

Ecological gardening

By **Michelle Portman**/ Special To The Tab
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You can turn a yard into a wildlife-friendly, water-saving, low maintenance, naturally beautiful place without pesticides and chemical fertilizers. It might require a change of perspective.

Turf grass has become a staple of American life. The consensus seems to be that green grass lawns are a safe place for children to play, a haven away from stressful daily lives and a way to connect with nature and neighbors. But these turfs are far from a natural occurring phenomenon and usually aren't "safe" at all (see wording of sign above).

Americans' love of lawn stems, in part, from early English gardens, which incorporated grass as an art form. British landscape painters of the early 18th century entrenched this vision by painting vast expanses of grass lawns as the ideal living situation. European settlers brought these preferences to North America. Advertisements and television shows highlight lush green turf lawns and envious neighbors (e.g. "the grass is always greener . . ."), making many believe that this is the only option for an attractive yard.

In reality, expansive turf and tidy exotic planted beds are far from ideal. The application of pesticides—herbicides, insecticides, fungicides and rodenticides—and synthetic fertilizers needed to maintain lawns and many plant species present serious environmental and health risks. An alternative called "ecological landscaping" that minimizes the use of pesticides and fertilizers and maximizes the use of natural landscape elements suited to local climate and geography offers a wiser, practical alternative.

Ecological landscaping involves preserving native vegetation, landscaping with new native plants, shrubs and trees and if desired, adding non—invasive ornamentals that complement and do not out-compete native vegetation. A complementary approach—organic landscaping—uses no synthetic pesticides, fertilizers or soil amendments; its land care practices take into account the local ecosystem, benefiting the whole web of life. (Another definition of "organic" may confuse people: in chemistry, any molecule with a carbon atom is called "organic.")

Ecological and organic landscaping benefit not only the yard owner and user but the whole environment because what we put into our yards eventually ends up in the air, water and soil. The US Geological Survey's National Water Quality Assessment for the decade of 1991-2001 found detectable concentrations of pesticides in water more than 90 percent of the time across all streams sampled that had significant agricultural or urban land use in the watersheds. More than 80 percent of urban streams had concentrations in water of at least one pesticide that exceeded a water-quality benchmark for aquatic life set by the Environmental Protection Agency.

The advantages of ecological and organic landscaping are significant. Better wildlife habitat is created, thus helping to protect biodiversity. Native varieties usually require much less water and they can provide erosion protection, especially near bodies of water or on steep slopes. There is less noise and air pollution from lawn mowers, weed whackers and leaf blowers when these machines are used infrequently. Cost savings is a great benefit too, achieved through fewer inputs to the yard. Less obvious benefits are lower health risks from pesticides, fertilizers, and gasoline fumes.

The key principles of Ecological Landscaping are:

- a) maintain as much as possible of the pre-existing landscape, including soil, rocks and contours;
- b) integrate components with surrounding natural vegetation to rejoin native habitat;
- c) identify and remove non-native invasive plants;
- d) use native varieties of plants and ground covers that are appropriate for the soil type, moisture content, and climate conditions;
- e) use water-efficient/drought-tolerant plantings;
- f) provide plant species of varying height—grasses, flowers, shrubs, and trees—to provide food, hiding places, nesting and over-wintering sites;
- g) minimize the use of pesticides to control weeds, insects and rodents;
- h) use compost and other natural products for fertilizer and mulch.

More information: Ecological landscaping Association website: www.ela-ecolandscapingassn.org; MA Executive Office of Environmental Affairs booklet: More than Just a Yard: Ecological Landscaping Tools for Massachusetts Homeowners. www.Mass.gov/envir/mwrc/pdf/More_Than_Just_Yard.pdf, and www.organiclandcare.net (list of accredited organic landscape professionals from the Organic Land Care Committee of CT and MA).

Michelle Portman is an environmental planner/analyst and the author/illustrator of "Compost, by Gosh! An Adventure with Vermicomposting".

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