

TAM-AAMM

Texas A&M—AgriLife Agronomic Monday Memo (Sept. 16, 2024)

Dr. Calvin Trostle, Texas A&M AgriLife Extension Agronomist, Lubbock

(806) 777-0247 (M), ctrostle@aq.tamu.edu

The USDA Winter Plant Hardiness Zone Map

Site-specific guidance for cold tolerance suitability of perennial and winter annual plants.

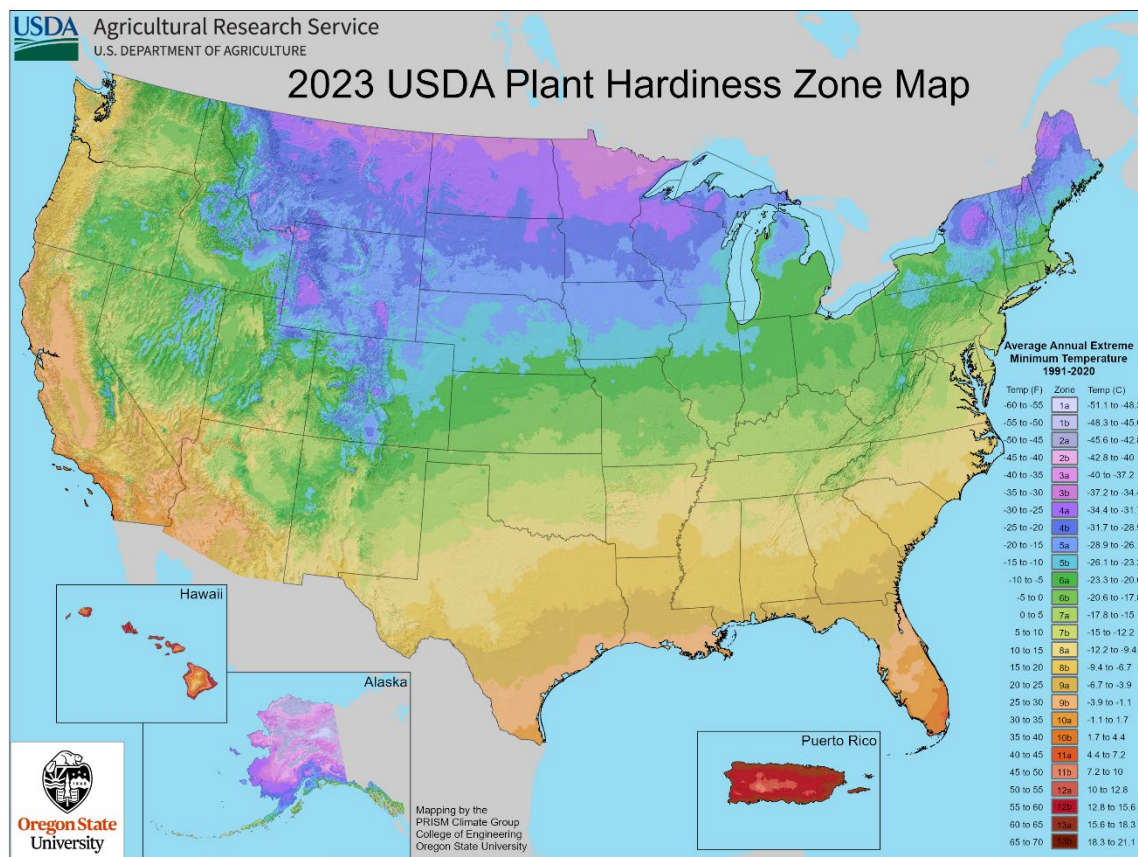


Fig. 1. USDA national map of annual coldest temperatures—Plant Hardiness Zones—which factor in perennial and winter annual plant survival. Texas-specific maps are below.

For decades USDA has updated a national color-coded map (Fig. 1, the most recent revision in 2023) of the typical lowest temperatures that occur over winter. These plant hardiness zones are divided by number into 10° F ranges (and subdivided by letters a & warmer b). **The purpose of the data** is to guide homeowners, gardeners, landscapers, farmers, and nursery growers to ensure their choice of perennial and winter annual plants are **likely to survive the coldest temperatures of the winter with minimal to no damage**.

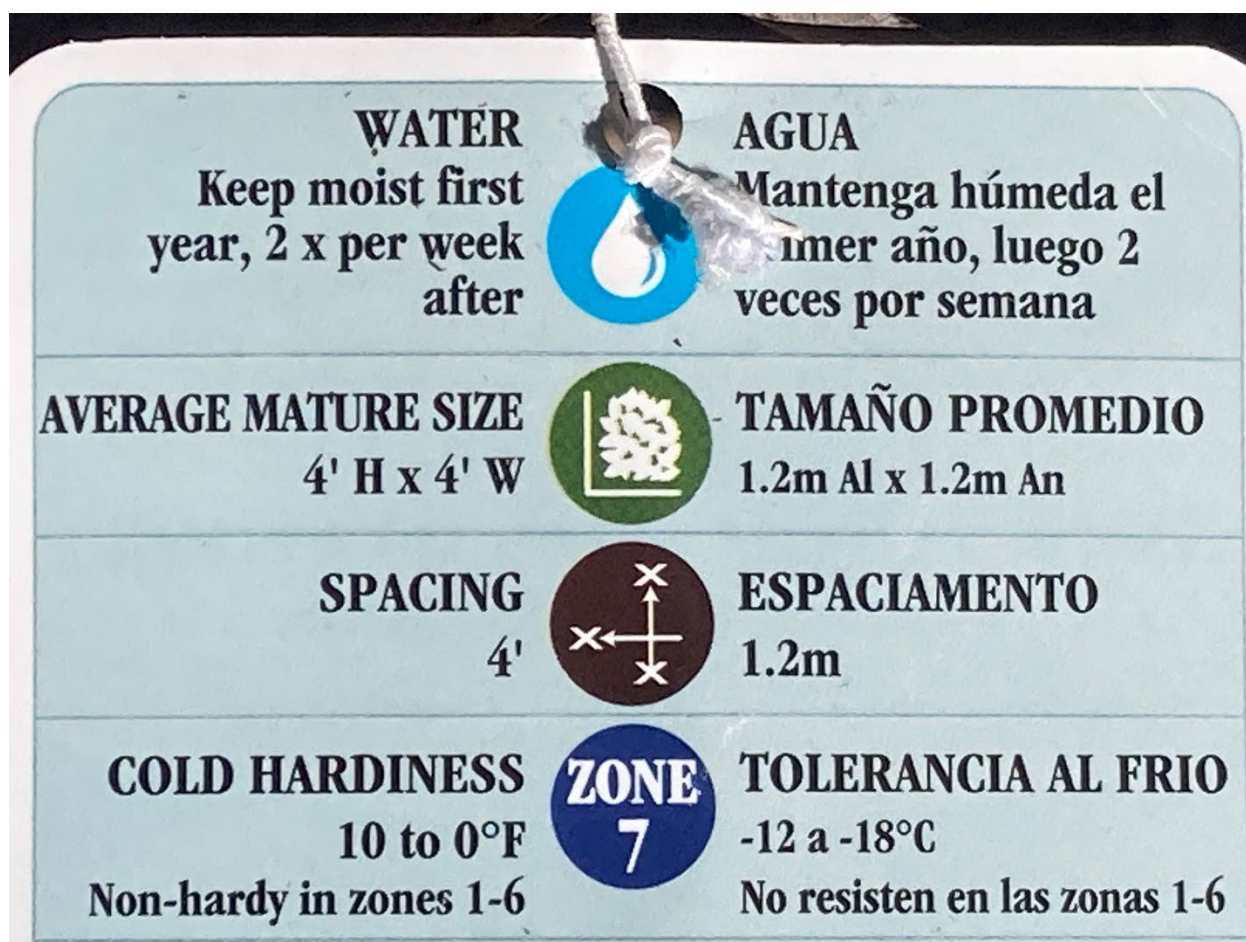


Fig. 2. Commercial plant tag for spring-to-fall flowering 'Snow White' Indian hawthorn (*Rhabdolepis indica* 'Snow White') noting the lowest appropriate cold hardiness tolerance, 0 - 10° F (Zone 7) for planting this perennial shrub. (Calvin Trostle, Sept. 14, 2024.)

Finding the USDA Plant Hardiness Zone for Your Location by Zip Code

If you are uncertain in looking at the above map (or the Texas maps below) enter your local zip code at <https://planthardiness.ars.usda.gov> (click "OK" to access the zip code entry box). This reports your current Zone rating. The lower the number the colder the temperatures (and 'a' is colder than 'b').

You will see for your location that the 2023 version USDA Plant Hardiness Zone has an increased winter low temperature since the previous (2012) map was released. Table 1 is a sample of Texas locations with current vs. earlier winter cold temperature zone ratings. Note in the last column all locations in Texas are now 2 to 4° F warmer for their winter low versus earlier data. This represents a gradual northward movement of hardiness zones indicating a warming trend in continental U.S. climate. (The same is also reflected in slightly increasing summer high temperatures as well).

Table 1. Texas locations and current USDA Plant Hardiness Zone ratings vs. earlier data. All locations statewide are experiencing slightly increased winter low temperatures (last column).

Texas Location	USDA Plant Hardiness Zone†		Updated Winter Warming Degree Change of Coldest Temperatures
	2023/"Current" 1991-2020‡	2005/"Previous" 1976-2005	
Dalhart	6b, -5-0° F	6b	+3° F
Dumas	7a, 0-5° F	6b	+3° F
Lubbock	7b, 5-10° F	7b	+3° F
San Angelo	8a, 10-15° F	8a	+2° F
Vernon	8a, 10-15° F	7b	+4° F
El Paso	8b, 15-20° F	8b	+2° F
Ft. Worth	8b, 15-20° F	8a	+3° F
Texarkana	8b, 15-20° F	8a	+3° F
Nagadoches	8b, 15-20° F	8b	+3° F
College Station	9a, 20-25° F	8b	+4° F
Uvalde	9a, 20-25° F	8b	+2° F
Beaumont	9a, 20-25° F	9a	+2° F
Corpus Christi	10a, 30-35° F	9b	+3° F
Harlingen	10a, 30-35° F	9b	+2° F

†There is 15 years of overlap in the Current vs. Previous USDA Plant Hardiness Zone ratings. Winter coldest temperatures across Texas are now higher in the Current data set.

‡Yellow notes increased Zone rating (winter lowest temperatures are now warmer) of USDA Plant Hardiness Zone previous rating.

What if I have plants with insufficient winter cold tolerance?

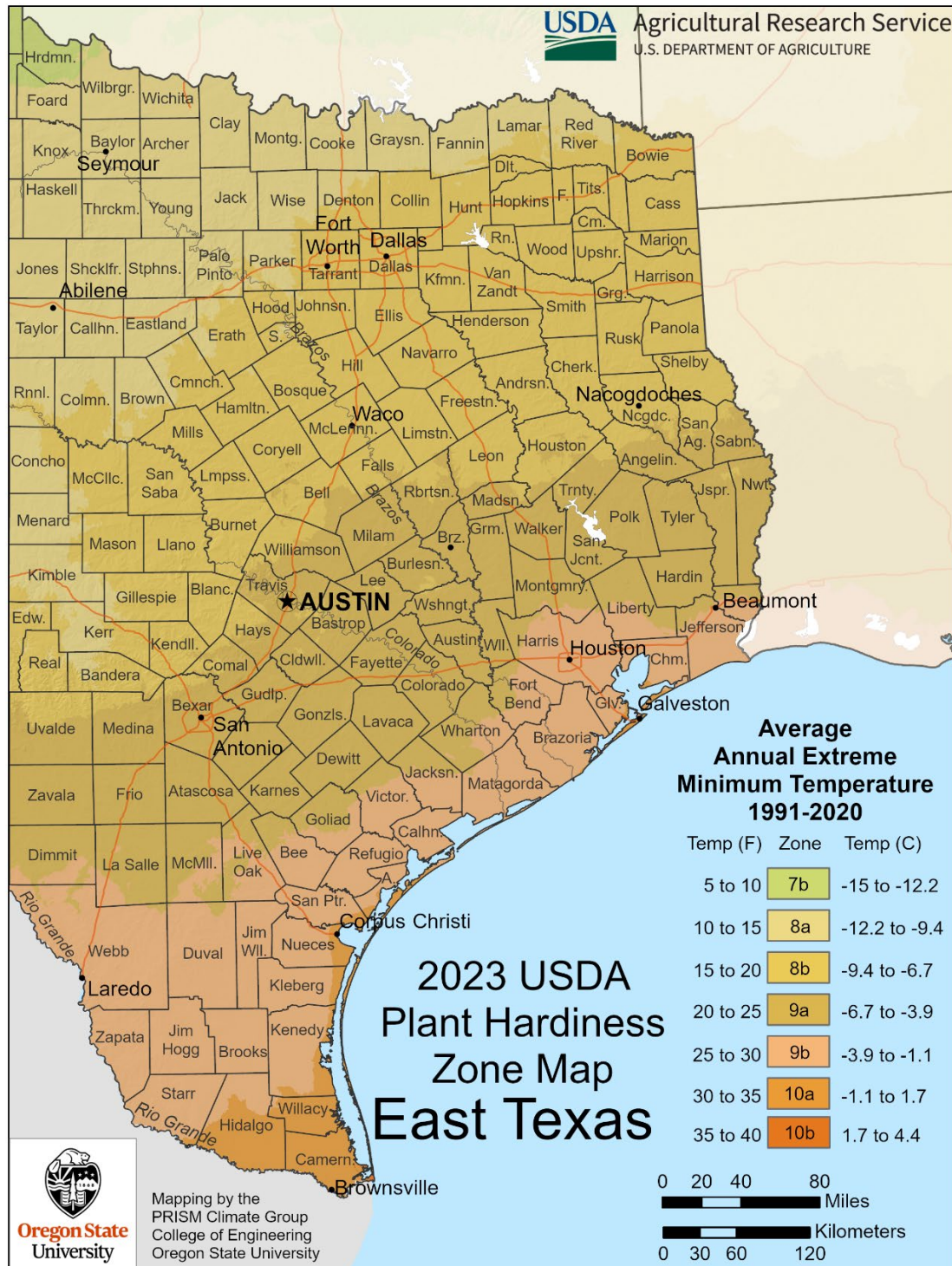
It is not uncommon that homeowners, landscapers, etc. may have planted perennials and winter annuals that do not have sufficient cold tolerance. We rely on nurseries, garden stores, and others to ensure that plants sold locally are sufficiently cold hardy. When purchasing plants that will overwinter, whether actively growing or dormant, you can check the tag (Fig. 2) or ask the seller. Also, a rare but possible harsh winter cold snap may lower temperatures 10 to 15° F below your local Zone rating. This is compounded if the cold snap last two days or more.

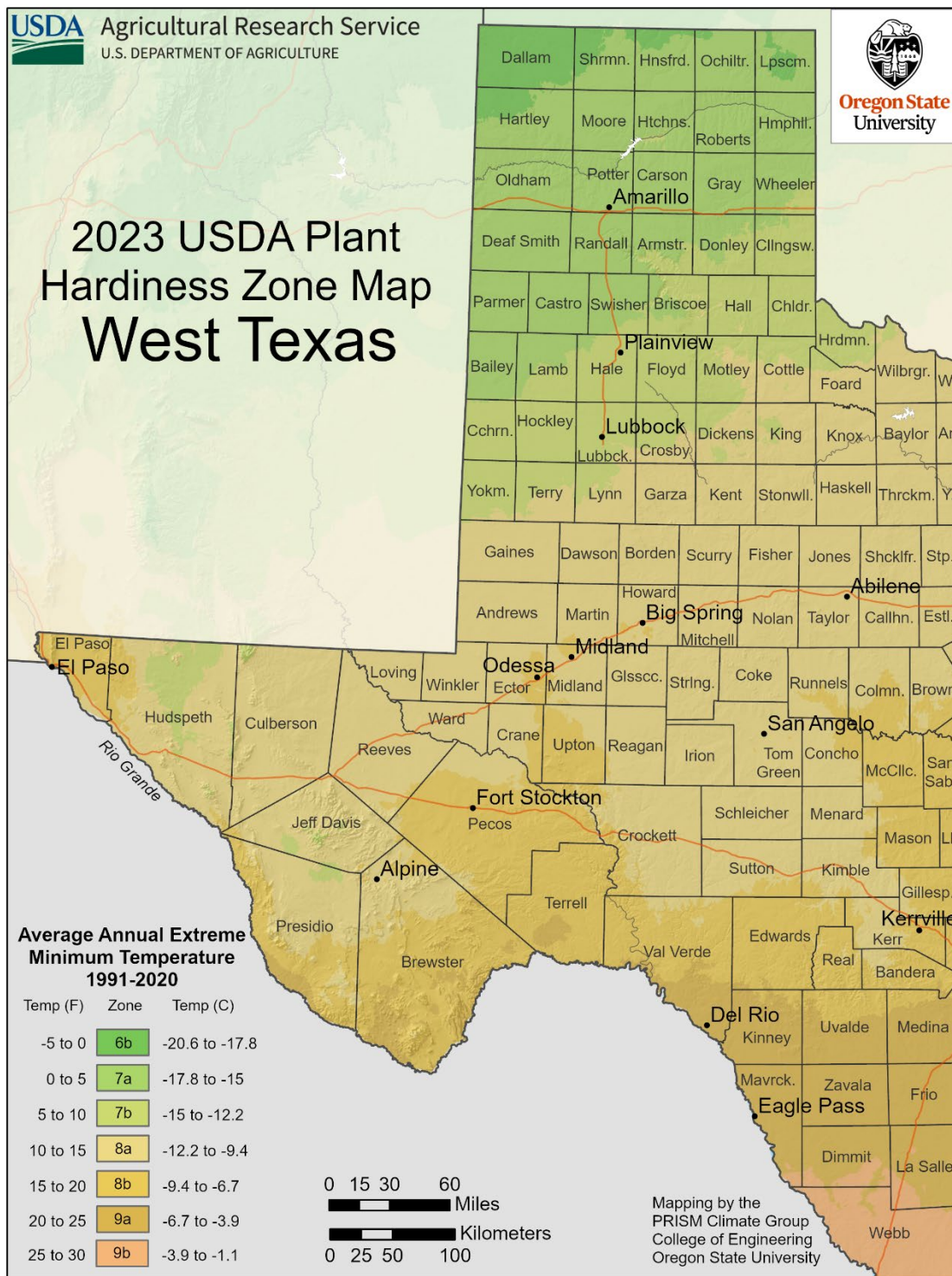
Plants in the ground tolerate cold better than plants in a pot. Cold temperature effects on roots and future growing points (crown, buds, etc.) are more severe in pots. Pot soil, roots, and growing points cool and freeze from the side of the pot in contrast to plants in the ground.

You can protect vulnerable plants from short-term cold by covering above plant parts and vegetation with old sheets or towels. Roots can be protected with a few inches of mulch or straw. Pots can be moved into a garage (even if unheated) for significant protection of 10 to 15 degrees above outdoor temperatures.

Texas USDA Plant Hardiness Zone Maps

<https://planthardiness.ars.usda.gov/pages/map-downloads>





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From TAM—AAMM one year ago: “The “Bamboo Forest” of Texas Forage Farming
This common summer annual forage mistake has forage quality implications. (Sept. 18, 2023)

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This weekly agronomic Memo for Texas A&M AgriLife Extension county agents is compiled by Dr. Calvin Trostle, Professor & Extension Agronomist, Lubbock, (806) 777-0247 (mobile), ctrostle@ag.tamu.edu TAM-AAMM tips will be collected at [\(to be determined\)](http://(to be determined)) Permission is granted to AgriLife Extension personnel to use this information as you see fit for Extension education purposes (newsletters, web posting, social media, etc.).

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