



# BUILDING YOUR NATIVE PLANT TOOLBOX: Guidance for Extension Professionals

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## Public interest in native plants is growing.


As an Extension educator, you may be asked:

- *to define what plants are native to your area.*
- *to recommend native plants for home landscapes or garden centers.*
- *to advise on creating habitat for native pollinators and wildlife.*
- *where to find native plants and seeds.*
- *how to grow and care for native plantings in small or large landscapes.*

There are many resources you can draw upon to help you answer these questions, but curating these resources will help you deliver the best information possible for your unique location and clientele. Building a toolbox will help you deliver accurate and adaptable information for you and your clients.

## Native plant resources to include in your toolbox

 **A short, repeatable statement that speaks to the benefits of native plants for your location.** You might have a few statements that target different audiences, such as providing caterpillars for bird enthusiasts, larval host plants for butterfly enthusiasts, or pollinator services for agricultural producers. You might customize your statement by referring to particular wildlife or rare or challenging habitat in your region. Avoid telling people to plant natives INSTEAD of their favorite plants, but rather encourage them to do it IN ADDITION to their favorites. The exception would be for invasive ornamental plants known to spread into natural areas.

 **A list of native plants for your area - annuals, perennials, grasses, vines, shrubs, and trees.** The list is not meant to be exhaustive. A good start is to generate for your region a list of important species that support the life cycles of insects, especially pollinators and caterpillars. Below are a few resources. Evaluate these resources based on local knowledge.

### Sources for native plant species by ecoregion

#### National:

[Biota of North America Program](#)

[USDA Plants database](#)

[Flora of the Southeastern United States](#)

[Audubon's Native Plants Database](#)

[Xerces Society Pollinator Friendly Native Plant Lists](#)

#### Regional/Local:

State or regional native plant societies


Local native plant nurseries


Botanical gardens

Habitat restorations groups


Local herbariums


Conservation organizations

 **An inventory of nurseries and garden centers that provide native plants and/or native plant seed.** While local sources are preferred, some areas may be limited to mail-order providers. There are a few native plant providers that ship nationwide, but note that some plants grown outside your ecoregions and hardiness zone may not adapt well to local conditions. Sourcing plants from local ecoregions is important, but it may not be possible based on availability.

 **Guidance on the utilization of native cultivars as compared to straight species.** See the ANREP fact sheet titled USING NATIVE CULTIVARS IN LANDSCAPES: GUIDANCE FOR EXTENSION PROFESSIONALS.

## Native Plant Teaching Tools

 **Demonstration native plant garden.** A garden showcasing native plants allows the public to see how these species might fit into their own landscape. Native plant gardens are an opportunity to shift public mindset away from perfectly manicured landscapes, which often provide little habitat to wildlife. Native plant habitat principles to demonstrate include: native alternatives to common invasive plants; combinations of different native cohort species; design principles such as “right plant, right place”, layering, and successional blooms; specific host plants for insects; leaving the leaves and stems for overwintering insects; and using plants as “green mulch”.

 **Native seed collection and sowing demonstration.** Growing native plants from seed is important for getting experience with germination, techniques for breaking dormancy, and native seed collection protocols and ethics. Native plant propagation is an important skill for anyone providing native plant education. Obtain permission from property owners and learn how to collect native seed in the wild. Check local regulations regarding collecting seeds in the wild and do not collect seed from rare or endangered plants. Growing native plants is different from growing vegetables. Be familiar with how different seeds break dormancy and the best methods for growing native plants in your region. Consider maintaining a native seed library as access to native seed from local ecotypes is not available at home improvement and garden superstores.

 **A list of best practices for planting and maintaining native plants.**

- Learn habitat preferences for native plants. Adhere to “right plant, right place” principles.
- Plant a variety of species to create a diverse habitat. Aim for a combination of plants that bloom at different times of the year, serve as hosts for caterpillars, and include different flower shapes and colors to attract a diversity of pollinators. Incorporate trees and shrubs where space allows.
- Consider the mature size of plants. Many late blooming perennials can be cut back at the beginning of the summer to reduce height and the tendency to flop over. This practice is termed the “Chelsea chop” method and is helpful for maintaining a more traditional garden aesthetic.
- Be aware of native plants that might spread aggressively when placed in formal garden beds with amended soil and regular irrigation.
- Once planted in the landscape, native plants do not need fertilizer and should not be sprayed with pesticides or fungicides. Avoid plants that have been treated with a broad-spectrum pesticide (such as a neonicotinoid, a systemic neurotoxin).
- Native plant habitats are not maintenance free and will need watering, weeding, and monitoring especially in the first few years as plants become established.

### Additional resources

Maintain a list of native plant gardening resources. Below are a few examples:

- Incorporate Pennsylvania Native Perennial Plants into the Garden, [PennState Extension](#)
- Invasive Plants and Native Alternatives for Landscapes, [Rutgers Cooperative Extension](#)
- Native Plants and Ecosystem Services, [Michigan State University Extension](#)
- Native Plants for Montana’s Home Garden, [Montana State University MontGuide](#)
- Native Plants Habitats, [National Wildlife Federation](#)
- Native Plants for the Home Landscape, [University of Maryland Extension](#)
- Gardening to Conserve Maine’s Native Landscape: Plants to Use and Plants to Avoid, [University of Maine Cooperative Extension](#)
- Pollinator Friendly Native Plant Lists, [Xerces Society of Invertebrate Conservation.](#)