

## Swift tract restoration outline

**Acreage:** 615

**Location:** Eastern shore of Bon Secour Bay (see map)

### **Description:**

A palustrine forested wetland referenced in the National Wetlands Inventory Map. Significant portions of the property can be characterized as palustrine scrub/schrub. Common trees are slash pine (*Pinus elliottii*), sweet bay (*Magnolia virginiana*) although longleaf pine (*Pinus palustris*), pond cypress (*Taxodium distichum*), swamp tupelo (*Nyssa biflora*), and tulip tree (*Liriodendron tulipifera*) are among the many flora species also present. The understory is variably dense, predominantly consisting of Gallberry (*Illex glabra*), wax myrtle (*Myrica cerifera*) and saw palmetto (*Serenoa repens*). Netted chain fern (*Woodwardia areolata*) and cinnamon fern (*Osmunda cinnamomea*) are among the tolerant herbs growing on the property.

Portions of the property can be temporally flooded by the brackish waters of Bon Secour Bay, influencing the location and types of vegetation on the property. The forested wetlands provide nesting habitat for many bird species including the Red-cockaded Woodpecker (*Picoides borealis*). Mammals like raccoon, beaver, gray and fox squirrel and others are likely to inhabit the property.

Adjacent to Weeks Bay Mitigation Bank – pitcher plant bog, forested wetland,

### **Habitat compromised:**

1. Regionally habitats such as those found on the Swift tract have been compromised through development (loss and fragmentation)
2. Considered by the Mobile Bay National Estuary Program as a high priority restoration site for submerged aquatic vegetation (SAV). Along the eastern shore of Mobile Bay, 1955 SAV was mapped from north of Point Clear south to Bon Secour Bay revealing 695.5 acres of SAV, but this area had no mapped SAV for the 2002 survey. (Vittor and Associates, 2005)
3. Identified as an area with eroded natural shoreline and is a potential shoreline restoration area (Parker et al. 1997, Smith, E. 1990)
4. January 1955 in Baldwin County.  
([http://www.mobilebaynep.com/site/news\\_pubs/news/Documents/NEP\\_historicSAV.pdf](http://www.mobilebaynep.com/site/news_pubs/news/Documents/NEP_historicSAV.pdf)).
5. Habitat on the Swift tract is similar to that found on the Benton tract which was ranked as the second highest candidate for restoration efforts in Baldwin county Alabama according to Alabama Wetlands Program pilot project (ADEM contract AGY8025 final report). Using the criteria set out in this document it is reasonable to think that the Swift tract would score higher than the Benton tract due to larger acreage, location relative to other managed lands, and ownership.

6. Storm effects – Salt water intrusion killed hardwoods/pine overstory, eliminated canopy, increased # of herbaceous plants and disturbance allowed increased number of *Sapium sebiferum*.

**Endangered/threatened species to consider –**

Florida manatee - *Trichechus manatus latirostris*  
Gulf sturgeon - *Acipenser oxyrinchus desotoi*  
Kemp's Ridley turtle - *Lepidochelys kempii*  
Diamondback Terrapin - *Malaclemys terrapin*  
Black rail  
Red-cockaded woodpecker

**Socio-economic importance:** [fisheries (Fish river oyster bed, etc), recreational use, aesthetic and stewardship value] An estimated 90% of commercial fish and shellfish landed in Alabama rely on wetlands for critical habitat during their life cycles (<http://www.mobilebaynep.com/habitatloss.htm>)

In general, estuarine, seagrass, and marsh environments, which are abundant in the northern Gulf of Mexico, are extremely valuable to humans. In a recent paper, these environments were estimated to be ten times more valuable to humans than any terrestrial habitat for ecosystem services like recreation and nutrient cycling (TNC, 2000).

**NOAA trust resources:**

1. Coastal fish and shellfish, associated with essential fish habitat and is a Habitat Area of Particular Concern (2004, Gulf of Mexico Fishery Management Council)
2. Associated with National Estuarine Research Reserve, wetlands considered high priority area according to Alabama Coastal Area Management Program
3. Anadromous fish – Gulf Sturgeon

**Recent storm history:**

Hurricanes: Ivan – 9/14/04, Dennis – 7/10/05, Katrina - 8/29/05  
Tropical storms: Isidore (2002) – Hannah (2002) – Arlene (2005)

**Near-shore habitat restoration summation:**

**Phase one:**

Collect historical information  
Collect and interpret sediment cores  
Cut down popcorn trees and treat stumps, remove other exotic invasive species  
Baseline survey(s)

Design monitoring plan – possible collaborators - TNC, Dr. Majors, CICEET grant recipients, NOAA Restoration Center

**Phase two:**

Implement and measure efficacy of shoreline protection alternatives (CICEET)

**Phase three:**

Experimental test plots-  
Beach re-nourishment  
Cypress planting  
SAV test plots

**Phase four:**

Use information gleaned from above stated activities to continue shoreline restoration if data proves feasibility.