

## Garden Season Draws to a Close

When night temperatures dip below 32°F, garden season draws to a close. To get the most out of last-season fruits and vegetables, use these tips:

- Pick **tomatoes** before the first frost, even if they're still green. Disinfect tomatoes with a solution of 1-1/2 teaspoons of 5.25% chlorine bleach to one gallon of water. The bleach will kill fungi and bacteria, which may ruin the fruits before they ripen. Dry the tomatoes thoroughly and store them in shallow boxes, such as pop flats. Keep tomatoes in a cool location above 50°F, otherwise they'll get chilling injury.

- **Peppers** should be harvested before the first frost. Disinfect peppers with the bleach-water solution and hang in a cool, dry place. Peppers with thick skin may need to be dehydrated, frozen or pickled for long-term storage.
- Most root crops, such as **parsnips, carrots, artichokes and beets**, may be stored in the ground even after a hard frost. After the first hard frost, trim the foliage at the crown and place a thick layer of mulch over the plants to keep the ground from freezing. If the soil is insulated well, the straw can be removed throughout the winter to dig

fresh vegetables.

- **Cabbage, brussels sprouts, kale and broccoli** will survive air temperatures to about 25°F, so don't be in a rush to harvest all the plants. Frost actually improves their flavors, so leave some to enjoy in the late fall.
- Harvest **pumpkins** when the fruit is full-sized, well-colored and the skin is hard enough to resist denting. A light frost will damage the vines, not the pumpkins, but the fruits should be harvested before a hard freeze.

SOURCE: Susan Schoneweis, horticulture specialist, NU/IANR

## Selecting a Tractor for an Acreage

Jobs on an acreage often require mechanical, as well as physical power. For this reason, it's not uncommon for acreage owners to be in the market for a small, utility tractor. Before starting the process, determine what tasks (e.g. mowing, snow removal, light tillage, feeding livestock) the tractor will be used for and some idea on the size of the tasks. If jobs are primarily mowing and some snow removal, a lawn and

garden tractor may be adequate for areas up to four or five acres.

Depending on tractor size, your budget and the local market, new or used tractors may be considered. If evaluating a new tractor, in addition to comparing features, be sure to consider service and warranty work after the sale. If evaluating a used tractor, start with a visual once-over. Inspect evidence of coolant or oil leaks and condition

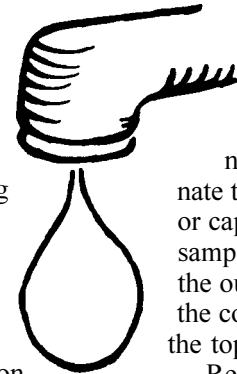
of the fluids. Has the frame been repaired? If desired, are three-point hitch and remote hydraulics present? Are previous service records available? Operate the tractor if possible and check operation of transmission, clutch, gauges and lights. Because of potential rollover hazards, avoid the purchase of an older tractor without a Roll-Over-Protective-Structure (ROPS).

## Urban Agriculture



## How to Collect and Handle a Water Sample

Proper collection and handling of a water sample is critical for a meaningful water test. Sample containers should always be obtained from the testing laboratory because containers may be specially prepared for a specific contaminant. Sampling and handling procedures will depend on the specific water quality concern and should be followed carefully. If the water is being treated, it may be necessary to sample both before and after the water goes through the treatment equipment.



Run the water for five minutes to clear the water lines and bring in fresh water. Do not touch or contaminate the inside of the bottle or cap. Carefully open the sample container and hold the outside of the cap. Fill the container and replace the top.

Refrigerate the sample and transport it to the testing laboratory within six hours (in an ice chest). Many labs will not accept bacteria samples on Friday, so check the lab's schedule. Mailing bacteria samples is not recommended because laboratory analysis results are not as reliable.

Iron bacteria forms a very obvious slime on the inside of pipes and fixtures. A water test is not needed for identification. Check for a reddish-brown slime inside a toilet tank or where water stands for several days.

### Bacteria Sampling

Water samples for bacteria tests must always be collected in a sterile container. Take the sample from an inside faucet with the aerator removed. Sterilize by flaming the end of the tap with a disposable butane

## Reducing Mouse and Rabbit Damage

Rabbits, meadow mice and voles can do a lot of damage to fruit trees and landscape plants.

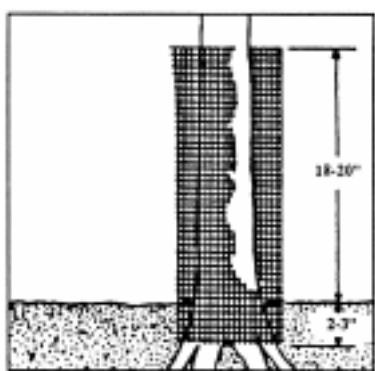
Mice eat the bark of the trunk and roots both above and below ground level. Voles nest underground, eating bark from the roots near the surface. Rabbits girdle trunks and branches.



*Deer browsing results in a ragged edge (left). Rabbit browsing results in twigs and small branches at 45 degree angle (right).*

The following control procedures are offered as suggestions to help reduce the potential for damage.

**GUARDS** — Use one-quarter inch mesh hardware cloth (wire mesh) around the base of fruit and ornamental trees and shrubs. Set the guards about two to three inches in the ground at the base of the trunk or around the crown of the plant. Extend the wire up at least 18 inches above the ground. In areas where snowdrifts develop, the wire guards will need to be extended up even higher.



*A cylinder of hardware cloth or other wire mesh can protect trees from rabbit damage.*

**CHANGE HABITAT** — This includes the elimination of high grass cover through repeated mowing or the use of non-selective herbicides (such as glyphosphate, Roundup) in and around, but not on, the leaves or trunks of trees and shrubs (protect them from direct contact, splash and drift). This will reduce the mouse population by giving predators (such as owls) a better chance to do their job. Pea gravel (small stones) placed one inch below the soil surface and around the tree will discourage mice. When planting trees, allow the soil to settle one inch and apply the stone two inches deep.

**TRAPPING** — Wooden snap-traps placed in runways will help control mice. Peanut butter, oatmeal or small slices of apple make the best bait. Rabbits can be captured alive in commercially available or homemade box traps made of wire or wood. When permitted, rabbit hunting may be another option.

**REPELLENTS** — There are several commercially available repellents on the market. When you apply them in the fall, they may not last throughout the winter and may need to be reapplied. Thiram is a taste repellent that makes plants distasteful to both rabbits and mice. Mix it with diluted latex paint. Mix ten parts water with one part paint and spray or brush it on. Commercial repellents that contain Thiram or other active ingredients are also available at garden centers and farm supply stores.

These safeguards will help reduce mouse and rabbit damage. However, when snowdrifts are deep, rabbits can eat the tips of branches and even girdle limbs. So, it is very important to reduce rabbit populations in early or mid winter. Leaving pruned branches on the ground also reduces damage to living trees because rabbits are more apt to chew the bark from the branches and leave trees alone.

If these methods are ineffective, then commercial rodent baits containing poisoned grain are available. However, baits may be hazardous to humans, pets and beneficial wildlife. Injury or death may result if non-target animals eat the bait directly or consume rodents killed by the bait.

As with most wildlife damage, a combination of methods is usually best for controlling mouse and rabbit damage.

### Mice Bait Stations

Bait stations used in rodent control programs may increase both the effectiveness and safety of rodent baits (rodenticides).

#### Bait Station Design

Bait stations should be large enough to allow several rodents to feed at once. They can be as simple as a flat board nailed at an angle between the floor and wall, or a length of pipe into which bait can be placed. More elaborate stations are completely enclosed and can contain liquid as well as solid rodent baits. Hinged lids provide convenient inspection of permanent stations.

Bait stations for mice should have at two entrances 1 to 1-1/2 inches in diameter. A cigar box about 10 x 6 x 2 inches high, with a hole in each end is ideal for mice.

#### Bait Station Placement

Proper placement of bait stations is just as important as using the appropriate bait.

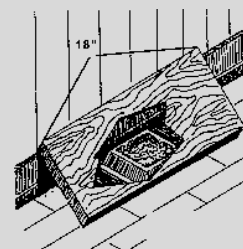
Where possible, place bait

between the rodents' source of shelter and their food supply. Put bait stations near rodent burrows, against walls or along travel routes used by the pests. Look for signs of activity such as droppings, gnawing, tracks and rubmarks. Rodents will usually not go out of their way to find baits.

On farmsteads, bait station placement depends on building design and use. For example, in swine confinement buildings it may be possible to attach bait stations to wall ledges, or to the top of pen dividing walls.

Bait stations can also be placed in attics, along walls, or in alleys where rodents are active.

Never place bait stations where livestock, pets or other animals can knock them over. Spilled bait may be a potential hazard, particularly to smaller animals. Pigs and dogs are especially susceptible to anticoagulants.



*A flat board nailed at an angle between the wall and floor. Board should be at least 18 inches long to keep pets and children from reaching the bait.*