Native and Beneficial Plants For Maryland

Flowering Perennials (common *and scientific name)*

Adam's Needle Yucca . . . . . *Yucca filamentosa*
Bee Balm . . . . . *Monarda didyma*
Butterflyweed . . . . . *Asclepias tuberosa*
Cardinal Flower . . . . . *Lobelia cardinalis*
Eastern or Wild Columbine . . . . . *Aquilegia canadensis*
False Indigo . . . . . *Baptisia australis*
Foamflower . . . . . *Tiarella cordifolia*
New England Aster . . . . . *Aster novae-angliae*
Solomon's Seal . . . . . *Polygonatum biflorum*
Tickseed Sunflower . . . . . *Coreopsis tinctoria*
Virginia Bluebells . . . . . *Mertensia virginica*
Wild Geranium . . . . . *Geranium maculatum*

Trees (common *and scientific name)*

American Holly . . *Ilex opaca*
Eastern Redbud . . *Cercis canadensis*
Fringe Tree . . . . . *Chionanthus virginicus*
Hop Hornbeam (Ironwood) . . . . . *Ostrya virginiana*
Red Maple . . . . . *Acer rubrum*
Serviceberry . . . . . *Amelanchier canadensis*

Shrubs (common *and scientific name)*

Arrowwood Viburnum . . . . . *Viburnum dentatum*
Black or Red Chokeberry . . . . . *Aronia melanocarpa, arbutifolia*
Black Haw . . . . . *Viburnum prunifolium*
Highbush Blueberry . . . . . *Vaccinium corymbosum*
New Jersey Tea . . . . . *Ceanothus americanus*
Azalea Pinxterbloom . . . . . *Rhododendron periclymenoides*
Spicebush . . . . . *Lindera benzoin*

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Backyard Actions For A Cleaner Chesapeake Bay

Like farmers, homeowners play an important role in protecting our soil and water resources – especially the Chesapeake Bay. Here are five conservation measures – best management practices – that farmers use to protect the Bay. Homeowners can apply these same conservation measures to home, lawn, and garden projects. Working together, we can make a difference for the Bay.

Many farmers rely on a practice known as Integrated Pest Management (IPM) to control insects and weeds with fewer pesticides. IPM requires farmers to monitor their fields regularly to keep track of insect and weed populations. A range of controls – both natural and chemical – are used only if pests reach threatening levels or begin to cause serious crop or plant damage. Many of the options used in IPM are available through local garden shops, mail order catalogs, and the Internet. Here are a few to consider:

Physical Controls

- Remove weeds and insects by hand.
- Try placing a protective row cover on vegetables to form a physical barrier against insects.

- Wrap aluminum foil around young vegetable or flower transplants to stop cutworms.
- Wash away pests with water instead of pesticide sprays.

Beneficial Insects

Use good insects to keep bad insects in check. Encourage beneficial insects in your yard by planting flowers and avoiding the use of insecticides.

- Ladybugs and lacewings help control aphids, mealy bugs and some scales.
- Beneficial nematodes help control borers on ornamentals.
- Predatory mites help combat spider mites and thrips.

Preventive Measures

- Choose native plants or those that are resistant to pests and diseases.
- Select plants that flower and bear fruit at different times of the year.
- Rotate vegetables to help cut down on disease and insect problems.
- Plant flowers, herbs and vegetables together to help attract beneficial insects.
- Remove diseased plants, weeds and plant litter regularly.
- Place bird or bat houses in the garden.
- Use a floating row cover to protect vegetables from insect pests.

Pesticide Alternatives and Less-Toxic Sprays

- Handpick leaf-feeding caterpillars, sawflies and beetles.
- Use B.t. (*Bacillus thuringiensis*) to control young caterpillars.
- Spray horticultural oils on plants during dormancy to kill overwintering insects, mites, and their larvae. Oils may also be used during the growing season to control spider mites, aphids, and whiteflies on ornamentals.
- Use insecticidal soaps to kill a variety of pests, including spider mites, whiteflies, and scale insects.
- 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.

5 Conservation Tips From Maryland Farmers...

2 Use Fertilizers Wisely

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

Have Your Soil Tested

Farmers use soil tests to determine the precise amount and type of fertilizer needed for a healthy crop. This helps prevent excess nutrients from polluting waterways. Homeowners can get an inexpensive soil test from Maryland Cooperative Extension to help minimize runoff from over-fertilized lawns and gardens. Call the Home & Garden Information Center at 1-800-342-2507 to request a soil test kit and instructions on how to take a soil sample. You'll need a separate soil test for your lawn and your garden.

Understanding Fertilizers

Most fertility recommendations are made for nitrogen, phosphorus and potassium – the three primary plant nutrients. Generally, nitrogen promotes leafy top growth, phosphorus encourages root, flower and fruit production, and potassium fosters hardiness and disease resistance.

Using Fertilizers

Fertilizer packages are labeled with three numbers that indicate the percentage, by weight, of the three main plant nutrients. The order is always nitrogen, phosphorus and potassium. A 100-pound bag of 15-10-10 fertilizer, for example, contains 15 percent nitrogen, 10 percent phosphorus, and 10 percent potassium. Apply only the nutrients needed according to the soil test results and never exceed the recommended rate. Be careful not to spread fertilizer on sidewalks and driveways and keep in mind that fall is the best time of year to fertilize lawns.

When to Test

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

3 Control Soil Erosion

Farmers use many methods to protect the soil from erosion. Grassed waterways, winter 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 backyard can help prevent soil and nutrients from entering creeks and streams in your neighborhood.

- 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 down spout outlets to reduce soil erosion by water.
- Place stones at pipe outlets to slow down rainwater runoff and promote infiltration.
- Stabilize steep hills with terraces made of wood or railroad ties.
- Plant 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. Build frames from wood, bricks or blocks to 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. Homeowners, too, can recycle leaves, grasses 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 backyard wastes. Microorganisms need three key elements to thrive: oxygen, moisture, and nutrients.

- Oxygen is supplied by turning the pile periodically with a pitchfork. 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 containing carbon (leaves, straw, and sawdust) with greens containing nitrogen (grass clippings and vegetable scraps).

What to Compost

- Many materials can be added to a compost pile, including leaves, grass clippings, straw, shredded wood, old plants, potting soil, coffee grounds, tea leaves, and non-meat kitchen scraps. Avoid using weeds, diseased plants, and meat scraps that may attract animals. Pet wastes should also be avoided.
- Depending on the yard waste used and your vigilance in turning 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 the crop. If you rely on the garden hose to keep your lawn green and your garden lush and attractive, consider the following water-saving measures:

- Don't select grasses that need a lot of water. Tall fescue is both drought and pest-resistant.
- Water lawns infrequently but deeply. Footprints and a blue-grey appearance are signs of thirst.
- Whenever practical, water in the early morning.
- Avoid watering at night. It encourages disease.
- Help prevent surface runoff. Don't apply water faster than it can be absorbed.
- Water grass with sprinklers. Trees, shrubs and garden flowers can be watered with a soaker hose or drip irrigation system.
- 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 4 to 6 inches to see if the soil feels moist and cool. If so, leave it alone.
- Use mulch to help plants retain moisture and reduce evaporation to the atmosphere.
- Use native and drought-tolerant plants that don't require extensive watering.

(*See back panel*)