

**Yard and Garden - 04-14-2012 - Ted Griess / Extension Horticulture Assistant**

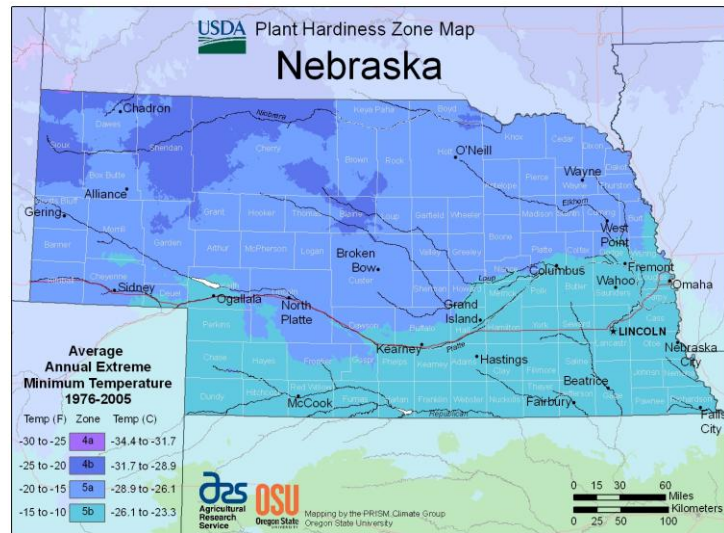
During January, 2012, it all changed, or did it? Prior to January, it had remained the same since 1990. I have a hunch that if you have been gardening for any length of time, you have been using this guide before purchasing plants for your landscape. Based on the average lowest winter temperatures across the country, it is a measure that not only gardeners rely on, but also plant breeders and nursery owners. I am referring to the newest version of the USDA's Plant Hardiness Zone Map.

Plant hardiness zones represent the average annual extreme minimum temperatures over a specified time at a given location. Understand, I emphasize the average minimum temperature—not the coldest temperature it has ever been or will be at a given location. As most gardeners know, low winter temperatures play a critical role in the survival of plants.

This new map is more accurate than the old one due to advances in the technology of collecting data. The 1990 version was based on temperature data from 1974 to 1986 (thirteen years); whereas, the 2012 version includes data taken over thirty years, from 1976 to 2005. Compared to the 1990 version, zone boundaries in the 2012 map have shifted 5° F warmer in many areas. In some cases, especially in the mountainous regions of the western United States, zone changes became cooler. Two new zones have been added, and today there are thirteen USDA Hardiness Zones. Each zone is a 10° F. band, further divided into 5 degree Fahrenheit zones labeled A and B.

The 1990 map indicated that most Nebraskans living north of Interstate 80 were in Zone 4; whereas, those living south of I-80 were in Zone 5. Zone 4 temperatures had an average winter low from -30° to -20° F. For those living in Zone 5 the average winter low was -20° to -10° Fahrenheit.

Today's USDA Plant Hardiness Map places the majority of Nebraskans living north of Interstate 80 in Zone 5a rated -20° to -15° F. A few areas in North Central and Northwest Nebraska are rated Zone 4b. South of I-80 is Zone 5b rated at -15 to -10 degrees F.



Although poster-sized versions of this map are not available for purchase from the government as they were in the past, individuals may now download state, regional and national images of the map free of charge from the internet. As a U.S. government publication, the USDA Plant Hardiness Zone Map is not copyrighted and is in the public domain. Furthermore, the new map offers a Geographic Information System providing an interactive format deemed to be internet friendly. Once on the website, the new map allows one to find exact zones through a zip code function. I urge you to visit the new map at <http://planthardiness.ars.usda.gov/PHZMWeb/>.

What do all these changes in zones mean for us gardeners? Although we Nebraskans have gained another 5° F warmer on the map, and we now have Zones A and B, we are still limited as to what plants we can grow. From all these new ratings, one might be tempted to grow plants rated for a warmer zone. Take caution. Placing plants rated warmer in a colder hardiness zone usually results in disappointment. To be on the safe side, I have always encouraged gardeners to plant those plants rated one zone colder. That way, in the event of an extreme cold spell, the plants will usually survive.

If one insists on growing plants rated for a warmer zone, certain measures need to be taken to improve their survival. One needs to create nano-climates. Ways to create a nano-climate involve planting in a sheltered area such as next to a stone or brick wall or near a windbreak and adding a thick layer of mulch around the plant. These methods create a warmer environment.

With the creation of the new hardiness map, nurseries will now need to update their plant tags to reflect the proper hardiness zones. Although the map officially changed in January, the fact remains, we are still limited to what we can plant successfully based on the plant's genetic hardiness.