

Table 1. Comparison of Traditional Versus Nature Garden Designs

Traditional Gardens	<i>Designing With Natives Gardens (Backyard Conservation Design)</i>
<p>Large lawns do not support native plants, beneficial insects or animal species</p>	<p>Native plants provide food and shelter for moths, birds and butterflies, beneficial insects and other wildlife. The structure of trees, shrubs, grasses, perennial wildflowers and ferns create places for all wildlife to live and thrive. Our landscapes can provide excellent habitat and recycle as many resources as possible and need little chemical intervention. Nectar, pollen and seeds serve as food for native butterflies, insects, birds and other animals. . Non-native horticultural plants do not provide the right nourishment and energetic rewards for local and migratory visitors and often require insect pest control to survive. We can create habitat islands and large gardens with lawn only as pathways or places to play. Research by Dr. Doug Tallamy of the University of Delaware, determined that 90 percent of our native insects are specialists that feed on three or fewer families of plants. The insects rely on native plant hosts and cannot eat the exotic plants that have become common in our yards. A reduction of native insects means that birds have fewer insects to feed to their young, and that leads to a reduction of bird species. What we plant in our yards today will determine the kind of wildlife that can survive in the future.</p>
<p>Create environmental problems and fertilizer and pesticide pollution</p>	<p>Native plants are adapted to our climate and provide natural system services, free of charge. They increase habitat and water infiltration, control runoff and stormwater, increase carbon storage and energy conservation and, by reducing lawn area, native plants can minimize nutrient and pesticide use. Natural system services provide financial benefits that help reduce our cost of living.</p>
<p>Foundation beds around a house</p>	<p>Habitat patches that are bigger and closer to one another are generally better than those that are smaller and more isolated from one another. However, even small container gardens can attract and support pollinators.</p>
<p>Plants that are clones with predictable shapes and colors</p>	<p>Native plants are beautiful and showcase seasonal color, texture, scale and unity in any landscape. They create a symphony of colors, natural beauty, sounds and fragrances that change with each season. The beauty of a natural yard is the color and interest expressed on both a horizontal and vertical axis as seasons change.</p>
<p>Limited vegetation layering</p>	<p>Wildlife live at all levels of a forest and backyard design should try to create canopy, understory, shrub, perennial and groundcover layers with native plants to maximize wildlife habitat for a diversity of species.</p>
<p>Disturb the soils and make the place fit the plant</p>	<p>Right plant in the right place. Minimal disturbance of the soil is best. Nature’s success depends on plant associations and communities to grow and function together. How these function together can suggest a plan to follow in the garden. Native plants have adapted to and survived in the particular environments in which they are found or for which they have</p>

	<p>been bred. By considering the mini-environment of our garden and choosing plants that are adapted to it because the site type offers the right conditions, we can expect the plants to thrive. In some cases, it is easy to pair plant and place, in others, it may take a little more ingenuity and a little adjustment. However, the overriding rule we have adopted is that the plant should be able to fend for itself once set in an appropriate place. By doing this, we will have <u>plant communities that support one another and require less maintenance.</u></p>
Health	<p>Richard Louv, in his book <i>The Nature Principle</i> explains there is a growing body of evidence that contact with nature reduces stress and depression, reduces blood pressure, increases concentration, creativity and learning; and connects people to their community.¹ Native plants help reduce air pollution. Excessive carbon from the burning of fossil fuels contributes to global warming and native plants sequester or remove carbon from the air. This helps reduce the costs associated with asthma and other pulmonary diseases. Children who live in a tree-covered environment also have 24% 29% less chance of having asthma.²</p>
Maintain a manicured look	<p>Low maintenance. We can place plants where their natural attributes (such as soil moisture, sun, mature size and shape) are an asset to our design.</p>
Mass planting	<p>Aesthetically, massing of plants is an easy way to get what commercial landscapers would say is a good looking garden. Flowers clustered into clumps of one species will attract more pollinators than individual plants scattered throughout the garden. To attract pollinators, try to plant clumps of the same species within a few feet of one another. On the other hand, wildlife is better served by a diversity of plants. Choosing a variety of plants with overlapping and sequential bloom periods will provide food for pollinators throughout the season.</p>
Replace plants each year	<p>We can create native gardens that maintain themselves and grow old gracefully with us and are more rewarding than demanding.</p>
Artificial show case rather than a real place.	<p>A home should not be an escape from nature, but rather an intrinsic part of it. Contact with nature provides many health benefits and improves mood, happiness, creativity, interest in exercise, inspiration and stress management and relaxation. Planting native plants can help retain our natural history and the beauty and diversity of Penn's Woods.</p>
Expensive to maintain	<p>The deep root systems of many native plants increase the soil's capacity to store water. Native plants can significantly reduce water runoff and flooding. Proper infiltration of water enhances stream base flows that support aquatic ecosystems and groundwater recharge for water supply. Native plants need less maintenance, less plant replacement, do not require fertilizers and require fewer pesticides and less mowing than lawns.</p>

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