

# Mattawoman Creek WATERSHED — Valued Ecosystem

From an extremely rare and sensitive Magnolia Bog on a small forested stream to the wild population of rare American Lotus in the expansive tidal wetlands, the Mattawoman Creek Watershed is home to one of the most biodiverse ecosystems in Maryland.

## REPTILES AND AMPHIBIANS

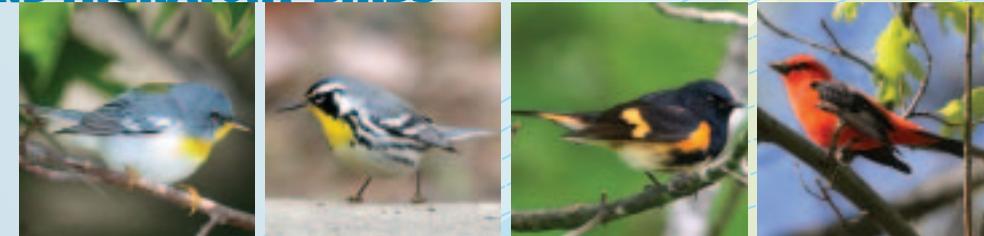


Eighteen species of reptiles and amphibians were observed by Maryland Department of Natural Resources at a single site in 2003. These include nine different types of frogs and toads and represents the richest biodiversity for this category in Maryland. *Photos by George Jett, l to r: Box Turtle, Fowlers Toad, Green Tree Frog, Marbled Salamander*

## RESIDENT AND MIGRATORY BIRDS

Forest covers over half of the Mattawoman Creek Watershed and provides shelter for an array of colorful birds to nest and raise their young. Of the nearly 230 species of birds that can be found in the watershed, about 100 species nest here according to the Southern Maryland Audubon Society. A third of the nesting species, including 26 types of neotropical migratory songbirds (*some shown above*), live in the interior portions of forests, where they are safer from edge-prowling predators. Maintaining large tracts of forest cover is critical to the survival of these species.

*Photos by George Jett, l to r: Northern Parula, Yellow-throated Warbler, American Redstart, and Scarlet Tanager*



## FIN-FISH AND MUSSELS

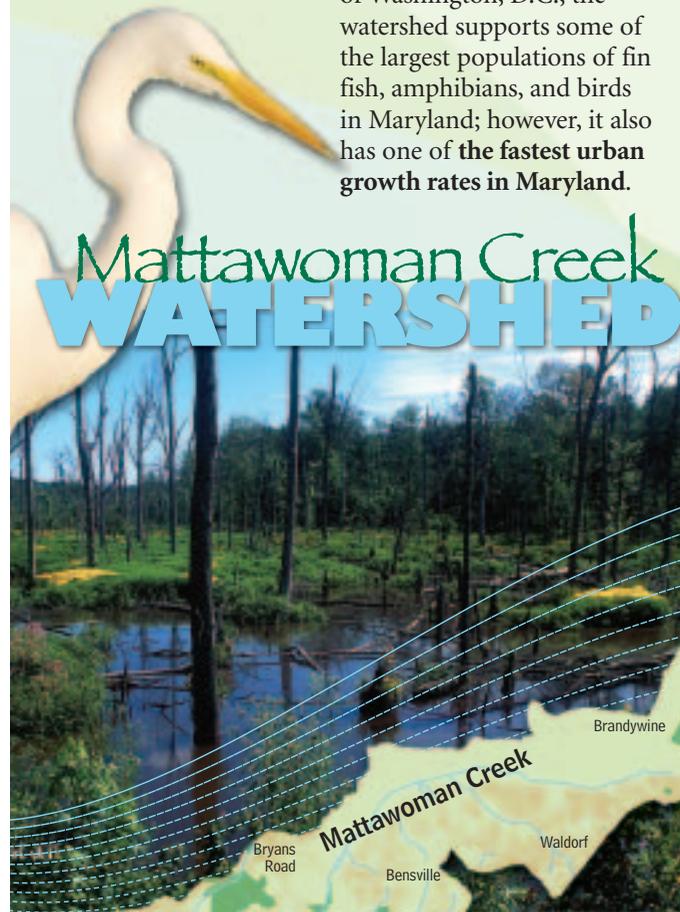


The Mattawoman Creek estuary, tributaries and wetlands are among the most productive fin-fish spawning and nursery areas in the entire Chesapeake Bay. Fifty-four species of fish were identified here by the Maryland Department of Natural Resources, and largemouth bass are so abundant, that Mattawoman Creek is a featured

stop of the national bass fishing tournaments. The supporting water quality is indicated by the presence of four mussel species, of which two are rare in Maryland and a third is considered of national concern.

*Photos l to r: Blueback Herring by George Wilmot, Largemouth Bass, Freshwater Mussel*

Over 90 square miles of land drains into the **Mattawoman Creek**. Most of this is in Charles County. Located just 12 miles south of Washington, D.C., the watershed supports some of the largest populations of fin fish, amphibians, and birds in Maryland; however, it also has one of the **fastest urban growth rates in Maryland**.



The wetlands support unusually large numbers of fish-eating **Great Egrets**.  
*Photo by George Jett*



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### VISION STATEMENT:

Charles County is a place where all people thrive and businesses grow and prosper, where the preservation of our heritage and environment is paramount; where government services to its citizens are provided at the highest level of excellence; and where the quality of life is the best in the nation.

*Photos: Pink Lady Slipper - George Jett (top) & rare American Lotus*

# Mattawoman Creek **WATERSHED** — Balancing Urban Growth with a Healthy Ecosystem

Waldorf and Bryans Road are the two primary urban growth centers that fall within the Mattawoman Creek Watershed. As urban growth occurs, it is important to ensure that stormwater runoff from new impervious surfaces (pavement, buildings, compacted soil) does not degrade the water quality and habitat quality of the watershed. **Charles County is working to minimize impacts from impervious surfaces through a series of strategies:**

**1) PLANT NATIVE SPECIES** to retain the natural food sources and habitat for native wildlife. Native plants are easily available because all nurseries have access to them, and some nurseries even specialize. For a guidebook to native plants and lists of nurseries, see the U.S. Fish and Wildlife Service website: [www.fws.gov/chesapeakebay/BayScapes/bsresources/bs-nativeguides.htm](http://www.fws.gov/chesapeakebay/BayScapes/bsresources/bs-nativeguides.htm)  
[www.nps.gov/plants/pubs/chesapeake](http://www.nps.gov/plants/pubs/chesapeake)

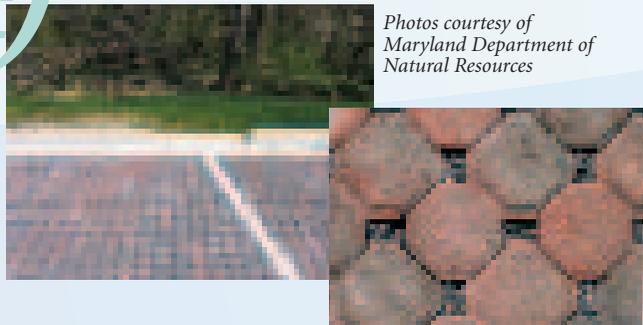


**2) INSTALL CONSERVATION LANDSCAPING** (mix of trees, shrubs and perennial plants) instead of lawn to maintain and increase wildlife habitat. This also saves you maintenance time and money, and minimizes air pollution from lawnmowers and other trimming equipment. For details on conservation landscaping see the U.S. Fish and Wildlife Service website: [chesapeakebay.fws.gov/conlascp.htm](http://chesapeakebay.fws.gov/conlascp.htm)

**3) PLANT MORE TREES IN URBAN AREAS** to absorb storm water run-off, provide shade, and maintain a cooler microclimate. For maximum benefit, provide room for the trees to reach a mature size. To help the trees stay moist and grow better, plant them at ground level, instead of on raised planting islands.



**4) USE PERVIOUS PAVING** to infiltrate storm water and maintain groundwater flow in streams. Maintaining water flow in the streams provides habitat for migratory spawning fish.

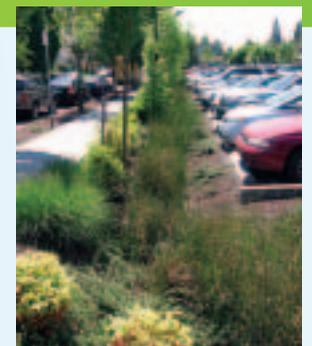


*Photos courtesy of Maryland Department of Natural Resources*

**5) PROTECT THE STREAM VALLEY** to top of slope to buffer streams. This is the most effective method for maintaining water quality and habitat quality that will continue to support a healthy ecosystem. Redevelop existing impervious surfaces at a higher intensity to accommodate the demand for housing, business, and related needs; rather than expanding impervious surfaces into forested and undeveloped areas.



**6) USE BIORETENTION** to filter stormwater run-off. Bioretention is proven to have higher pollutant removal rates than pond facilities, especially for heavy metals, oil and grease. Many smaller stormwater management practices located around a development site mimic the natural hydrology.



*Photo courtesy of Center of Watershed Protection*

