Thousands of Portuguese man-of-war washed up on Alphonse Island - 10.06.2013

On May 25, while inspecting the beach for turtle's emergences, Richard Jeanne of Island Conservation Society observed an impressive number of Portuguese man-of-war (Physalia physalis) washed-up on the southern beaches of Alphonse.

This jellyfish-like marine invertebrate is frequently stranded on our beaches by the strong southeast trade winds but in much smaller numbers. Its sting can cause severe pain even if dead on the beach so the Island Conservation Society has warned beach users of their presence and called for caution.

The Portuguese man-of-war is mostly found in the tropical and subtropical regions of the Pacific and Indian oceans and the northern Atlantic Gulf Stream. The man-of-war is adapted to live its life entirely in the open ocean. It drifts along on the surface blown by winds and carried by currents. The discovery of one Portuguese man-of-war usually indicates the presence of many as they are frequently congregated by currents and winds into groups of thousands. Its name derives from the shape of its sail which resembles that of 18th century Portuguese warships at full sail. The Portuguese man-of-war is not a jellyfish (which is a single creature), but is an animal made up of a colony of organisms working together known as siphonophore.

The four different polyp forms of the colony are incredibly well adapted to perform a specific function for the benefit of the whole. The 'sail' is the first polyp, a pneumatophore (aerial root) which the invertebrate fills with air to enable it to float in the open ocean. It can get up to 30 cm long and about 15 cm tall, the sail can even be deflated and allow submersion when threatened by aerial predators. One interesting detail is that the sail can be left-handed or right-handed, so some will sail left of the wind and others right. This means that if the wind takes some to an inappropriate death on the beach, others will find themselves being taken by the wind to an entirely different place. The body below the pneumatophore is composed of the three other polyp types:

(a) the feeding polyps, to catch and paralyse prey such as small fish, crustaceans and plankton, containing thousands of venomous stinging tentacles that can reach 50 metres in length but are more usually around 10 meters. (b) The gastrozooid polyps, which have tiny but flexible mouths that expand to ingest prey; they spread over the surface of their catch and begin the digestion process with an assortment of enzymes. (c) The gonozooid polyps, responsible for reproduction; they are hermaphrodite (having both male and female organs) and release gametes into the water to be fertilised, the resultant larvae then each going through asexual budding to produce a new man-of-war colony.

The redoubtable Portuguese man-of-war also have predators, for example a nudibranch called blue sea slug that feeds on it not only for a food source but also to re-use the venom in its own body for defence and the violet snail Janthina janthina whose purple shells frequently wash up on Seychelles beaches. Sea turtles are another predator, unfortunately, with the increase amount of waste at sea, frequently mistaking plastic bags for the man-of- war. After ingesting the indigestible plastic bags, the turtles can get sick and die.

What can we do in case of contact with tentacles? Carefully remove with gloves any noticeable tentacles from the afflicted areas and then rinse with plenty of lukewarm fresh water until the stinging sensation is reduced. Ice can help numb the affected area for pain relief. Do not apply alcohol; it may worsen the sting by making any remaining undisturbed nematocysts discharge.

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