

**FY 2016 Traditional Section 6 Grant Program  
PRIORITY LIST OF PROJECT TOPICS  
{Federal conservation status listed; if none then NatureServe ranks appear}**

**PLANTS**

**Walker's manioc (*Manihot walkerae*) ENDANGERED:**

- Conduct extensive, systematic surveys (using TPWD Rare Plant Survey Form) of extant and previously undetected populations (and establish conservation agreements with landowners);
- Demographic monitoring of known populations to document population trends, including assessments of mortality, recruitment, and dispersal.

**Texas poppy mallow (*Callirhoe scabriuscula*) ENDANGERED:**

- Conduct systematic surveys (using TPWD Rare Plant Survey Form) of extant populations (and establish conservation agreements with landowners);
- Analyze effect of cattle, deer and possibly fencing of extant populations

**Navasota ladies'-tresses (*Spiranthes parskii*) ENDANGERED:**

- Develop survey methodology and detection probability protocol suitable to the species biology (reproduction, plant longevity, dormancy)

**INVERTEBRATES**

**Burrowing crayfish, genus *Procambarus*, primarily *P. regalis* (PETITIONED) and *P. steigmani* (G1S1S2; CRITICALLY IMPERILED) in northeast Texas; secondarily, *P. brazoriensis* (G1S1; CRITICALLY IMPERILED), *ceruleus* (G1G3S2; IMPERILED), *P. nechesae* (G2S1S2; IMPERILED), and *P. nigrocinctus* (G1S1; CRITICALLY IMPERILED):**

- Distribution, habitat characterization, and genetic population structuring.

**Louisiana eyed silkmoth (*Automeris louisiana*) PETITIONED:**

- Distribution and genetic population structuring of the along upper Gulf Coast in Texas.

**Big Thicket emerald (Texas emerald) dragonfly (*Somatochlora margarita*) PETITIONED:**

- Assessment of threats to known populations.
- Evaluation of habitat availability.
- Estimates of population size and distribution.

**Monarch butterfly (*Danaus plexippus*) PETITIONED (THREATENED):**

- Assess factors limiting recovery in Texas.

**Aquatic Spring Invertebrates:**

- Bioinventories at Fern Bank and Hueco Springs

**Texas Freshwater Mussels:**

- Proposals to evaluate the status and distribution of threatened mussel species in the upper Brazos (upstream of Waco) and Colorado Rivers.
- Assessment of threats to known populations such as habitat alterations, low flow water quality requirements, and environmental contaminants.
- Evaluation of habitat availability, and estimates of population size and population dynamics.

For any of the following:

Triangle pigtoe, *Fusconaia lananensis* **G1S1; CRITICALLY IMPERILED**  
Falsespike, *Fusconia (Quadrula) mitchelli* **PETITIONED**  
Texas fatmucket, *Lampsilis bracteata* **PETITIONED**  
Louisiana pigtoe, *Pleurobema riddellii* **G1S1; CRITICALLY IMPERILED**  
Texas heelsplitter, *Potamilus amphichaenus* **PETITIONED**  
Salina mucket, *Potamilus metnecktayi* **PETITIONED**  
Golden orb, *Quadrula aurea* **PETITIONED**  
Smooth pimpleback, *Quadrula houstonensis* **PETITIONED**  
Texas pimpleback, *Quadrula petrina* **PETITIONED**  
Mexican fawnsfoot, *Truncilla cognata* **PETITIONED**  
Texas fawnsfoot, *Truncilla macrodon* **PETITIONED**

## FISH

**Smalleye shiner (*Notropis buccula*) ENDANGERED ; and sharpnose shiner (*N. oxyrhynchus*) ENDANGERED:**

- Habitat fragmentation (physical and hydrologic barriers to movement) and quantitative relationship to reproductive success.
- Development of refugia concepts and techniques including propagation and rearing.
- Biological monitoring that relates to ongoing salt cedar control in the upper Brazos River watershed.
- Effects of water quality changes on survival, growth, reproduction, and reproductive success.

**American Eel (*Anguilla rostrata*) PETITIONED (THREATENED):**

- Information on distribution and abundance to inform management, conservation, and potential listing.

## AMPHIBIANS AND REPTILES

**Houton toad (*Bufo houstonensis*) ENDANGERED:**

- Examine/optimize survey methods including electronic call logger technologies.
- Investigate survivorship and growth in altered environments (e.g., fire impacts, alteration of food webs, changes in microhabitats, etc.) including tolerance to ecological disturbance from invasive species and/or competing species.
- Implement captive propagation program to augment existing populations or to establish new populations in designated priority areas.
- Identify and optimize outreach to Safe Harbor Agreement participants.

**Eurycea salamanders (in order of priority): *E. latitans* PETITIONED, *E. sosorum* ENDANGERED, *E. rathbuni* ENDANGERED, *E. waterlooensis* ENDANGERED, *E. nana* THREATENED, *E. tonkawae* THREATENED, *E. chisholmensis* THREATENED, and *E. naufragia* -**

- Proposals to develop reference genomes for the above species, to be used in identification of unassigned populations, assessment of gene flow among populations and species, as well as other aspects of their biology with conservation relevance.

## BIRDS

### Red-cockaded Woodpecker (*Picoides borealis*) ENDANGERED:

- Are translocations working for this species in Texas?

[\*\*Whooping Crane PVA topic below removed for this year, due to efforts already underway via Whooping Crane Recovery Team, contact Gulf Coast Bird Observatory; [www.gcbo.org](http://www.gcbo.org) email: [info@gcbo.org](mailto:info@gcbo.org) \*\*]

### ~~Whooping Crane (*Grus americana*) ENDANGERED:~~

- ~~• Conduct facilitated Population Viability Analysis workshop to assist in updating recovery goals.~~

### Piping plovers (*Charadrius melodus*) THREATENED; and Red knots (*Calidris canutus rufa*) THREATENED:

- Comparison of effects of various beach maintenance programs, beach nourishment, and human activities on shorebird use of the Gulf beach (measured by birds' abundance, distribution, and prey availability);
- Develop management recommendations for land managers.

### Sprague's Pipit CANDIDATE:

- Status of this species in West Texas during migration and winter (i.e., west of the 100th Meridian).

## MAMMALS

### Swift fox (*Vulpes velox*) G3S1 IMPERILED (TX); and Kit Fox (*V. macrotis*) G4S1 IMPERILED (TX):

- Assess population status and distribution, including historic localities.

### Ocelot (*Leopardus pardalis*) ENDANGERED:

- Development of a management plan for the ranches in northern Mexico that could supply ocelots for translocation to Texas
- Support camera-monitoring of ocelots in northern Mexico
- Additional research on ocelot population density and distribution in northern Mexico toward the goal of translocation to the Cameron County, Texas population
- Research on serology and pathology
- Creation of a tissue bank

### Limpia Creek Pocket Gopher (*Thomomys umbrinus texensis*) T2S2 ENDEMIC IMPERILED (TX):

- Assess population status and distribution.