



Artwork by Melissa Maura

## SPINY LOBSTER

### SCIENTIFIC NAME

*Panulirus argus*

### DESCRIPTION

The Spiny Lobster or Crawfish has a hard outer shell or carapace with shaded areas of brown and tan with a few dark spots, while the abdomen is brown and tan, banded with a few light spots. They have sharp horns over their eyes and a pair of long conical antennae, often called whips.

Caribbean Spiny Lobsters inhabit reefs where they hide in its protective recesses during the day, and forage in the open at night. When disturbed, they can swim backwards rapidly using powerful strokes of their tails.

Male lobsters have a padded opening at the base of each last leg. Female lobsters have two extra claws or “spurs” at the tip of each last leg which are used to scrape the tar spot and release the sperm to fertilize the eggs. She also has pleopods or swimmerettes underneath her tail. These are the flat leaf-like appendages on the abdomen that function in locomotion and reproduction.

### DIET

By examining crawfish stomachs, it has been found that they feed on sea urchins, hermit crabs, starfish, worms and small mollusks, such as young conch and clams. In fact, crawfish will feed on almost any animal matter that they come across while foraging. They are able to detect food at some distance using special sensors on their antennae.

## REPRODUCTION/LIFE CYCLE

Most spiny lobsters breed and spawn when the ocean is warm during the spring and summer. Depending on their size, female crawfish produce eggs twice during the reproductive season. When lobsters mate, the male and female lie face to face. The male leaves a sticky fluid on the female's belly. This hardens into the black patch we call a "tar spot". This tar spot contains thousands of sperm. The female lobster lays the eggs and holds them on her body, under her tail for two to three weeks, until they are ready to hatch. The eggs are orange first and become dark brown when they are ripe. Egg bearing females usually stay on the deeper edges of a reef and when the eggs hatch the larvae are released into the open sea.

The newly hatched baby lobsters are called phyllosomes and look nothing like their parents. They have flat clear bodies with long thin legs, and float and swim on the ocean's surface in the company of baby conchs, crabs, clams and fish. All the tiny animals that float in the sea are called "plankton".

At approximately nine months, the phyllosomes undergo a complete change in shape called "metamorphosis". At metamorphosis the flat body of the baby lobster changes into the shape of a small, young lobster. These young lobsters can swim and they head for shore. They settle in shallow areas like mangroves, grass beds, or shallow reefs. They also hide in weeds, on boat bottoms, anchor ropes and dock pilings. Soon after they settle their clear bodies become colored – marked with yellow and dark brown.

Most lobsters begin to mate when they are 8 to 10 inches long from head to tail. In the Bahamas the minimum legal catch size is 3 3/8 inches measured at the head or carapace or, 5 1/2 inches in tail length. This size is considered to equal sexual maturity. Lobsters continue to grow larger throughout their lives. They can live more than 40 years and can reach more than three feet long from head to tail.

### HOW DO LOBSTERS GROW?

From time to time lobsters "moult" or shed their outer shell for a larger one. Before moulting, a lobster grows a soft shell, like a second skin, underneath its hard shell. The lobster splits its hard shell open where the tail joins the main body. It backs out of the shell through this opening. The lobster is now wearing only its soft skin-like shell and is in danger from predators until it hardens. The soft shell swells to a larger size and slowly hardens. The lobster has room to grow inside this new, hard shell until it is time to moult again.

### VALUE

The Spiny Lobster, is an important food source for large groupers, loggerhead turtles, octopus, sharks and man. Crawfish are "Reef Cleaners" and are vital in keeping our coral reefs healthy. Economically, the fishing of crawfish is a multimillion dollar industry!

### CONSERVATION

To produce enough larvae to sustain the harvest, crawfish must be allowed to reproduce undisturbed. Preservation of crawfish habitat is an important part of this. The following protective measures are in place under the Fisheries Regulations of the Bahamas:

- a) An annual closed season from April 1 - 31 July.
- b) A minimum catch size of 3 3/8 inches measured at the head or carapace.
- c) The possession of egg-bearing female crawfish is prohibited as is the stripping or otherwise

removing the eggs from the berried (egg-bearing) female.

These regulations also make illegal the use of bleach or other noxious or poisonous substances and the use of firearms or explosives for fishing.

