Maintaining TREES in your landscape

Montana presents a harsh environment for trees. High soil pH, low humidity and precipitation, Chinook conditions and fluctuating winter temperatures can take their toll on even the hardiest trees. To maintain a beautiful landscape, it is very important to give your trees the proper care they need to thrive.

FORDE NURSERY Landscaping & Garden Center

Watering Trees

Examine the soil 4 to 8 inches deep to determine the need for water. If the soil feels dry or just slightly damp, water is needed. Water slowly allowing it to penetrate deeply and soak the entire root zone. A slow trickle of the garden hose for several hours or a drip system is the best method of watering trees. If using a drip system, install 2-3 1gph emitters per tree and run the system for 4-8 hours once or twice a week. Avoid short, frequent watering, as these encourage the development of shallow root systems, which are vulnerable to drought, heat stress, and freezing injury.

Watering newly planted trees - It is crucial that all newly planted trees are watered routinely and thoroughly. With our hot, dry, windy summers, we must not neglect new plantings. The frequency of watering depends greatly upon soil type and weather conditions.

- In sandy, well-drained soil, water deeply about every 3 days until plants are established (about 30 days), and every 5-7 days after that.
- Plants in heavier soil will require water less often. They will need a deep soaking about every 5 days until established (about 30 days) and every 7-10 days thereafter.
- Under hot and/or windy conditions, plants will require water more often. In cooler weather or periods of heavy rain, water less often.
- When watering trees located on a hillside, water slowly and deeply. If you are not careful, water will run off before it has a chance to soak in.

Certain trees, until established, will require more water than others, such as: birch, arborvitae (cedar), aspen, willows, and any trees that were in smaller pots.

Do not **over water**, that is, water too often. Plants must breath as well as drink and saturated soils do not contain enough oxygen. Remember, "*you can't water your plants too much at one time, but you can water too often*". Make sure your plants aren't constantly flooded.

Early fall watering – Special care must be taken to make sure trees enter the winter completely dormant and yet have an ample supply of sub-surface water to get through the winter. To accomplish this, gradually withhold water in the fall (after mid Sept.) This slows growth and helps the plant become dormant. Continue this drying for 4 - 6 weeks.

Late fall watering – It is very important to water all trees heavily in the late fall – about the 1st of November – before the ground freezes. Add enough water to fill the entire root zone, and more, to capacity. This stored moisture will be available to the plant roots beneath the frozen layer of soil during the winter. This is especially true of evergreens or anything planted in late summer or fall.

Winter watering – If the winter is unusually warm, dry and windy, or if the plants are in a sunny, exposed location, it may be necessary to thoroughly water your trees once a month in the winter. This is especially true for evergreens due to the amount of water needles can use on a sunny winter day.

Mulching

Adding mulch around the base of your trees is a very important part of plant care. Mulching improves the environment for the tree roots allowing better infiltration of water, holding soil moisture, limiting weed growth, and reducing injury from lawn mowers and weed trimmers. Apply a 2 – 6" layer of bark, compost or decorative rock on the soil surface around your new plantings. Keep the mulch material from direct contact with the tree trunk to prevent crown rot. We recommend using a layer of Typar weed control fabric under decorative rock, this will reduce weed growth and prevents the rock from "sinking" into the ground. Due to decomposition, bark mulches may need to be replenished every couple of years.

Staking

With the exception of smaller trees or ones planted in protected areas, we recommend staking all trees for the first year. Use 2 or 3 tree slings around the lower trunk attached with wire to vertical stakes of wood or steel, depending on the size of the tree. Do not use wire through a section of garden hose around the trunk. Do not stake the tree too tightly – allow the tree to sway slightly in the wind. **Do not leave stakes on for more than one year.** After one year the tree should have developed a strong enough root system to support it in windy conditions. Allowing the tree to sway helps it to develop a stronger, more resilient trunk than those staked for several years. Trunk movement is required to develop strong, tapered trunks.

Pests and Diseases

A healthy tree is much less susceptible to diseases and pests. If you maintain the health of your tree with proper watering, fertilizing, etc., you should not have many problems. Regularly inspect your trees so you can catch a problem before it causes considerable damage. Before spraying your trees, it is important that you know exactly what it is you are spraying for. You don't want to spray an insecticide on your tree when it is actually a fungus that is doing the damage. If you are unsure what the problem is, bring us the bug, a leaf, stem or photo of your tree. We will try to determine the cause and suggest an appropriate solution. The extension service is also a great resource for information.

Fertilizing

Trees should not need to be fertilized the first year. Fertilizers can "burn" tender new roots or stimulate crown growth faster than the roots can supply water. Be sure your trees need fertilizer before you fertilize them. If a plant is healthy, showing no nutrient deficiencies, and making satisfactory growth, it probably does not need to be fertilized. To determine if your trees need fertilizing you should have your soil tested. You can also look for symptoms of nutrient deficiency such as yellowing, stunted growth or twisted, deformed foliage. The best time to fertilize established trees is in the fall after the leaves fall from deciduous plants but about 1 month before the ground freezes. The second best time to fertilize is in early spring after the danger of severe cold has passed, but before the buds begin to swell. Apply no fertilizer between late June and before the fall application time. There are several methods used to fertilize trees. ***Ross Fertilizer Stakes*** are a slow release fertilizer. They are hard stakes that are hammered into the ground around the drip line of the tree. These can be used once a year. ***Water soluble foliar fertilizers***, such as Miracle Gro or Peters, offer a quick but short-lived nutrient boost to your plants. Plants can be fertilized by this method every one or two weeks. ***Broadcast fertilizers*** are in a granular form and are spread around the drip line of a tree or shrub and left to filter into the soil. ***Ross Root Feeder***, uses a tool that attaches to a hose and the fertilizer is administered directly to the roots by a metal probe. This can be done twice a year, in the spring and fall. This is also a good tool for deep watering your trees in a drought situation.

Trunk Protection

Trunk protection may be needed to prevent damage to young trees or trees with thin bark. Make sure the material you use is loose on the trunk to allow air flow which will discourage insects and diseases. **Protection from mowers and weed trimmers:** A short trunk guard can be placed at the base of the tree. This can be kept on the tree year round. **Protection from animal damage:** To prevent deer or rodent damage, a wire mesh can be installed around the trunk. This can be kept on year round. **Protection from environmental damage like sun scald or frost cracks:** In the winter, extreme temperature changes can cause frost cracks and sunscald on the southwest side of the trunk. To help prevent this, in the late fall, place a white corrugated trunk protector on the tree up to the first branches. Remove the trunk protector in the spring.

Why you should prune trees:

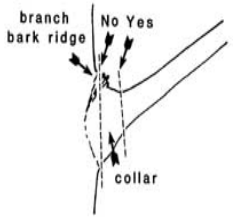
- To train young trees to create an attractive shape and a strong structure.
- To improve the health of a tree by removing dead, diseased, hazardous, or unsightly branches.
- To enhance flowering and fruiting by opening up a tree for better light penetration.
- To create a fuller look, reduce the size or maintain a special shape or form.

When you should prune trees:

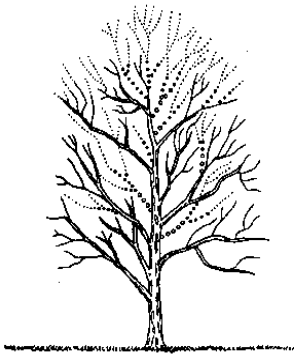
- Suckers, water sprouts, dead, dying and broken branches can be pruned anytime. When removing infected wood, make the cut with a sterile blade into healthy wood well beyond the point of infection (6-12"). Sterilize pruning tools before each cut by dipping them into rubbing alcohol.
- The ideal time to prune most deciduous trees is during the late dormant season after severe cold has passed, but before new growth has begun (March). Sap may flow heavily from trees such as maple, dogwood, birch, elm and walnut. This "bleeding" is not harmful, but is unsightly. To prevent this, you may want to prune these trees in the early summer after they have leafed out.
- Prune in the heat of the summer cautiously, as it can weaken the plant.
- Do not prune in the late summer or fall. This will stimulate new growth which will be susceptible to frost damage and disease.

What you should remove when pruning:

- Remove damaged or dead branches.
- Remove crossing or rubbing branches, as they result in wounds, decay, and notches.
- Remove water sprouts and suckers from the base of the tree or shrub. These are rapid growing, weekly attached shoots that should be removed as soon as possible because they are unsightly and drain energy from the tree.
- Trees should have one strong central leader. If the tree seems to be developing two or more strong leaders you should choose the one with the best placement to be the leader, shortening the others into a pleasing and appropriate form. This should be done when the tree is young.
- We do not recommend putting anything on a pruning cut. Paints or wound dressings do no good and may even harm your tree.
- When removing a branch, always cut outside the branch bark ridge and collar. Do not make a flush cut. This will allow the tree to heal faster.



Pruning deciduous trees:



Thinning cuts remove branches to a lateral branch big enough to assume the dominant role. Branches being cut may be smaller, the same size, or no more that twice the size of the branch being thinned to. For example, if a 6" branch is being removed, thin it back to one no less than 3" in diameter. A thinning cut opens a tree up, reduces the weight of limbs, can reduce the overall height and helps retain the natural growth.

Heading cuts remove branches to a stub, to a small bud, or to a lateral branch not large enough to assume the dominant role. This type of cut induces branching and bushiness below the cut. Heading cuts, which are commonly used for fruit trees, are usually not appropriate for ornamental and shade trees. **Topping** a tree is cutting all its major branches back with heading cuts deep into the center of the tree. This is NOT an acceptable pruning practice. Topping results in a deformed tree with weak branches. These trees are often more susceptible to insects and diseases and are a hazard due to the weakly attached branches that grow from the large cut.

Pruning Pines and Spruces:

- Pines and spruce are slow growing and usually don't need much pruning if planted in the right place that allows them to reach their mature size.
- Pines and spruces may be pruned in the spring (usually in June) when the new shoots, which look like candles, develop. When the "candle" has extended about to its full length, before the needles are fully developed, remove about 1/2 to 2/3 of the length of the "candle". This will reduce length and promote compactness.

- Don't prune into the "woody" part of the stem leaving a stub. New growth will not emerge from this cut.

This brochure is designed to give general guidelines for caring for trees. If you have any questions about specific trees, please feel free to give us a call. We are happy to answer any questions you may have.

2025 2nd Ave. NW
Great Falls, MT 59404
Phone: 406-727-0950 Fax: 406-727-4817
Email: mail@forde-nursery.com
www.forde-nursery.com