
➤ GREAT LAWNS/GREAT LAKES

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Deicing Salt Can Injure Plants

Most people are familiar with the corrosive effects of deicing salt to cars and road surfaces. Salt is also injurious to many plants growing along roadsides and driveways.

Most deicing salt is unrefined rock salt containing about 98.5% sodium chloride. The sodium and chloride ions separate when salt is dissolved in water and are absorbed by plant roots. These ions are carried through the plant to actively growing portions such as leaf margins and shoot tips. Here they can accumulate to toxic levels and result in marginal scorch.

Rock salt readily absorbs moisture in the soil that normally would be available to roots. So, even when there is plenty of soil moisture, the presence of high amounts of salt can result in drought-like conditions for plants.

High amounts of sodium cause soil to lose its ability to aggregate into clumps, thereby becoming easily compacted. Excess sodium also blocks the availability of important plant nutrients, resulting in nutrient deficiencies even in fertile soil. All of this results in a general decrease in plant health and vigor.

Salt from spray splashed by passing vehicles can also enter the above ground parts of plants directly. This can cause the buds and small twigs of some plants to lose cold hardiness, resulting in twig dieback.

Calcium chloride is reported to be less damaging to plants, but is extremely expensive and has serious storing and handling problems. Municipal use of sand can be equally as impacting to water quality. Around the house a material such as sand or kitty litter may be adequate.

Source: PENpages News, Penn State College of Agricultural Sciences



Earthworm Trivia ...

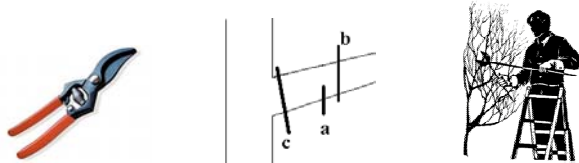
All the soil that you use to grow grass and gardens is filled with worms. But how much do you know about these creatures that are your partners in soil enrichment?

- The life expectancy of earthworms is generally two to eight years.
- Earthworm burrows increase water infiltration, and earthworms also increase moisture-holding capacity by increasing water-stable aggregates in the soil. Some burrows have been found to travel as deep as 50 inches below the soil surface.
- Earthworms are active in the spring and fall; during the summer and winter, they escape extreme temperatures by burrowing deeply or by entering resting states that are similar to hibernation. Earthworms can freeze solid and survive, as long as the freeze occurs slowly.
- Earthworms do not come to the surface after heavy rains to avoid drowning. Being aboveground makes it easier for them to mate and migrate, and the surface water and high relative humidity keep them from dehydrating.
- An acre of well-fertilized, low-lying ground can support one million worms. That translates into about 500 miles of tunneling every week.
- Earthworms are an excellent source of nutritional protein.

INSIDE THIS ISSUE

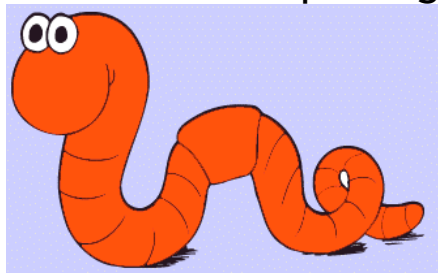
- 1 Deicing Salt Can Injure Plants
- 2 Earthworm Trivia
- 3 Winter is a Good Time For:
- 4 Red Worm Composting
- 5 The Value of Wetlands
- 6 What's Next?

Winter is a Good Time For :



Pruning: Most deciduous trees should be pruned in late fall to winter. At this time of year, you can see the overall branch structure easily, and most insects and disease causing organisms are not active. Late spring and summer are usually not good times of year to prune because disease pathogens are present and wound closure is slower. If you prune in late winter, some trees may bleed or ooze sap excessively in the early spring. The bleeding may be unsightly, but does not harm the tree. Examples of trees that bleed excessively are maple, willow, birch, walnut, beech, hornbeam, elm, and yellowwood.

Red Worm Composting



Worm compost is made in a container filled with moistened bedding and redworms. Add food waste and with assistance from micro-organisms, the worms will convert bedding and food waste into compost. Worm composting can be done year-round, indoors in schools, offices and homes. It is a natural method for recycling nutrients in food waste without odor. The resulting compost is a good soil conditioner for houseplants, gardens and patio containers. Redworms are best suited to worm composting. They are often found in aged manure, compost heaps, and piles of leaves. They are also known as red wiggler, brandling and manure worms. Their official names are *Eisenia foetida* and *Lumbricus rubellus*. Redworms are best suited for composting because they thrive on organic material, such as food waste. For one pound per day of food waste, you'll need two pounds of worms (roughly 2,000). If you are unable to get this many worms at the start, reduce the amount of food waste until the population increases. And the population will increase. Redworms mature sexually in 60-90 days and can then produce cocoons which take 21 days to hatch baby worms. Once they start breeding they can deposit two to three cocoons per week with two baby worms in each cocoon. The limits on their reproduction include availability of food and room to move and breed. So worm populations don't usually exceed the size of the container. For more information on red worm composting call the Garden Helpline at 473-5335.

The Value of Wetlands

Wetlands are among the most productive ecosystems in the world, comparable to rain forests and coral reefs.



Long regarded as wastelands, wetlands are now recognized as important features in the landscape that provide numerous beneficial services for people and for fish and wildlife. Some of these services, or functions, include protecting and improving water quality, providing fish and wildlife habitats, storing floodwaters, and maintaining surface water flow during dry periods. These beneficial services, considered valuable to societies worldwide, are the result of the inherent and unique natural characteristics of wetlands. Generally, wetlands are lands where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface (Cowardin, December 1979). Wetlands vary widely because of regional and local differences in soils, topography, climate, hydrology, water chemistry, vegetation, and other factors, including human disturbance. Indeed, wetlands are found from the tundra to the tropics and on every continent except Antarctica.

For regulatory purposes under the Clean Water Act, the term wetlands means "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas."

[taken from the EPA Regulations listed at 40 CFR 230.3(t)]

For more information please read the insert created by the Stormwater Coalition members here in Monroe County.

Horticulture School 2004

Cornell Cooperative Extension announces Horticulture School 2004. Sessions taught by Cornell faculty and regional experts are open to the public as a series or as individual topics. The programs run from 9- noon Tuesdays and Thursdays. Jan. 29-April 22. At 249 Highland Ave. Sessions include: Soils and Fertilizers, Turfgrass, Tree selection, Deer and Nuisance Wildlife, The Flower Garden, Home Fruit Production, Home Vegetable Gardening. To register and receive complete details please call Judy at: (585) 461-1000 ext 224. jac223@cornell.edu.