monitoring and Assessment's Biogeography Team. Silver Spring, MD. 522pp.

Porter, V., Leberer, T., Gawel, M., Burdick, D., Gutierrez, J., Torres, V., and Lujan, E. 2005. *Status of the Coral Reef Ecosystems of Guam* University of Guam Press, Mangilao. Technical Report 113. 80pp.

Abraham, T., Beger, M., Burdick, D., Cochrane, E., Craig, P., Fenner, D., Golbuu, Y., Gutierrez, J., Hasurmai, M., Houk, P., Idip, D., Jacobson, D., Joseph, E., Keju, T., Kelty, R., Kuartei, J., Leberer, T., Palik, S., Penland, L., Pinca, S., Porter, V., Rikim, K., Starmer, J., Trianni, M., Victor, S., Whaylen, L. 2004. "The Status of the Coral Reefs in Micronesia" in *Status of Coral Reefs of the World: 2004*, Clive Wilkinson ed. Australian Institute of Marine Science, Townsville, Australia.

**Name, title, phone number, and e-mail address of person compiling this report:**

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**Annual Project Performance Report**  
Guam Division of Aquatic and Wildlife Resources (GDAWR)  
FY 2005

**1. State:** Territory of Guam

**Grant number:** F-1R-13

**Grant name:** Guam Sport Fish Investigations

**Project number and name:** Project 5. Management of Guam's Coral Reef Fishery Habitat. Job 1. Quantifying and Assessing the Effects of Sedimentation on Fish Abundance, Fish Diversity, and Benthic Habitats including corals

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Piti, Guam

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual or Estimated <u>X</u>
<b>Federal :</b> _____	<b>\$52,628</b>	\$46,891
<b>State</b>		
<b>Other:</b> _____		
_____		
<b>Total Federal</b>	<b>\$52,628</b>	\$46,891
<b>Total match</b>		
<b>Total project:</b>	<b>\$52,628</b>	\$46,891

**5. Objectives:**

- A. To assess potential sites for the sedimentation study based on qualitative evidence of impact and location of current and future erosion control projects, in order to select sites for detailed monitoring within the first year of the study.
- B. To conduct fish counts, timed-swim counts, and video transects on 12 permanent transects located in the reef flat at each of the three study sites prior to installation of sediment traps and each year during the study, to determine the effects of sedimentation on fish community and benthic habitat.

- C. To conduct fish counts, timed swim counts, and video transects on 12 permanent transects located at the 20', 30', 40', and 50' depth contours of the fore reef slopes at each of the three study sites prior to the installation of sediment traps, and each year during the study to determine the effects of sedimentation on fish community and benthic habitat.
- D. To install and monitor thirty sediment traps on a monthly basis each year during the study at three sites impacted by sedimentation in the coastal waters of southern Guam, in order to quantify sediment load at impacted sites.
- E. To assess land based erosion control programs designed to reduce sedimentation in coastal waters, by monitoring sediment and biological parameters in areas that are scheduled for erosion control activities.
- F. To identify sties that should be targeted for erosion control program in the future.
- G. To build support for land based erosion control programs in the local sport fishing community by providing fishermen with information about sedimentation in Guam, how it affects the reef, and how they can help prevent it.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.** N/A

**7. Describe how the objectives were met. See "Supplemental Information" for additional requirements and "Attachments" for specialized tables.**

During this reporting period, the investigation focused on assessing potential sites for sediment traps and transects for fish counts, timed swim counts, and video transects. Sites were selected based on qualitative evidence of impact and the location of future erosion control projects. Two sites were identified in the Piti Bomb Hole Marine Preserve. These sites are adjacent to the Masso and Taguag Rivers, which empty into Piti Bay.

Piti Bay was selected as a priority area during the initial scoping work for this project as qualitative data suggests that this bay is increasingly impacted by sedimentation. Two of the three rivers, the Taguag and Masso Rivers that feed into Piti Bay show signs of significant stream bank erosion and other sources of sediment.

The area adjacent to the Masso River was chosen as a study site as the Masso Reservoir has filled in over time and limited the settling capabilities of the reservoir. GDAWR plans to rehabilitate the reservoir, which will enhance its settling capabilities and reduce sediment inputs into the bay from the Masso River. In conjunction with this effort, the Forest and Soil Resources Division of the Guam Department of Agriculture is planning to

revegetate areas above the reservoir to further lessen soil erosion and sedimentation. This project will assess these land based erosion control programs.

The area adjacent to the Taguag River has been identified as a second study site as there are currently no plans for rehabilitation, but it appears to have an impact on sedimentation in the bay. It will allow for comparison between a rehabilitated site and a non-rehabilitated one.

This bay is heavily used and the information from this study may be very useful in gathering further support for combating sedimentation. The Piti Bomb Holes Marine Preserves is one of the preserves currently being studied by DAWR for the marine preserve studies, so this site would integrate with existing projects funded by this grant. It will also complement the existing sedimentation monitoring work being conducted by the National Park Service in the War in the Pacific National Historic Park at Asan Bay just to the east of Piti Bay.

GDAWR was unable to install sediment traps and establish transects this year due to a lack of manpower constraints. It is believed that this shortage will be relieved during the next fiscal year and that the rest of the objectives will be met.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

Due to staff shortages, this project moved at a much slower pace than initially anticipated. Limited personnel were needed for existing projects, such as the creel surveys and marine preserve monitoring. For this reason, only a portion of this project was implemented, and a portion of purchase of the equipment was suspended funds in case GDAWR was unable to carry out the project. GDAWR expects to remedied the staff shortages in the next fiscal year, when equipment to monitor these sites can be installed and meet the project's objectives.

**9. List any publications or in-house reports resulting from this work.**

N/A

**Name, title, phone number, and e-mail address of person compiling this report:**

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**Annual Project Performance Report**  
Guam Division of Aquatic and Wildlife Resources (GDAWR)  
FY 2005

**1. State:** Territory of Guam

**Grant number:** F-6-B-5

**Grant name:** Guam Sport Fish Investigations

**Project number and name:** Maintenance and Repair of Ramps and Piers

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Hagatna Boat Basin, Merizo Pier and Boat Ramp

**4. Costs:**

Source	Budgeted	Actual or Estimated
<b>Federal :</b>	\$230,514	\$30,153.99
<b>State</b>	-0-	
<b>Other:</b>	-0-	
<b>Total Federal</b>	\$230,514	\$30,153.99
<b>Total match</b>	-0-	
<b>Total project:</b>	\$230,514	\$30,153.99

**5. Objectives:**

To maintain and repair Merizo Ramp and Pier, Agana Boat Basin, Agat Marina, and Seaplane Ramp for boaters and recreational fishermen, over a one year period.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.** N/A

**7. Describe how the objectives were met. See “Supplemental Information” for additional requirements and “Attachments” for specialized tables.**

During FY05, boating access funds were earmarked for improving the Agana Boat Basin (ABB). ABB is the primary boating access facility for trailered boats and is used by a mixture of private boat owners, fishing charter boats, and parasail boats. The facility was not adequately repaired after previous supertyphoons only coverings were placed over holes in the walkways. Currently, the revenue collected by the Port Authority of Guam for slip usage accounts only for a small fraction of the cost for maintaining ABB, resulting in a rundown facility. Previous funds were used to waterblast the walkways, add gravel to the spillover parking lot, and a Boating Infrastructure Grant (BIG) was initially awarded to assist with upgrading the facility, although transient vessel traffic is relatively low.

During mid-FY 05, the Guam Division of Aquatic and Wildlife Resources (GDAWR) began working on a Memorandum of Understanding (MOU) with the Port Authority of Guam (PAG) to maintain and repair the Agana Boat Basin and Agat Marina. This MOU would ensure the vested interest of federal assistance funds. Proposed plans to spend Boating Access funds were put on hold until the MOU was created. Consequently, the MOU was not completed between PAG and GDAWR. Currently, PAG and GDAWR are working on the MOU; fine-tuning the wording in regard to the information that PAG collects on boaters renting slippage to ensure the vested interest of recreational boaters.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

**9. List any publications or in-house reports resulting from this work.**

**Name, title, phone number, and e-mail address of person compiling this report:**

Thomas Flores, Jr., Fisheries Biologist III, (671) 735-3987, thomasfloresjr@yahoo.com.

**Annual Project Performance Report**  
Guam Division of Aquatic and Wildlife Resources (GDAWR)  
FY 2005

**1. State:** Territory of Guam

**Grant number:** F-8-D-4

**Grant name:** Guam Sport Fish Investigations

**Project number and name:** Maintenance and Repair of Fishing Platforms and Renovation of Office Space and Storage Facility

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam: Ylig and Togcha Bay for fishing platforms, and Mangilao for renovation of office space and storage facility

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual or Estimated
<b>Federal : Sport Fish Restoration</b>	\$208,786	\$92,698.22
<b>State</b>	-0-	
<b>Other:</b>	-0-	
<b>Total Federal</b>	208,786	\$92,698.22
<b>Total match</b>	-0-	
<b>Total project:</b>	208,786	\$92,698.22

**5. Objectives:**

- A. To maintain and repair the 5 fishing platforms located on the reef flats of Talofof, Ylig, and Togcha Bays, over a one-year period. Maintenance will include removal of accumulated trash in the vicinity of the platforms. The type of repair will depend on the type of damage encountered and will be provided as needed.
- B. To renovate and maintain the division's existing office space in order to provide more efficient use of limited space for fisheries work-stations, complete renovations of storage facility, and purchase office generator and and supplies.

Partitions, bookcases, and cubicle style desks, shelves, and file cabinets will be purchased.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.** N/A

**7. Describe how the objectives were met. See “Supplemental Information” for additional requirements and “Attachments” for specialized tables.**

A grant proposal for Federal Assistance Funds was submitted to the U.S. Fish and Wildlife Service to replace the two fishing platforms that were damaged during Typhoon Pongsona in December 2002. During FY 2006, the Guam Division of Aquatic and Wildlife Resources (GDAWR) will consult with village mayors for community assistance on potential locations for the two platforms. Afterwards, a proposal will be submitted to the Department of Public Works to bid out the project.

GDAWR visited the existing platform sites, approximately 3 times, in FY 05 to remove trash and fishing line entangled within the platform.

Renovations to the Fisheries office are partially completed. The Fisheries office is separated into two sections: professional and technical. During FY 05, partitions, desks, bookcases, shelves, and filing cabinets were installed within the technical section of the fisheries office. Quotes for similar office furniture were obtained for the professional section; submitted the General Service Agency; and awarded to a vendor. GDAWR is currently waiting for the vendor to install the office furniture when it arrives on island.

Renovations to the Fisheries office building were made and continue to improve implementation of the Sport Fish Restoration Program. A wall was put up to separate the Fisheries section from the Enforcement section. An enclosure was removed within the Fisheries section allowing staff more room to perform their daily functions. Wooden doors within the Fisheries section were removed and replaced with aluminum doors because the wooden doors were being replaced every six months to a year. The aluminum material will ensure that the doors have a longer life span. A purchase order for new air conditioner units were obtained, and GDAWR is waiting for the vendor to install the new units.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.** N/A

**9. List any publications or in-house reports resulting from this work.**

Division of Aquatic and Wildlife Resources. 2004. Maintenance and Repair of Fishing Platforms and Renovation of Office Space and Storage Facility. Guam, Department of Agriculture.

**Name, title, phone number, and e-mail address of person compiling this report**  
Jay Gutierrez, Acting Assistant Chief, (671) 735-3955, jaygutierrez@yahoo.com

**Annual Project Performance Report**  
Guam Division of Aquatics and Wildlife Resources  
FY 2005

**1. State:** Guam

**Grant number:** F-9-D-5

**Grant name:** Guam Sport Fish Investigations

**Project number and name:** Maintenance and Redeployment of DAWR FADs and SWMs

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam: Islandwide

**4. Costs:**

Source	Budgeted	Actual or Estimated
<b>Federal :</b> _____	\$146,044	\$62,919.83
<b>State</b>	-0-	
<b>Other:</b> _____	-0-	
_____		
<b>Total Federal</b>	\$146,044	\$62,919.83
<b>Total match</b>	-0-	
<b>Total project:</b>	\$146,044	\$62,919.83

**5. Objectives:**

- A. To maintain, preserve, and replace the 14 fish aggregating devices located between 3.5 and 12 miles off the island of Guam, in a one year period.
- B. To maintain, preserve, and replace the 34 shallow water mooring buoys located in 30-40 ft. of water off the coast of Guam, in a one year period.
- C. To study the feasibility of establishing new shallow water mooring buoys within Tumon Bay Marine Preserve, Piti Bomb Holes Marine Preserve, and Achang Reef flat Preserve in a one year period.

**6. If the work in this grant was part of a larger undertaking with other components**

**and funding, present a brief overview of the larger activity and the role of this project.** N/A

**7. Describe how the objectives were met. See “Supplemental Information” for additional requirements and “Attachments” for specialized tables.**

The Guam Division of Aquatic and Wildlife Resources (GDAWR) is currently responsible for the maintenance and redeployment of 14 Fish Aggregating Devices (FAD) sites and 34 Shallow Water Moorings (SWM) sites located on northern and leeward sides of Guam. During FY 2005, GDAWR conducted aerial surveys on July 28, and May 5, 2005 to determine the status of the FADs and SWMs. Data from aerial surveys revealed that 4 FADs (Ledge, Facpi #1, Umatac, and Cocos), and 13 SWMs (Double Reef #2, Hilaan Point, Tumon #1, Alupat Island, Rizal, Hap’s reef, Alutom Island, Navy Channel, Cocos Wall, Cocos #3, Jade Shoals, Western Shoals, and Gab Gab #1) were off-line. The SWMs will remain off-line pending reinstallation by the Guam Marine Awareness Foundation (GMAF). GMAF are installing the SWMs on a voluntary basis and as time and weather allows. Thus far, GMAF has installed twenty-one SWMs: Double Reef, Gun Beach, Tumon #2, East Agana, West Agana, Asan, Piti, Amphitheater, Luminao Reef, Blue Hole, Shark’s Pit, Bangi Point, Anae Island, Pete’s Reef, Sella Bay, Toguan Bay, Bile Bay, Cocos #1, Cocos #2, Gab Gab 2, and Cetti Bay.

**8. Discuss differences between work anticipated in grant proposal and grant agreement and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

**A.** The Cocos FAD was not re-deployed due to “**high surf**” advisory during the scheduled date of deployment. Scheduling conflicts with our contractor prevented re-deployment of the FAD during FY05.

**B.** Supplies, including FAD labels and rope systems, are currently being ordered.

**9. List any publications or in-house reports resulting from this work.**

Please refer to the DAWR Website at (<http—www.guamdawr.org>) and Fisheries section annual reports (2005)

**Name, title, phone number, and e-mail address of person compiling this report:**

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**Annual Project Performance Report**  
Guam Division of Aquatic and Wildlife Resources (GDAWR)  
FY 2005

**1. State:** Territory of Guam

**Grant number:** F-10-D-1

**Grant name:** Guam Sport Fish Investigations

**Project number and name:** Construction of Rinse-Off Facility and Installation of Electrical System in the Fisheries Warehouse

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam: Mangilao

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual or Estimated
<b>Federal : Sport Fish Restoration</b>	\$124,536	\$1070.23
<b>State</b>	-0-	
<b>Other:</b>	-0-	
<b>Total Federal</b>	\$124,536	\$1070.23
<b>Total match</b>	-0-	
<b>Total project:</b>	\$124,536	\$1070.23

**5. Objectives:**

- A. To construct a rinse-off facility within a two-year period to store, wash, and secure field equipment.
- B. To rewire the electrical system in the Division's existing storage facility within a two year period to provide for a climate-controlled mezzanine for storage of archival materials.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.** N/A

**7. Describe how the objectives were met. See “Supplemental Information” for additional requirements and “Attachments” for specialized tables.**

During FY 2005, the Guam Division of Aquatic and Wildlife Resources (GDAWR) drafted plans and specifications for the construction of the rinse-off facility. GDAWR sent a work request for the construction of the facility and rewiring the electrical system to the Department of Public Works (DPW) in November 2004. Subsequently, DPW staff worked with GDAWR on finalizing the plans and specifications for the bid process. An invitation for bid was announced and advertised in July 2005, and DPW and respective bidders visited the proposed rinse-off area at the Department. Sealed bids were opened in early August 2005, and the project was awarded to the lowest bidder. A contract was drafted, and GDAWR is waiting signatures from the Bureau of Budget and Management Research (BBMR), the Guam Attorney General’s Office, and the Governor of Guam’s Office. Once the contract is signed by all parties, GDAWR can proceed with the project.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.** N/A

**9. List any publications or in-house reports resulting from this work.** N/A

**Name, title, phone number, and e-mail address of person compiling this report:**

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**Annual Project Performance Report**  
Guam Division of Aquatic and Wildlife Resources (GDAWR)  
FY 2005

**1. State:** Territory of Guam

**Grant number:** F-11-D-1

**Grant name:** Guam Sport Fish Investigations

**Project number and name:** Masso Reservoir Restoration

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Entire Island of Guam

**4. Costs:**

Source	Budgeted	Actual <u>or Estimated</u> <u>X</u>
<b>Federal :</b>	\$366,043	\$817.889
<b>State</b>	-0-	
<b>Other:</b>	-0-	
<b>Total Federal</b>	\$366,043	\$817.889
<b>Total match</b>	-0-	
<b>Total project:</b>	\$366,043	\$817.889

**5. Objectives:**

A. Restoration of Masso Reservoir to enhance fish habitat, as well as enhancing endangered moorhen habitat. This will be accomplished by dredging of the Reservoir to a depth of 8 feet. In addition, sediment traps will be placed in rivers flowing into Masso Reservoir, to inhibit future silt deposition into the Reservoir.

B. Installation of a fishing pier to facilitate recreational fishing.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.** N/A

**7. Describe how the objectives were met. See “Supplemental Information” for additional requirements and “Attachments” for specialized tables.**

During FY 2005, the Guam Division of Aquatic and Wildlife Resources (GDAWR) discovered that the Ancestral Lands Commission (ALC) owned Masso Reservoir. The reservoir was returned to the Government of Guam from the U.S. Government on July 6, 2000. The Government of Guam then transferred ownership of the reservoir to the ALC on October 19, 2000. Because ALC owns the reservoir, the Masso Reservoir rehabilitation and enhancement project has been delayed briefly until a Memorandum of Understanding (MOU) between GDAWR and ALC is established. GDAWR met with ALC in March 2005 to discuss the project, and they verbally agreed to the project. GDAWR submitted a Memorandum of Understanding (MOU) to the ALC in June 2005, and is still waiting for a response from them. After an agreement is reached, a wetlands delineation study will be conducted, and all permits (GEPA, DPW) will be acquired to proceed with the Masso Reservoir project. The U.S. Army Corps of Engineers will grant a permit to GDAWR if the Government of Guam agencies listed above issue permits to us. These permits will be obtained next fiscal year. Subsequently, a proposal for the Masso Reservoir project will be submitted to the Guam Department of Public Works.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

**9. List any publications or in-house reports resulting from this work.** None

**Name, title, phone number, and e-mail address of person compiling this report:**

R. Brent Tibbatts, Fisheries Biologist I, (671) 735-3987, brent.tibbatts@gmail.com

**WILDLIFE RESTORATION**  
**FY 2005**  
**W-1-R-13**

## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** W-1R-13

**Grant name:** Guam Wildlife Restoration Program

**Project number and name:** Subproject A. Management of Guam's populations of Birds and Mammals Study No. W-1. Game and Non-game Birds. Job 1. Survey and Inventory of Resident and Migrant Birds of Guam and Rota.

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual ___or Estimated_x_
Federal : PR Funding	\$92,500	\$ 90,000
State	\$0	
Other: _____	\$0	
_____		
_____		
<b>Total Federal</b>	<b>\$92,500</b>	<b>\$ 90,000</b>
<b>Total match</b>	<b>\$0</b>	
<b>Total project:</b>	<b>\$92,500</b>	<b>\$ 90,000</b>

**5. Objectives:** (list project objectives from grant proposal or grant agreement)

Objective 1. To determine population trends, distribution and breeding status of the Mariana crow by conducting monthly searches for birds in northern Guam.

Objective 2. To determine population trends, distribution and breeding status of the Guam swiftlet [now known as the Mariana gray swiftlet] by conducting quarterly cave counts of birds entering and exiting active caves, the Mahlac, Maemong, and Fachi caves and surveying these caves for nesting birds.

Objective 3. To determine population trends of other game (black francolin) and non-game birds (yellow bittern, blue breasted quail, Micronesian starling, Eurasian tree sparrow, white tern, brown nobby, and migrant species) by conducting annual roadside surveys throughout the island.

Objective 4. To determine population trends and distribution of Guam rails on the island of Rota

in areas where they occur including the Sugua Gaga, I Chiugai, and Gampapa, by conducting playback surveys along transects and roadways.

Objective 5. Record and confirm noteworthy sightings of migrant bird species.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

N/A

**7. Describe how the objectives were met. See "Supplemental Information" for additional requirements and "Attachments" for specialized tables.**

Objective 1.

Monthly searches for Mariana crow were conducted in the Munitions Storage Area 1 (MSA 1), Ritidian Point, Tarague Basin, and Pati Point utilizing FY05 PR funds. Searches were conducted using playbacks and hiking through known territories. Ten crows remain in the wild in northern Guam. DAWR staff closely monitored the location of eight of the ten crows throughout FY 2005. It is vital to the survival of the species that we continue to monitor and manage this small population on Guam.

Objective 2.

A single population survey was conducted in the first quarter of FY 2005. The survey indicated a population size of approximately 532 swiftlets. This number is consistent with surveys conducted in FY 2004. The population has been stable since survey's resumed after Typhoon Pongsonga in 2002.

Objective 3.

The annual Spring Bird Count occurred in May 2005 using FY 2005 funds. Twenty-four routes were surveyed throughout the island covering 220 stations. Due to staffing shortages and priority of other projects, the results of the survey have not been completely compiled.

Objective 4.

During the month of June 2005, playbacks of rail vocalizations were broadcast at 81 points along four established transects to monitor population trends there. In addition, playbacks of rail vocalizations were broadcast at 325 random points in areas listed in the objectives above. Random points were surveyed between March 2005 and September 2005.

Objective 5.

No noteworthy sightings of migrants bird species were recorded in FY 2005.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

Objective 1. N/A

Objective 2. No other surveys were conducted during FY 2005. Several factors, including lack of available DAWR staff, incompatible scheduling with the Navy for access to Naval Ordnance, and weather related delays contributed to the lack of survey's for FY 2005.

**9. List any publications or in-house reports resulting from this work.**

The results of this project will be available in DAWR's annual report for FY05 (in prep).

**Name, title, phone number, and e-mail address of person compiling this report:**

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## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** W-1R-13

**Grant name:** Guam Wildlife Restoration Program

**Project number and name:** Subproject A. Study No. W-2. Native Mammals. Job 1. Population biology of Marianas fruit bats in the Mariana Islands.

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual ___ or Estimated _x_
Federal : PR Funding	\$4,000	\$4,000
State	\$0	
Other: _____	\$0	
_____		
_____		
<b>Total Federal</b>	<b>\$4,000</b>	<b>\$4,000</b>
<b>Total match</b>	<b>\$0</b>	
<b>Total project:</b>	<b>\$4,000</b>	<b>\$4,000</b>

**5. Objectives:** (list project objectives from grant proposal or grant agreement)

Determine population trends and age-structure of fruit bats on Guam by conducting monthly counts of known roost sites including the Andersen Air Force Base roost.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

N/A

**7. Describe how the objectives were met. See "Supplemental Information" for additional requirements and "Attachments" for specialized tables.**

The objectives were met with bat surveys (11 counts) of the Pati Point colony conducted from

October 2004-September 2005. No survey was conducted in August due to delays by Andersen Air Force Base in renewing base access for the observer. The number of adult bats ranged from 30-66, with the minimum count in September, and the maximum count in February. No large-scale movements of bats were noted this year. Pups were present in all nine pup counts over the year, ranging from two to eight pups present. Peak pup counts occurred in February (8 pups) and May (8 pups). It is generally assumed that brown treesnakes (*Bioga irregularis*) predate the young pups at some time during the non-volant stage of development, resulting in an almost total lack of pups in the large pup size class. In February, a pup of the large pup size class was observed in the colony.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

N/A

**9. List any publications or in-house reports resulting from this work.**

The results of this project will be available in DAWR's annual report for FY05 (in prep).

**Name, title, phone number, and e-mail address of person compiling this report:**

Dustin Janeke, Research Cooperator DAWR, 671-477-6614, [pteropus@netpci.com](mailto:pteropus@netpci.com)

## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** W-1R-13

**Grant name:** Guam Wildlife Restoration Program

**Project number and name:** Subproject A. Management of Guam's populations of Birds and Mammals Study No. W-3. Introduced mammal investigation. Job 1. Population biology of deer and feral Asiatic water buffalo.

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual ___ or Estimated _x_
Federal : PR Funding	\$32,000	\$32,000
State	\$0	
Other: _____	\$0	
_____		
_____		
<b>Total Federal</b>	<b>\$32,000</b>	<b>\$32,000</b>
<b>Total match</b>	<b>\$0</b>	
<b>Total project:</b>	<b>\$32,000</b>	<b>\$32,000</b>

**5. Objectives:** (list project objectives from grant proposal or grant agreement)

Objective 1. Determine deer abundance by conducting monthly spotlight counts at Pati Point, Munitions Storage Area (MSA) and Northwest Field on Andersen Air Force Base (AAFB), Naval Computer and Telecommunications Station (NCTAMS) and Naval Ordnance Annex (NOA).

Objective 2. Determine feral carabao abundance in conjunction with the monthly counts on NOA.

Objective 3. Document note worthy sightings of deer and feral carabao.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

N/A

**7. Describe how the objectives were met. See “Supplemental Information” for additional requirements and “Attachments” for specialized tables.**

Objective 1.

The objectives were met in FY 2005. Nightly counts were conducted monthly from November 2004 thru September 2005.

Objectives 2 and 3 were not met.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

Objective 2.

No counts were conducted on Naval properties (NCTAMS and NOA). Attempts by DAWR staff to coordinate access to these areas were not successful due to scheduling conflicts.

Objective 3.

No work was done to determine abundance of carabao or record sightings for this species.

**9. List any publications or in-house reports resulting from this work.**

The results of this project will be available in DAWR's annual report for FY05 (in prep).

**Name, title, phone number, and e-mail address of person compiling this report:**

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## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** W-1R-13

**Grant name:** Guam Wildlife Restoration Program

**Project number and name:** Subproject A. Management of Guam's populations of Birds and Mammals Study No. W-4. Monitoring Harvest of Game Mammals and Birds. Job 1. Harvest of deer, feral pigs, feral carabao and black francolin.

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual ___ or Estimated _x_
<b>Federal : PR Funding</b>	<b>\$16,500</b>	<b>\$16,500</b>
<b>State</b>	<b>\$0</b>	
<b>Other: _____</b>	<b>\$0</b>	
_____		
_____		
<b>Total Federal</b>	<b>\$16,500</b>	<b>\$16,500</b>
<b>Total match</b>	<b>\$0</b>	
<b>Total project:</b>	<b>\$16,500</b>	<b>\$16,500</b>

**5. Objectives:** (list project objectives from grant proposal or grant agreement)

Objective 1. Determine the hunter harvest of deer, feral pigs, and black francolin by analyzing mandatory hunter questionnaires and hunter logs from Andersen Air Force Base.

Objective 2. Determine the impact game animals by tabulating depredation permit take of deer, feral pigs, feral carabao and black francolin based on monthly Depredation Reports, which are required of all permittees for the duration of their permit.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

N/A

**7. Describe how the objectives were met. See “Supplemental Information” for additional requirements and “Attachments” for specialized tables.**

Objective 1.

This objective was met based on hunter questionnaires received. A total of 244 deer were reported as harvested based on the questionnaires. Hunting of feral pigs remains open year-round and 217 were reported harvested in FY 2005. There were no reports of black francolins being harvested.

Andersen Air Force Base (AAFB) hunter logs indicated 620 deer and 126 feral pigs were harvested in FY 2005. Harvesting of black francolins on AAFB is not permitted.

Objective 2.

A total of 42 Depredation Permits were issued in FY 2005. Residents issued depredation permits are required to submit monthly reports to DAWR indicating numbers and species harvested. From the reports received a total of 230 feral pigs and 71 deer were harvested. However, these numbers are conservative, as not all monthly reports have been submitted.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

**9. List any publications or in-house reports resulting from this work.**

The results of this project will be available in DAWR's annual report for FY05 (in prep).

**Name, title, phone number, and e-mail address of person compiling this report:**

Jeffrey Quitugua, Biologist I, 671-735-3996, [jdsquit@yahoo.com](mailto:jdsquit@yahoo.com)

## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** W-1R-13

**Grant name:** Guam Wildlife Restoration Program

**Project number and name:** Subproject B. Study No. W-1. Threatened and Endangered Species Investigations. Job 1. Natural History of Marianas fruit bats in the Mariana Islands.

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual ___ or Estimated _x_
Federal : PR Funding	\$28,000	\$15,000
State	\$0	
Other: _____	\$0	
_____		
_____		
<b>Total Federal</b>	<b>\$28,000</b>	<b>\$15,000</b>
<b>Total match</b>	<b>\$0</b>	
<b>Total project:</b>	<b>\$28,000</b>	<b>\$15,000</b>

**5. Objectives:** (list project objectives from grant proposal or grant agreement)

Objective 1. To determine the home range, habitat requirements and activity patterns of the Mariana fruit bat in northern and southern Guam by radio fitting 15 individuals during FY 2005, banding at least 40 bats, and by making observations of bats at the roost colony opportunistically during the two years.

Objective 2. Complete report in FY 2005.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

N/A

**7. Describe how the objectives were met. See "Supplemental Information" for additional**

**requirements and “Attachments” for specialized tables.**

Objectives of the study were met with the netting and radio tracking of three bats in FY 2005. Two male and one female bat were netted in October and November, 2004. Both male bats were collared and tracked for 36 and 81 days respectively, by which time both bats had shed their collars. The female bat was not collared, and was released after basic data was collected. Day-roosting and foraging locations were determined locations were identified on Andersen Air Force Base, and vegetation sampling was conducted to determine the characteristics of the habitats. A total of 21 vegetation transects were conducted in FY 2005 in four areas used by bats as determined by radio tracking. All four bat use areas showed considerable similarity due to a general dominance of the forest by the native species *Guamia mariannae*. The toxic effects of the non-native shrub, *Cestrum diurnum*, which is known to be part of the Mariana fruit bat diet, were identified as a potential threat to the continued health and persistence of fruit bats on Guam.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

This study did not reach the desired number of bat captures as stated in the objectives for radio collaring and banding. The small numbers of captures were a result of the low number of fruit bats on Guam, resulting in 0.04 fruit bats captured per net hour effort.

**9. List any publications or in-house reports resulting from this work.**

Janeke, Dustin S. (2005). Habitat use of the Mariana flying fox (*Pteropus mariannus mariannus*) on Guam, USA. Masters Thesis. University of Guam. *In Prep.*

Results of this study were also presented at the 2005 North American Symposium on Bat Research, in Sacramento, CA, October 19-22.

**Name, title, phone number, and e-mail address of person compiling this report:**

Dustin Janeke, Research Cooperator DAWR, 671-477-6614, [pteropus@netpci.com](mailto:pteropus@netpci.com)

## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** W-1R-13

**Grant name:** Guam Wildlife Restoration Program

**Project number and name:** Subproject B. Natural History and Ecology of Guam's Vertebrates. Study No. W-1 Threatened and Endangered Species. Job 2. Natural History of Endangered Birds.

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual ___ or Estimated _x_
Federal : PR Funding	\$75,900	\$75,900
State	\$0	
Other: _____	\$0	
_____		
_____		
<b>Total Federal</b>	<b>\$75,900</b>	<b>\$75,900</b>
<b>Total match</b>	<b>\$0</b>	
<b>Total project:</b>	<b>\$75,900</b>	<b>\$75,900</b>

**5. Objectives:** (list project objectives from grant proposal or grant agreement)

Objective 1. To determine nesting success, home range, habitat requirements and activity patterns of Mariana crows in northern Guam in the Andersen Air Force Base area and on Rota.

Objective 2. To determine the nesting success and activity patterns of the Guam [Mariana gray] swiftlet at the Mahlac, Fachi, and Maemong caves.

Objective 3. To determine estimated number of pairs, clutches and size, nesting success and activity patterns of Guam rails in Area 50 and on Rota.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

N/A

**7. Describe how the objectives were met. See “Supplemental Information” for additional requirements and “Attachments” for specialized tables.**

Objective 1. During the breeding season, crow searches are conducted in territories of established breeding pairs on Guam and Rota. Searches are conducted on a daily basis during the breeding season on Guam. On Rota, searches are conducted daily when crow project members are present on Rota. Pairs are observed for behaviors relating to nest building, incubation and/or brooding of chicks.

DAWR staff monitored four nests on Guam in FY 2005. No observations were done on Rota in FY 2005. Some of the data collected included nest attendance, egg turns, chick and/or mate feeding, and other behaviors. All eggs produced from these four nests were harvested for artificial incubation at the DAWR facility in Mangilao. Dummy eggs were placed in the nests and observed over the 21 day incubation period.

Objective 2. One survey for nesting success was conducted at Mahlac cave in the first quarter of FY 2005. On November 11, fifteen large chicks were observed in nests and 15-20 adults were observed brooding or incubating. No other nesting surveys were conducted for FY 2005.

Fachi cave: No surveys were conducted at Fachi cave for FY 2005. The Navy will only allow access to the Ordnance Annex to survey the Mahlac cave.

Maemong cave: No surveys were conducted at Maemong cave for FY 2005. The Navy will only allow access to the Ordnance Annex to survey the Mahlac cave.

Objective 3. Transmitter fitted rails released on Rota during FY 2005 were followed to determine the number of pairs formed, clutch sizes, nesting success and activity patterns.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

Objective 2. Due to a lack of available DAWR staff, incompatible scheduling with the Navy for access to Naval Ordnance, and weather related delays only a one survey was conducted at Mahlac cave. No surveys were done at Fachi and Maemong caves because the Navy will only allow access to the Ordnance Annex to survey Mahlac cave.

Objective 3. No rails were released in Area 50 so we did not collect data relating to nesting and activity patterns there.

**9. List any publications or in-house reports resulting from this work.**

The results of this project will be available in DAWR's annual report for FY05 (in prep).

**Name, title, phone number, and e-mail address of person compiling this report:**

Lloyd Blaine Dicke, Biologist II, 671-735-3955, [blainedicke@yahoo.com](mailto:blainedicke@yahoo.com)  
Paul Wenninger, Biologist II, 671-735-3996, [pwenninger@yahoo.com](mailto:pwenninger@yahoo.com)

## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** W-1R-13

**Grant name:** Guam Wildlife Restoration Program

**Project number and name:** Subproject B. Natural History and Ecology of Guam's Vertebrates. Study No. W-4. Non-game mammal investigations. Job 1. Eradication of Feral Asiatic Buffalo on Naval Ordnance Annex, Guam.

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual ___ or Estimated _x
Federal : PR Funding	\$17,300	\$0
State	\$0	
Other: _____	\$0	
_____		
_____		
<b>Total Federal</b>	<b>\$17,300</b>	<b>\$0</b>
<b>Total match</b>	<b>\$0</b>	
<b>Total project:</b>	<b>\$17,300</b>	<b>\$0</b>

**5. Objectives:** (list project objectives from grant proposal or grant agreement)

Objective 1. Determine the effects of removing feral Asiatic water buffalo from the Naval Ordnance area.

Objective 2. Assist in the removal of carabao from the Naval Ordnance area.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

N/A

**7. Describe how the objectives were met. See "Supplemental Information" for additional requirements and "Attachments" for specialized tables.**

Objectives 1 and 2 were not met in FY 2005 due to man-power constraints.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

No work was done to meet the objectives of this project in FY 2005.

**9. List any publications or in-house reports resulting from this work.**

**Name, title, phone number, and e-mail address of person compiling this report:**

Jeffrey Quitugua, Biologist I, 671-735-3996, [jdsquit@yahoo.com](mailto:jdsquit@yahoo.com)

## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** W-1R-13

**Grant name:** Guam Wildlife Restoration Program

**Project number and name:** Technical Assistance to Activities Affecting Guam's Wildlife Resources. Study No. W-1, Technical Assistance.

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual ___ or Estimated _x_
Federal : PR Funding	\$42,000	\$42,000
State	\$0	
Other: _____	\$0	
_____		
_____		
<b>Total Federal</b>	<b>\$42,000</b>	<b>\$42,000</b>
<b>Total match</b>	<b>\$0</b>	
<b>Total project:</b>	<b>\$42,000</b>	<b>\$42,000</b>

**5. Objectives:** (list project objectives from grant proposal or grant agreement)

Objective 1. To minimize the adverse impacts resulting from the construction of recreational, commercial, military and public facilities. Report on the number of projects reviewed and provide information on the amount of habitat preserved, mitigations implemented, etc.

Objective 2. Participate in emergency responses to salvage wildlife and to participate in emergency exercises that involve responding to accidental oil and toxic substance spills on wildlife.

Objective 3. To ensure that development and utilization of Guam's coastal and interior areas does not result in the deterioration of the environment.

Objective 4. To pursue the possibility of establishing safe-harbor, habitat conservation plan agreements with private and other non-federal landowners to encourage the protection and enhancement of land conducive to native wildlife.

Objective 5. Development of a Comprehensive Wildlife Conservation and Restoration Plan.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

N/A

**7. Describe how the objectives were met. See “Supplemental Information” for additional requirements and “Attachments” for specialized tables.**

DAWR reviewed and provided technical assistance for 16 major construction projects and many smaller projects impacting wildlife on Guam in FY 2005. Several of the projects were located on Andersen Air Force Base (AAFB), Guam. The Air Force plans to expand personnel, training, and infrastructure and will seriously impact natural resources on Guam. DAWR has worked closely with Mr. Dana Lujan, AAFB Chief Conservation Officer, and Mr. Jonathan Wald, Natural Resource Planner for AAFB, through informal and formal meetings to mitigate some of the impacts to resources. The Air Force has not produced finalized Environmental Assessments for any of these projects and therefore, no formal mitigation plans have been formulated for Air Force projects in FY 2005.

In addition, DAWR has reviewed several plans by Government of Guam (Department of Public Works- Highway Division and Chamorro Land Trust) and private entities (Perez Bros., Inc, Mr. Henry Simpson- Guam Raceway Park, Duenas and Associates, and Shell Guam) that would affect natural resources on publicly owned lands. No mitigation plans have been formulated for these projects and negotiations are on-going.

The Comprehensive Wildlife Conservation Strategy was completed on time.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

N/A

**9. List any publications or in-house reports resulting from this work.**

The results of this project will be available in DAWR's annual report for FY05 (in prep).

**Name, title, phone number, and e-mail address of person compiling this report:**

Lloyd Blaine Dicke, Biologist II, 671-735-3996, [blainedicke@yahoo.com](mailto:blainedicke@yahoo.com)

## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** W-1R-13

**Grant name:** Guam Wildlife Restoration Program

**Project number and name:** Coordination of Guam's Wildlife Programs. Study No. W-1. Coordination

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual ___ or Estimated _x_
Federal : PR Funding	\$28,000	\$28,000
State	\$0	
Other: _____	\$0	
_____		
_____		
<b>Total Federal</b>	<b>\$28,000</b>	<b>\$28,000</b>
<b>Total match</b>	<b>\$0</b>	
<b>Total project:</b>	<b>\$28,000</b>	<b>\$28,000</b>

**5. Objectives:** (list project objectives from grant proposal or grant agreement)

Objective 1. To plan, coordinate, supervise, and administer all wildlife restoration programs including programs in wildlife population monitoring, implementing of management plans, and ensuring legislation that affect Guam's wildlife are in alignment with other regulations.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

N/A

**7. Describe how the objectives were met. See "Supplemental Information" for additional requirements and "Attachments" for specialized tables.**

Management ensured that the Wildlife Section professional staff of the Division of Aquatic and Wildlife Resources (DAWR) provided expertise in reviewing and commenting on development plans, and various permit applications, activities and proposals from the military bases on Guam

that may affect Guam's endangered species and wildlife resources and their habitat, including U.S. Fish and Wildlife Service (USFWS) Section 7 consultations concerning impacts of military projects on endangered species, and to local legislative bills affecting local wildlife resources, comments on proposed actions by the USFW regarding endangered species listing. In addition, the Division ensured representation at important agency committees affecting Guam's natural resources including the Fish and Wildlife Natural Resources Committee – Andersen Air Force Base, Captive Breeding Working Group, and USFWS.

Management coordinated staff technical assistance to numerous farmers and the Air Force and Navy regarding damage by wild pigs, deer, and carabao (water buffalo). Responded to requests for information on laws regulation pertaining to wildlife, endangered species, hunting and importation of wildlife and that staff responded to numerous public requests for information on native wildlife, particularly endangered species.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

N/A

**9. List any publications or in-house reports resulting from this work.**

The results of this project will be available in DAWR's annual report for FY05 (in prep).

**Name, title, phone number, and e-mail address of person compiling this report:**

Lloyd Blaine Dicke, Biologist II, 671-735-3955, [blainedicke@yahoo.com](mailto:blainedicke@yahoo.com)

**Endangered Species Section 6  
FY 2004 Funding (Grant Extended)  
E-2-7**

**ANNUAL PERFORMANCE REPORT**  
Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** E-2-7

**Grant name:** Guam Endangered Species Recovery

**Project number and name:** Subproject A. Reproductive Enhancement of the Mariana crow and other endangered species. Job 2. Area-wide Brown treesnake control

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual <u>x</u> or Estimated <u>__</u>
Federal : ES Section 6 funds	\$0	\$0
State	\$0	\$0
Other: _____	\$0	\$0
_____		
_____		
<b>Total Federal</b>	<b>\$0</b>	<b>\$0</b>
<b>Total match</b>	<b>\$0</b>	<b>\$0</b>
<b>Total project:</b>	<b>\$0</b>	<b>\$0</b>

**5. Objectives:**

Objective. To protect up to 10 active Mariana crow nest trees with electrical barriers and area-wide snake control.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

N/A

**7. Describe how the objectives were met. See "Supplemental Information" for additional requirements and "Attachments" for specialized tables.**

No activity was conducted using FY 2004 funds in FY 2005. This project was extended as part of E-2-7 funding.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between**

**expected and actual costs.**

N/A

**9. List any publications or in-house reports resulting from this work.**

The results of this project will be available in DAWR's annual report for FY04 (in prep).

**Name, title, phone number, and e-mail address of person compiling this report:**

Lloyd Blaine Dicke, Biologist II, 671-735-3996, blainedicke@yahoo.com

## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** E-2-7

**Grant name:** Guam Endangered Species Recovery

**Project number and name:** Subproject A. Reproductive Enhancement of the Mariana crow and other endangered species. Job 3. Translocation of Mariana crows.

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual __ or Estimated __X
Federal : ES Section 6 funds	\$50,000	\$40,000
State	\$0	\$0
Other: _____	\$0	\$0
_____		
_____		
<b>Total Federal</b>	<b>\$50,000</b>	<b>\$40,000</b>
<b>Total match</b>	<b>\$0</b>	<b>\$0</b>
<b>Total project:</b>	<b>\$50,000</b>	<b>\$40,000</b>

**5. Objectives:**

Objective 1. Translocate up to 18 Mariana crow eggs or chicks from Rota to Guam for hand-rearing and then release into the wild the following year in the Munitions Storage Area, Andersen Air Force Base, to reestablish a self-sustaining Mariana crow population on Guam.

Objective 2. Band and collect blood samples from all chicks and hatchlings produced on Guam and tag and instrument all birds for release with radio transmitters.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

N/A

**7. Describe how the objectives were met. See "Supplemental Information" for additional requirements and "Attachments" for specialized tables.**

FY 2004 (E-2-7) grant was extended and used in FY 2005 to purchase two Mitsubishi Outlanders. The new vehicles replace two 1991 Toyota Corolla station wagons that are inoperable. The new vehicles will help DAWR staff meet the objectives of the project by provide reliable transportation to and from areas where released Mariana crows are located in northern Guam.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

N/A

**9. List any publications or in-house reports resulting from this work.**

The results of this project will be available in DAWR's annual report for FY04 (in prep).

**Name, title, phone number, and e-mail address of person compiling this report:**

Lloyd Blaine Dicke, Biologist II, 671-735-3996, blainedicke@yahoo.com

## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** E-2-7

**Grant name:** Guam Endangered Species Recovery

**Project number and name:** Subproject B. Avicultural Management for Rails, Kingfishers, and Crows. Job 1. Captive Propagation of Guam rails.

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual __ or Estimated __X
Federal : ES Section 6 funds	\$27,000	\$27,000
State	\$0	\$0
Other: _____	\$0	\$0
_____		
_____		
<b>Total Federal</b>	<b>\$27,000</b>	<b>\$27,000</b>
<b>Total match</b>	<b>\$0</b>	<b>\$0</b>
<b>Total project:</b>	<b>\$27,000</b>	<b>\$27,000</b>

**5. Objectives:**

Objective 1. Increase the number of actively breeding pairs of Guam rails at the GDAWR facilities until a maximum of 22 pairs is reached.

Objective 2. Produce at least 5 Guam rails from each pair of rails annually.

Objective 3. Maintain a minimum of 80 individual Guam rails at mainland zoo facilities for captive breeding.

Objective 4. Build permanent steel framed rail-holding cages at GDAWR.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

N/A

**7. Describe how the objectives were met. See “Supplemental Information” for additional requirements and “Attachments” for specialized tables.**

FY 2004 (E-2-7) grant was extended and used in FY 2005 to renovate GDAWR's lab facilities and upgrade computer equipment. The renovation has allowed lab staff to have their personal workspace which will be highly beneficial to the project. It will provide staff an area in which they can organize and maintain all administrative aspects of the Guam rail aviculture project. The new computer equipment will replace outdated units.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

N/A

**9. List any publications or in-house reports resulting from this work.**

The results of this project will be available in DAWR's annual report for FY04 (in prep).

**Name, title, phone number, and e-mail address of person compiling this report:**

Lloyd Blaine Dicke, Biologist II, 671-735-3996, blainedicke@yahoo.com

## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** E-2-7

**Grant name:** Guam Endangered Species Recovery

**Project number and name:** Subproject B. Avicultural Management for Rails, Kingfishers, and Crows.. Job 2. Mariana crow aviculture support.

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual <u>x</u> or Estimated <u>__</u>
Federal : ES Section 6 funds	\$0	\$0
State	\$0	\$0
Other: _____	\$0	\$0
_____		
_____		
<b>Total Federal</b>	<b>\$0</b>	<b>\$0</b>
<b>Total match</b>	<b>\$0</b>	<b>\$0</b>
<b>Total project:</b>	<b>\$0</b>	<b>\$0</b>

**5. Objectives:**

1. From crows on Guam, produce at least one surviving nestling each year per pair through inducement of multiple clutches, including eggs, hand-rearing young, and releasing into the wild.
2. From up to 18 crow eggs and/or chicks translocated from Rota to Guam annually, artificially incubate, hatch, hand-rear and release into the wild on Guam.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

N/A

**7. Describe how the objectives were met. See "Supplemental Information" for additional requirements and "Attachments" for specialized tables.**

No activity was conducted using FY 2004 in FY 2005. This project was extended as part of E-2-7 funding.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

N/A

**9. List any publications or in-house reports resulting from this work.**

The results of this project will be available in DAWR's annual report for FY04 (in prep).

**Name, title, phone number, and e-mail address of person compiling this report:**

Lloyd Blaine Dicke, Biologist II, 671-735-3996, blainedicke@yahoo.com

## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** E-2-7

**Grant name:** Guam Endangered Species Recovery

**Project number and name:** Subproject B. Avicultural Management for Rails, Kingfishers, and Crows. Job 3. Captive propagation of Guam Micronesian Kingfishers.

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual <u>x</u> or Estimated <u>__</u>
Federal : ES Section 6 funds	\$0	\$0
State	\$0	\$0
Other: _____	\$0	\$0
_____		
_____		
<b>Total Federal</b>	<b>\$0</b>	<b>\$0</b>
<b>Total match</b>	<b>\$0</b>	<b>\$0</b>
<b>Total project:</b>	<b>\$0</b>	<b>\$0</b>

**5. Objectives:**

1. Cross-train three GDAWR staff with successful mainland zoo kingfisher staff during the breeding season.
2. Establish one pair of kingfishers at the Guam facility by FY 2003.
3. Complete single breeding Micronesian kingfisher cage in the Guam Rail Captive Breeding Facility (Phase I).
4. Construct Micronesian breeding enclosure complete with holding cages, breeding cages, and security fence (Phase II and III).

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

N/A

**7. Describe how the objectives were met. See “Supplemental Information” for additional requirements and “Attachments” for specialized tables.**

No activity was conducted using FY 2004 in FY 2005.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

N/A

**9. List any publications or in-house reports resulting from this work.**

The results of this project will be available in DAWR's annual report for FY04 (in prep).

**Name, title, phone number, and e-mail address of person compiling this report:**

Lloyd Blaine Dicke, Biologist II, 671-735-3996, blainedicke@yahoo.com

## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** E-2-7

**Grant name:** Guam Endangered Species Recovery

**Project number and name:** Subproject C. Job 1. Development of an Experimental Population of Guam Rails on Rota or Other Islands in the Marianas.

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual __ or Estimated __X
Federal : ES Section 6 funds	\$47,190	\$47,190
State	\$0	\$0
Other: _____	\$0	\$0
_____		
_____		
<b>Total Federal</b>	<b>\$47,190</b>	<b>\$47,190</b>
<b>Total match</b>	<b>\$0</b>	<b>\$0</b>
<b>Total project:</b>	<b>\$47,190</b>	<b>\$47,190</b>

**5. Objectives:**

The objective of this project is to continue to establish an Experimental Population of Guam rails in northeastern Rota with releases of up to 100 Guam rails using captive-bred birds from Guam and cooperating zoos.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

N/A

**7. Describe how the objectives were met. See "Supplemental Information" for additional requirements and "Attachments" for specialized tables.**

FY 2004 (E-2-7) grant was extended and used in FY 2005 to purchase one Nissan 4x4 extra cab pick-up truck, contract USDA-WS to eradicate rodents on Cocos Island for rail releases, and purchase live animal traps.

The vehicle will replace one of the vehicles currently on Rota. The current vehicles are both over 10 years old and have been too costly to maintain. Several days each trip to Rota are spent repairing these older vehicles. The new vehicle will allow DAWR staff to focus on releasing and tracking of Guam rails released into the wild on Rota.

The USDA-WS contract and traps will assist DAWR in preparing Cocos Island as a release site for Guam rails in FY 2006 or later.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

N/A

**9. List any publications or in-house reports resulting from this work.**

The results of this project will be available in DAWR's annual report for FY04 (in prep).

**Name, title, phone number, and e-mail address of person compiling this report:**

Lloyd Blaine Dicke, Biologist II, 671-735-3996, blainedicke@yahoo.com

**Endangered Species Section 6**  
FY 2005  
E-2-8

## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** E-2-8

**Grant name:** Guam Endangered Species Recovery

**Project number and name:** Subproject A. Reproductive Enhancement of the Mariana Crow and other endangered species. Job 2. Area-wide control of Brown treesnakes.

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual ___ or Estimated _x
Federal : _____	\$13,000	\$2,000
State	\$0	
Other: _____	\$0	
_____		
_____		
<b>Total Federal</b>	<b>\$13,000</b>	<b>\$2,000</b>
<b>Total match</b>	<b>\$0</b>	
<b>Total project:</b>	<b>\$13,000</b>	<b>\$2,000</b>

**5. Objectives:**

To protect up to 10 Mariana crow nest trees with electrical barriers and area wide snake control.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

N/A

**7. Describe how the objectives were met. See "Supplemental Information" for additional requirements and "Attachments" for specialized tables.**

Four Mariana crow nests were discovered during the 2004-2005 breeding season. Three of the four nests were protected and maintained throughout the 21 day incubation period, however only

one nest was protected using FY05 funds.

The pair laid three eggs which were harvested and replaced with a single dummy egg. No BTS predation occurred during the incubation period due to the installation of the electrical barrier and surrounding snake traps. If the eggs had hatched the chicks would have been returned to the nest to be reared by the adults. The installation of snake barriers and snake traps around Mariana crow nest trees is vital to the recovery of the wild population.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

N/A

**9. List any publications or in-house reports resulting from this work.**

The results of this project will be available in DAWR's annual report for FY05 (in prep).

**Name, title, phone number, and e-mail address of person compiling this report:**

Lloyd Blaine Dicke, Biologist II, 671-735-3996, blainedicke@yahoo.com

## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** E-2-8

**Grant name:** Guam Endangered Species Recovery

**Project number and name:** Subproject A. Reproductive Enhancement of the Mariana Crow and other endangered species. Job 3. Translocation of Mariana crows.

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual ___ or Estimated _x
Federal : ES Section 6	\$37,000	\$2,000
State	\$0	
Other: _____	\$0	
_____		
_____		
<b>Total Federal</b>	<b>\$37,000</b>	<b>\$2,000</b>
<b>Total match</b>	<b>\$0</b>	
<b>Total project:</b>	<b>\$37,000</b>	<b>\$2,000</b>

**5. Objectives:**

Objective 1. Translocate up to 10 Mariana crow eggs or chicks from Rota to Guam for hand-rearing and then release into the wild the following year in the Munitions Storage Area, Andersen Air Force Base, to reestablish a self-sustaining Mariana crow population on Guam.

Objective 2. Band and collect blood samples from all chicks and hatchlings produced on Guam; and tag and instrument all birds for release with radio transmitters.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

N/A

**7. Describe how the objectives were met. See "Supplemental Information" for additional requirements and "Attachments" for specialized tables.**

No translocation of Mariana crows took place in FY05. Two DAWR staff made one trip to Rota in September 2005 to assist CNMI crow biologists with a population study. If the study can show Mariana crow numbers are stable on Rota then CNMI translocation permits may be reissued.

Five hand-reared crows collected as eggs from translocated Mariana crows were radio fitted and prepared for release in FY05. These five crows will supplement the wild crow population and bring the total number of birds in the wild to 15.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

No crows were translocated from Rota to Guam because the CNMI did not renew required permits.

**9. List any publications or in-house reports resulting from this work.**

The results of this project will be reported in DAWR's annual reports for FY05 (in prep).

**Name, title, phone number, and e-mail address of person compiling this report:**

Lloyd Blaine Dicke, Biologist II, 671-735-3996, blainedicke@yahoo.com

## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** E-2-8

**Grant name:** Guam Endangered Species Recovery

**Project number and name:** Subproject B. Avicultural Management for Rails, Kingfishers and Crows. Job 1. Captive Propagation of Guam Rails

**2. Report Period:** October 1, 2004 to September 30,2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam

**4. Costs:**

Source	Budgeted	Actual ___ or Estimated _x_
<b>Federal : ES Section 6 Funds</b>	<b>\$196,000</b>	<b>\$196,000</b>
<b>State</b>		
<b>Other: _____</b>		
_____		
_____		
<b>Total Federal</b>	<b>\$196,000</b>	<b>\$196,000</b>
<b>Total match</b>		
<b>Total project:</b>	<b>\$196,000</b>	<b>\$196,000</b>

**5. Objectives:**

1. Increase the number of actively breeding pairs of Guam rails at the GDAWR facilities until a maximum of 22 pairs is reached.
2. Produce at least five Guam rails from each pair of rails annually. (Full production potential of GDAWR will be an average of 110 rails annually.)
3. Maintain a minimum of 80 individual Guam rails at mainland zoo facilities for captive breeding.
4. Equalize founder representation and maintain the genetic diversity of the captive flock at 90% or higher.
5. Transfer 12 Guam rails to mainland zoos, and 12 Guam rails from zoos to the GDAWR facility every other year to maintain genetic diversity within the captive population.
6. Build 8 ten stall (equaling 80 individual bird holding cages) steel-framed rail holding cages at GDAWR.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

This grant provided all funding for endangered Guam rail captive propagation on Guam. Other funding was provided by 17 US zoological facilities participating in the Guam Rail Species Survival Plan. Each institution funded the husbandry efforts of maintaining and reproducing rails at their respective facility.

The overall goal of this effort is to increase the captive Guam rail population to supply Guam rails for release into the wild. As the majority of the captive population is located on Guam (78%), our institution is able to reproduce over 95% of rails annually.

**7. Describe how the objectives were met.**

Twelve pairs produced 46 rails in FY05 (average of 3.9 chicks per pair). The mainland population of rails remains below 50 and only four birds were transferred from the mainland to Guam. Founder representation was not equalized and genetic diversity stands at 88%. Two ten stall steel-framed holding cages were built utilizing funds from State Wildlife Grant funds and one was built with ES Section 6 Funds.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, ad that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

Only twenty-one pairs were established this fiscal year, and of them, 12 were active. The inability to achieve Objective 1, 2, and 4 was due to the fact that the Wildlife Biologist in charge of the captive breeding facility retired and the position was not filled. The low number of pairs resulted in the low amount of chicks fledging at the facility. Genetic diversity remained below 90% and founder representation was not equalized (Founder 98 has half the representatives as the other nine founders). The transfer of rails between Guam and the mainland did not take place as genetic diversity was maintained and transfers were not warranted. Only four rails were transferred from the mainland to Guam due to low breeding results in the US zoological facilities. Only three holding pens were constructed this fiscal year due to insufficient funds.

**9. List any publications or in-house reports resulting from this work.**

The results of this project will be reported in DAWR's annual reports for FY05 (in prep).

**Name, title, phone number, and e-mail address of person compiling this report:**

Suzanne Medina, Wildlife Biologist III, (671) 735-3957, medinas@guam.net

## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** E-2-8

**Grant name:** Guam Endangered Species Recovery

**Project number and name:** Subproject B. Avicultural Support for Rails, Kingfishers and Crows.  
Job 2. Mariana Crow Aviculture Support

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam

**4. Costs:**

Source	Budgeted	Actual ___ or Estimated __x
Federal : ES Section 6 Funds	\$39,000	\$39,000
State		
Other: _____		
_____		
_____		
<b>Total Federal</b>	<b>\$39,000</b>	<b>\$39,000</b>
<b>Total match</b>		
<b>Total project:</b>	<b>\$39,000</b>	<b>\$39,000</b>

**5. Objectives:**

1. From crows on Guam, produce at least one surviving nestling each year per pair through inducement of multiple clutches, including eggs, hand-rearing young, and releasing into the wild.
3. From up to 10 crow eggs and/or chicks translocated from Rota to Guam annually, artificially incubate, hatch, hand-rear and release into the wild on Guam.
4. Maintain outdoor aviaries for crows.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

This grant provided all funding for all aviculture support for the endangered Mariana crow.

**7. Describe how the objectives were met.**

Five eggs were pulled from two clutches in FY05. The first clutch of three eggs was pulled

for artificial incubation however two pipped prior to the air cell drawing down while the third was malposition. All three embryos pipped blood vessels and hemorrhaged. The second clutch of two eggs died within the first trimester of artificial incubation. Prior to pulling from the wild, this clutch had three eggs, however, the day of pulling, one egg was missing. One of the pulled eggs had blood on the shell along with a piece of the missing egg's shell. The early embryo death of these two eggs is indicative to trauma occurring at the nest or during transport to the Wildlife Lab.

No crows eggs and/or chicks were translocated from Rota this fiscal year due to lack of permits.

Seven crows were housed at the Wildlife Lab. Six of these crows will be released into the wild while the seventh, due to deformed feet, will remain at the lab and act as a mentor bird for future chicks.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

N/A

**9. List any publications or in-house reports resulting from this work.**

The results of this project will be reported in DAWR's annual reports for FY05 (in prep).

**Name, title, phone number, and e-mail address of person compiling this report:**

Suzanne Medina, Wildlife Biologist III, (671) 735-3997, medinas@guam.net

## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** E-2-8

**Grant name:** Endangered Species Recovery

**Project number and name:** Subproject B. Avicultural Support for Rails, Kingfishers and Crows.  
Job 3. Captive Propagation of Guam Micronesian Kingfishers

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam

**4. Costs:**

Source	Budgeted	Actual ___ or Estimated _x_
<b>Federal : ES Section 6 Funds</b>	<b>\$78,000</b>	<b>\$78,000</b>
<b>State</b>		
<b>Other: _____</b>		
_____		
_____		
<b>Total Federal</b>	<b>\$78,000</b>	<b>\$78,000</b>
<b>Total match</b>		
<b>Total project:</b>	<b>\$78,000</b>	<b>\$78,000</b>

**5. Objectives:**

1. Bring to completion Micronesian kingfisher breeding enclosure compete with holding cages, breeding cages and security fence (Phase II and III).
2. Upon completion of GDAWR kingfisher facility, transfer 3.3 kingfishers from mainland zoos.
3. Begin captive breeding of kingfishers as breeding facilities are in place.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

This grant provided the funds to commence the process of repatriating Micronesian kingfishers to Guam from US zoological facilities for reproduction. Other funding was provided by 11 zoological facilities participating in the Micronesian Kingfisher Species Survival Plan (SSP). Each institution funds the husbandry efforts of maintaining and reproducing kingfishers at their respective facility.

Wildlife Conservation and Restoration Program and State Wildlife Grant money are funding construction of holding and captive breeding aviaries for kingfishers on Guam.

The overall goal of this effort is to increase the captive Micronesian kingfisher population to sufficient numbers to begin reintroductions in snake-controlled areas on Guam. Currently, the mainland zoological facilities are unable to accomplish this goal due to high chick and adult mortality. Efforts for DAWR to become involved with the captive breeding program remains the highest priority on Guam and of the SSP as the Micronesian kingfisher will eventually become extinct in captivity on the mainland. It is speculated that the problems the zoo community are encountering are within their inability to completely replicate the natural diet and environment of the kingfisher as well as the population consisting of mostly hand-reared birds.

#### **7. Describe how the objectives were met.**

The sihek breeding facility was completed this fiscal year. DAWR currently has three breeding enclosures and five holding pens that can house up to 20 kingfishers.

No birds were transferred from the mainland to DAWR during FY05. Two females were scheduled to arrive in September, however they have been delayed due to *Mycobacterium avium*. Once cleared, these females are expected to arrive in January 2006.

Efforts to reproduce kingfishers this fiscal year were successful. Due to the lack of females on island, one pair was formed which produced three clutches totaling seven eggs. The first clutch had two eggs of which only one egg was viable. This egg hatched, however the chick disappeared after a few days. The second clutch consisted of three fertile eggs. One egg was brought to the Wildlife Lab where it successfully hatched and was hand-reared. The fate of one egg is unknown though it is presumed to have hatched while the third egg was found lodged at the base of the nest hole covered with wood shavings. The third clutch consisted of two fertile eggs. Of this clutch, one chick was reared at the lab while the second was kept in the nest log. DAWR staff supplemental fed the chick in the nest for 12 days at four times per day. At the 12<sup>th</sup> day, the male became involved with feeding the chick and by the 15<sup>th</sup> day, DAWR staff no longer needed to supplemental feed. A total of three chicks fledged on Guam this fiscal year.

#### **8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

N/A

#### **9. List any publications or in-house reports resulting from this work.**

The results of this project will be reported in DAWR's annual reports for FY05 (in prep).

#### **Name, title, phone number, and e-mail address of person compiling this report:**

Suzanne Medina, Wildlife Biologist III, 671-735-3997, medinas@guam.net

## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** E-2-8

**Grant name:** Guam Endangered Species Recovery

**Project number and name:** Subproject C. Development of an experimental population of Guam rails on Rota and other suitable islands.

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Rota, Commonwealth of the Northern Mariana Islands

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual ___ or Estimated _x
Federal : ES Section 6	\$46,189	\$46,189
State	\$0	
Other: _____	\$0	
_____		
_____		
<b>Total Federal</b>	<b>\$46,189</b>	<b>\$46,189</b>
<b>Total match</b>	<b>\$0</b>	
<b>Total project:</b>	<b>\$46,189</b>	<b>\$46,189</b>

**5. Objectives:**

Objective 1. Release at least 100 rails from the captive breeding program at the GDAWR and mainland zoo facilities in the Gampapa and Duge areas, Rota. The rails should be genetically unimportant to the maintenance of the captive gene pool (*i.e.* from over-represented family lines) and in excess numbers needed for maintaining the integrity of the captive populations.

Objective 2. Monitor survival, dispersal, reproduction and establishment of released rails through radio telemetry and surveys.

Objective 3. Identify and eliminate or control factors limiting establishment of rails in the wild on Rota, including trapping and removal of feral cats, monitor lizards, rats, and other potential predators.

Objective 4. Trap wild rails and harness with radio transmitters to gain further knowledge of rail behavior and territory size.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

N/A

**7. Describe how the objectives were met. See "Supplemental Information" for additional requirements and "Attachments" for specialized tables.**

(Objective 1) The objective of releasing 100 rails on Rota was not met in FY 2005. However, 12 rails were released on Rota in FY 2005.

(Objective 2) All rails had transmitters and telemetry was used (555 bearings) to determine locations of the birds and monitor survival, dispersal, reproduction and establishment.

We caught 77 cats and 2 monitor lizards in approximately 4050 trap nights on Rota using live traps and leg-hold traps (Objective 3).

We did not trap wild rails on Rota (Objective 4).

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

Objective 1. We did not meet our release objective of 100 rails because the breeding facility was unable to produce sufficient numbers for release.

Objective 4. We did not trap wild rails on Rota because of low population densities.

**9. List any publications or in-house reports resulting from this work.**

The results of this project will be reported in DAWR's annual reports for FY05 (in prep).

**Name, title, phone number, and e-mail address of person compiling this report:**

Paul Wenninger, Biologist II, 671-735-3994, pwenninger@yahoo.com

**STATE WILDLIFE GRANTS**  
**FY 02 Funding**  
**T-1-D**

## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** T-1-D-1

**Grant name:** Guam State Wildlife Grant Program

**Project number and name:** SWGP 1. Subproject W-1. Emergency Power Generation for Incubation Facility

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** August 2005

**3. Location of work:** Guam

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual ___ or Estimated __X
Federal : SWG Funding	\$50,000	\$7,000
State	\$0	
Other: _____	\$0	
_____		
_____		
<b>Total Federal</b>	<b>\$50,000</b>	<b>\$7,000</b>
<b>Total match</b>	<b>\$0</b>	
<b>Total project:</b>	<b>\$50,000</b>	<b>\$7,000</b>

**5. Objectives:** (list project objectives from grant proposal or grant agreement)

The objective of the project is to install a diesel generator to provide reliable emergency back-up power generation for the GDAWR Incubation Facility by the end of FY 2004.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

N/A

**7. Describe how the objectives were met. See "Supplemental Information" for additional requirements and "Attachments" for specialized tables.**

The objective of the project had not been met by the end of FY 2005. The project has been delayed several times due to contractual and procurement problems with the contractor and the Department of Public Works (DPW). The contractor was six months behind schedule in acquiring the generator from their subcontractor. Upon installation of the diesel generator in the newly

constructed typhoon-proof housing, DPW experienced procurement delays in awarding the contract for installation of an underground electric service line. Progress is being made and should be completed in early 2006.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

N/A

**9. List any publications or in-house reports resulting from this work.**

The results of this project will be available in DAWR's annual report for FY05 (in prep).

**Name, title, phone number, and e-mail address of person compiling this report:**

Lloyd Blaine Dicke, Biologist II, 671-735-3996, [blainedicke@yahoo.com](mailto:blainedicke@yahoo.com)

## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** T-1-D-1

**Grant name:** Guam State Wildlife Grant Program

**Project number and name:** SWGP 1. Subproject W-2. Construction of Micronesian Kingfisher Breeding Facility.

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** August 2005

**3. Location of work:** Guam

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual ___ or Estimated <u>X</u>
Federal : SWG Funding	\$144,000	\$144,000
State	\$0	
Other: _____	\$0	
_____		
_____		
<b>Total Federal</b>	<b>\$144,000</b>	<b>\$144,000</b>
<b>Total match</b>	<b>\$0</b>	
<b>Total project:</b>	<b>\$144,000</b>	<b>\$144,000</b>

**5. Objectives:** (list project objectives from grant proposal or grant agreement)

To construct a Micronesian Kingfisher facility, including 6-holding and 2-breeding pens, and a perimeter fence by FY 2004.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

N/A

**7. Describe how the objectives were met. See "Supplemental Information" for additional requirements and "Attachments" for specialized tables.**

The objective of the project has been met. The new facility was completed in early 2005 by Bascom, Inc. The new facility is currently housing four of six kingfishers.

**8. Discuss differences between work anticipated in grant proposal and grant agreement,**

**and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

N/A

**9. List any publications or in-house reports resulting from this work.**

The results of this project will be available in DAWR's annual report for FY05 (in prep).

**Name, title, phone number, and e-mail address of person compiling this report:**

Lloyd Blaine Dicke, Biologist II, 671-735-3955, [blainedicke@yahoo.com](mailto:blainedicke@yahoo.com)

**STATE WILDLIFE GRANTS**  
**FY 03 Funding**  
**T-2-D**

## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** T-2-D

**Grant name:** Guam State Wildlife Grant Program

**Project number and name:** SWGP 2. Subproject W-1. Emergency Power Generation for Wildlife Office.

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual <u>x</u> or Estimated <u>   </u>
Federal : SWG Funding	\$70,000	\$0
State	\$0	
Other: _____	\$0	
_____		
_____		
<b>Total Federal</b>	<b>\$70,000</b>	<b>\$0</b>
<b>Total match</b>	<b>\$0</b>	
<b>Total project:</b>	<b>\$70,000</b>	<b>\$0</b>

**5. Objectives:** (list project objectives from grant proposal or grant agreement)

The objective of the project is to install a diesel generator to provide reliable emergency back-up power to the GDAWR Wildlife Office by the end of FY 2005.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

N/A

**7. Describe how the objectives were met. See "Supplemental Information" for additional requirements and "Attachments" for specialized tables.**

The objective of the project was not met by the end of FY 2005. Plans to include the Director's office and DAWR's Administrative building have been discussed and additional funding has been identified. However, cost sharing issues to include the Director's office must be addressed before the new project can move forward. Guam's DAWR will be amending the grant agreement to

change the scope of the project to include DAWR's administrative building in FY 2006.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

No federal funds have been used for this project to date.

**9. List any publications or in-house reports resulting from this work.**

The results of this project will be available in DAWR's annual report for FY05 (in prep).

**Name, title, phone number, and e-mail address of person compiling this report:**

Lloyd Blaine Dicke, Biologist II, 671-735-3996, [blainedicke@yahoo.com](mailto:blainedicke@yahoo.com)

## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** T-2-D

**Grant name:** Guam State Wildlife Grant Program

**Project number and name:** SWGP 2. Subproject W-2. Construction of Guam Rail Outdoor Holding Cages.

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual ___ or Estimated_X
Federal : SWG Funding	\$30,181	\$22,000
State	\$0	
Other: _____	\$0	
_____		
_____		
<b>Total Federal</b>	<b>\$30,181</b>	<b>\$22,000</b>
<b>Total match</b>	<b>\$0</b>	
<b>Total project:</b>	<b>\$30,181</b>	<b>\$22,000</b>

**5. Objectives:** (list project objectives from grant proposal or grant agreement)

The objective of the project is to replace Guam rail wooden holding cages with permanent steel framed holding cages at the GDAWR.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

N/A

**7. Describe how the objectives were met. See "Supplemental Information" for additional requirements and "Attachments" for specialized tables.**

The objective of the project was met in FY 2005 with the addition of two steel framed holding cages at the Mangilao captive breeding facility. The contractor for the project was Bascom, Inc.

**8. Discuss differences between work anticipated in grant proposal and grant agreement,**

**and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

N/A

**9. List any publications or in-house reports resulting from this work.**

The results of this project will be available in DAWR's annual report for FY05 (in prep).

**Name, title, phone number, and e-mail address of person compiling this report:**

Lloyd Blaine Dicke, Biologist II, 671-735-3996, [blainedicke@yahoo.com](mailto:blainedicke@yahoo.com)

## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** T-2-D

**Grant name:** Guam State Wildlife Grant Program

**Project number and name:** SWGP 2. Subproject W-3. Development of a Comprehensive Wildlife Conservation Strategy.

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual ___ or Estimated <u>X</u>
Federal : SWG Funding	\$44,000	\$44,000
State	\$0	
Other: _____	\$0	
_____		
_____		
<b>Total Federal</b>	<b>\$44,000</b>	<b>\$44,000</b>
<b>Total match</b>	<b>\$0</b>	
<b>Total project:</b>	<b>\$44,000</b>	<b>\$44,000</b>

**5. Objectives:** (list project objectives from grant proposal or grant agreement)

The objective of the project is to develop a Comprehensive Strategy by the end of FY 2005.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

N/A

**7. Describe how the objectives were met. See "Supplemental Information" for additional requirements and "Attachments" for specialized tables.**

The objective of the project was met in FY 2005 with the development and submittal of Guam's Comprehensive Wildlife Conservation Strategy (GCWCS) in September 2005. A copy of the GCWCS can be obtained in DAWR's website ([www.guamdawr.org](http://www.guamdawr.org)). The GCWCS is being reviewed by the USFWS.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs.**

N/A

**9. List any publications or in-house reports resulting from this work.**

The results of this project will be available in DAWR's annual report for FY05 (in prep) or on the web at [www.guamdawr.org](http://www.guamdawr.org).

**Name, title, phone number, and e-mail address of person compiling this report:**

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**Non-Traditional Section-6  
Safe-Harbor  
E-3-SH-1**

## Annual Project Performance Report

Division of Aquatic and Wildlife Resources, Department of Agriculture  
FY 2005

**1. State:** Guam

**Grant number:** E-3-SH-1

**Grant name:** Endangered Species Section 6 Safe Harbor

**Project number and name:** Talofof Golf Resort Safe Harbor: Development of a Safe Harbor for the Guam rail

**2. Report Period:** October 1, 2004 to September 30, 2005

**Report due date:** December 31, 2005

**3. Location of work:** Guam

**4. Costs:** Please identify sources of federal funds and match and indicate amounts budgeted and spent for each. Indicate if match is in-kind. Indicate in table whether costs are "Actual" or "Estimated"

Source	Budgeted	Actual <u>X</u> or Estimated <u>    </u>
<b>Federal:</b>	<b>\$249,419</b>	<b>0</b>
<b>State:</b>	<b>0%</b>	<b>0</b>
<b>Other:</b>	<b>0%</b>	<b>0</b>
_____		
_____		
<b>Total Federal:</b>	<b>\$249,419</b>	<b>0</b>
<b>Total match:</b>	<b>0</b>	<b>0</b>
<b>Total project:</b>	<b>\$249,419</b>	<b>0</b>

**5. Objectives:**

1. Establish a population of Guam rails in a predator-controlled area on the Talofof Golf Course property.
2. Determine habitat preferences of Guam rails.
3. Introduce two species of native trees to an ungulate and fire-reduced area.
4. Give UOG students experience with wildlife management.
5. Increase public awareness of conservation recovery efforts and future needs for Guam's endangered species.
6. Gain experience managing Safe Harbor Agreements.

**6. If the work in this grant was part of a larger undertaking with other components and funding, present a brief overview of the larger activity and the role of this project.**

N/A

**7. Describe how the objectives were met. See "Supplemental Information" for additional requirements and "Attachments" for specialized tables.** Prior activity of this project to meet

objectives included: MOU's were developed between the University of Guam, GDAWR, USFWS and Talofofo Golf Resort; bids from contractors to modify and upgrade the existing fence were obtained; and, captive breeding of rails continued with progeny produced housed in outdoor holding cages paid for by funds from this grant.

Unfortunately, the main investigator from the University of Guam was unable to proceed with the project in 2005. The Department of Agriculture, in cooperation with US Fish and Wildlife Service Ecological Services (USFWS/ES), assessed the project and determined the project was not viable at the Talofofo Golf Resort site at this time. Talofofo Golf Resort was informed of the situation. A proposal to relocate the project was developed in cooperation with Region 1, USFWS/ES and an amendment was submitted to change the name of the project, expiration date of grant, and location of the project activities.

**8. Discuss differences between work anticipated in grant proposal and grant agreement, and that actually carried out with Federal Aid grant funds; include differences between expected and actual costs. N/A**

**9. List any publications or in-house reports resulting from this work.**

The results of this project will be reported in DAWR's annual reports for FY05 (in prep).

**Name, title, phone number, and e-mail address of person compiling this report:**

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