Disappearing Dugongs

There are new worries about the last southern-Red-Sea stronghold of Egypt's Sea Cows

My thanks to an old friend Amr Ali, managing director of the Hurghada Environmental Protection and Conservation Program (better known as HEPCA), for sending me good news concerning Egypt's beleaguered Dugong population. These peaceable marine herbivores, not inaccurately described by their archaic name Sea Cow, have been steadily retreating from their Red Sea coastal haunts in the face of tourist development, habitat destruction and disturbance from fisheries and leisure boats. Now there is increasing concern for them in their last stronghold in the southern Red Sea.

HEPCA has announced a comprehensive national sighting program to monitor and collate all Dugong records to obtain more accurate estimates of their population, along with a 'zoning line' across Dugong hot-spot Abu Dabbab Bay near Marsa Alam to minimize disturbance and injury from increasing numbers of motorized boats.

And the Dugongs need it. Dugongs are large, marine mammals up to four meters in length and weighing in at some 1,000 kilograms. Despite their size, Dugongs are harmless, slow-moving vegetarians grazing on seagrass beds in shallow coastal areas. With rounded, barrel-like bodies, they have forelimbs modified into flippers, no external hind limbs and a fluked tail. The muzzle is large, flattened and whiskered. They may be readily distinguished from the unrelated whales and dolphins in the region by the absence of a dorsal fin and by the nostrils on the tip of the snout rather than as a blowhole on the crown.

They enjoy a vast range from the coasts of East Africa through the Red Sea and Persian Gulf, across the coastal Indian Ocean and east to New Guinea, Australia and the western Pacific. However, nowhere are they common and everywhere they are retreating due to the factors mentioned above. Historically, they extended throughout the Red Sea but are now unlikely to be seen in the north though there are rumors of a healthy population in the off-limits areas around Tiran Island in the mouth of the Gulf of Agaba.

While threats such as tourist activity, motorboats, habitat destruction and oil pollution are all recent, Dugongs have also been hunted for perhaps millennia by man. On the walls of the Hurghada Marine Museum there are a series of dreadfully stuffed Dugongs, one of which has a grey-painted peg hammered into its lower belly presumably to represent its manhood. There are also old black and white photographs of slaughtered animals enlightening only in that they serve to illustrate the incredibly long intestine required to digest tough seagrass.

Hopefully this hunting is a thing of the past. Lieske and Myers, authors of Coral Reef Guide — Red Sea, estimate a possible 4,000 animals left in the Red Sea, of which only a small proportion are in Egyptian waters.

In myth, the Dugong lives on as the origin of the mermaid legend. Sailors, who had obviously spent far, far too much time in the sun,

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likened these rotund, bewhiskered sea grazers to voluptuous sea sirens. I have never seen a wild Dugong but I have had experience with a close relative, the West Indian Manatee.

The three manatee species, the West Indian, Amazonian and West African, look superficially similar to the Dugong but have a circular paddle-shaped tail rather than a finned one. My encounter with the West Indian Manatee was among the mangrove islands off northern Belize, Central America. Sharing much the same habits as the Dugong, the manatees are exposed to many of the same threats, and our encounter with the animals was tightly controlled.

As we neared the lagoons where the Manatees were found, the boatman turned off the motor. Too many of the animals can be identified by the scars on their backs inflicted by boat propellers. Passing through the shallows, our guide spotted a pair of moist nostrils momentarily breaking the surface of the water. The next hour was spent trying to photograph and sketch the animal as it grazed fully submerged. The West Indian Manatee is even larger than the Dugong, but it is amazing how graceful 1,400 kilograms can be in its element.

It was a great experience and goes to show how, if properly conducted and managed, such encounters can contribute to the local economy — conservation working with tourism rather than in competition with it. It must be stressed, though, how tightly the encounter was controlled and, much as we wanted to, we were not allowed into the water with the animals. If, and it is an immeasurably vast if, it could be managed equally carefully here, the same might be possible with the Dugongs. But not yet — let HEPCA do its research first.

The Dugongs rely on the seagrass beds for their grazing and a number of different seagrass species occur in the Red Sea including Clump, Canopy and Ribbon Seagrass as well as — yes, really — the Dugong Seagrass. These beds are not only vital to the Dugongs but to various species of fish and, rather like the mangroves, they serve as nurseries for the juveniles of many coral reef fish. Many of these seagrass denizens are superbly camouflaged, such as the various seahorses, filefish and pufferfish for whom these beds are home.

But to my mind the ultimate seagrass mimic is the Robust Ghost Pipefish. At 17 centimeters, this fish is indeed robust, at least for a ghost pipefish, and yet it is incredibly hard to spot. Variably colored in browns, greens or beiges, this elongated fish has a broad and flattened tail base that lends it the appearance of a single seagrass leaf. It even behaves like a seagrass leaf feeding vertically head-down among the real leaves, sifting minute invertebrates from the substrate. Superficially similar, the Hairy Pygmy Pipehorse, as the name implies, is a relative of the seahorses and pipefish. This incredibly cryptic little fish, barely six centimeters long, mimics the stem of the seagrass even down to fleshy tassels that ape tiny clumps of algae on the real thing.

It is probably fair to say that the seagrass beds are Egypt's most underestimated marine environment. The inhabitants are hard to find and perhaps lack the kaleidoscopic glamour of the reefs, but these beds are still of enormous ecological importance. The protection and preservation of the Dugong necessitates the preservation of this habitat, and that can only be a good thing. et

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