

Shark Nurseries in the 10,000 Islands Estuaries

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BACKGROUND INFORMATION

Pumpkin Bay, Faka Union Bay and Fakahatchee Bay lie downstream of the Southern Golden Gate Estates, a failed development which built 813 miles of roads and 138 miles of canals draining 55,000+ acres during the 1960's to drain the swamps of Collier County in SW Florida. Wet season over-drainage through the Faka Union Canal results in a significant salinity decrease in Faka Union Bay every year compared to adjacent Pumpkin and Fakahatchee Bays. Canals and roads in the Southern Golden Gate Estates are being filled and removed to restore the areas historic freshwater flow patterns. The planned hydrologic restoration will reduce the flow out of the Faka Union Canal dramatically and provide a more even distribution of water to the coastal wetlands and estuarine bays of the 10,000 Islands.

HOW MIGHT THIS AFFECT ESTUARINE SHARK DISTRIBUTION AND SHARK NURSERIES ???

This project was designed to gain an understanding of shark nurseries and distribution before, during and after the restoration of freshwater sheet flow into three of the many estuarine bays of the 10,000 Islands. Sharks utilize shallow, protected estuarine bays to give birth to their young. These back bays provide young sharks with a bountiful food supply and protection from potential predators such as larger sharks. Data presented here is preliminary and will be expanded upon as the project continues.

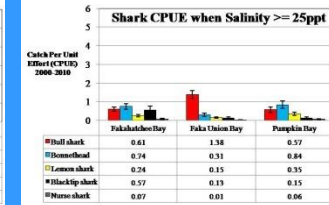
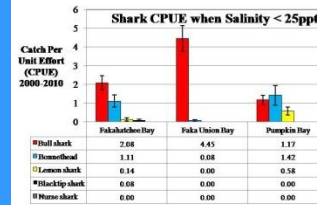
Is SALINITY the main controlling factor?

Bull Sharks (*Carcharhinus leucas*) are capable of acclimating to low salinities for long periods and freely move between marine salinities and freshwater.

According to the data so far, bull sharks are the dominant shark caught (over 69% overall), especially in the Faka Union Bay (100% when salinity is less than 25ppt).

Faka Union Bay, due to the large area of drainage canals, receives a tremendous amount of freshwater during the wet season (June - November). Salinities are much lower than the other bays (see below) and therefore may exclude the other shark species from entering Faka Union Bay in the wet season.

Methods – Preliminary Catch Data




Shark Species List



OTHER NOTEWORTHY ELASMOBRANCHS



Smalltooth Sawfish - Pristis pectinata



Small Sharks are being tagged and released along Florida's Gulf Coast as part of a research project at the Marine Mammal Laboratory.

IF YOU WOULD LIKE TO HELP, please contact the project leader at the Marine Mammal Laboratory:

- STEVE WARD, JENNIFER AND JESSIE PHILLIPS
- 1001 N. W. 10TH AVENUE, SUITE 100, MIAMI, FL 33136
- 305.375.2200 (ext. 200) OR 305.375.2201
- VISITOR: YOU WILL BE MET AT THE ENTRANCE
- VISITORS YOU RELEASED ON MAY 15TH THIS YEAR

Center for Shark Research
Marine Mammal Laboratory
1001 N. W. 10th Avenue, Suite 100
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YOUR HELP IS GREATLY APPRECIATED AND APPRECIATED

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- ALL VOLUNTEERS since the inception of this project who have donated their time and efforts to help collect the data, repair the nets and increase our knowledge of sharks
- All parties involved in the restoration of the Southern Golden Gate Estates - Pinyune Forest watershed system

