

# Plant Care and Maintenance Guide

Your recently purchased plants are one of the few investments that, properly cared for, will appreciate in value. Please use this brief summary as a general guide to caring for your plants – please call us if you have any specific questions or concerns.

## **WATERING**

Water is the most important factor in plant growth. If you don't do anything else, monitor and regulate the moisture level of your plants. New plantings are in some degree of shock due to transplanting, and, because they were held above ground at the nursery, they're used to being watered frequently. Therefore, monitor all new plantings daily during the first month. Usually a good, deep soaking every 1-2 days is sufficient the first two weeks – then about 2-3 times a week for the next two weeks. Monitor 1-2 times per week the rest of the growing season. Watering young plants regularly and deeply is the single most critical step in their early development. In late Fall reduce watering plants that lose their leaves, but continue to water evergreens right up to freeze-up. This watering helps evergreens get through the winter, since they will experience water loss from their leaves or needles throughout the winter season.

## **VARIABLES**

Lots of things affect the amount of water a plant needs/uses, and therefore the frequency and amount that you water will change, given certain conditions.

### **Things that increase a plant's water needs/uses**

- Higher Temperature – for every 10-degree rise in temperature a plant's water needs about double – this is the most critical factor to monitor.
- Wind – wind desiccates, or dries out plants. This is trouble when combined with high temperatures.
- Low Humidity – also dries out plants.
- Sandy Soils – water moves through porous soil quickly.
- Slopes – water runs off before it can percolate into soils.

So, if these factors get combined due to weather conditions or your site, or both – be extra vigilant. You will need to monitor and water more often because your plants water needs/use will rise dramatically.

### **Things that decrease a plant's water needs/use**

- Lower temperatures (cloudy weather too)
- Calm winds
- Heavy soils like clay – heavy soils hold water longer.
- Flat areas, or depressions – water doesn't run off and can percolate into the soil.
- Drought tolerant plants – they naturally need less water.

If these factors occur, or are combined because of weather and your site – you will need to water less frequently. We see just as many plants (maybe more) killed by over watering than under watering. Remember, plants need air too, so over watering can drown plants – be especially careful of this in heavy soils. If in doubt about whether to water or not – feel the soil – if the top two inches are beginning to dry out, it's time to water.

### **FREQUENCY/AMOUNT**

Generally it is better to water less often, but thoroughly saturating the soil when you do, than to water frequently with less water. Deep watering promotes deep root growth, which helps a plant withstand dry spells. Remember that young plants often need more frequent watering than old ones. In our experience, it's especially important to water properly during hot, dry, windy weather.

### **INDICATOR PLANTS**

Sometimes (not always) there is a plant in your landscape or garden that is always the first one to start wilting when it gets dry. If you do notice one, you can use it as an indicator that it's time to start watering.

As you can see, watering is more art than science – getting into the habit of checking your plants on a regular basis is the name of the game – remember those variables and don't forget to feel the soil with your hands – don't be fooled by rain.

### **WEEDS/COMPETITION**

Weeds and turf grasses compete with landscape and garden plants for light, water, and nutrients. For good healthy growth, eliminate any competition by hand weeding/cultivating, and/or by using both pre-emergent, and post emergent herbicides. Best results come from starting with a weed free planting bed – hand weed/cultivate or use a post-emergent herbicide like Round-up or Kleen-up. Be careful with these herbicides because they are non-selective, which means they kill anything green that they're sprayed on. Always read and follow label instructions for application. After your plants are in, you can use a pre-emergent herbicide like Preen or Chipco – sprinkle

them on top of the soil (about the same amount as salting a steak). Pre-emergents do not allow weed seeds to germinate, and don't hurt existing plants. The last step is to mulch with 2-3" of bark mulch (more than 3" is too much). Because weeds are never fully controlled, spot weed as necessary.

## **PRUNING**

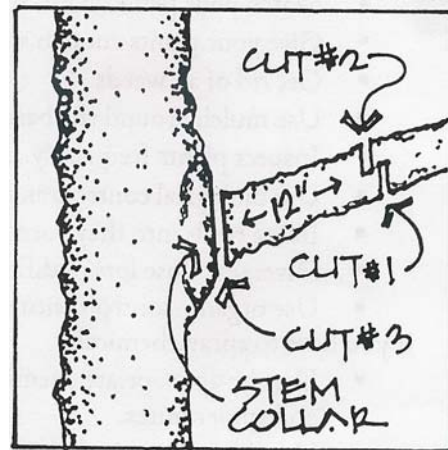
Pruning is as much art as science – learning from experience how a plant responds to pruning over a period of years is probably best. Good tools are a must. (see us at the nursery)

### **The Basics:**

- Remove any dead, damaged, or diseased stem tissue. (the 3-D's) – cut back until you reach live wood and make your final cut just above a bud.
- If you need to cut off an entire branch of a tree, cut it back to the trunk where the branch meets the stem collar (a bark ridge that looks like a horse collar). Cut just outside the stem collar.
- For larger branches use the 3 cut method.

This avoids stripping bark off the trunk. I.E.:

- In general, prune flowering shrubs
- just after they bloom. On mature plants, cut out approximately one-third of the oldest stems at this time.
- Prune evergreens for more dense growth by snipping off about one-half of the new growth once it has fully emerged in spring or early summer.
- Never prune late in the growing season – stop pruning by mid-August.



## **FERTILIZING**

Proper nutrition is essential for healthy plant growth and establishment. We recommend fertilizing once per season with a granular, time-release fertilizer that contains micronutrients (zinc, magnesium, iron, etc.). We use Osmocote 19-8-5 with minors. It lasts for nine months, so one application per season is all that's needed. Water soluble fertilizers like Miracle-Gro, or Peters are good too, but they need to be applied periodically throughout the

season (check label instructions). If a plant thrives in acidic soils, then use an acidifying fertilizer like Miracid. If you prefer organics, use alfalfa meal, blood meal, bone meal, compost, cottonseed meal, cow or horse manure, fish emulsion, or Milorganite. When fertilizing trees and shrubs, always saturate the soil with water before and after application. In general, stop fertilizing around mid-August, and remember to always follow label instructions.

## **MULCH**

We recommend shredded bark mulch for mulching around plants. It helps keep the soil moist and cool during hot weather, stops soil temperature from fluctuating wildly, and helps inhibit weed growth. Avoid placing plastic under mulch – it interferes with the natural exchange of gases between earth and the air. A depth of 3” is about right – slope your mulch down in the center toward the base of the shrub to about 1” or so at the stem/trunk. Bark mulch ties up nitrogen, so sprinkle additional nitrogen around your plants. Use a higher nitrogen formula fertilizer, (19-8-5) for this use. Replace mulch as needed – usually every 1-2 years.

## **SOLVING PROBLEMS**

Observation is the key here; watch for signs of trouble, including unexpected changes in leaf color, dying branches or stem tips, unusual growths on branches, leaves or stems, distorted leaves, etc.

Preventing/controlling diseases before they spread and controlling insects before their populations explode makes sense. Here are some tips that will help:

- Buy disease resistant plants.
- Plant only healthy plants – and keep them healthy via watering/feeding.
- Match your plant’s light/soils requirements to your site.
- Give your plants enough space for good air circulation – watch ultimate size.
- Get rid of all weeds.
- Use mulch around the base of plants.
- Inspect plants frequently and carefully – check the undersides of leaves.
- Use biological controls and mechanical traps whenever possible.
- Invite birds into they yard by providing lots of nesting sites, water, and feed.
- Diversity – use lots of different types of plants.
- Use organic controls/situations whenever possible.

If you have to spray chemicals:

- Use the appropriate chemical – which means you must be able to identify diseases, insects and spider mites.
- Use the least toxic chemical that will do the job.
- Read the instructions on the label carefully and completely.
- Spray early in the morning, or late in the evening when it's calm – cool, cloudy weather is the best.
- Cover all your skin with clothing. Wear rubber gloves, goggles and a respirator.
- Use a sprayer that makes a fine mist, and cover the entire plant, including the undersides of the leaves.
- When finished, wash your clothes separately with detergent, then wash yourself well – especially your face and hands.

If you have trouble identifying diseases or insects, or want more information on pruning, planting, etc., try the following sources for help:

- County extension offices for your county.
- Dial U (University of Minnesota). 1-900-988-0500 (it's a \$3.00 call)
- <http://www.hcs.ohio-state.edu/hcs/hcs.html> (lots of horticulture information).
- Earthworks – bring the evidence in a sealed zip-lock bag.

Remember, keep your plants healthy, and check them often. **GOOD LUCK!**

### **GUARANTEE**

We want you to be completely satisfied and happy with our plants. We will cheerfully refund, credit, or replace, (your choice) one time, any plant that has been properly cared for but has failed to grow. Because plants are living things, a nursery and its customers have a shared responsibility. Our job is to provide you with healthy, vigorous and hardy plants; your job is to promptly plant them and give them proper care after planting. If you give our plants proper care and they do not grow, we will gladly make good on our guarantee.