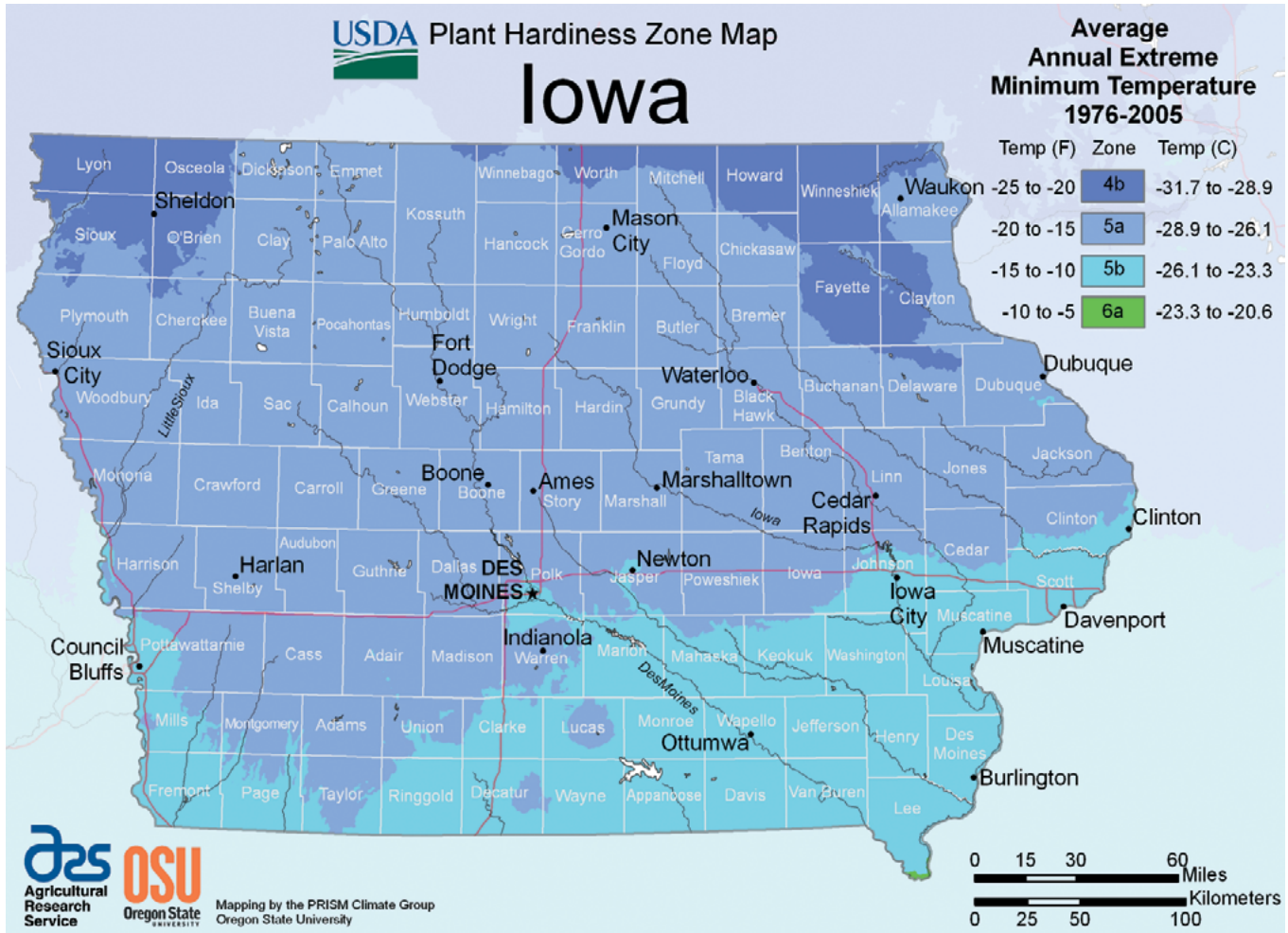




# Gardening in Iowa Zones

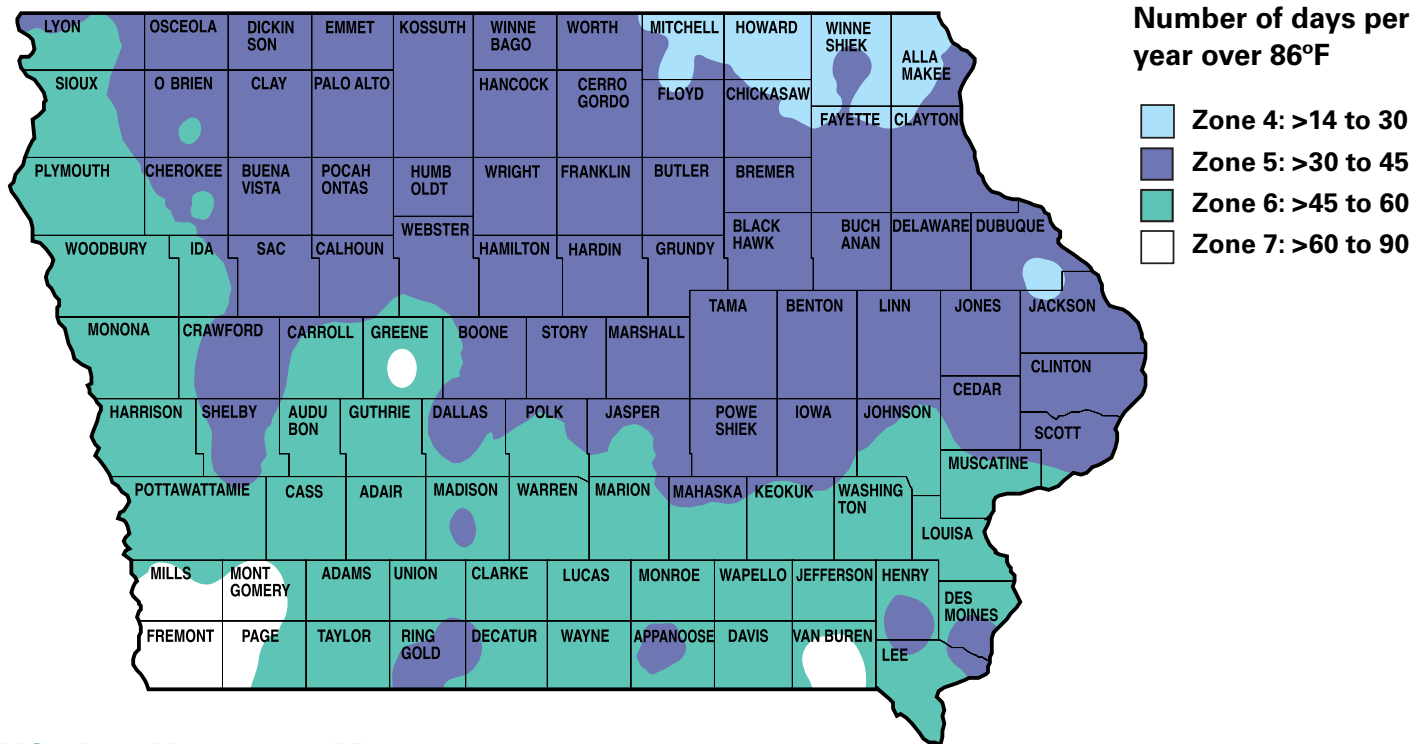
Zone maps are a gardener's best tool for selecting plants that will do well in local gardens.



## 2012 USDA Plant Hardiness Zone Map

Most gardeners are familiar with the United States Department of Agriculture's Plant Hardiness Zone Map as a standard guide to a plant's cold tolerance. It has been an important tool when selecting trees, shrubs, and perennials for the landscape for over 40 years. The data on which the 2012 map is based was gathered from 1976 to 2005. Most American reference books, nursery catalogs, and gardening magazines describe a plant's ability to survive cold temperatures using USDA plant hardiness zones.

The USDA Plant Hardiness Zone Map divides the country into 13 zones based on average annual minimum temperatures. Zone 1 is the coldest area where minimum temperatures can go down to minus 60°F. At the other extreme, Zone 13 is the warmest zone in tropical locations where lows don't drop below 60°F. The zones are divided by 10-degree increments. According to the 2012 version of the map, most of Iowa is in Zone 5. Small areas in northwest and northeast Iowa are in Zone 4.



## AHS Plant Heat Zone Map

Cold isn't the only factor that determines whether plants will survive and thrive in an area. Heat also has an effect on plants. The effects of heat stress are less obvious than the damage caused by extreme cold, which will either kill a plant instantly or slowly over the winter.

In 1997, the American Horticulture Society (AHS) developed a new map, called the AHS Plant Heat Zone Map, to help gardeners choose plants suited to summer temperatures in their region. AHS Heat Zones (1997)

This zone map is used to select annuals, perennials, vegetables, aquatic plants, and turf grass species. It divides the United States into 12 zones based on the average number of days in the year that daily high temperatures reach or exceed 86°F. This temperature was chosen because it is the point at which plants begin to suffer physiological damage from heat.

The zones range from Zone 1 (less than one heat day) to Zone 12 (more than 210 heat days). Iowa occupies parts of Zones 4 (northeast part of the state) through 7 (extreme southwest part of the state).

## Using the Zone Maps

The USDA Plant Hardiness Zone Map and AHS Plant Heat Zone Map are guides to help gardeners select plants suitable for their location. However, the maps are only guides. They are based on the average annual minimum temperature and average number of days of 86°F or higher. Longtime Iowa residents realize the weather in our state is rarely normal or average. Periodically, these averages will be exceeded, sometimes by a wide margin. Plants may be damaged or destroyed during extreme weather events.

For example, a tree or shrub hardy in USDA Hardiness Zone 5a (average annual minimum temperature of -15 to -20°F) may grow well for several years as long as winter temperatures are average or warmer than normal. However, a bitterly cold winter (when temperatures drop to -25 to -30°F) may result in serious plant damage or possibly death.

The USDA Plant Hardiness Zone Map and AHS heat Zone Map are helpful guides. Gardeners who utilize the maps and select plants based on their cold and heat tolerances should see very high plant success rates.

## For more information

Horticultural information on selection, planting, cultural practices, and environmental quality is available from your local Iowa State University Extension office and from these websites.

<https://store.extension.iastate.edu/>  
[www.yardandgarden.extension.iastate.edu](http://www.yardandgarden.extension.iastate.edu)  
[www.reimangardens.iastate.edu](http://www.reimangardens.iastate.edu)

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