



LOSING THE SANDS OF TIME

A COLLABORATIVE EFFORT STRIVES
TO SAVE THE OREGON'S DUNES

BY CAMILLA MORTENSEN

Wandering through the dunes of the Oregon Coast feels like being on another planet. You've left the land but not yet reached the sea. The wide hills of sand dampen the sounds of the surf as you slowly walk, the thick sand dragging at your feet, out onto the flat expanse of the beach to be hit with the roar of the waves.

Oregon's massive deposits of sand are actually the creation of this state's mountains, which formed 45 million years ago. As the Coast Range weathered, rivers such as the Umpqua brought rocks and sediment to the sea to be further ground and smoothed by the Pacific Ocean and then pushed back onto the land forming dunes as tall as 500 feet and as far as three miles inland.

The Oregon Dunes run 50 miles or so along the coast from Heceta Beach to Cape Arago. Forty of those 54 miles comprise the Oregon Dunes National Recreation Area and are part of the Siuslaw National Forest.

And those scenic dunes, with their constantly moving ecosystem, are at risk of being lost.

An unlikely group of people has come together to try to save the Oregon Dunes, from environmentalists and government officials to off-highway vehicle riders and tribal members. The Oregon Dunes Restoration Collaborative is working to bring back the open, moving sands that are the unique environment of the dunes.

LIVING SAND

In order to understand why the dunes are at risk, you first have to understand that the dunes, as Dina Pavlis says, "are kind of alive."

Pavlis, the author of *Secrets of the Oregon Dunes*, was an interpretive ranger for the Oregon Dunes and is a member of the Oregon Dunes Restoration Collaborative.

The dunes, she explains, are constantly moving, and they need to move to exist. "You need three things to create a dune," she says: a flat coastline, a lot of sand and wind to move it.

But that movement has been stopped — and that, Pavlis says, is the problem.

Years ago, the mouth of the Siuslaw River would wander as far as a mile and — before highways, when shipping was the main way to get supplies — ships would sink or get beached. When roadways were built, Pavlis says, they were another flat surface for the dunes to move over. For the settlers moving in, this created a lot of problems, and they didn't value the dunes for their environmental qualities or tourism. You couldn't farm them or grow timber on them, so they didn't value them at all.

This led to an effort in the early 20th century to stabilize the dunes by planting European beachgrass, and it was extremely successful. From the perspective of the dunes, it was too successful.

European beachgrass, that lovely waving tall grass you see at the tops of the dunes often mixed in with American beachgrass, spreads aggressively with deep roots — as much as 30 feet long — and spreading rhizomes, firmly holding the sand still.

Standing on the beach, looking inland, as the surf roars and the wind blows the sand, you will see the smaller foredune, closest to the water. It was once almost all sand, but now is topped with beachgrass. Behind it, Pavlis says, is the deflation plane where, according to the U.S. Forest Service, the wind strips the sand away, essentially "deflating" the area down to the permanently wet sand.

This is where water-loving vegetation grows. Before