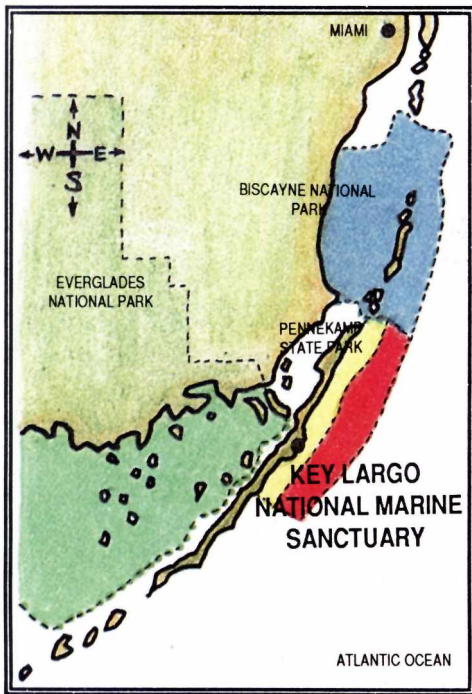




You can help insure a beautiful and healthy reef environment for generations to come by following the regulations listed below.

REGULATIONS - PROHIBIT THE FOLLOWING:

1. Spearfishing or possession of spearfishing equipment.
2. Handling or standing on coral formations.
3. Removal or destruction of natural features whether living or dead (for example, coral, shells, sea biscuits, sea fans, or sponges) .
4. Damage to natural features caused by watercraft and boat anchors.
5. Removal or destruction of archaeological, cultural and historical resources.
6. Collecting "tropical marine life."
7. Tampering with or damaging markers, mooring buoys or scientific equipment.
8. Discharge of trash or other pollutants.
9. Use of wire fish traps.
10. Dredging, filling, excavating and building activities.

VIOLATORS ARE SUBJECT TO CIVIL PENALTIES FOR EACH VIOLATION OF THESE REGULATIONS

REMEMBER - FEDERAL FISHING REGULATIONS APPLY



KEY LARGO NATIONAL MARINE SANCTUARY

P.O. Box 1083
Key Largo, FL 33037
305-451-1644

NOAA

SANCTUARIES & RESERVES DIVISION

1825 Connecticut Avenue N.W.
Room 714
Washington, DC 20235



FDNR

BUREAU OF SANCTUARIES & RESEARCH RESERVES

Room 651, MS 235
3900 Commonwealth Blvd.
Tallahassee, FL 32399

KEY LARGO NATIONAL MARINE SANCTUARY



KEY LARGO NATIONAL MARINE SANCTUARY

Florida is the only state in the continental United States to have extensive reef building coral formations near its coasts. The Key Largo National Marine Sanctuary was designated in 1975 to protect and preserve a unique portion of this exquisite national treasure.

LOCATION

Southeast of the Florida Peninsula, beginning 3 miles seaward of Key Largo and extending 20 miles parallel to the coastline, the Sanctuary protects 103 square nautical miles (191 square kilometers) of Florida's Reef Tract.

A UNIQUE CORAL REEF ENVIRONMENT

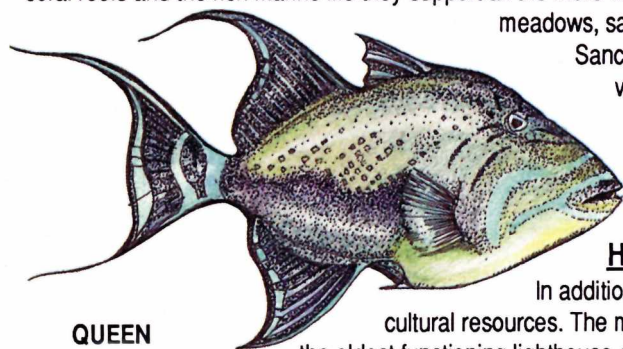
With well over one million visitors per year, Key Largo National Marine Sanctuary is one of the world's most popular dive destinations. The Sanctuary's allure is due primarily to its geographic location.

Reef building corals only flourish in an environment governed by narrow constraints. This environment is found 25 degrees north and south of the equator. Conditions associated with this favorable environment include: clear, relatively nutrient-free water, and close proximity to strong ocean currents. They cannot withstand continued exposure to water temperatures colder than 68° F (18° C) or warmer than 86° F (30° C). They are seldom found on soft or shifting bottom sediments or in continually turbid (cloudy) water. Corals cannot tolerate great changes in salinity, temperature, or water quality for prolonged periods.

The most extensive and prolific reef development in the Keys occurs seaward of Key Largo. This is due to the reefs proximity to open ocean circulation of warm, relatively nutrient-poor Gulf Stream waters and protection from the turbid, nutrient-rich, rapidly fluctuating temperature and salinity of Florida Bay waters. Thus, it is the continuous landmass of Key Largo that limits mixing of bay and ocean waters and helps to keep the environment of these reefs stable.

NATURAL RESOURCES

The coral reefs of the Key Largo National Marine Sanctuary are located near the northernmost fringe of coral reef development and therefore, are subjected to more natural stress than other Caribbean reefs. This precarious location makes Key Largo's coral reefs and the rich marine life they support all the more vulnerable and valuable. Bank reefs, patch reefs, seagrass meadows, sand flats, and hard bottom are distinct habitats within the Sanctuary. The warm clear waters allow for spectacular views of over 100 species of magnificent hard and soft corals, a dazzling array of over 500 species of colorful tropical fishes as well as spotted eagle rays, moray eels, endangered and protected sea turtles, and myriads of other intriguing reef inhabitants.



**QUEEN
TRIGGERFISH**

In addition to its unique natural resources, the Sanctuary also contains many historical and cultural resources. The most prominent historical resource is Carysfort Lighthouse. Constructed in 1852, it is the oldest functioning lighthouse of its kind in the United States. Numerous shipwrecks can be explored in the Sanctuary including the remains of Spanish galleons, a British war ship, a World War II freighter and some ocean-going barges and steamers. A unique artifact within the Sanctuary is "Christ of the Deep", a submerged 9 foot bronze statue. Donated to the Underwater Society of America in the early 1960's, it stands as a monument to those who have lived, worked or played at sea and to comfort those who have lost loved ones at sea.

NATIONAL MARINE SANCTUARY PROGRAM

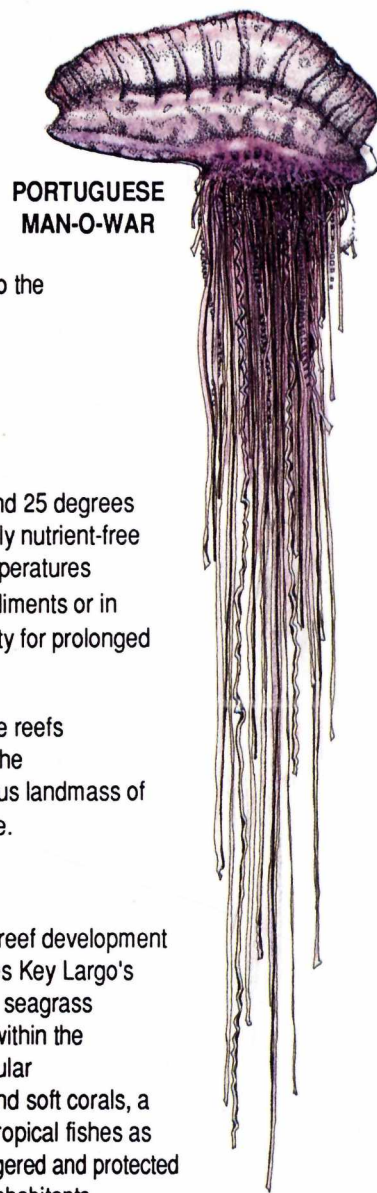
Responding to a growing awareness of the intrinsic environmental and cultural value of our marine resources, Congress passed the Marine Protection, Research, and Sanctuaries Act in 1972. Title III of the Act authorizes the designation of unique areas as national marine sanctuaries to promote comprehensive management of their special ecological, historical, and aesthetic resources.

National Marine Sanctuaries must permit "multiple compatible use" of their resources by public and private interests. This includes both commercial and recreational activities as long as the activity does not threaten the basic integrity of the sites' resource values. For example, commercial lobstering and certain types of commercial fishing activities coexist with recreational diving, snorkeling, sightseeing and hook and line fishing.

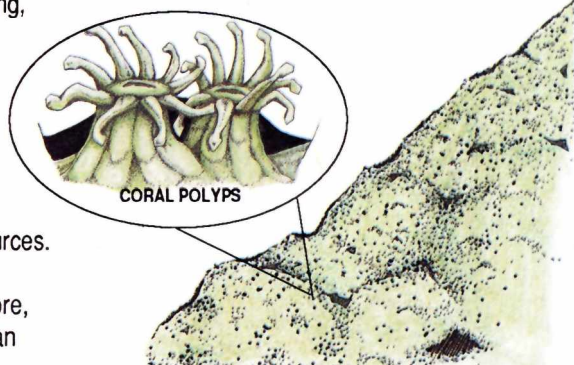
SANCTUARY MANAGEMENT

The Department of Commerce's National Oceanic and Atmospheric Administration (NOAA) is responsible for the overall management of the National Marine Sanctuary Program. On-site management of the Key Largo National Marine Sanctuary is achieved through a cooperative agreement with the State of Florida Department of Natural Resources.

There is little that can be done to control or alter natural threats to the coral reef. Therefore, sanctuary management focuses on designing strategies that minimize or eliminate human impacts through research, education and law enforcement.



**PORTUGUESE
MAN-O-WAR**

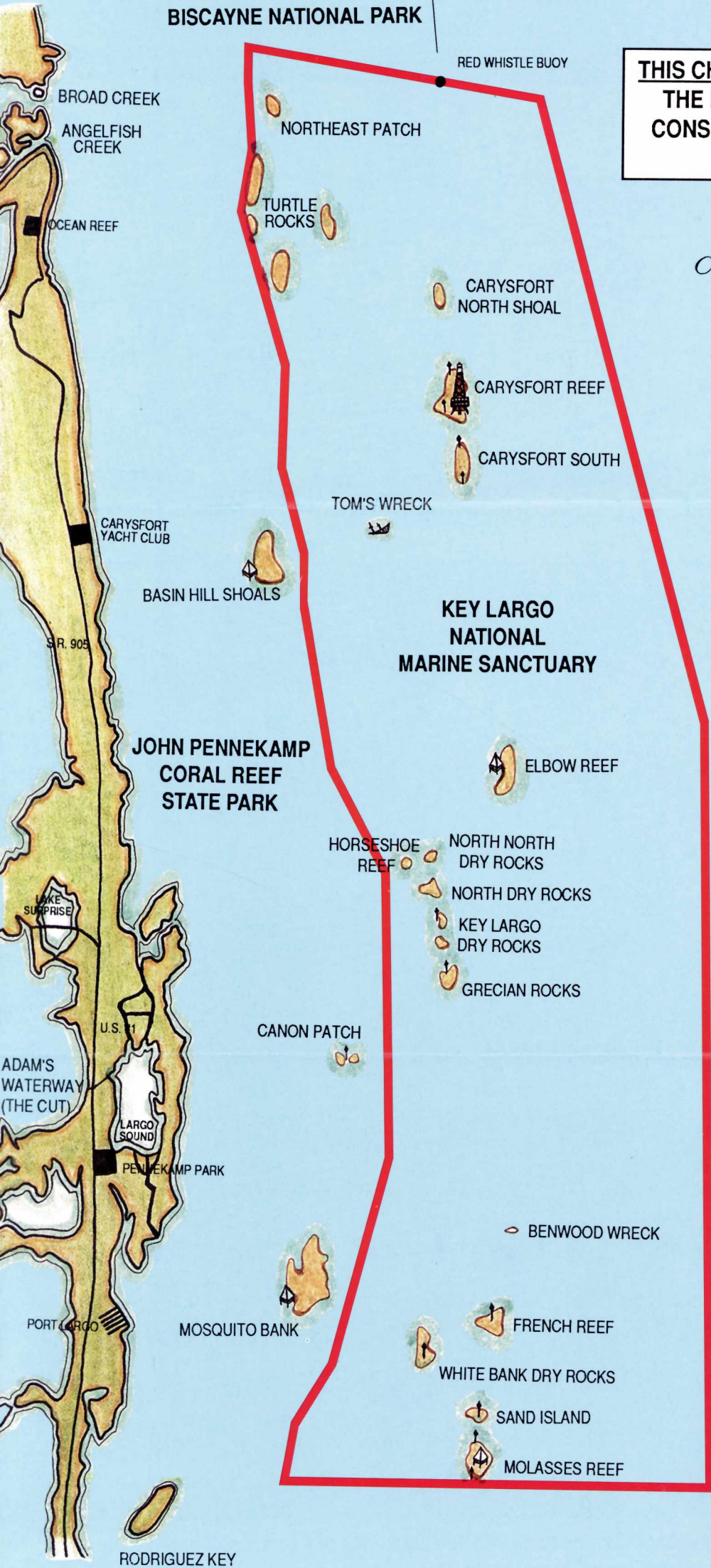
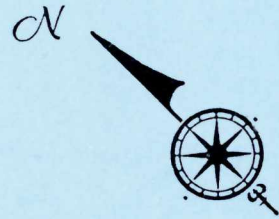


CORAL POLYPS

MOUNTAINOUS STAR CORAL

BISCAYNE NATIONAL PARK

**THIS CHART IS NOT FOR NAVIGATION
THE PRUDENT BOATER SHOULD
CONSULT NOAA NAUTICAL CHART
#11462 OR #11451**



U.S.C.G. BIBB
U.S.C.G. DUANE

KEY LARGO NATIONAL MARINE SANCTUARY MOORING BUOY SYSTEM

SELECTED AREAS OF INTEREST:

Some of the most popular areas are described below, but many other beautiful spots can be found in the Sanctuary.

• Molasses Reef

- M1 thru M12 Suitable for diving and snorkeling
- M13 thru M28 Suitable for diving and fishing
- M13 thru M18 Primarily snorkeling buoys

M1 - inshore of the buoy, an overhanging ledge allows observation of large permit fish. Usually 5 or 6 can be seen at a time.

M2 - Permit fish and large barracuda can sometimes be seen along the high profile ridges near this buoy.

M4 - a series of coral spurs and sand grooves, good for snorkeling or diving.

M5 - located next to a sand bowl, undercut ledges around the perimeter provide cover for many small organisms. Increased coral cover can be found inshore of the buoy.

M8 - a large sand pocket immediately seaward of the buoy contains iron shipwreck material including a large anchor windlass. A swim-through tunnel "Hole in the Wall" formation can be found in the next coral ridge to the southwest of the buoy.

M9 - the coral ridge shoreward of this buoy serves as a focal point for large schools of mangrove snapper.

M10 - located in a long sand gulley that opens into a large sand pocket. High profile coral ridges form the perimeter.

M11 and M12 - these buoys are located adjacent to the WELLWOOD ship grounding site. Please take extra care not to disturb this sensitive area.

M13 thru M18 - these buoys are located in a row, landward of other buoys, at the beginning of the spur and groove system. They are ideal for snorkeling and shallow SCUBA diving.

M19 thru M25 - located at approximately 32-35 ft. depth, these buoys run along the outer ledge of this reef. Good for diving and fishing.

M21 - an old Spanish anchor, approximately eight feet long, lies adjacent to the mooring buoy anchor. Seaward of the anchor is flat, hard bottom with occasional large sponges. There is greater coral relief inshore of the anchor.

M26 thru M28 - located at approximately the 50 ft. depth on the intermediate to deep reef zone. Good for fishing. Due to depth and current, use caution when diving.

• Grecian Rocks

G1 thru G9 - this elongated, centrally located, shallow reef is probably the most popular snorkeling reef in the Sanctuary. Marked by a spar buoy and mooring buoys G1- G5, the inshore side of the reef provides very calm water for snorkeling during prevailing wind conditions. Well-developed elkhorn coral colonies make up the dominant feature of this reef. Buoys G6 - G8 are located on the seaward side of the reef.

• Key Largo Dry Rocks

D4 - this reef, located less than 1 mile northeast of Grecian Rocks, is the setting for the "Christ of the Deep" statue, positioned in a sand channel next to a very large brain coral. A small pillar coral colony, which is fairly uncommon, can be found nearby.

• French Reef

F1 - undercut ledges and swim-throughs are located immediately northeast of the buoy with a long undercut ledge running seaward for approximately 100 ft.. Directly inshore of the buoy, approximately 50 ft. across a sand pocket, is an undercut ledge called "Hourglass Cave." There is a column in the center that can be passed either on the left or the right.

F3 - " Christmas Tree Cave" is located approximately 50 ft. landward of the buoy at the beginning of the coral formation. The tunnel-like cave extends for approximately 20 ft. before coming into the open. Often schools of glassy sweepers can be seen within the cave.

F5 - a circular sand pocket lies approximately 100 ft. to the west of the buoy. The seaward perimeter of this sand pocket becomes a large entrance to a white sand bottom cave. Swimming to the left and upward will bring a diver out the seaward opening of the cave. Mangrove snapper and occasionally a grouper can be found in and around the cave.

F6 - 25 ft. shoreward of the buoy is the beginning of a long, interesting coral ridge. The seaward end of this ridge also contains a short swim-through tunnel.

F7 - a ledge running northeast/southwest, slightly shoreward of the buoy, provides an interesting dive. One hundred feet to the northeast along this ledge is a large coral formation that has grown over an old anchor. Judging from the size of the coral head, the anchor has been down for at least 200 years.

F8 - immediately shoreward of this buoy is a circular sand pocket surrounded by elkhorn coral.

F10 - located along the 50 ft. ledge, parallel and seaward of the other French Reef buoys.

• Benwood Wreck

B1 thru B4 - this 285 ft. steel freighter, located 1.5 miles northeast of French Reef, grounded as a result of a collision with another vessel in 1942. A spar buoy and four mooring buoys mark the location. The super structure has been salvaged, but a large portion of the hull, which continues to attract a multitude of colorful fish, still remains.

• North Dry Rocks

N1 and N2 - located one-half mile to the northeast of Dry Rocks, this reef is locally called "Minnow Cave". A cave in the central portion of this small reef serves as a refuge for schools of small glass minnows. This area is very good for snorkeling or shallow SCUBA diving.

• North North Dry Rocks

NN1 thru NN3 - one-half mile to the northeast of North Dry Rocks is another locally named reef marked only by three mooring buoys. This reef has spectacular high profile ridges and valleys and a large thicket of staghorn coral. Large grouper can occasionally be seen patrolling the seaward edge of the reef.

• Elbow Reef

E1 - an example of a fairly shallow spur and groove system can be found southwest of the Elbow reef light tower.

E2 and E3 - between these buoys lie the remains of a steel barge.

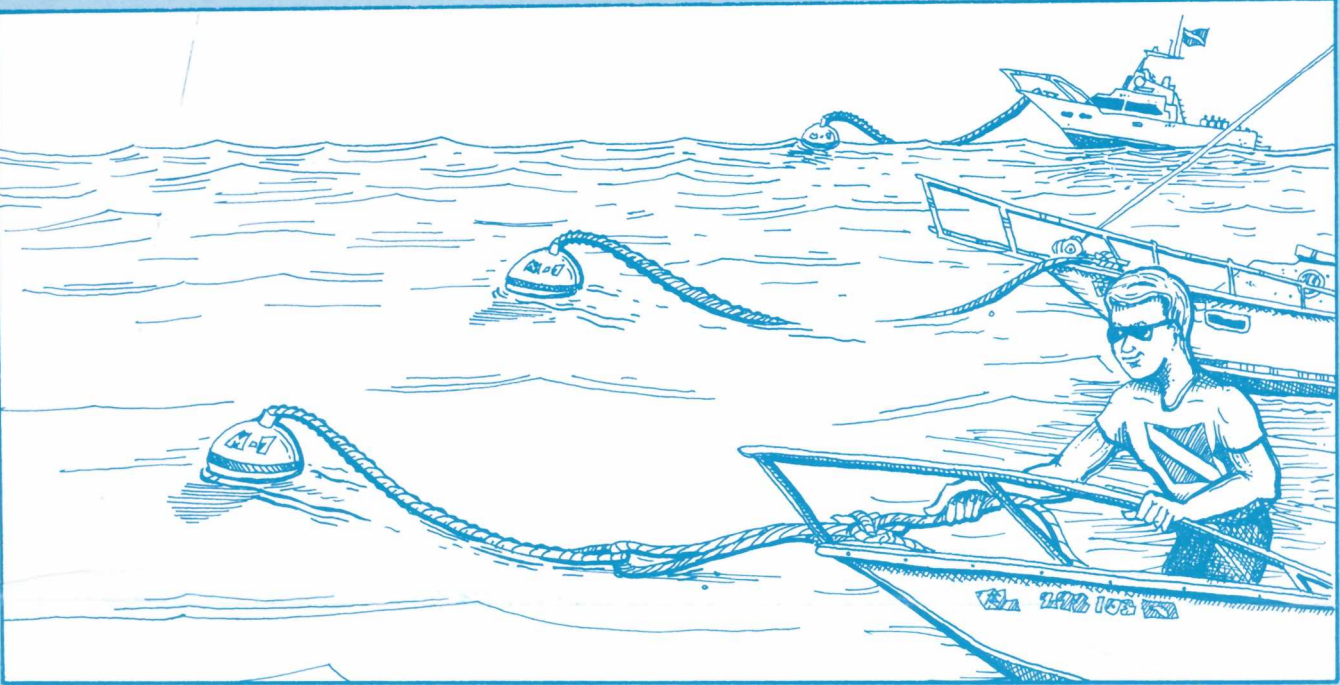
E4 - a length of old chain can be found in this area among the ridges of coral. This chain may have come from the steel hull vessel known as the TOWANDA that can be found beneath E5.

• Carysfort South

CS1 thru CS3 - this elongated, very shallow elkhorn coral reef is one of the best stands of elkhorn coral in the Sanctuary. *Do not approach these buoys directly from shore.* Go around either end of the several hundred yard long reef to avoid striking coral.

• Carysfort Reef

C1 thru C3 - a 112 ft. tall lighthouse, constructed in 1852, marks this spectacular reef that offers protected snorkeling as well as deeper SCUBA diving. Mooring buoys are located on the seaward side of an expanse of elkhorn coral.



WHY USE THE MOORING BUOY SYSTEM ?

We need your help to preserve these unique and fragile reefs for the enjoyment of everyone. A serious problem in the Sanctuary is the amount of damage caused by boat anchors striking the coral and the anchor rope or chain chafing coral or breaking off coral branches. The mooring buoy system has been developed to reduce anchor damage and to provide a convenient means of securing your boat.

REMEMBER...

At many reefs in the Key Largo National Marine Sanctuary, mooring buoys encircle the shallowest reef areas or are located on the ocean side of the reef. Shallow reef areas are distinguished by brownish colored water. Circle around either side of these shallow areas - always steering to the outside of a ring of buoys - *never motor directly across a shallow reef to get to a buoy!*

A FEW BASIC STEPS SHOULD BE FOLLOWED WHEN USING A MOORING BUOY

1. Buoys are available on a first come, first served basis.
2. Sanctuary regulations require idle speed/no wake in the vicinity of mooring buoys. Watch carefully for swimmers, snorkelers, diver's bubbles, and fishing lines.

3. Once a buoy is selected, turn and idle directly to the buoy without meandering among other dive boats. Reverse this procedure when leaving the reef. Buoys have been placed to provide clearance for most boats when tied up during normal tide conditions. To avoid grounding, use caution when approaching and while tied to a buoy.

4. Slowly approach the buoy from down wind and/or down current. Always keep visual contact with the buoy. Our biggest problem with maintaining the buoys occurs when boaters approach the buoy too fast, run over it and slice the line and/or buoy with their propeller(s). Please approach the buoy very slowly.

6. Inspect the mooring buoy your boat is tied to - you are still responsible for your vessel. Check to be certain that the mooring buoy is holding the vessel as intended, and inspect the buoy for functional integrity. Please report any problems, such as broken or frayed lines to the National Marine Sanctuary office in Key Largo or to Sanctuary Patrol on VHF channel 16.

7. If a mooring buoy is not available, anchor *only* in sand - **NEVER IN CORAL**. Always check to be sure your anchor is not dragging and your anchor chain or line is not contacting coral.

NOTE: Key Largo National Marine Sanctuary assumes no liability for the use of the mooring buoys.

SAFE NAVIGATION IN THE SANCTUARY

SHOAL MARKERS:

solitary I-beams standing approximately 10 ft. above water with a diamond-shaped sign attached.



◀ DO NOT APPROACH THESE MARKERS ▶

Maintain a safe distance and a careful lookout.

The shallowest area(s) of many reefs are marked by Reef Light Towers or Shoal Markers.

REEF LIGHT TOWERS:

prominent A-frame structures with square-shaped, numbered signs attached.



- MOLASSES REEF
- MOSQUITO BANKS
- ELBOW REEF
- BASIN HILL SHOALS
- CARYSFORT REEF

RUNNING AGROUND IS A VIOLATION OF SANCTUARY REGULATIONS AND WILL RESULT IN A HEFTY FINE

A MINIMUM CIVIL PENALTY OF \$150 HAS BEEN ESTABLISHED FOR MINOR ANCHOR DAMAGE TO CORAL IN THE KEY LARGO NATIONAL MARINE SANCTUARY

MOORING BUOY SYSTEM as of January 1992
(additional buoys are periodically being installed)

REEF NAME	LETTERS ON BUOY	# OF BUOYS
THREE SISTERS	TS	2
MOLASSES REEF	M	28
SAND ISLAND	S	4
WHITE BANK DRY ROCKS	W	5
FRENCH REEF	F	17
BENWOOD WRECK	B	4
GRECIAN ROCKS	G	12
KEY LARGO DRY ROCKS	D	16
NORTH DRY ROCKS	N	2
NORTH NORTH DRY ROCKS	NN	3
HORSESHOE REEF	H	1
ELBOW REEF	E	10
CARYSFORT SOUTH	CS	8
CARYSFORT REEF	C	12
CARYSFORT NORTH SHOAL	CN	2
TURTLE ROCKS/SOALS	T	13
NORTHEAST PATCH	NE	3
TOTAL BUOYS		142