



The "Migratory Bird" Refuges



What Are Migratory Birds?

While some birds live in one area year-round, "migratory birds" make regular seasonal flights from one area to another. These birds usually fly between wintering areas and summer breeding grounds. Although many species go north and south, others travel between coastal breeding areas and the open sea. Migration allows them to escape the short days and low food supplies of winter, only to return to raise their young when days are longer and food supplies more abundant. "Migratory" birds include many species of waterfowl, shorebirds, seabirds and songbirds.



Why Do They Come Here?

Like people, migratory birds need food, water and shelter. Both Nisqually and Dungeness National Wildlife Refuges have abundant supplies of water and offer a smorgasbord of foods to suit a variety of avian tastes. Shorebirds may feast on mudflat invertebrates while goldfinches prefer the fluffy seeds of thistles and dandelions. These refuges also have protected places where birds can find shelter from high winds and storms, and where they are safe from harassment by people. Migratory birds use Nisqually and Dungeness at different times and in a variety of ways. Some birds come in the fall and stay throughout the winter, while others arrive in the spring to raise their young through the summer months. Other birds stop for only a few days to eat and rest before continuing their fall and spring migrations.

Do Other Animals Live Here Too?

The variety of habitats found at Nisqually and Dungeness National Wildlife Refuges make them the home of a wide variety of wildlife. In addition to migratory birds, many "resident" birds such as the great blue heron live at these refuges throughout the year. Land mammals such as raccoons, weasels, and black-tailed deer also live and raise their young at Nisqually and Dungeness, as do marine mammals such as harbor seals and sea lions. Clams, crabs, sand shrimp and other invertebrates abound in the mudflats and many kinds of fish inhabit the surrounding waters.

Dungeness National Wildlife Refuge

Dungeness Spit is formed by eroding soil, wind, and water currents, and stretches for five and one-half miles along the Strait of Juan de Fuca. It breaks the rough sea waves to form a quiet bay, sand and gravel beaches, and tideflats where wildlife can find food and protection from wind, waves, and pounding surf. The bay and estuary of the Dungeness River produce micro-organisms that form the base of the food web, feeding a variety of wildlife including waterfowl, seabirds, shellfish, anadromous and ocean fish. Shorebirds and waterfowl feed and nest along the beaches, while seals haul out of the water to rest in the sun. The tideflats are the home of crabs, clams, oysters, and other shellfish. Shorebirds such as turnstones, phalaropes, and sandpipers may be seen searching for food along the water's edge.

As many as 30,000 waterfowl stop briefly at Dungeness each fall on their journey south for the winter and north in the spring. Up to 10,000 spend the winter at the refuge. Black brant, a species of goose that depends on eelgrass for its food, is present throughout the winter months and during spring migration.



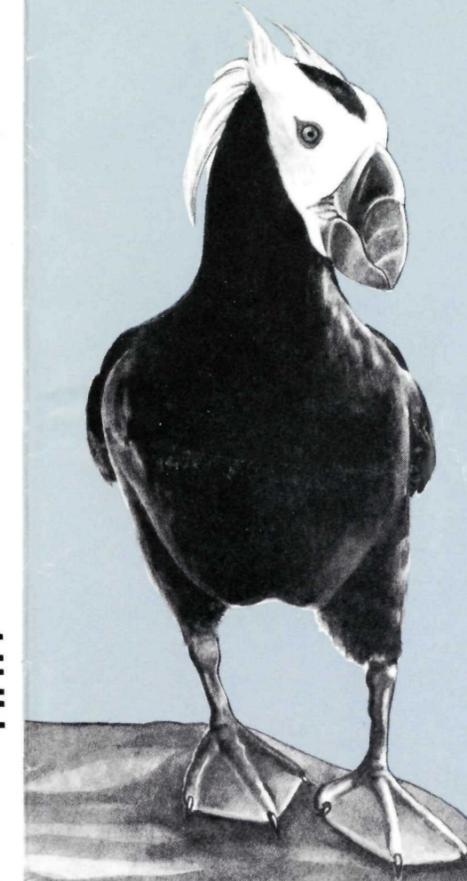
Nisqually National Wildlife Refuge

Ducks, hawks, salmon and sand shrimp live side by side at Nisqually National Wildlife Refuge. Salt marshes lie adjacent to freshwater marshes, and mudflats quickly turn to thick forests. Located on the delta where the Nisqually River flows into Puget Sound, this refuge is managed to protect the diversity of habitats and wildlife species found there. Ten different habitat types, ranging from salt marshes, mudflats, and estuaries to freshwater marshes, grasslands, and forests are the home of 177 species of birds, 27 species of fish, 35 mammals, and 5 reptiles and amphibians.

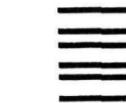
Migratory waterfowl are of special importance at Nisqually. Up to 20,000 ducks and 300 geese find food, water, and shelter here during their spring and fall migrations, and many stay throughout the winter. Other migrants such as goldfinches, warblers, and swallows arrive in the spring and stay at Nisqually throughout the summer to nest and raise their young.

Other "resident" birds may be seen at Nisqually all year long. Great blue herons are a common sight in the marshes and grasslands, while red-tailed hawks soar overhead and nest high in cottonwood trees along the river.

National Wildlife Refuges of Puget Sound and Coastal Washington



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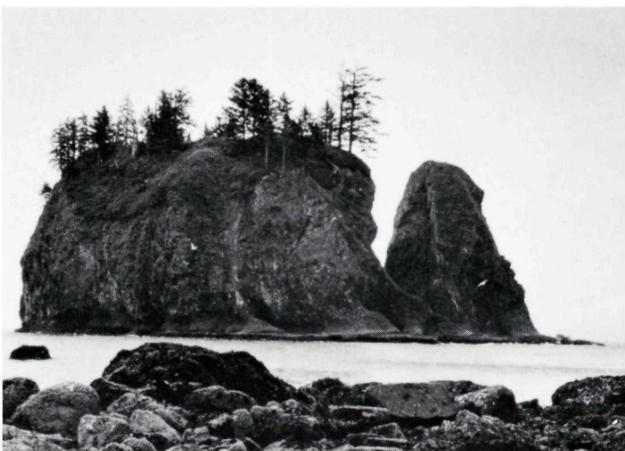
UNITED STATES DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
Nisqually National Wildlife Refuge
100 Brown Farm Road
Olympia, WA 98506

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 murre, 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 murre.

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.

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.

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.

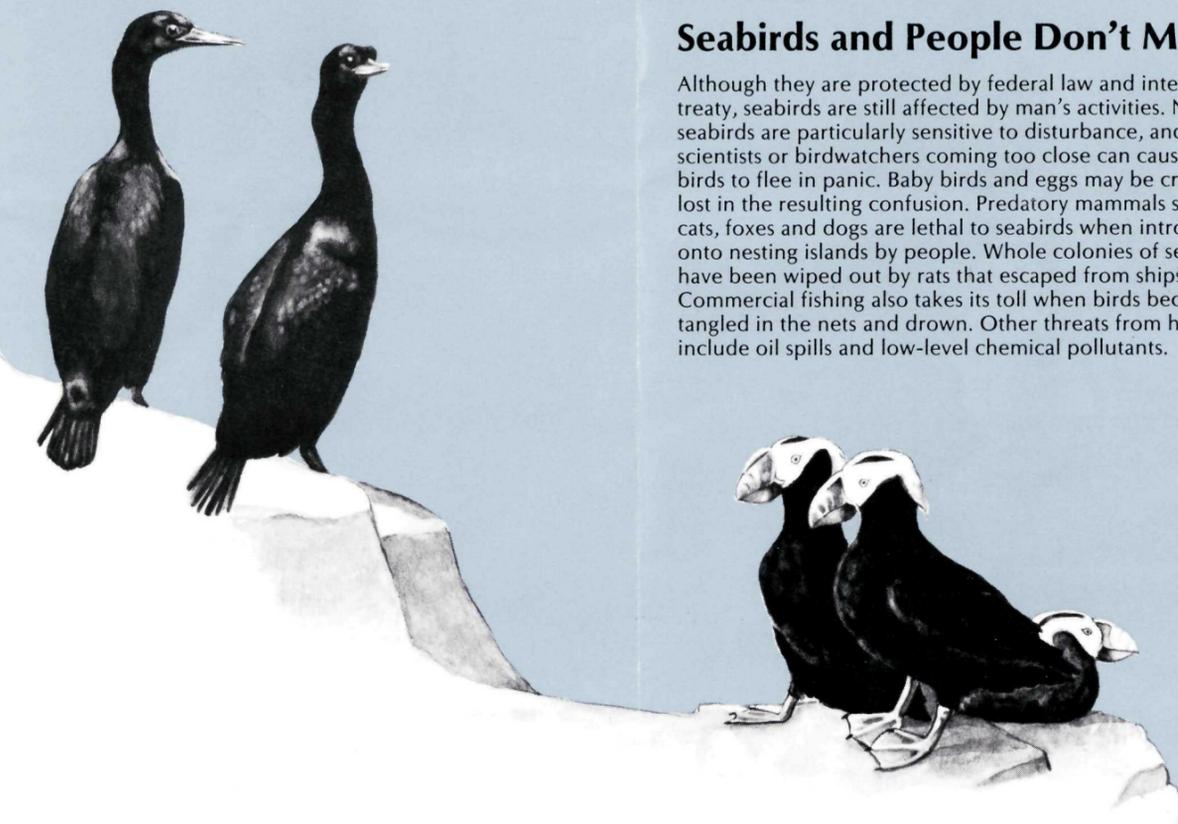
Common Murres — do not build nests. They lay a single egg on a bare cliff. The egg tapers into a pear shape so it will spin instead of roll. This pear shape prevents the egg from rolling off the cliff.

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.

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.



How Do I Visit These Refuges?

The Migratory Bird Refuges — Nisqually and Dungeness

Refuge Hours — These Refuges are open to the public daily from sunrise to sunset. The office at Nisqually is open from 7:30 a.m.-4:00 p.m., Monday through Friday.

Wildlife Observation — Fall migration (Oct.-Nov.) is the best time to see large numbers of birds, and many stay throughout the winter. Nisqually has an observation deck and three photo blinds; Dungeness has an overlook with spotting scope.

Boating — Boaters are welcome at Dungeness and outside the Brown Farm Dike at Nisqually. There are two boat launches near Cline Spit at Dungeness. At Nisqually the closest launch is at Luhr Beach where a hunting or fishing license or a Washington Department of Game Conservation license is required to park.

Fishing — Anglers must comply with Washington State fishing regulations. Visitors may fish by boat or from the shore at Dungeness, and by boat or from two designated bank fishing areas at Nisqually.

Clamming — Visitors may dig for clams at Dungeness but are subject to Washington State shellfish regulations. (Shellfish may be toxic from red tides from May through October. Inquire locally about conditions.) All oysters are privately owned and may not be harvested by the public.

Horseback Riding — Riding is permitted on designated trails at Dungeness daily from October 16 to April 14. From April 15 to October 15 they are open only on weekdays and closed on weekends and holidays. Access trails through Dungeness Recreation Area are closed to horses from October 13 to January 15. Nisqually is not open to horseback riding.

Drinking Water — No drinking water is available at these refuges. Please bring your own.

Litter — Please carry out what you bring in.

Pets, fires, jogging, or camping are not permitted on these refuges. Bicycles and motorbikes are not permitted on refuge trails.

The Seabird Refuges — Washington Islands, San Juan Islands, and Protection Island

Go ashore only at the Marine State Parks on Matia and Turn Islands in the San Juan Islands.

All of Turn Island and five acres on Matia Island are also managed as Marine State Parks. They provide boat mooring areas and facilities for camping and picnicking. Toilets are provided but no water is available on these islands. The rest of Matia Island except the designated Wilderness Trail is closed to the public.

STAY AT LEAST 200 YARDS AWAY FROM ALL OTHER REFUGE ISLANDS — THEY ARE CLOSED TO THE PUBLIC.

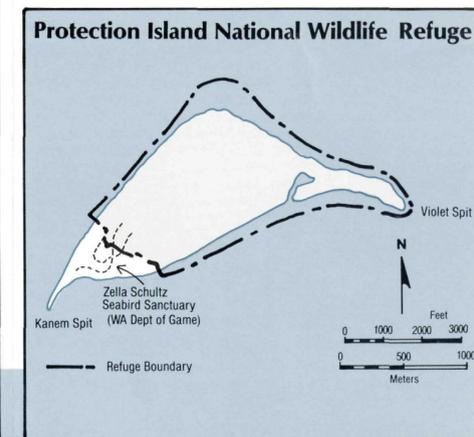
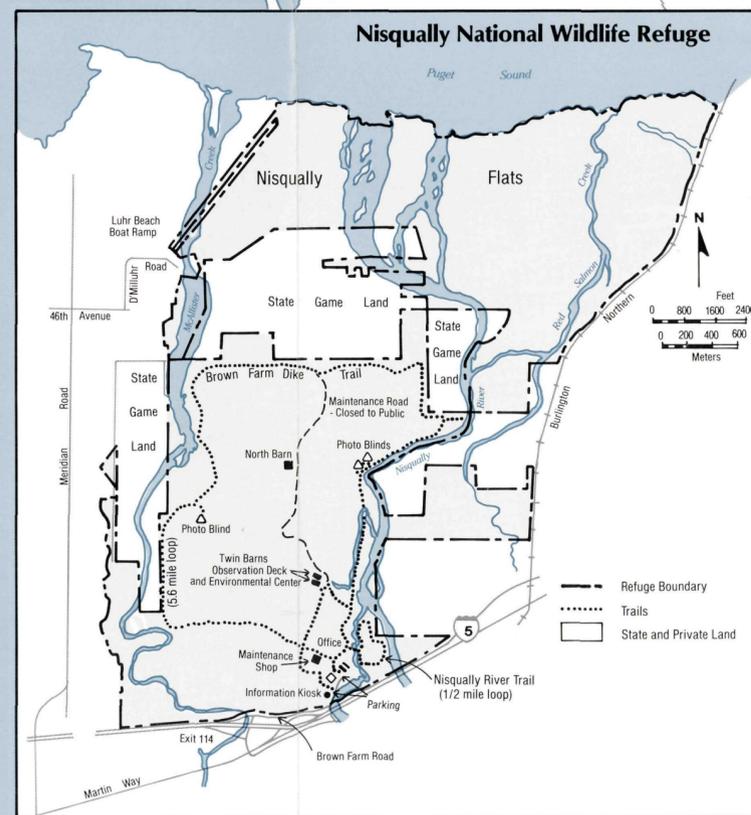
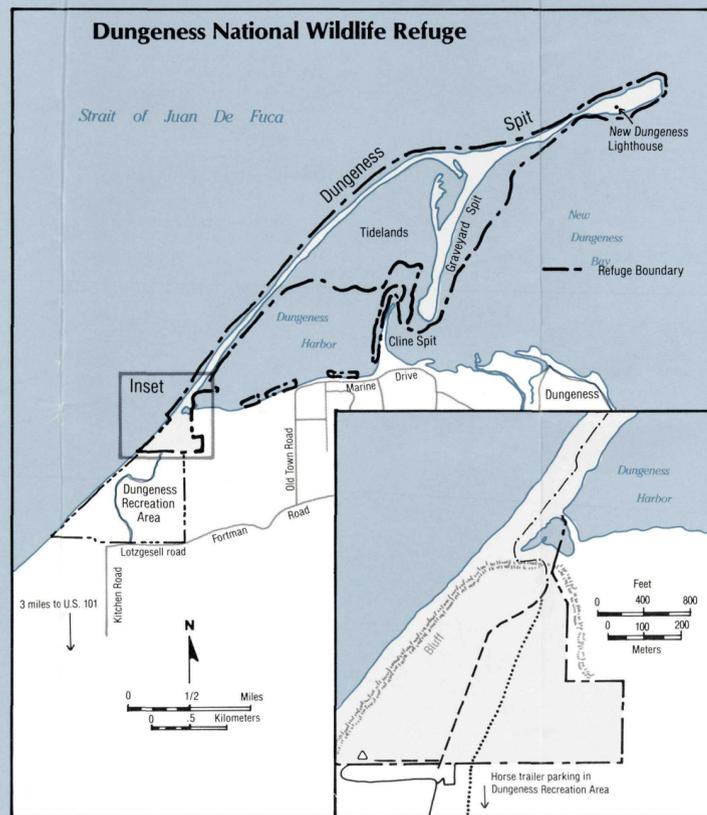
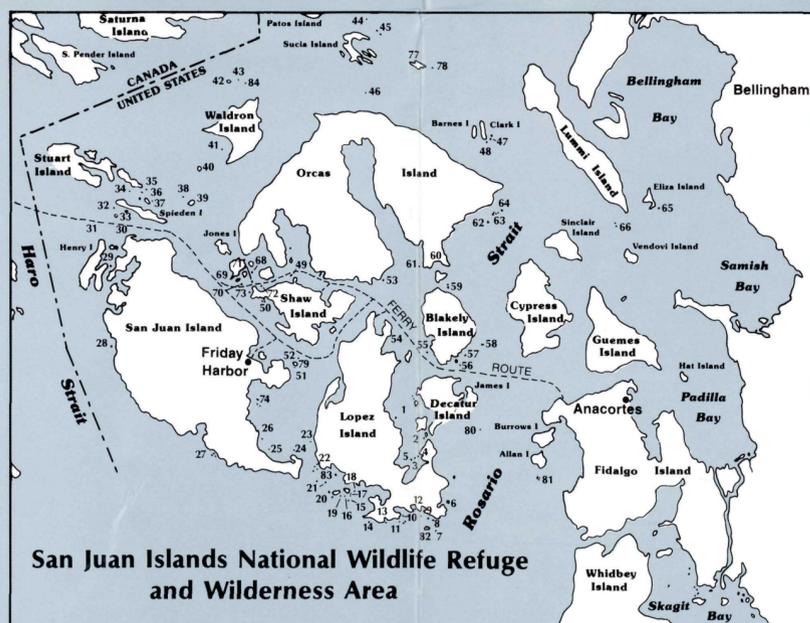
When people come too close:

- baby birds and eggs are crushed and trampled when adult birds leave the nest.
- bald eagles may abandon their nests.
- baby seals may be drowned or crushed when adults stampede.

Call (206) 753-9467 to report trespassers.

Learn about these refuges at mainland interpretive sites.

- Look for panels telling about Protection Island NWR at John Wayne Marina near Sequim.
- Read about the wildlife of Washington Islands at Lake Ozette, Rialto Beach, Second Beach, Ruby Beach, and Kalaloch along the Washington coast.
- Information about San Juan Islands NWR is located at marinas and resorts throughout the San Juan Islands.



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

These refuges consist of over 870 islands, rocks and reefs extending over 100 miles along Washington's Pacific coast. **These islands are CLOSED TO THE PUBLIC — PLEASE STAY AT LEAST 200 YARDS OFF SHORE TO avoid disturbing wildlife.**

San Juan Islands National Wildlife Refuge

The 83 refuge islands are scattered throughout the San Juan archipelago. The best way to see them is by boat. All refuge islands except Turn Island and five acres on Matia Island are **CLOSED TO PUBLIC. PLEASE STAY AT LEAST 200 YARDS OFF SHORE TO avoid disturbing wildlife.**

Dungeness National Wildlife Refuge

From U.S. Hwy 101 west of Sequim go three miles north on Kitchen Road, then go right to Lotzgesell Road. Enter the refuge by driving through Dungeness Recreation Area. The road dead ends at the refuge parking lot.

Protection Island National Wildlife Refuge

Protection Island is located at the mouth of Discovery Bay. The island is **CLOSED TO THE PUBLIC. PLEASE STAY AT LEAST 200 YARDS OFF SHORE TO avoid disturbing wildlife.** A boat launch is located at John Wayne Marina.

Nisqually National Wildlife Refuge

From Interstate 5 east of Olympia take Exit 114 and follow the signs to the refuge.

