

# J. N. "Ding" Darling

## National Wildlife Refuge



photo: Steve Alvarez



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photo: Charlie Heidecker ©



photo: Steve Alvarez

**Robert Jess, Refuge Manager**  
**J.N. "Ding" Darling NWR Complex**  
**1 Wildlife Drive**  
**Sanibel, FL 33957**  
**Phone: 239/472 1100**  
**Fax: 239/472 4061**  
**E-mail: FW4RWDingDarling@fws.gov**

### Refuge Facts

- Established: 1945.
- Acres: 5,223 Fee Title.
- Located: in Lee County, FL.
- Other management: Management Agreements with State of Florida; 950-acre Tarpon Bay. 184-acre State Botanical Site.
- Total refuge acreage 6,390.
- Most of the refuge lies within the jurisdiction of the City of Sanibel.
- Location: the refuge is located approximately 15 miles southwest of Ft. Myers FL, on Sanibel Island.
- Satellite refuges administered as part of the complex:
  - Pine Island NWR.
  - Island Bay NWR.
  - Matlacha Pass NWR.
  - Caloosahatchee NWR.

### Natural History

- The refuge is made up of several habitat types: estuarine habitat consisting of open water, sea grass beds, mud flats and mangrove islands; and interior freshwater habitats consisting of: open water ponds, spartina swales, and west Indian hardwood hammocks/ridges. Two brackish water impoundments totaling 800 acres are used extensively by wading birds and other water birds.
- Two thousand eight hundred and twenty-five (2,825) acres of the refuge have been designated as Wilderness Area.
- Several threatened and endangered species benefit from the habitats described: eastern indigo snakes, American alligators, American crocodiles, bald eagles, wood storks,

peregrine falcons, Florida manatees, and Atlantic loggerhead turtles.

- The refuge has a large diversity of species. Approximately 238 bird species have been identified utilizing refuge habitats, as well as 51 species of reptiles and amphibians and 32 species of mammals.

### Financial Impact of Refuge

- 17 full time employees.
- Five full time non-refuge FWS employees.
- Nine seasonal/temporary employees.
- Four student employees.
- 850,000 visitors annually.
- 240+ volunteers contributing equivalent of 10 full time employees.
- Current budget (FY 05) \$1,939,000.

### Refuge Objectives

- To join in partnership with the residents of Sanibel and Captiva Islands, Lee County and State of Florida to safeguard and enhance over 7,300 acres of pristine subtropical habitat for the benefit of wildlife.
- To protect and provide suitable habitat for endangered and threatened species including the American crocodile, west Indian manatee, wood stork, eastern indigo snake and bald eagle.
- To implement sound wildlife management techniques to provide feeding, nesting and roosting habitat for a wide diversity of shore birds, wading birds, waterfowl, raptors and neo-tropical migratory species.
- To provide high quality interpretive and environmental education programs in order to develop within each refuge visitor

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an appreciation of fish and wildlife ecology and to provide quality wildlife-oriented recreation compatible with the purposes for which the refuge was established.

## Management Tools

- Water management.
- Prescribed fire.
- Law enforcement.
- Wildlife population surveys.
- Visitor management.
- Marine protected areas.
- Partnerships.
- Education/interpretation.
- Concession operations/management.
- Chemical and mechanical control of invasive exotic plants.

## Public Use Opportunities

- Education/Visitor Center.
- Five-mile auto tour route.
- Fresh and salt water fishing.
- Hiking trails.
- Tram service.
- Sealife cruises.
- Canoe and kayak rentals.
- Electric pontoon boat rentals.
- Fishing boat rentals.
- Guided interpretive programs.
- Wildlife observation tower.
- Wildlife photography.
- Bike rentals.

## Calendar of Events

**March:** Junior Duck Stamp Contest.

**May:** International Migratory Bird Day.

**July:** National Fishing Week.

**October:** National Wildlife Refuge Week, "Ding" Darling Birthday and Duck Stamp Celebration.

## Questions and Answers

*Over 850,000 people annually visit the refuge. What is the secret to its popularity?*

The peak visitor season at the refuge coincides with Florida's peak tourist season, the winter months of December-April. Sanibel Island is world famous for its beautiful beaches and natural beauty.

J. N. "Ding" Darling National Wildlife Refuge serves as a major attraction for tourists coming to Sanibel. Roseate spoonbills, reddish egrets, snowy egrets, and a variety of other heron and egret species are found in abundance throughout the mangrove environment. As one of the top birding hot spots in the nation, J. N. "Ding" Darling NWR has received much national and international publicity from professional photographers and magazine writers.

*The refuge operates an entrance fee collection system. How successful is that system? And how are the fees utilized on the refuge?*

The refuge fee program is one of the most successful fee programs in the U.S. Fish and Wildlife Service. The refuge concessionaire staffs the collection booth and provides helpful information. The refuge collects over \$300,000 annually, of which \$240,000 stays at the refuge. Monies from the entrance fee program are used to support the refuge's environmental education, interpretive and public outreach programs.

*Do community "partnerships" play a part in day-to-day refuge operations? If so how?*

Partnerships are integral to the daily operations of the refuge complex. Annually, the Service/refuge provides over \$50,000 for Partners for Fish and Wildlife projects that restore fish and wildlife habitat. Also, the refuge has a cooperative agreement with the city of Sanibel and the Sanibel Captiva Conservation Foundation that allows for the sharing of equipment, personnel and material for the restoration of fish and wildlife habitat on and off the refuge.

The refuge also has a cooperative agreement with the "Ding" Darling Wildlife Society (a not-for-profit

friends group). Annually, the Society assists with funding projects that directly contribute to the objectives of the refuge. The friends group raised more than \$3,000,000 and built the new Environmental Education Center which was completed in 2001.

*What are some of the primary threats to the health of the refuge?*

The health of the refuge complex and the estuarine ecosystem in which the refuges lie are directly tied to the Caloosahatchee Watershed and those watersheds which are drained into the Caloosahatchee River (i.e. Kissimmee River and Lake Okeechobee watersheds). Water quality, quantity and timing are specific problems and concerns for the health of the refuge complex. These impacts are being analyzed through the Comprehensive Everglades Restoration Project and the Southwest Florida Feasibility Study.

In addition, residential and commercial development has increased along the river and bays causing higher nutrient and fertilizer runoff into the waterways.

The high volume of recreational boating and sport fishing has affected fish populations and the quality of seagrass beds which threatens endangered species such as the Florida manatee and sea turtles. Unregulated public use on beaches and inlands have adversely impacted migratory birds and nesting sea turtles.

*What can the refuge do to effect the health of the ecosystem?*

Management is focusing actions on understanding and sustaining a healthy structure and function of the estuarine ecosystem. Working with partners, the refuge has begun to investigate the status and trends and promote the health of the habitat and wildlife within the marine nursery areas in and around the barrier islands. Information garnered from these and other studies assist in the refuge's actions for maintaining the biological diversity, integrity and environmental health of the resource, as well as assessing management decisions for compatible wildlife-dependent recreational use.