

# DESTIN FORT WALTON BEACH FLORIDA

## Natural Resources

### Meet the Destin-Fort Walton Beach Natural Resources Team

#### What is the Natural Resources team?

The Destin-Fort Walton Beach, Florida Natural Resources team is a tourism development department dedicated to conserving Northwest Florida's natural beauty, protecting native wildlife, and developing tourism experiences that provide opportunities for families to enjoy adventures on the water.

#### Who makes up the Natural Resources Team?

The team is comprised of five biologists. Under the leadership of Natural Resources Chief Alex Fogg, they collectively help promote tourism by prioritizing sustainability and putting the community first. Please see more details of who makes up the team below:

#### Alex Fogg, Natural Resources Chief



Alex Fogg serves as the Natural Resources Chief for Destin-Fort Walton Beach tourism. In his role, he is involved in coastal and terrestrial ecotourism centered projects ranging from collaborative research programs and land management initiatives to

beach restoration, waterway safety, artificial reef creation and invasive lionfish management. He manages the most

active artificial reef program in Florida and since 2020 has deployed more than a dozen large vessels and thousands of tons of environmentally friendly reef material to create a world-class dive destination that serves as an essential habitat for species of fish that are important to the ecosystem. Alex also organizes the largest lionfish tournament in the world, the Emerald Coast Open, which since the inaugural event in 2019 has resulted in the removal of nearly 85,000 invasive lionfish. He is an avid recreational and scientific diver and lionfish hunter, with broad experience in offshore field operations and technical diving capabilities. These skills, coupled with his advanced science background and affection for the outdoors, guides ecotourism efforts not only in Destin-Fort Walton Beach but throughout the region and abroad.

#### Mike Norberg, Coastal Resources Manager



Mike grew up in Northwest Florida and earned his bachelor's degree in marine biology from the University of West Florida and his master's degree in Marine Science at the University of South Alabama – Dauphin Island Sea Lab. In his role as Coastal Resources

Manager, he is responsible for conservation initiatives ranging from artificial reef development, habitat restoration, invasive lionfish monitoring and removal, and



## Natural Resources

many other coastal-related projects. Mike has over 25 years of scuba diving experience, is a NAUI Dive Master, a scientific diver, and holds several technical diver certifications as well as an U.S. Coast Guard OUPV Captains license.

### **Robert Fenwick, Land Resources Manager**



Robert grew up camping, fishing, and backpacking on Colorado's western slope. A fascination with the ocean led him to Eckerd College in St. Petersburg, Florida for a Bachelor's Degree in Marine Biology and state-level contributions to gamefish

management and coastal habitat restoration with the Florida Dept of Environmental Protection and Southwest Florida Water Management District. Returning west, Rob helped establish the Resource Stewardship program for Colorado Parks and Wildlife, owned and operated a mixed-fruit orchard, and attained his Master's Degree in Natural Resources at Utah State University. Most recently, Rob partnered with numerous federal, state, local, and non-profit organizations to improve the condition of forests and rivers across Colorado. Now back in Florida, Rob is excited to begin work as the new Land Resources Manager for Okaloosa County. When not working, Rob

enjoys mountain biking, hiking, canoeing, growing orchids, and exploring the outdoors with his wife and children.

### **Jessica Valek, Natural Resources Manager**



Originally from Minnesota, Jessica moved to Pensacola, FL in 2014 to pursue a career in marine biology. She studied at the University of West Florida where she received her bachelor's degree. She began her career as a Research Assistant at the

Institute for Human and Machine Cognition in Pensacola focusing on artificial reef development, and a variety of different topics that focused on combining technology with biology. She then moved on to the Florida Fish and Wildlife Conservation Commission's Lionfish Control Program where she managed many programs to spread awareness about the invasive species and encourage involvement in removal efforts. Jessica joined the Destin-Fort Walton Beach team in March 2021, and the main focus of her work is managing the sea turtle conservation program as the marine turtle permit holder. She and her team of volunteers conduct daily morning surveys looking for sea turtle nests and monitor the beaches and nests throughout the nesting season. She conducts a large number of public education and outreach events and





# Natural Resources

programs to inform locals and visitors about protecting sea turtles. Additionally, she manages marine debris removal efforts and assists the team with lionfish removal efforts, research projects, restoration projects, and education and outreach efforts.

## Jacob Bolin, Land Resources Coordinator



Jacob grew up in northeastern Alabama and received his bachelor's degree in forestry from Auburn University. He has experience ranging from timber inventory cruising and wildland firefighting to imperiled species surveying and land

management planning. Jacob also has experience in managing native and non-native invasive species throughout the Southeast. He recently started with the Destin-Fort Walton Beach team in April 2024. He is responsible for managing Okaloosa County land resources by balancing conservation with ecotourism. Current projects include developing and mapping hiking and camping opportunities at newly acquired North Shoal River Preserve and Shoal River Ranch as well as existing underutilized recreation areas. Jacob is also exploring the expansion of river and lake opportunities such as paddle trails and boat ramps.

## Danielle Lasseign, Coastal Resources Coordinator



Danielle grew up in southern California where she earned her bachelor's degree in marine biology from California State University, Long Beach. She worked as an educator for a local aquarium in San Pedro, CA, then moved to the US Virgin Islands

where she earned her master's degree in marine and environmental science and gained extensive diving experience as a scientific diver. Danielle assisted with coral health and disease monitoring and other reef ecology monitoring projects. In 2019, she moved to Florida where she started her role as a student contractor with the US EPA and assisted with various coral health studies, and spent time exploring northwest Florida environments via hiking, paddle board, diving, etc. She joined the Natural Resources team at the end of 2024 as the Coastal Resources Coordinator and plans on using her experiences in scientific diving, resources monitoring, and outreach to assist with current and future projects that will restore and conserve the beautiful resources we all love and depend on.



# Natural Resources

## About Artificial Reefs in Destin-Fort Walton Beach

Destin Fort-Walton Beach leads the state of Florida in **artificial reef activity**. Since 2019 the destination has deployed 14 vessels. By comparison, only 1 other has been deployed in the state, and 20 in the country. A total of 336 public and 435 private artificial reef sites have been created, ranging from concrete piles to specifically designed modules and even large shipwrecks. These structures not only provide an ideal location for scuba diving and fishing activities, but also essential habitat for commercially and recreationally important species. A detailed look at the more than a dozen of the destination's artificial reefs (including interactive 3D models, maps and coordinates) is available [HERE](#).

## Recent Artificial Reef Efforts in Destin-Fort Walton Beach

- Recent deployments include:
  - 180ft Offshore Research Vessel- R/V MANTA – Deployed January 2023
  - 192ft Offshore Research Vessel- R/V DOLPHIN – Deployed March 2023
  - 125ft Supply Vessel- RMS ATLANTIS – Deployed April 2023
  - 105ft Supply Vessel- RMS CYCLOPS – Deployed April 2023

- 239ft R/V DEEP STIM III – Deployed January 2024 (a tri-county collaborative project)
- The first 3D printed artificial reefs (25 concrete modules) - Deployed February 2024
- 360ft Roll on Roll off vessel (offshore ferry) – Deployed August 2024
- The team has received \$1.26 million and a \$60K grant from the Fish & Wildlife Commission for 400+ module deployments. Additionally, the team has received \$900K of RESTORE funding for additional reef deployments.
- Natural Resources also has begun permit planning for Choctawhatchee Bay Reefs.

## Upcoming Projects

- M/V FANTASEA (140ft) former Casino Boat
- M/V SPIRIT OF NORFOLK (188ft) dinner cruise/ passenger vessel that caught fire in Norfolk, Virginia in June 2022
- M/V SKIPPIN SUE (110ft) offshore utility supply vessel that will be towed with the SPIRIT OF NORFOLK and deployed at the same time
- NEKTON PILOT and NEKTON RORQUAL (75ft and 80ft) are former live-aboard scuba diving vessels that toured the Caribbean, completing hundreds of cruises for thousands of divers from around the world.





## Natural Resources

- The M/V CRIMSON WHITE (135ft x 40ft) Tugboat in Mobile, AL is currently being used in military training exercises.
- SS UNITED STATES (990ft x 101.5ft) After nearly 30 years in Philadelphia, the SS United States embarked on a two-week journey to Mobile, Alabama, where it is currently being prepared to become the world's largest artificial reef off the coast of Destin-Fort Walton Beach by the end of 2025. This transformation will not only create a unique marine ecosystem, benefiting marine life and local fisheries but will also support the establishment of a land-based museum. The museum will provide divers, residents, and visitors an opportunity to explore the legacy of America's Flagship. Crews working with the Department of Environmental Protection and the EPA, are actively removing metal, wiring, and fuel from the ship. The team will cut holes to ensure it lands upright and create passages for marine life to flourish. The reef will attract species like grouper, snapper, mackerel, and tuna. This monumental project honors the SS United States' storied past while fostering ecological growth in the region.

### FADs (Fish Aggregating Devices)

Destin-Fort Walton Beach is home to the first FAD buoy network in the continental United States. Captain Kelly Windes Fish Aggregating Devices (FADs) Buoy Network

is made up of eight 15 ft. Okabe FAD buoys deployed in August 2020. Acoustic dataloggers have been installed in collaboration with numerous research partners to track fish movement and the team has estimated a \$56 million economic impact for this project. These buoys have seen success from the day they were deployed, with everything from tournament winning Blue Marlin and tuna to Wahoo and Mahi Mahi.

### Mitigating Impacts of Invasive Lionfish About the Species

Lionfish are known to be native to the Indo-Pacific region. They were first detected in the U.S. in 1985, and the first report of the species in the Gulf of Mexico was in 2010. The fish prey on native species and it has been reported that they have reduced native fish populations on some reefs by more than 90%. These invasive species are capable of eating prey up to two-thirds their size and will devour most of what comes in their direction, resulting in an imbalance in the underwater ecosystem.

### Natural Resources Efforts

The Destin-Fort Walton Beach Natural Resources team works to survey and calculate densities and recolonization rates at natural and artificial reefs. They also contributed to and lead numerous projects including the evaluation of detectability during different times of day; outreach and





# Natural Resources

education; test innovative removal methods (traps and ROVs); monitor monthly population densities; monitor a novel disease impacting lionfish in the Gulf; track lionfish in Choctawhatchee Bay; and encourage lionfish removal efforts through an annual tournament, the Emerald Coast Open

More info on the annual Emerald Coast Open event can be found [HERE](#).

## Sea Turtles

Destin-Fort Walton Beach is home to four of our seven types of sea turtles: Loggerhead, Green, Kemp’s Ridley, and Leatherbacks. Under the direction of Natural Resources, the Sea Turtle Patrol operates under Marine Turtle Permit #251 issued by Florida Fish and Wildlife Conservation Commission. During sea turtle nesting season (May 1 through October 31) the team patrols the beaches at dawn every day to survey for potential nesting and hatch activity. While sea turtles live in the Gulf year-round, they lay their eggs on the beaches during this timeframe. There are a number of educational opportunities for locals and visitors alike to learn more and participate in protecting turtles including an ongoing series “[C.A.R.E.”ing for Turtles](#)” at the Gulfarium C.A.R.E. Center.

## Tagging and Research

Current tagging and research efforts (including a citizen tagging program) include the following species: Whale Sharks, Tiger Sharks, Tripletail, Tuna, Redfish + Redfish Release, Rays, Swordfish, Terrapin, Sea Turtles and Cobia.

## Land Resources Projects

### North Shoal River Preserve

Planning and development is underway at this 410-acre property to turn it into a tourism park. It will include miles of hiking trails and wildlife viewing in a mix of upland and wetland ecosystems. The trails will include trail markers and informational signs along the way. There will also be a clear, open view of Shoal River that is a part of the Florida Designated Paddling Trails. A variety of different events will be held at this site including cross-country and other racing events, archery and orienteering, just to name a few. For these events, there will be primitive camping as well as a campground established on the north part of the property. The house on the north end of the property will be used as an event or meeting space.

There are numerous other large pieces of land that are being explored for ecotourism opportunities such as Shoal River Ranch and Patriot Ridge.