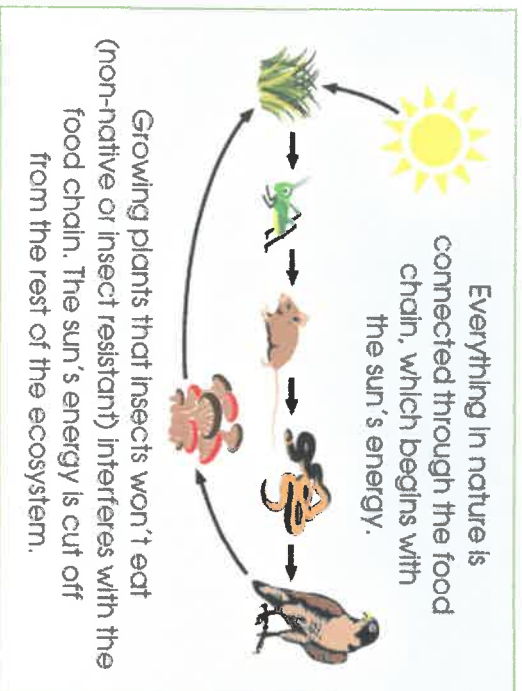


# Garden Plants & Design

## Connecting Visitors with Nature

### Why Plant Native?

When designing our home landscapes, we can and should consider the larger ecosystem of our neighborhood and community. Animals and plants in an ecosystem have evolved to be dependent on each other. By choosing native plant varieties, we are also choosing plants that will support the most wildlife, including many insects.



**"We will not keep our ecosystems running if we do not save the creatures that run them. To save local biodiversity, we must increase the amount and diversity of productive native plants in our neighborhood and corporate landscapes."**

- Doug Tallamy

### Bringing Nature Home

When choosing plant varieties, consider supporting all insects, not just bees and butterflies. Every insect has an important role in the food chain, with many larger species of birds and animals depending on them as a food source.

If you only have room for one tree in your yard, consider this example:



Photo courtesy of Tom DeGanne, University of Arizona, Bugwood.org

#### Red Oak

*Quercus rubra*, native to Wisconsin  
Supports 389 species  
of butterflies & moths



Photo courtesy of Melinda Board, University of Georgia, Bugwood.org

#### Ginkgo

*Ginkgo biloba*, native to China  
Supports 5 species  
of butterflies & moths

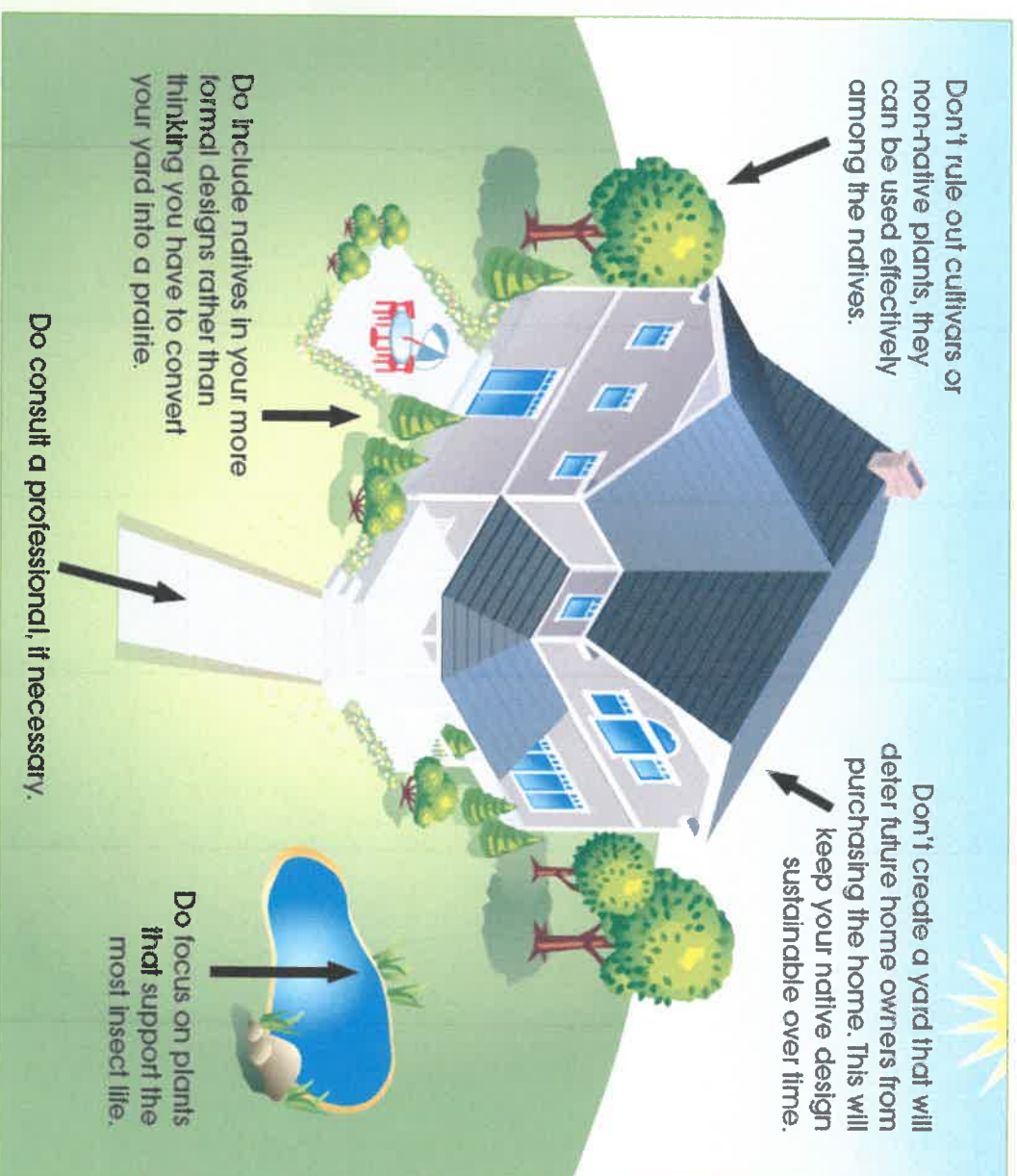
# Garden Plants & Design

Connecting Visitors with Nature

## Ecology vs. Society

Ecologists say we should plant native species in our landscapes to provide the most support to the greatest number of wildlife in the surrounding ecosystem. Society has pressured us to create a more manicured yard that fits in with our neighborhood expectations. The problem is, our native insects and wildlife are not familiar with the imported plants, so these home gardens provide little benefit to our environment.

Proper planning and design will result in a landscape that effectively supports insect populations and the ecosystem while also fitting within neighborhood standards.





## Storm Water Management

### What is storm water?

Storm water runoff is any water (rain or melting snow) that flows off building rooftops, pavement or other impervious surfaces, and is not able to soak into the ground.

### Why is it bad?

Storm water runoff is not clean water. It picks up and carries pollutants that can seriously harm fish and wildlife populations, kill native vegetation, foul drinking water supplies, and make recreational areas unsafe and unpleasant. Storm water runoff can also cause erosion.



Photo courtesy of <http://www.mnstate.edu/landscape.org>

### Why do we want to control it?

Managing storm water runoff is important to overall health of the environment. When the Donald J. Schneider Family Grand Garden was constructed, catching excess runoff and returning it to the natural environment safely was a top priority.

### How to control it?

Green Bay Botanical Garden uses infiltration basins (also called rain gardens), detention ponds and retention ponds. The Donald J. Schneider Family Grand Garden includes an infiltration basin which uses native plantings and special layered soils to help clean the water before it enters back into the ecosystem.

The methods used to control storm water runoff have changed throughout the years. Previous methods focused on using large pipes to catch excess runoff and dump it into bodies of water. Current methods are more environmentally friendly and focus on catching runoff, allowing solid particles to settle out, then returning water back to the natural environment.



Photo courtesy of <http://pacdc.wisc.edu>

## Rain Garden Plantings

You can do your part in helping the environment by controlling storm water runoff in your own yard and planting a rain garden.

Natural vegetation is preferred in storm water management areas. Use native plants, or cultivars of native plants, as they are best adapted to our climate. Choose plants that grow well in both wet and dry conditions, because the rain garden will be very wet at times and very dry at others. Native plants also reduce maintenance and enhance wildlife habitat.

### Plants used in this rain garden include:



**Baby Joe Dwarf Joe-Pye Weed**  
*Eutrochium dubium* 'Baby Joe'  
66 Insect species  
Photo courtesy of Ed Lyon



**Blue Fortune Hyssop**  
*Agastache* 'Blue Fortune'  
48 Insect species  
Photo courtesy of Ed Lyon



**Prairie Glow Brown-Eyed Susan**  
*Rudbeckia hirta* 'Prairie Glow'  
202 Insect species  
Photo courtesy of Mack Devier



**Wild Quinine**  
*Parthenium integrifolium*  
56 Insect species  
Photo courtesy of Ed Lyon

# Garden Plants & Design

Connecting Visitors with Nature

## Holistic Landscape Design

Landscape design is ever changing. Designers often choose and group plants based on their required sun exposure, flower color, foliage color and leaf texture.

Holistic landscape design incorporates these elements, but also considers the garden's place within an ecosystem. Holistic design encourages beneficial insects, provides flowers for pollinators all season long, and chooses plants that reduce the need for pesticides and fertilizers. It ensures a thriving garden that also enriches the environment surrounding it.

## Do the Most Good

When choosing plants for a holistic design, select the plant that meets your growing requirements and provides benefit to the most insect species throughout the seasons.



Spring  
**Smooth Penstemon**  
*Penstemon digitalis*  
44 Insect species  
Photo courtesy of Ed Lyon



Summer  
**Pale Purple Coneflower**  
*Echinacea pallida*  
57 Insect species  
Photo courtesy of Ed Lyon



Summer  
**Rattlesnake Master**  
*Eryngium yuccifolium*  
185 Insect species  
Photo courtesy of Ed Lyon



Fall  
**Snowy Goldenrod**  
*Solidago speciosa*  
50 Insect species  
Photo courtesy of Cad Kleier



**Sideoats Gramma**  
*Bouteloua curtipendula*  
21 Insect species  
Photo courtesy of Ed Lyon



**Little Bluestem**  
*Schizachyrium scoparium*  
40 Insect species  
Photo courtesy of Ed Lyon



**Indian Grass**  
*Sorghastrum nutans*  
19 Insect species  
Photo courtesy of Ed Lyon