



Giant puffball

## What are They? Puffballs!

Many homeowners have noticed large, white fungal spheres emerging from the ground in their lawn or landscape. These puffballs are the fruiting structure of a fungus and come in a variety of sizes.

Perhaps the most common species of puffball is the giant puffball, *Langermannia giganteum*. This puffball can grow up to a foot or more in diameter, appearing as a large, white ball. At first it has the texture of a marshmallow, but as the puffball matures it turns olive-brown, and the interior becomes spongy and filled with spores.

Another common puffball is the hard puffball, *Scleroderma* sp., also called an earth

ball. Hard puffballs are round, about the size of a tennis ball or slightly larger. Unlike giant puffballs, hard puffballs develop just underneath the surface of the soil. When they mature, they open up revealing spores inside and this develops depressions in the soil surface, causing the lawn to be bumpy.

Puffballs are not harmful to people, pets, or plants, but can be a nuisance in well-maintained lawns. There is no feasible management for them other than removing the fruiting bodies as they appear.

Source: Christine Engelbrecht, Iowa State University Department of Plant Pathology.

## Nebraska Forest Service Expert Discovers Pine Wilt Treatment

A new treatment for pine wilt is available thanks to some creative thinking by a Nebraska Forest Service forest health expert.

Mark Harrell, Nebraska Forest Service forest health program leader, initiated a project to determine whether a trunk injection aimed at controlling the pine-wood nematode that causes pine wilt would be effective in preventing the spread of pine wilt.

"In 2001, I tested abamectin, an insecticide that is known to have some effect against nematodes and found that it could kill the pinewood nematode at a concentration that was feasible to use in trees," Harrell said. "I began testing it in trees later that year."

Arbor Systems, an Omaha-based company that specializes in tree injections, provided the product and the injection equipment. The company added Greyhound, abamectin's trade name, to its product line in the mid-1990s. It commonly is used to control elm leaf beetles, lace bugs, leaf miners and mites.

Greyhound is injected into the tree's trunk near the ground. Trees are given a series of injections at four-inch intervals around the tree.

Research trials were con-

ducted in several windbreaks in southeast Nebraska in 2001 and 2002. These windbreaks were evaluated for one year. In 2003, a three-year trial was begun at Horning State Farm near Plattsmouth.

The results of the Plattsmouth test showed that Grey-

product more efficiently, so a slightly lower rate may be just as effective using the newer equipment. This could bring the cost down."

Additional lower cost products and methods for controlling pine wilt are being pursued, Harrell said. This

could enable people to treat windbreaks and other pine plantings.

"Since the current cost of the treatment will likely lead to it being used only on high-value trees, people should remove dead trees as quickly as possible and destroy them by either burning, burying or chipping," Harrell said.

Pine wilt has killed an estimated 5,000 pines in Nebraska since entering the state eight

years ago. The disease is most common in southeast Nebraska, but also has been found around Fremont, Grand Island, North Platte and Valentine, Harrell said.

The microscopic pinewood nematode disrupts the flow of sap, causing the tree to turn brown and die.

For more information about these injections or where to obtain one, contact the Nebraska Forest Service at 472-2944. More information about pine wilt can be found on the Nebraska Forest Service Web site at <http://www.nfs.unl.edu/>.

"Since the current cost of the treatment will likely lead to it being used only on high-value trees, people should remove dead trees as quickly as possible and destroy them by either burning, burying or chipping,"

—Mark Harrell, Nebraska Forest Service

hound, applied at six times the recommended label rate, provided approximately 70 percent protection from pine wilt for three years. Greyhound only is effective if no symptoms of pine wilt are present in the tree, Harrell said.

Due to its high application rate, Greyhound treatments are expensive, he said. The product must be applied by a trained arborist.

"Treating a tree with a trunk diameter of 10 inches could cost approximately \$300," Harrell said. "However, Arbor Systems now has equipment that can apply the

## Easier Gardening

Scan the gardening section at the local bookstore and you will find numerous titles that include the terms low-maintenance, carefree and easy. Gardeners, of course, wish that were true, looking for that secret formula to having a beautiful garden with no work. The fact is, gardens need tending. Here are some tips to make gardening easier.

**Get some wheels.** There are a wide variety of wheeled contraptions available, from wheelbarrows to carts to wagons. It is amazing how much easier it is to move bags of fertilizer, flats of flowers and baskets of squash when they are riding on a wheeled platform.

**Garden close to home.** The long-term dream for your landscape may include a secret hideaway in the back corner of your lot. The only problem is, the less frequently you visit, the less you will maintain it. Put a flower bed somewhere between your front door and your driveway and you will pass by it twice a day. That flower bed will be carefully tended, weed-free and immaculately deadheaded. The further the bed is from air-conditioning and lemonade, the more weeds it will have.

**Where's the water?** Nothing is more time-con-

suming and frustrating than dragging hose. It gets caught, kinked and is never where you need it. An irrigation system makes the job much easier, but may be prohibitively expensive and requires monitoring and maintenance. At the very least, consider installing a satellite spigot in a central location in your landscape.

**Get a good mower.** This may seem counterintuitive, since many gardeners want less lawn, not more. Nonetheless, a significant portion of your yard-maintenance time will be spent walking behind a mower. A mower that is reliable, powerful, well-maintained and easy-to-start will make time away from tending flowers less painful.

**Train, do not prune.** Training plants is the art of directing the growth where you want it, rather than removing it from where you don't. Corrective pruning — the kind that leaves you with large piles of clippings — is done in late winter. But training and light shaping can be done in early-to mid-summer. It is easy enough to tell if a branch is going to grow in the wrong direction. Take it out when it's small, before it has a chance to do so.

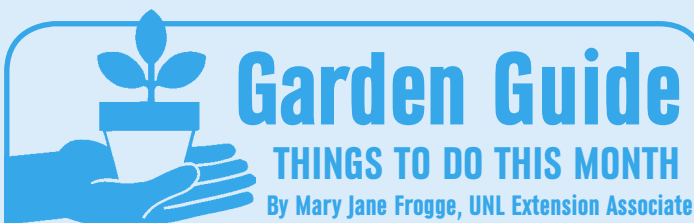
**Keep tools sharp.** Two people chop wood. One takes

frequent breaks. The other works non-stop. At the end of the day the one who rested has a larger pile of wood. "How did you manage that?" asks the other. "During breaks," she replies, "I was sharpening my axe."

**Do lots of planning and research.** A plant in the wrong spot is a waste of your time and efforts. It will either die young, fail to reach its potential or require constant maintenance. A poorly planned garden will be a source of frustration. The best gardeners have extensive libraries and journals full of sketches and notes. Don't know where to start? Consult your local extension office Web site for a start. The Lancaster County Web site is at <http://lanaster.unl.edu>.

**Do a little each day.** Even if it is only five minutes, make some time in your life each day for a bit of gardening. Instead of watching the news with your morning coffee, carry your mug out to the garden. Yes, you will miss the crime blotter, but you will catch the weed seedlings before they set seed and pinch off the aphid-infested leaves before they spread.

Source: Paul McKenzie, Horticulture Extension, Durham, North Carolina.



Snapdragons should be pinched back after blooming to promote a second flush of growth.

Cut back and fertilize delphinium and phlox to encourage a second flowering.

Many plants are easily propagated by layering. Verbenas, euonymus, English ivy and climbing roses are a few plants that will root if the stems are fastened down and covered with soil.

Cutting flowers is best done with sharp shears or a knife which will help avoid injury to the growing plant. A slanting cut will expose a larger absorbing surface to water and will prevent the base of the stem from resting on the bottom of the vase. It is best to carry a bucket of water to the garden for collecting flowers, rather than a cutting basket.

Divide and transplant bearded iris using the vigorous ends of the rhizomes. Discard the old center portion. Cut the leaves back to about six inches.

Tall flowers should be staked to prevent damage by wind. Use stakes which are large enough to support the plant but are not too conspicuous. Use soft twine or twist ties to secure.

A brown or grayish cast over a lawn can be caused by a dull or improperly adjusted mower blades that shred grass rather than cut it.

Store pesticides in a safe place in their original containers, away from children and pets. Use pesticides carefully in your garden. Read the labels and follow the directions. The warnings and precautions are for your protection.

Certain pesticides have a waiting period of several days between the time of the last spray and harvest. Read and follow directions on all labels before applying to your vegetable crops. Wash all produce thoroughly before use.

Control mosquitoes by eliminating all sources of stagnant water.

A garden needs one inch of rain or water each week. Early morning is the best time to water. Evening watering is less desirable because plant leaves that remain wet through the night are more susceptible to fungus diseases. Mulch plants to reduce water losses and improve yields.

For fall harvest of lettuce, radish, carrots, beets, turnips, kale and spinach, sow seeds in late July to early August.

Continue to make successive plantings of crops like beans and sweet corn to provide a continuous harvest until fall. A small garden will produce a large quantity of vegetables if replanting is done throughout the summer.

Check the soil moisture of container grown vegetables and flowers daily. As the temperature rises, some plants may need water twice a day.

Continue attracting insect eating birds to the garden area by providing them with a fresh water source.