

Natural Landscaping: Native Plants



What is a Native Plant?

Native plants (also called indigenous plants) are plants that have evolved over thousands of years in a particular region. They have adapted to the geography, hydrology, and climate of that region. Native plants occur in communities, that is, they have evolved together with other plants. As a result, a community of native plants provides habitat for a variety of native wildlife species such as songbirds and butterflies.

What is a Non-Native Plant?

Non-native plants (also called non-indigenous plants, invasive plants, exotic species, or weeds) are plants that have been introduced into an environment in which they did not evolve. Introduction of non-native plants into our landscape has been both accidental and deliberate. Purple loosestrife, for example, was introduced from Europe in the 1800's in ship ballast and as a medicinal herb and ornamental plant. It quickly spread and can now be found in 42 states.

In general, aggressive, non-native plants have no enemies or controls to limit their spread. As they move in, complex native plant communities, with hundreds of different plant species supporting wildlife, will be converted to a monoculture. This means the community of plants and animals is simplified, with most plant species disappearing, leaving only the non-native plant population intact.

For example, purple loosestrife colonizes wetland areas, replacing native plants unable to compete for available sunlight, water, and nutrients. Wetlands infested with purple loosestrife lose as much as 50% of their original native plant populations. This limits the variety of food and cover available to birds and may cause the birds to move or disappear from a region altogether.



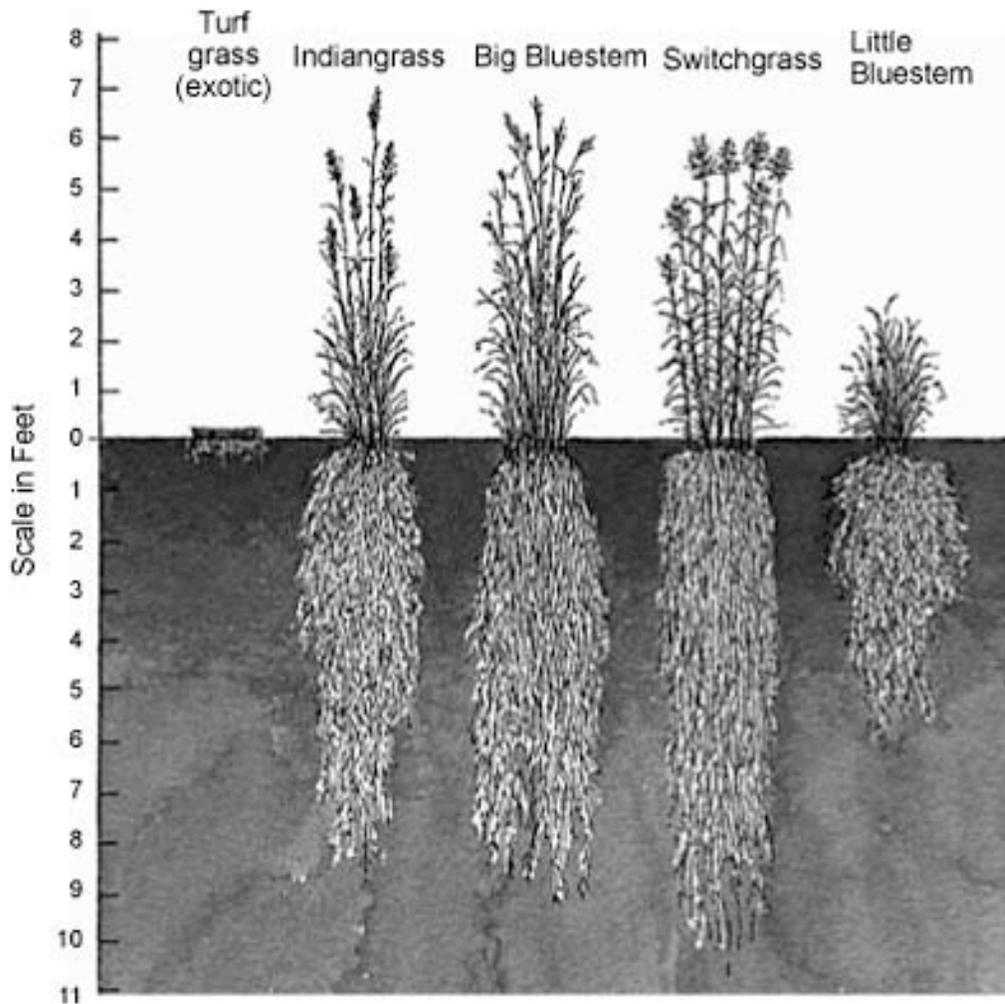
Why Should I Use Native Plants?

Native plants provide a beautiful, hardy, drought resistant, low maintenance landscape while benefiting the environment. Native plants, once established, save time and money by eliminating or significantly reducing the need for fertilizers, pesticides, water and lawn maintenance equipment.

Native plants do not require fertilizers. Vast amounts of fertilizers are applied to lawns. Excess phosphorus and nitrogen (the main components of fertilizers) run off into lakes and rivers causing excess algae growth. This depletes oxygen in our waters, harms aquatic life and interferes with recreational uses.

Native plants require fewer pesticides than lawns. Nationally, over 70 million pounds of pesticides are applied to lawns each year. Pesticides run off lawns and can contaminate rivers and lakes. People and pets in contact with chemically treated lawns can be exposed to pesticides.

Native plants require less water than lawns. The turf grass used in modern lawns requires significant amounts of water to thrive. In urban areas, lawn irrigation uses as much as 30% of the water consumption on the East Coast and up to 60% on the West Coast. The deep root systems of many native Midwestern plants increase the soil's capacity to store water. Native plants can significantly reduce water runoff and, consequently, flooding.



Native plants improve soil conditions. Through plant uptake, plants can bind nutrients and other pollutants, and remove water through evapotranspiration. Pathways for rainfall infiltration will be created through root development, which also contributes to a healthy soil structure. Each year, a part of the deep root mass of native plant dies off and decomposes. This annual organic matter deposition helps build soil organic carbon, which in turn helps the soil absorb more water. Soil microbes help bind together particles of sand, silt, and clay, along with organic matter, creating a more granular soil structure, which increases porosity and water holding capacity.

Native plants help reduce air pollution. Natural landscapes do not require mowing. Lawns, however, must be mowed regularly. Gas powered garden tools emit 5% of the nation's air pollution. Forty million lawnmowers consume 200 million gallons of gasoline per year. One gas-powered lawnmower emits 11 times the air pollution of a new car for each hour of operation. Excessive carbon from the burning of fossil fuels contributes to global warming. Native plants sequester, or remove, carbon from the air.

Native plants provide shelter and food for wildlife. Native plants attract a variety of birds, butterflies, and other wildlife by providing diverse habitats and food sources. Closely mowed lawns are of little use to most wildlife.

Native plants promote biodiversity and stewardship of our natural heritage. In the U.S., approximately 20 million acres of lawn are cultivated, covering more land than any single crop. Native plants are a part of our natural heritage. Natural landscaping is an opportunity to reestablish diverse native plants, thereby inviting the birds and butterflies back home.



The Monroe County Highway Engineering Department gratefully acknowledges the U.S. Environmental Protection Agency for content included on this webpage.