

Diver on wreck of the *Oriskany*, Pensacola, Florida; Bay County Hathaway Bridge (below)

Text by Kathalyn Gaither, Florida Department of Environmental Protection. Photos by A. Emtiaz, Bill Horn; and Keith Mille of the FWC Artificial Reef Program

Miles of white sandy beaches, family vacation destinations, infamous spring break festivities and outstanding state parks attract millions of visitors to Florida annually from around the world. But there is so much more

to see—especially for those who like to take their sightseeing down below the ocean and gulf waters—like the beauty and magic of thousands of artificial reefs that lie beneath the surface along Florida's coastlines.





Artificial reefs themselves cannot compare to the magnificent beauty of Florida's natural coral reefs. However, the spectacular marine species of all shapes, sizes and vibrant colors is of equal amazement.

And while Florida's coral reef tract lies in south Florida waters, divers and snorkelers can find more than 2,800 artificial reefs located off 34 of the 35 coastal counties.

Species such moray eels and sea turtles, red snapper and cobia, Atlantic spadefish and butterfly fish—and even goliath grouper reaching up to seven feet in length and weighing several hundred

pounds—frequent the reefs as thousands of tiny fish spiral around them.

The artificial reefs vary from as little as one ton in size to in excess of 30,000 tons. These structures had varying roles before becoming a part of the vast underwater artificial reef community. There are former combat army tanks, barges, freighters, schooners, tugboats, box cars, airplanes and water towers.

Currently, these types of reef materials are no longer used since new permits require that reef materials be usable for long-term marine habitat and remain stable on the ocean floor.

Most new reef materials are prefabricated concrete and steel reef structures built specifically for artificial reef use.

Some of the older artificial reefs were even somewhat famous before their sinkina.

Before its sinking off the waters near Looe Key in 1998, the 210-foot ship Adolphus Busch was in the 1957 film Fire Down Below starring Robert Mitchum, Jack Lemmon and Rita Hayworth.

In 2009, the USS *Hoyt Vandenberg*—a 520-foot long missile tracking ship and the star of the 1999 movie *Virus* starring

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Okaloosa Liberty Ship

Jamie Lee Curtis—was sunk off Key West.

Scrap army tanks and decommissioned old ships may not be thought of in terms of beautiful, but they do evoke a sort of intrigue and magic as artificial reefs.

Many of the structures were just sitting in water or on land, aging away, until Florida's Artificial Reef Program was created in 1982, and once again, they were given a purpose.

Several of Florida's artificial reefs have historical value. Some are registered with the Florida Underwater Archaeological Preserve and the U.S. National Register of Historic Places, such as the USS Hoyt Vandenberg that was sunk in the waters off Monroe County in 2009. It is the second largest artificial reef in Florida surpassed only by the USS Oriskany, which was sunk in 2006, about 22 miles from Pensacola Pass.

The USS *Oriskany*, measuring 888 feet in length and weighing 32,000 tons, was previously a Naval Air Craft Carrier used primarily in the 1970s and decommissioned in 1976. She is fondly referred to as the Great Carrier Reef.

The USS Spiegel Grove, named after U.S. President Rutherford B. Hayes' estate, was active in the military from 1956 through 1984. It transported troops and equipment thousands of miles

and to many countries including Newfoundland, South Africa, Spain and Denmark during the Cold War era. In 2002, the 510-foot ship was sunk in waters off the Florida Keys and is located near the John Pennekamp Coral Reef Underwater State Park in Key Largo.

Especially common in gulf waters off Mexico Beach in Bay County are memorial reefs that honor those who have passed on.

Some of the pre-fabricated reef structures actually hold the ashes of families' loved ones in many areas of the state, particularly off Sarasota.

Transportation was a theme for older reef materials in the waters of Escambia and Okaloosa coun-





USCG Duane (above) photo taken by Anoosh "Tony" Emtiaz—an employee at John Pennekamp Coral Reef State Park. Two of his favorite sites are sister shipwrecks, the USCG Duane and USCG Bibb, both sunk in 1987



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Queen angelfish, Dade County Barge

ties. In addition to the *Oriskany*, there are an additional ten army tanks, some CSX boxcars, at least a dozen M-60 army tanks, some tugboats, several barges and old auto bodies that serve as a refuge and playgrounds for area marine species.

You can also see a little bit of America's past in Pasco County waters where nine army tanks have been sunk, and in Sarasota County there are ten of them.

Many of the artificial reefs have been fondly named by divers or family members, like the Stewart Unkles Jr. Memorial Reef, Red Sea Tugboat, Spirit of Hemingway, Culverts Guardian Reef and Poseidon's Garden—an underwater burial site off Sanibel Island.

There are some ex-smuggling ships,

an old floating saloon and even a Rolls Royce off West Palm Beach.

No matter what it is made of—whether it's a concrete module or a massive retired military vessel—Florida's artificial reefs present awesome opportunities for those looking to explore life beneath the sea, from the novice diver to the most experienced.

Be cautious—there are certain dives that only experienced divers should attempt due to various conditions such as currents, underwater hazards and other variables.

Artificial reefs that lie within nine nautical miles of the coast in the Gulf of Mexico, and within three nautical miles of the Atlantic need permits from both the Florida Department of Environmental Protection (www.dep.state.fl.us) and

the U.S. Army Corps of Engineers; any beyond those distances need permits only from USACE.

The Florida Fish and Wildlife Conservation Commission (www.myfwc.com/conservation/salt-water/artificial-reefs/locate-reefs) oversees a grants-in-aid program to assist local governments to help fund the planning, building and monitoring of artificial reefs in their local marine waters, as well as provide technical assistance and guidance for artificial reef projects statewide.

With so many different reefs out there to explore, divers and photographers will never need worry about becoming bored with the scenery. So plan your next excursion to Florida and experience the undersea world of adventure that Florida's artificial reefs bestow!





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