

Preserving the Future for Smalltooth Sawfish



NOAA FISHERIES

Southeast Regional Office

Endangered Species Act Listing

NOAA Fisheries listed the U.S. distinct population segment of smalltooth sawfish as endangered under the Endangered Species Act (ESA) on April 1, 2003.

Critical Habitat Designation NOAA Fisheries designated critical habitat for smalltooth sawfish on September 2, 2009.



Habitat features that are essential to the conservation of the species include shallow water and red mangrove shorelines.



Smalltooth sawfish can grow to 16 ft. They resemble sharks, but gills on the undersides of their body reveal they are actually a type of ray. Photo credit: Kim Bassich.

The smalltooth sawfish, aptly named for its long saw-like snout (rostrum), was once widespread from Texas to North Carolina but the population is now at risk of extinction.

This endangered species is found almost exclusively in Florida, with a final reproductive stronghold between Charlotte Harbor and the Florida Keys. Within this area, researchers have identified priority nursery sites where mothers return to give birth and juveniles grow. NOAA Fisheries is seeking partnerships to preserve land parcels containing high-use mangrove shorelines in Charlotte Harbor, Florida. **Given the ongoing threat of coastal development, preserving high-use areas in this nursery habitat has never been more important to the recovery of the species.**

As a bottom-dwelling predator, smalltooth sawfish are rarely seen. However, in 2024, recreational fishermen in the Florida Keys reported numerous sawfish erratically 'spinning' in circles near the surface. These events followed a summer where water temperatures in the Keys soared above 100°F. While nearly 80 different fish species were affected, sawfish were hit the hardest.

What unfolded was the largest sawfish die-off on record, with at least 56 sawfish killed and over 200 showing similar symptoms. The cause of the spinning fish behavior and sawfish deaths is still unclear; however, evidence currently points to harmful algal blooms and their toxins. The die-off likely had a major impact on the total sawfish population. **With breeding females numbering only in the hundreds, the deaths of even just a few mothers could be devastating for this already diminished population.**

A recent study revealed a decade of significantly declining abundance in the Charlotte Harbor nursery habitat and suggested fewer than 100 adult females support the entire Charlotte Harbor juvenile population. These findings were consistent with other studies using genetic methods, suggesting fewer than 250 and possibly as few as 126 reproductive females across southwest Florida.



Role of NOAA Fisheries in Conservation and Recovery

Recovery Planning: NOAA formed a multi-agency team which developed and now implements a recovery plan. The plan serves as a guide for sawfish recovery by prioritizing research and framing management decisions.

Research: NOAA supports and participates in a number of research projects. These projects provide vital information on habitat needs, population abundance, and the response of sawfish to recovery actions. Data collected from these projects are used to monitor the status of the population and make management and recovery decisions.

Outreach and Education: NOAA has developed a variety of outreach products encouraging safe handling and quick release of caught sawfish, and reporting of any sawfish catches or sightings. For more information: http://sero.nmfs.noaa.gov/protected_resources/sawfish/



Help Us Help Sawfish

Sawfish are protected by federal and state law. Report sightings and unlawful harvest and handling to:

1-844-4SAWFISH

Contact: Adam Brame
Sawfish Recovery Coordinator:
adam.brame@noaa.gov

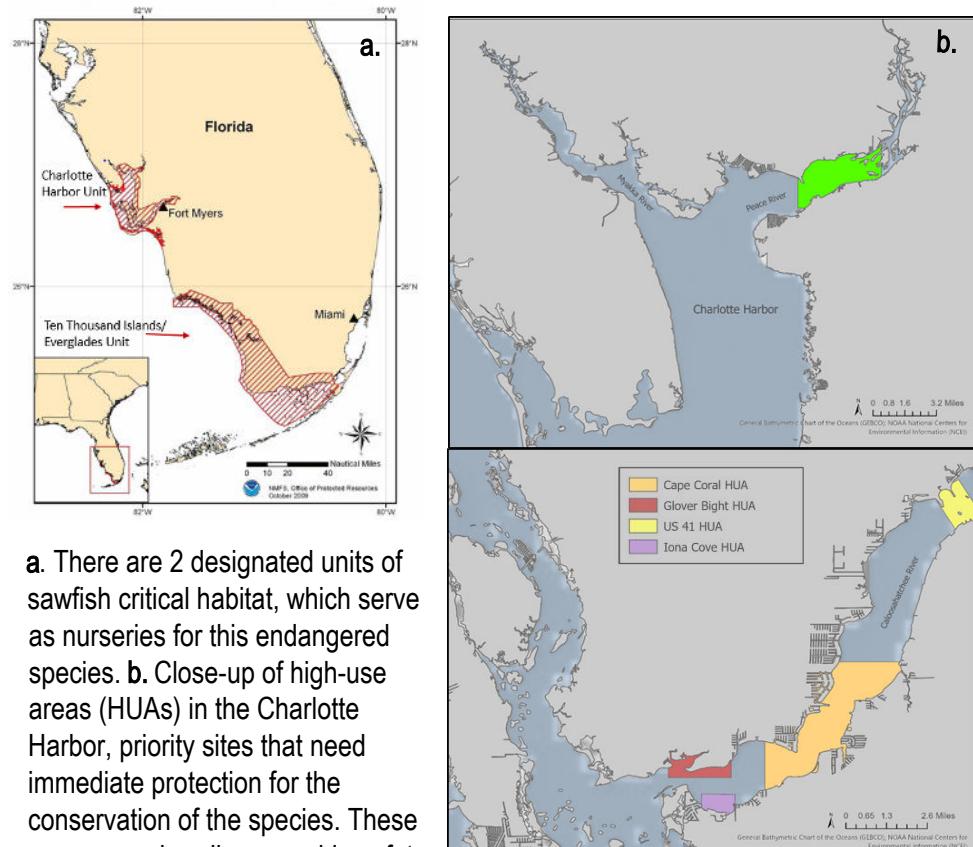


Although smalltooth sawfish dwell in the shadows, the extinction of this apex predator could have cascading detrimental effects throughout the ecosystem. Despite federal protections, sawfish continue to face a multitude of threats. Accidental capture of sawfish in shrimp trawls and other fisheries remains a major cause of death. Warming ocean temperatures and rising sea levels may reduce available habitat. Finally, high-use areas within the broader nurseries coincide with highly valuable waterfront real estate that is under continual pressure of coastal development.

The cumulative negative impacts of these threats could accelerate downward trends in abundance, further endangering this amazing species. **Immediate targeted actions like habitat protection and restoration could help stabilize populations by ensuring nursery habitats remain available and accessible.**

NOAA Fisheries is responsible for the conservation, protection, and recovery of sawfish, but we can only achieve progress in partnership with federal, state, academic and non-profit partners. Bringing sawfish out of the shadows and to the conservation forefront is critical to their survival. Now, more than ever, it is important to preserve the few remaining juvenile refuges for this unique species.

Preserving High-Use Areas



a. There are 2 designated units of sawfish critical habitat, which serve as nurseries for this endangered species. b. Close-up of high-use areas (HUAs) in the Charlotte Harbor, priority sites that need immediate protection for the conservation of the species. These mangrove shorelines provide safety from predators and abundant prey for sawfish pups.