

Sightseeing

Bermuda wants her queen back in the pink

Tied with palm trees and sandy beaches, conch shells are the very icons of tropical vacation spots, and the beautiful pink queen conch, pronounced “konk,” was abundant in Bermuda, South Florida, The Bahamas, the Caribbean and Brazil until about 1970.

Today, however, *Strombus gigas* — the giant marine snail known as queen conch or pink conch (Bermuda, Florida, The Bahamas), *botuto* or *guarua* (Venezuela), *cambobia* (Panama), *carrucho* (Puerto Rico), *cobo* (Cuba), or lambie (Windward Islands) — is in decline, and 30 years of protection have failed to revive its prospects. So the Bermuda Department of Conservation Services is redoubling its efforts.

Conch meat has been used as food, sometimes cooked in fritters, chowders, curries, gumbos and burgers; sometimes served raw in salads or seviches. Conch shells have been used as souvenirs by tourists and as decorations, building materials and wind instruments by islanders. With their tops lopped off to make blow holes, the shells produce a unique, plaintive tone that can be heard far and wide, often as part of festivities.

One conch in 10,000 produces a pearl, and one in 10 pearls — 3 mm or less, baroque or oval in shape — is gem quality. So rare and valuable that few jewellers have ever seen one, they appear in a wide variety of hues, from startling white to hot magenta, warm orange, café au lait, even lavender. Many are brilliant pink. The most valuable pearls show a shimmering, iridescent effect known as flame structure — a spectacular chatoyance, like a cat’s eye.

Trade in conchs is regulated by the Convention on International Trade in Endangered Species. Illegal harvesting and trade are widespread problems. Banned from export by many countries, conch shells are amongst the top-10 items seized by UK customs.

At 2.5 years of age, queen conchs reach market size of 18.8 cm / 7.4 in., with meat weighing 100 g / 3.5 oz. and total weight of 845 g / 1.8 lb. Although in decline throughout its range, *Strombus gigas* is still fished commercially in the Caribbean.

The queen conch has a strong, smooth shell with a row of nodes at the shoulder of a whorl and a long aperture rose pink to warm orange. It has a soft body with a black-speckled foot, snout-like proboscis, pair of tentacles and pair of yellow eyes. Unlike snails that glide smoothly, the conch moves in short hops. It extends its foot forward, fixes it on the ground, then contracts sharply to heave itself forward.

Usually found in groups, the herbivorous queen conch prefers meadows of turtle grass or manatee grass, but sometimes crosses sand flats, coral rubble or coral reefs. Around Bermuda, they keep to the outer reefs.

Adults mature sexually at about four years. In Bermuda, they mate between May and September, and a female averages nine egg masses per season. Moulded by the shape of her shell, each crescent-shape mass contains 400,000 eggs. When the larvae emerge, they begin feeding on phytoplankton immediately. After a month, they have shells that resemble adults.

Natural predators include loggerhead turtles, sharks, eagle rays and spiny lobsters. Rays can crush conchs in their jaws, whilst spiny lobsters just pick away at their shells.

Other threats include the ease of “catching” conchs, their slow development and current low densities of adults. Despite a complete ban on taking since 1978 and their endangered status under the Bermuda Protected Species Act of 2003,

populations have shown little recovery. Experimental releases of farmed specimens into the wild have not gone well, as they proved vulnerable to predators.

A new recovery plan by the Bermuda Department of Conservation Services seeks to increase population levels through habitat protection, active breeding and recruitment. The plan proposes to assess genetic status, population size, distribution, demography, movement, breeding and feeding grounds, especially regarding mysterious juvenile conchs.

The total cost of recovery is not yet known, but funding is sought through non-governmental organizations and is projected to take at least 15 years. To learn more, contact Samia Sarkis, protected species coordinator, at scsarkis@gov.bm.