

NORTH AMERICA'S FOUR GREAT DESERTS

Desert	Vegetation affinity	Size	Precipitation pattern	Winter temperatures	Dominant/distinctive plants
Great Basin Desert	Cold temperate	158,000mi ²	Low rainfall, scattered throughout the year. But, more than half the annual precipitation comes in the form of winter snow from NW Pacific storms.	Very harsh, with hard winter freezes. Short growing season in summer only.	Vegetation dominated by few species of low shrubs: sagebrush (<i>Artemisia</i>), saltbush (<i>Atriplex</i>), winterfat (<i>Ceratoides</i>). Notable absences: large trees, cactus, agaves, yuccas. This high cold desert type is called "steppes" in the Old World.
Chihuahuan Desert	Warm temperate	175,000mi ² (36% of total N Amer desert area)	Summer monsoons only (too far east for Pacific winter storms); 8-12 inches/yr.	Cold winters with hard freezes. Nighttime temperatures drop below freezing at least 100 times/yr.	Creosote, tarbush.
Mojave Desert	Warm temperate	54,000mi ²	Mostly winter storms from NW Pacific. Rainfall very low, generally less than 6 inches/yr.	Cold winters; hard freezes common.	Creosote, saltbush, brittlebush, Joshua tree, low-growing cacti (especially beavertail). Only "tree" is Joshua tree (above 900m).
Sonoran Desert*	Subtropical	100,000mi ²	Summer monsoons AND Winter Pacific storms; Spring and Fall draughts.	Only a few nights of winter freezes; few or no hard freezes	Columnar cactus (e.g. saguaro, cardon, organ pipe, senita), legume trees (e.g. paloverde, mesquite, ironwood), elephant trees, ocotillo & boojum, creosote, brittlebush, bursage.

**The Sonoran Desert:*

- (1) Covers 100,000 mi² (320,000 km²), in 2 countries and 5 states. Spans 12 degrees latitude, from 23°N to 35°N.
- (2) Home to 130 species of mammals, 500+ birds, 20 amphibians, 100+ reptiles, and 30 native freshwater fishes.
- (3) An estimated 3500 native species of plants occur in the Sonoran Desert proper (5000+ species of plants occur in the states of Sonora, Arizona, Baja Norte and Baja Sur).
- (4) All the world's great biomes occur in the Sonoran Desert (Tundra, Coniferous Forest, Temperate Deciduous Forest, Grassland, Chaparral, Desert, Tropical Forest).

from R. Brusca, 7/00