## SHORING UP THE WRACK LINE

written and photographed by Chuck Graham

The wrack line was a scattered flotsam of bleached driftwood and tangled mounds of kelp. With each step in the soft sand, swarms of black kelp flies wafted into the salty air. Gray skies hovered above the deserted beach when a solitary shorebird rose from its sandy depression and scampered along the wrack line. A western snowy plover camouflaged within the flotsam sprang after the flurry of insects seeking refuge in another gnarled ball of kelp.

Treading lightly while pulling my kayak below the wrack line, I soon spotted a handful of plovers. Well concealed in their coastal habitat, several peered from behind mounds of kelp, while others watched me from the security of their gritty depressions. A couple of plovers sounded off with their husky trill and a whistle resulting in "tur-weet". people enjoy its habitat too."

Photograph © Chuck Graham

Because of this degradation, plovers along the Pacific coast have been listed as a threatened species since 1993 under the Endangered Species Act. If you're a beachgoer and you don't see western snowy plovers, you know that beach has been heavily used, and it isn't suitable habitat for plovers to thrive in.

"Once plovers are gone from the beaches, it tells us something about our beaches," explains Dave Lauten, a biologist specializing in the western snowy plover for the Oregon Natural Heritage Information Center, "namely that they are not necessarily in good health."

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OCEAN 8.31

barren Pacific coast beaches stretching from British Columbia to Southern California, the western snowy plover is often the only shorebird species around. When winter migrants fly elsewhere to breed and raise their broods, the snowy plover remains year round. This leaves them more exposed to threats especially while tending to their nests and chicks. For this reason, the snowy plover is a good indicator gaging the overall health of coastal ecosystems.

Snowy plovers are typically gregarious during the winter. Although some territories are defended on beaches by individuals, most roost in loose flocks. When roosting plovers are disturbed, they frequently run a few feet to a new spot where they sometimes displace other individuals. Alternatively, the whole flock may fly to a new location.

Western snowy plovers need barren to sparsely vegetated sandy beaches, dry salt flats in lagoons, and dune habitats to breed and nest successfully.

It's estimated that about 2,000 to 3,000 plovers inhabit approximately 150 current or historical breeding or wintering locations where they try to survive amongst dwindling habitats. Besides the usual threats of raccoons, coyotes, foxes, crows, gulls, owls, falcons, and hawks, plovers reluctantly share nesting areas with beachgoers, dogs, kite flyers, off road vehicles, and bikers. All of these threats force snowy plovers to leave their nests exposed to predation.

"Typically plovers occupy habitat between the wrack line and the upland portion of beaches," says Al Donner, assistant field supervisor for the U.S. Fish and Wildlife Service in Sacramento, California. "Unfortunately,

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Western snowy plovers live dangerously. Because they prefer beaches with little or no vegetation, they breed above the wrack line and their nests are out in the open. Plovers don't make nests. Instead they use natural or scraped depressions in the sand. Many nests are lined with natural resources found on the beach including pebbles, shell fragments, fish bones, mud chips, scraps of vegetation, and invertebrate skeletons.

Eggs are about half the size of the parents. They have a buffed background, lightly covered with small spots and scrawls and a clutch is usually 3 eggs. Chicks are extremely mobile once they've hatched. They're born with feathers and eyes open, with fully grown legs ready to run and forage within hours after their down dries.

Once the chicks are hatched, the females typically desert their mates

and chicks, and promptly initiate a new breeding attempt with a different male. It's not uncommon for females to have 2 and even 3 broods with different mates in a single breeding season. This makes the males the primary caregivers after the chicks hatch. Chicks feed themselves after their fathers show them where to find insects, but they require periodic brooding for many days after hatching.

"This is only true of the west coast population," continues Lauten. "Other populations do not necessarily do this. This is because the chicks are mobile from day one and there are plenty of food resources on the beach."

Snowy plovers use the run-stop-peck technique for feeding. They forage on invertebrates in the wet sand and amongst clumps of kelp in the intertidal zone, in dry, sandy areas, on salt pans, and along the fringe of marshes, lagoons, and salt ponds. They sometimes probe for prey in the sand and pick insects from low growing plants.

Western snowy plovers show tremendous resilience as their habitat slowly vanishes and is overused. They typically won't move from their depressions until they absolutely have to, instead relying on camouflage as a defense.

The dark patches under each breast, the dark gray to black legs and the pale brown upper parts, make them almost impossible to spot in their coastal habitats unless they're forced to flee.

The western snowy plover is distinguished from other plovers due to their small size. Weighing about as much as a 25 cent piece, or 1.2 ounces to 2 ounces, and they're 5.9 to 6.6 inches long. "One thing plovers are, is tolerant. They are very tolerant of quite a bit of human harassment," explains Lauten. That does not mean it is good for them, nor does it mean that they like to deal with it, but they do."

Snowy plover populations have gone up some in the last few years. "I think one thing that argues in its favor is the fact that we west coast folk do love our Pacific beaches," says Donner. "There's a reservoir of good will toward the beach and all the natural things that are a part of it."

As a persistent northwest wind blew sand and brittle fragments of dead seaweed across the beach and over my kayak, a plover rose with its fuzzy chicks, the windblown sand becoming too much to absorb. The chicks quickly scampered after their parent, eventually taking shelter behind a thick piece of driftwood in their rugged habitat.

