



# MINNESOTA DEER HUNTERS ASSOCIATION

## APPLE TREE PROGRAM CARE GUIDE

-  Sunny Location
-  Spacing
-  Digging
-  Root Inspection
-  Planting
-  Water & Support
-  Fertilize & Weed

This is only a simple guide to get your started. We always suggest leaning more about the process from online resources or local experts. The information in this guide was sourced from the U of M and partners.



### MDHA APPLE TREE PLANTING INSTRUCTION GUIDE.

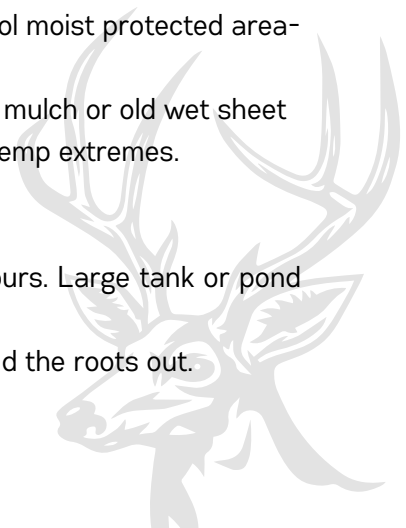


#### Storing Bare Root Trees

Essential roots **DO NOT** dry out. Wet down plants and store in a cool moist protected area- barn or garage. Water roots and cover with straw, mulch or old wet sheet or blanket. Cover with tarp, avoid temp extremes.

#### Planting

Soak roots in water for several hours. Large tank or pond is ideal. Large hole size is important. Spread the roots out. Proper planting depth is essential.





## Find a sunny location

Apple trees require full sun, so choose a spot where the sun shines directly on the tree for at least 8 hours each day.

## Test your soil

When it comes to soil, apple trees can grow in most soils as long as there is no standing water and the pH of the soil is between 6 and 7.

- Have your soil tested to determine pH
- pH of the soil should be between 6 and 7
- Apple trees can grow in most soils as long as there is no standing water
- Avoid planting in areas where water stands for several hours after a rain

If you are unsure about your soil pH, conduct a soil test to determine soil conditions before planting and amend the soil as suggested by the results.

## Spacing

How much space do you need for apple trees? A good rule of thumb for a garden fruit tree is to provide at least as much horizontal space as the anticipated height of the tree. So, if your tree will grow up to 8 feet high, make sure there are 8 feet between it and the next tree.

Planting trees too close together will increase shading and reduce the number and quality of the fruit coming from your tree.

Tree spacing

- Standard trees: 20-25 feet
- Semi-dwarf trees: 12-15 feet
- Dwarf trees: 6-8 feet



## Dig a hole

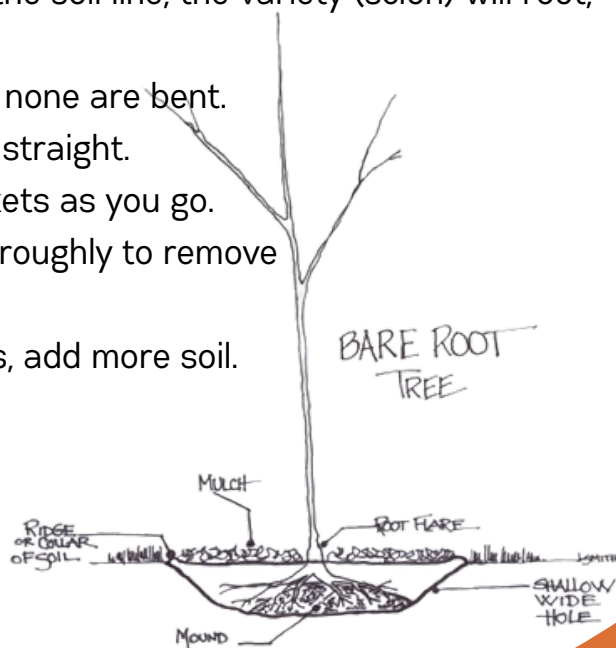
- Dig a hole for each tree that is no deeper than the root ball, and about twice as wide.
- When you dig the soil out of the hole, pile it on a tarp or piece of plywood so it's easier to get it back in the hole.
- You may mix in up to one-third by volume compost, peat moss or other organic matter.
- Most of what goes back in the planting hole should be the soil you took out of the hole.
- There is no need to add fertilizer to the hole.

## Look at the roots

- If you purchased bare root trees, closely examine the root system and remove encircling roots or J-shaped roots that could eventually strangle the trunk.
- For trees in containers, inspect the root systems for encircling woody roots.
- If woody roots are wrapped around in a circle, straighten them or make several cuts through the root ball prior to planting.
- This helps the plant produce a stronger root system and prevents the formation of girdling roots that eventually weaken the tree.

## Put the tree in the hole

- Position each tree so that the graft union is about 4 inches above the soil line. The graft union is a swelling where the variety meets the rootstock.
  - If the graft union is placed close to or below the soil line, the variety (scion) will root, causing trees to grow to full size.
- Spread the roots of bare root trees, making sure none are bent.
- Have someone help you get the tree standing up straight.
- Begin adding the soil, tamping to remove air pockets as you go.
- After the hole is filled, tamp gently and water thoroughly to remove remaining air pockets.
- The soil may settle an inch or two. If this happens, add more soil.



## How to keep your apple trees healthy and productive

From watering to weeding to thinning fruit, caring for your apple trees throughout the year will help your plants produce plenty of apples to harvest.

### Watering

Throughout the life of the tree, you should water its root zone thoroughly during the growing season whenever there is a dry spell. Ideally, the tree should receive one inch of water from rainfall or irrigation every week from May through October.

### Support

It's a good idea to stake the tree for the first few years. Either a wooden or metal stake will work. A stake should be about the height of the tree after being pounded two feet into the ground. Use a wide piece non-abrasive material to fasten the tree to the stake. Avoid narrow fastenings such as wire or twine, as they may cut into the bark.

Use tree guards to protect the trunk of your tree

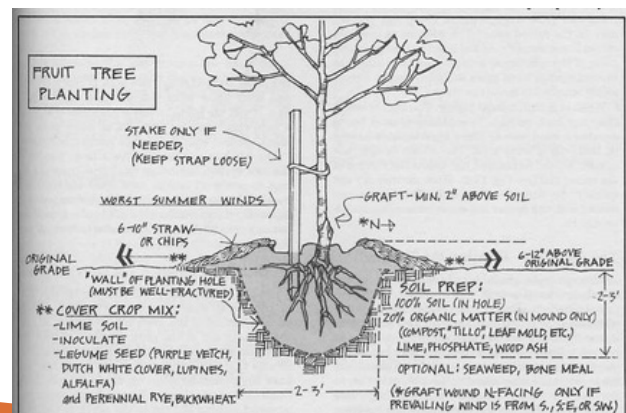
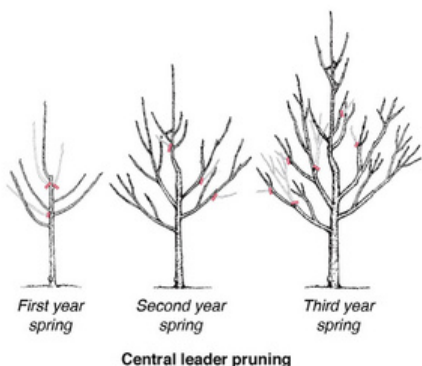
Planting is a good time to install a tree guard. These are usually made of plastic and are available at most nurseries and online.

Tree guards protect your tree from winter injury and bark chewing by small mammals, such as voles (aka meadow mice) and rabbits.

Guards also reflect sunlight from the trunk, which helps prevent the trunk from heating up on a cold, sunny winter day.

- If the bark temperature gets above freezing, water in the conductive tissue under the bark becomes liquid and begins to flow through the cells.
- When the sun goes down or behind a cloud, the liquid water suddenly freezes, damaging the cells and sometimes killing all the tissue on one side of the trunk. This is called sunscald.

Once the tree has rough and flaky mature bark, neither winter sun nor chewing animals can harm it, so tree guards will not be necessary. For the first years of its life, however, it's important to protect the trunk of your fruit tree.





# FERTILIZER, MULCH & WEEDING

## Fertilizer and mulch

Once established, an apple tree planted on a favorable site, in properly prepared soil, should thrive with minimal fertilization.

- Nitrogen is normally the only mineral nutrient that needs to be added on an annual basis and can be added using compost.
- The branches of non-bearing young apple trees will normally grow 12 to 18 inches per year while the branches of bearing apple trees will grow 8 to 12 inches in a season.
- If growth exceeds these rates, apply no compost at all, as too much growth can keep fruit from developing, and lush growth is more susceptible to fireblight infection.

## Weeding

- For the first three to five years, grass and weeds should be removed from about a 3-foot radius around the tree.
- Grasses can deplete soil moisture rapidly and will reduce tree growth.
- Applying a few inches of mulch around the base of the tree will help prevent weeds.
- Keep the mulch a few inches away from the trunk to prevent rodent damage and fungal growth.

Thank you for participating in the **Minnesota Deer Hunters Association** Annual Apple Tree Program. If you want to learn more about planting and caring for your trees please visit the University of Minnesota Extension Website.



**"Protecting the future of deer and deer hunting through Habitat, Education, Advocacy and Legislation"**