

A low-angle photograph of several tall saguaro cacti reaching towards a bright blue sky with scattered white clouds. The cacti are green with visible spines and are the central focus of the image.

Baja California's Sonoran Desert

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Objectives



- Define “desert”
- Explore Baja’s desert
- Learn how plants and animals survive







Central Gulf Coast, BCS

Erg Awbari Oasis, Libya



<http://inlinethumb54.webshots.com/9141/2350366490102347975S600x600Q85.jpg>

What is a Desert?

- Dry
 - Low rainfall ($P < 10''$)
 - High evaporation ($E > P$)
 - Dessicating winds
 - Poor soils
- Hot or cold (below 0° to over 140°)
- Below sea level to more than 8,000 ft



What is a Desert?

A place where water is severely limiting to life most of the time, where the plants and animals are adapted to chronic aridity and the arid conditions are necessary to maintain the community's structure.



Deserts of the World



Source: http://encarta.msn.com/media_461530118/World_Desert_Regions.html

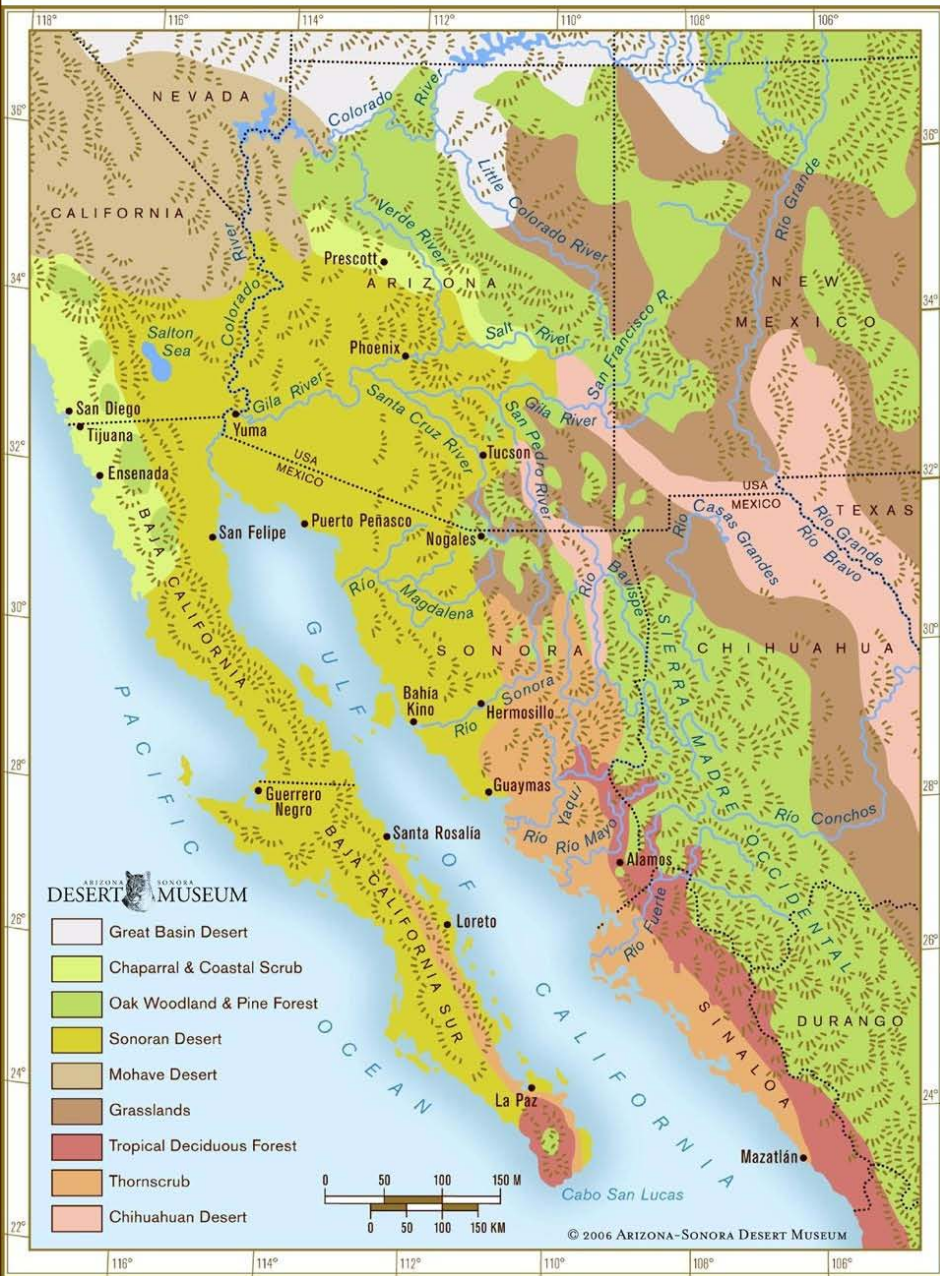
North American Deserts



Source: www.mbgnet.net/sets/desert/ofworld.htm

Sonoran Desert Region

The Sonoran Desert Region consists of the Sonoran Desert itself plus the surrounding biological communities, including the Sea of Cortez (Gulf of California) and its islands



The Sonoran Desert

- Binational (5 states)
- $\pm 120,000$ sq. mi.
- 0 to 4500 feet
- $<32^{\circ}$ to $>130^{\circ}$
- 3-15" avg. rainfall





Baja California Sur







Central Baja California







Central Gulf Coast Baja California Sur

"Air plants" (Bromeliads)



Pacific Coast Fog Zones



Lichens (fungi & algae symbiosis)



Central Vizcaino Desert, BCS



Vizcaino Desert – Pacific Coast, BCS



© Dennis Kamberg



© Don Getty



Meredith Tuttle/Bat Conservation International



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Mammals

- Bobcat and mountain lion
- Coyotes and foxes
- Bats and rodents
- Pronghorn antelope
- Bighorn sheep



Reptiles and Amphibians

- Horny toads & lizards
- Snakes
- Frogs & toads (15 spp.)
- Salamanders (3 spp.)



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Crawly Things

- Scorpions & spiders
- Beetles & bugs
- Ants, bees & wasps
- Caterpillars



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<http://bugguide.net/node/view/206296/bgimage>



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Birds

- Hummingbirds
- Raptors: hawks & owls
- Scavengers
- Perching birds







Trees



Annual and Shrubs
Perennial herbs







Ouchy Things

- Many endemics
- Long-lived
- Slow growing
- Succulent



Yikes! That Sun is **Hot!**



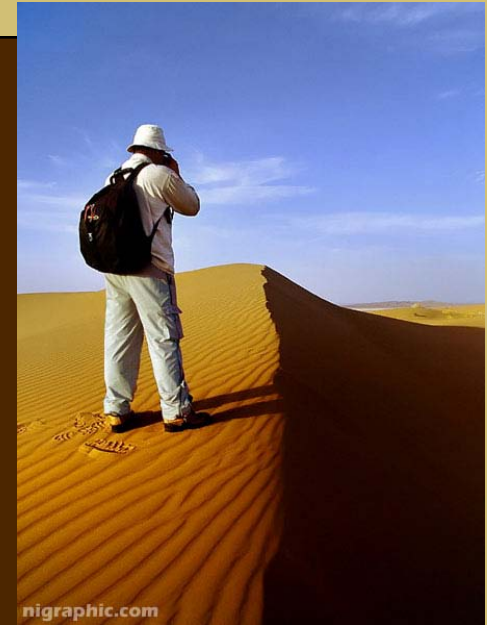
© Jason P Thompson

Avoid this



Do this instead...

...or better yet...





Adaptations

- Coloration
- Water retention
- Heat reduction
- Protective covering
- Hibernation



Adaptations

- Small and deciduous leaves
- Green stems
- Thick trunks
- Reflective hairs
- Sticky glands, wax and sap
- OUCH!! SPINES!





Interdependence

- Pollinator-plant
- Larval food source
- Recycling (knee deep in poop)





Ocean Oasis

- Pyramid of Life
- Desert Life



¡Gracias!
¡Los veo en Baja!

This presentation is available at:
www.lasecomujeres.org