

Pest Update (January 7, 2009)

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Available on the net at:

<http://www.state.sd.us/doa/Forestry/educational-information/Pest-Alert-Archives.htm>.

Any treatment recommendations, including those identifying specific pesticides, are for the convenience of the reader. Pesticides mentioned in this publication are generally those that are most commonly available to the public in South Dakota and the inclusion of a product shall not be taken as an endorsement or the exclusion a criticism regarding effectiveness. Please read and follow all label instructions and the label is the final authority for a product's use on a particular pest or plant. Products requiring a commercial pesticide license are occasionally mentioned if there are limited options available. These products will be identified as such but it is the reader's responsibility to determine if they can legally apply any product identified in this publication.

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Information requests

I had an email asking when is the best time to transplant a tree. There is no simple answer to this question as it depends on the method of transplanting and the tree species. Bare-root planting is an excellent means of transplanting trees, particularly seedlings and saplings, but regardless of species this method is limited to spring in South Dakota with the ideal time starting when soil temperature are above 40°F and ending just before the tree breaks bud. Planting too early often results in desiccation injury as the soils are too cold to promote root development and the bare stem loses moisture it cannot replace. After bud-break the water demands increase with the transpiring leaves and the roots do not develop quick enough to provide a steady supply of moisture. Further south and east bare-root transplanting is also conducted in the autumn after trees drop their leaves but our South Dakota winters are too harsh and these fall plantings often suffer severe mortality and desiccation injury.

Container and balled-and-burlapped planting are common means of transplanting landscape trees and shrubs. Since the root system is being moved with the plant the planting season is extended; beginning in the spring as the soil temperatures warm into the 40°Fs and ending in the autumn about four weeks before soil temperatures dip below 40.

Tree spades are used to move larger trees. Only a portion of the roots are moved with the tree so timing is a little more restricted than with container or balled-and-burlapped. Most tree spade operators begin moving trees in the spring as soon as the soil thaws and quit just before the trees break-bud. Transplanting resumes in late summer (late August) for evergreen trees and early autumn for deciduous trees. However, it is possible to move trees throughout much of the summer if the tree is move with an enlarged soil ball and watering is carefully monitored.

Some tree species, particularly those with a fleshy root system or marginal hardiness, are best moved in the spring, regardless of method. These are firs, birch, ginkgo, walnut, magnolia, ironwood (*Ostrya* spp) and many oaks.

It's critter time! It seems that all the calls and emails during the last couple of weeks are about tree injury caused by animals. Fox squirrels have been especially active this winter in stripping bark from tree branches; see the E-sample on the next page for more information on this particular pest. Usually we do not see branch stripping until later in the winter but it seems to be starting earlier this winter. The squirrels stop this feeding in the spring as other food become available.



Rabbits are the perennial critter problem in South Dakota and they are also out in force. When I walked through several shelterbelts just before Christmas many of the small crabapple trees and cotoneaster shrubs were cut off at about 1 foot above the ground as cleanly as if someone walked through with a pair of hand pruners. Rabbits usually chew bark off cleanly on larger trees up to a height of 18 to 20 inches above the snow line (under the snow line it is usually voles or mice doing the damage) and the feeding is most common on crabapples, apples, honeylocust and maples, though few species are exempt from damage. Shrub damage is usually entire twigs or stem cut cleanly at a 45-degree angle. You'll often find small brown droppings on the snow near the affected plants. What to do to avoid this problem? The best method is to remove any hiding cover; brush and woodpiles are perfect habitat for rabbits and should be removed. Valuable shrub beds can also be fenced off but the fence, typically chicken wire, must be at least 3 feet tall – *above the snow line* – and tight with the ground. Many of the barrier fences that I have seen this winter have not been working as the snow drifts are higher than the fences and better making a nice shelter for the rabbits to eat in!

Repellents work one of two ways, either as odor or taste. There is a relatively new product on the market called **Shake Away** that uses predator urine as a means to discourage rabbits from entering an area. This used to be “home-made” but now is available as a commercial product that has an odor almost undetectable to humans. The reports are encouraging and it is probably worth trying. **Garlic sticks** are also used as an odor repellent and these clip-on products have been very effective in some South Dakota gardens though the results have been disappointing in other landscapes.

The most common taste repellents contained thiram as an active ingredient but this is becoming harder to find and may not be available in many markets. **Chew-Nott** and **Bonide Deer and Rabbit repellent** contain thiram as the active ingredient. Capsaicin, the hot pepper taste, is also used as a repellent but I have found some rabbits actually begin to prefer this and will only eat where you have sprayed if you do not put it on thick enough! **Bonide Hot Pepper Wax** contains capsaicin. Also remember that repellents do not keep the rabbits out of an area, just discourage their feeding on certain plants.

Finally, don't live trap them. No one else wants them either and most animals that are released in unfamiliar territory have a very short life span.

E-sample



Steve down in Bon Homme County sent this great picture of a Siberian elm (commonly, but incorrectly referred to as a Chinese elm on the Northern Plains) almost completely stripped of bark. Apparently there is a shelterbelt in Yankton County containing Siberian elms and plums in which some of these trees have the bark stripped off many of the branches. The culprit in this instance is a squirrel. Surprisingly, Siberian elm is one of their favorites, along with plum and other fruit trees, and they will strip bark off branches to access the nutritious inner bark. They commonly feed on only certain trees in a row, almost randomly, but more likely these are trees that just a little “taster” than the surrounding ones. The preferred trees are basswood, crabapple and apple, elm (both American and Siberian), hackberry, littleleaf linden, maples (most often silver and sugar maples), and plums. There is not much that can be done to discourage squirrels from doing this other than placing a metal band round the trunk, as it done to prevent squirrel access to bird feeders and nest boxes.