

Dealing with Storm Damaged Trees
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Given the recent severe storms that have been moving through South Dakota I thought it might be a good time to republish an old article on tree damage during storms. Trees will often fail during storms if they have not been properly cared for in the past. Proper pruning, proper planting, tree selection, and tree placement all play an important part in whether or not a tree will stand up to storms.

Trees planted too deeply or with stem girdling roots can break off at the soil level causing a loss of the tree or even extensive damage to buildings or even injury to people. Trees with competing leaders can split leaving the tree vulnerable to insect or disease attack. Even trees that have been impacted during construction projects often will fall over during high winds. Predicting storm damage can be difficult but not impossible.

Taking a good look at the trees form, any decay that is present, how the tree has been maintained, site problems, and any girdling roots is a good start to tell how the tree will fare in a storm. Tree species can indicate if a tree will be strong during a storm as well. European mountain-ash, green ash, hackberry, boxelder, willows, littleleaf linden, and silver maple commonly have co-dominant stems and can be suspect for storm damage. Many of these species are also susceptible to decay especially if they have been improperly pruned. Shallow rooted trees in rocky areas are often lost during storms.

Check tree regularly for damage and decay to prevent storm damage. Broken and diseased branches should be pruned by cutting just outside of the branch bark ridge. Avoid leaving stubs or cutting flush with the trunk. Both of these conditions can be sites of infection from wood rotting fungi and can be the start of a tree failure down the road.

Plant trees by digging wide shallow holes and backfilling with native soil will enable the tree to grow healthy roots and withstand damage. If staking the newly planted tree is necessary always stake loosely to allow the tree to sway in the wind. The swaying enables the tree to grow strong in the trunk area. I suggest using a webbing material (like seatbelt webbing) to hold the tree in place. After planting maintain proper health by watering and fertilizing properly. Too little or too much water or fertilizer can be disastrous during storms.

After storm damage take a close look at your trees and prune any broken branches. For large branches use a three step procedure by first cutting almost half the way through the branch about 12 inches out from the trunk. Second undercut the branch just outside of the first cut, removing the bulk of the branch. Thirdly, cut off the stub just outside of the branch bark collar. Only use pruning paint if the damage is on oak or elm, otherwise leave the cut unsealed.

If smaller trees are leaning stake them as described earlier. You may have to use a tighter hold on the tree but always leave some wiggle room for the tree to sway. If bark has been torn during the storm clean up the wound by trimming any rough edges of bark and removing. Clean cuts will heal much faster and better than torn damage. Larger trees may need to be cabled or braced. A certified arborist can help with this procedure. Knowing what you can do as a homeowner and when to call an arborist is very key to keeping the tree healthy and may even keep yourself alive as storm damaged trees can be unpredictable when removing branches or the entire tree. When in doubt get some help.

Source: Gary R. Johnson "Storm Damaged to Landscape Trees: Prediction, Prevention, Treatment" University of Minnesota Extension.

Feel free to call on me for advice on storm damaged trees by calling 605-394-2188 or email me at ricky.abrahamson@sdstate.edu.