



ZONE HISTORY

NEW ARBORDAY.ORG HARDINESS ZONE MAP REFLECTS WARMER CLIMATE

Latest hardiness zones, based on most current temperature data available, suggest up-to-date choices for best trees to plant

Nebraska City, Neb. – Much of the United States has been warmer in recent years, and that affects which trees are right for planting.

Based on the latest comprehensive weather station data, the National Arbor Day Foundation has just released a new 2006 arborday.org hardiness zone map which separates the country into ten different temperature zones to help people select the right trees to plant where they live.

The new map reflects that many areas have become warmer since 1990 when the last USDA hardiness zone map was published. Significant portions of many states have shifted at least one full hardiness zone. Much of Illinois, Indiana, and Ohio, for example, have shifted from Zone 5 to a warmer Zone 6. Some areas around the country have even warmed two full zones.

In response to requests for up-to-date information, the Arbor Day Foundation developed the new zones based on the most recent 15 years' data available from the National Oceanic and Atmospheric Administration's 5,000 National Climatic Data Center cooperative stations across the United States. Hardiness zones are based on average annual low temperatures using 10 degree increments. For example, the average low temperature in zone 3 is -40 to -30 degrees Fahrenheit, while the average low temperature in zone 10 is +30 to +40 degrees Fahrenheit.

The new 2006 arborday.org hardiness zone map is consistent with the consensus of climate scientists that global warming is underway. Tree planting is among the positive actions that people can take to reverse the trend. Tree planters across the nation can go to arborday.org, click on the Hardiness Zone link, and enter their zip code to determine their hardiness zone.

"The Arbor Day Foundation supports tree planting throughout America," says Foundation President John Rosenow. "Providing the hardiness zone for individual zip codes at arborday.org is an important part of that goal, by giving tree planters the most up-to-date and useable data available."

"Of course existing trees should continue to be cared for," said Woody Nelson from the Arbor Day Foundation. "Certain species may be more vulnerable to stress with the current warmer climate, but they will continue to provide environmental and economic benefits as they grow. It's just a good idea to consider more tree species diversity for the future."

You can download the new Hardiness Zone Map at arborday.org. There is also a map that shows which regions have warmed and an animated graphic that shows hardiness zone changes since 1990.

Planting trees helps counteract global warming.

Trees counteract global warming in multiple ways. Atmospheric carbon dioxide is the leading contributor to global warming, and as trees grow they remove CO₂ from the atmosphere, storing the carbon and releasing oxygen. A single tree can remove more than a ton of CO₂ over its lifetime. Also, shade provided by trees reduces summer air conditioning needs. According to the USDA, the cooling effect of a healthy tree is equal to 10 room-size air conditioners operating 20 hours a day. Trees reduce the "heat island" effect in urban areas, where summer temperatures are generally warmer than the surrounding countryside. According to the U.S. Forest Service, 50 million strategically placed shade trees could eliminate the need for seven 100-megawatt power plants. Additionally, trees around homes and in cities slow cold winter



winds, reducing the need for winter heating. This relief on fuel consumption for heating and cooling helps reduce CO₂ emissions from burning fossil fuels.

Detailed information about which trees are best for planting throughout the country, the value of trees, and the latest warmer hardiness zones can be found at www.arborday.org.

The National Arbor Day Foundation is a nonprofit organization of nearly one million members, with a mission to inspire people to plant, nurture, and celebrate trees.