Maryland Native Plants

Backyard Actions for a Cleaner Chesapeake Bay

Flowering Perennials *(common and scientific name)*

Butterfly Weed *(Asclepias tuberosa)*
Cardinal Flower *(Lobelia cardinalis)*
Common Blue Violet *(Viola sororia)*
Eastern or Wild Columbine *(Aquilegia canadensis)*
Foxglove Beardtongue *(Penstemon digitalis)*
Goldenrod *(Solidago spp.)*
Hollow Joe Pye Weed *(Eutrochium fistulosum)*
Mountain-mint *(Pycnanthemum spp.)*
New England Aster *(Symphyotrichum novae-angliae)*
Phlox *(Phlox spp.)*
Spiderwort *(Tradescantia virginiana)*
Wild Bergamot/Bee Balm *(Monarda fistulosa)*

Shrubs *(common and scientific name)*

Blueberry *(Vaccinium spp.)*
Chokeberry *(Aronia spp.)*
Common Witch Hazel *(Hamamelis virginiana)*
New Jersey Tea *(Ceanothus americanus)*
Serviceberry *(Amelanchier canadensis)*
Spicebush *(Lindera benzoin)*
Viburnum *(Viburnum spp.)*

Trees *(common and scientific name)*

Black Cherry *(Prunus serotina)*
Eastern Redbud *(Cercis canadensis)*
Flowering Dogwood *(Cornus florida)*
Fringe Tree *(Chionanthus virginicus)*
Oak *(Quercus spp.)*
Red Maple *(Acer rubrum)*
Serviceberry *(Amelanchier canadensis)*

Maryland Department of Agriculture
Office of Resource Conservation
mda.maryland.gov/conservation

Maryland's Best Native Plants

UNIVERSITY OF MARYLAND EXTENSION
HOME & GARDEN INFORMATION CENTER
go.umd.edu/hgic

MASTER GARDENER
go.umd.edu/mg

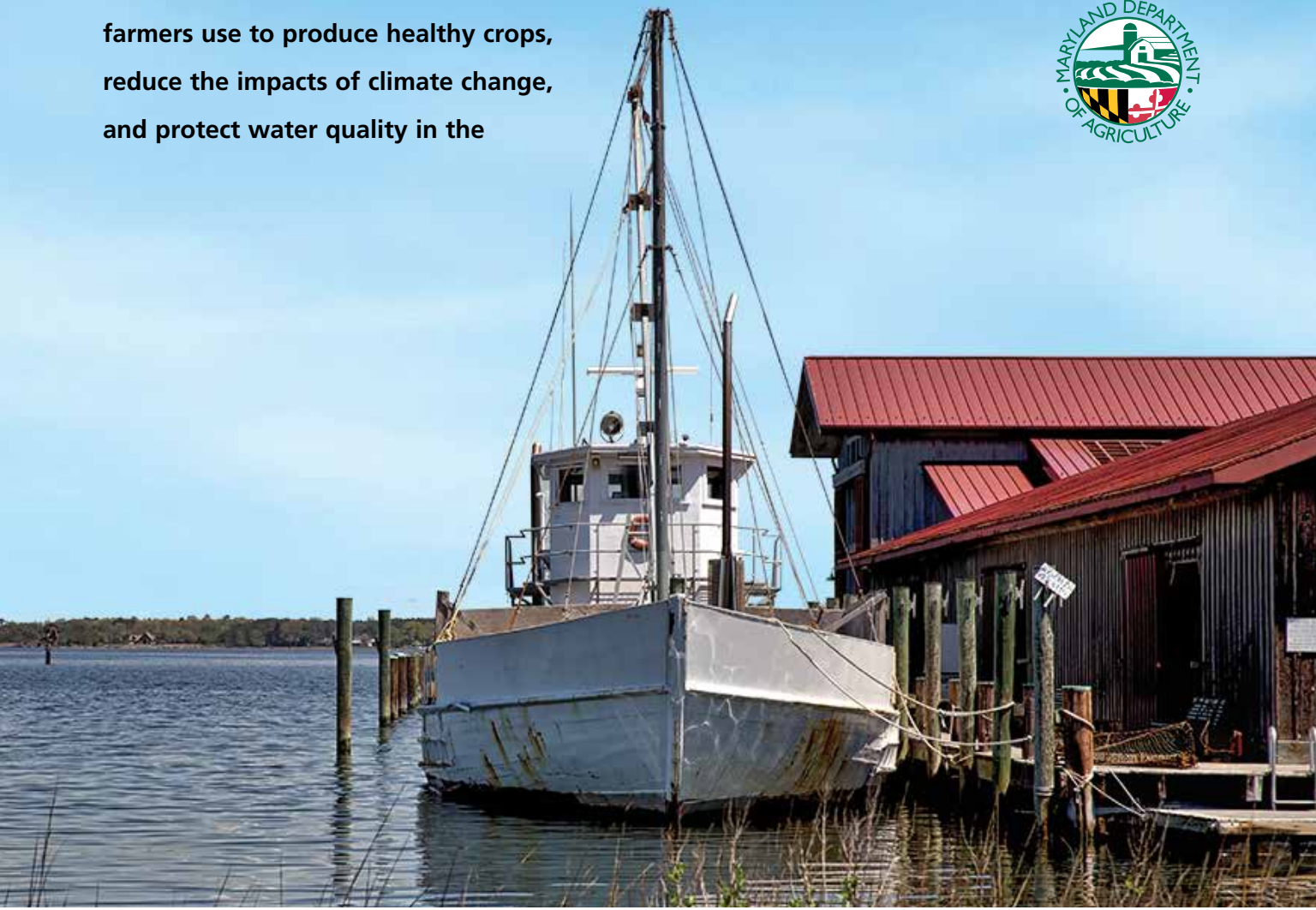
15.19.26 | Recycled paper

Includes Climate-Friendly Gardening Tips

MARYLAND DEPARTMENT OF AGRICULTURE

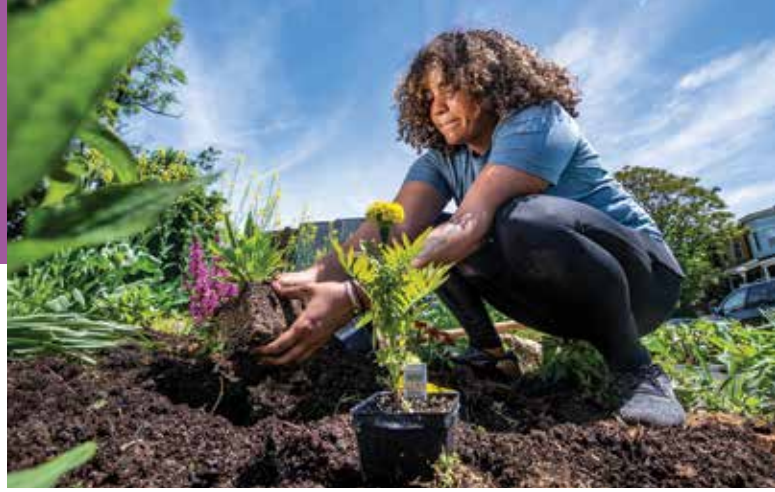
Like farmers, urban and suburban residents play an important role in protecting our soil and water resources —especially the Chesapeake Bay. Here are eight conservation measures—best management practices—that farmers use to produce healthy crops, reduce the impacts of climate change, and protect water quality in the Chesapeake Bay and its tributaries. Homeowners can apply these same conservation measures to home, lawn, and garden projects. Working together, we can make a difference for the Bay and local waterways.

MARYLAND DEPARTMENT OF AGRICULTURE



8 Conservation Tips *from Maryland Farmers*

1 try pesticide alternatives



Many farmers use an approach known as Integrated Pest Management to manage pests using a mix of cultural, physical, biological, and chemical controls. The aim is to keep pest populations at manageable levels using low-risk techniques before resorting to higher-risk options.

Biological Controls

- Encourage beneficial insects (pollinators and natural enemies of insect pests) in your yard by planting a variety of native flowers and herbs and limiting the use of insecticides.
- Plant native trees and shrubs in the surrounding landscape for bird habitat.
- Learn to recognize common beneficial insects so that you don't mistake them for pests.

Physical Controls

- Remove weeds and insect pests by hand after it rains.
- Install garden fencing or row covers to keep pests out. Remove row covers when plants start to flower to allow insect pollination.

- Use clean water sprays to remove pests, such as aphids and spider mites, from plants.

Cultural Controls

- Choose native plants or those that are resistant to pests and diseases.
- Choose plants that will thrive in the sun, soil, and water conditions of your planting site.
- Rotate vegetables to reduce annual pests and diseases.
- Remove diseased and dying plants.

Use Less Toxic Alternatives When Needed

- Help protect humans, pets, wildlife and beneficial insects by applying a pesticide only where it is needed. Do not blanket the spray over an area.
- Spray horticultural oils on dormant plants to kill overwintering insects and mites.
- Use insecticidal soaps to kill spider mites, whiteflies, and scale insects on contact.
- Use Bacillus thuringiensis (Bt) to control young caterpillars.

2 use fertilizers wisely

Every farmer knows that nutrients are essential for healthy crop and plant growth. Urban and suburban residents, too, have been quick to learn the benefits of fertilizers in sustaining beautiful lawns, gardens, and ornamental plants. But over-applying fertilizers is not good for plants or the environment.

Maryland's Lawn Fertilizer Law

This law limits the amount of nitrogen that can be applied to lawns and restricts phosphorus content in lawn fertilizer. The goal is to help residents and lawn care professionals maintain healthy lawns without applying unnecessary amounts of nitrogen and phosphorus.

- Hire only certified professionals to fertilize your lawn. Go to **mda.maryland.gov/fertilizer** for a list of trained and certified pros.
- If you are a do-it-yourselfer, read and follow all label directions on the fertilizer bag.
- A single lawn fertilizer application may not exceed 0.9 pounds total nitrogen per 1,000 square feet and 0.7 pounds of soluble nitrogen per 1,000 square feet except when using enhanced efficiency fertilizer.
- Visit **go.umd.edu/lawn** for seasonal and yearly lawn fertilizer recommendations.
- Keep fertilizer away from streams, sidewalks, and driveways. Clean up spills.
- Do not apply phosphorus to lawns unless a soil test indicates that it is needed or the lawn is being established, patched, or renovated.
- Do not apply lawn fertilizer between **November 16 and March 1**, when the ground is frozen, or if heavy rain is predicted.
- Do not use fertilizers to de-ice walkways and driveways.

Get Your Soil Tested

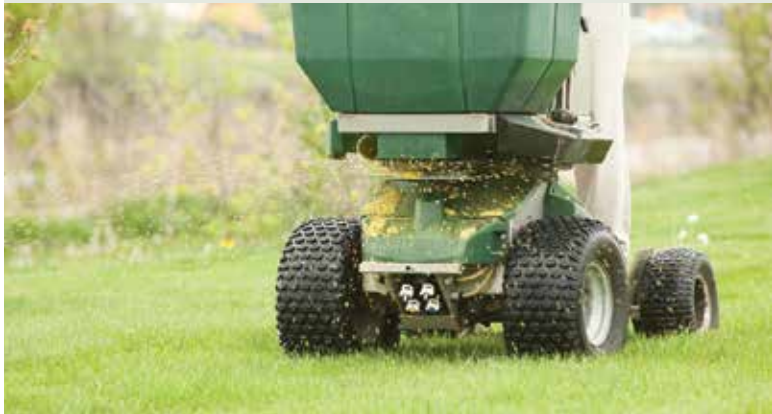
Farmers test their soil to determine the precise amount and type of fertilizer needed for a healthy crop. This helps prevent excess nutrients from polluting waterways. Visit **go.umd.edu/lawn** for soil testing information and a video on how to take a soil sample.

Understanding Fertilizers

Fertilizer packages are labeled with three numbers that indicate the percentage by weight of the three main plant nutrients: nitrogen, phosphorus, and potassium (N, P, K). Nitrogen promotes leafy top growth, phosphorus encourages root, flower, and fruit production, and potassium fosters hardiness and disease resistance. Apply only the nutrients needed according to the soil test results and never exceed University of Maryland recommended rates.

When to Test

- New lawns: test after grading, but before seeding.
- Vegetable gardens: test every three years.
- Established lawns, landscape plants, and perennial gardens: test every three years.

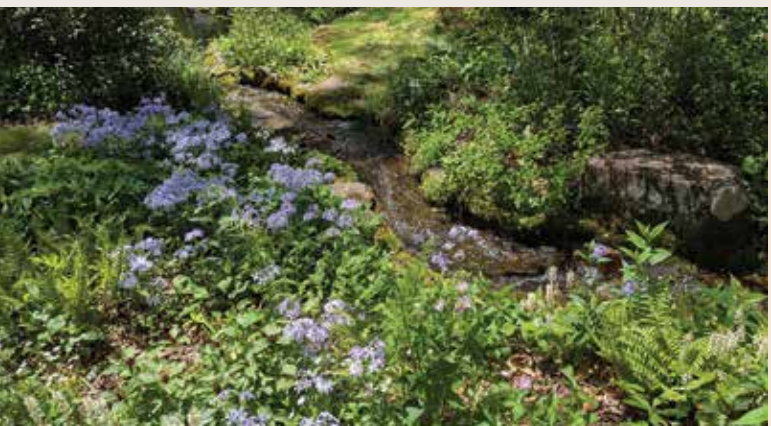


3 control soil erosion and rainwater runoff

Farmers use many methods to protect the soil from erosion. Cover crops and well-placed buffers of trees, shrubs, or grasses help keep soil and nutrients on farm fields and out of local waterways. A well-planned landscape can help prevent soil and nutrients from entering creeks and streams in your neighborhood.

Best Practices to Control Erosion and Rainwater Runoff

- Cover bare soil as soon as possible with new vegetation. Use mulch or wood chips in heavy traffic areas where vegetation cannot be reestablished.
- Use a splash block at downspout outlets to reduce soil erosion by water. Place stones at pipe outlets to slow down rainwater runoff and promote infiltration.
- Extend downspouts over lawns instead of directly into the storm drain system.
- Stabilize steep hills with terraces made of wood, stone, or landscape timbers.
- Plant native trees, shrubs, and ground covers as a buffer around your yard and in bare areas to soak up nutrients and reduce runoff.
- Use raised beds for gardens. Wood, brick, or metal frames help minimize soil erosion and runoff from your garden.



4 try composting

There are lots of ways to recycle. Farmers often recycle livestock manure as a safe and valuable fertilizer for their crops. Residents, too, can recycle leaves, grass, and non-meat kitchen scraps for use in the garden. Composting is easy, improves soil health, and makes a great fertilizer.

Getting Started

All organic matter will eventually decompose. Composting speeds up the process by providing an ideal environment for microorganisms to break down yard and garden waste. Microorganisms need three key elements to thrive: oxygen, moisture, and nutrients.

- Oxygen is supplied by turning the pile periodically or rotating a compost tumbler. This is one of the most important steps for making quick compost.
- Allow rain to provide moisture. Add water during dry spells and cover the heap during prolonged rainy periods. The compost should feel damp, not saturated.
- A good mix of nutrients is needed for proper decomposition. Mix browns high in carbon, (leaves, straw, and sawdust) with greens high in nitrogen, (grass clippings and vegetable scraps).

What to Compost

- Many materials can be added to a compost pile, including leaves, pesticide-free grass clippings, straw, shredded wood, old plants, potting soil, coffee grounds, tea leaves, and kitchen scraps (no meat, oils, or citrus). Avoid using weeds with seed heads, diseased plants, and meat scraps that may attract animals. Do not compost pet waste.
- Depending on the materials being composted and how often you turn the pile, most composted materials should be ready for garden use by the next growing season. The final product will look and feel like fertile garden soil.

5 conserve water

Every farmer knows the importance of conserving water. Today's crop irrigation systems are designed to minimize evaporation and maximize the amount of water that reaches crops. If you rely on the garden hose to keep your lawn green and your garden healthy, consider the following water-saving measures:

Become a Water-Wise Gardener

- Use a rain gauge to monitor rainfall and apply additional water to gardens or lawns only if needed.
- Let healthy, established fescue lawns go dormant during hot, dry spells. If you must water, do so in the early morning.
- Avoid wetting foliage in the evening. It encourages disease.
- Help prevent surface runoff. Don't apply water faster than it can be absorbed.
- Water newly seeded lawns with sprinklers. Trees, shrubs, and garden flowers can be watered with a soaker hose or drip irrigation system. A well-maintained rain barrel can capture rainwater for non-edible landscape plants.
- Check the soil in your garden or flower bed before watering. Wilting plants aren't always thirsty—they could be getting too much water. Dig down 4 to 6 inches to see if the soil feels moist and cool. If so, leave it alone.

Give Landscape Plants a Fighting Chance

- Look for signs of drought stress like wilted, curled, dull, yellowed, or brown leaves and undersized fruits and vegetables. These can indicate the plant is thirsty.
- Use undyed mulch to help the soil retain moisture and reduce evaporation to the atmosphere.
- Use native and drought-tolerant plants that don't require extensive watering.

6 plant cover crops

Don't let your garden sit idle after the harvest. Follow the lead of Maryland farmers and plant hardworking cover crops in your garden to control erosion, reduce nutrient runoff, and boost your garden's productivity.

Types of Cover Crops and What They Do

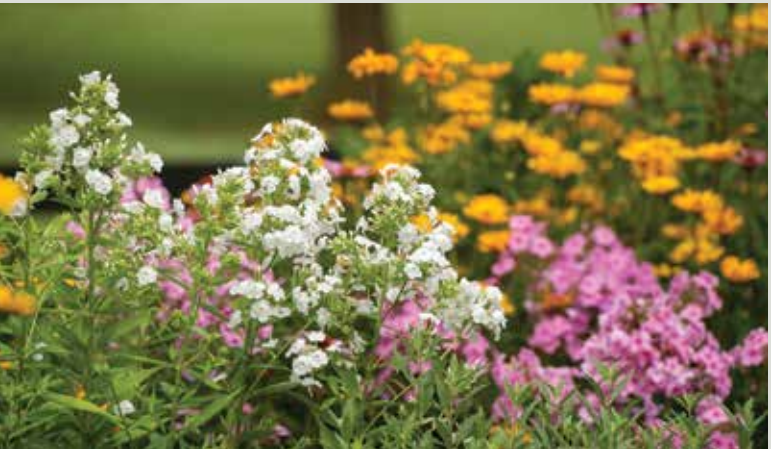
- Cereal grains (rye, wheat, barley, spring oats) are cold tolerant and their roots help break up compacted clay soils. They are excellent at recycling nitrogen left over from summer crops.
- Buckwheat is a fast-growing crop that is popular with pollinators. Plant it in spring or early summer to help control weeds and conserve soil moisture.
- Forage radish has a large taproot that can help create drainage channels in compacted soils.

- Legumes (crimson clover, southern peas, hairy vetch) take nitrogen from the air and convert it into a form that is used by plants.
- Mustards, kales, and rapeseed are fast-growing and produce a beautiful canopy of golden flowers when mature.
- Cover crop blends combine the best features of different types of plants into a single planting.

7 attract pollinators to your garden

Worldwide, pollinators—including birds, bees, butterflies, moths, beetles, and flower flies—are in decline due to many factors, but mainly loss of habitat. Maryland farmers know how important pollinators are to our food supply. They create habitat on their farms to support bees and other pollinators that plants need to produce seeds, fruits, and nuts. You can help, too, by growing plants that supply food, shelter, and water for pollinators.

- Start small and get creative. Any space can work, including balconies and porches, using containers or pots.
- Match the plant's mature height and spread to the size of the planting space.
- Aim to have something blooming in your space from early spring through late fall.
- Plant a wide selection of native flowering trees, shrubs, and plants with different heights, growth habits, and colors to attract different pollinators.
- Leave ground-nesting bees alone. Avoid fertilizers—most native plants are hardy and do not require additional nutrients.
- Reduce or eliminate pesticide use. Use alternatives and don't apply pesticides to actively flowering plants.
- Provide water for pollinators.



A Short List of Native and Beneficial Plants for Pollinators

Flowering plants and pollinators depend on each other for survival. Over time, flowers have adapted to attract specific pollinators. To support a wide range of pollinators, include a variety of plant types in your landscape. Here are a few plants that support different pollinators.

COMMON BLUE VIOLET

MOUNTAIN MINT

BUTTERFLY WEED

BLUE WILD INDIGO

GOLDEN ALEXANDER

NEW ENGLAND ASTER

BLAZING STAR

COMMON MILKWEED

Consider Shrinking Your Lawn

Turfgrass lawns provide little to no habitat for wildlife and often rely on costly chemicals that impact pollinators, beneficial insects, and aquatic life. By reducing the size of your lawn and planting pollinator-friendly alternatives, you will support wildlife while adding color, texture, and curb appeal to your home. Here are some tips on shrinking your lawn:

- **Start small:** Select one or two areas to convert and work from there.
- **Create pathways and borders**, so neighbors can understand your intentions.
- **For planting ideas**, visit **extension.umd.edu/hgic.**
- **Most nurseries** now have native plant sections and staff to help you.

8 practice climate-smart gardening

Marylanders are familiar with the effects of climate change. Warmer winters and hotter summers have caused trees to bloom earlier and hang onto their leaves later. New and aggressive garden weeds are out-competing native plants for nutrients and sunlight. Farmers are using regenerative practices to make their farms more resilient. You can do the same.

Reduce Your Lawn's Carbon Footprint

- Use a battery-powered, or electric corded mower to cut your grass.
- Don't over-fertilize. Follow Maryland's Lawn Fertilizer Law. Go to **mda.maryland.gov/fertilizer**.
- Plant lawn alternatives like native sedges, grasses, and groundcovers in areas where grass does not grow well.

Build Healthy Garden Soils

- Add compost to your lawn or garden.
- Practice no-till or low-till gardening to improve your soil's health.
- Plant a cover crop in your garden this fall.

Use Energy Efficient Landscaping

- Plant evergreen trees on the northwest side of your house to protect against winter winds.
- Plant deciduous trees on your home's west, east, and southwest sides to protect against heat and cold.
- Use plants to shade your air conditioning unit so it doesn't have to work as hard. Leave at least 3 feet of space around the unit on all sides to allow for good air circulation.

Other Ways to Reduce Your Carbon Footprint

- Start a vegetable garden.
- Buy locally grown foods.
- Compost food scraps to reduce methane emissions in landfills. Methane is a greenhouse gas that contributes to climate change.
- Replace peat, vermiculite, and perlite with more sustainable alternatives such as compost, biochar, rice hulls, or coconut coir.
- Plant a pollinator garden.
- Conserve water. Purchase a rain barrel.

Increase organic matter

Put away your tiller

Rotate crops each season

Plant a cover crop

Set up a drip irrigation system

Purchase a rain barrel

Plant drought-tolerant native plants

Use undyed or organic mulch