Information Sheet No. 6

Habitat Requirements

Adult and juvenile queen conch reside in seagrass beds, sand plains, or coral rubble beds. As herbivorous gastropods, the juvenile and adult conch will feed on a variety of algae, such as *Batophora oerstedi*, or on detritus or diatoms commonly found on the blades of *Thalassia testudinum*. Adult queen conch can be found in waters from 3-30m (1-90 ft) deep. During the reproductive season, large aggregations of conch will migrate towards open sand patches near or around seagrass *Thalassia testudinum* beds to find mate and lay their eggs where they can be camouflaged. During the winter months, when the oceans are rough from storms, the adult conch will migrate into deeper waters for more protection.

Most queen conch nursery grounds are found in shallow water seagrass meadows (<6 m), although juveniles can also been found in algal flats and on deep banks. Once a juvenile conch settles out of the water column, they will remain buried for the majority of their first year of life. Juvenile queen conch abundance is dependent upon the amount of biomass present in seagrass meadows as well as the seagrass density. Juvenile queen conch prefer a medium seagrass density of 608 - 864 shoots/m². It is thought that juveniles have difficulty mobilizing in a dense seagrass bed. Scientists have also discovered that not all seagrass beds are suitable for juveniles and that juvenile queen conch aggregations tend to appear in the same location year after year.

Conch have a modified foot that is used for a unique type of locomotion in their habitats. They use the hardened tip of their foot, the operculum, to propel themselves forward in a "hopping" motion commonly referred to as a strombid leap. This movement is thought to help the conch make a quick escape from predators and also breaks up their scent trail.