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National Wildlife Refuges of

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Puget Sound and Coastal Washington

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Washington Islands: Flattery Rocks NWR, Quillayute Needles NWR and Copalis NWR

Extending for more than 100 miles along Washington's Pacific coast from Cape Flattery to Copalis Beach are the 870 islands, rocks, and reefs of the Washington Islands refuges. These islands are protected from human disturbance and predators, yet are close to abundant ocean food sources. They are a vital sanctuary where 14 species of seabirds nest and raise their young. Nesting in burrows dug into the cliffs are rhinoceros auklets, tufted puffins, Cassin's auklets, Leach's petrels, and fork-tailed petrels. Other seabirds such as common murrelets, gulls, and Brandt's, pelagic, and double-crested cormorants build nests high on open ledges. During migration the total population of seabirds, waterfowl, and shorebirds may exceed a million birds. Sea lions, harbor seals, sea otters, and whales may also be seen around the islands.

San Juan Islands National Wildlife Refuge

Eighty-three reefs, rocks and islands in the San Juan Islands of northern Puget Sound have been set aside as San Juan Islands National Wildlife Refuge. These islands have also been designated by Congress as a wilderness area where seabirds, eagles and marine mammals will have an undisturbed place to live and raise their young. Several islands have high cliffs and grassy slopes where seabirds such as cormorants, pigeon guillemots, and gulls prefer to nest. Bald eagles, a threatened species in Washington state, build their nests high in the large trees of forested islands and catch fish in the surrounding waters. Harbor seals haul out to rest or to have their pups on the smaller rocks and reefs, as well as, on the rocky beaches of the larger islands.



Protection Island National Wildlife Refuge

Nearly 72% of all the seabirds in Puget Sound nest on this important island, which is located at the mouth of Discovery Bay off Washington's Olympic Peninsula. Its high grassy slopes are ideal for burrow nesting birds, including 17,000 pairs of rhinoceros auklets. These birds lay their eggs in the safety of burrows dug deep into the hillsides, and catch small fish called sandlance from surrounding waters to feed their chicks. Pigeon guillemots, pelagic cormorants, tufted puffins, black oystercatchers, and over 4,000 pairs of glaucous-winged gulls also nest on Protection Island. Up to 250 harbor seals may be seen hauled out on the rocky island beaches.



The "Seabird" Refuges

Seabirds nest high on the grass-covered slopes and cliffs of undisturbed islands along Washington's Pacific coast, Strait of Juan de Fuca, and San Juan Islands.

What Are Seabirds?

These are species of birds that are especially adapted to living on or near the ocean. Most live their entire life at sea, coming ashore only to nest on isolated islands and shoreline cliffs. Some adaptations that help them survive in the harsh marine environment are:

Wings — some species have short, stubby wings to help swim under water, while others have long, narrow pointed wings to help them soar on sea breezes.

Legs — placed far back on the body, and webbed feet for more efficient swimming.

Bill — may be hooked or serrated to help catch marine organisms.

Salt Glands — located near the eye to extract excess salt from the blood.

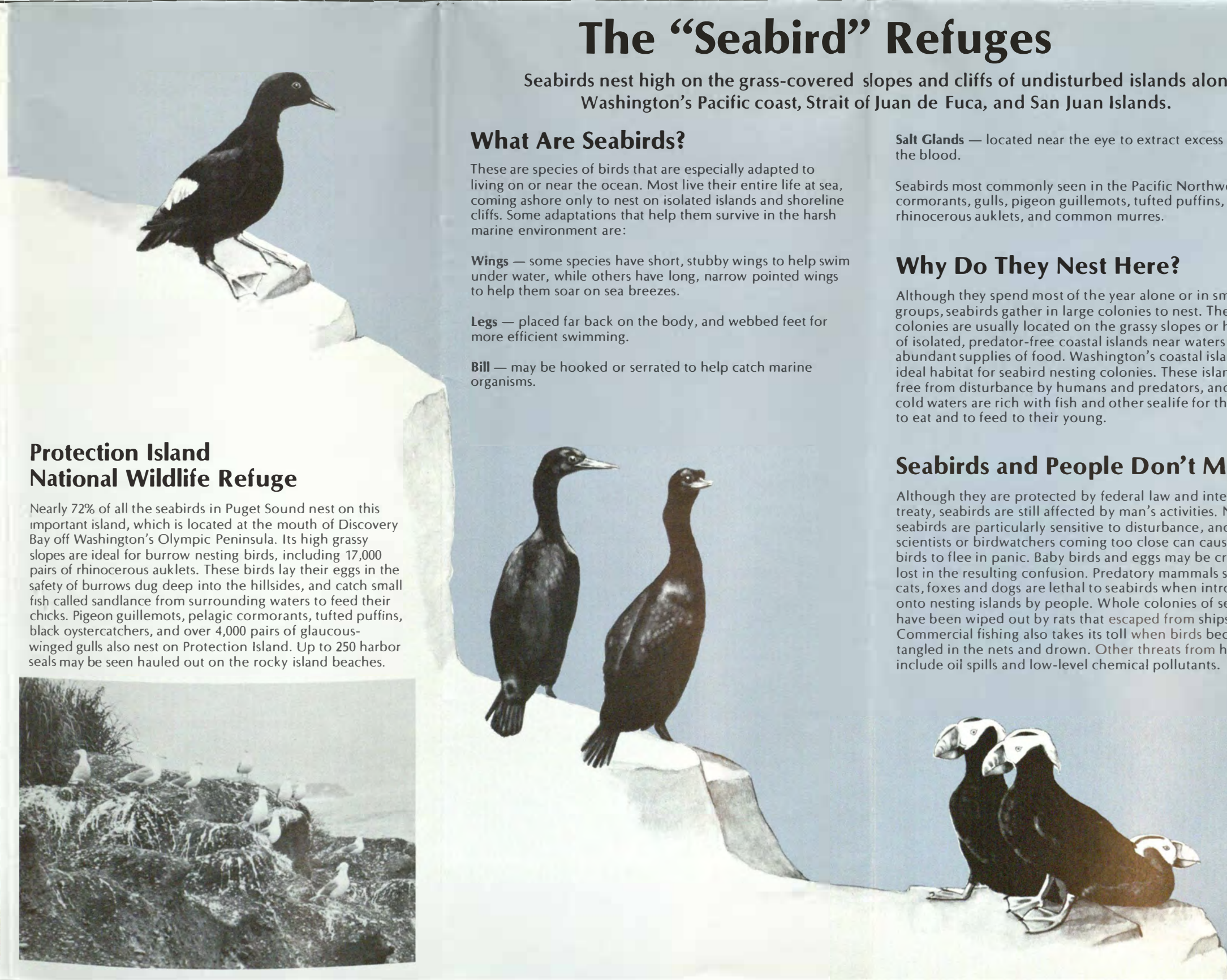
Seabirds most commonly seen in the Pacific Northwest are cormorants, gulls, pigeon guillemots, tufted puffins, rhinoceros auklets, and common murrelets.

Why Do They Nest Here?

Although they spend most of the year alone or in small groups, seabirds gather in large colonies to nest. These colonies are usually located on the grassy slopes or high cliffs of isolated, predator-free coastal islands near waters with abundant supplies of food. Washington's coastal islands offer ideal habitat for seabird nesting colonies. These islands are free from disturbance by humans and predators, and the cold waters are rich with fish and other sealife for the birds to eat and to feed to their young.

Seabirds and People Don't Mix

Although they are protected by federal law and international treaty, seabirds are still affected by man's activities. Nesting seabirds are particularly sensitive to disturbance, and even scientists or birdwatchers coming too close can cause the birds to flee in panic. Baby birds and eggs may be crushed or lost in the resulting confusion. Predatory mammals such as cats, foxes and dogs are lethal to seabirds when introduced onto nesting islands by people. Whole colonies of seabirds have been wiped out by rats that escaped from ships. Commercial fishing also takes its toll when birds become tangled in the nets and drown. Other threats from humans include oil spills and low-level chemical pollutants.



How Do Different Animals Share the Same Island?

Many wildlife species live together on a nesting island, but each builds its nest and uses the island's resources in its own way.

Rhinoceros Auklets — must have open, grassy hillsides to dig their nesting burrows. A single egg is laid in burrows up to eleven feet deep, and is incubated for about six weeks. The parents are usually active only at night.

Tufted Puffins — lay a single egg in an underground burrow dug three to six feet into the steep, grassy hillsides. They incubate the egg for six weeks, and the chick spends another six to eight weeks in the burrow after it has hatched.

Common Murres — do not build nests. They lay a single egg on a bare cliff. The egg tapers into a pear shape so it will spin instead of roll. This pear shape prevents the egg from rolling off the cliff.

Pigeon Guillemots — nest in the rubble of rocks and driftwood along the beaches and lower cliffs. They lay two eggs, which are incubated for about 30 days. Both parents help feed the chicks.

Harbor Seals — haul out to rest on rocky beaches and spits of sand along the islands. They usually have one pup, which is born on land.

Bald Eagles — may roost in large trees or build nests on the forested islands. They catch fish to eat from the surrounding waters.

Gulls — prefer to make nests in the flat, grassy areas at the top of the cliffs. They usually lay three eggs. Gulls may eat the eggs or chicks of other birds when the adults are away from the nest.

Cormorants — make a rough nest of sticks, seaweed, and feathers on cliff ledges. They may lay four or five eggs, and catch fish for the chicks to eat when they have hatched.

Black Oystercatchers — lay two or three eggs in a pebble-lined hollow built among the driftwood and rocks along the beach.

