HELP MINIMIZE SALT INJURY TO SHADE TREES

Each winter, thousands of tons of salt are applied to state and municipal highways in Illinois to combat snow and ice. While the procedure helps provide dry, safe highways, it also contributes to injury and death of trees along those roads and in town.

James A. Fizzell, University of Illinois Extension Advisor, Horticulture, said the injury occurs when salts are deposited by spray or drift on dormant stems and buds of deciduous trees and on stems, buds and needles of evergreens. The trees also are injured when excessive amounts of salts leach into the root zones.

The salt - whether moved by the spray of passing traffic or into the soil - can cause tree disfigurement, reduce plant growth and cause plant death, Fizzell said.

Spray-salt damage is most evident along heavily-traveled highways where high-speed traffic deposits sprays of salt on plants, causing the tissue to dehydrate. Fizzell said damage is most severe within 60 feet of the road, although it can extend to 150 feet.

In city areas, where traffic moves more slowly, the greatest threat is a build-up of soil salt and excess sodium and chloride in the tissue of trees and shrubs along city streets, driveways and sidewalks. Salt plowed and shoveled onto boulevards and lawns may also be absorbed by the roots, causing direct toxicity to the plants.

Fizzell said the damage means increased maintenance costs for pruning, fertilizing and extra care for damaged plants. While salt-tolerant species are available, it is hard to match them to soils best suited for them. Fizzell said there also is the increased risk of a single disease or insect destroying a lot of trees when a single species is used.

One way to avoid the damage is to avoid deicing salts, although this may not be feasible in rugged weather. Fizzell said the salts also could be diluted by mixing them with an abrasive such as sand, cinders or ash. Their application could be limited to high-risk areas such as intersections, hills, steps and walkways. Or, calcium chloride deicing salts could be used instead of sodium chloride, he added.

Fizzell said susceptible plants could be protected by constructing physical barriers of plastic, burlap, plywood or window screen on or in front of them. Shade and ornamental trees could also be planted away from the spray drift zone or areas where salt-laden snow will be deposited, if there is room.

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WELL MAINTENANCE

The National Water Well Association reminds well owners that regardless of location, depth, type, purpose, or subsurface environment, a well will sooner or later require a maintenance or rehabilitation program to keep it performing at maximum capacity. A drop in well performance may be due to faulty design, poor construction, over-pumping, corrosion, scaling and iron deposits, bacteria or failure of the pumping equipment. Any noticeable change in the quality of water being produced may be the result of poor quality water coming into the well through a hole in the casing, and is a signal to begin maintenance or rehabilitation. NWWA maintains that many wells which no longer yield adequate supplies of water can be restored to produce up to 90% of their intended capacity.

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