

## **ANNUAL REPORT: FY 2013 COOPERATIVE RECOVERY INITIATIVE DUSKY GOPHER FROG**

**Project Name:** Dusky gopher frog breeding pond restoration and population establishment on the Mississippi Sandhill Crane National Wildlife Refuge

**Project Manager/Primary Contact:** Linda LaClaire

**Phone Number:** 601-321-1126

**Email:** [linda\\_laclaire@fws.gov](mailto:linda_laclaire@fws.gov)

**Project Location:** Mississippi Sandhill Crane National Wildlife Refuge

**Project Goal:** The long-term goal of the project is to create a dusky gopher frog metapopulation within the Mississippi Sandhill Crane National Wildlife Refuge

**Expected Conservation Outcome of the Project:** The project will contribute to the endangered dusky gopher frog's recovery efforts by expanding the available habitat for the species and increasing the limited number of its breeding sites. The project will also contribute to the recovery of the endangered Mississippi sandhill crane by improving both its upland and breeding habitat.

### **Project Measureable Objectives (Year 1):**

- Identify ponds to be restored as dusky gopher frog breeding sites
- Remove hardwoods and brush from ponds; smooth pond basin contours
- Conduct prescribed burning of pond basins and surrounding uplands

**How are objectives measured:** Direct observation and accounting of management activities

### **Project Measureable Objectives (Long-term):**

- Establish pond hydrology at the 3 selected sites such that it is appropriate for dusky gopher frog breeding
- Release metamorphic dusky gopher frogs into restored ponds
- Document presence of calling male dusky gopher frogs and evidence of breeding
- Establish a dusky gopher frog population

### **How are objectives measured:**

- Pond hydrology-- Monitor by direct observation and through the use of depth gauges
- Metamorphic frog releases-- Observe and record numbers of released metamorphs
- Calling males and evidence of breeding-- Use automated recorders and survey ponds for egg masses
- Population establishment-- Monitor the population through the use of a drift fence

### **Assessment of Short-term Performance (Year 1):**

- **Less than 70% conservation objective achieved**

**Assessment of Long-term Performance this year:**

- **Less than 70% conservation objective achieved**

**Project Status:**

Funding was not received in our field offices until May 2013, therefore initiation of the project was delayed until late in the fiscal year. However, we were able to conduct a field assessment of the three ponds on the refuge selected as translocation sites. A prescribed burn of 295 of the 615 acres in the restoration area was also completed using station funds. In addition, project funds were obligated for a part-time researcher to assist in tadpole head-starting and population monitoring, and for materials, such as a drift fence, cattle tanks, and automated recorders, to be used in monitoring. Due to soil conditions resulting from an unusually wet summer (10" above average rainfall) followed immediately by reassignment of fire personnel to assist on Western Fire details (over 200 staff days), we were not able to use the machinery needed for clearing trees in the pond areas and sculpting pond basin contours.

**Future Actions:**

In FY 14, we plan to burn the balance of the translocation area (320 acres), remove shrubs and targeted trees from the 3 ponds selected as release sites, smooth the pond basins to proper contour, finalize contracts for drilling two shallow wells, and procure solar pumps and panels. After pond restoration work is completed, we will begin monitoring hydrology, and when the proper conditions are achieved we will release metamorphic frogs at the sites.