

### A SLIPPERY ISSUE

Old man winter came to visit in December and brought with him a bone chilling low of  $-3^{\circ}\text{F}$ . We haven't seen a subzero temperature since 2011 when we fell to  $-6^{\circ}\text{F}$  on both February 9<sup>th</sup> and 10<sup>th</sup>. Accompanying the cold was a little precipitation and a nice segue into the topic of this article, how to properly de-ice sidewalks.

All too often we see a de-icing product and think this will replace good ole' fashion snow shoveling, or "if a little is good, then a lot is better." In fact these products are designed to make shoveling snow easier, not in lieu of. Applying a deicer prior to snow accumulation is also a good idea which prevents the ice from bonding with the concrete. However, if concrete is less than a year old, de-icing agents should be avoided all together and products containing ammonium sulfate or ammonium nitrate should never be used on concrete. These two commercial fertilizers are sold as deicers but aggressively attack and deteriorate "new" concrete surfaces.



Not only can deicers damage sidewalks but over time, misuse and overuse of deicers can cause plant injury. Many deicing agents contain salt substances, such as sodium chloride and potassium which can cause desiccation (drying out) of leaf margins and tips of stems/branches causing plants to become stunted. Avoid piling snow on flower beds all together and minimally on turf, if possible.

If your only option is to shovel snow onto your grass, try to distribute the snow evenly. Water thoroughly in the spring which helps leach salts through the soil surface and out of the plant's root zone. Absorbing water in soils with a high salt content is difficult for plants.



There are alternatives to sodium and calcium chloride, like sand, sawdust or kitty litter. These will not cause the ice to melt, but provide traction to help prevent slipping and falling on ice. Mom alert: these alternatives are messy if tracked indoors. Magnesium chloride is fast acting and less corrosive to pavement, but may cause plant injury. Calcium magnesium acetate is another alternative. This product is biodegradable and environmentally friendly but, like Magnesium chloride, is more expensive than sodium or calcium chloride.

One final option is a compromise. The natural alternatives can be mixed with calcium chloride to provide a product that helps prevent ice accumulation, provides traction, and poses less threat of salt injury to plants. A one part calcium chloride to three parts sand, sawdust, or litter mixture can be used. Mulching flowerbeds is beneficial when dealing with deicers because the mulch absorbs some of the salt and prevents it from entering the soil profile. Yes, mulching finds a way into almost every article I write. Have a safe, warm and blessed New Year and as always, happy planting.