## 1997 Shorebird Viewing \_\_\_\_\_

BEST VIEWING TIMES — Although present during the fall and winter, peak shorebird numbers occur during spring migration from mid-April through early May. Generally, the best viewing times are two hours before until two hours after high tide. Shorebird viewing dates and times are predicted by us with information from past migrations and maybe subject to change without notice by the shorebirds!

1997	Best Viewing	High Tide
April 24	1:40 p.m5:40 p.m.	3:40 p.m.
April 25	2:30 p.m6:20 p.m.	4:23 p.m.
April 26	3:00 p.m7:00 p.m.	5:09 p.m.
April 27	4:00 p.m8:00 p.m.	6:00 p.m.
April 28	4:00 a.m7:00 a.m.	5:00 a.m.
April 29	4:00 a.m8:00 a.m.	6:05 a.m.
April 30	5:20 a.m9:20 a.m.	7:20 a.m.
May 1	6:40 a.m10:40 a.m.	8:43 a.m.
May 2	8:00 a.m12 noon	10:00 a.m.
May 3	9:00 a.m1:00 p.m.	11:11 a.m.
May 4	10:00 a.m2:00 p.m.	12:13 p.m.

PARKING — On weekdays park in designated areas at the airport. Please do not park at Lana's Hanger Cafe. On weekends (April 26, 27, May 3, 4) park at Hoquiam High School and ride the shuttle bus to the Refuge.

SHUTTLE BUS — A shuttle bus will run continuously between Hoquiam High School and the trailhead to the shorebird viewing area. The round trip fare is 50 cents. Shuttle bus hours for 1997:

April 26 and 2711 a.m. to 7 p.m.May 3 and 49 a.m. to 3 p.m.

BARRIER FREE ACCESS — Parking spaces are designated near the airport and chemical toilets are provided. Shorebirds are generally visible during the highest tides from these parking spaces and from the hard surfaced airport road.

**COOPERATORS** — The Port of Grays Harbor makes shorebird viewing possible by providing access for the shuttle bus and trail. Refuge volunteers and Grays Harbor Audubon Society assist with a variety of shorebird viewing activities.

### GENERAL INFORMATION \_\_\_\_

LOCATION — From Hoquiam, head west on Hwy 109. Turn left on Paulson Rd. and right on Airport Rd.

HOURS — The Refuge is open daily, daylight hours.

PARKING — Limited parking is available across from Lana's Hanger Cafe on Airport Road.

TRAIL — A 1/3 mile boardwalk trail is located at the tip of Bowerman Peninsula. To access this trail, walk west of Lana's Cafe through a gate, continue along the black top road and through the grassy field to the trail head. The grassy field can be muddy; rubber knee boots are recommended. Visitors must stay on marked trails and boardwalk. Do not wander onto the airport runway or hanger area. This is Port of Grays Harbor property. To protect habitat, do not walk in the marsh or tideflats.

WILDLIFE VIEWING AREAS — Wildlife may be seen from parking areas near the airport, from openings along the black top road and grassy field, and at the tip of the peninsula.

**PROHIBITED** — Pets, hunting, and boating (including kayaking) are not allowed on the refuge.

### FOR MORE INFORMATION

Write or call:

Grays Harbor National Wildlife Refuge c/o Nisqually National Wildlife Refuge 100 Brown Farm Road Olympia, WA 98516 Phone: (360) 532-6237 or (360) 753-9467

For services in the Hoquiam area write or call: Grays Harbor Chamber of Commerce 506 Duffy Street Aberdeen, WA 98520 (360) 532-1924

The U.S. Fish and Wildlife Service manages national wildlife refuges and national fish hatcheries throughout the country for the continued conservation, protection, and enhancement of our fish and wildlife resources and their habitats.



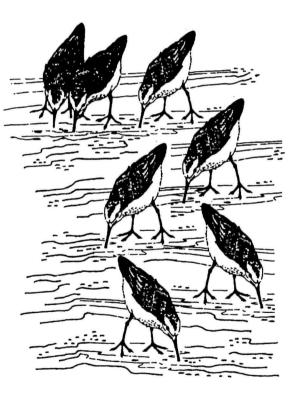
U.S. Department of the Interior Fish and Wildlife Service

April, 1997

# GRAYS HARBOR

NATIONAL WILDLIFE REFUGE

# HOQUIAM, WASHINGTON



## MIGRATION CREATES SHOREBIRD SPECTACLE

Grays Harbor estuary along the coast of Washington is one of four major staging areas for shorebirds in North America. Up to one million shorebirds gather, or stage, here in the spring to feed, store up fat reserves, and rest for the non-stop flight to their northern breeding grounds. This is one of the largest concentrations of shorebirds on the west coast, south of Alaska.

Each spring, shorebirds coming from as far south as Argentina concentrate at the muddy tideflats of Grays Harbor estuary. These Arctic-bound shorebirds are among the world's greatest migrants; many travel over 15,000 miles round trip! In recognition of the importance of this critical shorebird habitat, Grays Harbor Estuary has been named a Western Hemisphere Shorebird Reserve Network site of hemispheric significance. About two dozen species of shorebirds use the Grays Harbor estuary. The five most abundant species are the western sandpiper, dunlin, shortbilled and long-billed dowitchers, and semipalmated plover. Western sandpipers compose 85 percent of the shorebirds present in the spring. From June through October the shorebirds return to the estuary on their way south but in lesser concentrations. Thousands of birds, primarily dunlin, stay for the winter.

## **REFUGE PROTECTS CRITICAL HABITAT**

In order to protect this important shorebird habitat, Congress authorized the establishment of Grays Harbor National Wildlife Refuge in 1988. The Refuge is located in the northeast corner of the Grays Harbor estuary and is managed by the U.S. Fish and Wildlife Service. It encompasses about 1500 acres of intertidal mudflats, saltmarsh, and uplands.

## MANY SPECIES DEPEND ON REFUGE HABITAT

Although Grays Harbor Refuge occupies only 2 percent of the intertidal habitat of the estuary, it hosts up to 50 percent of the shorebirds. The Refuge mudflats are the last areas in Grays Harbor to be flooded at high tide and the first areas to be exposed as the tide recedes. This gives shorebirds extra time to feed.

Shorebirds must peck or probe almost continuously to obtain a constant supply of food. The mudflats provide an abundance of invertebrates for food.

Other birds including peregrine falcons, northern harriers, red-tailed hawks, and a variety of waterfowl, wading birds, gulls, and terns are also present. The Refuge is also home to salmon, steelhead, crabs, clams, shrimp, and oysters. The uplands are used by black-tailed deer, coyotes, voles, and songbirds.

