

## **Garden Update**

**Week of May 17, 2021**

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### **Winter Damage and Herbicide Drift**

#### Winter Damage

February's deep cold separated the marginally hardy plants from those that weathered the winter without problems. The lower portions of stems of some trees and shrubs, protected by the snow, flowered as usual and are sending out new leaves. Unfortunately, the portions of plants not protected by snow remain lifeless or are slow to leaf out. Burning bush, Japanese maple, doublefile viburnum, forsythia, black gum, Korean Evodia, butterflybush, blue spirea, beautyberry, boxwood, and other variably hardy plants are showing the effects of what a deep drop in temperature can do. Leaf emergence on lower parts of plants indicate they were not killed outright but significant growth has been lost.

Utilizing best management practices will nurture this new growth emerging from the lower parts of plants. Given last year's drought conditions, making sure trees and shrubs are adequately watered, about one inch per week, will help. If irrigating, this one inch of water should be made all in one application, not divided into several smaller ones. Mulching 2-4 inches deep with wood chips or shredded bark protects plant root zones throughout the year. Refrain from fertilizing trees and shrubs. Stay away from using any lawn weed herbicide containing dicamba. Cutting back stems thought to be dead can be delayed for another week or so to allow ample opportunity for new growth to emerge. For plants deformed by the frigid cold, removing them altogether may be the best option.

#### Herbicide Drift

Twisted new growth, stunted leaves, and distorted flower buds—these are the symptoms of herbicide drift. Auxin-containing herbicides such as 2,4-D and dicamba are easily carried on wind currents when wind speeds surpass 10 mph or can spread when vapors lift from targeted plants at temperatures 80° F and warmer.

The degree of harm to plants from drift depends on the age of the plant and the amount of product the plant is exposed to. Leaves that are smaller than normal and/or are curled do not photosynthesize to their full capability. This means leaves will produce less sugars, which are necessary to fuel root development and fruit production. Young trees have a tougher time weathering herbicide drift than older well-established trees, largely because young trees have a lot of growing left to do, and loss of leaf material greatly reduces the tree's ability to complete this process. Vegetable plants, like tomatoes, may survive herbicide drift but will have reduced yields.

There is nothing to be done to counter the effects of herbicide drift. If new growth in vegetable plants continues to be distorted, plants should be removed. Trees and shrubs are not necessarily killed by a single case of herbicide drift, but negative effects accumulate when trees are continually exposed. Specialty growers, tree nurseries, growers for farmers markets, grape growers, and beekeepers can register their site with DriftWatch™ Nebraska <[ne.driftwatch.org](http://ne.driftwatch.org)>, a communication tool to enable producers and applicators to work together to protect crops.