

## Helping Trees Through Winter

The tree-filled landscapes of winter can be mistakenly thought to be asleep. The winter trees are not sleeping, but are counting the days until spring. Most of the growing points in the tree are protected inside jackets called buds. Only in spring will it be apparent whether the tree has put aside and saved enough resources to respond to the new season of growth.

Winter is a difficult time for trees. Trees must stand in the face of drying and cold winds. Food reserves are carefully conserved for the coming needs of spring and water continues to move through the tree until it freezes. Any creature needing a meal chews and nibbles on the resting buds and twigs. Trees stand against all circumstances that the winter season can generate.

What can you do to help your

valuable trees? A few things can help a tree be more efficient and effective in surviving the winter and thriving in the spring. These small winter investments can pay off in a large way, yielding healthy and structurally sound trees.

- Add a thin layer of composted organic mulch that blankets the soil surface. Mulch protects and conserves tree resources and recycles valuable materials.
- Properly wrap new young trees and newly planted trees that have not developed a corky bark and could easily be damaged. Mechanical injury from the environment, including chewing and rubbing by animals, must be prevented.
- Remove visible structural faults and deadwood. Try to make small pruning cuts that minimize the exposure of the

central heartwood core on branches.

- Perform limited pruning of declining and poorly placed branches. Pruning should conserve as many living branches as possible with only a few selected cuts.
- Fertilize in early spring with elements needed in small quantities. Essential elements added over a mulch layer will help provide a healthy soil environment for root growth.
- Water where soils and trees are cool but not frozen, and where there has been little precipitation during the summer or fall. Winter droughts need treatment with water the same as summer drought. However, it is easy to overwater in winter, so be careful.

(Source: Society of American Foresters Urban and Community Forestry Working Group Newsletter) (DJ)

## How to Hire an Arborist

From time to time anyone who owns trees may need to hire an arborist. The services of an arborist may be required if a tree is in need of pruning, fertilizing, weather-related damage assessment, or other problem diagnosis. Full-service arborists are professionals who possess skills in planting, transplanting, pruning, fertilizing, pest management, disease diagnosis, tree removal and stump grinding. Consulting arborists are experts who offer advice, but do not perform services. They specialize in tree appraisals, diagnosing problems, and recommending treatments.

Hiring an arborist deserves careful consideration. A qualified arborist will do tree work properly and safely. An unqualified person may actually damage the tree. Unqualified persons may not have proper insurance, leaving a liability burden to the customer that could run into the thousands of dollars.

Remember the following points when hiring or contracting with an arborist:

- Check your telephone directory's yellow pages under "Tree Service" for a listing of those businesses which do tree work in your area. While anyone can list themselves in the phone book, a listing at least indicates some degree of permanence. Be cautious of any arborist that advertises "topping" as a service. "Topping" is not an approved tree maintenance practice under normal conditions and will seriously damage the tree.
- Ask if the arborist is certified. The International Society of Arboriculture (ISA) maintains a list of ISA Certified Arborists throughout the entire country and you can search the database by state, city or even zip code. The Nebraska Arborists Association also maintains a list of Nebraska state certified arborists. Certification is not

required but it does indicate that the arborist has a high degree of knowledge.

- If the arborist you are considering is not certified, determine if he/she is a member of any professional organizations, such as the Nebraska Arborists Association, the International Society of Arboriculture or the National Arborists Association. Membership in these and other professional organizations does not guarantee quality, but does indicate professional commitment.
- Ask for certificates of insurance, including proof of liability for personal and property damage and worker's compensation. Then, contact the insurance company to make sure the policy is current. Under some circumstances, you can be held financially responsible if an uninsured worker is hurt on your property or if the worker damages a neighbor's property.
- Ask for local references. Take a look at some of the work, and if possible, talk with former clients. Experience, education and a good reputation are signs of a good arborist.
- Don't rush into a decision just because you are promised a discount if you sign an agreement now. Be sure you understand what work is to be done for what amount of money. It is not generally a good idea to pay in full until the work is



completed.

- Most reputable tree care companies have all the work they can handle without going door to door. People who aren't competent arborists may solicit tree work at your door pointing out a

condition that needs "immediate attention" or the "tree will die." If a tree is that close to death there is probably nothing you or anyone else can do about it.

These kinds of people are most active after storm disasters.

- If possible, get more than one estimate.
- A conscientious arborist will not use climbing spikes except when removing a tree. Climbing spikes open unnecessary wounds that could lead to decay.

- Good tree work will

not be inexpensive by any means. A good arborist must carry several kinds of insurance as well as pay for expensive and specialized equipment. Beware of estimates that fall well below the average. There may be hidden costs or the arborist may not be fully insured or trained.

- A good pruning job is often one that cannot be noticed after the work has been done.
- Some communities require arborists be licensed in order to do tree work within city limits. If you are unsure, contact the city office to see if such a license is required.

(Note: The information and guidelines contained in this article, while written for Nebraska, apply to the entire country.) (DJ)

## Tips on Storing Firewood

With cold weather upon us, you may begin to store firewood in or near their homes. However, you may be storing more than firewood and may unknowingly bring insects into the house.

As long as wood is properly handled and stored, insect emergence in the home can be avoided.

If wood is kept below 50° F, insects living in it will remain dormant. However, if taken indoors and allowed to warm up, insect activity resumes and they may emerge in the home. Emerging insects can then move out of the firewood, wander into the rest of the house and become a nuisance.

The best way to avoid invasion is to

store the wood outside in the cold until it's ready to be burned so insects don't have a chance to warm up and become active.

Store wood away from the house and under a cover, such as in a woodshed, unheated garage, utility building or under a sheet of plastic or sheet metal roofing to keep it dry. Leave an air space between the wood and covering.

Splitting, sawing and stacking wood in loose piles raised off the ground accelerates drying. Few insects will survive if wood is dried quickly and is kept dry.

Firewood also may be stored in a sealed box or container. Apply a coat of

residual insecticide inside the container before putting wood inside. But don't directly spray the firewood or allow wet spray to contact the wood because pesticides can release poisonous gases when the wood is burned.

If firewood insects, such as bark beetles, ambrosia beetles and both roundheaded and flatheaded wood borers, do emerge indoors they are not likely to attack wood in the home. However, powderpost or lyctid beetles can reinfest the hardwood from which they emerged and can attack other unfinished hardwoods in the house.

### WATERWHEEL

## Sources of Man-Made Chemicals in Drinking Water



Note: This is part of a series of articles related to rural water issues.

Scattered throughout Nebraska are areas that have both sandy soils and shallow water tables. The high permeability of these soils, combined with the relatively short distance to the water table, make these areas particularly sensitive to contamination. Excessive rainfall or over-irrigation can cause downward movement of water through the soil profile. Those man-made chemicals which do not bind strongly to soil particles can be carried with the downward moving water and eventually can be leached to the groundwater.

Leaching and groundwater contamination takes place in areas without sandy soils or a high water table, only at a slower rate.

Activities near a well, particularly mixing or storing chemicals, potentially can contaminate the water supply. In some areas, depending on the relative location of the well and sites where various man-made chemicals are used, contamination could occur from normal application and use. Used motor oil dumped on the ground, spilled fuel near storage tanks, pesticides spilled during mixing and loading and improperly dumped household products are all examples of man-made chemicals that could leach into groundwater. In addition, leaking underground fuel tanks can contaminate groundwater without visible evidence on the surface.

Man-made chemicals can enter groundwater through more direct routes. Improperly constructed wells or older wells with leaks around or through the casing can allow contaminants to seep into groundwater. Abandoned wells that are not properly sealed also provide direct pathways to the aquifer. Pesticide applications near such wells or any chemical spills on the surface could potentially contaminate groundwater if surface runoff moves toward the well.

Prevention of spills and immediate cleanup of any spills are among the best ways to prevent contamination of groundwater with man-made chemicals. Proper site selection and construction of domestic water wells can reduce potential contamination of drinking water. Wells no longer needed should be properly decommissioned to eliminate direct conduits to the aquifer. (DJ)