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RESOURCE GUIDE MEMBERSHIP



Native Plant

Container Gardening

May 17, 2021 | Blog



By Mervin Wallace

I began growing native perennials in containers for outdoor display about ten years ago, as various native plant colleagues of mine had suggested. At Missouri Wildflowers Nursery, we now have decorative pots, planted seven to eight years ago, which are still going strong. The successes and failures of these plantings, as well as information from grocery store gardening magazines, have given me some knowledge to share about gardening with natives in pots.

Like a prairie planting, native perennials in pots improve with age—at least to a point. The look of native plants grown in containers is much different than annual bedding plants in containers. Native perennials generally bloom for weeks, not months, so it is good to use plants, or plant combinations, with attractive flowers and foliage to provide visual interest throughout the growing season.

Many native perennials can grow large enough for one plant in the pot to provide a balanced look, like the narrow leaves of [prairie dropseed](#) or [oak sedge](#) shooting fountain-like up, out, and over a pot. Several equal-sized plants growing in the same pot will usually be smaller than they would be growing in the ground. It's a matter of preference whether to use one or more plants per pot. When using multiple species, be sure

to use plants with similar growing requirements. Plants that are naturally shorter are going to look better proportioned in a pot than tall ones, unless you have a very large pot.

Container Gardening Basics

Keep in mind that a plant in a pot is in a closed system and is dependent on someone to provide it with all its needs. A plant can't go beyond the pot in search of fertilizer and water unless a root makes it through the drainage hole into soil below, at which point it will suddenly begin to grow with abandon.

Containers: There are almost no limits to the kinds of containers to use. Some containers are definitely better than others for keeping plants outside year-round. Wooden containers are probably the least durable. Clay pots that look and feel porous are more likely to absorb water and crack or chip when frozen. Coatings of terracotta sealer on the inside and outside of a pot can protect it for several years. Shiny glazed pots don't absorb moisture and will last a long time, as will plastic and metal pots.

Potting Soil: Soil compacts too much over time, which limits the air supply to roots. Use a soil-less potting mix. Some good ingredients include rice hulls, pine bark, compost, Turface (a brand name soil additive), and a little fertilizer. It may be difficult, but try to avoid a mix containing peat. Peat is another carbon sink like coal and oil. It can remain stable in bogs for thousands of years. In potting soil, however, it quickly breaks down into carbon dioxide and water. Use real dirt in a flowerpot only if the pot will be holding an aquatic

plant.

Fertilizer: The potting soil you choose contains a limited amount of nutrients. Once the plant uses them, they'll have to be replaced. Yellowing leaves are often a sign of a fertilizer shortage, but not always. Chemical fertilizers such as Miracle-Gro® or Peters are safe if you follow instructions. Go easy with fertilizer. Too much can kill a plant. If you are experienced with a particular fertilizer, keep using it.

Mulch: Mulch can serve to cool the soil, hold in moisture, and add to the overall appearance. The potting soil shouldn't have weed seeds so a thick layer of mulch isn't needed to control weeds. Mulch can be organic like bark and many other plant products or inorganic like sand, gravel, rocks, marbles ...

Watering Do's and Don'ts: Don't follow a set schedule. The plants will be outside and will get rain occasionally. Small pots will need water more often than large pots, and as plants grow larger in a pot, they use more water. Water evaporates from a pot and the plant much quicker on a hot and/or windy day. Plants that stay too wet may develop yellow leaves and look a little droopy because their roots are rotting. Before watering pull some soil back with a finger to see if there is moisture an inch or two down. Water thoroughly enough to keep from having a wet top portion of soil with a dry bottom.

Winter Care: Most native plants are hardy enough to survive an average winter outside in a pot without the insulation of a garage or under a pile of leaves. Just leaving them on the ground or patio works. Our exceptionally cold winter last year killed a couple of potted plants left on a table—the others survived. As long as the pots are exposed to snow and rain

during winter, they need very little additional water—the exception being a long dry period in winter. Southern species like Spider lily, [American beautyberry](#), native bamboo, [passion flower](#), and [yellow passion flower](#) will not do well in a pot unless protected in an unheated greenhouse or garage.

Container Plants for Sun

Fame flower, also called [rock pink \(*Talinum calycinum*\)](#) is my favorite. Fame flower is typically found on glades in an inch or two of soil on top of solid rocks, so it is adapted to extreme conditions that most other plants can't tolerate. Those harsh conditions can be created in a pot, with sand or small gravel making an attractive mulch. Fame flower blooms from June to September with flowers usually opening in the afternoon. In mid-September the tops of the small succulent plants suddenly turn yellow and wither, leaving a thickened root with a bud or two at the surface. The plants seed profusely in pots, resulting in a carpet of foliage each year. I think they look best as a single species, but have also grown them with a cactus plant.

Prickly pear cactus (*Opuntia spp*): One of the problems with growing prickly pears in a garden is the weeds that occur in good soil and the issues of weeding a sprawling cactus. In a pot you can maintain dry conditions that are hostile for weeds, but ideal for a cactus. Use well drained soil in a fairly wide pot. To remove unwanted pads, with gloves or a kitchen utensil, twist them about 360 degrees until they break off. Mulch with sand or gravel for a more naturalistic look.

Agave or false aloe (*Manfreda virginica*): I grew this one in a

low, 10- or 12-inch pot several years until someone purchased it. It frequently flowered with a 3- to 4-foot stalk. Agave's leathery, sprawling leaves can form rosettes 12 or more inches across. Avoid tall or small pots. A heavy pot that is 10 or 12 inches across will provide a visual counter-balance for this plant and will probably hold this species up in a strong wind.

Prairie dropseed (*Sporobolus heterolepis*) is wonderful in a medium 12- to 18-inch pot. The thin, tan foliage can easily hang over to the bottom of a large pot. The dormant plant is attractive through the winter. In early spring, simply cut back the dead leaves and enjoy the new growth.

Aquatic Container Gardens

You can grow water plants in pots that hold water. Use real dirt (not commercial potting soil) for water plants. Add a little chemical or organic fertilizer toward the bottom of the pot. Allow room in the pot for a few inches of water above the soil. Ceramic pots that hold water need to be drained and emptied during winter or stored where they won't freeze. Plastic pots that slope outwards from the bottom up will not break in winter.

Water plants like [duck potato](#), [pickerel weed](#), [water canna](#), mud plantain, [arrow arum](#), and [lizard's tail](#) are good candidates for growing in pots. See Ann Wakeman's [Grow Native! "Missouri's Native Aquatics" article](#) in the summer 2014 issue of the Missouri Prairie Journal for more information on gardening with aquatic natives.

Plant Selection

I have more container gardening experience with plants that prefer some shade. My list of recommended plants for containers, therefore, is heavier on the part sun/part shade than sun, as you can see below. However, in recent years I have been successful with some natives that prefer sun, and I provide some observations about several of these species.

There are many native species not on this list—including trees and shrubs—that will perform miraculously in containers. I hope you try some of them and share your experience. Next I'm going to try [butterfly weed](#), [prairie dock](#) (in a large pot), [Indian pink](#), [Fremont's leather flower](#)...

- [Fame Flower or Rock Pink \(*Talinum calycinum*\)](#)
- [Prairie Dropseed \(*Sporobolus heterolepis*\)](#)
- [Agave or False Aloe \(*Manfreda virginica*\)](#)
- [Prickly Pear Cactus \(*Opuntia* spp.\)](#)
- [Thread-leaved Blue Star \(*Amsonia ciliata*\)](#)
- [Prairie \(Field\) Pussytoes \(*Antennaria neglecta*\)](#)
- [Pussytoes \(*Antennaria parlinii*\)](#)
- [Oak Sedge \(*Carex albicans*\)](#)
- [Coral Bells or Alumroot \(*Heuchera* spp.\)](#)
- [Leather Flower \(*Clematis versicolor*\)](#)
- [Dittany \(*Cunila origanoides*\)](#)
- [Garden Phlox \(*Phlox paniculata*\)](#)
- [Sand Phlox \(*Phlox bifida*\)](#)
- [Wild Sweet William \(*Phlox divaricata*\)](#)
- [Dwarf Crested Iris \(*Iris cristata*\)](#)
- [Solomon's Seal \(*Polygonatum biflorum*\)](#)
- [Jacob's Ladder \(*Polemonium reptans*\)](#)
- [Celandine Poppy \(*Stylophorum diphyllum*\)](#)

- Wild Ginger (*Asarum canadense*)
- Barren Strawberry (*Waldsteinia fragarioides*)
- Wild Stonecrop or Sedum (*Sedum ternatum*)
- American Jointweed (*Polygonella americana*)



Prickly pear cactus (*Opuntia humifusa*) paired with fame flower (*Talinum calycinum*) by Mervin Wallace



Sand phlox (*Phlox bifida*) by Carol Davit



Wild pink (*Silene caroliniana*) by Mervin Wallace



The contrasting foliage shapes of columbine (*Aquilegia canadensis*), ostrich fern



Pennsylvania sedge (*Carex pennsylvanica*) by Mervin Wallace



Container gardens in April by Carol Davit

(*Matteuccia struthiopteris*),
and Virginia
knotweed
(*Polygonum virginiana*)
provide a pleasing
patio or garden
focal point. By
Mervin Wallace



Container
gardens at Shaw
Nature Reserve
by Carol Davit



Containers call
attention to even
very common
natives. In a
meadow, the
beauty of
dogbane's foliage
(*Apocynum
cannabinum*) may
go unnoticed, but
it is lovely in a
container. Photo
by Carol Davit



Indian pink
(*Spigelia
marilandica*) and
columbine
(*Aquilegia
canadensis*) by
Carol Davit



Pickerel weed (Pontederia cordata), water lilies (Nymphaea odorata), and soft rush (Juncus effusus) in a water garden container. Photo by Carol Davit



Fremont's leather flower (Clematis fremontii) by Mervin Wallace

About the Author:

Grow Native! Professional Member **Mervin Wallace** founded his Missouri Wildflowers Nursery more than 30 years ago. In addition to selling millions of native plants and thousands of pounds of native seed since he began, Mervin has inspired other native plant businesses, countless gardeners, and wildlife enthusiasts to “grow native” through his pioneering work, tremendous knowledge, and his unquenchable love of native plants.

Feature Photo: [Agave \(Manfreda virginica\)](#) in the smaller pot by Mervin Wallace.

This article was originally published in the 2014

Fall/Winter *Missouri Prairie Journal*. [See the article PDF here.](#)

Learn more about container gardening in the below videos with Mervin Wallace at the Missouri Wildflower Nursery.

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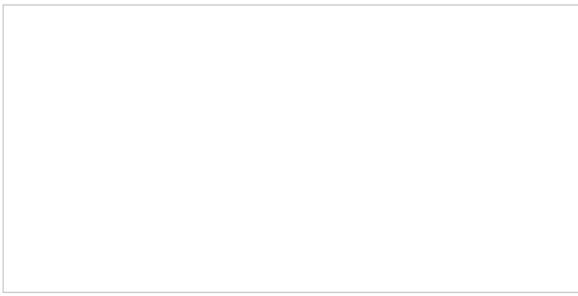
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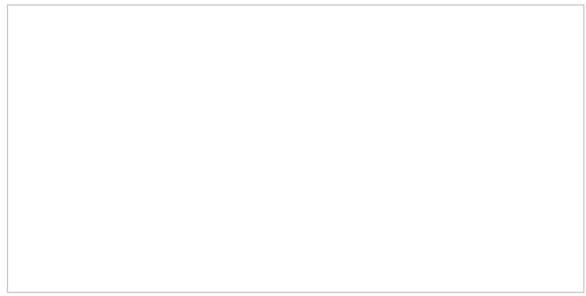
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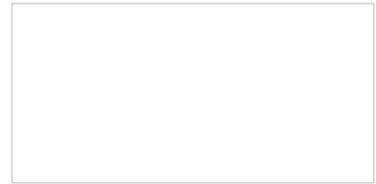
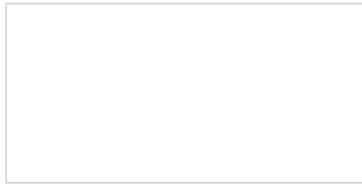
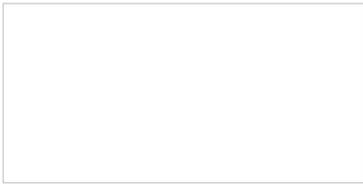
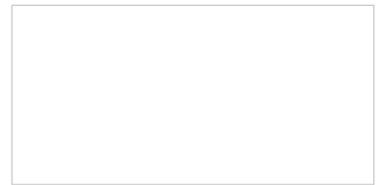
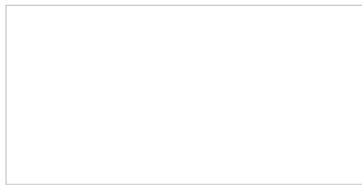
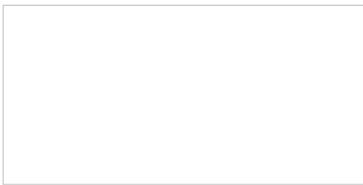


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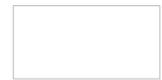
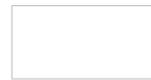
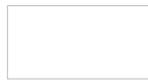
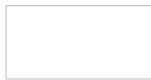
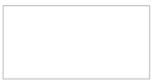


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