

## **Enjoying the Refuge**

Willapa Refuge invites you to explore and enjoy its varied environments and their wildlife inhabitants. Although the refuge is open year-round, the best times to visit to see wildlife are from October through May.

Refuge regulations help protect resources and visitors:



**Wildlife Observation**—See and photograph wildlife in their natural environments.



**Hiking**—Public entry on refuge lands is limited to foot travel ONLY.



**Boating**—You must provide your own boat transportation to Long Island. Tidal flows and fluctuations can make boating difficult and occasionally dangerous, so carry a tide table. Launch facilities are available at the Nahcotta Mooring Basin and on U.S. Highway 101 across from refuge headquarters.



**Environmental Education**—The refuge offers space and guidance to teachers and educational groups to conduct outdoor classroom activities.



Clamming, Crabbing and Sport Fishing—Washington State regulates these activities on Willapa Bay and the ocean beach. Consult the State Shellfish Lab at Nahcotta for maps and regulations. All oysters in Willapa Bay are private property.



**Hunting**—Certain areas of the refuge are open to hunting of waterfowl, upland game birds and big game in accordance with State and Federal regulations.

Consult the Refuge Manager for current regulations.



Camping—Five unimproved campgrounds are located around the perimeter of Long Island. Camping is permitted only in these campgrounds. Fort Canby State Park and numerous private parks offer camping on the Long Beach Peninsula.



**Fire**—Fires are permitted only in the campgrounds on Long Island.



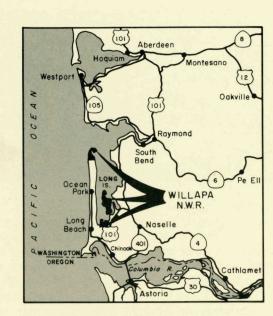
**Water**—Most Long Island streams are dry during the summer months so you should carry your own water. All water on the refuge should be boiled or chemically treated before drinking.



**Dogs**—Dogs and other pets must be kept on leash except during waterfowl hunting. A good retriever will help locate and retrieve downed waterfowl that might otherwise be lost. Their use is encouraged.



**Firearms**—Firearms are prohibited on Long Island at all times, and are permitted on the remainder of the refuge only during the waterfowl hunting season.



For more information contact: Refuge Manager Willapa National Wildlife Refuge Ilwaco, WA 98624 Phone (206) 484-3482.



DEPARTMENT OF THE INTERIOR U.S. FISH AND WILDLIFE SERVICE



## Willapa

NATIONAL WILDLIFE REFUGE Washington

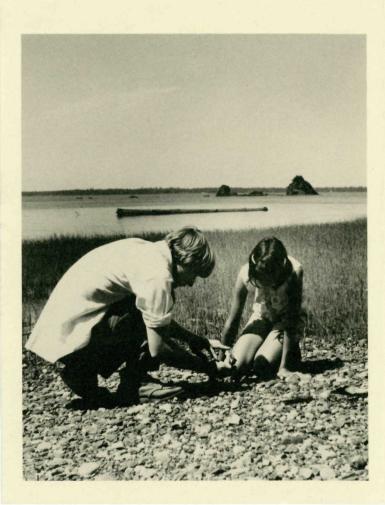


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## Preserving a Rich Natural Heritage

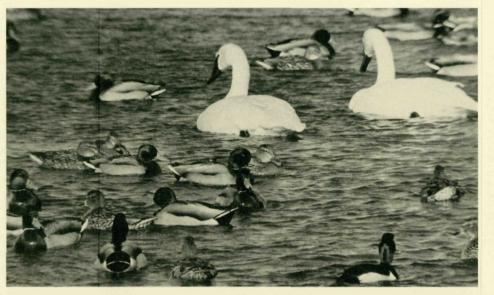
Willapa Bay, a large, relatively pristine estuary located in the southwestern corner of Washington, is a rich natural resource. In the shallow bay, the incoming tide combines the life-giving nourishment of the ocean with the nutrient-laden fresh waters of several small rivers to make one of the most productive environments on earth. Plants and animals from the land, rivers and ocean are all present at Willapa Bay—and all are dependent on the delicate balance of the estuary.

Willapa National Wildlife Refuge was established in 1937 to preserve and manage parts of this natural environment and its plants and wildlife at a time when such areas were rapidly being destroyed by dredging, filling and pollution. Today the refuge still helps maintain the quality of Willapa Bay.



## The Many Environments of Willapa Refuge









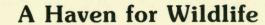


**Long Island**—This dense, rain-drenched coastal forest of Long Island, which is located in the southeast corner of the bay, is home to deer, bear, elk, grouse, beaver and

numerous songbirds and small mammals. A stand of oldgrowth western red cedar is a remnant of the virgin forest that once covered the island.

**Lewis Unit**—Freshwater marshes at the south end of the bay provide waterfowl with both resting and wintering habitat. A small flock of trumpeter swans frequently spends the winter here.

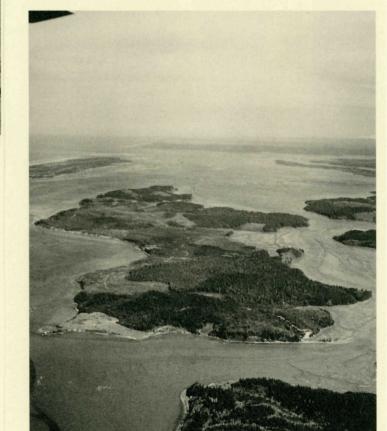
**Riekkola Unit**—Grasslands established on diked tidelands at the south end of the bay provide feeding areas for migrating Canada geese, ducks and shorebirds.

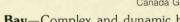


Winter is Willapa's season. The greatest diversity of birds is present then, including large flocks of black brant, Canada geese, American wigeon, canvasbacks, scaup, buffleheads and scoters. Loons, grebes, mergansers and cormorants join them on the bay while dunlin, plovers and sandpipers line the tideflats.

Fall and spring migrations bring large concentrations of waterfowl and shorebirds to the refuge. Shorebirds and seabirds often number in the hundreds of thousands as they stop to feed and rest during their migrations.

In spring and summer, nesting species include grouse, bald eagles, herons, woodpeckers and shorebirds. During the nesting season a portion of Leadbetter Point is closed to public entry to protect the nesting area of the snowy plover, a small shorebird species whose numbers have been reduced because of human disturbance. Deer, bear and elk on Long Island also raise their young during this time.





Willapa Bay—Complex and dynamic biological, chemical and physical processes interact in the bay to produce a rich environment that supports clams, crabs, oysters, fish and other marine organisms. Vast beds of eelgrass at the lower levels of the intertidal zone are a staple food for black brant, a sea goose that migrates along the Pacific Coast between Alaskan nesting grounds and Mexican wintering grounds. Thousands of bay and sea ducks, loons, grebes, and cormorants find food and protection from wind and waves on Willapa Bay.

**Leadbetter Point**—Located at the northern tip of the Long Beach Peninsula which separates Willapa Bay from the ocean, this is a world of sand dunes, grasses and small shrubs. The appearance of Leadbetter Point constantly changes as dunes shift, become stabilized or erode away. Tens of thousands of shorebirds feed and rest on Leadbetter Point's ocean beaches, bay tidal flats, and salt marshes during spring and fall migration peaks.