



## The Soils and Climate of Yavapai County

Yavapai County terrain varies in elevation of 1,900 feet to just under 8,000 on its mountain peaks. The county lies in the center of a 100-mile strip of Ponderosa pine forests which crosses the state from the northwest corner to the eastern border. Other vegetation types include: mixed conifer, pinyon-juniper, chaparral, desert grassland, and upper Sonoran desert. The Prescott National Forest, as well as portions of the Kaibab, Coconino, and Tonto National Forests, are in the county.

### Soils

**Big Chino Valley** (elevation 4,300 - 4,600 ft) consists of gently rolling to flat topography in the valley floor. The average soil depth is 4 - 6 ft. The soil is sandy loam to clay loam with a pH of 7.0 - 7.8.

**Chino Valley** (elevation 4,400 - 4,700 ft) has rolling land and steep runs in most areas. The average soil depth is 2 ft. The soil is underlain by gray-white, semi-impervious layer of caliche resulting in perched water table in portions of the valley when irrigated. The topsoil varies from sandy loam to clay loam with an average pH of 7.0 - 7.8.

**The Verde Valley** (Cottonwood-Camp Verde-Sedona area, elevation 3,000 - 3,300 ft) has fairly steep slopes in some areas. Soils in the upper and middle Verde and part of the lower Verde Valley are sandy to sandy loams; the lower Verde has some clay loams. Soils tend to be heavily leached. Soil depth is approximately 3 - 5 ft underlain by coarse gravels or bedrock.

**Skull Valley** (elevation 4,200 - 4,400 ft) has a fairly level valley floor. It is a narrow valley running north and south with slightly shorter daylight hours than at Chino Valley. Soils are valley fill soils, often rather sandy.

### Climate

The climate varies from Sonoran Desert at the lower elevations to mid-Canada at the higher elevations. The temperature variation from daytime high to night-time low throughout the year is about 35 degrees.

**Prescott** has a semi-arid climate with abundant precipitation only from early July through mid-September. During the rest of the year, rainfall is generally deficient. Temperatures from June through September average between 65 and 70 degrees F. Only in about two of every five summers are readings above 100 degrees recorded. Average winter temperatures at Prescott are above freezing in all months. Minima below zero degrees occur on the average on one or two mornings in every other winter. The average growing season is 153 days.

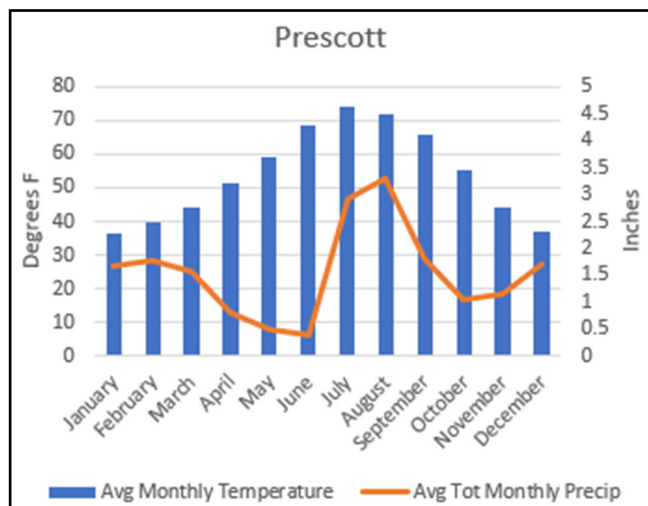
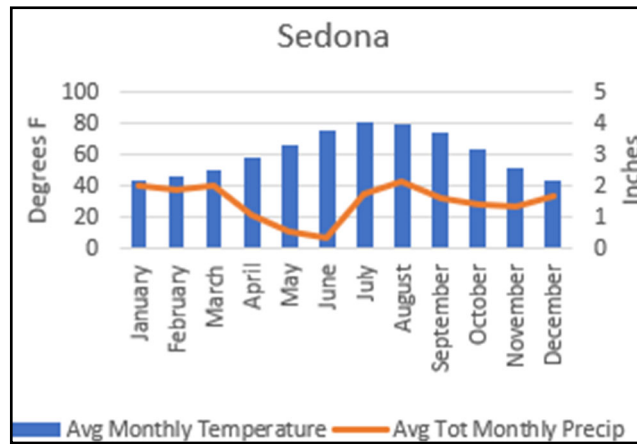
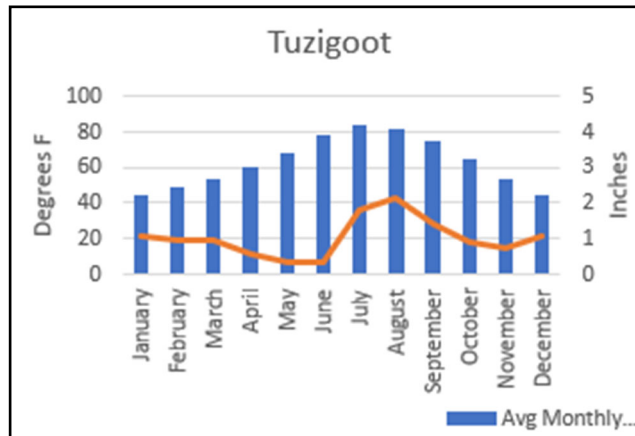
**Cottonwood** has a semi-desert climate, with an average annual rainfall of just over 12 inches. The most arid conditions occur in the spring, although completely dry months are uncommon. The summers at Cottonwood are warm, but comfortable, with temperatures frequently climbing above 100 degrees. The evenings are pleasantly cool, when readings in the upper fifties prevail. During the winter, early morning temperatures typically fall into the upper twenties in December and January. Daytime maxima normally hover around sixty degrees. The average number of growing days is 221.

Climate data for Prescott and Cottonwood is available on the next page. The source for that and several other Yavapai County locations is available at the Western Regional Climate Center web site: [www.wrcc.dri.edu](http://www.wrcc.dri.edu). Specific Arizona station data can be accessed at [www.wrcc.dri.edu/summary/climsnaz.html](http://www.wrcc.dri.edu/summary/climsnaz.html).

Reliable weather forecasts are available on-line from the National Weather Service at [www.wrh.noaa.gov/fqz/](http://www.wrh.noaa.gov/fqz/)

Daily precipitation data can be accessed on-line at [rainlog.org](http://rainlog.org). This data is gathered and reported by citizen-scientists throughout Arizona. It is being used by researchers to monitor the variability of precipitation across the southwest. You are encouraged to participate.

# Temperature and Precipitation (1922 to 2022)



# Spring and Fall Frost Probabilities - 1922 to 2022

Percent probability that a minimum temperature below the threshold will occur on or before the given date.

## Prescott

Prescott – <b>Spring</b> Freeze Probabilities (32°) – 1922 to 2022										
Earliest	90%	80%	70%	60%	50%	40%	30%	20%	10%	Latest
Apr 11	Apr 24	Apr 30	May 5	May 9	May 12	May 18	May 21	May 26	Jun 1	Jun 17

Prescott – <b>Fall</b> Freeze Probabilities (32°) – 1922 to 2022										
Earliest	10%	20%	30%	40%	50%	60%	70%	80%	90%	Latest
Aug 23	Sep 23	Oct 1	Oct 6	Oct 9	Oct 13	Oct 16	Oct 20	Oct 25	Nov 1	Nov 15

## Verde Valley

Verde Valley (Tuzigoot) – <b>Spring</b> Freeze Probabilities (32°) – 1922 to 2022										
Earliest	90%	80%	70%	60%	50%	40%	30%	20%	10%	Latest
Feb 10	Mar 11	Mar 16	Mar 22	Mar 27	Apr 1	Apr 7	Apr 13	Apr 21	Apr 27	May 14

Verde Valley (Tuzigoot) – <b>Fall</b> Freeze Probabilities (32°) – 1922 to 2022										
Earliest	10%	20%	30%	40%	50%	60%	70%	80%	90%	Latest
	Oct 26	Oct 18	Nov 4	Nov 6	Nov 9	Nov 13	Nov 15	Nov 18	Nov 23	Dec 7

Western Regional Climate Center: <http://www.wrcc.dri.edu> contains historical data, including freeze date probabilities.

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<https://extension.arizona.edu/yavapai-gardening>

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