

Life in the Valley



Shore pine forest at Oregon dunes. PHOTOS COURTESY OF BOBBIE SNEAD

Naturalist's Eye: Hiking dunes at Oregon Coast



Russula mushrooms.

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Nature is the greatest storyteller. Her stories are full of intriguing plot twists, colorful characters and spectacular settings. Any time I find myself in natural surroundings, I search for the telltale threads that will reveal the story behind the scenery.

Sometimes the story is a fast-paced thriller. Other times nature crafts a saga that is a subtle, nuanced tale. Reading the story of a sand dune at the Oregon Coast offers fascinating insights into the raw power of wind, the fickleness of sand and the secretive lives of the organisms that dwell in a dunal habitat. An ideal place to explore a coastal dune is at Bob Straub State Park near Pacific City.

The wind is unexpectedly calm and the air hangs softly with the smell of salt as I walk the short trail to the beach. Once my feet touch the firm, wet sand close to the water, I turn south. On my left is a long foredune. It parallels the beach for two miles all the way to the tip of Nestucca Spit. I will be returning on the Dune Ridge Trail which follows the crest of this dune back to the parking lot. For now, I stick to the beach.

The story of the beach and its attendant dune begins, of course, with sand. It is the end product of a continual process of erosion. Sand begins as chunks and chips of rock in coastal rivers. As these pieces tumble and rub against other rocks in the streamflow they are reduced to smaller fragments that are carried in the current.

The rivers eventually drop their freight into the Pacific. Erosion from coastal cliffs and headlands adds to the sediment in the sea. Ocean currents and wind-driven waves deposit sand on the beach. As the waves break, the swash leaves the heavier sand grains on the seaward edge of the beach while the lighter grains are deposited farther ashore. The lightest grains dry out the wind carries them inland to the dune.

My meanderings take me away from the water's edge to the deeper, softer sand. Here I find a long stem of kelp. A strong storm brought this torn scrap of giant seaweed above the tide line. I kneel down and flip the kelp over. Dozens of beach hoppers spring to life and jump away. These tiny shrimp-like creatures feed on stranded kelp at night and burrow underneath it during the day.

Looking closer, I spot a kelp beetle in the sand. His little guy is the size and color of an unpopped kernel of corn. It, too, eats the decaying kelp. These miniscule creatures are, in turn, eaten by hungry shorebirds. An entire food chain exists on and under decomposing kelp. Nothing is wasted in nature.



Marram grass on sand dune at the Oregon Coast.

How to get there

Directions: Drive Highway 101 north from Lincoln City for 18 miles. Turn west on the Three Capes Scenic Route and drive 2.7 miles to Pacific City. Follow signs to Bob Straub State Park.

Length of hike: 1.5 – 4.0 miles round trip

Duration: 2 – 4 hours

Elevation gain: 30 feet

Age range: suitable for all ages

I walk on and find another clump of beached seaweed. A tiny mound of sand has formed in the shelter of its leeward side. If the winds drop a seed on the newly formed mound, a plant could begin to grow. Nourished by the rotting seaweed, the seedling will put down roots and anchor the sand in place. A sand dune will then get its start.

A fresh set of deer tracks leads me through a series of hummocks crowned with tall shoots of marram grass. It is rough and scratchy to the touch and its leaves are curled in to fight the drying effects of briny winds. Widely planted as a stabilizer along the Oregon Coast, marram grass is a tough no-nonsense plant. It thrives in sand, tolerates salt and resists battering winds. It is the perfect dune protector.

Wrapping my fingers around a stem, I try to pull it up like a weed but I'm not strong enough. Deep roots hold it in place in the loose sand. Digging below

the surface allows me to see the uppermost part of an intricate lattice of underground stems called rhizomes. These buried stems send down deep runners and lateral shoots to each side. They also produce aerial shoots which are exact duplicates of the original plant. The dune above me is covered with clones that have slowly marched up the slope from the parent plants.

An uphill path through the grass brings me to the top of the high dune, 30 feet above the beach. The wide crest is almost completely covered with grass except for a slender trail that runs the length of the dune. I turn north and follow the ridgetop. Deer tracks once again lead my way. This dune was built by relentless onshore winds blowing through the ages. It acts as a giant dike protecting the moist swale lying in its wind shadow.

As I follow the elevated path, I scan the rounded ridge and notice four flick-

ing ears rising above the grass. Two black tailed deer, the owners of the tracks I have been following, watch my approach and then bound over the mounded sand and disappear.

After a half mile the trail descends to the protected side of the dune. I enter a fairy tale forest of stunted shore pines. The trees huddle together for protection. The thick canopy is almost completely closed overhead. A few fingers of light penetrate the dense branches to transform the remnants of last night's rain into glittering diamond droplets. It is a scene of pure magic.

I fully expect to see a gnome peeking out from behind a twisted tree trunk. Instead I find rosy Russula mushrooms popping up through the fallen pine needles on the forest floor. Mushrooms are the fruiting bodies of an underground network of thin filaments called mycelium. Some of the thread-like roots attach themselves to the roots of the shore pine to form a hidden partnership between fungus and tree. The mycelium and tree roots exchange water and nutrients with each other. Each partner benefits from the other so both can survive.

The sandy path pulls me on through the dune forest. All too soon the rumble of an idling car engine tells me that the parking lot is just around the bend. The hike is nearly over and its story has come to a close. But today's tale is just one in an endless anthology of nature's works. I will continue reading.