

Ice and Deicers

AGRI-VIEWS

by Chuck Otte, Geary County Extension Agent

Last weekend we had some not uncommon winter weather conditions with sleet and freezing rain. It's of interest to note that as global warming continues, the notorious ice belt, which used to be centered further south of us, is moving north and we can likely expect to see more of these types of events. When ice storms occur, and other frozen winter precipitation, we often see impacts on our plants and we often start reaching for the deicer products for our sidewalks and driveways.

Deicers, or ice melt, work by reacting with the ice and lowering the freezing point of water. It isn't an instantaneous reaction but it can work fairly quickly. In some commercial and road situations, deicers are mixed with sand so that the sand can provide some traction while the deicers are starting to melt the ice. In virtually all cases, deicers work because they are salt based. Salt, good old sodium chloride or any one of the the different chemicals that are chemically considered a salt.

Here's the problem. Much of the melted ice or snow runs off the hard surface and on to nearby soil. A little bit of salt on soil isn't a big deal. But a lot of salt will have some very detrimental impacts on the chemistry and the structure of the soil. Additionally, salty slush that may be splashed onto ornamental trees or shrubs near roadways can cause damage and in extreme cases, death of those plants. Some people choose to use garden or lawn fertilizer instead of deicers, and it works. But before you think it is all benign and kind, keep in mind that it works because most nitrogen fertilizers are chemically a salt.

Apply too much deicer, which then runs off the sidewalk, driveway or street, onto soil and it can change the soil pH, destroy the soil structure and pretty muchly make the soil unfit to grow anything you would desire to have growing there. It doesn't matter whether that deicer is rock salt, some commercial deicer or fertilizer, too much and you've messed up the soil for a long time!

When deicers are applied you need to use patience. Far too many people go out and want the ice cleared NOW so apply it far more generously than is necessary. There are times when you do need to have a rapid melt. More than likely you've found a lot of ice melt left over after it's warmed up and dried off. When that happens, sweep up that ice melt and put it in a bucket for later use. If you leave it on the hard surface it will eventually dissolve or get moved over to the soil to mess up the soil. Be patient, use deicers sparingly and just let them work.

The other issue when we have ice storms is the ice on trees and bushes. Humans tend to think that they can help plants under these conditions by doing something. The best help that humans can do is nothing! Under extreme ice loads tree limbs will break and bushes will go flat. But if you go out and try to help by knocking ice off the plants, you are likely to only make things worse. In fact, going around and under trees that have a heavy ice load will put you at risk of injury or death if a large limb breaks. And you never know when that might happen. Just stay away from plants that are covered in ice. Wait until after the storm and after ice melts off trees to start any clean up of broken limbs. Given a few weeks, most bushes and sagging limbs on trees will return to normal. Any clean up pruning on trees can wait for better conditions. There's no need to be in a hurry!