



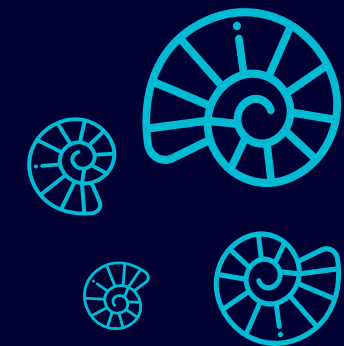
MSC Cruises is committed to the restoration of marine resources and the ongoing conservation of existing marine resources, including habitats and species supported by them in the lease area. This will include the restoration of endangered corals, and the implementation of other conservation and educational programs. MSC Cruises commissioned a Rapid Ecological Assessment (REA), that provided a short-term, yet comprehensive overview of the waters around Ocean Cay in order to better understand the conservations needs.



Divers recorded habitat characteristics at **37** sites to understand coral reef health and conch populations.



Qualitative photo/video assessments of habitats were conducted at an additional **41** sites



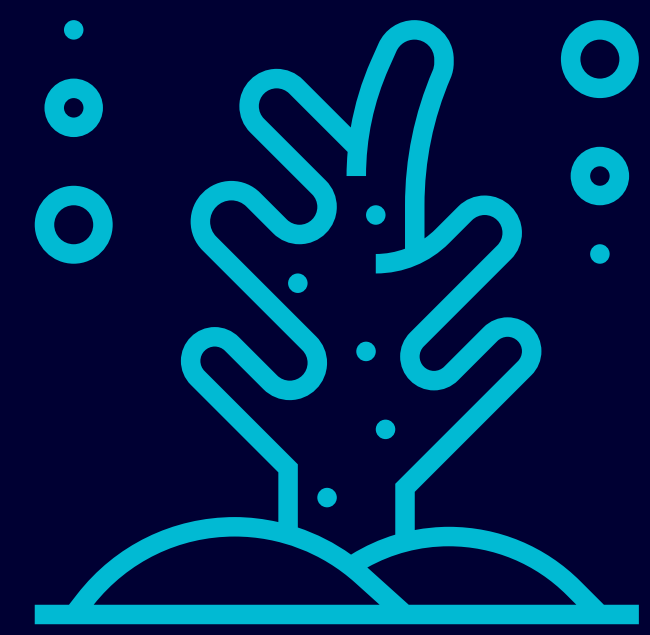
**28** transects were conducted to quantitatively assess conch populations.



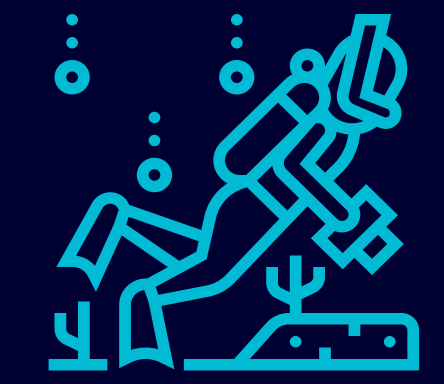
Video surveys were conducted at **30** sites with photos from an additional 11 sites



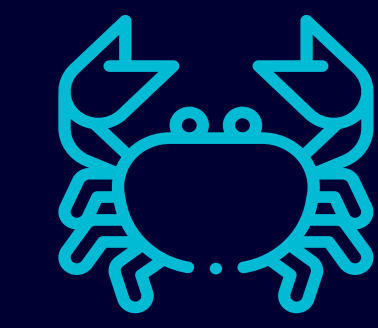
Assessments were conducted at **7** coral reefs



A total of **21** benthic surveys (a study of the seafloor) were conducted with **2,500** observations of what was growing on the seafloor



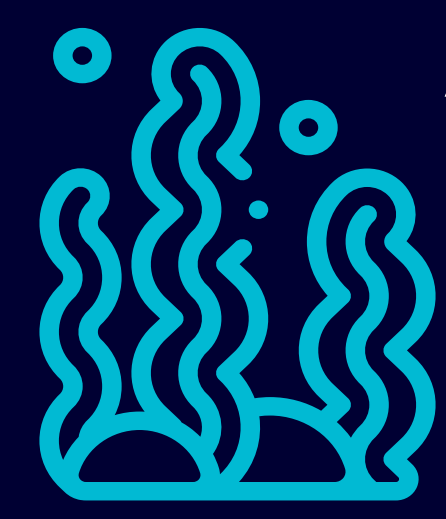
A total of **816** free standing coral colonies were surveyed



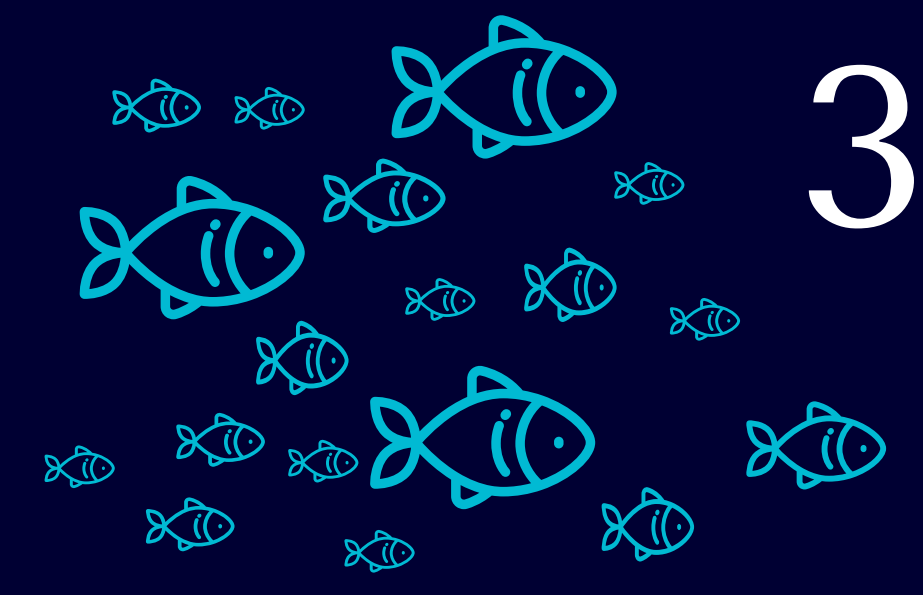
**100** surveys of coral recruits and substrate type, and over **190 m<sup>2</sup>** of seafloor searched for mobile invertebrates



**44** fish surveys were conducted covering the water column above **2,640 m<sup>2</sup>** of seafloor



A total of **826** corals were identified, measured and their condition assessed within **160 m<sup>2</sup>** of the seafloor



**3,249** fish belonging to **88** different species were identified and measured.



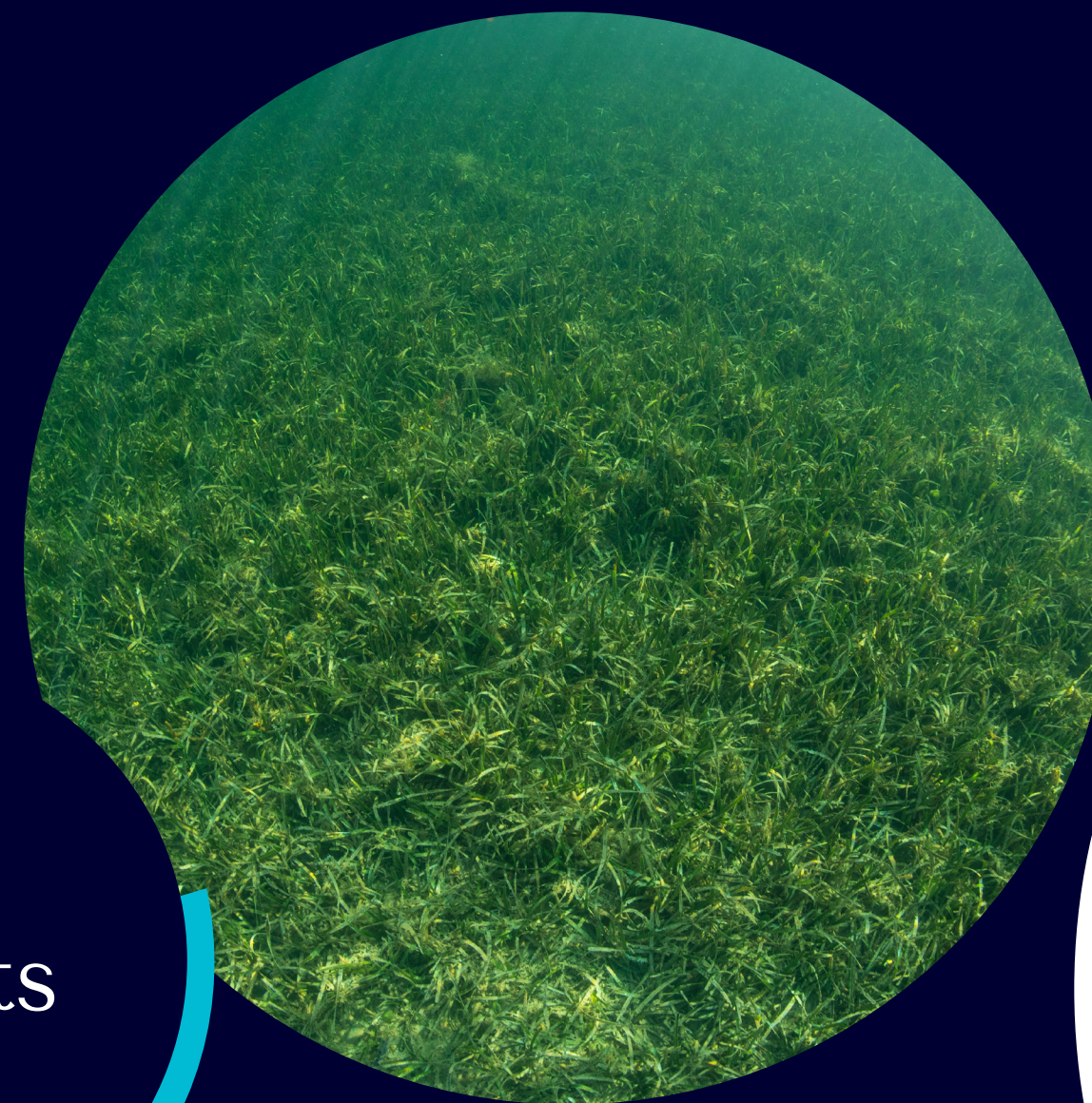
## About the Marine Ecosystem

The coastal and nearshore waters of Ocean Cay support a high diversity of fish in healthy abundance. Furthermore, observations presented here, suggest a mosaic of seemingly well established and healthy habitats, including seagrass meadows, coral reefs and fan gardens.

Seagrass ecosystems are critical for a range of ecologically and economically important marine species. They provide a foraging area for many reef fish and invertebrate species, including Caribbean spiny lobster, *Panulirus argus* and the queen conch, *Lobatus gigas*.

It is also possible to find gorgonians (soft corals including sea fans, sea rods, and sea plumes) and macroalgae (seaweeds), such as benthic sargassum in the waters.

## Habitats



## Coral

Coral reefs support the highest biological diversity of any ecosystem in The

Bahamas and are home to ecologically, economically and critically endangered species.

The most common coral to be found close to Ocean Cay includes:

*Agaricia agaricites* - lettuce coral or tan lettuce-leaf coral

*Porites astreoides* commonly known as mustard hill coral or yellow porites

*Siderastrea* massive starlet coral or round starlet coral

Around the island, the critically endangered *Acropora palmata* known as elkhorn coral was found. Four distinct colonies of this species were observed along the rocky shoreline of these cays.

Larger reef building corals were less common but still in evidence including: the mounding *Orbicella* boulder star coral, as well as brain corals, such as *Diploria labyrinthiformes*, *Pseudodiploria strigosa*, and *Colpophyllia natans*

## The Importance of Conch

Ocean Cay is a productive conch habitat and the queen conch, *Lobatus gigas*, is one of the most important fishery species in The Bahamas, but conch populations have seen dramatic declines throughout the region. The creation of a Marine Protected Area (MPA) around Ocean Cay provides an excellent framework for managing conch populations.

The conch is a large sea snail and lives in the seagrass beds around Ocean Cay and plays an important role in the marine ecosystem by helping to keep seagrass beds healthy.



## Types of Marine Life

**88** different species of fish were identified including:

Yellow tail snapper, ocean trigger fish, green turtle, Caribbean reef shark, eagle ray, southern stingray and horse eye jack

