Program Name: Invasive Exotic Species Management
Project Name: **Eradication of the Giant Gambian Pouched Rat**
Project ID: 2700
Lead Agency: FWC
Cooperating Agencies: USDA-WS, USFWS, Texas A&M
Funding Source: State

Strategy and Biennial Report Objective Addressed: 2-B.3
Invasive Species Strategic Action Framework Goal: 3

Measurable Output(s): Number of rats harvested, rat 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: A reproducing population of Giant Gambian pouched rats (GPRs) was reported to the USFWS in 2004.In February 2006, a pilot eradication project was initiated on Crawl Key. 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 GPRs 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 GPRs.

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 GPRs 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.

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 – through 2010 documented zero GPRs – the only exception being the 'Judas' rat. It appeared that the project was a success. Unfortunately, in early 2011, FWC received a credible report from a private citizen familiar with the project and subsequent trapping confirmed that a hold-out population remained.

Trapping conducted by USDA-WS in August and November 2011 for approximately two weeks at time using 150—200 live traps during each event yielded 17 GPRs, including pregnant females. In December of 2011 FWC staff began baiting and monitoring a small number of camera traps in this area on a weekly basis. In January 2012, staff trapped at the camera locations for two nights with 16 traps. Three rats were trapped during this event, including one juvenile. This effort was repeated in February resulting in the capture of four rats, two of which were very young animals that had been trapped in the same trap.

The last trapping effort by USDA-WS in March 2012 (ten days, approximately 200 traps) and resulted in the removal of two adult rats. FWC staff conducted more two-day trapping operations in August, September, and December 2012 resulting in removal of one GPR in August. Three small-scale trapping events were conducted in 2013 and one in May 2014. No GPRs have been trapped since August 2012 but remote cameras continued to document the presence of rats in 2013.

Current status: The Nonnative Fish and Wildlife Program, housed within the Wildlife Impact Management Section (Formerly Exotic Species Coordination Section) of FWC continues to lead efforts to eradicate this species by conducting monitoring and trapping activities, both in-house and by contracting with USDA-WS. FWC is currently funding these activities with both state funds and with a Florida Wildlife Foundation Conserve Wildlife Tag Grant issued to the Nonnative Fish and Wildlife Program. FWC staff are also conducting targeted outreach to the affected areas to get credible reports of GPR. The project will be considered a success after two years of monitoring and trapping have passed with no credible sightings or captures. Assuming that the extensive trapping scheduled for FY 14/15 is successful, monitoring in 2016 and 2017 will determine whether this eradication effort is successful.

Estimated Cost: $82,000 (*revised est.*)

Project Schedule:

Start Date: February 1, 2006
Finish Date: September 30, 2017

Detailed Project Budget Information ($1000s)

	2012	2013	2014	2015	2016	2017	Total
Federal							
State[1]	2	5	3	2	10	10	32
Tribal							
Local							
Other[2]			25	25			50
Total	**2**	**5**	**28**	**27**	**10**	**10**	**82**

[1]FWC
[2]Wildlife Foundation of Florida

Contact: Kristen Sommers, Section Leader
Wildlife Impact Management Section
Florida Fish and Wildlife Conservation Commission
Kristen.Sommers@MyFWC.com, (850) 488-3831

Figure 1. Giant Gambian pouched rat in live trap.