

Oil spill threatens toothy marine predator that is cultural and historic icon

May 27 2010, by Cathy Keen

The BP oil blowout in the Gulf of Mexico threatens the existence of a critically endangered sawfish and its relative that recently has been proposed to join it as the only two marine fish in United States waters to receive such federal protection, says a University of Florida researcher.

The largetooth sawfish, a popular curio item known for its sawlike snout, was proposed as a federally endangered species on May 7, less than three weeks after massive amounts of oil started gushing into Gulf waters, said George Burgess, a UF [ichthyologist](#) and sawfish expert.

"The oil spill will not only have very dire effects on such highly visible creatures as [seabirds](#) and dolphins, but also threatens a multitude of bottom-dwelling organisms including the smalltooth sawfish, which already is in considerable trouble as its range diminished and its numbers dwindled," he said.

What's left of the smalltooth sawfish population is confined to the lower peninsula of Florida, Burgess said, with the most important area ranging from Charlotte Harbor through the Ten Thousand Islands area of the Everglades into Florida Bay and the Keys.

That's where the largest portion of its nurseries is found and these are now threatened by the oil spill, he said.

"As oil gets caught up in the loop current, it will be pulled down into the [Gulf Stream](#), which goes right by Key West on its way up the U.S. East

Coast," Burgess said. "The opportunities for serious ecological problems are mind boggling, with dire implications for what's left of that species in the northwest Atlantic Ocean if the oil reaches critical mangrove habitat."

The largemouth sawfish, which was most common in the northwestern [Gulf of Mexico](#), has not been encountered in decades. Its close relative, the smalltooth sawfish, was listed as an endangered species in 2003 and survives in the U.S. only at the southern tip of Florida.

Conservationists had hoped conditions would become favorable for both sawfish species eventually to stage a comeback in Gulf waters, Burgess said. Far more common to South and Central America, the largemouth sawfish migrated up the Central American coast during the summer into the Gulf, the edge of its natural geographic range, he said.

"If important underwater habitat is destroyed, neither species will have a place to return to," he said. "They can't come back to an underwater desert."

A creature of historic and cultural interest, the sawfish was sometimes depicted as a so-called monster on postcards from the turn of the century, with stories of its catching routinely published in newspapers outside Florida, Burgess said. Today it is not unusual to find the fish's "saw" hanging from the walls of South Florida bars, he said.

The last time a largemouth sawfish was seen in United States waters was in 1961, said Burgess, who is curator of the National Sawfish Encounter Database, a compendium of all known historic and current records of sawfish in the United States. The predator's close relative, the smalltooth sawfish, once swam in bays, lagoons and rivers extending from New York to the Rio Grande, he said.

The sawfish's fearsome, long, toothy snout is utilized to stun fishes and unearth crustaceans, shellfish and other food buried in the bottom.

The National Marine Fisheries Service's proposed listing of the largemouth sawfish as an endangered species came after UF researchers provided detailed information about its distribution range and trends in abundance to federal officials in response to a petition asking that the fish receive the designation.

In 2008, five years after the smalltooth sawfish was listed as endangered, UF became keeper of the National Sawfish Encounter Database. Besides serving as its overseer, Burgess also is curator of the International Shark Attack File. Both national records collections are housed at the Florida Museum of Natural History on the UF campus.

For the past two years, Burgess and other UF researchers have documented sightings and captures of the smalltooth sawfish as part of an effort to gather information about its range, habitat and abundance. That information is used by the Smalltooth Sawfish Recovery Team to develop a plan to help speed the species' recovery.

It takes longer for sawfish to rebound than other species because of its relatively slow growth rate and its late onset of sexual maturity, Burgess said. "Our recovery plan covers 100 years, which should give a pretty good indication of how much trouble the animal is in," he said.

Provided by University of Florida

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