"Science Education Asea" follows the events of scientists onboard the R/V Melville.

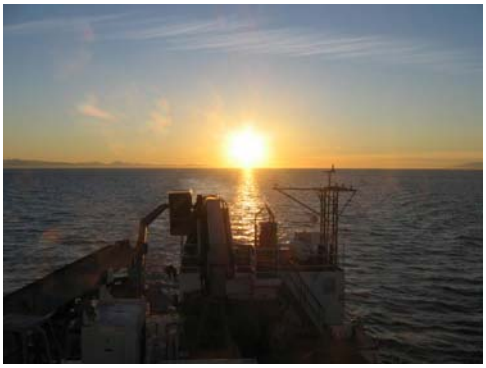
The SEA Times

Current Location
Latitude 48' 33.52" N
Longitude -124' 22.85" W

TUESDAY, SEPTEMBER 6, 2005

All Aboard Awed by Pacific Northwest Landscape and Seascape

PUGET SOUND TO
60 MILES OFFSHORE



Everyone on the R/V Melville agrees, life at sea has its charm. The complement of 52 scientists and crew has had time between working and sampling to enjoy the beauty of the ocean.

From near shore sampling stations, the Olympic Mountains and the Vancouver Island Ranges are a beautiful background for sunrises. Glaciers deep in the valleys of Olympic National Park glisten in the light of a new day. Jagged rocky peaks stand out behind the rolling foothills. Cape Flattery is a picturesque scene marked by a charming lighthouse with red roof buildings.

Sunsets over the open ocean are a time for scientists and crew to gather on deck and appreciate the colorful display. Whites fade to yellows to orange and reds. Clouds contribute to the beauty as they diffuse the light; ones' eyes can focus on the great orange ball as the horizon slices it away.

Most nights have been clear featuring star-filled skies, the Milky Way a distinct streak, well beyond the light pollution of the city. After a long shift, science and crew relax in a salt water hot tub, looking beyond the masts and cranes to the swaying constellations. Wildlife viewing is always an exciting part of being at sea. Orcas, or killer whales, are a symbol of the Pacific Northwest and the Melville has encountered these graceful creatures on two occasions during the last week. Scientist Anne observed one as it dove under the ship's bow. During the sec-ond encounter, a pod of over 20 orcas swam around the ship. The pod was spread out over a few hundred meters and families swam side-by-side, surfacing together.

The heart-shaped blows of humpback whales have been a common sight. Several people watched from the bow as a pair of humpbacks waved and slapped their large pectoral fins and dove, flashing the white underside of their massive tail flukes.

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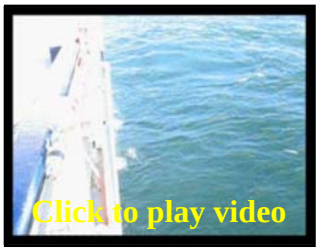
Mixed flocks of gulls, fulmars, shearwaters and petrels fly alongside the ship. Murrelets, murres, guillemots, and auklets sit on the water, then dive to feed. Some shipmates caught sight of an albatross – a bird with a wing span up of 6 feet that spends most of its life at sea.

Salmon splash the water at dawn and dusk, practicing for their migration to their freshwater streams. An odd-looking sunfish, or *Mola mola*, occasionally floats by the ship. And, perhaps the most intriguing is the vast, wild ocean itself spread as far as the eye can see.

Close Encounters with an Odd Kind

OPEN OCEAN



"Look! It's a giant Frisbee with wings!" The common sunfish or *Mola mola* is an interesting sight in the open ocean. These fish are often observed lying on the surface showing off their flat, silvery bodies, moving their paddle-like fins side-to-side. *Mola* is Latin for "millstone" – referring to the sunfish's roundish shape.

The average sized *Mola mola* is 6 feet long and weighs 1 ton (2200 pounds) and the largest weighed 4,927 pounds! Sunfish forage at the surface, among floating weeds, on the seafloor and in deep water. Some have been seen from submersibles (small submarines) at 1,500 feet. They eat zoo-plankton, jellyfish, salps, squid, sponges and crustaceans (like crabs and shrimp). They suck and spit water to break their prey into bite-sized pieces.

Like whales, sunfish can breech, clearing the water's surface up to 3 body lengths. This may be a way of cleaning themselves of parasites. Sunfish may recruit the help of a gull to remove parasites, but if the cleaning gets too rough *Mola mola* will spit water at its assistant.

Sunfish are related to pufferfish and triggerfish. Larval sunfish are like swimming pin cushions -- they look like their relatives, with spines and a tail.

The French call sunfish poisson lune (moonfish). In Tawainese their name means toppled car fish; Philipine: Putol (cut fish); Japanese: Manbo; Hawaiian: Makua; Spanish: Bezador; and in German they are known as: Schwimmender Kopfe (swimming heads)!

ECOHAB PNW is a 5-year multi-disciplinary project that is studying the physiology, toxicology, ecology and oceanography of toxic Pseudo-nitzschia *species off the Pacific Northwest coast. For more information, visit the ECOHAB-PNW website at: http://www.ecohabpnw.org.*

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