Confused by Plant Hardiness Zones?

Most gardeners are familiar with plant hardiness zones. Hardiness zone maps divide the country into zones based on the local average low temperatures. We use a map as a guide to help us determine which plants will survive the winter temperatures in our own zone. But, unfortunately, it just isn’t that simple.

The first attempt at mapping hardiness zones was done in 1927 at the Arnold Arboretum and it has been upgraded many times over the years. There are at least five other plant hardiness maps being used in the US today. And another one is being developed by Oregon State University which will use other factors besides cold and heat in determining plant hardiness. No wonder this zoning thing can be so confusing.

The zones most often used on plant labels you see at nurseries and garden centers are the USDA hardiness zones. The zones were determined by figuring the lowest temperature average of each area. Research is done with a plant to determine the coldest possible temperature it can survive. Then a plant is assigned cold hardiness zones in which it should survive. But how do we know the cold hardiness of new plants entering the market? By someone’s best guess. By our own trial and error, so good luck.

The zones are numbered from north to south on the map. We are in USDA zone 8b in Columbia County, with an average low temperature of 15 to 20 degrees F. So if you try to grow a shrub that is hardy to zone 9b, it will die when our temperatures dip below 25 degrees F. You might get lucky for a year or two, but nature will win out eventually.

Think about all the other factors of nature that are involved in growing plants and keeping them alive; rainfall, soil, drainage, wind, humidity, daylight, and heat. Heat is really a big factor here in Florida where seasonal high temperatures can be murderous to plants. You might try growing a plant that is cold hardy here only to have it wither away in our summer heat. Plant lists on the website http://solutionsforyourlife.com can help you find the right plant considering all those other factors.

There are ways to use conditions in your own yard to grow plants that are marginally hardy here. Try creating a microclimate to slightly change the growing conditions. Brick walls or paving will hold heat and release it slowing, slightly increasing the air temperature around them. A body of water cools off more slowly than soil. Plants around a pond can benefit in winter from the warmer night air around the water. Even a small space like a courtyard or an area between structures may keep temperatures elevated a few degrees in the winter.

To summarize, plant hardiness zones should be used only as a guide. There are many other factors to consider when selecting plants for your own garden. Don’t be discouraged if you lose a few because this is still a developing science in a changing climate.

If you have questions about the right plant in the right place, call the UF Columbia County Master Gardeners on Tuesday or Thursday mornings at 752-5384.