



Wildlife Connectivity

Desert Botanical Garden
Connectivity Lab @ White Tank Mountains Conservancy • November 6, 2018

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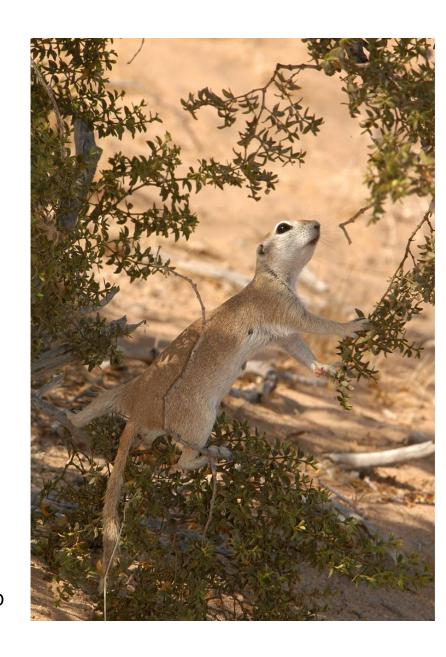
an initiative of the Desert Botanical Garden

CAZCA is a collaborative initiative to develop, and align regional efforts to conserve, restore, and promote natural areas in and surrounding Maricopa County.

What lives and travels through Central Arizona today?

- A unique mix of plant and animal species
- Specialized adaptations & endemic species
- Niche habitats
- Home to one of the world's highest pollinator populations
- Highest bird breeding densities anywhere in the world.

Round-tailed ground squirrel. Photo by Randall Babb, AZGFD



Animal Movement

- Searching for mates
- Foraging for food
- Shelter from the heat

Benefits

- Diversifies gene pool –
 strengthens biodiversity
- Ecological function –
 supports important ecoservices



Mule Deer in the White Tank Mountains. Photo by George Andrejko, AZGFD, 2017.

Biodiversity: What's in it for me?

The living elements of the planet are connected in complex webs of interdependent functions called ecosystems.

Healthy ecosystems provide many services

WHAT DO WE GET FROM ECOSYSTEMS? fibres medicines **PROVISIONING** SERVICES crop pollination climate regulation water filtration waste disease control descomposition REGULATING SERVICES personal growth leisure and fun aesthetic CULTURAL SERVICES

Threats to biodiversity

Some of the most dramatic ecosystem changes are human caused.

- Degradation, fragmentation and habitat loss
- Spreading of invasive species
- Unsustainable use of natural resources
- Inappropriate fire regimes
- Changes of climate
- Changes within aquatic environments and water flows







Changes in Aquatic Environments & Water Flows



Habitat Loss Degradation Fragmentation



Lookout Mountain, Phoenix, AZ Photo:Bill Yates

