



Spiny Lobsters Thrive in the Ecological Reserve

Carrollyn Cox, FWC/FMRI Biologist

Spiny lobsters are wanderers. They start their lives as tiny floating larvae that drift offshore for almost a year. When they are ready to begin life on the sea floor, they settle in nearshore habitats. After a year or two near shore, the lobsters are on the move again, this time to offshore reefs where they reproduce. With all their wandering, it is amazing that a discernable difference in the population could result from protecting a relatively small area from fishing. But that is just what lobster biologists at Florida Fish and Wildlife Conservation Commission's Florida Marine Research Institute (FWC/FMRI) have been finding out in an ongoing research project.

Over the last five years, FWC/FMRI biologists have been counting and measuring lobsters in thirteen of the protected zones in the Sanctuary and unprotected reference areas. As might be expected, at this time there does not appear to be an increase in the number or size of lobsters in some of the smaller Sanctuary Preservation Areas (SPAs). However, in the larger Western Sambo Ecological Reserve, lobster abundance is on the rise. It is not unusual to find dens containing twenty or more lobsters on the fore reef. The lobsters in this reserve are getting bigger too, especially on mid-channel patch reefs. In 1997, large males were very rare; only one lobster larger than 100 mm carapace length (CL) was found in the searches conducted by scientists. But, by 2001, large males were more frequently encountered, and the largest individuals were more than 130 mm CL. Because size of both male and female lobsters influences the number of larvae that are produced, biologists predict an increase in the number of larvae starting their lives in the waters of Western Sambo Ecological Reserve.

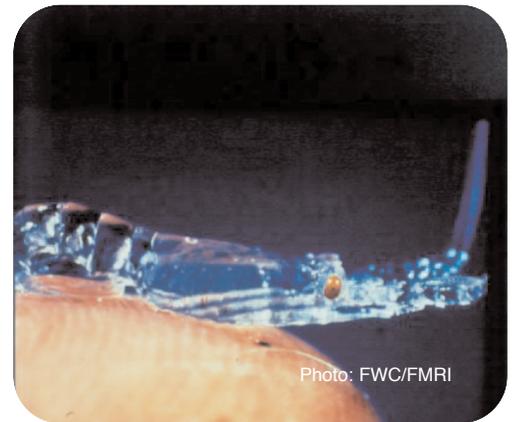


Photo: FWC/FMRI

Spiny lobster larvae float in the ocean currents for up to nine months before changing into the transparent swimming form called a puerulus (above). For several weeks, the non-feeding puerulus swims until it reaches nearshore habitat where it settles to the bottom and develops into a juvenile spiny lobster.



Photo: Grant Stoecklin

During a day of field sampling, Dave Eaken, FWC/FMRI, holds up one of the large males found in the Western Sambo Ecological Reserve. Also pictured: Project Biologist Carrollyn Cox (right) and Kerry Maxwell (center).

Project biologists will continue to follow the trends in size and number of spiny lobsters within the Ecological Reserve and in the SPAs.

For more information about spiny lobster biology, please visit the FWC Florida Marine Research Institute website at: www.floridamarine.org.

For more information about this project, please visit: http://www.fknms.nos.noaa.gov/research_monitoring/zpr99.html#Anchor-Project-3800.

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Note: This article first appeared in the Summer 2002 issue of the newsletter of the Florida Keys National Marine Sanctuary, **Sounding Line**. For more information, visit: floridakeys.noaa.gov.