

Oregon's Climate

THE COCORAHS 'STATE CLIMATES' SERIES

The Two Faces of Oregon

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Oregon's climate can mostly be classified as mild, with few instances of severe or extreme weather. Two prominent geographic features are largely responsible for the state's temperate climate. Proximity to the Pacific Ocean keeps temperatures moderate year-round. The Cascade Range acts as a divide between the wetter western side and more arid eastern side of the state. To a lesser extent, the paralleling Coast Range acts as a slight buffer from the moist air masses traveling over the Pacific. Areas along the Coast Range can receive upwards of 200" of precipitation annually, while the southeastern plateau sees less than 10" per year. Statewide, average precipitation is 27.38". The coldest day of year statewide is typically January 1. It takes about seven months to reach the warmest day of the year on July 1.

On the Western side, the Willamette Valley is home to 70% of the state's population and the largest city of Portland. This region receives an average of 40-50" of precipitation annually. Most of the precipitation falls between October and March as rain. The rain tapers off through the spring, though summer showers are not unusual. The seasonal pattern is fairly similar on the Eastern side, but amounts are typically smaller and snow is a bit more common. Summer in Oregon is a reward for tolerating the rainy, gray winters. Sunny blue skies, warm temperatures and low humidity make the state one of the most pleasant places to be in the country in the summer months.

Despite the mostly temperate climate, Oregon is sometimes prone to large extremes in temperature and precipitation. Eastern Oregon experiences higher maximum temperatures and lower minimum temperatures, largely due to the lack of cloud cover. Clear and calm nights can bring the minimum temperature well below zero. Unsurprisingly, the record minimum and maximum temperatures are from east of the Cascades. The highest daily maximum temperature, set in both Pendleton and Prineville in 1898, is 119 °F. Ukiah and Seneca both hold the record daily minimum temperature of -54 °F, set in 1933. This range is among the largest in the United States, but few daily temperatures ever come close to approaching these records.

The official state 24-hour precipitation record is from the Nehalem 9NE station, with 11.77". The largest amount ever recorded by a CoCoRaHS spotter in Oregon is 7.17" at Brookings 4.2 ENE on December 29, 2008. Snow is mostly confined to higher elevations (typically 4500 ft and higher) in Oregon, and is crucial for summer water supply in the state. Snow showers do occur at lower elevations, but are few in number and the snow rarely lasts more than a couple days. The highest one-day snow fall total is 47.0" at Hood River ES in January of 1980 and the largest recorded snow depth is 252" at Crater Lake National Park in April 1983.

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