

First Things First.....

Your tree should be unpacked as soon as it arrives at its new home, even if it cannot be planted right away.

A great deal of care has been taken in the packaging of your tree. However, it has been in a box for several days, possibly handled roughly in transit and or exposed to extreme temperatures. Therefore, your new tree may appear a little wilted, dry or droopy when it arrives. This is common and no cause for concern. With proper care, your tree will quickly rejuvenate.

If you have purchased a bare root tree (which means no soil around the roots), the roots must stay moist within the packaging until you are ready to plant the tree. Place the tree in a cool, protected area, and always keep the roots from drying out. Plant your bare root tree as soon as possible.

If your tree is in a pot, water it thoroughly until water runs out of the bottom of the pot. Place the pot in a shady, protected area for at least 3 days. This allows your tree to acclimate to its environment without the stress of being transplanted immediately.

If your tree has arrived with some damaged branches or leaves, these can be easily pruned away and will grow back nicely. If you feel that your tree has been damaged in excess of this, please contact our Online Customer Service Department immediately.

When you are ready to plant your tree, we suggest you do the job as early in the day as possible before it gets too hot. Don't worry about cool or overcast days..... they're great for planting too!

So with all that said.....let's get to planting



Plantingdirections.com

Planting Instructions

Planting a tree can improve our environment and decrease energy costs. It can also enhance our quality of life and improve our health. Trees reduce sound, produce oxygen, store carbon, clean the air, reduce wind and erosion. Trees also give us shade, keep us cool and increase property values.



Selecting the best location for your tree.

Choose a planting site that will match your trees light, soil and watering needs. It's always a good idea to plant your tree and watch it carefully for the first season to see if it's adjusting to its new home. If not, it can easily be removed and planted in a more suitable area.



Digging the Hole.

We suggest before you begin digging, you might want to contact your local utility company to have them locate buried cables and lines before you start.

Potted trees:

Dig a hole that will accommodate the entire root system of your tree. As a general guide line, the hole should be approximately twice the height and width of the root ball. Carefully remove your tree from its container and gently loosen the roots with your fingers. Now, just place the tree in the hole. Spread the roots out evenly, and cover them with dirt to avoid air pockets. Ensure that the root collar (where the roots meet the base of the tree) is even with the ground and then begin to fill the hole. You can do this with the native dirt, or with a 50/50 mixture of the native dirt with gardening soil or peat moss. Pack the soil firmly around the tree and water. We suggest to stake the tree gently to encourage a straight trunk and the staking also helps on windy days while your tree is establishing its new roots in its new home.

Bare root trees:



Unpack tree and soak in water 3 to 6 hours. Do not allow roots to dry out.



Dig a hole, wider than seems necessary, so the roots can spread without crowding. Remove any grass within a three-foot circular area.



Plant the tree without crowding the roots. Partially fill the hole, patting the soil around the lower roots. Shovel in the remaining soil. Pack firmly.



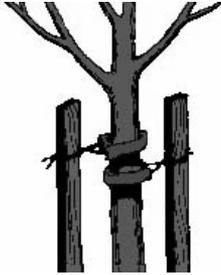
Construct a water-holding basin around the tree. Keep in mind the plant is still dormant, so allow the soil to dry out a bit in-between watering. Bare-root doesn't need as much moisture when they are dormant as when they are actively growing, but they do need to be watered to keep them alive and healthy.



After the water has soaked in, place a 2-inch deep protective mulch area 3 feet in diameter around the base of the tree (but not touching the trunk).



Water the tree generously every week or 10 days during the first year.



Staking

Staking is a technique used to protect, anchor, and support recently transplanted trees.

Staking provides a young tree with support it needs until the trunk is strong enough to hold its canopy upright. (especially if you live in a windy area.)

Most trees will not need to be staked longer than a year, but should be left for at least one growing season. The tree should have become established in this period of time.



Watering

Water is the single most limiting essential resource for tree survival and growth. Drought conditions can lead to tree decline, pest problems, and non-recoverable damage.

The need for irrigation is greatest in mid to late summer, when temperatures are the highest and most of the moisture stored in the soil over the winter has been depleted.

Newly planted trees: Immediately after planting, all tree roots are in the original root ball area. Until new roots grow into the soil of the planting site, water the original root ball and just beyond this area. The root ball area may dry out faster than the surrounding soil, so check the moisture in this area frequently for the first month or two after planting. A newly planted tree will need more frequent irrigation than an established tree because its root system is more limited.



How to Water

You can apply water effectively using sprinklers, drip irrigation, or a hose running on the soil surface. Regardless of how you apply the water, follow these basic rules:

- 1. Water deeply rather than frequently.** Because most tree roots are found in the upper 18 - 24 inches of the soil, this is the zone that is most important in each irrigation cycle. Each deep irrigation will meet a tree's water needs for between 10 days to 2 weeks during the hottest part of the summer, depending on the tree species and soil type. One inch of water each week for the first season is a good rule of thumb, but monitoring soil moisture and applying water as needed is preferable. Remember, overwatering can reduce soil air space, lowering oxygen availability, and that can be just as stressful as drought.
- 2. Stop watering when runoff starts.** Soils high in clay accept water slowly, often as little as 1/4 inch per hour. Water infiltration is especially slow in compacted soils. If water starts to pool or run off, stop irrigating, let the water soak in, and start watering again. Repeat on/off cycles until you apply enough water to wet the soil to 18-24 inches. This may take a number of cycles over several consecutive days.
- 3. Don't saturate the soil for long periods.** Water displaces air in the soil. Long periods of soil saturation can suffocate growing roots. Take a long enough break between irrigation cycles to allow the free water to be absorbed. If in doubt, probe or dig to make sure that the soil isn't soggy below the surface. Overwatering is very common with newly transplanted trees and can lead to death of a tree. A good indication of too much water is yellowing of the foliage that develops first on the inside leaves and progresses to outer leaves.

JUST REMEMBER...



- 1. Routine watering is essential for newly planted trees.**
- 2. The need for watering increases with higher temperatures.**
- 3. Root growth is slower in soils that are too wet or too dry.**



Fertilizing

Trees require nutrients to live and thrive. When one or more of these nutrients are deficient in the soil, the tree will not reach its full landscape potential, will be more susceptible to disease and insect problems, and will have a shorter life than a similar, well-fertilized tree.

The three primary nutrients used by plants are nitrogen, phosphorus and potassium. Nitrogen is largely responsible for healthy leaf and stem growth, phosphorus is very important for root growth and potassium is needed for overall plant health.

Newly planted trees should be lightly fertilized until they have become well established. This usually is not until after their first growing season.

Foliage color is an indicator of the need for fertilization. Yellow or “off-color” leaves may indicate the need for fertilization as these symptoms generally occur on trees which are not taking up enough of one or more required nutrient.

If a tree shows yellowing, extremely slow growth, or some other sign which might indicate a nutrient deficiency, then fertilizer can be applied at any time during the growing season. If fertilizer must be applied under the hot, dry conditions of the summer, it is important to provide water for the tree soon after fertilizer is applied so that salts from the fertilizer don't build up and damage the tree's root system. Two to three inches of water (as measured by a rain gauge) applied every two or three weeks around the area where fertilizer was applied will be sufficient to wet the top 1-1 ½ feet of most soils. Sandier soils will require lighter, more frequent watering while clay-based soils will require heavier watering less frequently.

Remember that plant nutrition is a “balancing act” and that too much fertilizer, as well as too little, can negatively affect the growth and well being of your trees and lawn. The correct amount will keep trees healthy and enhance landscape beauty.



Soil Amendment

A soil amendment is any material added to the soil to improve its physical properties such as water retention, permeability, water infiltration, drainage, aeration and structure. The goal is to provide a better environment for the roots.

To do its work, an amendment must be thoroughly mixed into the soil. If it is merely buried, its effectiveness is reduced, and it will interfere with water and air movement and root growth.

We suggest Cocogro premium soilless grow media. This can be used in seed starting mixes, bedding plants, planters, soil mixes, gardens and container plants. The properties of Cocogro make it resistant to bacterial and fungal growth.

Cocogro has a very low salt content that is available in double-sieved long fibers to reduce dust and give ample space within the mix. It has excellent drainage properties and can be used over a longer period of time than coir fiber with shorter fibers. With longer fibers and reduced dust, gardeners will experience an optimal air to water ratio, which is vital for strong root development.

Cocogro is unique because it is not chemically treated like other coir fibers on the market. It is a superior coir fiber because it is aged a minimum of 18 months and has finished its decomposition stage. In addition, Cocogro passes through at least three monsoon seasons, which naturally washes away harmful salts out of the final product. Most other coir fibers are only 4 to 5 months old and have excessive potassium and salts and thus have to be chemically treated.

Cocogro has the ability to store and release nutrients to plants and trees for extended periods of time. It also has great oxygenation properties which is important for healthy root development. One Cocogro brick makes approximately 4 quarts of soil amendment. It is a biodegradable source that breaks down very slowly and has a life of 3 to 4 years and it is completely environmentally friendly.

Weed Control



Weeds are unwanted plants that reduce available moisture, nutrients, sunlight, growing space and compete with your hard-earned flowers, shrubs and trees. They can also shelter harmful insects and diseases. Weeds are hard to control because they grow rapidly, produce vast numbers of seeds, and spread aggressively.

Here are some helpful tips to make life with weeds a little easier.

1. Weed Early In The Season
2. Weed Every Day If Possible
3. Weed When the Ground is Wet
4. Make Sure You Get The Roots
5. Use Organic Mulch (Some of the most commonly used organic mulching materials are manures, bark chips, ground corncobs, sawdust, grass clippings, leaves, newspapers (shredded or in layers), and straw.
6. Use Inorganic Mulch ((plastic sheeting, weed mats, etc.)

Disease and Pest Control

Let's face it, insects and plant diseases are ever present in our environment. To eliminate them is to fight a losing battle. Managing them at low levels, however, is a practical and feasible alternative. In most situations, healthy, vigorous, well maintained plants are resistant to outbreaks of insects and disease.

To achieve the goal of creating a healthy, vibrant tree that is free from disabling insect and disease outbreaks, the following considerations should be kept in mind:

Choose varieties that are known to be disease resistant whenever possible.

Create a healthy fertile soil for your plants. Soil rich in nutrients and microbial life will be much less vulnerable to and affected by disease or insect pests.

Prune to keep your plants open for good air circulation and to allow sunlight to reach all parts of the plant.

Remove all plant debris in the fall, so there is no shelter for over-wintering garden pests and spores.



ORGANIC REMEDIES FOR PESTS/DISEASES



These pest control remedies may help tree enthusiasts save money, avoid frustration and dangerous chemicals. Use these homemade remedies selectively, only spraying the infected plants. Apply them early in the morning or just before dark. Re-apply after a rain.

Soft-bodied insects (mites, aphids, mealybugs): Mix one tablespoon canola oil and a few drops of Ivory soap into a quart of water. Shake well and pour into a spray bottle. Spray plant from above down, and from below up to get the underside of the leaves. The oil smothers the insects.

Mites and other insects: Mix two tablespoons of hot pepper sauce or cayenne pepper with a few drops of Ivory soap into a quart of water. Let stand overnight, then stir and pour into a spray bottle and apply as above. Shake container frequently during application.

Earwigs, slugs, and other soft-bodied garden pests: Sprinkle Diatomaceous earth (a remarkable, all-natural product made from tiny fossilized water plants.) over plants and around edges of garden beds. The diatoms particles are very small and sharp – but only harmful to the small exoskeletons of insects, slugs and snails. Insects cannot become immune to its action, as it is a mechanical killer – not a chemical one.

Fungal diseases: Mix two tablespoons of baking soda into a quart of water. Pour into a spray container and spray affected areas. Repeat this process every few days until problem ceases.

Powdery mildew: Mix equal parts milk and water and spray on infected plants. Three treatments a week apart should control the disease.

Deer: Mix one whole egg with a quarter cup of water and mix well. Pour the mixture into a pump bottle and spray it on your plants. This deterrent will withstand light rains because the egg sticks to the leaves. You can also mix one tablespoon of liquid dish detergent with one ounce of hot sauce in one litre of water and spray directly on plants which deer have been nibbling.



BENEFICIAL INSECTS FOR PEST CONTROL



There are beneficial insects used as a form of natural pest control. The basic approach is to bring in insects that are predators of the bugs afflicting your trees and or bushes. This eliminates the pests in the most natural way possible, without adding any chemicals at all to the environment. Ladybugs, Praying Mantises, Parasitic Wasps and Green Lacewings are the top 4 beneficial insects that are welcome in any yard or garden.

WINTER BRONZING



A common problem for evergreens and shrubs is "winter bronzing," manifested by a change in foliage color to a reddish-brown or yellowish. It is the result of exposure in winter to wind and sun. Such exposure causes a water loss that damages the foliage. Remember, plants are already deprived of water in winter by the frozen ground, a problem that is just made worse by exposure to wind and sun.

How should you address the problem of winter bronzing on evergreens and shrubs? First of all, spray an anti-desiccant (a foliage spray that aids against summer scald, transplant shock and winter moisture loss) on evergreens and shrubs in late November and again in late January, and make sure your plants are watered sufficiently throughout the growing season.

Winter bronzing doesn't kill evergreens and shrubs, but is unsightly. Normal green foliage should, however, return in spring on new growth. Just prune out the damaged foliage.

The pictures below are examples of "bronzing" on an evergreen:



SPECIAL HINTS FOR TREES

Royal Empress

The Royal Empress needs to be regularly fed with a high nitrogen fertilizer for optimum growth. Fertilize twice a month when the tree is coming out of dormancy, then once a month during the summer. Stop fertilizing before the tree goes back into dormancy.

It is best to use organic insect deterrents, as Royal Empress leaves can be easily injured by chemicals.

Plant the Royal Empress in good draining soil.

Be careful not to over-water or under-water the Royal Empress. (If under-watered, the leaves will become dry and brittle. If over-watered, the leaves will become black and begin to shrink)

Butterflies are attracted to the Royal Empress tree and the caterpillars love to eat the leaves. Hand picking for caterpillars is very effective or Sevin-10 Dust® can be applied to the leaves. Garlic and Red Pepper spray are also very effective and is easily stored.

Garlic and Red Pepper Spray

Cut up one onion and one head of garlic. Add with one heaping tablespoon of red pepper to three pints water in a saucepan. Cook about 20 minutes on low heat. Let the spray cool. Pour it in glass jars and cover with a lid. It will keep in the refrigerator over a month.

When you are ready to use the herbal spray, use one tablespoon per pint of water. Adding Ivory Snow increases effectiveness (soapy water is a good natural pest control by itself if you spray it directly on the insect.

Crape Myrtles

Make sure your Crape Myrtle is planted in well drained, fertile soil. (Fertile soil has an abundance of plant nutrients, minerals and organic matter.)

Remove suckers (A sucker is a shoot that comes from the base or near the base of a tree.) and buds of new branches as they appear on the "trunk." The Crape Myrtle is predominantly shrubby in habit, and you'll have to be vigilant about those side shoots if you want to maintain it as a single trunk tree.

Fight aphids with a weak soap solution sprayed on the leaves.

Water deeply and regularly when first planted. Once it is established, a Crape Myrtle can tolerate fairly "arid" conditions (lacking sufficient water or rainfall).

Flowering Dogwoods

The dogwood can very well adapt to the different soil types that can provide it with basic nutrients.

Water weekly during particularly dry periods.

Be careful when using lawnmowers or other implements around flowering dogwoods as the bark is easily damaged and wounds can both weaken the tree and serve as an invitation to insects and fungus.

Roses

Roses require at least six hours of direct sun per day.

Roses do not want to stand in soggy soil.

Don't plant roses near large trees or shrubs that will compete for light, water, and nutrients.

Good air movement helps the dew and rain to dry quickly, thus discouraging disease.

Roses do not like over head watering.

Camellias

Camellias require acidic soils.

Camellias grow well in full shade to semi shaded garden beds. (Japonica variety likes full sun)

Before planting camellias, always amend the soil with plenty of organic matter.

Sufficient water and good drainage is key to growing camellias.

Azaleas

If your azaleas are in need of some pruning, wait until the blooms have fallen before attacking them with your pruners.

To help keep your plants looking nice, use an azalea fertilizer after blooming.

Yellowed leaves with dark green veins are characteristic of iron deficiency. Apply a soil acidifier such as sulfur to allow iron that is already in the soil to return to an available form.

Hydrangeas

White blooms will always be white. It is much easier to change a hydrangea from pink to blue than it is from blue to pink. Changing a hydrangea from pink to blue entails adding aluminum sulfate to the soil. Changing from blue to pink means adding dolomitic lime to the soil.

If you want flowers, DO NOT prune in late fall, winter or spring.

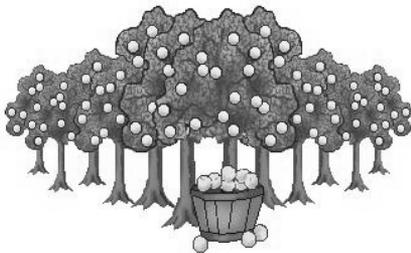
Hydrangeas will not grow or flower satisfactorily in hot, dry, poorly drained locations.

Fruit Trees

Fruit trees will perform best with at least 6 hours of direct sunlight a day, preferably more.

First year trees should be watered on a weekly basis. As the tree matures, the frequency of watering will lessen.

For best results, fertilize three times during the year: once in early spring when the flower buds break, once in early summer and once in the fall.

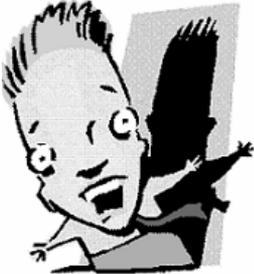


Thin the fruit. If the size of the fruit produced from your tree is below expectations, it may be due to an over-abundance of fruit on the tree. The tree has only so much energy to use to produce fruit, so thinning (removing some of the fruit) is essential to produce large fruit in some species, such as peach and apple. For best results, thin fruit trees early in the season, when the fruit is still quite small.

ATTENTION ALL CUSTOMERS

Since we ship throughout the seasons, here's a little advice concerning the arrival of your new tree/plant.

If your tree/plant arrives in the "cooler" months, it is important for you to know that your plants leaves may be discolored, wilted, spotted, crinkled, or even appear to have some holes in them. DO NOT BE ALARMED!!!



This is normal. You are witnessing the fall season at work. The seasons are changing and your tree/plant may be going "dormant". Dormancy is a natural process that ensures the protection of your tree/plant for the upcoming winter. Other nurseries grow all of their material in greenhouses, but we grow ours outdoors to help the tree/plant acclimate to the natural climate and reduce the shock when it is moved. This will help your new tree/plant adapt quickly to your region.

If your tree/plant arrives in the "hotter" months, your tree/plant will need your help. You must be aware that your new tree/plant has been in a box with no water, sunlight or moving air for up to 5 days depending on where you live.

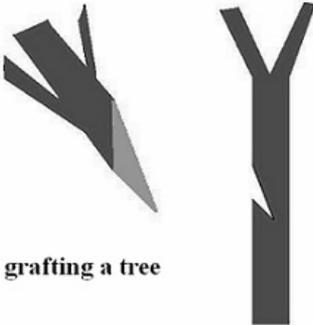


It might look wilted and dry but will bounce back quickly after a few days of care. We suggest that you place your tree/plant in a shaded area for a day or two before introducing it to the direct sun. Give it some water and soon it will be perking up and ready to plant. We understand that you might be busy but please plant your tree/plant as soon as it's convenient. Follow the planting instructions at www.PlantingDirections.com and this will be the start of a beautiful relationship.

Grafted Trees

We would like to take this opportunity to let our customers know about some of our “grafted” trees. Let’s start with the definition of grafting.

“Grafting describes any of a number of techniques in which a section of a stem with leaf buds is inserted into the stock of a tree”.



Grafting is used to reproduce desirable trees or change a large tree from old to a new variety. It is also a method of using a root system better adapted to soil or climate than that produced naturally by non-grafted trees. Grafting is also a way to produce dwarf trees.



Trees grafted from vigorous rootstock will grow faster and develop quicker and give increased disease resistances as well as pest resistance. Grafted trees can make a healthy and beautiful addition to your yard.



Evergreens

Most homeowners expect the evergreen trees and shrubs they purchase to be green all year round; but various factors can cause evergreen needles to turn brown and fall off. Some browning and needle loss is to be expected with all evergreens and is a natural and inevitable occurrence.

Needle loss that requires attention

The homeowner need not be concerned about natural browning and needle loss from the inner parts of the branches. If, however, loss occurs on the outer ends of the branches of evergreens, remedial action should be taken. Browning and shed of outer needles is usually caused by some sort of stress or injury; it is not part of the natural aging process of the trees and should be controlled. Where needles have been shed, new ones will not grow back to replace them; and if the shedding takes place on the outer ends of branches, the tree will soon start to look bare.

The best approach to this problem is first to establish its cause and then to take the appropriate measures. Among the most common causes of premature needle browning and loss are the following:



Drought damage: Needle loss from drought damage is usually seen in the late summer or early fall and can be quite dramatic on pines. Needles gradually change from green to yellow to light-brown before they are shed. The process usually begins at the top of the tree and develops downwards. Some trees may eventually die. (please refer to the “Watering” section in this booklet)



Winter injury: A combination of warm temperatures just above freezing and strong, drying winds in late winter or early spring can cause this problem. Needles turn red-brown in spring, fading to light brown by summer. (please refer to the “Winter Bronzing” section in this booklet)



Salt damage: The first symptom is yellowing of the needle tips. As damage increases, the needles turn reddish-brown or reddish-purple. Entire branches or the outer ends of the entire tree may be affected. Salt damage can occur anywhere there is snowfall and snow plowing. We suggest that you plant your trees or bushes further away from any roads or driveways that will be plowed and salted.



Insect damage: Sucking insects such as aphids and mites remove sap from the needles and stems; in large numbers they can kill needles. (please refer to the “Organic Remedies for Pests” section in this booklet)

Other causes: Animal injury, nutrient deficiency, disease, physical damage, transplanting shock and frost damage can also cause premature browning of needles.

Don't confuse natural seasonal drop of evergreens with various insect disease problems that can reduce the vitality and aesthetic value of shrubs and trees. Normal needle drop is a seasonal occurrence, and the symptoms are distributed generally throughout the interior portion of the plant. If you have doubts about accurate diagnosis, examine the leaves and needles carefully. You can take a sample to your local garden center and they will be able to assist you in diagnosing the problem. An accurate diagnosis of the condition will determine whether it is a natural occurrence or if chemical sprays are necessary to arrest the problem.

Introduction to Tree Pruning

A tree may need pruning for a variety of reasons:

to remove diseased or storm-damaged branches, to thin the crown to permit new growth and better air circulation, to reduce the height of a tree and to remove obstructing lower branches.



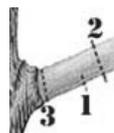
Once the decision has been made to prune, your next decision is whether or not to tackle the job yourself. In the case of a large tree where you want to remove big branches in the upper area of the crown, it may be best to hire experts. Large tree pruning, in particular, can require climbing and heavy saws or even cherry-pickers and chain saws. This is a job that should be left to trained and experienced professionals. Never compromise personal safety in pruning a tree.

How to Prune



The key is to prune the unwanted branch while protecting the stem or trunk wood of the tree. Tree branches grow from stems at nodes and pruning always takes place on the branch side of a stem-branch node. Branches and stems are separated by a lip of tissue called a stem collar which grows out from the stem at the base of the branch. All pruning cuts should be made on the branch side of this stem collar. This protects the stem and the other branches that might be growing from it. It also allows the tree to heal more effectively after the prune. To prevent tearing of the bark and stem wood, particularly in the case of larger branches, use the following procedure:

1. Make a small wedge shaped cut on the underside of the branch just on the branch side of the stem collar. This will break the bark at that point and prevent a tear from running along the bark and stem tissue.



2. Somewhat farther along the branch, starting at the top of the branch, cut all the way through the branch leaving a stub end.

3. Finally, make a third cut parallel to and just on the branch side of the stem collar to reduce the length of the stub as much as possible.

When to Prune

The dormant season, late fall or winter, is the best time to prune although dead branches can and should be removed at any time. Pruning during the dormant period minimizes sap loss and subsequent stress to the tree. It also minimizes the risk of fungus infection or insect infestation as both fungi and insects are likely to be in dormancy at the same time as the tree. Finally, in the case of deciduous trees, pruning when the leaves are off will give you a better idea of how your pruning will affect the shape of the tree.

How Much To Prune

When deciding how much to prune a tree, as little as possible is often the best rule of thumb. All pruning places stress on a tree and increases its vulnerability to disease and insects. Never prune more than 25% of the crown and ensure that living branches compose at least 2/3 of the height of the tree. Pruning too much will fatally damage your tree. In some cases such as storm damage, height reduction to avoid crowding utility lines or even raising the crown to meet municipal bylaws, your pruning choices are made for you. But even in these instances, prune as little as you can get away with.





In closing, we would like to take this opportunity to say “thank you” for your business.

*Thank
you*

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