

Wetlands Walk

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A Guide to **Wetlands** and **Wildlife Sanctuaries** in the Washington, DC, Metropolitan Area



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Wetlands Walk

A Guide to Wetlands and Wildlife Sanctuaries in the Washington, DC, Metropolitan Area

A wetland is a wonderful place to get away from the hustle and bustle of urban life, a place to watch birds, fish or just relax. Wetlands are home to an abundance of wildlife and plants. Many can only be found in wetlands and may be rare or endangered. Wetlands are also fragile, so when you visit a wetland, please take care to leave it as you found it.

There are a number of wetlands on publicly owned land in Washington, DC, Virginia and Maryland that are open to visitors. This collection includes a variety of wetland types in beautiful settings. Several are accessible by car or public transportation from the urban heart of Washington.

What is a Wetland?

Although wetlands are often wet, they may not be wet all year long. In fact, some of the most important wetlands are wet only seasonally. Wetlands are the link between land and water, where the flow of water, cycling of nutrients and energy of the sun meet to produce a unique ecosystem characterized by hydrology, soils and vegetation.

Wetlands generally fall under four basic categories – marshes, swamps, bogs and fens – characterized by their vegetation and/or soils:

» Marshes may have saltwater and/or freshwater and are dominated by soft-stemmed vegetation;

» Swamps are mainly freshwater with mostly woody plants;

» Bogs are freshwater wetlands, often formed in old glacial lakes, characterized by spongy peat deposits, evergreen trees and shrubs and a floor covered by a thick carpet of sphagnum moss;

» Fens are freshwater, peat-forming wetlands covered mostly by grasses, sedges, trees and wildflowers.

What's So Important About Wetlands?

Wetlands are some of the most valuable natural features of our environment. They are diverse and often beautiful ecosystems that provide numerous benefits to humans and animals.

Some benefits of wetlands include:

» Water storage. Wetlands function like natural sponges, soaking up water then slowly releasing it. When there is a flood, wetlands slow down the momentum of the water, potentially reducing property damage, injury or loss of life. This ability also prevents erosion and helps to fill the reserves of ground water below.

» Water filtration. Water moves around wetland plants, and suspended sediments drop out and settle to the wetland floor. Excess nutrients from fertilizer, manure, leaking septic tanks and municipal sewage that are dissolved into the water are often absorbed by plant roots and microorganisms in the soil. Other pollutants stick to soil particles.

» Animal habitat. Wetlands are some of the most biologically productive natural ecosystems in the world. They are comparable to rainforests and coral reefs in the diversity and productivity of the species they support. Their abundant vegetation and shallow water provide habitat for fish and wildlife. More than a third of all endangered and threatened wildlife species live in wetlands.

» **Recreation**. If you are visiting a wetland with this guide in hand, you know or will soon discover the varied opportunities for recreation in a wetland. You can take photographs, hike or bird watch, perhaps fish or hunt at some locations. The sites in this guide are wonderful places to get away from the pressures of modern life and relax.

In spite of these and other important benefits of wetlands, they were for years considered by many to be wastelands, fit only to drain and fill for other uses. In recent years, however, we have begun to appreciate wetlands for the many values they offer. The goal of the Environmental Protection Agency (EPA) is to increase the number of wetland acres and preserve or improve the quality of those that we already have.

Reminders

» Respect wetland inhabitants and stay on the trails or boardwalks.

» Bring binoculars if you have them. They will allow you to observe the wetland inhabitants close up without leaving the trail.

» If you are interested in identifying the many plants and animals found in these wetlands, consider bringing field guides. Some of these locations also provide pamphlets or other information on local species.

» The wetlands included in this guide are on public lands. However, they may be near or border private property. Respect the rights of nearby property owners by staying off their land.

» If you hope to see wildlife, plan your visits for early morning or late afternoon. Many wetland inhabitants actively search for food at these times, and your chances for observing them will be greater.

» Visit wetlands during different seasons so that you may observe the changes in these vibrant ecosystems.

» Please take only photographs and leave only footprints. Collecting plants or animals is prohibited in most of these areas.

» Before your visit check with the park contact. Hours and/or fees may have changed.

Audubon Naturalist Society at Woodend

Location: 8940 Jones Mill Road, Chevy Chase, MD.

Landowner: Audubon Naturalist Society

Description: The 40-acre nature sanctuary, home of the national birding and nature preservation society, offers a chance for nature walks and pond exploration. Tucked away in a residential neighborhood, the historic grounds date back to a 1699 land grant. Woodend was donated to the Audubon Naturalist Society in 1967.

Facilities: There is a visitors' center and bookstore on the property. The Woodend Mansion, listed on the National Historical Register, is one of the few remaining grand old estates in Chevy Chase, Maryland. The sanctuary is available to rent for events and special occasions. The Society hosts special events every year, including the Birdseed Sale, Nature Fair and Holiday Fair.

Hours of operation: Dawn to dusk daily.

Restrictions: The sanctuary is open for visitors but special arrangements are required for renting the facilities. See the rentals section of the website or call (301)652-9188.

Fees: Special annual events are open to the public and are free; however, there may a small charge for some activities.

Directions: From the Capital Beltway (I-495), exit Connecticut Ave. south (exit 33) toward Chevy Chase. From Connecticut Ave. go left on Manor Road. Turn right on Jones Bridge Road and left on Jones Mill Road to 8940 on the left. Look for the Nature Center sign.

Contact: Visit the Audubon Naturalist Society (www.audubonnaturalist.org) or email at Contact@audubonnaturalist.org.

Blackwater National Wildlife Refuge

Location: 2145 Key Wallace Drive, Cambridge, MD 21613

Landowner: U.S. Fish & Wildlife Service

Description: Blackwater is representative of Chesapeake Bay habitats and is home to numerous species of birds, mammals, and other wildlife, many of which are threatened or endangered. It encompasses over 27,000 acres on Maryland's Eastern Shore and has been designated a "Wetland of International Importance" by the Ramsar Convention. The Convention on Wetlands, signed in Ramsar, Iran, in 1971, is an intergovernmental treaty which provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources. The largest waterfowl populations are seen in late October, November and December.

Facilities: Visitors can get close to nature on several walking trails and a "wildlife drive" that leads guests by car or foot along five miles of marshes, woods, fields and fresh water ponds. It features two land trails, three paddling trails and, in season, a butterfly garden. There is also a visitors' center and gift shop with exhibits and daily film showings.

Hours of Operation: Dawn to dusk daily.

Outdoor facilities: Dawn to dusk daily.

Visitors' center and gift shop: 8:00 a.m. to 4:00 p.m., Monday through Friday 9:00 a.m. to 5:00 p.m. on the weekend (closed Thanksgiving and Christmas)

Fees: Daily permits can be purchased at the visitors' center for \$3 for a private vehicle, \$1 for pedestrian or bicyclist, \$15 for commercial bus (up to 20 passengers) and \$25 for commercial buses over (more than 20 passengers.)

Restrictions: No camping or fishing, October through April. Picnicking is allowed only in designated areas. All dogs must be leashed. Boats cannot be launched from the shore.

Directions: Take U.S. 50 to Cambridge, Maryland. Once in Cambridge, take a right at the Refuge sign onto MD 16 West, then a left onto MD 335 at Church Creek. After approximately five miles, take a left at the Refuge sign onto Key Wallace Drive. Drive one mile to the visitors' center (on the right) and 2 ½ miles to the Wildlife Drive (on the right).

Contact: Call (410)228-2677 or visit the Blackwater National Wildlife Center (www.dnr.state.md.us/baylinks/24.html) or Friends of Blackwater (www.friendsofblackwater.org)

Dyke Marsh

Location: George Washington Memorial Parkway, Alexandria, VA

Landowner: National Park Service

Description: Located on the west bank of the Potomac River, Dyke Marsh consists of approximately 380 acres of tidal marsh, floodplain and swamp forest. It is the largest remaining freshwater tidal wetland in the Washington, D.C., metropolitan area. It provides habitat for a diverse array of plants and animals and offers an ideal setting for a variety of recreation activities.

Facilities: The trail that leads visitors into the marsh is known as the "haul road." It is a favorite of area birdwatchers and is also used by hikers, photographers and nature lovers. Waters in and around the marsh are popular fishing areas for people and animals. Those who explore the marsh by canoe may be rewarded with up-close encounters with resident wildlife. Weekly Sunday morning bird walks start at 8 a.m. at the south parking lot of the Belle Haven picnic area. Walks are held year-round and are led by experienced birders.

Hours of operation: Dawn to dusk daily.

Restrictions: To protect the sensitive marsh habitat, hiking is permitted only on trails. Parking and picnics are restricted to designated areas.

Fees: None

Directions: Travel south from Old Town Alexandria on George Washington Memorial Parkway toward Mt. Vernon. After crossing the stone bridge at Hunting Creek (unmarked), take the next left at "Belle Haven Picnic Area/Dyke Marsh." The trail to the marsh is beyond the bike path, on the right.

Contact: Visit the Dyke Marsh (http://www.nps.gov/gwmp/dyke-marsh.htm) or Friends of Dyke Marsh (http://www.fodm.org)

Huntley Meadows Park

Location: 3701 Lockheed Boulevard, Alexandria, VA 22306.

Landowner: Fairfax County Park Authority

Description: Huntley Meadows lies in a wet lowland carved out by an ancient meander of the Potomac River. The resulting freshwater wetland is one of the few left in Fairfax County. Nestled in Hybla Valley, Huntley Meadows Park is a rich, natural island in the suburbs of Northern Virginia. Its 1,425 acres harbor majestic forest, wildflower-speckled meadows and extensive wetlands.

Facilities: There is a visitors' center with a classroom, auditorium and exhibits. A .5- mile trail winds through the wetlands. There are observation platforms located at strategic points along the trail providing exceptional viewing of birds and other wildlife. There are also a Hike-Bike trail and a 2-mile interpretive trail system.

Hours of operation:

Park: Dawn to dusk daily (closed Thanksgiving Day, Christmas and New Years Day)

Visitors' center: 9:00 a.m. to 5:00 p.m. daily (closed Tuesdays)

Restrictions: No disturbance to or removal of vegetation or wildlife

Fees: None

Directions: From the Capital Beltway, take Beltway Exit 177A (Richmond Highway, Route 1). Proceed on Route 1 south for 3.5 miles to a right on Lockheed Boulevard. The park entrance is approximately three blocks down on the left at Harrison Lane.

Contact: Call (703)768-2525 or visit

the Huntley Meadows Park (http://www.fairfaxcounty.gov/parks/huntley/index.htm) or Friends of Huntley Meadows Park (http://www.friendsofhuntleymeadows.org)

----- Jug Bay Wetlands Sanctuary Glendening Nature Preserve and McCann Wetland Education Center

Location: 1361 Wrighton Road, Lothian, MD 20711

Landowner: Ann Arundel County Department of Recreation and Parks and State of Maryland

Description: The Jug Bay Wetlands Sanctuary consists of more than 1,400 acres of freshwater tidal marshes, forests, meadows and fields along the Patuxent River. The wetlands, some of the most extensive in the state and featuring large stands of over 40 species of aquatic plants, are home to many varieties of birds, fish, reptiles and mammals. The sanctuary is located in southern Anne Arundel County, just 20 miles from both Washington, DC, and Annapolis, MD.

Facilities: There are over 12 miles of trails affording ample opportunities for enjoyment of nature and solitude. The Glendening Nature Preserve at Jug Bay is open for hiking. Parking and trail maps are located at the Wrighton Road entrance of the Preserve and online. The McCann Wetland Education Center features an interactive wetland exhibit. Picnic tables are available at the McCann Center and at Farm Point (Sweet Flag Picnic Area).

Hours of operation:

Sanctuary: 9:00 am to 5:00 p.m., Wednesday, Saturday and Sunday Closed Sundays, December through February Glendening Nature Preserve: Saturday, 9:00 a.m. to 5:00 p.m.

Restrictions: To protect the unique environment of Jug Bay, the sanctuary is open to the public on a limited basis by reservation only. Entrance at River Farm by car is limited to special events only. Hikers can explore the area if they sign in at Wetlands Center first. Please contact the office for access information. All animals and plants are protected. In all areas of the sanctuary, hikers must stay on trails and boardwalks. Smoking is permitted only in the parking lot. No smoking on trails. Hunting and fishing are not allowed. There are no boat launching facilities. Pets, horses and bikes are not allowed.

Fees: Adults \$3 | persons under 18, \$2 | seniors, \$2 | Friends of JugBay free. There is no entrance fee for the Glendening Nature Preserve, and reservations are not required.

Directions:

From Annapolis

From West St. at Parole, take Route 2 south for 18 miles. At the Lothian "circle" go 3/4 of the way around and stay on Route 2. Go past the fire station, schools and St. James Church (on left) until the next stoplight at Route 258 then go right (west) on Rt. 258. Continue on Route 258 for 4.5 miles until this ends near the "Park and Ride" just after crossing over Route 4. At the stop sign, turn onto Wrighton Road and continue for 1.5 miles to sanctuary entrance on left.

From Baltimore at the Baltimore Beltway (Route 695)

From Route 695, take I-97 south. I-97 ends at Route 50. Take Route 50 West/301 South. 301 South will split from Route 50. Continue on Route 301 South to Route 4 at Upper Marlboro. Go east/south on Route. 4 for 3 miles (1.5 miles after crossing over the Patuxent River) to the Plummer Lane exit on right. Follow Plummer Lane for .5 mile to Wrighton Road. Go right on Wrighton Road and continue for .5 mile to sanctuary entrance on left.

From Washington, D.C.

Take Pennsylvania Ave. east to the Capital Beltway (Route 495). At the Beltway, Pennsylvania Ave. becomes Route 4; follow Route 4 east/south for about 10.5 miles to the Plummer Lane exit. (Plummer Lane is 3 miles east of Route 301 and 1.5 miles east of the Patuxent River). Exit right at Plummer Lane and go .5 mile to Wrighton Road. Go right on Wrighton Road and continue for .5 mile to sanctuary entrance on left.

From Calvert County

Take Route 4 north and exit at the Bristol-Deale exit (Route 258). At stop sign go left over Route 4 and continue to stop sign at Wrighton Road (near "Park and Ride"). At the stop sign, turn onto Wrighton Road and continue for 1.5 miles to sanctuary entrance on left.

Directions to the Parris N. Glendening Nature Preserve Follow the directions to the Sanctuary above. The Preserve parking lot is on the right just before the sanctuary entrance (which will be on the left).

Contact: Call 410-741-9330, email jugbay@toad.net, or visit the Jug Bay (http://www.jugbay.org/)

Julie J. Metz Wetlands Mitigation Bank

Location: Woodbridge, Virginia

Landowner: Prince William County

Description: This site features approximately 19 acres of constructed wetlands, as well as over 200 acres of protected natural wetlands. This mitigation bank was the first of its kind in Northern Virginia. It was created and is protected to offset (mitigate) the impact of development activities, permitted by the U.S. Corps of Engineers, on wetlands elsewhere in Northern Virginia. Forested, scrub and emerging wetland communities create a mosaic attracting abundant wildlife. Viewing the larger marsh is more difficult but worthwhile, especially in winter, when waterfowl arrive in large numbers. An array of songbirds is found here in summer and during migrations, and winter brings a full complement of grassland birds to the dry, grassy part of the wetlands.

Facilities: A chip-surfaced trail goes through and around a relatively dry section of marsh. A duck blind provides photographic opportunities, and a bird list is posted at the entrance to the wetland.

Hours of operation: Dawn to dusk daily.

Restrictions: Hikers should remain on the trail to avoid disturbing the wetlands and its inhabitants.

Fees: None

Directions: From the Capital Beltway (I-495) take I-95 South. Take Exit 156, Neabsco Mills Road, to Route 1 South, Jefferson Davis Highway, towards Dumfries. Turn left on Neabsco Road to Julie J. Metz Wetlands Bank on left.

Contact: Call (703) 792-6819 or email ukiste@pwcgov.org

Kenilworth Aquatic Gardens

Location: Anacostia Avenue at Douglas Street, NE, Washington, DC

Landowner: National Park Service

Description: Kenilworth Aquatic Gardens, a National Capital Park, is a wonderful place to understand wetlands. The aquatic gardens are part of a 14-acre marshland area in Anacostia Park. Visitors may walk along the 1.5 mile Garden River Trail and see the water lilies and lotus that the park is known for. There is also a variety of other plants and animals to observe, including raccoons, muskrats, turtles and beavers. The marshes flood twice a day due to the Anacostia River's tides, so throughout the day, wildlife may change significantly.

Facilities: There is a visitors' center where park rangers offer walking tours. Kenilworth Park abuts the Kenilworth-Parkside Recreation Area, which is managed and operated by the District of Columbia Department of Parks and Recreation, offers a wide variety of activities and has a track and play equipment for children. There are also managed meadows along the perimeter of selected ball fields. The Park has been working to establish native grasses and wildflowers along the meadow fringe where visitors can enjoy viewing them. Wildlife, such as birds of prey, ground-nesting birds (rare in such an urban location) and lovely spring azure butterflies may also be sited.

Hours of operation: 7:00 a.m. to 4:00 p.m. daily.

Restrictions: Picnics only in designated areas and no grills allowed. All dogs must be on a leash.

Fees: None

Directions: The gardens are located in northeast Washington, near the Maryland border, along the Anacostia River. The entrance is just west of I-295 (Kenilworth Avenue) between Quarles and Douglas Streets on Anacostia Avenue.

Contact: Call (202) 426-6905 or visit the Kenilworth Gardens (http://www.nps.gov/nace/keaq/)

Lake Accotink Park

Location: 7500 Accotink Park Road, Springfield, VA 22151

Landowner: Fairfax County Park Authority

Description: Lake Accotink Park's 493 acres include wetlands, streams and a 55-acre lake with unique views of waterfowl and marsh life.

Facilities: Activities and available facilities vary with the season and include canoe, rowboat and pedal boat rentals, a 3.75-mile hiking/biking trail, fishing, tour boat rides, boat launch, bait and tackle sales, miniature golf course, antique carousel, snack bar, pavilion shelters, picnic area with grills and a play-ground. Small sailboats permitted. Special events are held throughout the year.

Hours of operation: 7:00 a.m. to dark daily Closed December 25

Restrictions: Swimming, windsurfing and gas-powered boat motors are prohibited. A Virginia State fishing license is required for fishing.

Fees: Fees are charged for boat rentals, boat launching, miniature golf and the antique carousel. Call for prices.

Directions: Lake Accotink can be accessed via I-95 by taking Old Keene Mill Road west. After the exit, turn right on Hanover Avenue and turn left on Highland Avenue. Turn right on Accotink Park Road and the Park's front entrance will be on the left.

Contact: Visit the Lake Accotink Park (www.co.fairfax.va.us/parks/accotink/) or call (703) 569-3464

Leesylvania State Park

Location: 2001 Daniel K. Ludwig Drive, Woodbridge, VA 22191-4504

Landowner: State of Virginia

Description: Leesylvania State Park fronts Neabsco Creek, Powells Creek and the Potomac River with about two miles of shoreline. The Park's 510 acres represent about one-quarter of a former 2000-acre tobacco cultivation estate that has been allowed to revert to woodlands.

Facilities: The present network of nature trails and the public boat ramps provide considerable access to the river and its wetlands. Canoe tours, guided historic and nature walks, children's fishing tournaments, Junior Ranger day camps and historical programming are available. The park has a large visitors' center, featuring historic and nature displays, an environmental education classroom and a gift shop. There are four large picnic shelters and an open area available to rent. (To make a reservation, call the Reservations Center toll-free at 1-800-933-PARK. or in Richmond at 225-3867) A small, tents-only primitive campground is available for \$48 a night. Overnight boating is allowed Friday and Saturday nights from Memorial Day through Labor Day. The park store operates from April through October and sells groceries, marine gasoline and oil, bait and tackle. The marina store has a boat pump-out station and bathrooms with showers.

Hours of operation: 6 a.m. to dusk daily

Restrictions: No swimming is allowed. Reservations are required for overnight facilities. A Virginia State freshwater fishing license is required for fishing. Motorboats are allowed and there are no restrictions on horsepower. No hunting is allowed and horse rentals are not available.

Fees: Call or check web site for fees for parking, boat launch and horse trailers. Annual and reduced rate passes are available.

Directions: The Park is located in the southeastern area of Prince William County, approximately 25 miles from Washington, DC, and Fredericksburg, VA. From I-95, take the Rippon Landing Exit 156. Go east on Route 784 to U.S. 1. From U.S. 1 take Route 610 (Neabaco Road) east two miles.

Contact: Call (703) 670-0372 or visit the Leesylvania State Park (http://www.dcr.state.va.us/parks/leesylva)

Mason Neck State Park

Location: 7301 High Point Road, Lorton, VA

Landowner: Northern Virginia Regional Park Authority

Description: Located on a peninsula formed by Pohick Bay, Belmont Bay and the Potomac River, Mason Neck is the site of several coastal wetlands. It boasts an active heron rookery and is also home to bald eagles. It attracts migrating birds that include whistling swans and assorted wildlife. The Park contains several wetland areas and hundreds of acres of hardwood forests with oak, hickory and other species of trees.

Facilities: Beachcombing, pond study, bird watching, night hikes, fishing clinics and butterfly gardens are features of this park. Regular guided canoe trips are scheduled in spring and summer, and canoes and kayaks can be rented by the hour. Fresh and brackish water fishing is allowed, and cartop boat launch facilities are available. One picnic shelter is available for rent by reservation only, April through October, and on a first come, first served basis the rest of the year. Limited deer hunting is by lottery only.

Environmental Education Center: The center provides an opportunity for teachers to conduct environmental studies in natural settings. The facility has an extensive collection of research materials, a wet lab and a variety of sampling equipment. Park staff is available to assist with all phases of planning a program. In addition, the park participates in *Virginia's State Parks: Your Backyard Classroom*, a 40 activity curriculum guide for use by teachers of grades K-12. More information is available by calling the park.

Visitor Center: The Elizabeth Hartwell Environmental Education Center features exhibits on plant and animal life, area history, hands-on activities, a resource library, a volunteer exhibit and changing interpretive displays.

Hours of Operation: Visitors' center: 10:00 a.m. to 6:00 p.m. daily, April-September 10:00 a.m. to 5:00 p.m. weekdays, October-January Closed February 10:00 a.m.05:00 p.m. daily, March

Park: 8:00 a.m. until dark daily.

Restrictions: A Virginia State fishing license is required for fishing. No facilities for trailer launch. No swimming. Motorized vehicles are not permitted on park trails, with the exception of electric wheelchairs or scooters.

Fees: Parking: April 1- October 31 is \$3 on weekdays and \$4 on weekends. November 1- March 31, fee is \$2 daily.

Directions: Take I-395 South toward Richmond (becomes I-95). Take the VA-642 exit (exit 163) toward Lorton. Turn left onto Lorton Road/VA-642. Turn right onto Gunston Cove Road. Turn slight right onto High Point Road (gate access required). Turn right to stay on High Point Road to parking lot.

Contact: Call (703) 339-2380 or visit the Mason Neck State Park (http://www.dcr.state.va.us/parks/masonnec.htm)

McKee-Beshers Wildlife Management Area

Location: 18600 River Road, Poolesville, Maryland

Landowner: Maryland State Department of Natural Resources

Description: This 2,000-acre Wildlife Management Area is located near Gaithersburg and Seneca Creek State Park and borders on the C & O Canal National Historical Park. The forests, streams, ponds, fields and abundant wildlife provide a wonderful pocket of natural beauty in the middle of the suburbs. Forests flooded in the fall and winter form "greentree reservoirs" that attract migrating and wintering wood ducks and other water fowl. Wild turkeys also find sanctuary here. More than 200 species of birds have been documented over the years by local bird clubs.

Facilities: Hikers will find trails for miles and miles, meandering through the wetlands, fields and forests. The C&O Canal and trail border the area. It is possible to hike or bicycle east from the Park to Washington or west as far as Cumberland, MD. Hunters may find white-tailed deer, wild turkey, woodchuck, squirrels, waterfowl and many other species.

Hours of operation: Dawn to dusk daily

Restrictions: No motorized vehicles are allowed. Vehicle access is via marked parking areas located on River Road, Hunting Quarter Road and Sycamore Landing Road. Access to Maddux Island is by boat only from the ramp on Rileys Lock Road into Seneca Creek or at the end of Sycamore Landing Road at the C&O Canal. Hunting is allowed only in accordance with statewide open season dates, bag limits and shooting hours, unless otherwise noted. All state and federal hunting laws and regulations apply.

Fees: None

Directions: From the Capital Beltway, take Exit 39 (River Road) west toward Potomac. Proceed for approximately 11 miles to the intersection of River Road and MD 112, Seneca Road. Turn left and continue on River Road for about 2.5 miles. McKee-Beshers will be on the left as you head west on River Road.

Contact: For more information contact the Gwynnbrook Work Center at (410) 356-9272 or visit the McKee-Beshers Wildlife Management Area(www.dnr.state.md.us/publiclands/central/mb.asp)

National Aquarium in Baltimore

Location: Pier 3, 501 E. Pratt St., Baltimore, MD.

Landowner: The land and the buildings are owned by the City of Baltimore. The Aquarium is run by the National Aquarium in Baltimore, Inc, a non-profit corporation, which consists of a volunteer 25-member Board of Governors and larger Advisory Board, plus a full-time paid staff.

Description: The National Aquarium features not only sea life, but wetland creatures as well. The Allegheny Pond exhibit has bullfrogs, painted and soft-shell turtles and an assortment of small fish. Fresh water flows from ponds and streams to tidal marshes, where it mixes with saltwater from the sea.

Facilities: The one-way, self-guided tour of the main Aquarium begins and ends in the lobby on Level One. It includes stingrays, octopuses, electric eels and sharks. There are marine mammals, puffins and tropical fish. Some of the exhibits are tiny replicas of huge ecosystems, such as the Amazon rain forest and Atlantic coral reefs.

Hours of operation:

9:00 a.m. to 5:00 p.m., Saturday-Thursday, March-June 9:00 a.m. to 8:00 p.m. Fridays only, March-June 9:00 a.m. to 8:00 p.m., Friday and Saturday, July and August 9:00 a.m. to 6:00 p.m., Sunday —Thursday, July and August

10:00 a.m. to 5:00 p.m., Saturday-Thursday, September-February

Restrictions: You are advised to buy tickets in advance. On especially busy days, available tickets may not permit entry until several hours after your purchase. You will be asked to surrender strollers upon entering. Aquarium staff will store strollers for you and provide a backpack or front pack child-carrier.

Fees:	Adults	\$21.95
	Children 3-11	\$14.95
	Adults 60 and over	\$20.95
	Children under 3	Free

Directions: From points south via I-95 (Washington, D.C., Virginia, and elsewhere)

follow I-95 North toward Baltimore. Take the I-395 North exit (exit number 53) toward Downtown. Take I-395 North toward Downtown/Inner Harbor. Road divides; take left fork. I-395 becomes South Howard Street. Go past Camden Yards, on left. Turn right onto West Pratt Street. Continue past Baltimore Convention Center and Harborplace, both on right. National Aquarium in Baltimore is on right, shortly before the ESPN Zone restaurant. Buses and cars dropping off handicapped visitors may pull into Gunther Circle, on right. All others continue toward designated parking area.

Contact: Call 410-576-3800 or visit the National Aquarium (http://www.aqua.org/)

National Wildlife Visitor Center

Location: 10901 Scarlet Tanger Loop, Laurel, MD.

Landowner: U.S. Fish & Wildlife Service

Description: This large science and environmental education center is located on the 12,750-acre Patuxent Research Refuge. The visitors' center offers interactive exhibits that focus on global environmental issues, migratory bird studies, habitats, endangered species, creature life cycles and the research tools and techniques used by scientists.

Facilities: The visitors' center also offers hiking trails, wildlife management demonstration areas and outdoor education sites for school classes. A large auditorium and meeting rooms can accommodate national and international scientific conferences, environmental meetings, teacher workshops, environmental lectures and traveling displays. A gift shop, Wildlife Images, operated by the Friends of Patuxent, Inc. (a non-profit cooperating association), offers a variety of environmental books and other educational materials.

Hours of operation:

Visitors' center: 10:00 a.m. to 5:30 p.m. daily (except for federal holidays)

Trails and grounds: dawn to 5:30 pm daily (except for federal holidays)

Restrictions: No swimming, sunbathing, littering, camping, campfires, firearms, alcoholic beverages, picnicking, boating, disturbance to or removal of vegetation or wildlife. Public trails may not be hiked after 5:30 pm. All pets must be kept on a leash no longer than 10 feet and are not allowed in the water. Fishing is restricted to designated areas only and all fresh water fishing regulations of the State of Maryland apply. (See web site for additional Center fishing restrictions.)

Fees: All events held at the National Wildlife Visitor Center, unless otherwise noted, are free, with exception of tram tours. Tram tickets are \$3 for adults, \$2 for senior citizens 55 and over and \$1 for children under 12. If you have any special needs or requests, please call 301-497-5763 or TDD 301-497-5779 two weeks in advance.

Directions: From Washington, D.C.: Take Baltimore/Washington Parkway (Route 295) north, Exit 22 to Powder Mill Road-Beltsville exit. Turn right (east) onto Powder Mill Road and go 1.9 miles. Turn right into Visitor Center entrance (Scarlet Tanager Loop). Go 1.4 miles to Visitor Center parking area.

From Baltimore, MD: Take Baltimore/Washington Parkway (Route 295) south to Powder Mill Road-Beltsville Exit. Turn left onto Powder Mill Road (East). Go 2.0 miles and turn right into Visitor Center entrance (Scarlet Tanager Loop). Go 1.4 miles to Visitor Center parking area.

Contact: Call (301) 497-5760 or visit

the National Wildlife Visitor Center (http://patuxent.fws.gov/vcdefault.html) or Friends of Patuxent Wildlife Visitor Center (www.friendspwvc.org)

National Zoo and Wetlands Exhibit

Location: 3001 Connecticut Avenue, NW, Washington, DC.

Landowner: The Smithsonian Institution

Description: Visit the soon to be opened Wetlands Exhibit at the Zoo and learn about the value and disappearance of wetlands. At the Bird House, see many species of birds that depend on wetlands for food, breeding and migratory rest stops.

Facilities: The Zoo is a great place to discover new habitats and appreciate the diversity in wildlife.

Hours of operation: Daily, except December 25. Hours may vary but currently are as follows:

Grounds: 6:00 a.m. to 8:00 p.m., April 3 to October 29 6:00 a.m. to 6:00 p.m., October 30 to April 1

Buildings: 10:00 a.m. to 6:00 pm, April 3 to October 29 10:00 a.m. to 4:30 p.m., October 30 to April 1

Restrictions: Pets, leashed or unleashed, are not allowed in the park. (Service dogs are permitted.) Please don't feed the animals. Rails, moats, and other barriers between you and the animals are there to protect you and the animals from harm. Only people in wheelchairs and children in strollers or wagons may ride around the Zoo. Biking is permitted only on public vehicle roads.

Fees: There is no entrance fee. However, the Zoo offers a variety of classes and events for which there may be a fee. Call or check the web site.

Directions: By Metrorail: Take the Red Line to the Woodley Park/Zoo/Adams Morgan stop or the Cleveland Park stop. The Zoo entrance lies halfway between these stops, and both are a short walk from the Zoo.

By car from Virginia: Follow I-95 North to I-395 North (I-95 turns into I-395). Continue on I-395 North to Exit 8B Washington Boulevard. Follow Washington Boulevard to the Arlington Memorial Bridge. Cross Arlington Memorial Bridge. Get into the left Iane. The left Iane will take you to Constitution Avenue. Turn

right onto Constitution Avenue. Turn left onto 17th Street. 17th Street turns into Connecticut Avenue. Continue on Connecticut until you reach the 3000 block. The National Zoo will be located on your right at 3001 Connecticut Avenue.

By car from Maryland: Follow I-95 South to I-495 (the Capitol Beltway). Exit onto I-495 West in the direction of Silver Spring. Continue on I-495 West to Exit 33 Connecticut Avenue. Go south on Connecticut Avenue for approximately 5 miles. The National Zoo is located on the left at 3001 Connecticut Avenue.

Contact: Call (202) 763-4717 to ask about tours and educational events or visit the National Zoo (http://nationalzoo.si.edu/default.cfm)

Pohick Bay Regional Park

Location: 6501 Pohick Drive, Lorton, VA 22039

Landowner: Northern Virginia Regional Park Authority

Description: The Park features a spectacular bayside setting on the historic Mason Neck peninsula in Fairfax County. Mason Neck is ecologically fragile land that shelters numerous wildlife species, including the bald eagle. The developed recreation areas are concentrated to minimize disturbance to the delicate balance of nature.

Facilities: The Park features nature trails, four miles of bridle paths and a bluebird trail.

There is a marina with an observation deck, where sailboat, jon boat, pedalboat and sea kayak rentals are available for a fee. The marina also features RV/boat storage, a boat ramp and snack bar. There is also a swimming pool, campground, 18-hole and miniature golf courses and picnic tables. Guided canoe and kayak trips are offered.

Hours of Operation:

Park: Dawn to dusk daily Pool: Memorial Day - Labor Day Miniature golf: March 19 - October 29, weekends only, 8 hours per day October 30 - March 18, closed Golf: see web site below to book tee times Boat rentals: 10:00 a.m. to 6:00 p.m., April 2 - May 27, weekends only 10:00 a.m. to 6:00 p.m., May 28 - Labor Day, Fridays, Saturdays, Sundays and holidays 10:00 a.m. to 4:00 p.m., September 6 - October 30, Saturdays and Sundays October 31 – April 1 - closed

Restrictions: A Virginia State fishing license is required for fishing. Annual passes are available only to residents of Alexandria, Arlington, City of Fairfax, Fairfax County, City of Falls Church and Loudoun County.

Fees: Park entrance fee for nonmember jurisdictions is \$7 per vehicle, per day; \$14 per vehicle, per week; and \$11 per vehicle with 10 or more passengers. Annual pass is available for \$25.00. See website below

for golf and boat rental fees.

Directions: Take I-95 south of the Beltway, exit at Lorton. Turn left on Lorton Rd., right on Armistead Rd., right on Rt. 1 and left on Gunston Rd. Continue 1 mile to golf course on left. Go 3 miles to main park.

Contact: Call (703)339-6104 (camp center) visit the Pohick Bay (www.nvrpa.org/pohickbay.html)

Sunrise Valley Nature Park

Location: Sunrise Valley Drive and Monroe Street, Reston, VA

Landowner: Reston Land Corporation

Description: This 15.75-acre park was constructed in 1994 to mitigate wetlands lost during the construction of the Town of Reston. It also provides an educational experience for the community, emphasizing the functions and values of wetlands in the town's landscape. It features over four acres of existing forested wetlands, a rehabilitated farm pond, and upland forested buffers and islands. It is in an area surrounded by office buildings and screened by heavy brush.

Facilities: The Park features forested wetlands and a small pond. There is a path to the park and a small bridge across the pond which allows for close up views of pond life. It is suitable for school field trips, scouting adventures and has been used as a classroom for wetlands delineation. There is no dedicated parking and parking is not permitted on Sunrise Valley Drive or the adjacent portion of Monroe Street. Parking in the lot for the Landmark Arboretum 1 building may be available.

Hours of Operation: Dawn to dusk daily.

Restrictions: None.

Fees: None.

Directions: Take the Capital Beltway (I-495) to VA-267 west toward Dulles Airport. Take the VA-7100 South exit, east 11. Turn left onto Fairfax County Parkway (VA 7100 South). Turn right onto Sunrise Valley Dr. Turn left at Monroe Street.

Contact: Visit the Sunrise Valley Nature Park (www.restonpaths.com/SunriseValley/Generalinfo.htm)

Theodore Roosevelt Island

Location: Near McLean, VA, off George Washington Memorial Parkway

Landowner: National Park Service

Description: This wooded island is dedicated to the memory of Theodore Roosevelt, an outdoorsman, naturalist and conservationist. There are 2.5 miles of trails that lead through marsh, swamp and forest habitats, where visitors often see birds or small mammals. A memorial statue of the President is located near the center of the island. The outdoor memorial, with Roosevelt's thought provoking quotes and statue, captures the spirit of this energetic President who believed in conservation of our nation's natural resources.

Facilities: The George Washington Memorial Parkway facilities and programs provide a variety of education and recreational opportunities year round. Guided group tours of the island are available upon request. Maps are available at the trail head and upon request. The comfort station is closed in winter.

Fees: None

Hours of Operation: Dawn to dusk daily.

Restrictions: A parking lot is available to visitors but there is a 2-hour limit. Dogs are allowed but must remain on a leash. No bicycles are allowed on the island.

Directions: The Island is accessible by a footbridge from the parking lot off the northbound lane of George Washington Memorial Parkway in Virginia. The closest Metro stop is Rosslyn on the Blue and Orange Lines, and a pedestrian bridge crosses over George Washington Memorial Parkway from Rosslyn Circle to the island.

Contact: Call (703)289-2550 or visit Theodore Roosevelt Island (http://www.nps.gov)

Flora and Fauna List

The abundant vegetation and shallow water of wetlands provide diverse habitats for fish and wildlife. Aquatic plant life flourishes in the nutrient-rich environment, and energy converted by the plants is passed up the food chain to fish, waterfowl and other wildlife.

The following is a species list of some of the flora and fauna that generally live in area wetlands at some point in the year. As the seasons change, so may the denizens of the wetlands. Bring your guide book and see how many of these species of plants and animals you can identify.

Grasses, Sedges and Ferns

Acorus calamus Andropogon virginicus Calamagrostis candensis Calamagrostis cinnoides Carex folliculate Carex stricta Cinna arundinacea Coelorachis rugosa Cyperus spp. Dulichium arundinaecum Erianthus brevibarbis Eriophorum virginicum Glyceria canadensis Glvceria maxima Juncus effuses Leersia orvzoides Panicum virgatum Peltandra virginica

Sweet flag Broom sedge Bluejoint reedgrass Reed bentgrass Long sedge Tussock and uptight sedge Stout wood-reedgrass Wrinkled jointgrass Flat sedges Three-way sedge Short-beard plumegrass Tawny cotton-grass Canada manna grass Reed meadowgrass Soft rush Rice cutgrass Switchgrass Arrow arum, tuckahoe, wampee, duck corn Phalaris arundinacea Phragmites australis Polyaonum amphibium Polygonum punctatum Pontederia cordata Sagittaria latifolia Scirpus cyperinus Scirpus pungens (S. americanus) Scirpus spp. Scirpus validus Sparganium americanum Spartina alterniflora Spartina cynosuroides Spartina pecinata Spartina patens Typha angustifolia Typha latifolia

Wildflowers

Aster calamus Impatiens capensis Iris versicolor Nuphar luteum

Trees and Shrubs

Acer rubrum Alnus serrulata Betula nigra Betula populifolia Reed canary grass Common reed Water smartweed Marsh or dotted smartweed, red top Pickerelweed Arrowhead, duck potato, wapato Wool grass Common three square Bulrushes Soft stem bulrush Eastern or lesser burreed Smooth cordgrass, salt marsh cordgrass **Big cordgrass** Prairie cordgrass Salt marsh hay, saltmeadow cordgrass, highwater grass Narrow-leaved cattail Broad-leaved cattail

Sweet flag Spotted touch-me-not Blue flag, poison flag Spatterdock, yellow water lily, cowlily

Red maple Hazel, smooth and tag alder River birch Gray birch



Cephalanthus occidentialis Chamaecyparis thyoides Cornum amomum Cornus sericea Fraxinus pennsylvanica Hihiscus moscheutos llex verticillata Lindera benzoin Liquidambar styraciflua Myrica pensylvanica Nyssa sylvatica Platanus occidentalis **Ouercus** bicolor **Ouercus** palustris Quercus phellos Salix niara Sambucus canadensis Thuja occidentalis Vaccinium corymbosum Viburnum dentatum Virurnum lentago

Buttonbush Atlantic white cedar, false cypress, south white cedar Silky dogwood Red-osier doawood Green ash Marsh hibiscus, rose mallow Common winterberry, winterberry holly Common spicebush **Tulip** tree Bayberry Black gum, black tupelo, sour gum American sycamore Swamp white oak Pin oak, Spanish oak Willow oak Black willow Elderberry, American elder Northern white cedar, arbor vitae Highbush blueberry Southern arrowwood Nannyberry

Reptiles and Amphibians

Frogs

Acrtis crepitans Hyla cinera H. chrysoscelic, H. versicolor Pseudaccis crucifer Rana catesbeiana Northern cricket frog Green tree frog Grey tree frog Spring peeper Green frog Rana palustris Rana sylvanica Rana utricularia

Lizards

Cnemidophorus sexlineatus Eumeces fasciatus Sceloporus undulates

Salamanders

Ambystoma opacum Ambystoma maculatum Desmognathus focus Eurycea bislineta Hemidactylium scutatum Notophthalmus viridecens Plethodon cinereus Pseudotiton montanus Pseudotriton rubber

Snakes

Carphophis amoenus Coluber constrictor Diandophis punctatus Elaphe obsolete Heterodon platirhinos Lampropeltis getula Opheodrys aestivus Storeria dekayi Pickerel frog Wood frog Southern leopard frog

Six-lined racerunner Five-lined skink Fence lizard

Marbled salamander Spotted salamander Northern dusky salamander Northern two-lined salamander Four-toed salamander Red-spotted newt Red-backed salamander Eastern mud salamander Northern red salamander

Eastern worm snake Northern black racer Northern ringneck snake Black rat snake Eastern hognose snake Eastern king snake Rough green snake Northern brown snake Thamnophis sirtalis Thamnophis sauritus Regina septemvittata Virginia valeriae

Toads

Bufo americanus Bufo woodhouseii fowleri Scaphiopus holbrokii

Turtles and terrapins

Chelydra serpentine Chrysemys picta picta Clemmys guttata Kinosternon subrubrum Malaclemys terrapin Pseudemys rubriventris Sternotherrus odoratus Terrapene Carolina

Mammals

Castor Canadensis Marmota monax monax Microtus pennsylvanicus Odocoileus virginianus Ondatra zibethicus Peromyscus spp. Procyon lotor lotor Sciurus carolinesis Eastern garter snake Eastern ribbon snake Queen snake Smooth earth snake

American toad Fowler's toad Eastern spadefoot toad

Snapping turtle Eastern painted turtle Spotted turtle Eastern mud turtle Diamond-backed terrapin Red-bellied turtle Eastern musk turtle Eastern box turtle

Beaver Woodchuck Meadow vole White-tailed deer Muskrat Deer mouse Raccoon Gray squirrel

Sylvilagus floridanus Tamias striatus fisheri

Fishes

Acipenser ssp. Amia calva Brevoortia tyrannus Gambusia holbrooki Hybognathus regius Lepomis macrochirus Letalurus punctatus Micropogonias undulastus Micropterus salmoides Morone americana Morone saxatilis Pogonias cromis Pomoxis annularis Procammbarus spp.

Birds

Aix sponsa Anas platyrynchos Ardea herodias herodias Bartramia longicauda Branta Canadensis Bubo virginianus Buteo jamaicensis Cottontail rabbit Chipmunk, Fisher's eastern

Sturgeon Bowfin Atlantic menhaden Eastern mosquitofish Eastern silvery minnow Bluegill Channel catfish Atlantic croaker Largemouth bass White perch Striped bass Black drum Crappie, white Crawfish

Duck, wood Mallard Heron, great blue Sandpiper, upland Goose, Canada Owl, great horned Hawk, red-tailed

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Cyanocitta cristata Dendrocia ceruela Dryocopus pileatus Haliaeetus leucocphalus Icterus galbula Meleagris gallopavo silverstris Nyctanassa violacea violacea Pandion haliaetus carolinesis Tachycineta bicolor Vermivora chrysoptera

Jay, blue Warbler, cerulean Woodpecker, pileated Eagle, bald Oriole, Baltimore Turkey, wild Night heron Osprey Swallow, tree Warbler, golden-winged

Insects

Family OdonataDragonflyFamily OdonataDamselflyPieris rapaeButterfly, cabbage whiteEurema lisaButterfly, little yellowEurytides MarcellusButterfly, zebra swallowtail

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What Can You Do to Help?

It may take only one visit to a wetland for you to understand and appreciate how special they are. We hope that you will want to take personal action to help preserve and protect wetlands. Here are just 10 simple things that you can do as a private citizen:

01 Contact your local Corps of Engineers District Office or state environmental agency to find out how to take part in decisions on permits for projects affecting wetlands in your area.

02 | Plant native grasses or trees as buffers along any wetlands on your property to protect water quality.

03 | Limit the amount of chemicals you use on your lawn to reduce polluted runoff into wetlands.

04 | Plan ahead to avoid wetlands when developing or improving a site.

05 | Invest in wetlands by buying duck stamps. Find them on-line at the U.S. Fish and Wildlife service's web site (www.fws.gov) or at your local post office.

06 Work with your neighbors to help protect the health of a wetland near you.

07 | If there is a wetland in your community, ask what your local government is doing to preserve it.

08 Investigate the possibility of restoring or improving a local wetland.

09 Join a local volunteer group to protect wetland animals and save their habitat. Find one in your area at yosemite.epa.gov/water/volmon.nsf.

10 | Walk through and enjoy a wetland, then carry out trash you find that might damage it. Contact your local parks department or ask at the nearest Wildlife Refuge for nearby locations and more information. (http://refuges.fws.gov/)

Wetland Resources

Once you've experienced the wonders and beauty of a wetland, you may want to learn more about wetlands and how to protect them. For additional information, visit the U.S. Environmental Protection Agency's website (www.epa.gov/owow/wetlands/), call the toll-free Wetlands Helpline at 1-800-832-7828 or refer to the sources below.

On the Internet:

EPA's Wetland Home Page	www.epa.gov/owow/wetlands/
USDA's Wetland Reserve Program	www.nrcs.usda.gov/programs/wrp
The Association of State Wetland Managers	www.aswm.org
The Izaak Walton League of America	www.iwla.org
U.S. Fish and Wildlife Service	www.fws.gov
Wildlife Refuges	www.refuges.fws.gov
National Wildlife Visitor Center	http://patuxent.fws.gov/vcdefault.html

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EPA 843-F-06-008 | Office of Water | September 2006

