‘UNDERSEA EYE’ UPDATE FOR OSPREY REEF MANTA ENCOUNTER
M307 May 26-June 1, 2007

Once again Undersea Explorer hosted Owen O’Shea, manta researcher. Owen’s project entails leaving a video camera at a manta cleaning station at Osprey Reef for up to twelve hours at a time, and recording the interactions between the mantas and their associated cleaner wrasse. Cleaner wrasse set up ‘stations’ at defined territories, where they remove parasites and diseased or dead tissue from their ‘clients.’ The clients include many different species of fish, as well as elasmobranches such as the mantas and sharks that we see at Osprey Reef. It is thought that cleaner wrasse may increase the species diversity on a local scale, because they provide a focus for fish species. The symbiosis between cleaner wrasse and clients is considered to be mutualistic, where both partners benefit. The cleaner wrasse obtain nutrition, while the clients benefit from the removal of parasites.

This week Owen captured hammerhead sharks on the manta camera, but not as many mantas as in other weeks. This project will hopefully help us to better understand the factors that influence the presence and movement patterns of manta rays.

Besides looking at manta rays, Owen is also recording interactions between cleaner wrasse and other species of fish along the Great Barrier Reef. He was very lucky to catch this glimpse of a school of over 60 bumphead parrot fish (*Bolbometepon muricatum*) being cleaned in shallow water at a coral garden. Additionally, he notes that the common cleaner wrasse are not the only fish that conduct cleaning activities. He sighted a turtle being cleaned by a surgeonfish and a butterfly fish!

Besides the school of bumpheads being cleaned, guests saw a number of other large schools of barracuda, giant trevally, and bigeye trevally. A silvertip shark was seen during the shark attract at Osprey Reef, and a couple of sightings of a juvenile ribbon eel were recorded. In addition, this strange and interesting fish was sighted within the Great Barrier Reef. *Dendrochirus biocellatus* is sometimes called a twin-spot turkeyfish, or a Fu Manchu, named for the long cirri extending below its lower jaw.

Creature Feature: Polyclad flatworm (Phylum Platyhelminthes)

Did you know… that even though flatworms look a lot like nudibranchs, or sea slugs, they are actually unrelated? They are more closely related to tapeworms and liver flukes! Flatworms usually move around using cilia, or hair-like projections, but they can also swim by undulating the sides of their body.

Environmental Tip of the Week: Don't contribute to overfishing!
Overfishing occurs when harvesting of fish reduces stocks to unacceptable levels. Overfishing usually has a follow-on effect on other parts of the ecosystem. This is especially a concern for coral reef fish. By carefully choosing the fish you eat, you can avoid contributing to this problem. Ask your fish merchant if the species is long lived (>20 years) or short growing, if it is a deep sea species (found below 500m), or if the fish is a shark or ray (sold mostly as 'flake' or 'fish' in fish and chips). If the answer to any of these questions is "Yes," then say "No thanks!" to the fish.

References

Rudman, W.B., 1998 (May 27) Flatworms. [In] Sea Slug Forum. Australian Museum, Sydney. Available from http://www.seaslugforum.net/factsheet.cfm?base=flatworm

Australian Marine Conservation Society. Sustainable Seafood 3 step pocket guide. www.amcs.org.au