

Spinning Sawfish in the Florida Keys: Weather Conditions, Movements, and Mortality

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The smalltooth sawfish (*Pristis pectinata*) is an endangered ray historically found in warm Atlantic waters. It is one of only five sawfish species worldwide, and its U.S. range once extended from Texas to the Carolinas. The species has been protected in Florida waters since 1992 and was the first marine fish to be listed as endangered under the U.S. Endangered Species Act in 2003. South Florida is the last remaining stronghold. In recent years, the Florida Keys have emerged as a consistent winter mixing area for large (>10 feet total length) juveniles and adults from points north on both coasts. For this reason, the unprecedented mortality events (UME) in 2024 and 2025 due to the “spinning fish” phenomenon are concerning. Recent population viability analyses that include current sources of mortality, including the 2024 UME, show the species going extinct in one or two generations. This talk will discuss weather conditions associated with hotline reports from the public of disoriented sawfish in shallow water, their movements before, during, and after the 2024 UME, and the fate of acoustically tagged individuals from the 2024 UME. This research was and is highly collaborative, and this aspect of the project will be a theme. The smalltooth sawfish is in trouble and needs our help now more than ever.