



Your Full Service Nursery & Landscape Center  
Since 1987  
3166 Willow Creek Road, Prescott  
www.mortimer-nursery.com  
776-8000 / [info@mortimer-nursery.com](mailto:info@mortimer-nursery.com)

## A Plant's Preparation for Winter



"Hardening Off, "Dormancy", "Hardiness"... these are words you hear among gardeners as fall turns to winter.

Hardening off is the process a plant goes through to prepare itself for cold weather. This process is triggered by the onset of shorter days and cooler temperatures. You can see the effect of hardening off on deciduous trees and shrubs as their leaves turn color and drop off. Inside the plant, a concentration of carbohydrates is building up to help prevent the formation of ice crystals within the plant's cells. This helps to protect trees and shrubs from cold injuries. You can help your plants harden off by gradually reducing water throughout the

fall and by not applying high nitrogen fertilizer in the fall which forces top growth.

Dormancy is the state a plant will enter by the time winter arrives. During dormancy, development is temporarily suspended which minimizes metabolic activity and, therefore, conserves energy. Also, dormancy keeps the tender parts of a plant (leaves and flower buds) from sustaining damage during adverse weather, such as cold. Evergreens are not able to go into a full dormant state since they continue to photosynthesize through winter. However, they do enter a rest period during which their development decreases. Although your deciduous plants are dormant and your evergreens are resting, they still require water through the winter. Water deeply once or twice a month on days when temperatures are above 40 degrees F.

Hardiness is a measure of a plant's resistance to cold. A hardy plant is one that can survive its region's lowest temperature from year to year.

A common question at the nursery is "What hardiness zone are we in?". Well, there are several answers to that: The most commonly used zones are the USDA Plant Hardiness Zones which divide the United States and southern Canada into 11 areas based on a 10 degree Fahrenheit difference in the average annual minimum temperature.

Depending on the elevation at which you live in the Prescott area, your USDA Plant Hardiness zone would be either: Zone 6a: -10/-5F minimum temperatures or Zone 6b: -5/0F minimum temperatures

However, the USDA Plant Hardiness Zones have not been updated since 1990. The National Arbor Day Foundation has developed an updated Plant Hardiness Zone Map based on the most recent 15 years' data available from the National Oceanic and Atmospheric Administration's 5,000 National Climatic Data Center cooperative stations across the United States. This new map is not an official government document and its release has caused some controversy. Using this map, Prescott is in Zone 7: 0/10F minimum temperatures.

Although this is confusing, if you're a conservative gardener then stick with plants that will over-winter in USDA Zone 6. If you're a risky gardener then give a few USDA Zone 7 plants a try.

Western gardeners often use the Sunset's Western Climate Zone system that divides the Western U.S. into 24 climate zones. This system takes into account winter cold and summer heat, humidity, elevation and terrain, latitude, and varying degrees of continental and marine influence on local climate.

The Prescott area lies within Sunset Western Climate Zone 3A in the 2007 edition while older editions put Prescott in Zone 2. Zone 3A has minimum winter temperatures averaging between 15 to 25F. The frost-free growing season runs between 150 to 186 days.

*Your hardy plants that harden off and enter winter dormancy will be back to greet you in the spring!*

