

What geologists call the Basin and Range Province in the United States roughly coincides in its northern portions with the geographic province known as the Great Basin.

The Great Basin is hemmed in on the west by the Sierra Nevada and on the east Line by the Rocky Mountains; it has no outlet to the sea.

The prevailing winds in the Great Basin are from the west.

Warm, moist air from the Pacific Ocean is forced upward as it crosses the Sierra Nevada.

At the higher altitudes it cools and the moisture it carries is precipitated as rain or snow on the western slopes of the mountains.

That which reaches the Basin is air wrung dry of moisture.

What little water falls there as rain or snow, mostly in the winter months, evaporates on the broad, flat desert floors.

It is, therefore, an environment in which organisms battle for survival.

Along the rare watercourses, cottonwoods and willows eke out a sparse existence.

In the upland ranges, pinon pines and junipers struggle to hold their own.

But the Great Basin has not always been so arid.

Many of its dry, closed depressions were once filled with water.

Owens Valley, Panamint Valley, and Death Valley were once a string of interconnected lakes.

The two largest of the ancient lakes of the Great Basin were Lake Lahontan and Lake Bonneville.

The Great Salt Lake is all that remains of the latter, and Pyramid Lake is one of the last briny remnants of the former.

There seem to have been several periods within the last tens of thousands of years when water accumulated in these basins.

The rise and fall of the lakes were undoubtedly linked to the advances and retreats of the great ice sheets that covered much of the northern part of the North American continent during those times.

Climatic changes during the Ice ages sometimes brought cooler, wetter weather to midlatitude deserts worldwide, including those of the Great Basin.

The broken valleys of the Great Basin provided ready receptacles for this moisture.