

#### Welcome



This blue goose, designed by J. N. "Ding" Darling, has become the symbol of the National Wildlife Refuge System.

### A Refuge for Birds

The U.S. Fish and Wildlife Service invites you to visit Parker River National Wildlife Refuge, near Newburyport, Massachusetts. The refuge occupies in part, the southern three-fourths of Plum Island, an 8 mile long barrier island. The refuge offers excellent wildlife viewing and is a very popular birding area.

Parker River National Wildlife Refuge was established in 1942 primarily to provide feeding, resting, and nesting habitat for migratory birds. Located along the Atlantic Flyway, the refuge is of vital stopover significance to waterfowl, shorebirds, and songbirds during pre- and postbreeding migratory periods.

### Diverse Habitats Support Diverse Wildlife

The refuge consists of 4,662 acres of diverse upland and wetland habitats including sandy beach and dune, shrub/thicket, bog, swamp, freshwater marsh, salt marsh and associated creek, river, mud flat, and salt panne. These and other refuge habitats support varied and abundant populations of resident and migratory wildlife including more than 300 species of birds and additional species of mammals, reptiles, amphibians, insects, and plants.

## Managing for Wildlife

A variety of management practices are in use at the refuge to enhance its value to wildlife. While visiting the refuge you may see evidence of some of these procedures described below.

A black-throated green warbler rests and refuels during a migratory stopover period at the refuge.





Through mowing and other means, refuge habitats are sometimes manipulated for the benefit of wildlife.

Mowing

Portions of refuge lands are mowed to maintain open habitats, providing food and cover for such migratory bird species as American woodcock and bobolink.

Burning

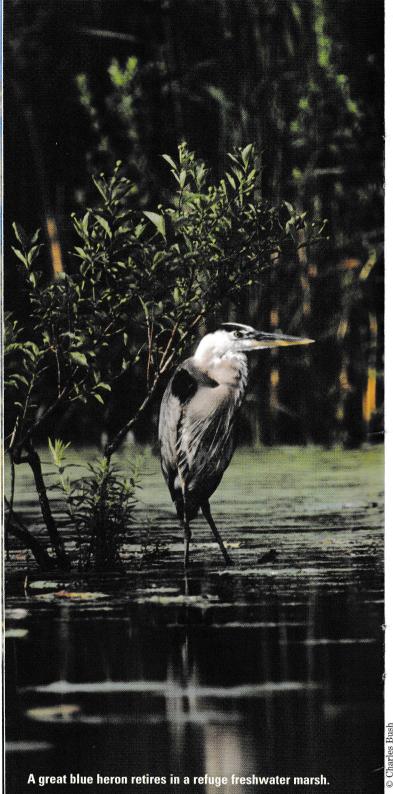
Freshwater marshes and other grasslands are burned to return nutrients to the soil and to promote new growth by reducing decomposing vegetation.

Applying
Herbicides and
Releasing
Non-native
Insects

Invasive plants diminish the wildlife food and protective cover values of refuge habitats by displacing native plant species. These weeds are controlled in part through the application of herbicides and the release of non-native insects that feed specifically on these plants.

Controlling Water Levels

Impoundment water levels are lowered to expose mud flat feeding and resting areas for migratory shorebirds and to promote the growth of certain wetland food plants favored by various species of ducks. This technique may also benefit herons, river otter, and other wildlife by



Erecting Nest Structures



A purple martin returns to its refuge nest house.

### **Planning Your Visit**

Refuge Headquarters/ Visitor Center



Refuge Hours and Closures

concentrating fish and other prey in shallow pools.

Nest boxes are erected and maintained for purple martin and other cavity-nesting birds. Elevated nesting platforms are situated near refuge water bodies to attract osprev.

The refuge, conservation organizations, and universities conduct on-site biological research to further human understanding of wildlife and their habitats. Examples include bird banding studies and wildlife population surveys. Information gained by this research is put to practical use at the refuge.

The following information will assist you in planning a safe and enjoyable refuge visit.

The refuge headquarters and visitor center is located off island at 6 Plum Island Turnpike, directly across the street from Massachusetts Audubon at Joppa Flats. The administrative offices are open Monday - Friday, 8:30 am - 4:00 pm, and the visitor center is open daily 9:00 am - 4:00 pm.

The refuge is open daily from sunrise to sunset but is subject to temporary closures. Closures that routinely occur are discussed below.

During the warmer months, the Plum Island section of the refuge sometimes fills to capacity. Public entry is then restricted typically for several hours. Plan on arriving early in the morning to avoid this inconvenience.

Each year the entire 6.3 miles (10.1 kilometers) of refuge beach is closed to all public entry beginning April 1 to provide undisturbed nesting and



Unspoiled scenery adds to the pleasure of a refuge visit.



This juvenile piping plover will soon depart the refuge beach for wintering areas south. feeding habitat for the piping plover, a shorebird species threatened with extinction. Portions of the beach not being used by the birds may be reopened beginning July 1. Typically all sections are reopened by mid-late August.

During the fall, a controlled deer hunt may be conducted on the Plum Island portion of the refuge. For your safety and to reduce user conflict, this refuge section is closed to all other public entry at this time.

The Nelson Island section of the refuge is closed Monday – Saturday generally from early September – early February (commercial clammer permittees and waterfowl hunters during state seasons excepted) but is open daily during the remainder of the year.

Entrance Fees

A daily entrance fee is in effect yearround at the Plum Island section of the refuge. When the refuge entrance gatehouse is not staffed envelopes Restrooms



Access

and an "iron ranger" pipe safe are available for fee deposition. Annual passes are available at refuge headquarters and the entrance gatehouse when staffed.

Restrooms are located in parking lots 1 (seasonal) and 4 (year-round) as well as at the refuge maintenance area and are wheelchair accessible.

The Plum Island section of the refuge is accessible by way of a 6.5 mile (10.5 kilometer) roadway. The first 3.5 miles (5.6 kilometers) has an asphalt surface while the remainder is gravel.

Designed for scenic travel, this roadway meanders by shrub/thicket, dune, salt marsh, and other habitats and provides outstanding scenery. For your safety, roadside parking is prohibited and a 25 mph (40 kmph) speed limit is in effect.

The Nelson Island section of the refuge is accessible by foot only via a 0.8 mile (1.3 kilometer) gravel trail.

During the warmer months at the refuge, mosquitoes and other biting insects can be very bothersome. Greenheads are aggressive, blood feeding horse flies that occur in large numbers from July through mid-August.

Ticks are common on the refuge and can transmit serious diseases such as Lyme disease. Wearing a hat, long-sleeved shirt, and long-legged pants will offer some protection as will the use of tick repellent according to label directions. Check yourself carefully for ticks during and after your visit. Light-colored clothing will allow you to detect a tick more easily.

Poison ivy is common on the refuge and is contagious during all seasons. To avoid this and other hazards, stay on established trails.

Safety Precautions





The white-tailed deer can be observed on the refuge yearround.

Wildlife can be dangerous. Enjoy them from a safe distance. Use binoculars or a spotting scope to enhance your view. Do not handle dead animals.

When the refuge beach is open, ocean swimming is permitted at your own risk. Treacherous undertows, currents, and heavy surf may be present and lifeguards are not provided.

The refuge road and its shoulders are generally narrow with limited sight clearance. Be alert for other motorists, bicyclists, and pedestrians and obey all traffic laws.

Protecting Your Valuables

Loss of or damage to personal belongings can ruin an otherwise memorable outing. Valuables should not be left unattended. Carry them with you or leave them at home. Report any suspicious or criminal activity immediately.

Carry In – Carry Out Policy The refuge has established a Carry In – Carry Out policy. Please properly dispose of all your trash, and any litter you remove, off the refuge.

Climatic Conditions

Typical of New England coastal sites, the refuge experiences a wide range of weather conditions. Spring (March -May) is generally cool with snow storms occasionally into April. Summer (June - August) is usually warm with periodic heat waves and thunderstorms. Fall (September -November) typically begins warm and stable then turns cool to cold, and winter (December - February) can be mild to severe with bitterly low temperatures and much snow. Windy conditions are common throughout the year and have a significant cooling effect.

Area Information



Information about nearby lodging, restaurants, and other amenities is available from the Greater Newburyport Chamber of Commerce and Industry, 38R Merrimac Street, Newburyport, MA 01950. Telephone: 978/462 6680. The Massachusetts Department of Conservation and Recreation, offers both tent and RV camping at nearby Salisbury Beach State Reservation. Telephone: 978/462 4481.

**Emergencies** 

Dial 911 for emergencies.

A greater yellowlegs takes advantage of lowered refuge impoundment water levels to search exposed mud flats for food.



Charles Bus

# Recreational and Educational Opportunities

At Parker River National Wildlife Refuge, wildlife comes first. Wildlife-dependent recreational and educational opportunities are available. These opportunities, deemed appropriate and compatible with the refuge's primary objectives, include wildlife observation and photography, hunting, fishing, shellfishing, environmental education and interpretation. Additional information concerning these activities is included below. Refer to the map for the location of available facilities.

Wildlife Observation and Photography



The refuge is renowned for its wildlife observation and photography opportunities with facilities providing easy access. Observation towers and platforms afford commanding views of the refuge and surrounding lands and waters. Several miles of self-guiding foot trails meander through dune, shrub/thicket, marsh, and other refuge habitats. The Salt Pannes Wildlife Observation Area, North Pool Overlook, Bill Forward Bird Blind. Pines Trail, and the observation platforms overlooking the beach and ocean at parking lots 1 and 7 are wheelchair accessible.



Birding the refuge in May can result in an especially long list of migrants.







An early morning fisherman casts a line from the refuge beach in hopes of landing a "striper."

A checklist of refuge birds is available from refuge headquarters and the entrance gatehouse when staffed.

Hunting



Waterfowl hunting opportunities are available in designated salt marsh areas of the refuge during state seasons. Also, a controlled deer hunt may be conducted on the Plum Island portion of the refuge with hunters chosen by lottery. All refuge, federal, and state hunting regulations apply.

In cooperation with the League of Essex County Sportsmen's Clubs, the refuge conducts a Youth Waterfowler Training Program each fall. This program includes an all-day seminar and a supervised hunt on a reserved section of the refuge.

Fishing and Shellfishing



The refuge offers some of the area's finest surf fishing. In season you may catch striped bass, bluefish, and several other species. A refuge permit may be required. Contact the refuge for additional information. All refuge, federal, and state fishing regulations apply.

A gray cathird is about to be released by a volunteer from the audience at a refuge songbird banding demonstration.



The refuge tidal flats are open for commercial and recreational shellfishing but are subject to periodic closures. Town and refuge permits are required and all refuge, state, and town shellfishing regulations apply.

Environmental Education and Interpretation



The refuge serves as an outdoor laboratory for teachers and students from schools, universities, and other educational institutions. A refuge permit may be required depending upon the size of the group and the purpose of the visit.

The Hellcat Interpretive Trail, located at Hellcat Wildlife Observation Area, offers refuge natural history and resource management learning experiences. An illustrated guide, with numbered narratives corresponding to numbered posts along the trail, is available at the trailhead, refuge headquarters and the entrance gatehouse when staffed.

Wildlife-oriented interpretive programs and special events are periodically offered at the refuge. Many of these programs are wheelchair accessible.

Contact refuge headquarters for further information on these abovementioned programs and activities.

### Seasonal Wildlife Highlights

The latitudinal position, coastal location, and varied habitats of the refuge contribute to the dynamic makeup of its natural events. While any season can produce a memorable experience, spring, summer, and fall offer the most diverse wildlife observation opportunities. Each season's highlights are described below.

 $Spring \ (March-May)$ 

American woodcock begins courtship flights in March and piping plover and red-winged blackbird also return. On warm days mourning cloak butterflies may appear. In April, osprey and purple martin first arrive and peak numbers of migrating American kestrels occur. In May, pearl crescent, spring azure, and many other butterflies are present. Also in May, flowering shadbush and beach plum dominate the landscape. Migratory bird diversity is at its height mid-late month and bobolink, American redstart, and other songbirds are in full chorus.

Summer(June - August)



Songbird migration continues into early June and beach heather is in bloom. By early July southbound shorebird migrants begin to appear with numbers peaking in August. Beginning mid-August large concentrations of migrating tree swallows gather and songbird migrants become apparent. During the summer, fledged young of resident birds appear and butterfly diversity is

The sanderling (above) and the semipalmated plover (right) contribute to the celebrated diversity of refuge shorebird species.



Jharles Bush



Fall (September – November)



The monarch is among the many butterfly species that occur on the refuge.

at its height with common wood nymph, eastern tiger swallowtail, and various other species present.

In September, great numbers of migrating monarch butterflies often pause to drink nectar on seaside goldenrod and other wildflowers in bloom. Also at this time shorebird diversity is at its height. Peregrine falcons occur most regularly from mid-September through November. Waterfowl numbers peak in October and November with many species present. Alfalfa, cabbage, and clouded sulphur butterflies most commonly linger into November.

Winter (December – February)







Loons, grebes, scoters, and other waterfowl winter offshore. Snowy owl, rough-legged hawk, and northern shrike are sometimes present. Tracks of white-tailed deer, coyote, and other mammals may be found in the snow. Hooded and other arctic seals sometimes haul out on the refuge beach while the more common harbor seal is typically observed in ocean waters near the shore.

Please remain an unobtrusive observer by viewing wildlife from an appropriate distance and staying within designated public use areas.

An adult common tern returns from an ocean foraging trip with a fish for one of its young.



