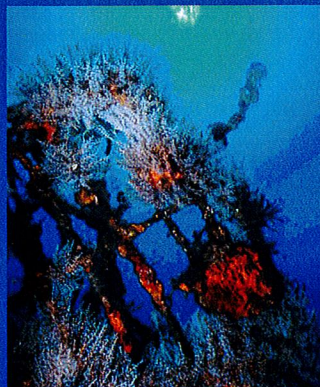


Many species of remarkable marine tropical fish inhabit the artificial reef sites.



Telesio is a species of branching soft coral that is found on many artificial reef sites. The coral sustains itself by trapping tiny food particles drifting in the current.



Oculina is a species of branching hard coral that is found on some of the artificial reef sites. This coral grows in dense thickets in very deep water and provides important spawning habitat for grouper species.



A multitude of unusual and colorful invertebrate species such as sponge, tunicate, bryozoan and corals grow directly on the concrete and steel reef materials.



Large Goliath groupers and snapper species form spawning aggregations on many reef sites during the summer months.



Volusia County Marine Wildlife Habitat and Artificial Fishing Reef Site Coordinates

Volusia County currently maintains 15 federally permitted marine habitat and artificial reef construction areas located on the continental shelf offshore Ponce de Leon Inlet. Reef habitat construction areas 1 through 13 are 5,000ft x 5,000ft square with multiple reef habitat sites located within and spaced approximately 300ft to 500ft apart. Reef construction areas 14 and 15 are located nearshore within 1 mile off the beach at Flagler Avenue in New Smyrna Beach and the Sunglow Pier in Daytona Beach Shores. Reef sites are made up of large, clean concrete structures, culverts, road barriers, utility poles, steel ships, tugs and barges. The reef sites provide habitat for a wide range of marine life including snapper, grouper, sea bass, flounder, manta rays, sting rays, sharks, sheephead, cobia, kingfish, spadefish, redfish, snook, weakfish, hard and soft corals, barnacles, clams, starfish, sponges, sea cucumbers and sea fans. Reefs support the local and regional marine and boating industries by providing fishing and diving locations on the nearshore area of the continental shelf where no natural reef occurs. Reefs improve the quality of life for the residents and visitors in east central Florida and will grow marine life for decades to come.

SITE 1: Site 1 is 11 miles from the inlet and 75ft deep. A large steel barge named the Argoil is located here along with 24 pre-fabricated concrete reef balls. Concrete culverts and structures make up the other reefs at this site. The S reef pile is about 15ft high, 80ft long and 25' wide. The NW and NE reefs are each configured in two parallel lines 30ft apart, 90ft long, 20ft wide and 10ft high. Black Sea Bass, Red and Mangrove Snapper are common here.

Name	Year	Lat	Long
Center Culverts	1990	29°07.18'N	80°41.80'W
195 ft. steel barge, Argoil	1994	29°07.07'N	80°41.58'W
Reef Balls	1996	29°07.03'N	80°41.85'W
S Culverts	2010	29°06.996'N	80°41.681'W
NW Culverts & Structures	2011	29°07.365'N	80°41.954'W
NE Culverts & Structures	2011	29°07.385'N	80°41.432'W
SW Culverts and Seawalls	2012	29°06.860'N	80°42.011'W
SE Culverts	2013	29°06.874'N	80°41.407'W
W Culverts	2013	29°07.152'N	80°42.026'W
S Structures	2013	29°06.862'N	80°41.698'W
N Culverts and Poles	2014	29°07.396'N	80°41.716'W

SITE 2: Site 2 is 12 miles from the inlet and 85ft deep. Several culvert piles and a steel ship named the Semarca are located here. There are also scattered groups of culverts located to the north and northwest of the center pile. These old culverts are completely encrusted with marine life and barely recognizable as man-made features. They are excellent reef habitat and superior bottom fishing can be found here. Some natural reef ledge known as Cracker Ridge is located nearby as well as county reef site 13.

Name	Year	Lat	Long
Center Culverts	1993	29°09.36'N	80°40.59'W
76 ft. steel ship, Semarca	1994	29°09.16'N	80°40.64'W
E Culverts	1993	29°09.31'N	80°40.35'W
N Culverts and Metal Tank	2012	29°09.593'N	80°40.640'W
W Culverts	2013	29°09.394'N	80°40.961'W
SW Culverts	2013	29°09.095'N	80°40.972'W
NNE Railroad Ties	2013	29°09.697'N	80°40.410'W
NE Culverts	2013	29°09.563'N	80°40.409'W
SSE Culverts	2013	29°09.090'N	80°40.392'W
NW Culverts & Structures	2014	29°09.622'N	80°40.959'W

SITE 3: Site 3 is 11 miles from the inlet and 85ft deep. The U.S.S. Mindinao is a World War II liberty ship that is located along with the Rio Yuna, the tugboats Thomas H and Alexandra MacAllister and a steel barge named the Atlas. The Mindinao and the Rio Yuna have been broken up somewhat by storms however the tugs remain upright and intact. There is also a pile of culverts on this site located very close to the tug MacAllister. This site offers excellent trolling for kingfish throughout the summer months as large schools of baitfish congregate above the many wrecks located here.

Name	Year	Lat	Long
446 ft. USS Mindanao	1980	29°11.93'N	80°44.86'W
MacAllister Culverts	1992	29°11.62'N	80°44.77'W
217 ft. steel ship, Rio Yuna	1995	29°11.7'N	80°44.8'W
100 ft. steel tug, Alexandra McAllister	1995	29°11.63'N	80°44.81'W
81 ft. steel tug, Thomas H	1995	29°11.74'N	80°44.92'W
100 ft. steel barge, Atlas	1995	29°11.39'N	80°45.04'W
SE Culverts and Seawalls	2012	29°11.432'N	80°44.304'W
NW Culverts and Seawalls	2012	29°11.975'N	80°45.077'W
E Culverts	2013	29°11.670'N	80°44.462'W
NE Culverts	2013	29°11.974'N	80°44.506'W
W Culverts & Utility poles	2014	29°11.653'N	80°45.070'W
SSE Culverts & Structures	2014	29°11.398'N	80°44.552'W

SITE 4: Site 4 is 17 miles from the inlet and 80ft deep. The Maxine D and the Antilles Star are both located here. Additional reefs made up of large concrete culverts and structures and a small barge are also located on the site. The NNW and SW reefs are each configured in two parallel lines 30ft apart, 90ft long, 20ft wide and 10ft high. This site offers great bottom fishing, trolling and spearfishing for a broad range of reef species.

Name	Year	Lat	Long
John Lane Reef	1989	29°19.26'N	80°44.66'W

Grabes Gee Whiz Reef	1992	29°19.17'N	80°44.54'W
165ft. steel ship, Maxine D	1994	29°19.40'N	80°44.84'W
165ft. steel ship, Antilles Star	2004	29°19.198'N	80°44.770'W
NNE Culverts & Structures	2011	29°19.500'N	80°44.476'W
NNW Culverts & Structures	2011	29°19.568'N	80°44.976'W
SW Culverts & Structures	2011	29°19.019'N	80°44.959'W
S Culverts and Seawalls	2012	29°19.023'N	80°44.658'W
E Culverts	2013	29°19.286'N	80°44.354'W
W Culverts	2013	29°19.268'N	80°44.990'W
N Culverts & Structures	2014	29°19.526'N	80°44.694'W

SITE 5: Site 5 is the closest reef site located just 5 miles from the inlet. Depth is 65 feet. A large, 15ft high, elongated pile of concrete material from the Port Orange and New Smyrna Beach bridges is located here. Three small piles of 40ft long concrete bridge fender pilings are located slightly offshore the main bridge material pile. The NW, NE, SE and SW piles are each configured in two parallel lines 30ft apart, 90ft long, 20ft wide and 10ft high. Large Redfish, Flounder, Cobia and Kingfish are routinely caught at this popular nearshore site.

Name	Year	Lat	Long
Dunlawton Bridge Concrete	1990	29°07.18'N	80°48.32'W
NSB Bridge Concrete	1997	29°07.14'N	80°48.35'W
Bridge Fenders	2002	29°07.27'N	80°48.36'W
Bridge Fenders	2002	29°07.251'N	80°48.253'W
Bridge Fenders	2002	29°07.198'N	80°48.223'W
NW Culverts & Structures	2011	29°07.489'N	80°48.657'W
NE Culverts & Structures	2011	29°07.443'N	80°48.102'W
Debbie Dixon Reef	2011	29°06.919'N	80°48.029'W
SW Culverts & Structures	2011	29°06.894'N	80°48.634'W
E Culverts	2012	29°07.188'N	80°48.635'W
E Culverts	2012	29°07.168'N	80°48.030'W
N Culverts	2013	29°07.475'N	80°48.308'W
S Railroad Ties	2013	29°06.884'N	80°48.311'W
WNW Culverts & Poles	2014	29°07.360'N	80°48.555'W

SITE 6: Site 6 is 9 miles from the inlet and 65ft deep. A large steel barge and piles of concrete culverts and structures are located here. The barge lies upright on the seafloor, is 195ft long, 45ft wide and 10ft high. Numerous large holes were cut through the deck, interior bulkheads, bow, stern and sides to allow fish access and water flow throughout the steel vessel. The SW pile is configured in two parallel lines 30ft apart, 90ft long, 20ft wide and 10ft high. The NE and SE piles are each 10ft high.

Name	Year	Lat	Long
Center Culverts	1990	29°03.04'N	80°43.36'W
NE Culverts	1994	29°03.23'N	80°43.16'W
SE Culverts & Structures	2010	29°02.866'N	80°43.175'W
SW Culverts & Structures	2011	29°02.765'N	80°43.435'W
E Steel Barge	2011	29°03.067'N	80°42.892'W
ESE Culverts & Structures	2012	29°02.791'N	80°42.919'W
NNE Culverts	2012	29°03.352'N	80°42.916'W
N Culverts	2013	29°03.376'N	80°43.184'W
NW Culverts	2013	29°03.342'N	80°43.443'W
S Culverts	2013	29°02.749'N	80°43.176'W

SITE 7: Site 7 is 11 miles from the inlet and 60ft deep. A no name steel barge is located on this site along with piles of culverts and structures. The N and E piles are each configured in two parallel lines 30ft apart, 90ft long, 20ft wide and 10ft high. Large grouper have been observed on the barge in winter and early spring.

Name	Year	Lat	Long
Center Culverts	1991	29°01.18'N	80°41.41'W
120ft No Name Barge	1992	29°01.22'N	80°41.03'W
SE Culverts, Slabs and Poles	2010	29°01.034'N	80°41.033'W
N Culverts & Structures	2011	29°01.461'N	80°41.040'W
E Culverts & Structures	2011	29°01.218'N	80°40.720'W
SW Culverts	2012	29°00.952'N	80°41.285'W
SE Culverts	2012	29°00.940'N	80°40.783'W
NE Culverts	2013	29°01.459'N	80°40.731'W
NW Culverts	2013	29°01.446'N	80°41.286'W
ESE Culverts	2014	29°01.079'N	80°40.715'W

SITE 8: Site 8 is 12 miles from the inlet and 60ft deep. Two piles of

culverts are located here. A wide range of species have been observed at this site including snook, grouper, snapper, sheephead, sea turtles, tarpon and shark.

Name	Year	Lat	Long
E Culverts	1989	28°55.27'N	80°42.5'W
W Culverts	1996	28°55.27'N	80°42.68'W

SITE 9: Site 9 is located 33 miles from the inlet and 135ft deep. The steel tug Canaveral is located here. It is upright on the seafloor and attracts a great number of large snapper, grouper and amberjack. Twenty-six USN A-6 Intruder aircraft bodies are also scattered in the vicinity of this site to the south and east of the tug. Strong currents at this deepwater location make it challenging to fish.

Name	Year	Lat	Long
100ft steel tug, Canaveral	1996	29°21.23'N	80°21.44'W
The USN A-6 Intruder Planes	1996	Scattered to the south and east of tug.	

SITE 10: Site 10 is 17 miles from the inlet and 70ft deep. The center pile is made up of concrete roadway barriers and is 10ft high. A second pile of concrete material is located a short distance south of the center pile. The NE and SE piles are 15ft high. The NW and S piles are also 15ft high. This is the furthest site north of the inlet. Large snapper and cobia have been observed at this site.

Name	Year	Lat	Long
Center Concrete	1998	29°21.46'N	80°49.77'W
NE Concrete Pile	2003	29°21.56'N	80°49.65'W
SE Concrete Pile	2003	29°21.35'N	80°49.67'W
NW Culverts & Structures	2010	29°21.638'N	80°49.966'W
S Culverts & Structures	2011	29°21.199'N	80°49.753'W
W Culverts	2012	29°21.430'N	80°49.978'W
SSE Culverts	2013	29°21.159'N	80°49.465'W
N Culverts	2013	29°21.740'N	80°49.745'W
NNE Culverts	2013	29°21.731'N	80°49.447'W
NNW Pile	2013	29°21.735'N	80°50.063'W
SW Culverts & Poles	2014	29°21.169'N	80°50.076'W
ESE Culverts & Poles	2014	29°21.346'N	80°49.459'W

SITE 11: Site 11 is 15 miles from the inlet and 85ft deep. Twelve piles of large culverts and structures are located here. The center culvert pile is 20ft high and four other 15ft high piles are located approximately 500ft NE, NW, SW and SE of the center pile. These five reefs are configured in tight, circular, high-profile piles and form an excellent array of reefs for trolling. The W and E piles are each configured in two parallel lines 30ft apart, 90ft long, 20ft wide and 10ft high.

Name	Year	Lat	Long
Center Culverts and 4 Pyramid Piles Located 500ft NE, NW, SE SW	2001	29°16.427'N	80°41.906'W
W Culverts & Structures	2011	29°16.415'N	80°42.132'W
E Culverts & Structures	2011	29°16.420'N	80°41.704'W
N Culverts	2012	29°16.710'N	80°41.911'W
S Culverts	2012	29°16.102'N	80°41.928'W
NNE Culverts & Structures	2013	29°16.659'N	80°41.641'W
SSE Concrete Structures	2013	29°16.127'N	80°41.654'W
SSW Culverts	2013	29°16.124'N	80°42.225'W

SITE 12: Site 12 is 9 miles from the inlet and 75ft deep. There are ten piles of large concrete culverts and structures located here along with large concrete pieces of the Broadway Bridge from downtown Daytona Beach. The bridge material can be found to the north and northeast of the center culvert pile. Some of the solid bridge pieces weigh as much as 45 tons. These solitary pieces can hold sea bass, sheephead, flounder and redfish and also attract a variety of pelagic species. The SW pile is 18ft high. The SE culverts are in a single line, 90ft long, 30' wide and 10ft high. The E pile is configured in two parallel lines 30ft apart, 90ft long, 20ft wide and 10ft high.

Name	Year	Lat	Long
Center Culverts	1998	29°11.89'N	80°46.50'W
S Concrete Material	2000	29°11.84'N	80°46.53'W
Broadway Bridge Concrete Pieces	2001	29°11.93'N	80°46.39'W
SW Culverts, Structures and Poles	2010	29°11.690'N	80°46.685'W

SE Culverts & Structures	2011	29°11.674'N	80°46.340'W
E Culverts & Structures	2011	29°11.881'N	80°46.095'W
S Culverts	2012	29°11.595'N	80°46.478'W
W Culverts	2012	29°11.890'N	80°46.792'W
NW Culverts	2013	29°12.102'N	80°46.752'W
NNE Culverts & Structures	2014	29°12.125'N	80°46.249'W
SSE Culverts & Structures	2014	29°11.587'N	80°46.192'W

SITE 13: Site 13 is 12 miles from the inlet and 80ft deep. There are eleven reefs located here including one that is made up of a combination of steel car transport trailers and concrete culverts. The N and S piles are comprised of long, hollow pre-cast concrete poles of varying lengths and sizes. The poles are situated like very large piles of pick-up sticks on the seabed. The NE pile is 15ft high. The NNW pile is configured in two parallel lines 30ft apart, 90ft long, 20ft wide and 10ft high. The SW pile is in a single line, 90ft long, 30' wide and 15ft high.

Name	Year	Lat	Long
Car Transport Trailers and Culverts	1989	29°10.16'N	80°41.65'W
N Concrete Poles	2002	29°10.236'N	80°41.521'W
S Concrete Poles	2002	29°10.099'N	80°41.438'W
NE Culverts & Structures	2010	29°10.362'N	80°41.264'W
NNW Culverts & Structures	2011	29°10.404'N	80°41.595'W
SW Culverts & Structures	2011	29°09.927'N	80°41.655'W
E Culverts	2013	29°10.128'N	80°41.167'W
SSE Railroad Ties	2013	29°09.961'N	80°41.026'W
NNE Culverts & Structures	2014	29°10.466'N	80°41.060'W
SE Culverts & Structures	2014	29°09.846'N	80°41.030'W
N Culverts & Structures	2014	29°10.466'N	80°41.378'W

SITE 14: The Flagler Avenue nearshore reef is located 2.5 miles south of Ponce de Leon Inlet and approximately 1 mile off the beach. There are 12 individual patch reef piles located within the ½ square mile reef construction area and mooring and perimeter buoys allow easy and safe access and use for small boat anglers. The reefs 40' to 50' deep and comprised of concrete culverts, structures, road barriers and utility poles. The reefs are spatially complex and attract spadefish, triggerfish, sheephead, flounder, juvenile sea bass, snook, goliath grouper, mangrove snapper, weakfish and many species of baitfish.

Name	Year	Lat	Long
SW Culverts, Structures	2015	29°02.457' N	80°52.960' W
NW Culverts, Structures	2015	29°02.649' N	80°53.066' W
SE-inside Culverts, Structures	2015	29°02.566' N	80°52.832' W
SE Culverts, Structures	2015	29°02.517'N	80°52.813'W
ESE Culverts, Structures	2015	29°02.583'N	80°52.779'W
ENE Culverts, Structures	2015	29°02.645'N	80°52.820'W
N-inside Culverts, Structures	2015	29°02.609'N	80°52.930'W
NNE Culverts, Structures	2015	29°02.687'N	80°52.984'W
S Culverts, Structures	2016	29°02.479'N	80°52.874'W
Center Culverts, Structures	2016	29°02.553'N	80°52.927'W
SSW Culverts, Structures	2016	29°02.515'N	80°53.004'W
NNW Culverts, Structures	2016	29°02.585'N	80°53.012'W

SITE 15: The Sunglow Pier nearshore reef is located 5 miles north of Ponce de Leon Inlet and approximately 1 mile off the beach. There are 8 individual patch reefs located within the ½ square mile reef construction area and mooring and perimeter buoys allow easy and safe access and use for small boat anglers. The reefs are 45' to 55' deep and comprised of concrete culverts, structures, road barriers and utility poles. The reefs are spatially complex and attract spadefish, triggerfish, sheephead, flounder, juvenile sea bass, snook, goliath grouper, mangrove snapper, weakfish and many species of baitfish.

Name	Year	Lat	Long
NW Culverts, Structures	2015	29°09.234'N	80°57.434'W
SW Culverts, Structures	2015	29°09.055'N	80°57.332'W
SE Culverts, Structures	2015	29°09.100'N	80°57.218'W
SE-inside Culverts, Structures	2015	29°09.187'N	80°57.270'W
ESE Culverts, Structures	2015	29°09.241'N	80°57.165'W
NE Culverts, Structures	2016	29°09.355'N	80°57.227'W
N Culverts, Structures	2016	29°09.300'N	80°57.334'W
W Culverts, Structures	2016	29°09.133'N	80°57.388'W

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