## Tree Resources

### IN THIS DOCUMENT:

This document contains information on care and maintenance for your trees, including how to properly plant, water, stake, and prune your shade trees. It includes a Frequently Asked Questions section for tree planting. There is also a section all about diagnosing and treating common issues, such as dry leaves or leaves falling off and transplant shock. It also details when you should hire an Arborist, and what an Arborist can do for you. Protecting your trees in it's early years is crucial for it to survive and thrive. This includes: protecting against monsoons, what to do if your tree gets blown over in a storm, and protecting against things like sunburn and winter frost. Critters can also cause damage to your trees, so we included a section about protecting your trees from dogs, rabbits and aphids. This section also contains a recipe for a homemade insect repellent that is natural and will not harm your trees. Lastly, this document contains information on how to insure your trees, as they are a living asset. If something happens to your tree, you could be eligible for compensation if you get your trees insured.

### WHEN IN DOUBT, ASK AN ARBORIST!

Trees Matter has a Facebook group called Ask an Arborist, where you can post questions, concerns, pictures, etc and get a quick response from one of our volunteer arborists. You can access this forum at https://www.facebook.com/groups/askanarborist/



### **INDEX**

- Planting your Shade Tree 2-3
  - Planting your Shade Tree Sapling
    - 10 ways to reuse your 5-gallón bucket ´ Frequently Asked Questions
  - aboùt Planting
- 4-6 Care and Maintenance
  - Watering your trees
  - Staking your trees Pruning your trees
- Diagnose and Treat Common
  - Dry leaves / leaves falling off trées
  - Transplant shock

  - Denuding by animals When to call an Arborist
    - What is an Arborist
- 8-9 Protecting your trees
  - Monsoons
    - What to do if tree blows over in storm
  - Sunburn
  - Winter
- Protecting against critters 10
  - **Aphids**

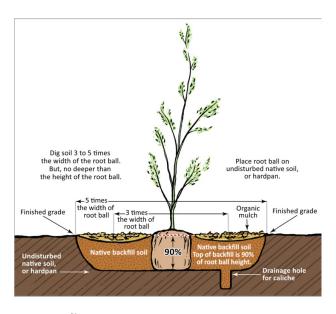
  - Homemade insect repellent
- 11 Insuring your trees

## HOW TO PLANT YOUR SHADE TREE SAPLING

#### Digging your hole

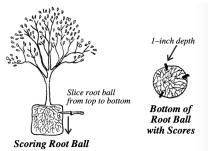
For width, dig a hole 3 -5 times the width of the root ball to increase drainage. Test drainage by digging a hole one foot deep in dry soil. Fill hole completely with water twice during the day. Drainage is poor if water remains 24 hours after the second filling. If you have poor drainage, dig multiple chimney holes besides, not beneath, the root ball to avoid root rot from excess water. Fill the holes with the same soil used in the planting hole, not gravel

The depth of the hole should be 90% of the height of the root ball. The root ball is at soil level where root flare begins The root ball should rest on undisturbed, native soil. You do not want to plant your sapling too deep, or too shallow. Standards is 5-10% above grade, which is about 1-2 inches. Refer to below diagram for a visual demonstration,



#### **Planting your Sapling**

Remove the tree carefully from the bucket, without breaking the root ball. Cut off any kinked, girdled, or circling roots with a sharp knife or pruners. Slice the root ball lengthwise approximately an inch deep in 2-3 places



#### **After Planting**

Irrigate root ball and the plant area right away, making sure the root ball remains level with the soil surface. **Remove the nursery stake.** Only if it is necessary should you re-stake the tree (reference p.6 for more on staking). A mulch can be applied to maintain moisture, but keep it away from the base of the tree. Do not fertilize at planting.

Planting your tree correctly is crucial to its survival!

### WAYS TO REUSE YOUR 5-GALLON BUCKET

- 1. Use as container to carry your recyclables to the recycling bin
- 2. Store extra cords or Christmas lights
- 3. Decorate it and plant flowers or herbs in it
- 4. Composting Bin/ Worm Farm
- 5. Storage for mulch
- 6. Storage for extra tools or other random stuff in the garage
- 7. Place over plants to protect them from frost
- 8. Make a jack-O-lantern out of it around Halloween time
- 9. Store all that random stuff in your garage in one place

You can always drop your 5-gallon bucket at the Trees Matter office where we will re-use them!



# FREQUENTLY ASKED QUESTIONS ABOUT PLANTING

### When is the best time to plant my trees?

Whether you received your tree(s) from our shade Tree Event or from a nursery, you should plant them as soon as possible.

### Where is the best place to plant my tree?

Trees should be planted 15 feet away from your home. West is the best side to plant, followed by east. and then south. To increase energy savings, place closest to walls, windows and doors, not near patios or overhangs. If you are only planting 1-2 trees, prioritize shading windows first,--they get the most heat gain. Trees planted upwind from prevailing winds (SW in summer) filter air to reduce velocity and add humidity.

## How do I know where my underground utilities are? How close to power lines can I plant?

If you are unsure about underground utilities **call 811 or go to arizona811.com.** It is better to be safe than sorry. As for power lines , refer to the diagram below for proper tree placement.

#### 

#### Which tree is right for me?

Refer to our "Shade Tree Types" document that can be found on the Trees Matter website, treesmatter.org. If you are picking up trees from our SRP Utility Shade Tree Event, you can go to the "Ask the Experts" table.

#### Should I fertilize my trees?

After planting, it is not recommended to use a fertilizer, as nitrogen can delay root establishment. After your trees have established a strong root establishment, you can add fertilizer if there is a nutrient deficiency. Desert soils most commonly lack nitrogen and/or iron; these deficiencies can cause a yellowing of leaves.

If you are using an inorganic, store-bought fertilizer, be sure to follow the instructions included. Inorganic fertilizers release quickly and are recommended on plants that are showing a nutrient deficiency because they are fast releasing and uniform.

Natural, organic fertilizers release nutrients more slowly and less uniformly. Organic fertilizers are derived from composted plants, food

waste, manure, etc.
Organic fertilizers will
not have to be
applied as frequently,
as they are slower
releasing.

### Should I use mulch around my trees?

Yes! We recommend using mulch around your trees because it serves as insulation between the soil surface and the atmosphere. Mulch reduces water loss from evaporation, erosion and compaction, regulates soil temperatures, protect roots from injuries and reduces weed growth.

### What type of mulch should I use?

There are two different types of mulch: organic and inorganic. Organic mulches are great in landscapes with coarse material like woodchips or bark that will not blow away. Apply these 2-4 inches deep, 6-8 inches from the base of the tree and spread out to beyond the drip line. These will need to be replaced as they decompose over time. Inorganic mulch would be pea gravel, river rock or decomposed granite; these mulches do not need to be replaced. Apply the mulch 1/2-2 inches deep. INorganic mulch also needs to be 6-8 inches away from the trunk.

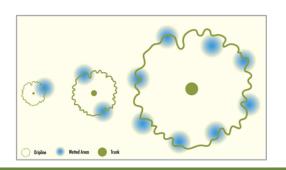
#### How do I plant a tree seed?

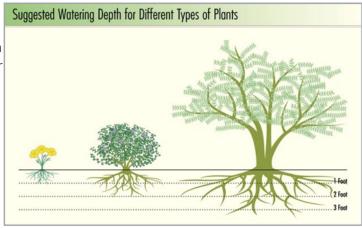
This of course depends on the species. However, you should bury it twice the depth of the seed's diameter (a seed with 1" width should be plated 2" deep). Keep the area moist until it sprouts. You can plant it in a nursery pot that is 5-15 gallons to nurture it, but transport to the ground after about a year. Put about 3-5 seeds per bucket

### CARE & MAINTENANCE

### WATERING YOUR TREES

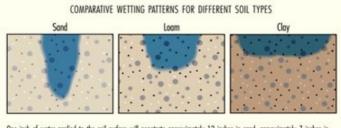
- 1. Most water absorbing roots are located near the dripline--the area under the outer edge of the plant's canopy--and not close to the trunk. (reference the image below) If you are using a drip irrigation system, place the emitters along the dripline of the tree. The water will move down and horizontally as it soaks into the soil, reaching the root zone. If you are using a hose, make sure and water along the dripline area.
- 2. While watering frequency and depth depends on the season, often the rule with desert-adapted trees is *deep but infrequent watering*. Do not perform water soaks for more than 24 hours. Also, trees kept in standing water for more than a week will cause a desert-adapted tree enough stress for it to drop its leaves, a common stress response.
- 3. The rate at which your soil dries out between watering depends on the soil type you have. Most soils in the valley are clay and, therefore, watering more than once or twice a week to the proper soil depth of 2-3 feet can drown the young trees. Clay soil retains moisture and you will most likely not need to water your tree more than 1-2 times a week during the hottest summer months.
- 4. Water in the early morning, or late evening so more water reaches the roots instead of being evaporated by the sun and wind.
- 5. Applying mulch, such as wood chips or compost, over your tree's root zone will help keep moisture in the soil longer (and keep it warmer during the winter). Make sure and keep mulch 2-4 inches away from the tree's trunk for proper aeration.
- 6. Often, first signs of tree damage is the wilting and loss of leaves or discoloration. Pay attention to the tree's leaf growth and adjust the watering as needed.
- 7. As your trees grow and the weather changes, so will the watering requirements. Below is landscaping watering guidelines. Locate the *desert-adapted trees* section to find the suggested watering frequency and depth for each season.



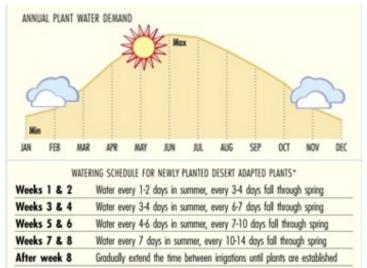


|         |                   | Plant Canopy Diameter in Feet |    |     |    |    |    |    |     |     |     |     |     |    |
|---------|-------------------|-------------------------------|----|-----|----|----|----|----|-----|-----|-----|-----|-----|----|
|         |                   | 1'                            | 2' | 3'  | 4' | 5' | 6' | 8' | 10' | 12' | 14' | 16' | 18' | 20 |
|         | Trees             | 1.5                           | 5  | 11  | 16 | 22 | 26 | 38 | 59  | 85  | 115 | 150 | 190 | 23 |
| add man | Shrubs            | 1                             | 4  | 8   | 12 | 17 | 20 |    |     |     |     |     |     |    |
|         | Groundcover/Cocti | .5                            | 2  | 3.5 | 5  | 7  | 9  |    |     |     |     |     |     | Г  |

NOTE: The amount of water needed will vary depending on soil type and soil conditions. See illustration on page 13.



One inch of water applied to the soil surface will penetrate approximately 12 inches in sand, approximately 7 inches in loam, and approximately 5 inches in day soil.



Note: After the eighth week, move the drip emitters to the outer edge of the root ball.

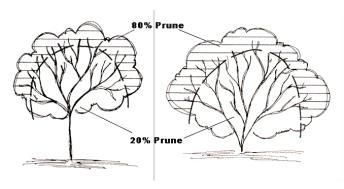
\* High water use plants will require more frequent injurious.

We highly recommend buying a soil probe because it is hard to determine just how deep water is going. Often people believe that water is reaching deep into the root zone (typically 2-3 feet), but when using a soil probe they find that the water only reaches a foot underground. A soil probe will slide easily through wet soil but will be hard to push through dry soil. If you do not have a soil probe, you can use a very long screwdriver as well.

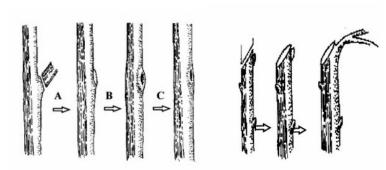
### CARE & MAINTENANCE

### PRUNING YOUR TREES

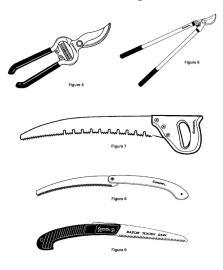
The type of tree should always be considered when pruning as this influences the method used to shape the tree and the tools needed. Trees native to climates with hardwood forests typically grow vertically as they compete for sunlight. Desert-adapted trees, however, compete for water so they tend to grow nearly as wide as they are tall, often developing branches that can extend to the ground. This growth pattern should be considered when pruning desert-adapted trees. The main purpose of pruning a tree is to encourage healthy growth and to enhance the natural form of the tree. Regular pruning can prevent damage during monsoons and proper tools and method will ensure that the tree heals quickly to prevent insect infestation and damage to the tree. Ideally the best type of pruning is periodic light thinning rather than infrequent, major pruning. The general rule to pruning desert-adapted trees is 80:20. No more than 20% of tree foliage (or the main canopy) should be removed at one time and 80% of the area pruned should be new growth on the outer third of the canopy. (Refer to the diagram below).



Regular pruning will help you notice dead or diseased branches that need to be removed. It is generally better to frequently remove small branches than to occasionally remove large ones. Fortunately, most desert-adapted trees need minimal pruning if they are placed in areas where they have room to grow and will not obstruct walkways or other plants and trees.



#### **Common Pruning Tools**



We recommend pruning your tree only after the first or second year of growth. If a tree is pruned too early or too much is removed, you run the risk of removing branches that are needed for photosynthesis for the tree and you could end up starving the tree. As much as 60% of all photosynthesis for the Blue Palo Verde happens on the surface of its young branches. As the tree grows, first remove branches that cross each other (rub against each other) or are starting to obstruct walkways or other plants. Also, remove any dead or diseased limbs. If you are pruning to influence the shape of your tree and are uncertain about how to trim it or what to remove, first seek the advice of a certified desert landscaper or an arborist. You can always post questions to our "Ask The Arborist" Forum.

When pruning, use sharp tools for cleaner edge cuts that reduces the time needed for the tree to heal. Also use the correct size pruners or saw for the thickness of the branch being removed. Refer to the drawing below for different types of pruning tools.

The angle and position of pruning cuts will significantly affect the rate at which the tree will heal.Improper cuts will increase the chance of tissue dieback and insect infestation as it takes longer for the tree wound to close. Cuts should be made near the branch bark ridge but not beyond it (refer to the diagrams below). Do not leave short stumps sticking out, a common mistake. Prune directly above a bud or lateral branch at about a 45 degree angle (refer to diagram 2 below), as this will ensure correct and speedy growth of the cut branch and healing of the tree wound. If you are pruning a tree with thorns make sure to wear protective gear like eyewear, long sleeves, and sturdy leather gloves. Also use long handled pruners not only make the cuts but to pull the cut branches out and away from the tree.

Remember, when it comes to pruning if you are in doubt about how or what to prune, wait. You can always remove later but can never add back.

### CARE & MAINTENANCE

### STAKING YOUR TREES

We recommend that you remove stakes as soon as possible. The trees distributed at the SRP Utility Shade Tree Event do not need to be staked after planting into the ground. It is a common

misconception that we should stake our trees for a long time; however, staking keeps the roots from developing the strength they need to support the tree. Staked tree also develop weak wood and can damage the bark. Sometimes staking is necessary but ideally it should be used for only the first 3-6 months and at most, a year. Young or weak trees might need to be staked for additional support during Monsoon season in Arizona; however, remove the stakes once the tree is stable

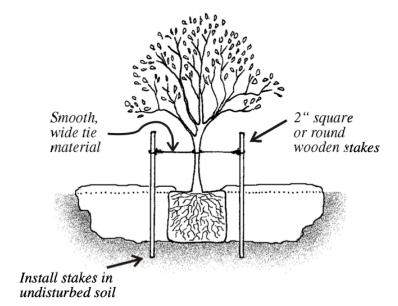
If the tree cannot support itself on its own or you are located in a very windy location, staking may be necessary. If this is the case, use the following guidelines to properly stake your tree.

Use 2 stakes per tree; 2" round wooden poles are preferred. Do not use metal pipes. Install stakes in undisturbed soil, outside the root ball. They should be placed straight up from the ground and perpendicular to the direction of the prevailing wind. Drive stakes 12-18 inches deep, but again be careful to avoid root ball. Cut the stakes a couple inches above the ties to avoid rubbing damage on the tree.

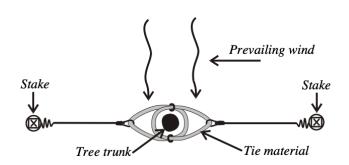
Tie material should be wide, smooth and elastic. Some examples of this would be polyethylene tape, plastic webbing or wire covered with hose or rubber tubing. You will damage your tree if you used uncovered rope, wire, or string.

When choosing the correct placement for your ties, slowly move your hands up the trunk to see at what point does it return to its upright position. Place ties 6 " above that point. When securing the tree to the stake, it is very important that you secure it LOOSELY so that the tree is still able to move. It's the movement of the tree that develops a strong root system. The trunk and tie should move as one unit. Refer to bottom right diagram for visual representation of a properly staked tree.

Loosen ties periodically to see if the tree can support itself. remember to remove stakes as soon as possible.



Stake Placement



Overview of Staked Tree with Ties

### DIAGNOSE & TREAT COMMON ISSUES

## DRY LEAVES / LEAVES FALLING OFF OF TREES

It is important to water trees properly, as this is often the most common reason for leaves drying out, especially with young trees. When you receive your trees, check the moisture of the soil in the container it comes in. It should have the moisture level of a wrung out sponge, moist but not soggy. Too much water can be as bad as not enough. Sometimes between the time we receive trees from nurseries and the time we distribute them, the trees

may have dried out so check to see if you need to water them right away. Once you plant your tree, it is important to water them DEEPLY, down to 2-3 feet. Pictured below is a Willow Acacia that is showing signs of dehydration—the leaves are starting to curl and crisp up, as well as turn brown-gray. Once the owner began watering more often and deeply, the tree recovered. Trees are very resilient—don't give up on it if you start to see signs of distress. Try watering it more often and remember: moist but not soggy soil.



### TRANSPLANT SHOCK

Once you plant your new tree it might show signs of transplant shock, like the one pictured left. When trees/plants are transplanted into a different soil environment they may go through an initial period of distress while adjusting to the new soil. Below are steps you can take to minimize the chances of transplant shock:

- Keep the roots moist while you are planting the tree (you can briefly soak the tree roots in water before you plant the tree)
- Make sure there is good soil contact on the roots. Lightly tamp the soil

around the base of the tree with your foot. Don't stomp, but firmly push down the soil to make sure the root ball has good contact.

- Do not cut the roots when you plant trees—they store important carbohydrates, nutrients, and hormones necessary for tree growth. Sometimes, though, we recommend scoring the roots if they are overgrown.
- Water the tree once it is in the ground, even after it has rained and the soil is wet. This will help attach fine root particles to the roots.



## WHAT IS AN ARBORIST?

An Arborist is a person trained in the art and science of planting, caring for, and maintaining trees. Arborists are knowledgeable about the needs of a wide variety of tree species and are trained with the proper techniques to care for trees (such as pruning, pest and disease management, tree removal, proper selection and planting of a tree, and tree soil fertilization).

Certified arborists are individuals who have attained a level of knowledge through experience and by passing a comprehensive examination developed by some of the nation's top experts on tree care. Certified arborists must also continue their education to retain their certification and must adhere to a Code of Ethics. The International Society of Arboriculture offers ISA certification to those who would like to voluntarily undergo the process in order to measure their knowledge and competence required to provide proper tree care.

## WHEN TO HIRE AN ARBORIST

As a rule of thumb, if the services required revolve around tree care, consult an Arborist. The International Society of Arboriculture (ISA) provides online resources at <a href="https://www.isa-arbor.com">www.isa-arbor.com</a> to find an Arborist and to verify an arborist's certification. Some landscaping services might offer a certified Arborist on staff or be able to recommend one to you.

You can also access our "ask an Arborist" forum at <a href="https://www.facebook.com/groups/askanarborist/">www.facebook.com/groups/askanarborist/</a>.











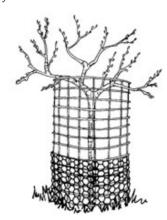
### PROTECTION AGAINST CRITTERS

If you notice leaves on your tree one day and the next day find it stripped of them—or denuded—hungry wildlife is most likely the cause. While the chance of a tree surviving an "attack" by an animal can be dependent on the species and age, most trees young or old can survive a single incident of defoliation (the loss of leaves). If your tree becomes denuded by an animal, water the tree as if it has leaves, don't over compensate. If it occurs in the heat of the summer, try shading the tree until the new leaves reach maturity. And remember—dogs also love to "play" with new trees, so check out how to keep dogs away from trees down below.

### **RABBITS**

Rabbits like to eat the leaves off trees, strip their bark and/or eat the ripe green layer beneath the bar especially in the wintertime. The most effective way of preventing rabbit damage is to place chicken wire fencing around the tree(s). Place the fence far enough away so rabbits cannot reach the

leaves, and put it about 3-6 inches underground to avoid them digging under. You can also add extra wire to the bottom to make smaller openings (see image below). To protect against bark stripping, you can place a temporary protective wrap around the trunk and lower branches.



### DOGS

You can buy a wire tree cage at your local hardware store or nursery; however, you can try these other, more cost-effective and less obstructive solutions. for keeping dogs away from your tree(s):

- Scatter red chili flakes, cayenne pepper or Tabasco sauce around the base of the tree. These will not harm the tree, and your dog will not like the smell or sneezing affect from the peppers.
- place cotton balls dipped in vinegar around the tree. The pungent smell will keep dogs away.
- If you can find pine cones, scatter them around the base of the tree. Dogs don't like the prickly feeling of them.
- Decorative rocks also do not feel good on dogs paws, so they will avoid the area
- Planting a prickly or thorny plant (or temporary splace some) around the tree. When your dog loses interest in the are, you can remove the plants

### APHIDS

Aphids are critters that suck plant juices and generally make a nuisance that have a sucking mouth-part and they feed on the plant's juices. After using what they need, they discharge the waste, a sticky, sweet substance called "honeydew." The



honeydew can accumulate on the leaves and stems of plants as well as roofs, automobiles, sidewalks, driveways, lawn furniture and other items underneath the tree. Aphids become a problem when there is a large population, one or two won't cause any damage. Here are some popular ways of removing aphids.

- Strong stream of water. Spraying the leaves with a jet of water can blow a lot of them right off the plants. Only spray plants that can withstand the pressure. do not allow the jet of water to damage the plant. That would be self-defeating. Also, some plant leaves are susceptible to sunburn from water laying on the leaf during a sunny day. Early morning or late afternoons are the best time to spray plants.
- Insecticidal soap spray. You can buy some or make your own by mixing 2 tbsp of liquid detergent per gallon of water. the soap solution will need to be sprayed directly onto the animal which, again, are usually located on the lower surface of leaves and in other protected places. Because some plants are sensitive to the soapy sprays, run a test on a small number of leaves and search for damage before spraying the entire plant.

### HOMEMADE INSECT REPELLENT

- 1. Chop, grind, or liquefy one garlic bulb and one small onion.
- 2. Add 1 teaspoon of powdered cayenne pepper and mix with 1 quart of water.
- 3. Steep 1 hour, strain through cheesecloth, then add 1 tablespoon of liquid dish soap to the strained liquid; mix well.
- 4. Spray your plants thoroughly, including leaf undersides.
- 5. Store the mixture for up to 1 week in a labeled, covered container in the refrigerator.

### PROTECTING YOUR TREES

### MONSOONS

Even old trees, with healthy root systems can be yanked up by monsoon winds. Although trees cannot be completely sheltered from such damage, there are things you can do to mitigate it and strengthen a tree's chance of surviving the season.

# WHAT TO DO IF YOUR TREE BLOWS OVER IN A STORM

The most important thing is to take action within a few hours of the tree being damaged.

Cover any exposed roots with soil so the tree doesn't dry out. Trees can survive laying on its side as long as the roots are intact and don't dry out.

If the tree is small, you can replant it. This means removing the tree completely from the ground, re-digging/shaping the hole, and positioning the tree in it.

Next, stake it and make sure the stakes are set inthe surrounding *undisturbed* soil. If the stakes are in the same hole with the roots, they'll likely get pulled over by the tree if it falls again.

Large trees can be more difficult to save. If the entire root ball has

heaved up or the trunk has
detached from the roots (like
what happened in the above
photos), the tree most
likely is

unsalvageable.*The best thing to do is consult an Arborist immediately*. Although they will charge you to

- Add mulch to your trees consistently and adequately so your tree grows healthy and are better prepared to withstand the monsoons. Ensure that you are properly watering your trees so the soil does not become compacted or excessively heavy due to over-watering.
- Prune trees every year (or every 2-3 years, depending on the type of tree) because poorly pruned trees increase the chances of limbs and trunks snapping off. Reducing the canopy size by 10-15% makes it easier for the wind to pass through it. Desert adapted trees can be pruned from May-July, when they grow the fastest (in the middle of monsoons).
- Young or weak trees might need to be staked for additional support during this time. However, remove the stakes once the tree is stable
- Keep an eye on your trees to spot early damage such as splitting along the branches or trunk and tend to it promptly.

Monsoons in Arizona are typically between June 15th and September 30th  Remember that money spent on routine maintenance and care of your trees will be assuredly cheaper (and less time consuming) than repairing damage caused by snapped and uprooted trees.



### PROTECTING YOUR TREES

### SUNBURN

Just as we protect our skin from the intense Arizona sun, take preventative measures with your trees to protect them against sunburn.

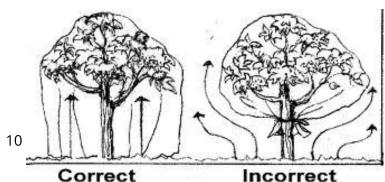
A first sign of sun damage to a desert adapted tree like a Palo Verde, is uneven bark color, from yellow to pale green. For trees with gray bark, a brown discoloration can occur and later the bark can crack or peel away from the tree (pictured below). While sun is needed to produce food for the plant, too much sun will burn plant tissue on leaf and bark surfaces. Trees with broad leafs, like Mesquites, have tubes which lay underneath the bark and transport energy from the leaves down to the roots. When the bark is sunburned these tubes are often affected and the tree is no longer able to carry food to the roots.To prevent sunburn, it is important to select the proper tree type for the climate. Properly selected desert adapted trees have smaller leaves that release less water and tissues that are better suited for our intense sun. Proper placement of the tree is equally important, as trees planted in west and south facing locations receive the intense late afternoon sunlight. Refrain from planting trees in the heat of the summer or make sure to protect the newly planted trees.

Another preventive measure against sunburn is to allow branches that grow along the lower part of the trunk--called watersprouts--to keep growing for at least two years before pruning or removing them. The lower branches not only encourage strong trunk growth, they also shade interior branches and protect the trunk from sunburn. Properly prune your treet o prevent from removing too much of the canopy which exposes tree bark to large amounts of sunlight. Improper irrigation or watering techniques can also lead to leaf loss and further sun exposure.



When night temperatures in Phoenix fall into the 30s, it is important to protect young trees from the cold weather. Temperatures below 32 degrees for a prolonged time or over several nights can freeze tree buds/blossoms, fruit, leaves, and twigs. While the trees in our Shade Tree Program are desert-adapted and can, therefore, typically withstand freezing temperatures, young saplings can be vulnerable to the cold weather especially if they haven't gone into winter dormancy and are, therefore, still actively growing. Below are things you can do to protect your trees from frost:

- Cover your trees with a sheet, light blanket, or burlap sack. Hardware stores sell sheets made of light, porous material specifically for frost protection but feel free to use whatever you have on hand except for anything made of plastic, or heavy blankets. Ideally, you want the cover to touch the ground to retain the warmth under the cloth and around the tree (pictured below). Remove the cover later in the morning when there is full sunlight and preferably when temperatures are warmer. Some of the coldest temperature occur at daybreak so if you can, wait a bit. Do not leave trees covered all day as this can damage
- If your tree gets frost bitten, do NOT trim the damaged parts as they still provide protection for the remaining living parts of the tree. Wait until the spring or when you regularly prune your tree. Make sure to water your trees regularly during winter (refer to p.4 for more on watering). Dehydrated trees are more susceptible to frost which draws moisture from the leaf tissue. Wet soil also absorbs heat during the day so water your plants in the morning and do not
- For large trees or frost-sensitive ones such as citrus trees, string 100-watt electric outdoor light bulbs, such as Christmas lights Not only are you decorating for the holidays but you are warming your trees. Make sure the lights are not too close to the trunk or branch that it could burn it.
- Place mulch around deciduous trees (like our shade trees) to prevent them from breaking winter dormancy by insulating against fluctuating surface soil temperatures. However, do not place mulch around citrus trees, as it will hinder the capturing of heat that will protect the plant.



### INSURING YOUR TREES

Below are steps you can take to insure your valuable trees and find out if your current coverage includes trees:

- 1. Calculate the value of old and large trees. You can hire an Arborist to perform an estimate or use this online resource, https://extension.tennessee.edu/publications/Documents/SP614.pdf.
- 2. Remember to take pictures of the tree.
- 3. Call your insurance company and request an appraisal of live assets. Live assets insurance can cover, for instance, if a neighbor accidentally kills your 80 year old oak tree from chemical fertilizer run-off. Calculating the cost beforehand of the tree will increase the chances of receiving fair coverage versus receiving the cost to replace it with a 48" box tree.
- 4. Most homeowner's insurance policies cover tree removal and damage repairs for your home and other insured structures, such as fences, but double check by calling your insurance claims department. If a tree is not maintained (pruned) and falls due to neglect, you could be responsible for the damages. Following the tips in this packet will help keep trees in good condition.
- 5. Know the policies of your insurance company by calling them or looking them up online. Generally, most insurers limit the coverage to \$500 per tree or 5% of the amount of insurance on the structure of the house.

Many times trees damaged during a storm are salvageable if you take the proper steps to protect them(see p.9 for more information). If your tree, however, is damaged beyond repair, insuring your trees can help prevent expensive costs. Removing a tree during the thunderstorm season may seem like a good idea now, but come summer you'll miss the cooling shade it provides!