Tornado & Wind

Information on weather-ready landscapes

EXTENSION

WHAT IS IT?

Thunderstorms, tornadoes and severe wind storms are a common occurrence on the Plains causing damage to plants, trees, and structures. Storms can uproot trees, cause plant material to fall on other plant material, break or crack branches, etc. which reduce the lifespan, pest susceptibility, and vigor of the plant.

Typical Damage: Trees with multiple leaders or narrow branching angles are more prone to significant wind damage. Broken or cracked branches increase risk of breakage in future events, while branch stubs left in trees will rot and decay.

Average number of days per year this occurs, within a 25 mile radius of any point (1986-2015):

- 57 mph wind or greater: 6-7 days in SE Nebraska and 3-4 days in NW Nebraska
- Any tornado: 1.0 - 1.25 days in SW thru NE Nebraska and 0.50 days in NW Nebraska

Average number of tornadoes per year in Nebraska

- 54 (1985-2014)

Source: Storm Prediction Center

PREVENTATIVE ACTIONS

Inspect and maintain your plants to lessen storm damage.

1. **Prune trees correctly when young** (from 3 to 4 years after planting up to 10 to 15 years of age) so tree develops a strong branching pattern.
2. **Do not treat wounds with pruning paint/wound dressings.**
3. **Remove any dead, damaged, or diseased tree branches** as you see them at the branch collar. Do not leave stubs.
4. **Plant trees, shrubs, groundcovers, perennials and ornamental grasses** that are adapted to USDA hardiness zone 5 in eastern Nebraska; Zone 4 in western Nebraska.
5. **Identify brittle or easily damaged plant material** like willow, cottonwood which are more prone to damage from wind or tornado.
6. **Select and plant trees with dense wood and strong branch angles** that are less susceptible to breakage, consider slower growing trees over very fast growing trees

PREVENTATIVE ACTIONS

(continued)

7 **Inspect root ball of trees before purchasing.** Avoid trees with pot bound roots and encircling or girdling roots.

8 **Do not allow codominant trunks to develop on shade trees.**

9 **Do not plant too deep.** Trunk taper needs to be visible above ground.

10 **Stake correctly**: low on tree and for only one year. Use strong but flexible material.

11 **Monitor tree for signs of decay:** fungal growth on bark, discolored wood, and large wounds.

CORRECTIVE ACTIONS

Use safety and patience when assessing damage.

Remove any dead or damaged branches if you can do so safely. Consult an arborist for more extensive pruning or tree removal. Remove branches at branch collar. Stubs should not be left.

Allow leaves and blooms to fall off the plant naturally, then rake them up and compost them.

Cut off broken or bent stems with a by-pass hand pruner just above a node

Remove trees that have been uprooted, have trunk failure or more than 50% of branches are broken.

Small trees that bent over or leaning my be staked into an upright position. Larger trees may best be removed for safety.

Avoid fertilization until the plant recovers.

Keep soils around the plant evenly moist, not soggy or dry.

Mulch with wood chips to avoid weed competition and to moderate soil temperature and moisture

Be patient. It could take several years before some plant species show signs of damage.

For more information, visit **weather-ready.unl.edu/landscapes**

Written by John Fech, Kelly Feehan, Elizabeth Killinger, David Lott, Ashley Mueller, & Tyler Williams | © 2018

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