## Watering Instructions

Proper watering means thoroughly soaking the soil to the depth of the root ball. This deep watering will hydrate the feeder roots (most of which are in the top 18") and promote vertical root growth that will protect the plant against drought. Unlike deep watering, shallow watering promotes only horizontal root growth near the surface and leaves the plant vulnerable to water stress, thus should be avoided.

Water a plant until the soil is moist, then allow the soil to partially dry out before watering a second time--this will promote root elongation and allow for adequate soil aeration that is critical to a plant's health. In order to know if the plant needs to be watered, inspect the soil. If it forms a ball in your hand, you do not need to water. If the soil is starting to crumble or just looks dry, water your plant. Soil is often dry on the surface but wet several inches below. To get an accurate reading of soil moisture, stick a shovel into the ground to the depth of the shovel.

Knowing your soil type will make watering easier. Clay soils consist of small soil particles that cling together and subsequently cling to water. Plants in clay soils require less frequent watering. Sandy soils lack these water retention qualities--they shed water more quickly. Plants in sandy soils require more frequent watering.

Exposure to wind and sun, weather conditions, time of year, and plant species also influence watering. Drought tolerant plants need the least amount of water, but even they will need some supplemental water. All plants need water initially, and soil should never completely dry out the year of planting. Plants exposed to full sun and wind will need water more often, and water demands decrease in the fall when the weather cools and plants lose their leaves.

Other than examining the soil, look for visual clues when deciding whether it's time to water. Leaves that are turning black or yellow even though fall hasn't arrived probably indicate too much water. Leaves that are drooping and losing their color are indications the plant is too dry.

Cut back on watering when fall approaches in order to prevent new growth that won't have time to harden off before winter. After the plant has dropped its leaves but before the ground has frozen, give the plant a deep watering so that it has sufficient water going into winter. Water evergreens heavily at this time.

A common misconception among Montana gardeners is that plants do not need water in winter. All plants, including perennials and especially evergreens, lose moisture through winter via transpiration. During the winter months, it is crucial you water your plants if the weather is mild and dry and the ground is not frozen. Once a month or so is usually adequate.

## Watering schedule

The following are general watering recommendations that we hope act as guidelines for your specific situation. Please read the information on the back of this handout before adopting this schedule as each situation is different.



www.blakenursery.com (406) 932-4195

- 1. Every other day if the plants are not yet in the ground (fill pots to brim, and keep root balls of B&B and fabric bag plants moist. Water drought tolerant perennials and grasses less keep plants in semi shade and out of the wind if possible.)
- 2. Immediately after planting.
- 3. Once a day for three days.
- 4. Every other day for two weeks.
- 5. Twice per week through August.
- 6. Once per week from early September through early October.
- 7. Every other week through October.
- 8. Once per month in winter if weather conditions are dry and mild and the ground is not frozen.
- 9. Once or twice per week the second year and beyond during the growing season.
- 10. <u>Planting in early September or later</u>, follow steps #1-3 before cutting back on water.

## Other tips

- 1. Potentilla and barberry, two drought tolerant plants, are sensitive to drying out the first week after planting—give them extra water at this time.
- 2. Plants planted in to dry soils will need more water initially because the surrounding dry soil will wick the moisture away.
- 3. Less than  $\frac{1}{4}$ " of precipitation is not a substitute for watering.
- 4. Because most feeder roots are at the drip line and beyond, you will need to water a larger area of ground as the plant grows.
- 5. Placing a windscreen (snow fence, pallets, etc) on the windward side of evergreens for one or more years minimizes winter desiccation. Combine this with winter watering for best results.
- 6. Plants in a lawn often do not need supplemental watering after the first couple of weeks if the lawn is watered two or more times per week.
- 7. Plants watered by lawn sprinklers in addition to drip irrigation, bubblers, or hand watering are susceptible to over watering. Mulch further decreases the need for water.

Please call us at Blake Nursery if you have any questions regarding the above information or specific watering needs. We will be happy to help you.

## Winter watering

A common misconception among Montana gardeners is that plants do not need water in winter. All plants, including perennials and especially evergreens, lose moisture through winter via transpiration. Therefore, it is crucial you water them if the weather is mild and dry and the ground is not frozen.

How do you tell if water is needed? Stick a shovel in the ground to the full depth of the shovel. (If the ground is frozen, don't worry about this procedure until it thaws.) Look at the soil profile - if it is dry, water is needed. Soil should never be dry the year of plant installation--this is true for all plants, but particularly **evergreens**.

\*\*\*How to water? Use a hose or sprinkler. Water the entire area around the base of the plant and let the water really soak in so that it saturates the roots.



www.blakenursery.com (406) 932-4195