National Park Service U.S. Department of the Interior

Cape Cod National Seashore



"Seashore Science"

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The What and Why of "Mung"

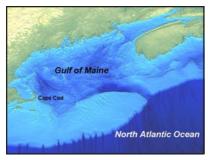


Each July and August many of the seashore's ocean-side beaches become clogged with thick rafts of seaweed locally and infamously known as "mung". Although this mixture of brown, red and green drift seaweeds is harmless to swimmers, it is a definite nuisance, making swimming, surfcasting and even wave-riding difficult, and sometimes accumulating in smelly piles along the shore.

Drift seaweeds have been washing up on Cape beaches since at least the 1850s, and are even mentioned by Henry David Thoreau in *Cape Cod* (1865); however, many long-term residents believe that mung is becoming more abundant and lasting longer each summer along the Atlantic shore. Also, the daily reports of seashore lifeguards suggest an increase since the early 1990s.

The abundance of mung on outer Cape Cod has been difficult to explain, mostly because our near-shore waters are low in the nutrients responsible for algae blooms elsewhere, and lack the rocky bottom that seaweeds require when they start life.

continued



The Gulf of Maine

For this reason, it's believed that mung likely originates elsewhere and is carried here by ocean currents. Using drifter studies, scientists have documented the dominance of

southward coastal currents within the Gulf of Maine, a marine system bounded to the south by the Cape Cod peninsula. Thus, most of our mung may begin life each spring attached to the rocky shores of northern New England, and become detached by waves and carried by southward currents toward Cape Cod. As mung drifts

with this current around the northern tip of the Cape, it could be caught by the same outer shoals that trapped so many unlucky human mariners. The fact that highest densities of mung occur at



The shoals off Head of the Meadow Beach, Truro

beaches closest to these outer bars, notably Head-ofthe-Meadow in Truro, supports this hypothesis.

Although mung likely originates well beyond the boundaries of the National Seashore, park staff established a protocol for the long-term monitoring of drift seaweed on park beaches in 2006. As an accident of geography, Cape Cod is strategically located for tracking important physical and biological changes throughout the Gulf of Maine ecosystem.

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