

Program Name: Invasive Exotic Species Management
Project Name: Eradication of the Giant Gambian Pouched Rat
Project ID: 2700
Lead Agency: FDACS, FWC
Cooperating Agencies: FWC, SFWMD, USDA-WS, USFWS
Funding Source: Federal/State

Goal(s) Addressed: 2.B.3

Measurable Output(s): Number of GPR harvested, GPR movements and home range, development of attractants, bait deployment stations and effective baits, susceptibility to baits, and effectiveness of attractants, baits and bait delivery systems

Project Synopsis: In February 2006, a pilot eradication project was initiated on Crawl Key where Giant Gambian pouched rats (GPR) were documented in 2005. In June 2006, USDA-APHIS Wildlife Services (USDA-WS) deployed 94 bait stations. Supplemental trapping was done to obtain rats for radio telemetry. From January to May 2007, 1,000 bait stations were placed throughout Grassy Key hammock and residential areas. In March 2007, 20 GPR were trapped for the USDA-APHIS National Wildlife Research Center for studies of more effective attractants and third generation rodenticides. USDA-WS developed GPR-specific bait deployment stations effectively eliminating the non-target mortality observed in the earlier stages of baiting and trapping, and in addition, after numerous trials, developed an effective bait, zinc phosphide, to eliminate GPR.

In May 2007, the eradication effort commenced with the pre-baiting of roughly 600 stations around the periphery of the core GPR infestation area. As of January 2008, direct baiting and post-baiting monitoring has resulted in the removal of 73 GPR from Grassy Key, Crawl Key and adjacent areas. An additional 10 GPR were captured between January-October 2009. A few GPR remained in areas that could not be accessed. Captures and sightings subsided after October 2009 following these initial intensive very successful trapping efforts. FWC and USDA-WS continue to monitor for GPR using 60 motion-activated cameras and 318 live traps. A 'rat hotline' has been established (FWC, Scott Hardin), and when a report is confirmed, the 'hot spot' area (s) is/are saturated with zinc phosphide baits to further ensure complete removal.

Current Status: A female GPR was captured in September 2009, sterilized and was fitted with a radio collar, and subsequently released on Grassy Key as a 'Judas' specimen in hopes of attracting other wild GPR, and was monitored for its movements. Tracking indicated she moved frequently from her original capture location to an adjacent 'no access' property. However, this collared 'Judas' rat did not work out as well as hoped, and did not lead researchers to any additional rat activity. Monitoring efforts for the period of November 2009 - early May 2011 documented zero GPR - the only exception being the 'Judas' rat. It appeared that the project was a success. Unfortunately, in late May 2011, a young male and older female were captured adjacent to the same 'no access' property that the 'Judas' female frequented. Currently, FWC and USDA-WS are trying to scrape together funds to continue quarterly monitoring efforts to initiate 2 weeks of trapping in core GPR areas on Grassy Key - each visit consisting of 250 cage traps per night. These agencies continue to collaborate to discuss ways to gain access to the few properties that still remain 'off limits' and which may harbor the few remaining GPR.

In June 2011, the FWC and USDA-WS followed up on reported sightings of GPR on Big Pine Key. After inspection of the rat carcasses that had been collected, it was determined that these specimens were likely Norway rats.

Estimated Cost: \$500,000 (*revised est.*)

Project Schedule:

Proposed Start Date: February 1, 2006
 Finish Date: September 30, 2014

Detailed Project Budget Information (\$1000s)

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | Total |
|----------------------|-----------|--------------|-----------|-----------|----------|------------|------------|
| Federal ¹ | 20 | 105 | 13 | 50 | | | 188 |
| State ² | | 67.5 | | 15 | 9 | 5.5 | 97 |
| Tribal | | | | | | | |
| Local | | | | | | | |
| Other ³ | 20 | | | | | | 20 |
| Total | 40 | 172.5 | 13 | 65 | 9 | 5.5 | 305 |

¹USFWS Washington DC, Region 4 Invasive Species Strike Team, Partners for Wildlife Program, USDA-WS

²FL-DEP (in-kind), FWC, South Florida Water Management District

³Wildlife Foundation of Florida

Hyperlink: N/A

Contact: Scott Hardin, Statewide Invasive Species Coordinator, Scott.Hardin@MyFWC.com and William G. Thomas, Jr Region 4 Invasive Species Strike Team Leader, General Biologist (*Invasive Species*) U.S. Fish and Wildlife Service, J.N. 'Ding' Darling NWR

Additional Information: As of June 2011, 85 GPR have been captured and/or removed for research or euthanized. Monitoring continues with the goal to be two years of monitoring without a GPR capture or verified sighting that would indicate all GPR have been eradicated.



Figure 1. Giant Gambian pouched rat in live trap.