

# June 7 – Perdido Key and the Gulf

- Perdido Key is closely tied to the ocean waters of the Gulf of Mexico; the Gulf forms the island's southern boundary and is tidally connected to the Old River, Intracoastal Waterway, and Big Lagoon on its northern boundary
- While the Gulf gives Perdido Key a great deal, it also takes away Hurricane Sally dramatically demonstrated in September 2020
- The Gulf can also erode beaches as happens sometimes significantly on the eastern portion of the island, it also may replenish sand on the western portion
- The Gulf supports a wide variety of sea birds that hover and strut near the coast, giving great pleasure to all who care to watch; the birds are here primarily because of bounty from the sea, from schools of bait fish, to pompano, redfish, whiting, and black drum just waiting for the patient and skilled angler to catch along the shore; further out red snapper and their cousins are ocean-gold for table fare and profit

Today's entry features Perdido Key's connection to its environment, including the damage caused by Hurricane Sally, as well as past celebration of World Oceans Day; the 2017 and 2018 events were held at Perdido Key State Park, but in 2019 was postponed because of storm threats and held later as a modest "in the rain" event; in 2020 it was online due to COVID-19 restrictions as we are now as part of the Perdido Key Area Chamber of Commerce hosted 2021 World Oceans Day event



World Oceans Day 2018

# Hurricane Sally Roars Ashore September 2020

- It was supposed to be a Category 1 storm with a lot of rain, but Hurricane Sally turned into a dangerously strong Category 2 disaster for Perdido Key and its neighbors
- The storm pummeled the island beginning on Tuesday September 15 and did not end until late afternoon on Wednesday September 16
- Those who rode it out will remember its howling winds and brutal rainfall for a good long time
- Almost every structure on Perdido Key was in some way affected by the storm; some were destroyed and repair to others continues to this day



# Hurricane Sally Recovery

## A Work in Progress

- The infrastructure to the Perdido Key Area of Gulf Islands National Seashore (Johnson Beach) and Perdido Key State Park were heavily damaged or destroyed; the parks will not return to full service until late-2021
- Sally tore four breaches in the remote eastern portion of the National Seashore leaving three islands in its wake
- Thanks to terrific effort by public agencies and private enterprise, roads were re-opened quickly as downed trees and other debris were pushed aside; water service and electrical power were restored soon afterwards for most homes and businesses



# Perdido Key Beach Erosion



Winter storms and tides can take a toll on Perdido Key beaches; the worst erosion moves to different locations each year but the damage is usually mitigated as the seasons progress



# Seasonal Changes to Dunes

## Perdido Key State Park East Use Area

April 2019



November 2019



December 2019



January 2020



February 2020



# Dune Restoration Project

- In 2018, Escambia County used FDEP/Deepwater Horizon settlement funds to plant sea oats and other appropriate vegetation on Perdido Key dunes
- The new plants will help maintain the dunes and reduce beach erosion



# Dune Damage from Hurricane Sally September 2020



Dunes in some areas of the Perdido Key Area of Gulf Islands National Seashore (Johnson Beach) were leveled by Hurricane Sally



Restoring dunes is not easy; the first photo shows an area where dunes were flattened by the storm; the next shows piles of sand brought in to begin the dune restoration process; the final photo reveals the sand piles flattened and spread over the road after several days of strong wind



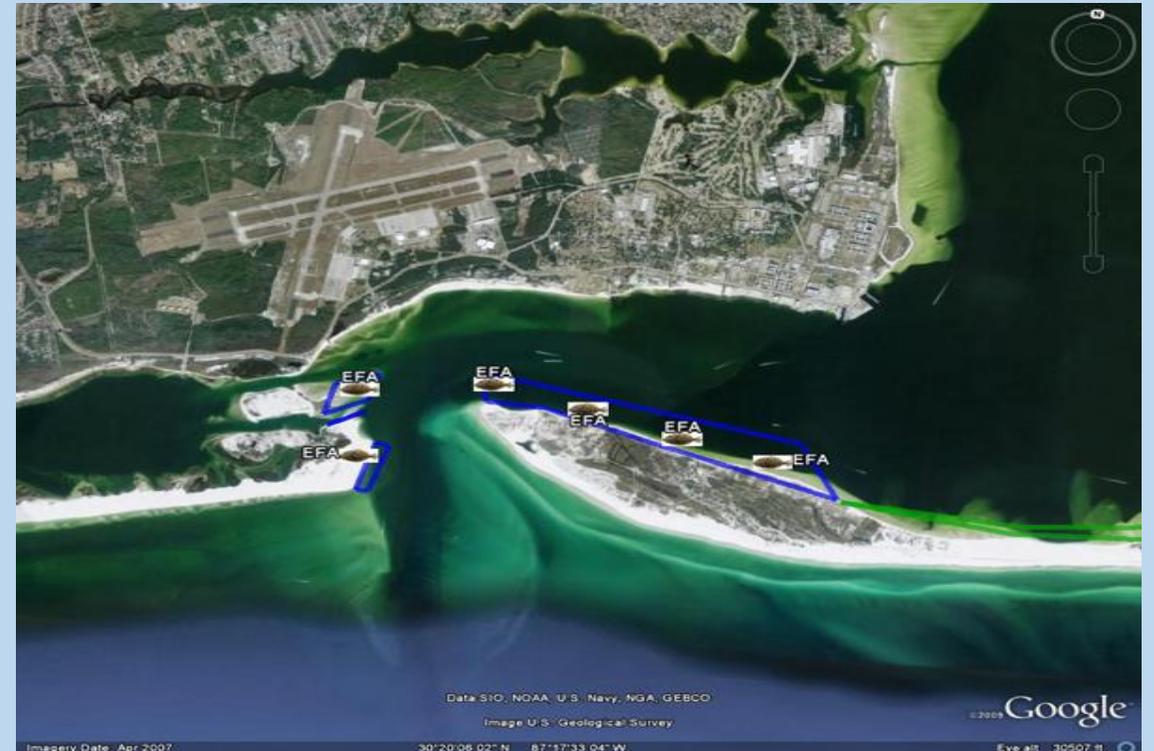
Some condominiums in the hard hit eastern portion of Perdido Key added sand and beach retention plants to help restore dunes after Hurricane Sally

# Pensacola Pass Inlet Management Plan

- The Pensacola Pass Inlet Management Program will help maintain the Pass and protect Perdido Key beaches by placing dredged sand from the Pass on Gulf Islands National Seashore beaches and allowing the natural east-west migration of sand to renourish beaches on the rest of Perdido Key
- For more on the project, view the Escambia County video “Inlet Management Plan” at <https://youtu.be/pBLc9Aj9vY4>



Beach Renourishment Myrtle Beach SC US Army.mil Photo



# Perdido Key Beach Mouse

- The Perdido Key beach mouse is an endangered species; its habitat and welfare are subject to regulations and close scrutiny by government authorities
- The mouse eats only seeds and plays a useful role in propagating plant life and maintaining Perdido Key dunes
- The Perdido Key beach mouse is vulnerable to strong storms, predators such as foxes and domestic cats, and development
- For more on the mouse, view the video “The Little Mouse from the South” at ["Little Beach Mouse from the South"](#) and the article “Beach Mice Provide Big Benefit at the National Seashore” at <https://www.nps.gov/guis/learn/news/beachmice-magnet.htm>



Perdido Key Beach Mouse USFWS



# Protecting the Environment on Perdido Key

- Why has Perdido Key not become overdeveloped? One reason is because the Perdido Key beach mouse was listed as an endangered species in 1985 under the Endangered Species Act (ESA) of 1966; preventing local extinction of the mouse required protecting its habitat with measures like curbing public access to dunes, planting appropriate vegetation, and restricting predators such as domestic cats
- Building on the island required substantial permitting requirements – a process that could take years; to improve the process, Escambia County worked with federal agencies to create the Habitat Conservation Plan (HCP – approved in 2014) that expedited procedures while still protecting the Perdido Key beach mouse, sea turtles and piping plovers (a small shorebird)
- According to Tim Day, Escambia County natural resource manager: “The endangered species issues have done a good job helping to maintain the vision of Perdido Key as a village which isn’t overbuilt or a condo canyon” all who appreciate the modest development and wonderful animals on Perdido Key should strongly support efforts to retain its natural environment and wildlife
- The Perdido Key Master Plan is another means by which the development is managed on Perdido Key
- Developed by renowned architectural firm DPZ, it was adopted by Escambia County on June 2, 2016 after numerous public meetings and extensive deliberations by public officials; as noted by the County “the plan is intended to guide decisions related to public and private use of land and public facilities in a manner compatible with the land’s character and adaptability, thus promoting good stewardship of resources”
- The Plan provides incentives and restrictions through zoning and other land-use instruments to encourage development along the lines of the “New Urbanism” associated with DPZ
- Its main focus is on the Perdido Key Drive corridor between Semmes Road and River Road where the “Perdido Key Town Center Overlay District” encourages “a walkable, attractive urban space that supports a mix of uses” and discourages “commercial strip development . . .”; although the Perdido Key Master Plan provides government rules and guidance on development, construction and other land use decisions will be primarily made by private enterprise
- Specific details on the Perdido Key Master Plan are available from Escambia County at [www.myescambia.com](http://www.myescambia.com)

# Turtle Friendly Lighting

- Turtles follow the moon's image reflected off the Gulf of Mexico to return to safe waters, but can become confused by man-made lights or bonfires near the beach
- Turtle friendly lighting should be
  - **Long:** it should have a long wavelength, such as amber
  - **Low:** the lights should be positioned as low as possible while still ensuring personnel safety and security
  - **Shielded:** the lighting should be shielded to prevent light not needed for personnel safety and security from being visible at the beach
  - Photos from Sea Turtle Conservancy



Unfriendly



Friendly

# Invasive Species on Perdido Key



Nutria are large rodents introduced into the United States from South America for their fur; in the wild, they can severely damage marsh areas as experienced in Louisiana and elsewhere; nutria have been identified on Perdido Key (NOAA Photo)



Cogongrass is an invasive species from Southeast Asia and is established in at least one beachfront lot on Perdido Key; it is one of the “Top 10 Worst Weeds in the World”; a perennial grass with varying color and “long, fuzzy-white seed heads,” it can spread readily and displace native plants (USDA Photo)



Beach Vitex is a particularly damaging invasive species; the top photo shows a Perdido Key property with a patch of beach vitex; several volunteers removed most of the plant in two work sessions several months apart, but more work is required to eradicate it fully from this and adjoining property; unchecked, beach vitex can take over a beach as shown in the lower photo of Debidue Beach SC – FWS Photo by Betsy Bradson



# World Oceans Day 2017



# World Oceans Day 2017





# World Oceans Day

2018



# World Oceans Day



# World Oceans Day



# World Oceans Day



# World Oceans Day



# World Oceans Day 2019



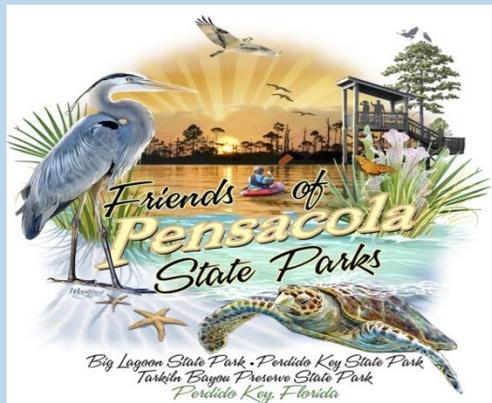
# International Coastal Cleanup Day September 2019



PKA/Florida State  
Parks/Friends of  
Pensacola State Parks co-  
sponsored cleanups at  
Perdido Key State Park



# Some Environmentally Conscious Non-Governmental Organizations



# Whale Sharks!



- Whale sharks can grow to 40 feet and weigh as much as 40 tons! They have broad, flat heads and may live as long as 100 years! They like warm waters and to eat small ocean organisms like plankton, schooling fish, and squid.

- Drawn from NOAA article "What is the biggest fish in the ocean?" at <https://oceanservice.noaa.gov/facts/bigfish.html>

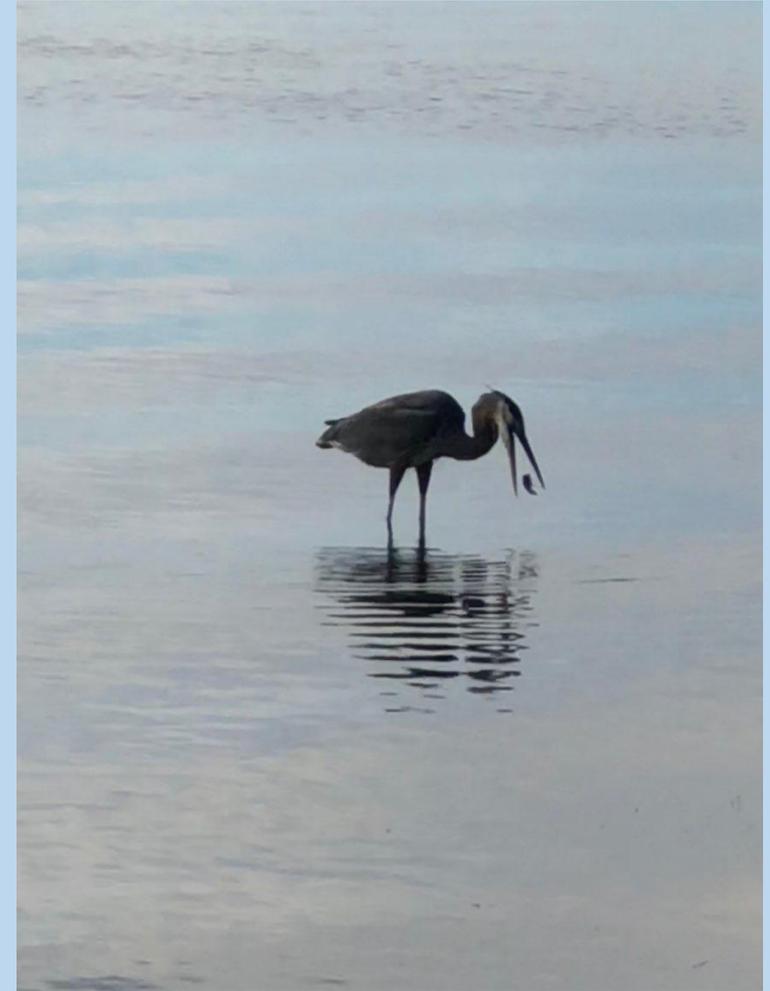
## Whale Shark Word Search

L H Q N V T Q O T G A A G R L  
C A R R C O D E I G T L O A P  
K P R Y X G Y L H Z Y N Y K B  
S G T G Z F L D F O D V Y E C  
L J L N E S E Z I A I W Z R H  
L C T S G S U N G J N D S S T  
Z P U W M L T T K T W H H K U  
C G C S A I S C X O A K L I O  
O V O V I V I P A R O U S N M  
T S A E W H S V K F I S H Y D  
F M T W T E T I H W I H U X Q  
F H L O M E X W D T X A K A F  
W A U A P X T L Q M G Q M Y C  
U G L G O S Q W E Y B K G M F  
U G D P E A U A O O H N I F N

### Find the underlined word in the whale shark facts below:

1. The whale shark is the LARGEST of all fish.
2. The whale shark has a HUGE mouth, which can reach up to 4 feet (1.4 meters) across.
3. It is a SHARK; it is not a whale.
4. Food is strained from the water through its GILLS.
5. It has 300 rows of tiny teeth, which many scientists believe are used to hold whatever is scooped into the MOUTH.
6. The whale shark is OVOVIVIPAROUS, meaning that the embryo is formed within eggs retained in the mother's womb.
7. It has gill RAKERS that are located at the rear of the mouth.
8. The SKIN of a whale shark can be as thick as 4 inches.
9. The whale shark can be recognized by the two-toned pattern of light SPOTS on its dark back.
10. It has a WHITE underside.

# Walking with Blue Heron





World Oceans Day is celebrated on June 8 every year and coordinated worldwide by the United Nations and The Ocean Project to emphasize the importance of oceans to the well-being of the planet and our very survival

“On World Oceans Day, people around our blue planet celebrate and honor the ocean, which connects us all...”

“ Working together, we can and will protect our shared ocean”

*The Ocean Project*

Stay Safe and Enjoy Our Gulf and Estuaries

