Hardiness Zone Ratings Best Weapon Against Cold Damage

With the chance of frosts passed and new plants going into the landscape, it’s important to consider the climate extremes that your plant can tolerate before putting it in the ground. The primary map used to determine the suitability of a plant for an area is the USDA Hardiness Zone map. This shows the average minimum temperature in our area. Plants rated as suitable for Zone 6b SHOULD survive our average minimum temperature with no damage, but this is not always guaranteed. The minimum temperature in a given year could be lower than the average, like it was back in February. For this reason, always exercise caution when planting species that are on the edge of our range. Mimosa trees, for example, are suitable from zones 6-10, but if hit by cold below the average, they could be killed, as we are currently seeing. Leaving a little bit of wiggle room in the cold that your plant can tolerate will make it more likely that you won’t have to replace the plant too soon.

The concept of cold hardiness only applies to perennials – plants that return in future growing seasons. Annuals, especially flowers, usually aren’t sold on the basis of their cold hardiness since they will die off after a year anyway. Many herbaceous perennials like hostas and daylilies will die back to the ground in cold, but this is not the complete death of the plant, and should instead be viewed in the same way as a tree dropping its leaves. Some naturally perennial plants are traditionally grown as annuals in places that get too cold. Depending on the range of zones these perennials can successfully grow in, these plants could survive thanks to their microclimate, or could be grown as perennials in containers when the temperatures drop too low.

Microclimate is the weather and atmosphere immediately above the ground, and there are several strategies to keep cold-sensitive plants warmer in the winter. The first and easiest step is to position these plants on the south and west sides of your house. These will get the most sun exposure, and the closer these plants are to a wall, window or foundation, the more light and heat
will be reflected back towards the plant. Avoid planting in low spots, as these will gather cold air and wind. Finally, mulch the plants. This will keep soil warmer in the winter, and cooler in the summer.

The American Horticulture Society has a map similar to hardiness zones, but for summer heat. This map measures the average number of days with a high temperature above 86. Kansas will fall into zone 7 or 8, showing that somewhere between 60 and 90 days in a year will have a temperature above 86. This information will not be as readily available as the USDA’s map, as it is a relatively new creation, but it is still a good idea to look for this info on plant labels when shopping. Keep in mind that every microclimate trick for keeping cold-sensitive plants warm will also keep heat-sensitive plants warmer, and could lead to their death. When designing new garden beds, it is best to split straight down the middle for both heat and cold tolerance, so as to not freeze one and fry the other.

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