



Factsheet

The Protocol on Specially Protected Areas and Wildlife in the Wider Caribbean (SPAW): Flower Garden Banks National Marine Sanctuary

- A SPAW listed site -

Identification

Country: USA
Name of the area: Flower Garden Banks National Marine Sanctuary
Administrative region: Southeast United States, Gulf of Mexico Federal Waters
Date of establishment: 12/5/1991
Geographic location:
Longitude X: -93.666667
Latitude Y: 27.833333
Date of listing under SPAW: 23 October 2012

Contacts:
Contact address: 4700 Avenue U, Building 216 Galveston, TX 77551, USA
Website: <http://flowergarden.noaa.gov>
Email address: flowergarden@noaa.gov



Introduction

The Flower Garden Banks National Marine Sanctuary provides natural resource protection to some of the most intact coral reef ecosystems and most healthy coral communities in the Western Atlantic. These reefs are the northern most coral reefs in the continental US. Surrounded by seafloor of 150 m water depths, the reefs grow on salt-dome features that rise to within 16 m of the sea surface at the margin of the continental shelf in the northern Gulf of Mexico. The sanctuary also protects mesophotic reef communities in its deepwater areas. The sanctuary was created by public interest to protect these coral reef communities

from expanding oil and gas development, anchoring and fishing impacts in the NW Gulf of Mexico. The coral reefs are popular dive sites. Recreational and commercial fishing is allowed in the sanctuary with some gear restrictions and oil and gas production infrastructure is also present within sanctuary boundaries. As a result, the Flower Garden Banks is an example of how marine resource use and conservation protections can compatibly coexist with the US National Marine Sanctuary System.

SPAW criteria met

Ecological criteria

- Representativeness
- Conservation value
- Rarity
- Naturalness
- Critical habitats
- Diversity

- Connectivity/coherence
- Resilience

Cultural and socio-economic criteria

- Productivity
- Cultural and traditional use
- Socio-economic benefits

General features of the site

Size: 145 sq. km
Terrestrial surface under sovereignty, excluding wetlands: 145 sq. km

Wetland surface: 0 ha
Marine surface: 2416 sq. Km
National status of your protected area: National Park
Marine ecoregion: 70. Floridian

Management structure, authority

The Flower Garden Banks National Marine Sanctuary is managed within the Southeast Region of Office of National Marine Sanctuaries of the National Oceanic and Atmospheric Administration within the United States Department of Commerce.

Management plan

The sanctuary's original management plan is a comprehensive approach to resource protection and management. It includes programs for science, education, outreach, regulation, enforcement, permitting and coordination with other local, state and federal agencies:

http://flowergarden.noaa.gov/document_library/mgmtdocs/fgbnms_eis_mgmtplan_1991.pdf

In April 2012 an updated Management Plan was released based on a comprehensive public review of sanctuary management strategies and activities that is required by the National Marine Sanctuaries Act and modifies and adds certain regulations and programs based on current conservation issues:

http://flowergarden.noaa.gov/document_library/mgmtdocs/fmp2012/fmp2012.pdf

Main fauna populations and/or those of particular importance present (resident or migratory) in the area:

The habitats of the Flower Garden Banks have been classified into depth related zones that contain distinctive communities of fauna and associated flora.

Coral Reef Zone

The coral reef zone is the shallowest zone at the Flower Garden Banks, occurring at depths of between approximately 17 to 44 meters. This zone is characterized by a high diversity coral assemblage dominated by *Orbicella* spp., *Pseudodiploria strigosa*, *Colpophyllia natans* and *Porites astreoides*. *Coralline algae*, and *filamentous and leafy algae* also occur on reef substrates, but are not dominant members of the benthic assemblage. *Madracis auretenra* forms large monotypic stands in coral reef habitat below about 28 meters. *Stephanocoenia intersepta* habitat is a lower diversity coral reef habitat occurring primarily below 36 meters. Sponges and *Agaricia* spp. are common in crevices and cavities of the reef.

Coral Community Zone

The coral community zone is characterized by other coral reef associated organisms, such as the hydrozoan *Millepora* spp. (fire coral), sponges and macroalgae. The coral community at the Flower Garden Banks is characterized by the blushing star coral, (*Stephanocoenia intersepta*), the great star coral, (*Montastraea cavernosa*), and the large grooved brain coral, (*Colpophyllia natans*), and occurs between depths of 18 to 50 meters. Lettuce corals (*Agaricia* spp.) and brain coral (*Pseudodiploria strigosa*) are also an important part of the community.

Coralline Algae Zone

Found in depths between 45 to 90 meters, this zone is rich in sponges, algae, gorgonians, and black coral, and harbors healthy populations of deep reef fish including rough tongue bass (*Pronotogrammus martinicensis*), scamp (*Mycteroperca phenax*), and marbled grouper (*Dermatolepis nermis*). Crustose coralline algae forms large beds of algal nodules (also called "rhodoliths"), or massive reef structures composed of large plates and ridges. A variety of sponge species are abundant in this zone, along with numerous antipatharians (black corals) and octocorals (seawhips).

Deep Coral Zone

Found in depths typically below 90 meters, the deep coral zone is dominated by eroded reef outcroppings, *azooxanthellate* (non-reef building) solitary hard corals, antipatharian and gorgonian corals, deep reef fish, sponges, bryozoans, and crinoids (feather stars).

Site

Soft Bottom Community Zone

Large expanses of mud, sand, and silt substrates, which typify the soft bottom community zone, are found in the deepest parts of the banks and surrounding the banks. Features of the soft bottom community include pits, burrows, Cirripathes (*Stichopathes*) fields, stalked anemones, and echinoderms. Squat lobster (*Munida* sp.) are often observed in this zone.

Fish

Approximately 300 species of fish have been documented within the sanctuary, including parrotfish, wrasse, angelfish, boxfish and squirrelfish. Large schools of barracuda (*Sphyraena barracuda*) and pelagic jacks (*Caranx* spp.) also occur. Winter brings enormous schools of mackerel (*Scomberomorus* sp.). The conspicuous deeper water fish in the sanctuary include rough tongue bass, threadnose bass, vermilion snapper, red snapper, scamp, and marbled grouper. Commercially targeted species include snapper, grouper, jacks, and mackerel. Smooth trunkfish (*Lactophrys triqueter*) are common throughout the Caribbean, but the golden morph of the species is very rare and was first described at the Flower Garden Banks, and has since been rumored to occur in just one other place in the Caribbean. The Mardi Gras Wrasse (*Halichoeres burekiae*) was discovered and described from FGBNMS, and appears to have a limited range.

Sea Turtles

Loggerhead and hawksbill sea turtles reside at all three banks of the sanctuary throughout the year. Loggerheads (*Caretta caretta*) are the primary sea turtles of the sanctuary, and are most often seen at night or in the late afternoon resting underneath ledges or coral heads or on the surface taking a breath.

Sharks & Rays

Approximately 20 species of sharks and rays have been documented at the Flower Garden and Stetson Banks, some seasonal, others year-round. During the winter months, schooling scalloped hammerhead sharks (*Sphyrna lewini*) and spotted eagle rays (*Aetobatus narinari*) are visitors to all three banks. The reason for the seasonality of their visits is unclear, but the occurrence is quite predictable. Other winter visitors include occasional sandbar (*Carcharhinus plumbeus*) and tiger sharks (*Galeocerdo cuvier*), as well as spinner sharks (*Carcharhinus brevipinna*), which are often seen leaping out of the water. Summer months usually bring whale sharks (*Rhincodon typus*) to the area. Nurse sharks are sometimes seen resting under ledges or in crevices in the coral, while large schools of silky sharks (*Carcharhinus falciformis*) are known to aggregate around oil and gas platforms in the vicinity of the sanctuary during the winter months. Manta rays (*Manta birostris* and *Manta* spp.) are regular visitors to the sanctuary. Similar-looking mobulid rays (*Mobula tarapacana* and *M. hypostoma*) are also seen in sanctuary waters, although less frequently.

Inhabitants inside the area or in the zone of potential direct impact on the protected area:

No human populations are present near the sanctuary. Workers reside on petroleum production platforms in the region, but only boaters (fishing and diving) come to the sanctuary.

International status and Date of designation

SPAW Site : 2012



PA LISTING : www.spaw-palisting.org

CaMPAM : <http://campam.gcfi.org/campam.php>

UNEP-CEP : www.cep.unep.org/

SPAW-RAC : www.car-spaw-rac.org

Links