

Handy Facts and FAQs on Hardiness



HOW CAN I FIND OUT WHAT HARDINESS ZONE I LIVE IN?

- Visit the [USDA Plant Hardiness Zone Map \(PHZM\) website](#) and enter your zip code.
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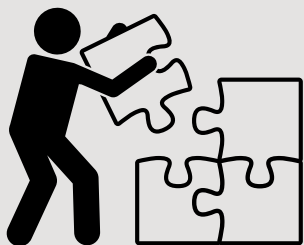
WHAT IS THIS MAP TELLING ME AS A GARDENER?



- Plant hardiness zone maps (PHZM) are a general guide for selecting plants suitable for gardens or landscapes. But, they only describe low winter temperatures. Many other climate patterns such as summer heat, moisture, and rapid changes in spring and fall also affect plant success.
 - PHZM are a great start to selection. Your observations and site-specific experiences with hardiness and winter damage can then help you fine-tune your planting decisions.
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HOW IS THE 2023 MAP BETTER THAN PREVIOUS VERSIONS?

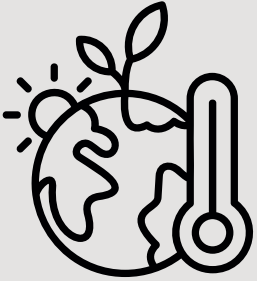
- The new 2023 map tells the story of the average annual low winter temperature with more detail than the 2012 map. The new map is GIS-based (Geographic Information System) to have more resolution and display well digitally.
- Like the 2012 map, this map uses a 30-year range of data (1991-2020). But, the 2023 map used data from over 13,000 weather stations when around 8,000 stations were used for the 2012 map.
- Two new hardiness zones (12 and 13) were added to the 2012 and 2023 maps to reflect nuances in tropical conditions where extreme minimum temperatures vary between 50 and 60 degrees F.
- Resources are also available to clearly show these changes over time. The USDA offers a second map that indicates areas of change between the 2012 and 2023 maps. This map can be found as a download option under “National” on the [Map Downloads](#) page.



[CHECK OUT THESE RESOURCES AND MORE AT OUR NICH WEBSITE](#)

MY ZONE HAS GOTTEN WARMER. DOES THAT SHOW CLIMATE CHANGE?

- Not necessarily. Some areas may be as much as a half-zone (5 degrees) warmer than on previous maps, but there are many other factors.
- For example, the plant hardiness zone for a location in Lexington, Kentucky (40514) increased a half zone, reflecting warmer average minimum winter temperatures. In 2012, the location was in zone 6b (-5 to 0F/-20.6 to -17.8C). According to the 2023 PHZM, this location is now considered in zone 7a (0 to 5F/-17.8 to -15C). However, Anchorage, Alaska (99540) decreased a half zone, reflecting colder average minimum winter temperatures, as noted by the change in letter following the zone number. In 2012, the location was in zone 5b (-15 to -10F/-26.1 to -23.3C). According to the 2023 PHZM, this location is now considered in zone 5a (-20 to -15F/-28.9 to -26.1C).
- Zone changes are partially due to increased sophistication in the technology of the map. The GIS-based method increased the resolution of temperature differences between cities and surrounding areas. Urban areas tend to hold heat because of increased amounts of concrete and asphalt, while surrounding areas can have lower temperatures. This sophistication also considers elevation changes and proximity to water which are known to impact weather. There were also improvements in analysis and interpretation of the data. The collective result is a more highly refined map.
- Zone change does not necessarily mean climate change. PHZM use data from a 30-year period rather than the 50-100 years that is analyzed to describe climate. The data in the PHZM reflects weather (short-term changes in the atmosphere) rather than climate (long-term averages of weather trends and patterns over a long time in a given area). Climate change encompasses global climate and includes factors such as solar energy, sea level, sea surface temperatures, sea ice, and ocean heat, in addition to land conditions, including wind, humidity, and temperature.



HOW SHOULD I USE THIS MAP TO MAKE THE BEST PLANT DECISIONS?

- Use the Plant Hardiness Zone Map to check how cold it might get at your location during an average winter. The precision of the 2023 PHZM enables cold hardiness zones to be determined for specific zip codes.
- Don't rely on the map too much. You still need to do your homework when making plant selections. Consider other aspects of plant success, such as heat, rainfall, humidity, and soil preferences. Always match the right plant to the right place.
- Check plant publications and recommendations from your land-grant university and Extension service. To find one near you, consult this list from the USDA (<https://www.nifa.usda.gov/about-nifa/how-we-work/partnerships/land-grant-colleges-universities>)