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**Hardiness Zones**  
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There are a myriad of plants in the world and knowing which ones to choose can be a daunting task. From annuals (plants that last one season) to perennials (those that last more than one year) and trees and shrubs, their needs vary by sunlight, water, fertilization and soil types, but a key component is winter hardiness.

The USDA developed a plant hardiness zone map in 1960 and it is revised periodically based on weather data collected over a period of time. The version most commonly in print is the 1990 edition which divided Arkansas into three separate zones: 6 (temperatures between -10 F to 0) in the northern tier, zone 7 (temps between 0 and 10 degrees) in the center part of the state and zone 8 (10-20 degrees) in the southern tier of the state.

Keep in mind this map is giving you one piece of the puzzle—the average low winter temperature over a period of years. It does not tell you anything about average high summer temperature, rainfall amounts or humidity, so it is a guide not the ultimate tool in choosing plants.

If you think about it, over the past twenty years in central Arkansas we have seen a few single digit days, but they were rare, and we did not make it down to 0. NW Arkansas still has some brutally low days, but overall we have found our winters to be a bit milder. Arkansas is not the only state with that issue.

In 2012 the most current edition of the plant hardiness zone map was released. It was designed for the internet—you can put in your zip code and it will tell you what your zone is. Those of us who live in the city tend to be a tad warmer than those in outlying towns. The website is: <http://planthardiness.ars.usda.gov/PHZMWeb/>

The current zone map divided each of the hardiness zones into two separate ones and Arkansas now has four separate zones. Little Rock and points south are for the most part 8a (minimum temp of 10-15 degrees), with other areas being 7b (5-10 degrees), 7a (0-5) and the far NW corner 6b (-5-0). Remember this is not the actual low temperature we have ever seen in our areas, but the average low temperature over a period of years between 1976 and 2005.

It would be nice if our weather patterns were precise and we could predict what was going to happen, but ever year there are fluctuations. Last year was extremely mild with our first killing frost in central Arkansas January 7. This year our first killing frost was December 8 and in 2013 and 2014 we had severe low temperatures and killing frost in mid-November, so each year is a new year weather-wise.

Many catalogs today list the plants hardiness zone, but use it as one piece of information, not the only piece. If you look at the zone maps, many of our zones begin in the NE US and end up in Washington State. Their winter lows may be similar, but their summers are quite different. An example would be the Colorado blue spruce. It is ranked as being hardy from zone 2 to zone 7, which means that it should be winter hardy in most of Arkansas, but winter isn't the problem. It doesn't like our summers.

While you can find a few Colorado blue spruce trees in Arkansas they aren't the magnificent specimens they are in Colorado where summers are milder. Another example is lantana. Most catalogs or references say it is hardy to USDA Zones 10-11 (roots hardy to Zone 8 or 9). In NW Arkansas it is almost always an annual dying each winter, while in central Arkansas in mild winters it does come back from the root system making it a moderate perennial, in south Arkansas it is always a perennial and in Florida it is evergreen.

The key to gardening is trial and error. Hopefully, most of the plants sold as shrubs and trees in Arkansas nurseries should be considered hardy in Arkansas for both summer and winter, but extreme weather can still cause damage. For years we couldn't grow figs much taller than 4-5 feet tall because they froze to the ground too often, but now we have many 20 feet or taller fig trees. We had no damage last year, but did have some the prior two years. Big leaf hydrangeas bloomed beautifully for the first time this past summer, while they were frozen back the prior two years.

Cold hardiness can also change with the season. Plants are often most susceptible to cold damage as they are going dormant in the fall if we have an abrupt drop in temperatures versus a gradual cooling off or as they are beginning to grow in the spring. As the days get longer and we experience a few bouts of warm weather, the buds begin to swell and they begin to grow. As they leave their dormant state, they are not as cold hardy as they were when totally dormant.

Try new plants. If you have a plant that is only moderately winter hardy in your area—gardenias for instance, place them in a more protected spot in your landscape. Your entire yard could be warmer or cooler than your neighbor's yard because it is more sheltered with trees and shrubs or more exposed. Low lying areas typically get colder than hilly yards. When we think of a protected spot, it is often an eastern or northern exposure next to the house. South and west facing exposed areas may seem warmer, but often can lead to more winter damage. In Arkansas we typically have more problems with huge fluctuations in temperatures than just low temperatures. Plants exposed with full afternoon sun will experience even more fluctuations.

I often say that you are not a true gardener if you have never lost a plant, because you aren't experimenting and trying new things. So test the waters. There are so many new plant introductions that it is hard to have hard and fast evidence on what will always survive. If a plant dies, that is an opportunity to buy a new plant! And remember, there is not a hardiness zone map that will ever take the place of the knowledge that a gardener knows about what will and will not work in their own gardens through hands-on experience. The key is to garden!