

Helpful Hints On Fall Garden Cleanup

BROOKINGS — The days are shorter and getting cooler, many gardens are worse for wear following the recent light frost. For gardeners wondering what to do now, Mary Roduner, SDSU Extension consumer horticulture field specialist has some answers.

"Fall cleanup can help with the success of your garden next year," she said, explaining that diseased plants left over the winter will provide fungal spores or virus particles ready and willing to infect the new plants.

"It is also a good idea to get as much done in the fall as possible because spring could be late, cool or wet again like it was the last two years."

Roduner said if gardeners choose to wait till spring 2015 to do garden cleanup; because they have to wait on warmer weather to work the soil, it may be too late for cool season crops.

When cleaning out the vegetable garden, Roduner encourages gardeners to follow these steps:

- Last veggies: First go through the garden to look for and pick anything that was missed earlier.

- "Sometimes a pepper or tomato will be hiding under plant material and survive a light freeze," Roduner said.

- If a gardener does not plan to overwinter beets or carrots in the garden, pull them and store in a refrigerator long term.

- Kale and spinach can be left in the garden.

- "If temperatures don't get too low, both will overwinter and give you a treat next spring," she said.

- Diseased plants: If there were any disease problems during the summer, pull these plants, roots and all; bag them and put in the trash.

- "Spores and virus particles will overwinter causing new plants to be infected much earlier than if the diseases have to move in with the weather or insect infestations,"



PHOTO: METRO CREATIVE GRAPHICS

Mary Roduner, SDSU Extension consumer horticulture field specialist, says fall cleanup can help with the success of your garden next year.

Roduner said.

All tomatoes, peppers and eggplant that show any signs at all of virus problems must be removed.

Powdery mildew spores will overwinter on soil protected by the leaves that fall and remain in place for the winter.

Squash plants are very prone to powdery mildew and need to be removed and put in the trash.

Roduner added that it is important to make note of where infected tomatoes or peppers were planted so that gardeners can avoid planting anything in the nightshade family in this location for the next six to 10 years.

- Plants that are not diseased: These plants are valuable organic matter for next year.

Gardeners can pull the plants and run a lawn mower over them so they are chopped into smaller pieces and spread over the ground on the garden. They will decompose over the winter, returning nutrients to the soil. These plants can also be composted and the finished compost used next season.

- Adding soil amendments: Fall is the best time to add amendments like well-rotted manure, leaves, compost and disease free garden waste.

All manure needs to be at least a year old to prevent root burning next spring. The type of manure is not as important as the age.

Chicken manure is known for being hot or very strong, so use caution with the amount applied.

In an average garden with good soil, about

1-inch per year of cow or horse manure or a half-inch of chicken manure is all that is needed.

"Too much manure over several years will cause salts to build up in the soil and plants will not survive," Roduner said.

Leaves are good organic matter.

Thicker leaves take longer to break down and help loosen heavy soil.

Whole leaves can be layered on the soil and pulled back next spring to let the soil warm and dry. These half decomposed leaves can then be used as mulch when the garden is replanted. Leaves can also be chopped with the mower and spread out. Chopped leaves will decompose faster and may not need to be raked off in the spring.

Compost purchased at local landfills can be applied at this time too. Several inches can be spread on the soil and allowed to continue decomposing over the winter.

Since decomposition uses nitrogen, don't forget to supplement with extra nitrogen when planting next spring.

- Tilling: Tilling in the fall is a personal decision; if the garden has heavy clay soil that needs amending to loosen it, tilling during fall cleanup will mix the mulch, compost or manure into the soil, speeding improvement.

If the soil has been improving over several years and has good tilth and is loose and feels soft to the touch a gardener does not need to till in the fall.

Amendments can be spread on the soil or worked in with either a hoe or fork.

Over tilling will break soil particles into very small pieces that remove air spaces and cause compacting.

"By following good soil amendment and care practices, some gardeners have given up tilling and are very pleased with the results," Roduner said.

No-till or layered gardening methods like lasagna gardening will improve soil and eliminate the need for tilling.

To learn more, visit iGrow.org.

Say Cheese



PHOTO: MCT

Rattlesnake master is a great native perennial that attracts pollinators.

On Gardening

Ingredients To A Camera-Ready Garden

BY NORMAN WINTER

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Rattlesnake master, common boneset and blazing star don't sound like the names of key ingredients to a garden that would bring out the camera, but that is precisely what is happening. These or just three that have helped create what some might consider a pollinator haven. Since they are plants that are for the most part native from Texas to Canada means that you can do it, too; your season of bloom just may be a little adjusted.

These plants are part of a cooperative demonstration Rain Garden at the Coastal Georgia Botanical Gardens, where I am director. While the garden might not make the cover of Fine Gardening it would certainly be worthy of being featured in a publication dedicated to bees and butterflies.

If you aren't familiar with the Rain Garden concept, picture a shallow, bowl-shaped plant bed that collects stormwater runoff from roofs, paved roads, driveways, sidewalks, and other hard surfaces. In our case the rain water runoff is from a large pavilion and directed to our small garden.

In the real world these hard surfaces often contribute pollutants such as fertilizers, pesticides, oil, and pet waste to the runoff, which is then washed into our coastal waterways. Stormwater runoff pollutants harm plants and wildlife and could contaminate our drinking water supply.

A rain garden's basin collects and holds stormwater for a short period of time, usually less than 24 hours. The soil absorbs the water and any pollutant particles. Plants like the boneset and rattlesnake master have roots that help filter out the pollutants while providing water to the stems and leaves. The water evaporates back into the atmosphere from the plants.

By using native plants like these, rain gardens provide



PHOTO: MCT

The Liatris or blazing star is also in the aster family and attracts butterflies like this Gulf Fritillary.

important habitat to a broad array of wildlife, including bees, butterflies, spiders, frogs, toads, lizards and birds. Even though our demonstration Rain Garden is small it is like a miniature zoo, creating excitement and photo opportunities for those of all age groups. Since these are natives that are adapted to the climate and soils, they require less water and need little or no fertilizers and pesticides which is a plus for the environment.

The common boneset is known botanically as *Eupatorium perfoliatum*. It looks like it is a white Joe Pye weed and reaches 6-feet tall blooming at what is the peak of our butterfly season. There are hundreds of bees and wasps hitting on the flowers but prized butterflies like the Great Purple Hairstreak, Red-banded Hairstreak and Buckeye are all visible.

This wonderful plant is in need of a Madison Avenue PR firm. The name boneset is just not marketable for such a butterfly magnet. On the other hand I suppose Rattlesnake Master won't make the cash register ring either. Does it prevent rattlesnakes, help you tame them or even perhaps attract them? The truth is this

plant was used to treat snakebites.

The one thing I can say is it is a plant of rare beauty. It is known botanically as *Eryngium yuccifolium*. It is actually in the carrot or parsley family and easily reaches 4 to 5 feet in height. The foliage does resemble that of the yucca. The flowers are incredible white round balls or globes that might resemble thistles. They are among the best for bringing in pollinators.

With the white boneset and white rattlesnake master flowers the large purple flowers of the blazing star is a great complement. The blazing star known botanically as *Liatris spicata* is often overlooked in the world of bees and butterflies but this aster relative related to Joe Pye and the boneset is ideally suited to the Rain Garden or the Backyard Wildlife Habitat.

Rain Gardens planted with the best and showiest plants native to your area combine the benefits of reducing stormwater runoff with the appeal and beauty of a garden. I hope you might give it a try. Follow me on twitter @CGBG-gardenguru.

Fall Lawn Weed Control

BROOKINGS — Fall is a good time to control tough lawn weeds.

"Good moisture in most areas of South Dakota this August set the stage for healthy fall growth of perennial weeds," said Paul O. Johnson, SDSU Extension Weed Science Coordinator.

Johnson said the weeds to target this fall include; dandelion, ground ivy, creeping bell flower, field bindweed and white clover.

Ground ivy is also known as creeping charlie and field bindweed is often referred to as creeping jenny.

"Results from the SDSU

WEED project tests show fall timing has the best chance for excellent control of dandelion," Johnson said. "Active new growth is important for good results."

Johnson explained that fall works best for perennial weeds as the herbicide moves better into the root. "If you wait until a light frost other plants in the yard are less sensitive to drift," he said.

He suggests letting the grass grow and delay mowing to get good growth prior to spraying. It is safe to begin spraying anytime in September.

For the toughest weeds, like ground ivy and creeping bell flower, Johnson said to make a repeat application two weeks after the first.

APPLICATION TIPS

Apply with care and use low pressure and coarse droplets to reduce drift. Do not make applications if it is windy. Most broadleaf lawn products are a mixture of herbicide ingredients. Check label guidelines in mixing and applying instructions.

To learn more, visit iGrow.org.



Welcome to the World

The following babies were born at Avera Sacred Heart Hospital in September 2014:

ALAN	BROGAN	HUNTER	KENNISYN	PARKER
ALLAIRA	CAMILA	JAKOVY	LARRIN	PERSEUS
AMELIA	CARAL'LYN	JASE	LIAM	SARAH
ANDREW	CARTER	JAXX	LILLIAN	SAWYER
ANNALEIGH	CLARA	JOHN	LINCOLN	SERENITY
ASHTYN	DESOTO	JORDAN	LUCAS	SILAS
ASPEN	EMMITT	JOSIE	MARLI	STERLENE
AZAYIAH	EZEKIEL	KAPRI	MASON	TRACE
BENTLEY	FABIAN	KAYDEN	MOLLIE	ZAILEY
BREYER	GRASON	KEILANI	OLIVER	
BRINNLEIGH	HAYDEN	KEIRA	PALMER	

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