



Fact Sheet 701

Landscapes That Help the Chesapeake Bay

Water flowing from the landscape after rain or during irrigation can pick up sediments and nutrients that pollute streams, rivers, and the Chesapeake Bay. When you prevent pollutants from washing off your property you protect your local streams, rivers, and the Chesapeake Bay. The yard care practices that follow can lead to a healthier landscape and environment by preventing or minimizing pollutants from entering our waterways.

Keep Paved Areas to a Minimum

Hard surfaces don't allow water to soak into the ground. Water that drains off quickly takes pollutants with it and leads to stream channel erosion. If you are planning to install a walk or patio, consider using these materials:

- Gravel
- Wood chips
- Stepping stones
- Bricks or pavers on sand (without mortar)

Control the Flow of Water from Your Yard

- Maintain dense, healthy plant cover over your whole yard.
- Make the downspouts on your house discharge to grassy areas or planting beds where the water can soak in. Use splash blocks to soften the impact.
- Collect rainwater runoff from roof, in rain barrels, to water landscape plants.
- Take advantage of low-lying areas in your yard by planting plants that can tolerate "wet feet." Examples include

swamp milkweed, New England aster, boneset, joe-pye weed, cardinal flower, and New York ironweed.

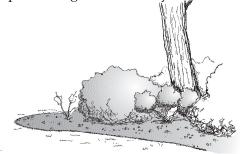
Use Planting Beds

Group plants in mulched beds instead of placing them individually around the yard. This technique gives a more natural look to the landscape and makes watering and weed control much easier.

Mulched planting beds

- provide an area to recycle yard wastes,
- protect plants from lawn equipment,
- moderate soil temperatures,
- conserve water,
- help control weeds, and
- add organic matter to soil.

Note: Do not pile mulch more than 2 inches deep. Also, avoid using shredded hardwood bark mulch on azaleas; instead use pine bark mulch. Over time, manganese builds up in the decomposed hardwood mulch. Azaleas are susceptible to manganese toxicity. If symptoms look similar to iron chlorosis but when tested and the soil pH is in the optimal range for azaleas suspect manganese toxicity.



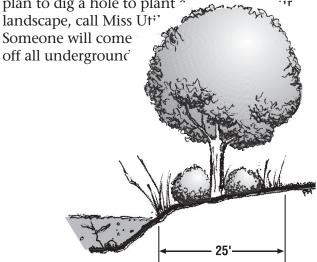
Mulched planting beds create a more natural look and provide beneficial areas for plants.

Rethink Your Lawn

Healthy turf does an excellent job of protecting soil, slowing runoff, and trapping pollutants, but the basic upkeep takes energy, time, and money. You can conserve all three in the following ways:

- Reassess your need for lawn area. Weigh the benefits of scenery, sitting areas, and play areas against the cost of maintenance. If you have more lawn than you need, consider making it smaller. Your needs will change as your lifestyle changes.
- Create planting beds. Fill them with flowers, ground covers, trees and shrubs; then mulch them. Use as many native plants as you can. They require less overall maintenance, and if planned well, the beds can provide four seasons of interest. Publication HG #120, "Native Plants of Maryland: What, When, and Where" (\$5.00), offers many choices of native plants and is available from the Home & Garden Information Center.
- Consider ground covers. In some parts of the yard, grass can be difficult or impossible to grow or to mow. An area may be too shady, too rocky, or too hilly. Often you can improve the conditions, but it may be easier to plant something more suitable for the site. Many ground covers are less demanding than turf. Table 1 has some good choices.

Avoid the possibility of damaging underground utility lines. One week before you plan to dig a hole to plant



Buffers protect the water supply and provide habitats for wildlife.

Table 1. Ground Covers.

Plant	Height	Light Conditions
Bearberry*		
Arctostaphylos uva-ursi	6-12"	s, psh
Bearberry Cotoneaster		
Cotoneaster dammeri	12-18"	S
Black Huckleberry**		
Gaylussacia baccata	18"	psh, sh
Blue Fescue*		
Festuca ovina v. glauca	6-8"	S
Bugleweed		
Ajuga repans	6-9"	sh
Warning: This plant is a rapid spreader	•	* -
close to natural forest areas where it can	ı easily displac	re native ground covers
Candytuft		-
Iberis sempervirons	6-12"	sh
Checkerberry or Creeping Wintergreen**		
Gaultheria procumbens	6"	sh
Christmas Fern**		
Polystichum acrostichoides	18-24"	psh
Creeping Juniper*		
Juniperus horizontalis	12-24"	S
Foamflower**		
Tiarella cordifolia	12"	s, sh
Lilyturf, Mondo Grass		
Ophiopogon japonicus	3-15"	s, sh
Liriope		
Liriope muscari	18"	s, sh
Maidenhair Fern**		
Adiantum pedatum	12-24"	psh
Mountain Stonecrop**		
Sedum ternatum	4-8"	psh, sh
Partridgeberry**		-
Mitchella repens	1-2"	s, sh
Wild Ginger**		
Asarum canadense	12"	psh, sh
Alleghany Pachysandra*		•
Pachysandra procumbens	6-12"	sh
, .		

s = sun, sh = shade, psh = part shade

Conserve Water

Water-saving landscape practices reduce runoff and help keep pollutants out of storm drains that empty into waterways feeding the Bay. Here are some ideas:

- Use plants adapted to this region. They can better withstand periodic drought. If a "problem" plant dies in your landscape, replace it with a native.
- Try xeriscaping, using plants that are extremely drought tolerant. Contact the Home and Garden Information Center for HG 25, the fact sheet on xeriscaping or a brochure on drought-tolerant annuals.

^{*} native to the U.S.

^{**} native to Maryland

- If you want certain plants in your landscape that require regular watering, group them so that you can water all of them at once and minimize waste.
- Use soaker hoses or drip-irrigation, instead of a sprinkler. The initial cost might be higher, but these devices do the job with much less water, and send the water right where it's needed.
- If you water your lawn, do so only when the grass shows signs that it needs water. The lawn will develop a blue-gray color and will leave footprints when you walk on it. Water to a depth of at least 4-6 inches. Light, frequent watering can actually damage your lawn. A newly seeded or newly sodded lawn must be watered regularly until it is established. Unless you have bluegrass, allow a mature lawn to go dormant during dry spells. Dormancy during dry weather is a survival mechanism and the lawn will usually recover when rainfall returns.

Leave Buffer Strips

If you live next to a stream, lake, or other body of water, consider leaving a 25-foot or wider strip of unmowed grass or woodland along the water. This will

- slow water runoff and soil erosion,
- filter water pollutants, and
- provide food and shelter for wildlife.

Deal with Pests Sensibly

Learn about Integrated Pest Management (IPM). You can reduce or eliminate the use of traditional pesticides in your home landscape and still have a desirable lawn or garden. The basics of IPM are:

 plant a variety of species to avoid widespread damage by a single disease or

- pest,
- use disease and insect-resistant plants, and
- monitor your landscape to catch problems early.

If your plants have problems, first consider their basic needs like proper pH, soil fertility, and drainage. Many potential pests don't need to be controlled. Learn to distinguish between minor damage and significant attacks. Try mechanical controls of pests and diseases such as handpicking, trapping, or pruning. If you decide to use a pesticide, choose the least toxic one with the shortest residual that will be effective. Learn to identify and appreciate beneficial insects. Contact the Home and Garden Information Center to request FS 62, "IPM: A Common-Sense Approach."

Conserve Energy

Emissions from burned fossil fuels deposit pollutants directly on Maryland waters of the Chesapeake Bay, and on the land where they can be washed into our waters. Actions taken at home to reduce energy usage and demand can help reduce pollution. Use a non-polluting reel mower to mow small areas. If a gaspowered mower is necessary, use an energy-efficient one with a cleaner burning engine. On air quality code-red days, avoid filling the gas tank and mowing during the hottest part of the day.

Homeowners can use trees to reduce energy consumed by heating and air conditioning units. Plant evergreen trees on the northwest side of the house to protect it from winter winds. Deciduous trees planted on the south and southwest sides block the sun during the summer and allow the sun to penetrate and warm the house during the winter.

Make Your Yard a BayScape!

The ultimate "Bay-friendly" landscape is a BayScape. Developed by the Alliance for the Chesapeake Bay and the U.S. Fish and Wildlife Service, the BayScapes Program presents a gradual plan for transforming a residential yard into an environmentally sound landscape that benefits people, wildlife, and the Bay.

References

Kissida, Gould, & Pitt. 1978. "Residential Landscape Design with Trees," Department of Horticulture, University of Maryland.

University of Maryland Cooperative Extension, Home and Garden Information Center. 2000. "Native Plants of Maryland: What, When and Where," HG#120.

University of Wisconsin Extension. 1993. "Yard Care and the Environment Series."

Reviewed by

Zolna Russell Landscape Architect Zolna Environmental Design Baltimore, Maryland

Revised by

Wanda McLachlan Area Educator Central Maryland Research and Education Center

Contact the Home and Garden Information Center by phone at 1-800-342-2507 or on the Web at www.hgic.umd.edu.

The Chesapeake Bay Trust provided total funding for this publication.

Landscapes That Help the Chesapeake Bay

by
Peter J. Ricciuti
Faculty Extension Assistant
Home and Garden Information Center

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, University of Maryland, College Park, and local governments. Thomas A. Fretz, Director of Maryland Cooperative Extension, University of Maryland.

The University of Maryland is equal opportunity. The University's policies, programs, and activities are in conformance with pertinent Federal and State laws and regulations on nondiscrimination regarding race, color, religion, age, national origin, gender, sexual orientation, marital or parental status, or disability. Inquiries regarding compliance with Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Educational Amendments; Section 504 of the Rehabilitation Act of 1973; and the Americans With Disabilities Act of 1990; or related legal requirements should be directed to the Director of Human Resources Management, Office of the Dean, College of Agriculture and Natural Resources, Symons Hall, College Park, MD 20742.

V2003