

Plant Wise

IOWA STATE UNIVERSITY
University Extension

Mills County Extension
415 Main St., Suite 2, P.O. Box 430
Malvern, IA 51551
712-624-8616
<http://www.extension.iastate.edu/mills>

Prepared by Denise Fikes, Mills County Horticulture Assistant

April 2011

Springtime Revelation

By Jim Pease
Retired Wildlife Specialist
Iowa State University Extension



The snows have finally disappeared, the days are longer, and the grass is greening. Ah, spring! But, wait – what's this? Tunnels of dead grass all over your lawn? They seem scattered in some places, dense in others. Some end in foot-wide circles of dead vegetation. What has this winter left you?

What you have is evidence of a small native grass-land animal, the vole (a.k.a. meadow mouse). Only about 4 to 5 inches, long, including the tail, voles are dark brown in color with short, rounded ears that are mostly hidden by their fur. Their hair is fairly long for a mouse, and their tails are short, usually only an inch or two long. Most of their short life is spent on the ground or in tunnels within the top 2 or 3 inches of the surface. Females have several litters during the growing season and may have litters year-round if food is in abundance.

If you think you only have this problem every few years, you're right. Populations of voles go up and down quickly and regularly. In fact, the fluctuating populations of vole and lemming species in Canada are responsible for the

periodic winter appearance of such predator species as the snowy owl in Iowa. When there are few prey up north, the owls come south for food. Iowa vole populations also vary, likely influenced by weather, the abundance of food, and the number of vole predators such as hawks, owls, and foxes.

Iowa's two common vole species, the prairie vole and the meadow vole, look very much alike and have similar food habits. They may eat their own weight each day in grasses, seeds, leaves, bark, bulbs, shallow tubers, nuts, and other plant matter. Some food gets stored for the winter in their shallow tunnels. During the winter voles burrow beneath the snow at ground level, lining the tunnels with dead grass and leaves. The tunnels are often in heaviest concentration near a bird feeder, where the rodents feast on spilled seed, or in areas that have other seed supplies.

Does this mean your lawn is a goner? Likely not. These are winter tunnels, and as soon as the grass starts growing and the lawn mower predator starts growling, voles retreat to areas of longer, unmowed grass, shrubs, and weeds. They simply can't survive summers in your lawn. The surface tunnel areas will grow grass back readily in a healthy lawn. The foot-wide circles of dead grass can be raked and sprinkled with a bit of grass seed to enhance their recovery. Usually it's only a temporary problem for most homeowners.

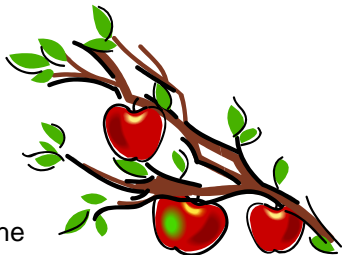
Voiles' girdling of young fruit trees in the winter, however, can be devastating and their appetite for young plants in a heavily mulched



garden can be equally destructive. Mulch is terrific at maintaining moisture for plants, but it also provides perfect vole habitat. Thus, young trees should not have mulch mounded up around their bases through the winter and must be protected by cages of ½-inch or smaller wire mesh or by tree tubes to keep the voles out. Mulching garden plants only after they are well established can deter voles from harvesting them. In addition, live or snap traps baited with peanut butter and placed near any quarter size holes you may see in the mulch will help manage vole numbers in your garden.

Pollination Requirements for Tree and Small Fruits

By Richard Jauron
Horticulture Department
Iowa State University



In the flower, pollination is the transfer of pollen from the anther to the stigma. After pollination and fertilization, fruit set occurs. There are two types of pollination. Self-pollination occurs when the pollen is transferred from the anther to the stigma on the same flower, from another flower on the same plant, or from a flower on another plant of the same variety. Self-pollinated plants are said to be self-fruitful. Many plants cannot produce fruit from their own pollen and are considered self-unfruitful. These plants require cross-pollination for fruit set. Cross-pollination is the transfer of pollen from one plant to the flower of a genetically different plant or variety. Pollination is an important factor when selecting and planting tree and small fruits. A list of pollination requirements for the various fruits is presented below.

Fruit Trees

Apples -- Apples are regarded as self-unfruitful. Most apple varieties will set a small crop with their own pollen. For maximum production, however, plant at least two different varieties with overlapping bloom periods to

insure cross-pollination and fruit set. Apple cultivars can be classified as early, mid, and late season blooming. The bloom periods of early and mid-season bloomers overlap, permitting adequate cross-pollination and fruit set. Good pollination can also be expected with mid and late blooming varieties. However, the bloom periods of early and late blooming varieties may not overlap, resulting in poor pollination. (Additional information on blooming times can be found in Pm-1052 "Tree Fruit Pollination" and Pm-453 "Fruit Cultivars for Iowa.") Most flowering crabapples will pollinate nearby apple trees if they bloom at the same time.

Apricots -- Few apricot varieties are reliably hardy in Iowa. 'Moongold' and 'Sungold' are hardy throughout Iowa and self-unfruitful. Plant at least one of each for proper pollination. 'Moorpark' can be successfully grown in central and southern Iowa. 'Moorpark' is self-fruitful.

Cherries, Sour -- Sour or pie cherries are self-fruitful.

Cherries, Sweet -- Most sweet cherries are not reliably hardy in Iowa. Most varieties are self-unfruitful. 'Gold' and 'Black Gold' can be successfully grown in central and southern Iowa. 'Gold' is self-unfruitful. 'Black Gold' is self-fruitful. ('Black Gold' will pollinate 'Gold'.)

Peaches -- Peaches are not reliably hardy in much of Iowa. Most peach varieties are self-fruitful.

Pears -- Most European pears are self-unfruitful. Plant at least 2 different varieties for maximum fruit production.

Plums -- Japanese plums are not reliably hardy in Iowa. However, European and hybrid plums can be successfully grown in the state. European plums are partially to entirely self-fruitful. Hybrid plum varieties (crosses between American and Japanese plums) are self-unfruitful. Plant 2 or more hybrid plum varieties to insure cross-pollination and fruit set. European plums will not pollinate hybrid plums and vice versa.

Fruit trees which require two different varieties for pollination should be planted within 50 to 100 feet of one another to insure good fruit set.

Small Fruits

Blackberries -- Blackberries are self-fruitful.

Blueberries -- Plant two or three different varieties for maximum production.

Currants -- Currants are self-fruitful.

Elderberries -- Elderberries are essentially self-unfruitful. Plant two or more varieties to insure good fruit set.

Gooseberries -- Gooseberries are self-fruitful.

Grapes -- Grapes are self-fruitful.

Raspberries -- Raspberries are self-fruitful.

Strawberries -- Strawberries are self-fruitful.

Home gardeners should keep these fruiting requirements in mind when selecting tree and small fruits for the home garden.

Early Spring Vegetable Garden Actions

By Jennifer Boussetot
Horticulture Department
Iowa State University



In just a few short weeks we will pass the frost-free date, May 10th, for most of Iowa. Then, gardeners will finally be able to plant warm season vegetables. In the meantime, your cool season crops can use maintenance.

The acclimation process can begin now for warm season crops that were started as seed indoors. On nice days put the starts outdoors in a protected area for a few hours at a time then bring them back in before evening. Avoid direct sun until the tender starts have acclimated to the relatively more extreme conditions present outdoors. Plants that are 'hardened off' early can withstand transplanting and other stresses more effectively.

Remember that it is good practice to rotate your vegetable garden every year. For example, if tomatoes or their close relatives in the Solanaceae family are grown in the same location for too long, they tend to build up disease and insect populations. At least a two or three year rotation with other crops will prevent these harmful buildups because pests are typically specific to either one or a few species within a plant family. However, exceptions apply for certain generalist pests.

The benefit of diversity in rotation is only one reason to branch out to cool season vegetables - they can also

tolerate light frosts. Some examples of cool season vegetables, which can be planted up to four weeks before the frost-free date, are broccoli, cabbage, lettuce, onions, peas, potato, radish, rutabaga, spinach and turnip. For those cool season crops, it might be time to thin the direct seeded varieties. Most gardeners tend to plant species with small seed at high rates. In the image to the left, the rows of radishes, spinach and rutabaga need to be thinned. Vegetables that are planted too densely do not yield well.

Now is the time to incorporate compost into your garden as well. Prepare the planting bed for warm season crops by incorporating compost during tilling. Additionally, compost can be top dressed in cool season vegetable beds.

Transplanting Deciduous Shrubs

By Richard Jauron
Horticulture Department
Iowa State University



Occasionally the need arises to move shrubs within the landscape. Early spring (before growth begins) and fall (after leaf drop) are the best times to transplant deciduous shrubs.

Shrubs are best moved with a ball of soil adhering to the roots. With a portion of the root system intact, transplanting shock should be minimized with faster reestablishment.

The soil should be moist when the shrub is dug. If the soil is dry, thoroughly water the area 3 to 4 days before digging the plant.

To make the transplanting process easier, wrap twine around the shrub. Attach twine to the base of one of the stems, and then gently lift the stems upward and inward as the twine is wrapped around the shrub. With the stems compressed to a smaller area, it will be much easier to dig and move the shrub.

The radius of the root ball for deciduous shrubs should be approximately one-half the distance from the dripline to the center of the shrub. Dig a trench with a spade around the plant to a depth of 12 to 15 inches. Then cut beneath the roots, rounding the bottom of the soil mass into a ball. Tip the soil ball to one side, place a piece of burlap in the trench on the opposite side, and then carefully lower the soil ball onto the burlap. Tightly wrap the burlap around the soil ball. Lift and carry the plant by the root ball rather than grasping the stems.

If possible, replant immediately. Dig a hole that is approximately twice the width of the shrub's root ball. The depth of the hole should be equal to the height of the soil ball. Carefully lower the shrub into the hole, position it correctly, and begin to place soil back into the hole. When the hole is about two-thirds full, cut away the top (exposed) portion of the burlap. Then complete the backfilling of the hole and water thoroughly.

Home gardeners should limit themselves to transplanting deciduous shrubs that are 5 feet or less in height. Root balls greater than 2 feet in diameter are extremely heavy and usually require mechanical equipment to move the plants. Shrubs greater than 5 feet in height can be moved by professionals with a tree spade.

Ask the ISU Extension Gardening Expert

When is the best time to plant asparagus?

Early spring (April) is the best time to plant an asparagus bed in Iowa. Since asparagus is a perennial crop, carefully consider possible sites. Asparagus performs best in well-drained soils in full sun. In poorly drained sites, raised beds may be a solution. Avoid shady sites near large trees and buildings.



What are some good asparagus varieties for home gardens in Iowa?

Asparagus is dioecious. Dioecious plants produce separate male and female plants. Male asparagus plants live longer and are more productive than female plants. Excellent all-male asparagus varieties for the home garden include 'Jersey Giant,' 'Jersey Knight,' 'Jersey King,' and 'Jersey Supreme.' 'Mary Washington' and 'Martha Washington' are good standard asparagus varieties. (A planting of 'Mary Washington' or 'Martha Washington' will include both male and female plants.) 'Purple Passion' is a distinctive variety with purple shears.

How do you plant asparagus?

Asparagus crowns should be planted in shallow trenches or furrows. The planting depth depends on the soil type. Asparagus crowns should be planted 6 to 8 inches deep in light, sandy soils, but only 4 to 6 inches deep in heavier soils. A small amount of well-rotted manure can be worked into the soil at the bottom of the trench before planting. Space the crowns 12 to 18 inches apart in rows that are 4 to 5 feet apart. Spread the roots out in the trench with the buds pointing upward. After planting, completely fill in the trench with soil. (Though commonly done in the past, it's not necessary to gradually fill in the furrow as the plants grow.)

After planting asparagus, how long must I wait before I can begin to harvest spears?

Asparagus plants should be allowed to become well established before any spears are harvested. No spears should be harvested during the first growing season. Asparagus can be harvested over a three to four-week period during its second growing season. In following years, asparagus plantings can be harvested until early to mid-June. Harvest asparagus by cutting or snapping the spears when they reach a height of 6 to 8 inches.

Is it possible to move an established asparagus bed?

The roots of established asparagus plants are deep and quite extensive. As a result, transplanting attempts are usually unsuccessful. Large, old plants will be severely injured during the transplanting procedure. Some may die. Those that survive may never produce a good crop. The best way to establish an asparagus planting is to purchase one-year-old plants or crowns from a garden center or mail-order nursery.

When should I cut back my ornamental grasses?

Many ornamental grasses provide color, sound and movement to the winter landscape. Because of these winter features, cut back ornamental grasses in April in Iowa. Cut back the grasses to within 2 to 4 inches of the

ground with hand shears, lopping shears or hedge trimmers.

When planting potatoes, do I need to purchase certified seed potatoes?

Since potatoes are susceptible to several serious diseases, buy certified, disease-free potatoes at garden centers and mail-order nurseries. Potatoes that remain from last year's crop may carry undetectable diseases. Potatoes purchased at supermarkets (for table use) may have been treated to prevent sprouting. Best results (excellent quality and high yields) are obtained with certified seed potatoes.

When cutting potato tubers into pieces prior to planting, what is the proper size for the sections?

Small potato tubers may be planted whole. Large potatoes should be cut into sections or pieces. Each seed piece should contain one or two "eyes" or buds and weigh approximately 1.5 to 2 ounces. After cutting the tubers into sections, place the freshly cut seed pieces in a humid, 60 to 70 degree Fahrenheit location for one or two days. A short "healing" period allows the cut surfaces to callus or heal over. Callused seed pieces are less likely to rot in cool, wet soils.

What are snow peas?

Snow peas are an edible podded pea. Snow peas are harvested when the pods are long and thin, just as the seeds begin to develop. Young pods are tender, stringless and may be stir-fried in Chinese dishes, steamed or cooked like snap beans. If the seeds are allowed to develop fully, they may be shelled and used like garden peas. Snow peas are sometimes referred to as sugar peas.



What are snap peas?

Snap peas are an edible podded pea. Snap peas are best picked when the seeds are nearly full size and the pod walls are thick, fleshy and crunchy. Snap peas may be eaten raw in salads, snapped and cooked like snap beans, or shelled for garden peas. They also freeze very well.

When should peas be planted in the garden?

Peas are a cool season crop. They should be planted as soon as the ground can be worked in spring (late March or early April in central Iowa). Sow seeds 1 inch deep and 2 inches apart. Peas can be planted in single or double rows. Space double rows 6 inches apart. Double rows allow short varieties to cling and hold up one another. Place wire netting or a trellis between double rows of tall vining varieties to provide support. Single and double rows of short varieties should be spaced 2 feet apart. Space single and double rows of tall growing varieties 2 to 3 feet apart.



Upcoming Horticulture Events of Interest:

Spring into Spring Seminar Series Presented by the Mills County Master Gardeners

Final Session: *"Invasion of the Exotics"*

Date: Monday, April 18

Time: 7:00 – 8:00 PM

Place: Glenwood Resource Center
Visitor's Center Conference Room
(address = corner of Main & Lacey)

Cost: FREE!

The series will conclude with this program by Rich Pope, Harrison County Extension Program Director. Invasions by exotic plants is now considered one of the most serious problems facing native plant and wildlife populations. Rich will talk about which species are considered invasive in our area, and will answer questions such as "What makes a plant invasive?" "Why should I be concerned about invasives?" and "What can I do about them?" Come to learn how you can be part of the solution to this serious problem!

Refreshments served-Door Prizes!

Mills County Master Gardeners Plant/Bake Sale

Date: Saturday, May 7

Time: 8:30 – 11:30 AM

Place: Parking lot west of Glenwood State Bank
(See Page 6 for details)



APRIL GARDENING TO DO LIST



- Finish dormant pruning of summer and fall-blooming shrubs before growth begins.
- Begin to fertilize houseplants again.
- Begin hardening off transplants two weeks before planting them outdoors.
- Repair damaged areas in the lawn. As the grass greens, it will be easier to spot these problems. You can purchase lawn repair kits which contain the seed and mulch needed to repair problem areas. Or you can make your own lawn patch by mixing a handful of quality grass-seed mix into a bucket of topsoil. Prepare the soil and spread the seed and soil mixture. Mulch to conserve moisture.
- Divide perennials as new growth begins to emerge.
- Work organic material into your garden and flower beds or fertilize with 2 lbs. of 5-10-5 fertilizer per 100 square feet.
- Take a soil test if you have not done so or it has been 3 or more years. The Extension office has soil bags and instructions sheets. Current fee for the testing service is \$8.00 per sample. A soil test will tell you the PH of your soil and how much of what type of fertilizer you need.
- Remove tree wrap from trunks of trees and winter fencing.
- Plant potatoes and onions for harvest in late summer. Wait until the soil has warmed up. Tubers and bulbs planted in cold, wet, soil may rot.
- Plant pansies outside in beds or in containers. These cool season annuals will survive several light frosts, so you can enjoy their color now – long before many other plants will bloom!
- Perennials can be started indoors much like annuals. Some seeds need to be stratified (a cold treatment) for weeks, soaked in tepid water

overnight, or scarified (the seed coat scratched) prior to planting. Check label directions for seed treatment, timing, and planting directions.

- Plant a tree for Arbor Day (April 29).
- Plant or transplant asparagus, rhubarb, and strawberries.

Plants for Sale!

11th Annual Mills County Master Gardener & Co-Horts Plant & Bake Sale



Saturday, May 7

8:30 – 11:30 AM

In the parking lot west of Glenwood State Bank

- High quality, low cost plants including annuals, perennials, houseplants, vegetables, ornamental grasses, and more! For every \$20 in purchases, receive a free bucket of Omagro!
- Bake sale items, whimsical garden art, and beautiful plants just in time for Mother's Day!
- Purchase raffle tickets for a 15 gallon tree or custom-made wooden garden bench!
- Master Gardeners on hand to answer all of your gardening questions!

Proceeds applied to future Master Gardener programs in Mills County

Resources for Horticulture information

ISU's Hortline at (515) 294-3108

(Monday-Friday, 10 a.m.-noon, 1-4:30 p.m)

Iowa State University Publications

PM 874	Starting Garden Transplants at Home (free)
PM 683	Composting Yard Waste
PM 820	Garden Soil Management
RG 319	When to Divide Perennials
PM 1591	Community Tree Planting & Care Guide
PM 0453	Fruit Cultivars for Iowa
PM 0719	Rhubarb in the Home Garden
PM 819	Planting a Home Vegetable Garden

Horticulture Publications on-line

<https://www.extension.iastate.edu/store/ListCategories>

Extension programs are available to all without regard to race, color, national origin, religion, sex, or disability.