

UNIVERSITY OF MARYLAND E X T E N S I O N

Solutions in your community



Extension Bulletin EB-0370

Conservation Landscaping

Impervious surfaces are hard surfaces such as roofs, driveways, sidewalks, and roads. They prevent rainwater from being soaked into the ground which results in both water quality and quantity impairments. As impervious surfaces increase in a watershed, additional untreated stormwater runs off the landscape into local streams and rivers and eventually the Chesapeake Bay. In rain events, pollutants such as pesticides, fertilizers, pet waste, and oil are washed directly into our storm system and into local waterways. Large amounts of stormwater can also cause flooding and stream bank erosion that harms aquatic insects, fish, and animals that depend on the stream for their food and habitat. It is critical to find solutions to stormwater pollution that enhance the natural environment and promote healthy ecosystems.

How You Can Help?

Homeowners can take simple actions on their property to encourage rain to soak into the ground and reduce the amount of runoff leaving their property. These actions can reduce flooding, save money and decrease pollution in our local streams. One method to slow down and soak in stormwater runoff is to install a conservation landscape.

What is a conservation landscape?

A conservation landscape is a garden that improves water quality, promotes and preserves native species, and provides wildlife habitat. Conservation landscaping replaces some of the turf grass of a traditional lawn with native plants.

Benefits of Installing a Conservation Landscape

Conservation landscaping offers many benefits to the community and the local environment. The eight essential elements below represent the practice of conservation landscaping:

- Designed to benefit the environment and function efficiently and aesthetically for human use and well-being;
- 2. Uses locally native plants that are appropriate for site conditions;
- Institutes a management plan for the removal of existing invasive plants and the prevention of future nonnative plant invasions;
- 4. Provides habitat for wildlife;
- 5. Promotes healthy air quality and minimizes air pollution;
- 6. Conserves and cleans water;
- 7. Promotes healthy soils;
- Managed to conserve energy, reduce waste, and eliminates or minimizes the use of pesticides and fertilizers.

Steps to Install a Conservation Landscape

Step 1: Site Assessment

- Evaluate your property's sunlight, soil and moisture conditions to help you choose the right plants for the right place
- Consider your yard aesthetics and usage.
 Color, texture, and seasonability of plants should be weighed in planting choices
- Check with your local jurisdiction to see if there are rebates, incentives, and/or specific guidelines available

Step 2: Develop a Planting Plan

Choose native plants that are adapted to your local ecosystem. They will require less maintenance and water and will provide many ecological benefits over time.

Sample Conservation Landscape Plant List:

- Rudbeckia fulgida- Black eyed Susan (sun)
- Liatrus spicata- Blazing Star (sun)
- Aesclepias tuberosa- Butterflyweed (sun)



- Aster novae-angliae- New England Aster (sun)
- Panicum virgatum- Switch Grass (sun)
- *Polystichum acrostichoides* Christmas Fern (shade)
- Hydrangea quercifolia- Oakleaf Hydrangea (shade)
- Hydrangea arborescens- Smooth Hydrangea (shade)
- Chasmanthium latifolium- Sea Oats (shade)
- Carex pensylvanica- Pennsylvania Sedge (shade)

Step 3: Planting the Conservation Landscape

- 1. Outline planned garden area with spray paint or a string
- 2. Remove sod with a sod cutter or a spade
- 3. De-compact 9" of soil
- 4. Add 2" of compost and topsoil to mix
- 5. Plant native plants
- 6. Cover ground with 3" of hardwood mulch
- 7. Water deeply

Step 4: Maintenance

Conservation landscaping requires regular garden maintenance. However, landscaping with native plants requires less maintenance than traditional lawns and gardens.

Typical gardening activities include:

- Annual mulching (no more than 3 inches)
- Weeding (by hand)
- Watering (if more than 3 weeks without rain)
- Pruning (as desired)

*Remember pesticides or fertilizers are generally not necessary.

Additional Resources:

The Maryland Native Plant Society also lists native plant nurseries in the Mid-Atlantic region http://www.mdflora.org/publications/nurseries.ht ml

The Chesapeake Conservation Landscaping Council, Conservation Landscaping Guidelines: The Eight Essential Elements of Conservation Landscaping: <u>http://www.chesapeakelandscape.org/Guid1207%2</u> 0.pdf

U.S. Fish and Wildlife Service, Native Plants for Wildlife Habitat and Conservation Landscaping: Chesapeake Bay Watershed:

http://www.fws.gov/chesapeakebay/BayScapes/bsr esources/bs-nativeguides.html

Montgomery County Rainscapes Program http://www6.montgomerycountymd.gov/content/d ep/downloads/Rainscapes/MocoConservationLands caping.pdf



Before & After Conservation Landscaping Photo Courtesy of CJ Lammers



Amanda Rockler, Eric Buehl, Jennifer Dindinger, Jacqueline Takacs, Krisztian Varsa

This publication, Conservation Landscaping (publication number), is a series of publications of the University of Maryland Extension and Sea Grant Extension. The information presented has met UME peer review standards, including internal and external technical review. For more information on related publications and programs, visit: <u>http://extension.umd.edu/watershed</u> or <u>http://extension.umd.edu/topics/environment</u>. Please visit <u>http://extension.umd.edu/</u> to find out more about Extension programs in Maryland.

The University of Maryland Extension programs are open to any person and will not discriminate against anyone because of race, age, sex, color, sexual orientation, physical or mental disability, religion ancestry, national origin, marital status, genetic information, political affiliation, and gender identity or expression.