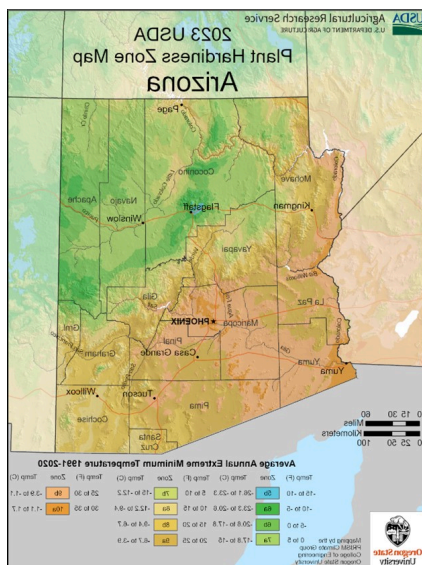


## Understanding Plant Hardiness Zones



By Hattie Braun

It's Official! Flagstaff is now in the USDA plant hardiness zone 6a. I wrote a column about hardiness zones back in 2005 and my last sentence was, "If Flagstaff officially becomes zone 6, I'll let you know." The latest USDA plant hardiness zone map just came out in November, and about half of the United States is now in a warmer zone.

First published in 1960, hardiness zones are used by gardeners, farmers, landscapers, and researchers to determine which plants are most likely to survive during the coldest months in a given location. Each zone number marks a ten-degree band with a's and b's used to further define the zone.

A zone definition of 6a means the average minimum temperature will be between -5- and -10-degrees F. Over the last three decades, several towns and regions in Coconino County shifted to warmer hardiness zones. Doney Park is now labeled as 6b (-5 to 0 °F), while Williams went from 5b (-15 to -10 °F) to 7a (0 to 5 °F), as did the Grand Canyon. Tuba City and Sedona both remained the same.

Here are some local hardiness zones with their average minimum temperature.

Fort Valley – 5b (-15 to -10 °F)

Flagstaff -- 6a (-10 to -5 °F)

Fredonia, Happy Jack, Ashfork, and Supai – 7a (0 to 5 °F)

Page and Tuba City – 7b (5 to 10 °F)

Sedona – 8b (15 to 20 °F)

Phantom Ranch – 9b (25 to 30 °F)

You can find the hardiness zone for your neighborhood using your zip code at:

<https://planthardiness.ars.usda.gov/>. Some of you may think these zones can't be right. Is Fort Valley really only 5b? It must be colder than that, especially since the location is over 8,000 feet. Is Grand Canyon warmer than Tusayan? Be aware that some areas may lack long-term

temperature data, and therefore may not give precise information. And because the map is based on zip codes which can cover a sizeable and variable area, it may not be exact for your location. Click on the map and zoom into your neighborhood to find the zone based on quarter-mile increments.

What do these zone changes mean for gardeners? In many locations, people may find they can grow new types of trees, shrubs, and perennials. On the other hand, some plants will no longer thrive in a warmer climate. Aspen is a good example, as many of them are now struggling in Flagstaff. Regional warming may also mean an increase in invasive species or insect pests. What was once only a problem for Sedona could now be a problem for Flagstaff.

Features on your property can create microclimates that further modify the environment from the norm. A low, wet location may be a lot colder than a higher, dry one. Buildings and concrete are usually warmer than gardens or the forest floor. Gardeners can take advantage of these variations when selecting and situating plants.

Don't forget that zones are based on the average minimum temperature for the last 30 years. One cold weekend that drops temperatures below the minimum can damage trees and shrubs even if they're listed for that zone.

Keep in mind that minimum low temperature is just one factor affecting plant growth. Snow, rainfall, temperature fluctuations, wind, latitude, altitude, heat, and cold can all affect the survival of a plant. Some of us should think twice before purchasing a pomegranate. It can grow in zones six and seven, but if it is exposed to harsh winter winds, chances are high it won't bear fruit that season. Additionally, the hardiness zone of most fruit trees will have little bearing on determining whether it will produce fruit in any given season. It is late spring frosts when temperatures dip below 25 °F, causing the death of blossoms, which prevents fruit production. Remember: the later a fruit tree blooms in the spring, the less likely it will encounter blossom damage due to freezing temperatures.

I still like to recommend being conservative in your plant selection, especially with trees. And if the map changes again, I'll let you know.

The next Master Gardener class will be in-person starting on January 23, meeting on Tuesday afternoons from 1:00 to 4:30 in Flagstaff. For more information, go to:

<https://extension.arizona.edu/coconino-master-gardener>.

*Hattie Braun is the Coconino Master Gardener Program Coordinator and Coconino County Director for Arizona Cooperative Extension.*