## PEA ISLAND

n a thin, sandy finger of land at the northern end of North Carolina's Hatteras Island, migrating birds and threatened loggerhead turtles have staked a modest claim. In the fall, shorebirds such as the ruddy turnstone, dunlin and marbled godwit crowd upon Pea Island National Wildlife Refuge to rest from their long journeys. In winter, these travelers are replaced by thousands of snow geese that rest here until their return to breeding grounds in the Arctic. Where the island widens enough to support bayside marshes and ponds, herons and avocets, tundra swans, northern pintails and cedar waxwings all forage for food. In all, more than 365 species of birds have been seen on this 13-mile-long ribbon of sand between the Atlantic Ocean and Pamlico Sound. In spring, black skimmers and American oystercatchers settle in to raise their broods, sharing their nesting grounds with piping plovers and loggerhead sea turtles, who bury their eggs in the island's warm sand.

Despite its small size, at about 5,900 acres Pea Island protects an impressive array of habitats, including sand beaches, coastal dunes, freshwater and brackish ponds, saltwater marshes and stands of wax myrtle. The refuge, established in 1937, was named for the dune peas that provided winter sustenance for snow geese and other birds. These geese continue to rely on refuge lands and, along with a parade of other species of birds, 25 species of mammals and nearly 30 types of reptiles and amphibians, Pea Island attracts 1.3 million people every year. They come to be caught up in a dynamic world where waves and wings are forever moving upon this sandy edge of North America.

But wildlife and ocean are not the only forces on the move here. The beach itself is moving westward with every crash of the Atlantic—a fact that makes the presence of Highway 12 a constant conundrum. Dependent on natural and periodic flooding or "overwash" of sand to nourish the marsh, the ecosystem has had to deal with the disturbance—and constant maintenance—of a highway slicing through the heart of a barrier island regularly flooded and buried with sand.

The refuge improvement act makes clear that nonwildlifedependent uses, such as roads, are not compatible with the purpose of a national wildlife refuge. And in fact, when the North Carolina Department of Transportation recently proposed moving the road farther away from the ocean, which would have required a new right-of-way through pristine refuge property, refuge management said no.

It has, however, become necessary to replace the aging Bonner Bridge, which connects to Highway 12 on Pea Island and spans Oregon Inlet to the north of the refuge. The state transportation department wants to replace the bridge with a similar one in the same location. The problem is, taxpayers will be spending nearly \$300 million on a bridge that will require the realignment or elevation of sections of Highway 12 to protect it from the Atlantic.5 Such an expenditure would effectively turn a national wildlife refuge into a perpetual construction zone, with Highway 12 demanding near-constant cleanup from regular flooding and sand overwash. Its proximity to the ocean also results in lengthy closures following storm events and in the inevitable event of



Black skimmer | © Johann Schumacher

a complete washout, residents and visitors to the Outer Banks would literally be trapped.

There is an alternative. The U.S. Fish and Wildlife Service, conservationists and many others support building a bridge through Pamlico Sound, which would completely bypass Pea Island refuge. Although initially more expensive, this approach would eliminate the costly and constant maintenance of Highway 12 (which is estimated by the state's Department of Transportation to cost up to \$912 million by 2060)6, would allow the refuge to restore habitat damaged by the road and would provide a safer and more reliable route for residents and tourists of Hatteras Island. Despite the clear benefit of the longer bridge for people and wildlife, and the refuge improvement act's clear mandate to avoid damage to refuge resources, the state's transportation department is pursuing the short bridge and relocation of Highway 12 through the refuge.