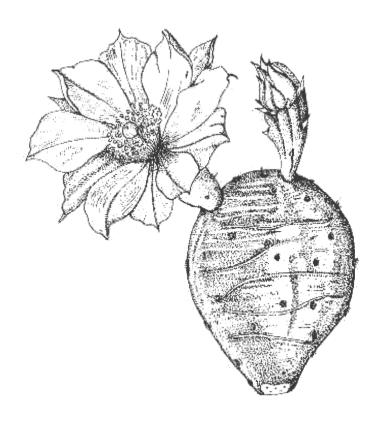
National Park Service
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Assateague Island National Seashore



The Life of the Dunes Nature Trail



The Life of the Dunes

Behind the primary dune, lies a tentative environment influenced by salt-laden winds. Plants and animals must adapt to this unsettled land of shifting sands. Some thrive here, some compromise, some merely survive.

1 Tracks in the sand



In the desertlike conditions of the dunelands most animal activity other than birds is nocturnal. Search for tracks in early morning before the breezes have had time to obscure them. Look for a doodlebug's (antlion larva) winding trail through the surface sand, a red fox's dainty doglike pawprints in a fairly straight line or a boattailed grackle's many wandering tracks.

2 Plants that trap sand

Pioneer plants create the conditions that enable other plants to get a foothold. American beachgrass and woolly hudsonia (beach heather) play a major role in building and stabilization of dunes. These plants form an underground network of stems that anchor the sand. The plants above, trap blowing sand and help to build the dune.

3 Shrubs in the duneland



The primary dune provides protection from saltspray allowing beach grass, poison ivy, hudsonia, and bayberry to dominate this interdune area. Vegetation builds up organic matter in the soil and provides food and cover for many creatures.

Most of the shrubs you see around you are northern bayberry (Myrica pensylvanica). Its berries persist through the winter providing food for birds, fox, deer and other mammals. In fall, thousands of tree swallows gorge on bayberries, fueling their southern migration.

5 Freshwater wetland

Darker soil indicates the location of damp depressions formed during rainfall. Close to the underlying water table sand remains moist enough to support a growth of rushes and sedges associated with freshwater wetlands.

6 Duneland wildflowers



Splashes of yellow can be seen in May as beach heather's delicate bloom carpets the interdunes while prickly pear cactus flowers boldly in May and June. Seabeach evening primrose will follow June through October and seaside goldenrod adds an autumn splash August through November. Purple gerardia blooms in damp spots July through September and blue toadflax springs up in dry sandy areas April through June.

seaside goldenrod

7 Hognose snake



The reptile most closely associated with the duneland environment is the eastern hognose. All snakes are predators. The preferred prey of the adult hognose is the Fowler's toad, while young hognose snakes eat insects. This species is famous for its bluffing defensive behavior, which includes striking at an intruder, but not making contact. If this fails to deter, the snake may roll over and play dead. Despite its seemingly belligerent actions it is harmless. Part of the island food web, the hognose feeds on amphibians and is itself food for foxes, hawks, and owls.

8 Wild black cherry

This tree grows in many areas of the island. It is small in the duneland edge zone, but grows tall in the mainland forest, where it may reach 100 feet. This specimen is stunted by the pruning effect of salt spray. It may grow no taller, but has space to grow wider.

The black cherry is valuable to wildlife and humans. The fruits are eaten by birds, fox, cottontail, raccoon, and white-footed mice. Deer eat the foliage. The wood has been used in making furniture, tool handles, veneers, and cabinets.

9 Duneland fungi



The crowned earthstar, a relative of puffballs, is adapted to desertike conditions of the dune zone. This fungi derives nutrients from organic material in the soil. The fruiting body of the earthstar (the part above the surface) has a ball-like inner spore sac covered by a thick outer layer. When rain brings moisture, the outer layer splits open and the pointed segments curl downward, sometimes raising the plant above the ground.

10 Edge effect



poison ivy

Duneland meets forest in this transition zone where both communities come together to create a zone of greater diversity of both plant and animal life. Assateague's thickets include climbing or trailing vines (poison ivy, Muscadine grape, Virginia creeper, greenbriar, trumpet creeper, and blackberry), shrubs and small trees (highbush blueberry, bayberry, wax myrtle, wild black cherry, sumac, holly, loblolly pine, and red maple, along with shrub-form poison ivy). A wealth of food and cover for wildlife can be found in thickets.

11 Birds of the thicket



12 The old oak



13 American holly

14 Predators of the sand



15 Observe

Attracted by the relative safety and abundant food source, you will find a multitude of birds in the thicket. This popular dining spot attracts the catbird (rarely seen far from dense shrub growth), towhee, brown thrasher, yellow warbler, mourning dove, robin, cardinal, bobwhite quail, American goldfinch, white throated sparrow, and yellow-rumped warbler.

Exposure to salt-laden ocean winds has caused this southern red oak to adapt. Notice its short thick trunk and low spreading branches. As seasons pass, fallen leaves accumulate and gradually decay adding organic matter and moisture to the sandy soil. The old oak has created a more hospitable environment for plants and provides acorns for white-tailed deer, red fox, raccoon, grackle, towhee, and brown thrasher.

Holly provides good year-round food and cover for birds and other animals. Note how this holly has been pruned by salt spray.

Predators come in all sizes and are found in all places. Look around the sandy surface of the interdunes for their signs. Perfect holes about the diameter of a pencil are the homes of wolf spiders. The cone-shaped pit of the antlion larva is often found at the end of its winding track.

Wolf spider burrows are lined with silk, which holds the sand grains together, helping keep the burrow walls intact. The best time to see one of these small predators is at night, when its four largest eyes (of a total of eight) shine as green points in the glow of your flashlight. This arachnid is terror to the insects upon which it pounces, but it is preyed upon by dune-dwelling spider wasps.

The adult antlion does not feed at all. The larva, known as a doodlebug, is a voracious carnivore. It digs its pit in dry sandy areas, then lies in wait in the bottom with only the tips of its sickle-like jaws visible. When an ant or other insect tumbles into the pit, the doodlebug tosses sand up and over it, seizes the victim, pulls it under the sand, sucks it dry and ejects the carcass.

Wind and salt shape this rugged landscape but there is an unsettling beauty in this seeming imperfection. Scoured dunes, exposed roots and twisted limbs are the tangible confirmation of the will to survive. Take a moment and notice the efforts and struggles as life and land find harmony.

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