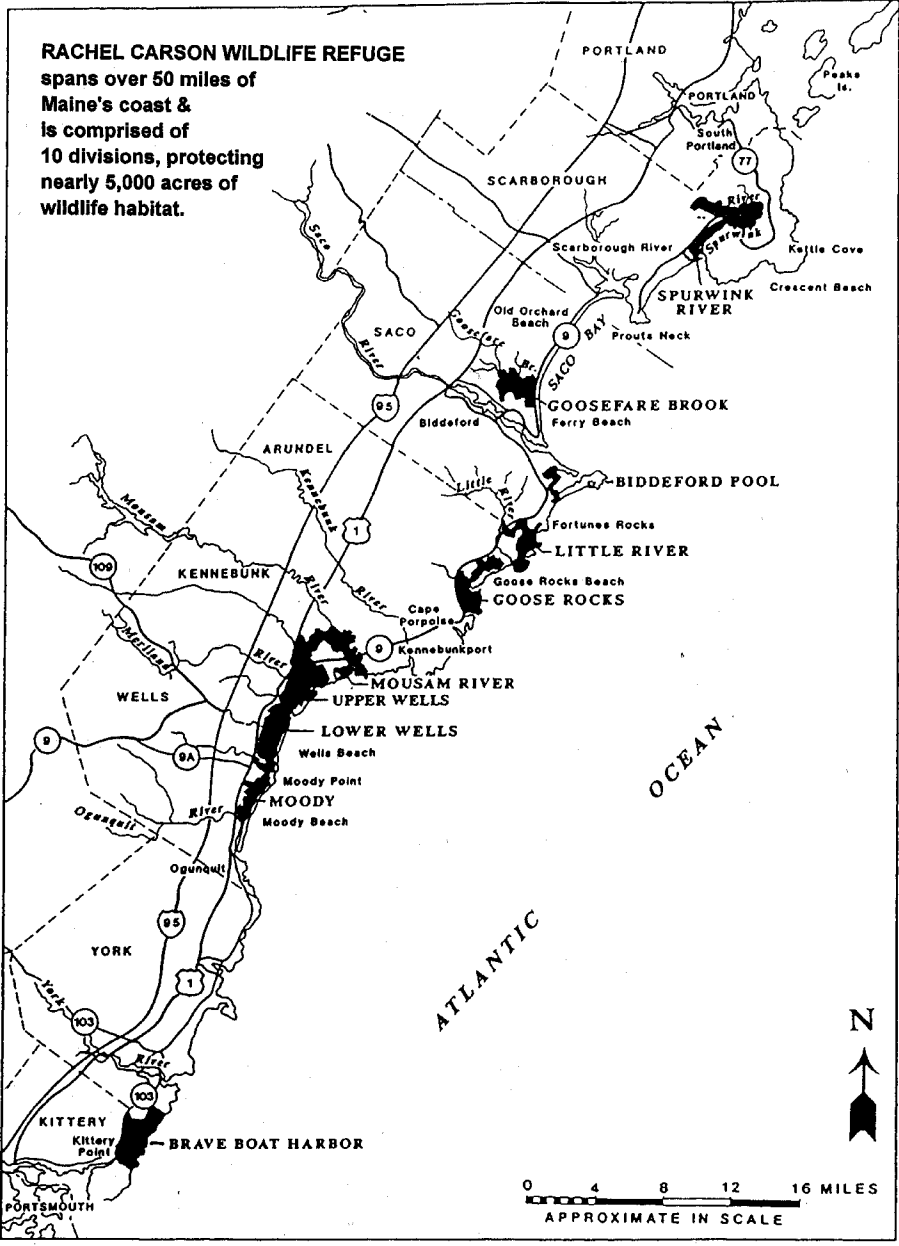


RACHEL CARSON WILDLIFE REFUGE
 spans over 50 miles of
 Maine's coast &
 is comprised of
 10 divisions, protecting
 nearly 5,000 acres of
 wildlife habitat.



Springtime Birding at the Rachel Carson National Wildlife Refuge

Susan A. Bloomfield

It's difficult to determine exactly when spring begins in southern Maine. It's a short season to be sure, heralded by as many cues as there are naturalists to notice. For some, it's the first hint of crimson on the tops of red maples, the sight of an actual flying insect, or the thought that ice-skating on a pond may not be such a good idea anymore. Here, at the Rachel Carson National Wildlife Refuge, it may be determined by the first Pine Warbler singing above the headquarters building in Wells, the faint blush of a trailing arbutus flower, or the first Piping Plover spotted on a frigid, windswept beach.

All are surprises. "What's *that?*" is my usual response to the insect-like trill of a Pine Warbler after the still of the winter. It seems incredible that there would be any insects around to sustain it. These trail-blazing birds have been snowed on more than enough times after their arrival here. Certainly, they must find enough white pine seeds to tide them over until life warms up a bit. Some years, expected blooming dates of early wildflowers are hampered by impressive inches of ice. But they manage, as ice yields to warmed leaves and eventual flowers. There is a refuge staff joke about Piping Plovers *always* showing up on March 21. Actually, they often have; pioneers must brave the brutal, early-spring storms that will redesign the beaches once more.

Southern Maine's Rachel Carson National Wildlife Refuge was established in 1966 for the express purpose of protecting wildlife habitat and critical waterfowl migration routes associated with southern Maine's coastal estuaries. It is one of almost 540 National Wildlife Refuges in the country managed by the U.S. Fish & Wildlife Service. The refuge currently consists of ten separate divisions that center on tidal rivers and their associated estuaries, stretching approximately 50 miles between Kittery and Cape Elizabeth. The refuge headquarters, centrally located in Wells, is a one-and-a-half-hour drive from Boston.

The namesake of the refuge was, of course, the world-renowned marine biologist, author, and environmentalist. Through investigation for her greatest work, *Silent Spring* (1962), Rachel Carson eloquently linked unrestrained use of chemical pesticides with fearsome biological consequences. As fitting recognition of her scientific and literary contributions as well as her love of the Maine seashore, this refuge, first known as the Coastal Maine National Wildlife Refuge, was renamed in her honor in 1970.

The refuge's habitat is varied and unique because it lies within the transition zone of the northern boreal forest and eastern deciduous forest. Therefore, some species of plants and wildlife are at the limits of their ranges. This is also the only region in Maine to feature a mix of barrier beaches, rocky shores, and pine barrens. The miles

of sandy beaches are home to Maine's largest concentrations of state and/or federally listed Piping Plovers and Least Terns.

Each of the refuge's ten divisions includes a tidal river, the surrounding coastal wetland complex, and varying amounts of critical edge. Most refuge estuaries contain salt pans. These are natural, shallow depressions that serve as tidal and rainwater-holding basins. They attract waders and shorebirds seeking small fish and invertebrates and are surrounded by highly salt-tolerant plants.

Refuge marshes, fields, and forests are home or resting place to more than 250 species of birds, notably waterfowl, shorebirds, and songbirds. Twenty-six species of waterfowl have been recorded. American Black Ducks are regular nesters on tidal marshes throughout the refuge. During spring migration, eleven species of bitterns, herons, and ibis have used the refuge's estuaries. Southern coastal Maine is also an important staging area for shorebirds; thirty-six species have been seen on or from the refuge, primarily on tidal mudflats and at salt pans. The refuge's diverse habitat sustains numerous passerines: year-round residents, short-distance migrants, and neotropical migrants alike find nesting, feeding, and roosting habitat in the swamps, woodlands, and forests adjacent to refuge estuaries. A dozen species of migrating raptors use the marshes and forests for hunting, and a few stay to nest.

Other wildlife species found on or from the refuge include white-tailed deer, river otter, beaver, red fox, coyote, moose, opossum, northern flying squirrel, snowshoe hare, porcupine, black bear, long-tailed weasel, fisher, and harbor seal. The refuge also supports northern leopard frog, green frog, pickerel frog, Fowler's toad, blue-spotted salamander, dusky salamander, four-toed salamander, Blanding's turtle, wood turtle, eastern box turtle, eastern ribbon snake, northern black racer, northern brown snake, and redbelly snake. Bird checklists and mammal and reptile/amphibian brochures are available at the refuge headquarters.

The south coastal region holds considerable historical interest as well. Sokaki and Saco Indians had established thriving cultures in the area when Samuel de Champlain arrived in 1600. Periods of lumbering, clipper ships, and salt-marsh-hay harvesting have come and gone, each leaving artifacts and memories. Seacoast towns have active historical societies and occasionally hold historic home tours.

Visitor Guidelines

To protect wildlife and the habitat on which it depends, all refuge lands are closed to the public unless otherwise designated, such as the specific trails mentioned below. "Blue Goose" boundary signs clearly indicate refuge properties and must be respected. Observe Piping Plovers and Least Terns from a distance; they are the subject of on-going federal and state monitoring studies and management. Their nesting areas are clearly marked with stakes and twine. As always, respect private property rights of refuge neighbors. Many of the viewing areas identified below are from vantage points along shoulders of public roads. Be careful to consider the seasonally heavy traffic. As always, check for ticks when walking in tall grass: Lyme disease is prevalent in the area. Keep your distance from wildlife.

Birding Opportunities

Working from south (Ogunquit) to north (Cape Elizabeth) along the coast, the following are recommended refuge sites for birding:

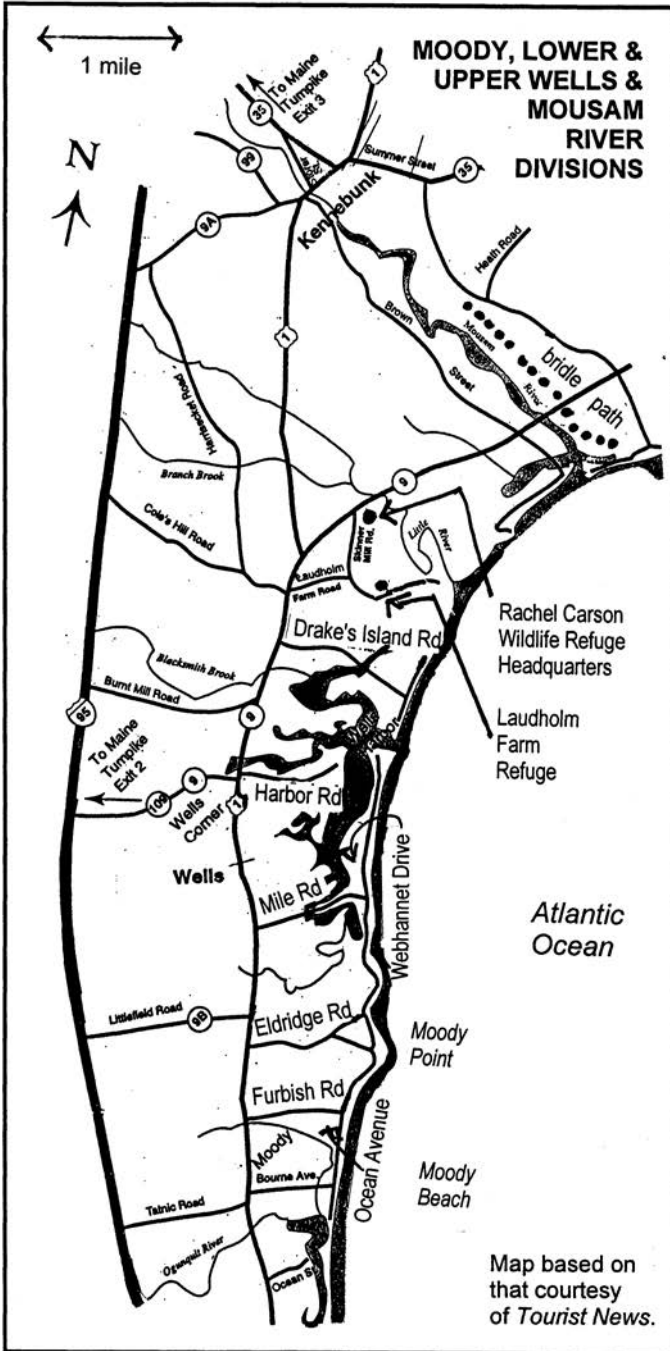
Moody Division: Refuge marshes may be best viewed from parking lots at the east end of Ocean Street in Ogunquit and the south end of Ocean Avenue in Wells, and along the roadside of Bourne and Furbish Roads. Ocean Avenue and Webhannet Drive, which run parallel to the sea, have viewing areas facing the marsh and ocean. Look for Green-winged Teal, American Wigeons, Northern Pintails, Common Mergansers, and American Black Ducks in the river; in flight years, look for lingering Common Redpolls and White-winged Crossbills in the upland pines.

Lower Wells Division: In Wells there are three roads leading east across refuge salt marshes from Route 1. They are Mile Road, approximately 1.25 miles south of Route 109; Harbor Road (aka Lower Landing Road), just north of Route 109 and the Wells Fire Station; and Drakes Island Road, approximately 1 mile north of the Wells Fire Station. Pull safely off these roads to scan the refuge and Webhannet River tributaries for migrating shorebirds, herons, and waterfowl. Check a local tide table: the best times to visit are two hours before and after a high tide. Glossy Ibises often arrive in late March and feed on invertebrates in the *Spartina* and salt pans. Other species of note are Semipalmated and Black-bellied plovers; Semipalmated, Spotted, Least, Pectoral, and Solitary sandpipers; Greater and Lesser yellowlegs; Willets; Short-billed Dowitchers; Little Blue and Tricolored herons; Black-crowned Night-Herons; and Snowy and Great egrets.

Waterfowl frequenting the river and tidal streams include Snow Geese, American Black Ducks, Northern Pintails, American Wigeons, Ring-necked Ducks, Green- and Blue-winged teal, and Hooded Mergansers.



NORTHERN PINTAILS, USFWS PHOTO



Early Piping Plovers may be found at Wells Beach, though they often move farther north. The northern end of Drakes Island, accessible by walking on the beach from a small parking lot at the end of Drakes Island Road, is another spot favored by Piping Plovers. Find Dunlins and Sanderlings on the beaches by mid-March.

In both spring and early summer, listen carefully for Nelson's and Saltmarsh sharp-tailed sparrows. They both may be found in the marshes alongside Bourne Avenue, Eldridge Road, and Drakes Island Road. There is less traffic noise early in the morning.

Upper Wells Division (Headquarters): The Rachel Carson National Wildlife Refuge headquarters and the adjacent Carson Trail are located off Route 9, heading toward Kennebunkport, 0.7 mile east of Route 1. The trail, a one-mile, wheelchair-accessible, self-guided, interpretive path, follows the edge between a mature upland woodland and a tidal marsh. The Merrilland River attracts Belted Kingfishers, Double-crested Cormorants, and Red-winged Blackbirds. Look for Pine Warblers by the third week of March: they'll eventually nest there. Early April brings Tree Swallows, attracted by salt-marsh mosquitoes; they eventually nest in the boxes visible in the marsh. Cooper's Hawks hunt in the trailhead woods, and Great Horned Owls have bred and fledged young along the Branch Brook. In the salt marsh and rivers, American Black Ducks, Common Goldeneyes, and Common and Hooded mergansers are reliable.

Warblers and vireos do not appear in great variety until mid-May. Along the Carson Trail, Chestnut-sided, Pine, Northern Parula, Black-throated Green, Black-throated Blue, Yellow, Yellow-rumped, Palm, Blackpoll, and Black-and-white warblers, American Redstart, Ovenbird, Common Yellowthroat, and Blue-headed and Red-eyed vireos are fairly easily found along with Scarlet Tanagers, Veeries, and Hermit Thrushes.

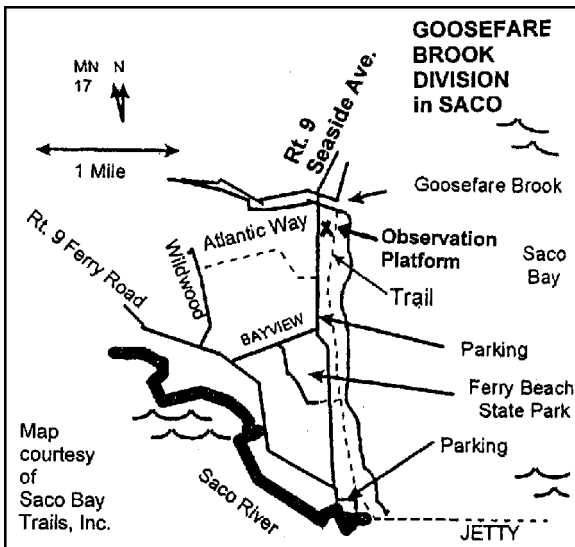
Mousam River Division: The salt marshes of this division can best be viewed from Route 9 in the town of Kennebunk. Hike the bridle path, an abandoned railroad bed that parallels the river both north and south of Route 9. Park along Route 9, just east of the Mousam, near a small blue water-pumping station. In the marsh along the river, look for Common Goldeneyes, Common Mergansers, American Black Ducks, and Snow Geese. The woods on the northern end of the trail are fairly rewarding for early-morning warblers.

Little River Division: Granite Point Road, off Route 9 slightly east of the Biddeford line, affords good views of more salt-marsh habitat. The rocky coves located along the ocean east of the Little River provide good habitat for Common Eiders and other surf-loving birds.

Biddeford Pool Division: This area affords some of the best bird habitat protected by the refuge and is renowned for its concentrations of shorebirds in spring and fall. The tidal "Pool" is a mile wide, nearly surrounded by a sand spit and a peninsula. Though surrounded mostly by private land, it can be viewed from Route 208, east of Route 9, and from Mile Stretch Road. By late March, Eastern

Meadowlarks, Northern Flickers, and Killdeer arrive. While in the area, walk Maine Audubon's East Point Sanctuary trail off Ocean Avenue. You never know what you'll find there. Look for lingering, state-endangered Harlequin Ducks feeding on the rocky shoreline, and scan the ocean for alcids, Northern Gannets, all scoters, Common Eiders, and Common and Red-throated loons. *Always* look for the rare King Eider and the occasional American Oystercatcher. Shorebird migration does not begin in earnest until mid-May, when at the Pool, Spotted, Least, and Semipalmated sandpipers arrive with Ruddy Turnstones, Dunlins, Black-bellied Plovers, Short-billed Dowitchers, Willets, and Greater and Lesser yellowlegs.

Goosefare Brook Division: The Atlantic Way trail off Route 9 (Seaside Avenue) in Saco is a former logging road. The trail, maintained by Saco Bay Trails, Inc., winds



through refuge salt marsh, alder thickets, wet and dry woods, and across streams. Look for American Black Ducks, Common Mergansers, Green Herons, Glossy Ibises, and Snowy Egrets. As the trail meanders into the woods, there is excellent habitat for a variety of neotropical migrants. The trail is located just north of Bayview Road, south of where Route 9 crosses Goosefare Brook. There is room for one or two cars to park along the east side of Seaside Avenue.

A new refuge wildlife observation platform is approximately half a mile north on Route 9 from the Atlantic Way trailhead, just past Shore Avenue. There is limited, 20-minute parking. With a spotting scope, scan the Goosefare Brook estuary for waterfowl, herons, Piping Plovers, and, from May on, Common Terns.

Spurwink River Division: The northernmost division of the refuge is located in the towns of Scarborough and Cape Elizabeth. The refuge can best be observed from Route 77 (Spurwink Road), Spurwink Avenue, and Wells Road. Waterfowl include Snow Geese, Northern Pintails, Blue- and Green-winged teal, and American Black Ducks. Shorebirds and herons likely to be seen are Pectoral and Solitary Sandpipers, Willets, Greater and Lesser yellowlegs, Glossy Ibises, Little Blue Herons, and Snowy and Great egrets.

Nearby Natural Areas

While you are visiting the refuge, these local birding sites are well worth a few hours each:

Scarborough Marsh, off Route 9/Pine Point Road between Scarborough and Old Orchard Beach, is the largest salt marsh in the state. It comprises more than 3100 acres of mudflats, brackish marsh, and salt meadow. From Route 1 in Scarborough, turn east onto Route 9 West/Pine Point Road. (Don't worry about the posted direction of Route 9: it is often at odds with the actual direction.) A parking area at the nature center is located at 0.8 mile on the left. Over 200 species of birds have been recorded at the marsh, which is managed primarily for waterfowl. Contact the Maine Audubon Society: 207-883-5100; <<http://www.maineaudubon.org>>.



CARSON TRAIL, USFWS PHOTO

Kennebunk Plains, located off Route 99, supports habitat and birds found nowhere else in the state. From Route 1 in Kennebunk, travel west on Route 9A (High Street) for approximately 0.3 mile. Turn right on Route 99. The plains are visible from the road in about 4 miles. There is a small parking area on the right. To visit the southern part of the plains, continue westbound on Route 99 to a sharp left, McGuire Road. There is a small parking lot on the right side of the road about half a mile from that intersection. Unique for its size in southern Maine, the plains are a 1600-acre barrens and woodland formed from a glacial marine delta. More than 87 nesting species have been recorded at the barrens; fifty additional species are listed as migrants. Look there for state-endangered Grasshopper Sparrows and Upland Sandpipers, as well as Vesper Sparrows and Eastern Meadowlarks. There are no facilities. Contact the Maine Department of Inland Fisheries & Wildlife: 207-287-8000, or the Maine chapter of The Nature Conservancy: 207-729-5181.

Wells National Estuarine Research Reserve, between the Lower and Upper Wells Divisions of the refuge, is accessible from Route 1. Take Laudholm Farm Road at a flashing yellow traffic light (between the Lighthouse Depot and the Maine Diner).

Follow signs to the Reserve. Seven miles of trails meander through 1600 acres of upland fields, woods, salt marsh, dunes, and beaches on the former Laudholm Farm. The varied habitat provides for over 200 species of birds; there are also historic buildings, the Coastal Ecology Center, and a visitor center with special lectures and programs. 207-646-1555; <<http://www.wellsreserve.org>>.

Mount Agamenticus woodlands provide habitat for nearly 40 species of breeding birds. It is Maine's southernmost breeding area for Dark-eyed Junco and Common Raven. "Mount A" is the site of the best hawk-watching opportunities in southern Maine, with an average of almost 4000 hawks recorded each fall. From the York Chamber of Commerce on Route 1, travel north approximately 3.9 miles, and take a left on Mountain Road (Flo's Hot Dogs will be on your right). Travel 1.5 miles to a stop sign. Turn right and travel 2.7 miles to Summit Road on your right. The road will take you to the top, but needless to say, walking the trails is most rewarding. Contact York Parks and Recreation: 207-351-1204, or the Maine chapter of The Nature Conservancy: 207-729-5181.

Accommodations

The beautiful southern coast of Maine offers countless lodging opportunities. Advanced reservations are recommended for summer weekends, especially between Independence Day and Labor Day. Contact the following Chambers of Commerce: Kittery/The Yorks: 207-363-4422; Ogunquit: 207-646-2939; Wells: 207-646-2451; Kennebunk/Kennebunkport: 207-967-0857; Biddeford/Saco: 207-282-1567; Old Orchard Beach: 207-934-2500; Portland: 207-772-2811.


Refuge Visitor Information

The headquarters office/visitor information center is open from 8:00 a.m. to 4:30 p.m., Monday through Friday. During summer weekends and holidays, the office is also open 10:00 a.m. to 2:00 p.m. Summer weekend interpretive programs are normally offered; please call for more information. Portable toilets are provided near the picnic area at the headquarters. There is no refuge admission fee, but donations are accepted. Trails are open year-round from sunrise to sunset. Pets are permitted on the Carson Trail and must be leashed.

Throughout the year, refuge staff conduct a variety of wildlife and habitat studies, including Piping Plover and Least Tern monitoring, biological control of purple loosestrife, salt-marsh restoration, rare-plant monitoring, shorebird and waterfowl surveys, deer-browse impact studies, invasive-plant monitoring, and bluebird nest-box surveys. Volunteers, particularly those with excellent birding skills, are welcomed.

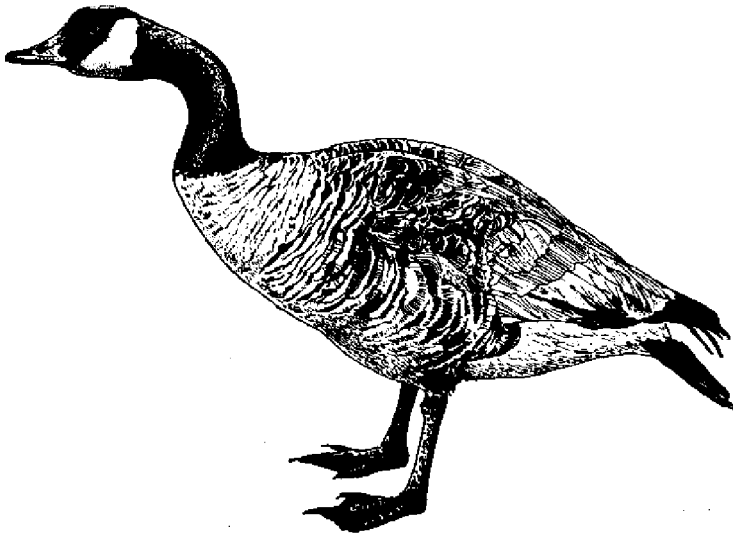
Directions to the Rachel Carson National Wildlife Refuge headquarters in Wells, Maine: From Maine Turnpike Exit 2 (Wells exit), travel east on Route 109/9 to Wells. Turn left (north) onto Route 1. Proceed approximately 1.5 miles and turn right (east) onto Route 9. Travel 0.7 mile; the Refuge will be on your right. Look for the large wooden sign at our entrance.

The National Wildlife Refuge System is celebrating its centennial this year. It is the only system of federal lands dedicated primarily to wildlife. Today, the U.S. Fish and Wildlife Service's refuge system has almost 540 units and encompasses more than 93 million acres, an area the size of Montana. At least one national wildlife refuge can be found in every state and U.S. territory. Rachel Carson National Wildlife Refuge will join with refuges throughout the country in marking this anniversary. It's a great year for a visit.

For further information, contact: Refuge Manager, Rachel Carson National Wildlife Refuge, 321 Port Road, Wells, ME 04090, 207-646-9226. <<http://rachelcarson.fws.gov>>. Hearing-impaired visitors may contact the Maine Relay Center at 1-800-437-1220. 

Susan A. Bloomfield is the refuge's planner/outreach specialist. She has worked for the U.S. Fish and Wildlife Service and, formerly, the National Park Service for more than seventeen years. She is a member of the York County (Maine) Audubon Society and attributes her ornithological leanings to her mother and grandmother. She shares her love of nature with her husband Kenny DeCoster.

Editor's Note: For more information on places mentioned in this article see: *Bird Observer* October 1995 (23: 256-62): Birding Biddeford Pool by Nancy McReel *Bird Observer* October 2002 (30: 306-15): Birding Mount Agamenticus by Scott Cronenweth.



CANADA GOOSE BY ANON.