Tornado & Wind
Information on weather-ready landscapes

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.

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

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.

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.

Average number of tornadoes per year in Nebraska
- 54 (1985–2014)

Source: Storm Prediction Center
**PREVENTATIVE ACTIONS**

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**

- **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.

- **Avoid fertilization until the plant recovers.**

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

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

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

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

For more information, visit [weather-ready.unl.edu/landscapes](http://weather-ready.unl.edu/landscapes)