

Assessment of the American Alligator at the Kennedy Space Center, Florida



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Date and Time: Tuesday, 31, August, 10:00~12:00

**Venue: The 4th floor meeting room in the Science Research Building 1
(Lecture will be in English.)**

ABSTRACT

The Kennedy Space Center, Merritt Island National Wildlife Refuge (KSC/MINWR) is located within the boundaries of a unique and diverse ecosystem on the east coast of Florida. Established in 1963, KSC/MINWR is home to 146 state and federally listed endangered species of plants (Schmalzer et al., 2002) and animals (Breininger et al., 1998). The land area is isolated by barrier islands and structures that could isolate certain biota. There are 53,308 acres of surface water found on KSC/MINWR (E.G. & G. Florida & Edward E. Clark Engineers-Scientists, 1992), which is ideal habitat for the American alligator (*Alligator mississippiensis*).

Hunted close to extinction, the American alligator was listed as a federally endangered species in 1967. Biologists focused studies on the American alligator; contributing data and information instrumental to the recovery and conservation of the species. Efforts resulted in the American alligator being down-listed to a federally threatened species in 1977. In 1987 the American alligator was removed from the list of endangered species by the Fish and Wildlife Service and pronounced fully recovered. To date, no significant studies concerning the biology, toxicology or regional population status have been conducted at KSC/MINWR. The areas in and around KSC/MINWR remain largely undeveloped reducing the influence and impacts of residential development on alligator habitat, with potential impact from rocket launching facilities on human and environmental health. We believe this area represents a largely undisturbed population of American alligators in the central and northern coastal regions of Florida. The uniqueness of this situation could provide important baseline data on the home range of the American alligator, average population size-class distribution, foraging strategies and toxicological analysis for comparisons to other alligator or species populations. This talk will report initial data from over seven hundred and eighty alligator captures, and focus on initial hormone data from blood collections used for toxicology analyses, and also includes VHF tracking, and nesting success within the Kennedy Space Center, Merritt Island National Wildlife Refuge.

RESEARCH INTERESTS

Training, experience, and research interests in marine biology, specifically relating to toxicology, heavy metals and fisheries ecology, endangered species management, wetlands ecology and habitat assessment. More than eighteen years of experience studying fish species assemblages and reproductive biology in Florida. Sixteen years experience documenting the distribution and movement of the Florida manatee and sea turtles within waters managed by the National Aeronautics and Space Administration (NASA), U.S. Fish and Wildlife Service, and the National Park Service (NPS). Collaborations with many top scientists from around the world on alligator and sample analysis.



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