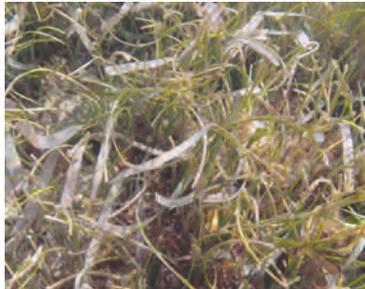




Biologists sample fauna from seagrass beds in the Tampa Bay area.

All seagrass beds are not created equal: The effects of seagrass bed architecture, location and water quality on fish distribution and abundance in Tampa Bay



Seagrass is critical habitat for many species in Florida.

Introduction:

Seagrasses provide critical habitat for many animals in Florida waters. Among the species using this habitat are economically valuable animals, such as spotted seatrout, gray snapper, and pink shrimp and abundant, ecologically important species, such as pinfish, pipefish and killifish. The suite of species is not the same in all seagrass beds in a given estuary, but detailed descriptions of the relationships between types of seagrass beds and the composition of the animal communities living within them are typically lacking.

Objectives:

1. Document distribution and abundance of fauna in seagrass beds within Tampa Bay.

2. Determine changes in seagrass fauna associated with freshwater inflow into the bay.
3. Increase the resolution of data regarding relationships between fauna and seagrass bed architecture, location and water quality.

Approach:

Long-term patterns of seagrass and faunal distribution were documented by analyzing monitoring data collected from 1989 through 2006. The resolution of habitat-fauna relationships was enhanced by conducting short-term synoptic sampling during September 2007.

Benefits:

The relationships between different types of seagrass beds and their faunal communities that we documented in this study can be used by managers to refine seagrass conservation, restoration and mitigation decisions. This means factors other than the mere presence or absence of seagrass need to be considered when determining the relative value of habitats.

Location:

Tampa Bay

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Samples taken from seagrass beds provide valuable data for scientists to determine the health of the habitat.



The presence of healthy fish, such as gray snapper, in seagrass gives biologists much needed data to help conserve habitats.



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