

Information Sheet No. 13

A Time to Move

Scientists at the Florida Fish and Wildlife Conservation Commission's Florida Marine Research Institute in Marathon, Florida have discovered some very interesting facts about the local queen conch populations. Initially the scientists were looking at restocking juvenile queen conch as a means to restore the populations, however, large-scale restocking programs are very difficult to achieve.

There is a channel (Hawk Channel) that runs parallel to the Florida Keys where the conch are not able to migrate through it, as it is too silty for them to cross. Therefore, there are distinct nearshore and offshore conch populations. The scientists have discovered that the adult queen conch populations that reside in nearshore habitats are no longer able to reproduce. However, if they are transplanted to the offshore habitats, they regain their gonads and are able to reproduce.

The reasons behind this phenomenon have not been proven yet, however, there is a belief that anthropogenic changes to the nearshore habitat may be partially responsible. It has been documented in the past that poor water quality leads to poor reproductive output of other marine invertebrates. There have also been numerous studies on the negative effects of eutrophication caused by habitat degradation in nearshore habitats in the Florida Keys, although it is difficult to assess the effects at an organismal level.

Some things to think about...



List some ways in which nearshore waters may become contaminated.



What household chemicals and products may find their way into the ocean?



How has urbanization and habitat degradation affected nearshore habitats?

For more information about the translocation program please visit

www.floridamarine.org or check out the following paper:

Delgado, G. et al. 2004. Translocation as a strategy to rehabilitate the queen conch (*Strombus gigas*) population in the Florida Keys. Fishery Bulletin. 102: 278-288.