

Our Beach Wrack Community

The wrack is stuff cast ashore by the sea. Much of this once grew in the sea, like seaweeds and seagrasses. These marine castaways foster protective dunes and allow assembly of a unique natural community that brings life to the beach.

The Red Knot's Journey

Red Knots migrate as far as 20,000 miles each year between their feeding and breeding areas. On their journey, the birds depend on pit stops where beach wrack and other food sources provide refueling energy. Without these options, the birds can starve to death.



Beach Wrack Life



- 1 A major component of wrack is algae. This seaweed floats at sea and is part of a diverse assemblage of marine life adrift in the ocean.
- 2 Currents transport algae and other floating material, and onshore winds push it onto beaches. Storms can create rough surf that also brings sunken items ashore.
- 3 As wrack ages, it provides for the growth of fungi and other organisms.
- 4 Beetles, beach-hoppers, ghost crabs, and other small animals feed on the fungi growing in the wrack, as well as on the marine creatures that wash ashore after living lives at sea.



- 5 The smaller animals in the wrack provide food for shorebirds, which rely on this sustenance to fuel their long-distance migrations. Gleaners of wrack include rare Piping Plovers, which are currently threatened with extinction.



- 6 Clumps of old wrack begin to collect wind-blown sand and tumbling plant seeds on the upper beach.
- 7 Sprouting plants grow more quickly through their vulnerable period thanks to nutrients provided by the decaying wrack.

- 8 Some wrack clumps grow into low dunes out on the upper beach. These small dunes can grow into substantial mounds capable of protecting upland property from storm erosion and improving beach habitat.

Base of the Wrack Community

Most energy for the wrack community comes from a variety of marine plants. In their death, these plants form the base of a widely influential food web.



Manatee and shoal grass



Brown algae



Turtle grass



Red algae

What's in the Wrack?

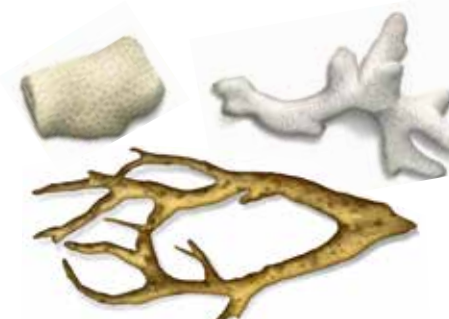
Hidden in the wrack are many items with stories to tell. Plant seeds give rise to future dunes, and seashells and other invertebrate skeletons reveal former lives at sea. Human influence is also seen in bits of plastic.



Dune plant seeds



Mollusk shells



Coral and sponge pieces



Plastic bits and shards



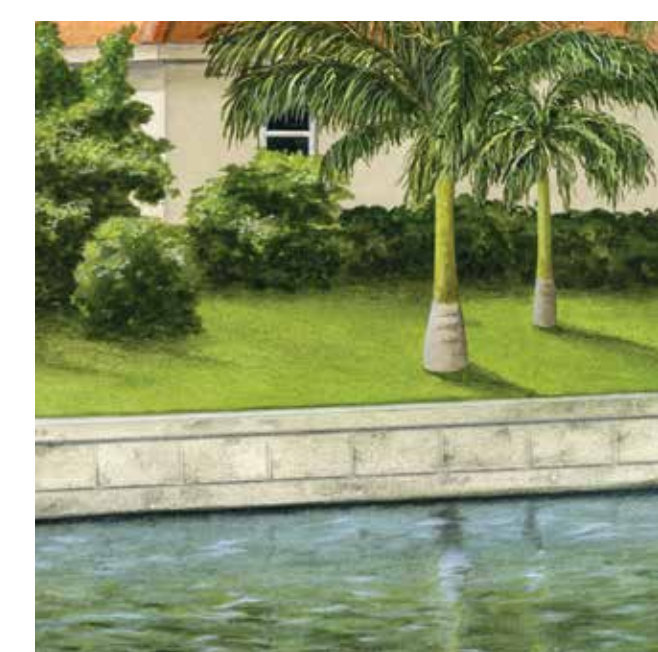
Threats to the Wrack

Some of our efforts to "clean" the beach include the mechanized removal of wrack from the beach. Unfortunately, without wrack, some of the most interesting attributes of a beach are also absent.



You Can Help

Most human litter can be picked up by hand. Freeing beaches of plastic debris reduces threats to wildlife from mistaken ingestion and entanglement. Excess fertilizers can run off lawns with rainfall and ultimately flow into coastal areas, which may also harm wildlife. Use fertilizers, pesticides, and household chemicals responsibly.



FOLLOW LEASH LAWS
Dogs Must Be Leashed at All Times



Dogs are prohibited from Critical Wildlife Areas, County and State Park beach areas.

