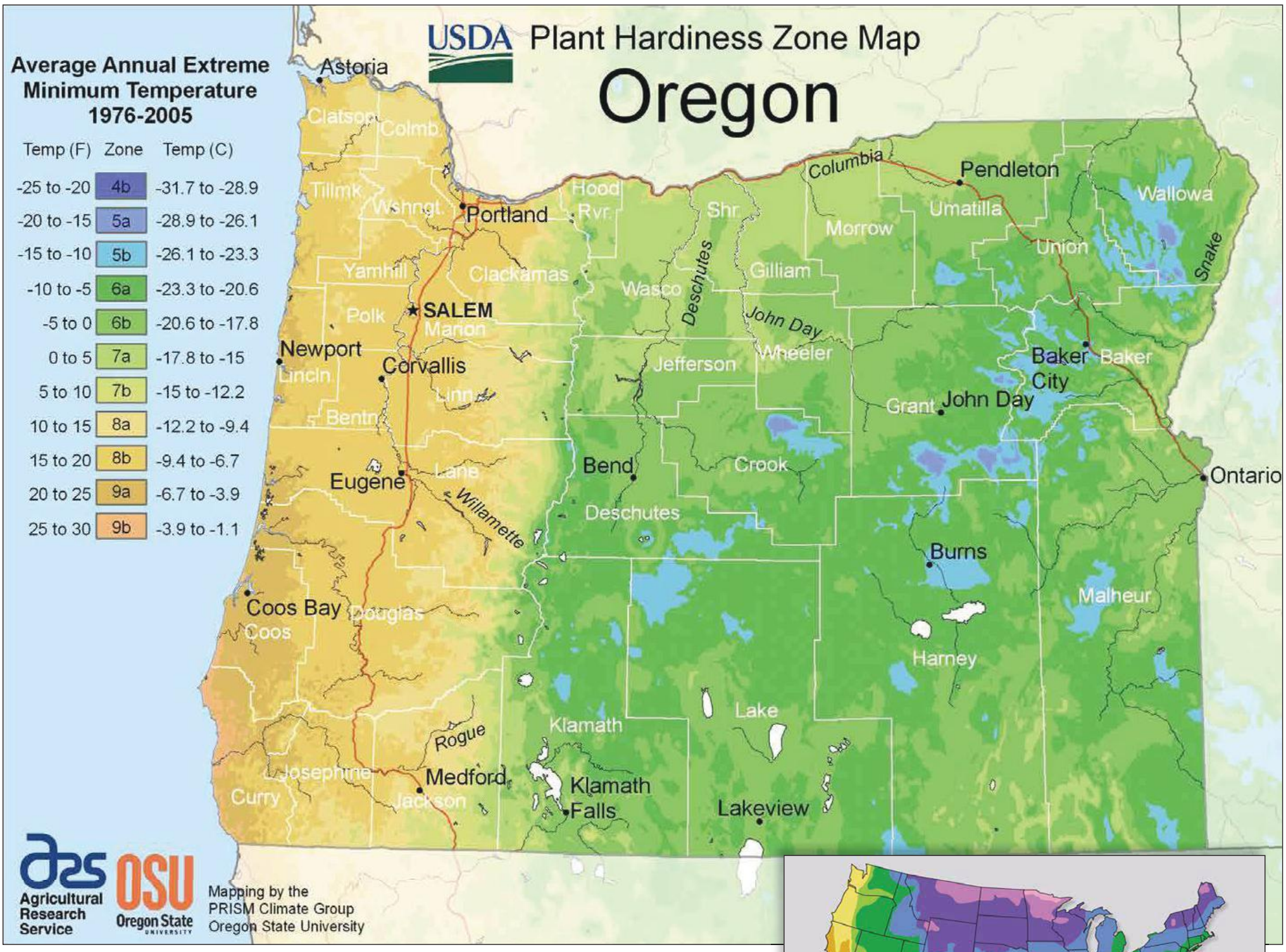

Understanding hardiness zones

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Ask a Master Gardener

Question: Whenever I look through any seed catalog or look at any plant tag, there is generally a reference to the hardiness zone. I know that it is important information, but I don't really understand the logic behind it. Please explain what they are and practical uses for the hardiness zones.

Answer: Understanding the information presented in a hardiness zone map provides guidelines helpful to your gardening success.

Back in the 1960s, Henry Skinner supervised the development of hardiness zones. His team from the United States National Arboretum worked with a team from the American Horticultural Society and they incorporated data from across the United States regarding horticultural and meteorological information.

The Plant Hardiness Zone Map was published in 1960 by the US Department of Agriculture. This map was most recently revised in 2012 by the USDA Agricultural Research Service and Oregon State University.

For the home gardener, the terms hardiness zones, planting zones, and growing zones refer to the same thing. North America has been divided into thirteen zones and each of those zones is further divided into A and B sub-zones.

The zones are based on the annual average minimum winter temperature over a 30-year period. Each zone represents a difference of 10 degrees, and each sub-zone represents a difference of 5 degrees. The zones do not take into account extreme temperatures.

The new map uses GIS (Geographic Information System) technology and data from weather observation stations across the United States, allowing for a higher degree of accuracy than the old map. An online interactive map can be found at planthardiness.ars.usda.gov. Simply type in your zip code and obtain the exact hardiness for your location.

The Plant Hardiness Zone Map is most useful for determining what perennial plants will survive year-round in your area, and, of course, this is useful for determining how well and how long annual plants will thrive.

When selecting plants using this map, pick a plant with a rating that falls within your zone, or one zone colder.

This map is meant to be just a guide. The gardener has to be aware of the microclimates that exist on their property. For example, microclimates can be influenced by how your property slopes and how much shade covers your property. South-facing walls will be warmer than similar areas facing north. The proximity of garden buildings, fences, ponds and patios may all contribute to a microclimate.

The successful gardener will use all available tools, but then will also have to determine what works best in the garden.

The Plant Hardiness Zone Map is universally recognized; however, for gardeners living in one of the thirteen western states, the climate zone map found in the Sunset Western Garden Book may be more familiar. Keep in mind that the Sunset climate zones do not correspond to the USDA Hardiness Zones.

The 24-zone climate system published in the Sunset Western Garden Book was developed in collaboration with the University of California. This tool considers a wider range of factors when developing the zones. Winter and summer highs and lows, weather patterns like humidity, rainfall and heat are considered. Specific environmental conditions such as prevailing winds, day length and soil type are also considered.

The eastern United States is comparatively flat, but since the western United States has a much greater variety of geographical features when it comes to elevation, many gardeners in the west rely mainly on the information published by the Sunset Western Garden Book.

There is one thing to keep in mind, though, as you look through seed catalogs and at plant tags. When looking at the seed packet, plant tags or catalog descriptions, determine which zone is being referenced.

Is the information provided referring to the USDA zone or to the Sunset zone? When looking at plant tags at local Roseburg nurseries, I noticed that the USDA zone is referenced the majority of the time.

And when it's not, then the plant tag gives a "cold hardy" temperature range to guide you.

Do you have a gardening or insect question? Contact the Douglas County Master Gardeners at douglasmg@oregonstate.edu or 541-672-4461 or visit 1134 SE Douglas Ave., Roseburg. Douglas County Master Gardeners are trained volunteers who help the OSU Extension Service serve the people of Douglas County.