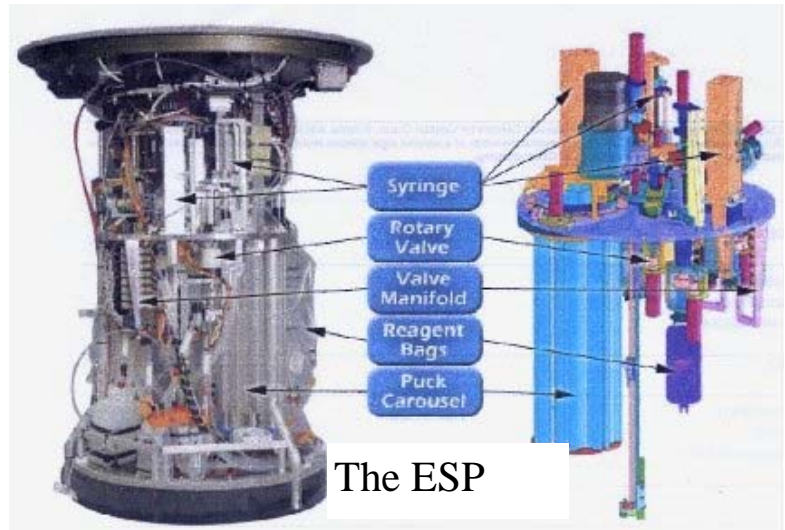


Penzance B.S.A.C. Conservation Officer's Report, September 2009

Scientists at NOAA's National Centres for Coastal Ocean Science and the Monterey Bay Aquarium Research Institute (MBARI), have successfully conducted the first remote detection of a harmful algae species and its toxin below the ocean's surface. This achievement represents a significant milestone in NOAA's effort to monitor the type and toxicity of harmful algal blooms (HABs) which are considered to be increasing not only in their global distribution, but also in their frequency, duration, and severity of their effects. HABs damage coastal ecosystem health and pose threats to humans as well as marine life. Climate change is expected to exacerbate the trend, since many critical processes that govern HABs dynamics, such as water temperature and ocean circulation, are influenced by climate. A MBARI designed robotic instrument called The Environmental Sample Processor, or ESP designed as a fully-functional analytical laboratory in the sea, lets researchers collect the algal cells and extract the genetic information required for organism identification as well as the toxin needed to assess the risk to humans and wildlife.



The ESP then conducts specialized, molecular-based measurements of species and toxin abundance, and transmits results to the laboratory via radio signals. In the spring of 1998, a mass mortality of sea lions in and around the Monterey Bay area was attributed to the sea lions feeding on domoic acid contaminated anchovies. Humans can also be affected by the toxin through consumption of contaminated seafood such as shellfish.

A report with a picture of what was thought to be a marine turtle walking down the beach toward the sea at Mexico Towans, was sent to me in early August, but it was identified as a Terrapin. Lots were imported at the time of the Teenage Ninja Turtle craze, but have subsequently been released when the owners grew tired of them or they grew too big. Bought the size of a 50p piece they grow to a large dinner plate size. They are quite an alien pest, eating fish and young water birds and carrying salmonella and potentially other diseases. If found they should be captured, (careful they bite, and hands must be thoroughly washed after), They could then be offered to somewhere like The Blue Reef Aquarium or Paradise Park, Newquay or other Zoos or the British Chelonian Group has a rescue programme that ships them to an enclosed reserve in Italy; alternatively euthanasia should be carried out. They must not be released into the wild. The one in question made it to the sea, but would not have survived long there, for it is a fresh water species.



Bottlenose Dolphins were reported 9 times during August, from Newdowns Head near St. Agnes on the north coast to Carrick Roads, Falmouth on the south. 8 other reports of unidentified dolphins were probably Bottlenose. There were 15 sightings of Common Dolphins, all reports from the Cape Cornwall to Porthgwarra area except one sighting of 2 off Marazion. They were seen in large pods off Gwennap Head, one report was of up to 700 on the 16th, and 3 Risso's Dolphin were seen off Gwennap that day, and 12 Whitebeaked Dolphins were seen off Fowey on the 2nd. Of 31 reports of Harbour Porpoises, 23 were between Cape Cornwall and the Minack Theatre and the other 8 sightings were between Falmouth and The Lizard. Basking Sharks were reported 25 times, mostly of single sharks but there were a few groups of 2, 3, and 5, but also 12 were seen off Gwennap Head on the 29th. Ocean Sunfish were seen 16 times, 12 of which were between Cape Cornwall and Porthgwarra. Other sightings were off Lowland Point, St. Agnes and on the wreck of The James Egan Lane, and north of St. Ives. Grey Seals were reported 24 times, all in the Gwennap Head area, largest group being 19 on the 4th. Other creatures seen were A Leatherback Turtle off Loe Pool Beach, Portuguese-man-of-War, 10 washed up on Crinnis Beach St. Austell Bay and one off Cape Cornwall. Columbus Crabs and Goose Barnacles and the Terrapin mentioned above.