

# From the Ground Up



## Placing & Caring for Trees

Nebraska State Arboretum

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Trees are generally the plants that will live the longest in landscapes. Trees that are well-selected and cared for can live for generations. Trees need careful consideration in reference to the species and location where they are planted. Here are some suggestions to think about when planting trees.

1. Don't rush your decision. It's common for people to misjudge their placement of the trees they plant.
2. Think of the function first. Try not to pick a tree just by its looks. Take into consideration how it blooms in the spring, how it sheds its leaves in the fall, how structurally sound it is, how friendly it is to wildlife, climate tolerance, and if it's environmentally friendly.
3. Know the tree and how it grows. Tree species can greatly vary from each other. Some grow very wide, some are more upright, and some may even have sweeping branches. Native trees are generally more accepted due to them being mostly climate-adapted and can offer wildlife habitats. Avoid trees that are invasive like the ornamental pear, goldenraintree, and others.
4. Know the soil and the site. Soil can make a big difference with trees. Trees prefer soils that are rich with decomposing organic matter. Also, take advantage of drainage ways or wet areas to plant species that are more wet-tolerant. Be careful about planting trees that are not as wet-tolerant in places like irrigated lawns. Many trees die more from over-watering rather than under-watering.

## Emerald ash borer discovered in two more Nebraska counties

Paul Hammel

Courtesy of Tzi Martinez

The Emerald Ash Borer has now been detected in two more Nebraska counties: Lincoln county and Shubert county. This makes a total of twelve counties in Nebraska where this invasive beetle has been detected according to the Nebraska Department of Agriculture. Known for attacking and killing ash trees, the Emerald Ash Borer was first discovered in Nebraska back in 2016.

Infested trees will show thinning and/or dying branches in the top of the tree and S-shaped larval galleries under the bark.

While it's difficult to stop the spread of this beetle, state entomologists have offered a few suggestions to avoid human-assisted spread.

- Use locally sourced firewood, burning it in the same county you've purchased it.
- Consider treating healthy trees within a 15-mile radius of a known infestation.
- Continually reapply treatment to prolong the tree's life.
- Consider removing trees that are experiencing declining health.

## What Happens to Native Plant Life during the Winter and Drought

What are the two things plants need in order to thrive? Water and sunlight. But during the winter months, the days are getting shorter and thus providing less sunlight. Cold weather also means that water is beginning to freeze. Freezing water can cause the water in plants to expand and break open plant cells. How do plants adapt to this? Annual plants have adapted to produce seeds before the cold weather arrives. As the weather gets colder, the annual plants will begin to die off, leaving their seeds behind. Perennial plants, in contrast, go through a dormancy period. This often means that the plant will die back during the winter months but the roots are still alive under the ground. They store nutrients to survive during the winter.

## Winter Hay for Horses

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Hay is a vital part of your horse's winter diet. It provides the horse with calories while also giving the horse a wonderful heat source from within as the fermentation of fiber in the hindgut produces heat. This helps your horse maintain his body condition while also keeping him warm when it's cold outside!

Horses need quality hay and in adequate quantities to meet their nutritional needs. Ideally, a horse's diet will be based on his forage intake of approximately 2-2.5% of his body weight each day. Some horses will need modifications, such as concentrates or higher protein forage added such as alfalfa, and we base such on the specific horse. For example, a geriatric horse with minimal dentition will need an additional source of calories, along with his hay, in the form of concentrates like senior feed or soaked alfalfa pellets to meet his needs.

Good practice on these cold winter days, especially when the temperature falls below 18 degrees Fahrenheit, is to increase the forage provided to the horse. Don't forget to ensure the horse has free-choice access to water at all times. Power his own machinery, with his internal furnace, with some extra hay and help your horses stay warm on these cold days!

