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Protect Trees from animals

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EXTENSION SERVICE
NORTH DAKOTA STATE UNIVERSITY
OF AGRICULTURE AND APPLIED SCIENCE

PROTECT TREES FROM ANIMALS

Many animals such as rabbits, mice, deer, porcupines, pocket gophers, beavers, dogs and squirrels do considerable damage to trees during late fall, all winter and early spring. Prevention of rabbit damage is discussed in NDSU Extension Circular, "Protect Trees from Rabbits".

Mice

The No. 2 pest in tree plantations in this state is mice. Mice in some winters do considerable damage to trees by girdling (gnawing). Usually the girdling is done close to the ground and often it is done under snow covering. Prevent this by clean cultivation of tree plantings in the fall by reducing mice numbers through poisoning or by using repellents.

Clean cultivation is discouraging to mice, especially in the tree row. Poisoning with a strychnine or zinc phosphide oat or wheat bait is a very practical means of control. Place bait by scattering lightly in the mouse trail or tunnels before the snow falls. Protected bait stations can be made from boxes, tin cans, tile, or can be made by throwing a forkful of hay or straw over a fence post laying on the ground and placing the bait in the opening along the post. Bait stations should be placed where livestock and poultry can't get at them, or fasten the stations securely so that the bait cannot be spilled or uncovered. This means of control will give almost 100 per cent protection from mice.

Repellents are also effective. Fish and Wildlife studies in Colorado showed that Tat-Go, Selco Rabbit and Deer Repellent, and ZIP all give protection as mouse repellents. Repellents are paint type compounds that are either painted or sprayed on that part of the tree to be protected.

Wrapping of individual trees with wire screen or foil will protect against mouse girdling. These wrappings should be sunk into the ground at least 1 inch, and preferably 2 inches, and cover at least 1 foot of trunk area. Better still, have these wrappings high enough to also protect the trees from rabbits.

Pocket Gophers

Pocket gophers eat the tree roots, thereby killing the tree. All varieties are eaten. Usually, they will take the tap roots, leaving the main root looking like a club. The tree will die and can easily be pulled from the ground. Evidence shows gophers will damage trees up to 4 years old.

Methods of controlling pocket gophers are given and illustrated in NDSU Extension Service Circulars A-243 and A-368, and U. S. Fish and Wildlife Leaflet No. 340. Copies of these publications are available from your County Extension Agent.



Picture courtesy State Game & Fish Department, Bismarck.

Deer

In some areas of the state, heavy concentrations of deer have caused considerable damage to large field shelterbelts by clipping and "rubbing". In browsing, deer tend to clip new succulent growth and in some plantings cause considerable deformity to trees. Antlered deer do a lot of rubbing with antlers during certain times of the year. This causes debarking and broken limbs.

One method of deer control is to invite hunters during open season to hunt so as to reduce the heavy concentration in shelterbelt areas. Another means is through the use of repellents. Repellents have been effective in some areas. Dupont's Arasan 42-S can be used either as a dormant season spray or during the summer. ZIP, Tat-Go and Selco Rabbit and Deer Repellents are also effective.

Porcupines

Porcupines are widely scattered over most of North Dakota, but are primarily found in the western part of the state. Typical damage by porcupines is girdling or gnawing. They usually attack the larger trees and may work anywhere from the ground level to the tree top. Complete girdling results in the death of the tree but even spot damage may seriously affect growth and timber value.



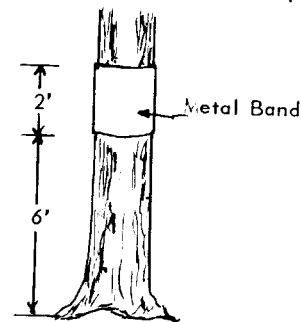
On small plantations, systematic repeated hunting is the fastest method of control. In the fall, porcupines will feed in the evening at bait stations of small piles of ear corn. They are also found in the evenings in or about alfalfa and grain fields. Porcupines are easily trapped with No. 2 or 3 steel traps. A partially buried porcupine carcass makes a good bait as does any decayed or fetid material.

On larger plantings, porcupines can be poisoned easily with a strychnine and salt mixture. **CAUTION:** Strychnine is a deadly poison and extreme care must be exercised with this bait. The porcupine's fondness for salt is used as a basis for this means of control. Directions for preparing salt bait, construction of bait boxes and safe guards to be followed are available from the U.S. Fish and Wildlife Service, 601 Capitol Building, Bismarck, North Dakota.

Effective porcupine control usually gives results for a considerable time as porcupines rarely give birth to more than one young per litter and have only one litter per year.

Squirrels

Squirrels can do considerable damage to trees by girdling them and by cutting tree buds. Local game laws should be checked as in many states squirrels are protected by game laws.



Squirrels can be kept out of isolated trees by placing a 2-foot wide metal band 6 feet from the ground. Overhanging branches within 6 feet from the ground should be trimmed. ZIP rabbit repellent (commercial repellent) nicotine sulfate (insecticide) or a homemade preparation made by mixing 1 teaspoon Lysol, 3 ounces Epsom Salts and 1 gallon water, can be used as a repellent. These sprays must be repeated frequently as new growth and rains ruin their effectiveness.

Where game laws permit, hunting is a quick means of control. If shooting is impossible, trapping can be effective through use of either No. 0 or No. 1 steel traps or live traps. Winter damage to shrubs and trees can be minimized by feeding of squirrels as well as the birds.

Beavers

Beavers can do severe damage to tree plantations adjacent to water areas. During early fall, beaver colonies prepare for the coming winter by cutting trees and saplings to store for food in winter caches. Often beavers travel great distances for winter food, especially in the western part of the state where trees are scarce.

Consult your State Game and Fish Laws on seasons and means of control. Trapping is a very effective means of control and can also provide income if the pelts are prime. Several beaver trapping publications are available and assistance may be obtained from your local mammal control agent on trapping methods.

Dogs

Dogs, especially males, do considerable damage to ornamental evergreens. This damage is usually confined to the lower outside edges of the tree. The damage is usually nonfatal, but it does brown up the area affected, and repeated damage can kill the branches involved.

Damage can be prevented either by fencing the dogs away from the trees, or by the use of a dog repellent. Most nursery stock dealers and garden supply stores handle repellents of this type.

If you see a dog spraying an evergreen, you can prevent damage by immediately hosing the sprayed area.

Livestock

Domesticated livestock, cattle and sheep, damage trees by eating branch tips, by rubbing of tree bark, and by compacting the soil. Pigs root out and eat tree roots.



Livestock browsing ruined the appearance and protective effectiveness of this shrub.

All livestock should be fenced out of the tree groves whether they were planted or are native.

The listing of commercial repellents does not necessarily mean that there may not be others equally as good or better available. It simply indicates that the authors do not know of them.

Additional information on animal control with relationship to tree damage may be secured from the Extension Forester, North Dakota Extension Service, NDSU, Fargo, North Dakota; the Fish and Wildlife Service, 601 Capitol Building, Bismarck, North Dakota; or the State Game and Fish Department, Bismarck, North Dakota.

Cover picture courtesy Ed Bry, State Game & Fish Dept., Bismarck.

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Extension Service

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