



Howard County

M A R Y L A N D

WELCOME TO OUR OPEN SPACE



"We have no liberty to do what we like with our natural environment; it is not ours to treat as we please... Since we hold it in trust, we have to manage it responsibly and productively for the sake of both our own and subsequent generations."



As with many endeavors, it takes numerous people and organizations to make a project the best it can be. The brochures in the Howard County Department of Recreation & Parks' Environmental Education Series are no exception. There are many corporate and organizational sponsors whose generous funding makes our education series such a success. It is this sense of community, of working together, that makes Howard County such an exciting place to live and to work.

Howard County Department of Recreation & Parks would like to thank the following organizations for making this publication possible:

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Maryland Ornithological Society, Inc. (MOS) Howard County Bird Club
www.howardbirds.org

Audubon Society of Central Maryland
www.centralmdaudubon.org

If you or your organization would like to sponsor one of our brochures in the Environmental Education Series, please contact:

*The Natural Resources Division
Howard County Dept. of Recreation & Parks,
7120 Oakland Mills Road,
Columbia, MD 21046-1677
410-313-1679*

Currently over 2,600 acres are protected within Howard County's Open Space system as a way of preserving the natural beauty, balance and function of our land both in our immediate neighborhoods and beyond to the Chesapeake Bay.



In a sense, the benefits we receive from Open Space are nothing new. Clean water, fresh air, wildlife and woodlands have been ours to enjoy since our region was first settled. Most of us remember chasing butterflies and playing in the woods and meadows as children. Open Space assures that our children and grandchildren will have the same opportunities.

What is new about Open Space is the way in which Howard County protects these valuable and beautiful portions of our natural environment. Since the mid - 1970's, all major residential developments have been required to set aside a percentage of their total land area as Open Space. Such important natural features as stream valleys, floodplains, wetlands, erodible slopes and forests are thereby protected. Additionally, this land provides wildlife habitat as well as areas for hiking, nature study and similar passive recreational use.

Open Space exists to provide the clean, natural surroundings which are a vital part of a healthy community.

The many benefits of open space



Improves water quality

Development has brought impervious surfaces such as pavement and rooftops which prevent the absorption of rainwater into the soil. Since a lawn absorbs very little water, extensive areas of mowed lawn further increase the volume and speed of storm runoff. This can result in dangerous flooding, serious erosion and heavy sediment loads in our streams and rivers. Lawn fertilizers, pesticides and other pollutants also wash away, causing such environmental problems as algae blooms in streams, fish kills in rivers and ecological degradation of the Chesapeake Bay.

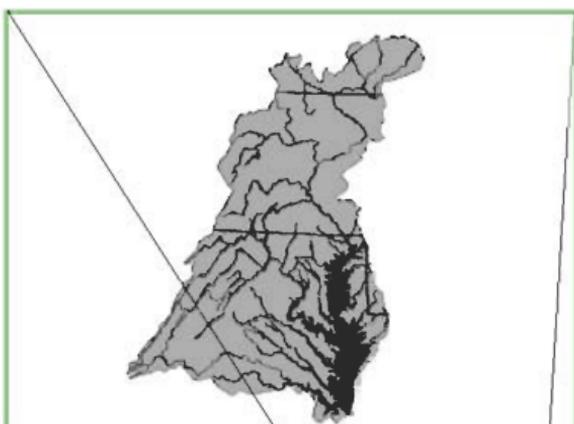
Floodwater control is a primary function of Open Space. Soils beneath a mature forest can absorb up to 14 times more water than the soil under a mowed lawn. The undisturbed vegetation on Open Space land reduces surface water flow which allows sediment and chemical pollutants to settle out or break down before reaching our streams and rivers. This protects aquatic life throughout the watershed and minimizes the risk of flood damage to our homes, roads and other facilities.

Open Space also has a direct effect on our drinking water supply. About 12,000 wells provide domestic water to many

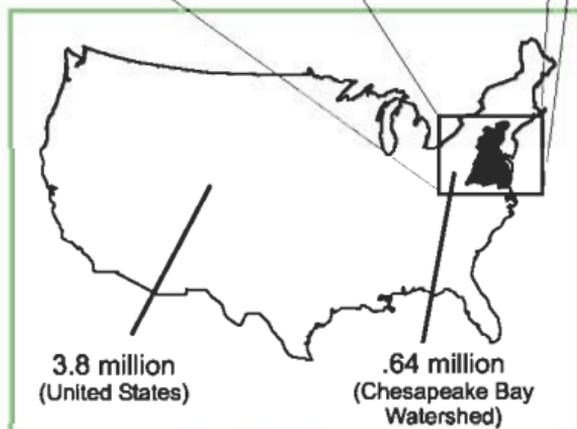
Because Chesapeake Bay Watershed's Population Density is High, Open Space is Vital

While the watershed of the Chesapeake Bay encompasses only **1.7% of the land mass** of the U.S. it contains **5.2% of the total population** of the country.

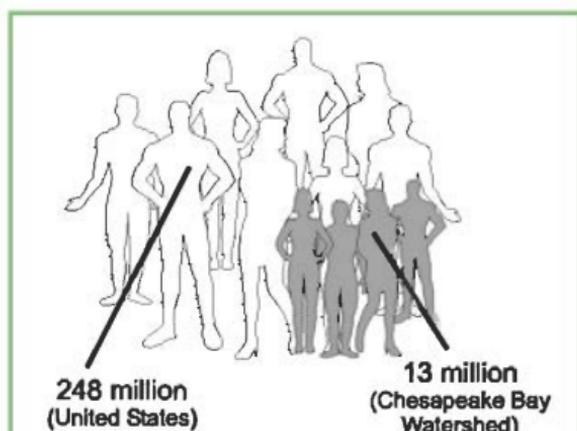
That is more than **3 times** the average population density.



Chesapeake Bay Watershed



Land Mass
(square miles)



Population

residents of the County. Of our total municipal water supplies, approximately 1.5 million gallons per day are drawn from the WSSC reservoirs on the Patuxent River. Howard County groundwater and the Patuxent's watershed are protected by the filtering which occurs as rainwater seeps slowly through the vegetation and undisturbed soils of Open Space land. (For more information please see the Department of Recreation and Parks' Brochure about forested stream buffers.)



Provides wildlife habitat

As Open Space provides a better life for us, it also provides essential habitat for native plants and wildlife. Just as human neighborhoods and communities vary, native plants and animals have different



requirements for the maintenance of healthy populations. While some species thrive in the suburban back yard, some need undisturbed expanses of forest, others need meadows or wetlands.

By providing a diverse array of these habitat types, Open Space gives wildlife a chance to thrive and enrich our lives.



Open space is for us to enjoy

No matter what your interests are, Open Space can provide that little place, just down the street, where you can relax and enjoy nature. Whether you are a bird watcher, amateur botanist or photographer, Open Space is for recreational uses which complement the natural resources protection mandates for which these lands exist. There are no fees or registration forms, no need for reservations. Just walk along, enjoy and be refreshed.

The future of Open Space: What's the plan?

Although the majority of Open Space land is set aside to protect our natural resources, there are various ways in which specific parcels of land are managed.

Much of the land is allotted to forested stream buffers, and is protected from mowing, building or other impacts. Where appropriate, reforestation increases the functional value of these important buffer zones (see water quality above). A healthy growth of native plants also helps reduce the occurrence of pest species such as Norway Rats, which are most common in areas which have been highly disturbed by human activity and refuse. During the past decade, the Department of Recreation and Parks has helped to plant tens of thousands of trees and shrubs as stream buffers around the County. Natural succession, the unplanned reforestation from naturally occurring seed, has also increased the forest cover along our streams and rivers.



Wetlands comprise a significant portion of the County's Open Space land. These marshes, swamps and shallow ponds are extremely

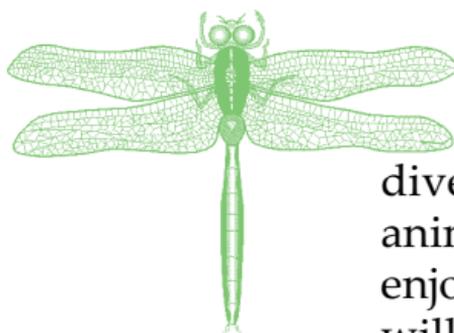


valuable as wildlife habitat, as pollutant traps to protect our waterways, and for preventing or reducing flood damage. Sometimes, the County has used Open Space land to create new wetlands. This may be done to mitigate for losses which were unavoidable elsewhere, or to

enhance water quality in storm water management systems. These wetlands are protected by federal, state and county laws, because of their great intrinsic value. Wetlands are extremely important resources providing numerous values to society including:

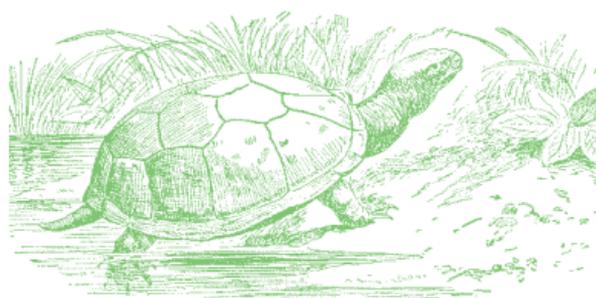


- fish and wildlife habitat
- aquifer recharge
- flood protection
- water quality enhancement
- erosion control
- sediment control



They offer a tremendous diversity of plants and animals which can be enjoyed by all who are willing to probe them

with rubber boots, field guides and binoculars.





Riparian Buffers

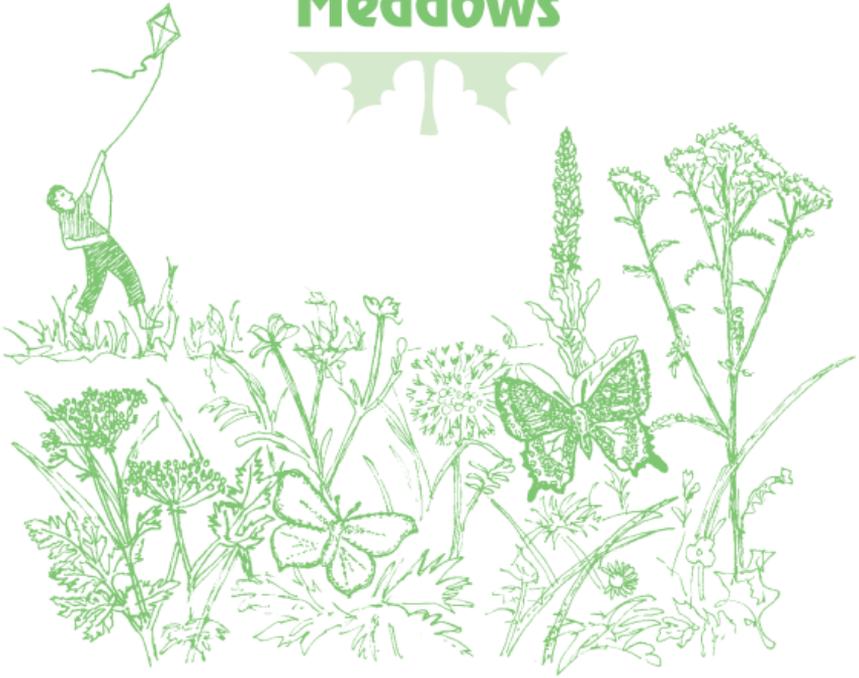
A riparian buffer is the area of transition between streams or other bodies of water and developed land. These areas can contain trees, shrubs, grasses and other native vegetation. They help to protect and enhance:

- water quality
- soil stabilization
- wildlife habitat
- air quality

Since 1988 the Natural Resources Division has planted miles of riparian buffers and is a major player in the Maryland Stream ReLeaf Program whereby the Governor has committed to planting 600 miles of riparian buffers by the year 2010.



Meadows



The management of these areas may include the planting of native species of grasses and wildflowers which are good sources of food and cover for birds, mammals and insects that may not survive otherwise. Backyard feeders may attract birds for viewing purposes, but planting and maintaining meadows provides suitable breeding and migration stopover habitat which help to ensure healthy populations for species such as bobwhite quail and the grasshopper sparrow. In order to maintain this type of habitat, a schedule of mowing every third year has been implemented so that this community of grasses and wildflowers is always renewed. These areas are well suited for relaxing walks and nature study. Many species of wildflower thrive in these sunlit meadows, blooming throughout the growing season.



Trails and pathways

Another way in which Open Space can meet our recreational needs is through the network of trails and pathways which is being developed throughout the County. Paved pathways for bicycling and walking now exist in several locations, and link up with Columbia's extensive pathway system. A multitude of unpaved hiking trails exist as well. These offer a more intimate view of nature.



Passive play areas

In a very small number of areas, communities are allowed to maintain County Open Space land as recreational play fields. Under specific licensing agreements with the Department of Recreation and Parks, incorporated homeowners associations can mow informal play areas for community get-togethers and picnics. A legal framework even exists whereby they may be able to erect approved playground structures if no public facilities are readily available. Generally, Open Space is not intended to serve as a community park or playground. Where the need is present, however, suitable parcels of land may be used for these purposes.



How do I find out about open space in my neighborhood?



Within Howard County, Open Space land is held and maintained by several different organizations. The Columbia Association owns most of the Open Space within New Town, and has its own management plans, regulations and policies. There are other homeowners associations which own Open Space within their communities, but the Department of Recreation and Parks owns the vast majority of the Open Space outside of Columbia. The Natural Resources Division of the Department of Recreation and Parks can assist you in identifying Open Space land in your area.

There are also several Environmental Education brochures available from the Department of Recreation and Parks which explain how easy it is to take better care of the natural resources around you. Look for them at any local library, or call the Natural Resource Division at 410-313-1679.



Summary



Howard County has a continuing commitment to providing a quality lifestyle and a safe, clean environment in which to live. As part of this commitment, the Department of Recreation and Parks

holds a network of lands which we call Open Space. Distributed throughout the residential areas of the County, these numerous and diverse lands provide a healthy, beautiful and fascinating environment for everyone to enjoy. As Howard County's population has grown, so has our network of protected Open Space. Currently, the County Open Space system includes over 2,600 acres of land which have been set aside as conservation areas and will never be developed for residential, industrial or commercial purposes.

There are many ways in which Open Space benefits us. Some of these are very tangible, like flood control, water purification and scenic beauty. Other benefits may be less direct, such as providing wildlife habitat, reducing pollution, and protecting the Chesapeake Bay. Some of these benefits cannot be measured, nor can they be replaced: the sound of birds singing as you wake up, the wind whispering through the trees, a child's fascination as tadpoles turn into frogs.



How you can help

First, you can enjoy the Open Space in your neighborhood. Walk there, relax there, feel at home in it. If you would like to become more involved in the County's efforts to promote nature in our residential areas, you could become a "Stream Team" water quality monitor or a volunteer in our Bluebird, FrogWatch, Checkerspot Butterfly or numerous other volunteer

programs. You may want to conduct a stream cleanup, or plant some native trees, shrubs or wildflowers on the Open Space in your community. These activities could provide you with a satisfying pastime while assisting us in our overall management of these lands. If you are interested in this type of volunteer endeavor, contact the Natural Resources Division (410) 313-1679 to receive more information.



Maryland Department of Natural Resources

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580 Taylor Avenue

Annapolis, MD 21401

410-260-8100

<http://www.dnr.state.md.us>

Chesapeake Bay Foundation

Philip Merrill Environmental Center

6 Herndon Ave.

Annapolis MD 21403

410-268-8816

<http://www.savethebay.cbf.org>

USGS Patuxent Wildlife Research Center

12100 Beech Forest Road, Suite 4039

Laurel, MD 20708-4039

301-497-5500

FAX 301-497-5505

<http://www.pwrc.usgs.gov>

Alliance for the Chesapeake Bay

6600 York Road

Baltimore, MD 21212

410-377-6270

FAX 410-377-7144

<http://www.acb-online.org>



The Howard County
DEPARTMENT OF
RECREATION & PARKS

presents the

Environmental Education Series

One of the goals of the Department of Recreation and Parks is to preserve a balance of ecological, natural and environmental values on Open Space land throughout the County. We strive to manage these areas in a way that will preserve their ecological integrity while making them available to the public for passive recreational use.

A key element in our management plan is public awareness and education. This brochure is one in a series of publications designed to educate the public on matters related to the conservation and preservation of our environment.

To help accomplish this goal, our staff is available to speak with various civic and community organizations and to assist with the planning and implementation of projects such as habitat enhancement, reforestation, stream walks/water quality monitoring, etc. It is our firm belief that only by working together can we fulfill the moral and civic responsibility with which we have all been charged... the stewardship of this land.