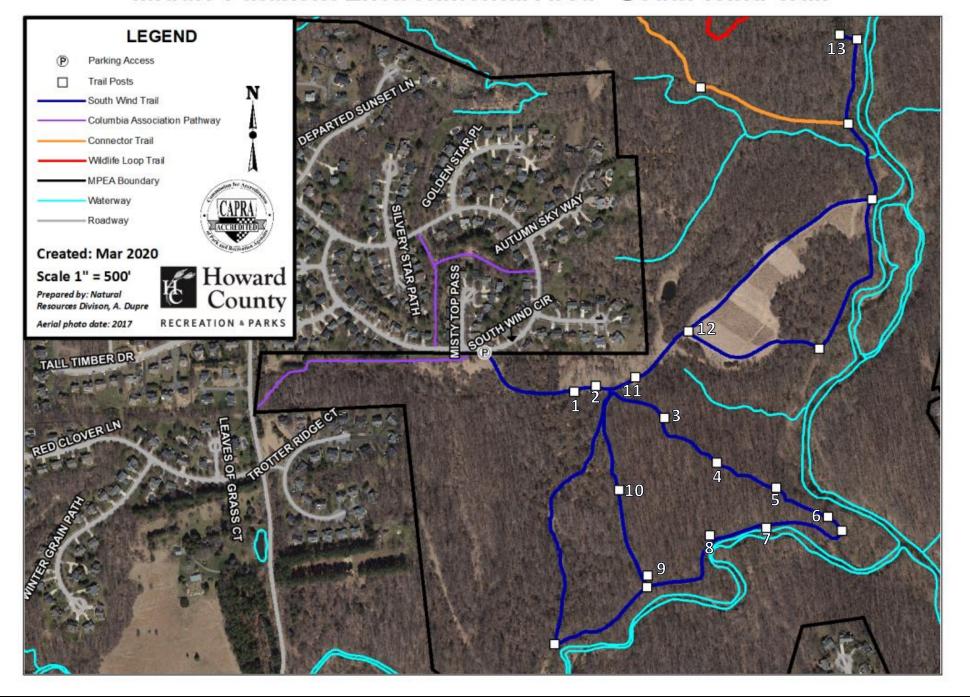
Middle Patuxent Environmental Area South Wind Trail Interpretive Nature Walk



Welcome to the Middle Patuxent Environmental Area (MPEA) virtual interpretive nature trail. The MPEA, established in 1996, is 1021 acres in size and contains a diversity of habitat types. There are upland and bottomland hardwood forest, fields, wetlands, ponds, and riparian (riverine) habitats. The primary components of the MPEA's mission are natural resource management, education, research and recreation. There are 5.4 miles of hiking trails in the MPEA. This brochure will guide you on a virtual tour through the South Wind Trail (2.3 miles), including the grassland restoration area and a wetland area. Numbered markers along the trail (see map) correspond to the numbered interpretive point pictures. ENJOY!

Middle Patuxent Environmental Area - South Wind Trail





1. A high diversity of wildlife can be found in areas like this where field and forests meet. This transitional border is known as edge habitat. The high species diversity is due, in part, to the fact that animals associated with field habitat or forest habitat may both be found here. Many opportunities exist here for wildlife to find food, cover from predators, and nesting sites. Owls, which nest high up in the trees of the forest, may perch in a tree along the edge to hunt for mice, and other prey, in the field. The dense thicket of shrubs in edge habitat provides ideal cover for eastern cottontail rabbits. These dense shrubs also provide nesting sites and escape cover for birds who forage for seeds and insects in the grasses and herbs of the field.



2. Many of the small trees in this meadow are persimmon trees. American persimmon is one of the first invaders of old fallow fields. The seeds are brought into the fields by birds and mammals that eat the small, pale-orange fruit. The fruit remains on the tree after the leaves have fallen and ripens after the first frost. Although very sweet when fully ripe, unripe fruit is extremely astringent (will make your mouth pucker!). Persimmons are dioecious, meaning the trees produce either male or female flowers, and only female trees produce fruit.



3. Snags are dead or dying trees that are still standing. These snags are of great value to wildlife for both shelter and food. Many species make their homes in snag cavities, including raccoons, opossums, gray squirrels, flying squirrels, and many species of birds. Insects and fungi attracted to the decaying wood provide a good source of food for a variety of wildlife



4. Spicebush dominates the understory in this area. The red fruits of this native shrub provide food for wood thrushes, veerys and other songbirds. Spicebush is also a larval host plant for the spicebush swallowtail butterfly. White-tailed deer do not browse spicebush as heavily as many of our other native plants, as it is not a preferred food. Perhaps the aromatic leaves have an unpleasant taste to deer. This preferential browsing may aid spicebush in gaining dominance in areas such as this, where there is an overabundance of deer.



5. The MPEA is home to over a dozen species of ferns. Some, like the maidenhair fern seen here, are adapted to drier upland soils. While others, like the sensitive fern, prefer very moist soils. Ferns are not flowering plants, nor do they produce seeds. Ferns reproduce by spores. When the spores are ripe, and the spore case is dry, it will burst to release the spores for dispersal by wind. A spore that lands in a suitable spot with the proper moisture, shade and temperature will develop into a gametophyte. The gametophyte is a small, green, membranous body which eventually will put forth a new fern plantlet.



6. At this spot along the trail, there is a beautiful view of the Middle Patuxent River. This section of the trail follows an old road. The landscape shows evidence of old roads in other areas of the MPEA as well. Some of these were farm roads, while others were created when portions of the area were logged in the 1960's.



7. This is Cricket Creek. There are seventeen tributaries that flow into the Middle Patuxent River within the MPEA. Cricket Creek is the largest of these. Many species of wildlife depend on riverine habitats like those found in the MPEA. One of the more secretive animals that live along this creek is the mink. Minks are small and sleek-bodied, with dark brown fur. They are often out at night, and therefore seldom seen. The mink is an accomplished swimmer and spends much of its time hunting in ponds and streams. Its prey includes fish, snakes, frogs and young snapping turtles as well as rabbits, mice and chipmunks.



8. This small rock outcropping may be a good area to look for five-lined skinks. The five-lined skink is a medium-sized lizard (about 8 inches in length) with one of the most extensive ranges of any North American lizard. They are found throughout most of the eastern United States and west to Texas. Skinks have smooth, shiny skin and some have stripes – like those which give the five-lined its name. Five-lined skinks are woodland animals. They search for food on the forest floor, primarily small invertebrates, and bask on rocks or logs where sunlight penetrates the canopy.



9. These narrow clearings, through which part of the South Wind Trail runs, are sewer line right-of-ways. These are necessary to support the surrounding community. The right-of-way, under which the sewer line runs, must be maintained clear of trees. These clearings present an opportunity to research different management techniques for maintaining the right-of-ways. For example, they could be planted with native grasses. This would benefit wildlife and compete with the invasive exotics that threaten to choke out the clearing.



10. One of the dominant shrub species in this area is autumn olive. Autumn olive is a highly invasive, non-native species. This shrub can be easily identified by the silvery colored underside of its leaves. Autumn olive poses a serious threat to native biodiversity by forming dense stands at the expense of native vegetation. The characteristics that contribute to its ability to become a serious pest include prolific fruiting, rapid growth, adaptability to poor sites, and dispersal of the seeds by birds.



The white gourds, to your left out in the meadow, are 11. actually Purple Martin housing. East of the Rocky Mountains, martin colonies nest only in human-supplied housing like these gourds, or condominium-style martin houses. Thousands of years ago, martins nested in natural cavities in dead trees or in cliffs. It is believed that early Native Americans began an association with martins. Perhaps they discovered by accident that martins would nest in long-handled dipper gourds hung from a pole. The martins probably provided some benefit to the early Americans that caused them to continue a tradition of hanging gourds to attract them, such as chasing crows from their corn patches or just the entertainment of their songs. Today, providing Purple Martin housing in appropriate habitat is important to martin conservation. The Purple Martin housing in this meadow was made possible by a grant from the Howard County Bird Club.



12. This is Clegg's meadow - the site of the grassland restoration habitat management project. This area was once home to the River Hill Game Farm. In an effort to attract game birds to the area, and unaware of the ecological threat, managers of the area planted several acres of autumn olive. This was a common method of introduction for many of the invasive exotic plants found throughout North America today. Currently, the most common method of introduction is residential landscaping. As such, it is highly recommended that native plants be used. In the summer of 2001, approximately 7 acres were cleared and reseeded with native warm-season grasses. The grasses planted here include big bluestem, little bluestem, Indian grass, switchgrass, and eastern gamma grass.



13. This forested wetland area is an incredibly valuable asset to the diversity of the MPEA. There are many species of plants that require the saturated soil conditions of a wetland to survive. In addition, there are many animals that prefer wetland habitat for finding food and/or rearing their young. Wood ducks, Virginia rail, prothonotary warblers, and many species of frogs and toads may use this wetland area. In 2001, a local Eagle Scout built and hung several nest boxes to help us monitor wood duck usage of the area. Many other cavity-nesting species will benefit from these boxes as well. Wetlands also serve other critical ecological functions besides providing habitat for wildlife. These ecological functions include storage and slow release of water, filtering out pollutants like nutrients and sediment, high biological productivity, and decomposition and recycling of organic matter.