

From the Ground Up

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Get Ready for Fall: New Life for Your Expanding Perennial Garden!

By Michelle Harvey Erpenbach
Master Gardener



It was Albert Camus who said, “Autumn is a second spring when every leaf is a flower.” A French author and philosopher, Camus was the second youngest recipient of the Nobel Prize for Literature. He didn’t see fall in all the same ways gardeners do, but the quote fits.

Gardeners see the second spring in fall’s abundant opportunity to divide perennials and expand garden space. Perennials transplanted in fall develop extensive root systems before putting out new foliage in the next growing season. Experts suggest the ideal weather for transplanting is cool and overcast. It’s best to avoid planting during hot or windy periods. At the very least, try to provide some shading after planting.

Soak bare root plants in water for a half hour or so before planting. Water container grown plants before removing them from their container. Turn the pot upside down and slide the root ball out. Gently loosen those roots to give them the best opportunity for spreading beyond their tight pot shape. Fill the hole and firm the soil around the plant. Be sure the crown is at the soil line or a little above, to allow for settling.

A good liquid fertilizer is helpful at this point. As always, follow package instructions. After planting, apply a 2- to 3-inch layer of mulch without covering the plant’s crown. Transplants will need to be watered frequently until new roots are produced into the surrounding soil.

Friendly trades

Purchasing new plants for your garden is one way to expand your selection. Sharing with other friendly gardeners is an optimum (and less expensive) way to find new plants. When trading with friends, bring along a spade and a bunch of plastic shopping bags. For plants that will go back in the ground quickly, these sacks make the perfect throwaway planter and keep garden soil out of your car.



Given the weather we experience in southeast South Dakota, you can be fairly safe dividing and transplanting into the late fall. A little cold weather won’t harm a hardy perennial, and good mulching practices help conserve soil heat and moisture.

Many perennials need dividing after three years or so. It’s best to dig the entire clump, lift it out of the soil and divide into smaller clumps. Vigorous plant can withstand you taking a slice off with a sharp spade. With this option, the main clump of the plant stays in the ground. Certain root systems, such as those on daylilies, can be gently pulled apart by hand. Other roots, such as hostas, can be sliced apart using a sharp kitchen knife. Make sure each cutting has its own root system and at least a couple of leaves to give it a good start in its new location.

Some perennials (chrysanthemums, bearded iris) show signs of decline as a clump grows. Transplants from the clump’s center often grow poorly and bloom sparsely. To divide mature clumps, select only the vigorous outer edges of the clump and discard plants from the center. Divide the plant into clumps of three to five shoots each.

Some perennials are best left in place and not divided; examples include: baby’s breath, blue wild indigo, gas plant, goat’s beard, globe thistle, and sea holly.



Party at the Gardens



Mark your calendar: McCrory Garden Party. 5 p.m. until dusk, Friday, Aug. 17, 2007. Director of McCrory Gardens, David Graper says that “the garden party is one of our best times of the year, as far as color in the garden. It’s about their [annuals] peak time of year typically. For those who want to see some of the latest and newest plant materials, this is the place to come. It’s nice to stroll through a garden on a summer afternoon, meet with friends and family, have some ice cream and enjoy



the band. Visitors can enjoy a relaxing evening away from the usual day-to-day kind of stuff.” And best of all, it is free. The McCrory Gardens comprised of botanical gardens and arboretum is located on the corner of 6th Street and 22nd Avenue in Brookings, SD (a few blocks west of I29).

Got Milkweed?

Butterflies, particularly monarchs, add color and movement to the garden. Monarch larvae feed exclusively on plants of the genus *Asclepias*, i.e. milkweeds. Common milkweed (*Asclepias syriaca*) is a native perennial plant abundantly found in the second half of the 20th century in corn and bean fields and along roadsides. You see milkweed less and less due to the destruction of habitat and increased control with



Butterfly larva

The milkweed is aptly named because of the milky sap found in its leaves, stems and pods. You can make your garden friendly to monarchs by eliminating gardening practices that affect butterflies like overuse of pesticides and increasing the number of nectar producing plants for adults and food plants for butterfly caterpillars.

For monarchs, milkweed is the plant of choice. The female monarch lays eggs on the milkweed. In 4 to 5 days, the larvae, yellow/white/black banded caterpillars, feed solely on the milkweed. And the monarchs are what they eat. The milkweed's "milk" or white latex is acidic and somewhat poisonous to many animals. Since a monarch caterpillar feeds solely on milkweed, it absorbs these substances, cardiac glycosides, into its body and stores them throughout its life. Consequently, the monarch and the milkweed taste awful to many of its predators. The milkweed's very fragrant, pink blossoms grow in large, rounded, umbrella-like clusters which provide nectar for adult monarchs.

Common milkweed is hardy in zones 3-8 and grows 2 to 5 feet high. Thriving in full sun to partial shade, it can be grown in all types of soil. Because it requires minimal amounts of water, milkweed makes a good addition to the xeriscape garden. The opposite, dark-green leaves of common milkweed are large, 6-8 inches in length and 2-4 inches wide. In autumn, flowers develop into spindle-shaped pods, 2-4 inches long.



Milkweed seeds



Milkweed Seedpod

When dry, the seedpods crack open to disperse fluffy clumps of silk with flat, brown seeds. The silk was used to fill life jackets in WWII and is still used to fill natural fiber pillows. Because the seeds easily become airborne, pods should be discarded before they dry to avoid the spread of plants to areas of the garden where they are unwelcome.

Native Americans had many uses for the milkweed: fiber for ropes and fishnets, medicine for wart removal and sweetener from the flower nectar. Be warned--the milkweed plant is mildly toxic and will cause vomiting and diarrhea if ingested. Also, the milky sap can cause irritation if it comes into contact with the eyes.

Other varieties of milkweed that adapt well to the garden are the orange flowered Butterfly Weed (*Asclepias tuberosa*), Yellow Milkweed (*A. tuberosa* 'Hello Yellow'), Blood Flower Milkweed (*A. curassavica*) and pink-purple flowered Swamp Milkweed (*A. incarnata*). Seed is available for these species as well as for common milkweed. **Photographs by Judy Sedbrook.**

August Dog Days To Do List

*If you have been trying to grow "the great pumpkin" for Halloween, early August is the time to do some pruning and fertilizing. Start by taking off all but one or two pumpkins from the vine. Pinch the ends off the vines to encourage development of the fruit already set on the vines.



*Cut strawflowers for dried flower arrangements when the blooms are only half open. Tie small bundles of the flowers together and hang them upside down in a well ventilated place to dry.

*Water the garden early in the day so plants can absorb the moisture before the hot sun dries the soil. Early watering also insures that the foliage dries before night. Wet foliage at night increases susceptibility to fungus diseases.

*Check on water needs of hanging baskets daily. Wind and sun dry them much more quickly than other containers. Push your finger into the soil about two inches down to determine if enough water is reaching the roots. If dry, water thoroughly.



*Clean up fallen rose and peony leaves.

*Remove sucker growth from trees.

*Pinch off onion flower buds from the top of the plants to direct all of the plant's energy into the developing bulb instead of seed production.

*Pick summer squash and zucchini every day or two to keep the plants producing.

*Remove old plants which have stopped producing to eliminate a shelter for insects and disease organisms.

*Many herbs self-sow if the flowers are not removed. Dill produce seeds that fall around the parent plant and come up as volunteers the following spring.

*To reduce the number of pests on your fruit tree for the coming year, practice garden hygiene by picking up and destroying all fallen fruit.

*Every weed that produces seed means more trouble next year. Control weeds before they go to seed. Weed, weed and weed.

*Do not add weeds with mature seed heads to the compost pile. Many weed seeds can remain viable and germinate next year when the compost is used.

*Late August, prune raspberry bushes. Removing old canes gives the new canes room to grow. Do NOT fertilize at this time as this will encourage new growth that will only be killed by fall frosts.

*Other activities for August: harvest rose hips for tea; plant ornamental kale for fall color. Visit your local nursery to view and buy late summer blooming perennials.

*Donate surplus vegetables to your local food shelter.



From the



Ground Up

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Thirsty Trees



As of this writing for those of you who are not watering lawns, you may hear crunching as you walk across the lawn and see lawn balding spots. KELO meteorologist, Jay Trobec, wrote in a July 19 forecast “that the Sioux Falls area and SE South Dakota are rated as moderate drought areas on the latest US drought monitor. The I-29 corridor, plus most of western South Dakota, are rated as abnormally dry. The southwest corner of the state is the worst, in a moderate to extreme drought situation.” Those who are paying attention to the

landscape may notice that in addition to lawns turning brown, many landscape plants are wilting. Without sufficient water, leaves begin to turn brown at the tips and far edges.

We are going to concentrate on the condition of trees in your landscape. Economically and environmentally, you are better off concentrating on maintaining the health of your trees and shrubs your lawn. For trees, drought conditions create more problems than just wilting leaves. Drought places stress on trees which makes them susceptible to opportunistic pathogens and insects. Although opportunistic pathogens are normally unable to infect a healthy tree, these pathogens can be severe and even fatal in a tree weakened by drought stress.

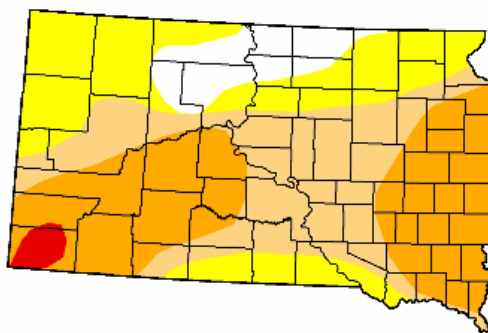
A perfect example of an opportunistic pathogen is the fungi *Nectria cinnabarina*. *Nectria* lives on the surface of many different plants feeding on dead organic matter and

U.S. Drought Monitor South Dakota

July 31, 2007
Valid 7 a.m. EST

Drought Conditions (Percent Area)

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|---|------|-------|-------|-------|-------|------|
| Current | 8.6 | 91.4 | 64.0 | 35.2 | 1.5 | 0.0 |
| Last Week (07/24/2007 map) | 11.3 | 88.7 | 33.8 | 9.0 | 1.5 | 0.0 |
| 3 Months Ago (05/08/2007 map) | 59.9 | 40.1 | 27.2 | 5.7 | 0.0 | 0.0 |
| Start of Calendar Year (01/02/2007 map) | 11.9 | 88.1 | 56.5 | 52.2 | 10.9 | 0.0 |
| Start of Water Year (10/03/2006 map) | 30.1 | 69.9 | 57.9 | 52.1 | 13.4 | 0.0 |
| One Year Ago (08/01/2006 map) | 0.0 | 100.0 | 100.0 | 92.2 | 66.9 | 21.4 |



Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements

<http://drought.unl.edu/dm>



Released Thursday, August 2, 2007

Author: Brian Fuchs, National Drought Mitigation Center

residue. This type of feeding does not hurt the plant in any way. BUT when a stress or injury occurs. *Nectria* seizes the opportunity. The fungus quickly moves into the injured tree and starts to colonize bark, cambium, and sapwood. Being a true opportunist, *Nectria* is not picky about what to attack. It can infect deciduous shade trees, shrubs and a few conifers.

Nectria lurks and grows unseen underneath the bark expanding when the tree is dormant during winter. These infections can girdle and kill the branch. Many gardeners may not realize that the dead branches they are see in the spring may be a direct result of drought combined with an opportunistic pathogen.

Infections caused by *Nectria cinnabarina* can be recognized by small spore-producing structures that push through natural openings and cracks in the bark of the infected tree in spring. These structures look like tiny cushions and are pastel colored when young, but turn dark brown or black as they age or after frost. Later in the summer, smaller orange-red bumps will push through the bark as well. Both of these structures will produce fungal spores that allow the pathogen to spread.

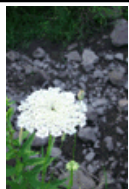
Much of the damage has already been done for those trees that are suffering from infection. Trees with dead branches should be examined for the cushion-like spore producing structures. Dead branches can be pruned out of the tree, but this should be done when conditions are dry. *Nectria* produces spores in response to rain or other moisture. A pruning cut is an open wound that could easily be infected by these spores.

After cutting out dead branches, pruning shears should be cleaned with a 1:10 solution of bleach and water. Infected trees should NOT be pruned or fertilized in late summer or fall. Pruning at this time causes a flush of new growth that is easily injured by winter temperatures and creates a perfect infection site.

Providing a stress-free growing season for all trees this year will help avoid future problems. If drought conditions occur, supplemental watering can help maintain the health of a tree for the current season and on into the future. Newly transplanted trees are especially susceptible to drought stress since their root systems have not had time to become established. For these trees create a 3 to 4 inch tall ring of soil around the area of the new tree. When watering, fill this area with water and allow it to soak slowly into the soil. New trees may need up to 3 inches of water per week (including rainfall) depending on soil conditions.

Even trees need supplemental water during drought. For mature trees, use a lawn sprinkler to water the area around the tree. A tree's root system can expand as much as 3 times the width of its canopy, and all of that area should be watered. Water until the top 8 inches of soil is wet. Wait to water again until the top 2 to 3 inches has dried. This type of deep, infrequent watering will encourage trees to develop deep roots that will support them in drier conditions.

Wounds from a lawn mower, trimmer or poor pruning practices expose parts of the tree normally protected by the bark. Other stresses like compacted soils can also create an opportunity for a pathogen to start an infection. With southeastern South Dakota's experiencing drought conditions, help your plants to some water, please.



Odds and Ends

By Crystal Stewart/ Extension Educator/Horticulture



There were a couple of questions that came up during the tour.

- **What is Queen Anne's Lace?**

Queen Anne's Lace, also known as wild carrot, is a member of the parsley family (Umbelliferae). The likely place of origin is the near east or central Asia, where carrots have been cultivated for at least 3,000 years. According to legend, the name Queen Anne's Lace was given to wild carrots after Queen Anne, bride of King James I, challenged the ladies of the court to create lace as beautiful as the flowers of the carrot.

It is very easy to grow Queen Anne's lace. Sow seed in fertile, sunny locations and the plant will flower in the second year. It re-seeds itself quite readily. Sometimes too readily!

- **There were several gardens with trees that had a lovely copper bark? What is it?**

The gardeners identified the tree as birch bark cherry. The botanical name is *Prunus serrula* and other common names are paper-bark cherry and Tibetan cherry. Its hardiness zone ranges from 5-8, which means that it usually needs to be grown in a protected area of the city. It blooms in the spring with pale pink to white blossoms. It can be grown in any fertile, well drained soil. Water needs are moderate.

One problem that we're seeing right now is tar spot on silver maple. This fungus leads to slightly raised, generally circular black spots on the upper sides of the leaf. Often these spots will have a yellow halo as well. Some leaves may fall from infected maples in the heat. Fortunately, this disease looks worse than it is. It will not negatively affect the health of the tree. Just rakes up infected leaves and dispose of them.

Sincerely,

Crystal Stewart
Extension Educator/Horticulture

Tar Spot



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