National Park Service
Organic Act (1916)

“The fundamental purpose…is to conserve the scenery and natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations”
Conservation Biology at Saguaro National Park

- Saguaro
- Charismatic megafauna
- Endangered species
- Biodiversity
### How Many Saguaro in Saguaro National Park?

<table>
<thead>
<tr>
<th></th>
<th>Tucsons</th>
<th>Rincons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990:</td>
<td>798,245</td>
<td>190,000</td>
</tr>
<tr>
<td>2000:</td>
<td>1,091,181</td>
<td>243,375</td>
</tr>
</tbody>
</table>
Wildlife Research at Saguaro

Species of concern – leopard frogs, lions, tortoises, owls and others

Boundary studies

Road effects

Species inventories
Arizona’s Native Ranid Frogs

**Extirpated**
- Tarahumara frog

**Federally listed**
- Ramsey Canyon leopard frog
- Chiricahua leopard frog

**Declining**
- Plains leopard frog
- Northern leopard frog
- Lowland leopard frog

Why are the Frogs Croaking?

*Habitat Loss*

*Disease*

*Exotic Species*

*Pollution*

*Global Climate Change*
Metapopulation Dynamics
Distribution of Lowland Leopard Frogs in Rincon Mountains, 1996-2001
Adults and Juvenile Frogs Observed on Surveys in Two Canyon, Saguaro National Park, 1996-2003
(No surveys in yellow canyon, 1997-1998)
Fig. 3. No. Pools with Water, Pre-Monsoon Surveys in Burned vs. Unburned Canyons, 1996-2003
(No surveys where bars missing)
Species Inventories
<table>
<thead>
<tr>
<th>Location</th>
<th>End of Carrizo Long Alte in Park</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date/Time/Year</td>
<td>1/19-02 5:20 pm</td>
</tr>
<tr>
<td>Weather</td>
<td>Cool &amp; Clear</td>
</tr>
</tbody>
</table>

Description: Behvior, Hunter, Mammal, Etc. (see revew if necessary)

Called Back Sunday, 1-19-02, Mr. Hurley said the animal was seen at dusk. It was about 4 ft. at the shoulder, was about 25" long (he never saw a long tail) and weighted.
Gray Fox Locations
<1600 m

Coyote Locations
DNA Analysis
Collaborators

University of Arizona
Arizona Game and Fish Department
Rincon and Sonoran Institutes
U.S. Geological Survey
Western National Parks Association
Notch Neighborhood Group
Earth Friends
Tucson Herpetological Society
T&E, Inc.

…and many volunteers