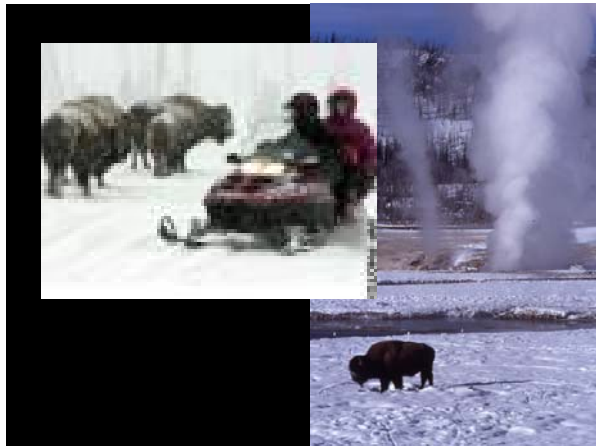
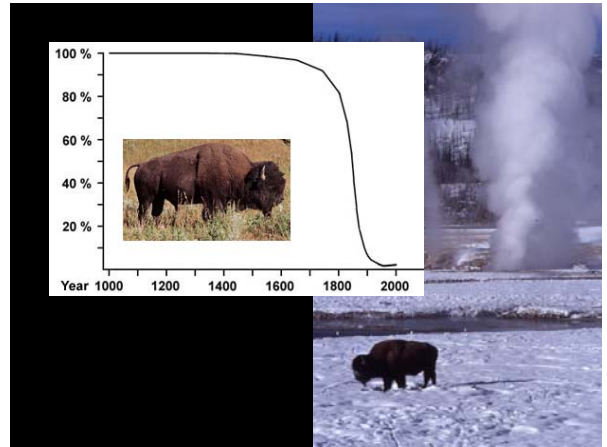
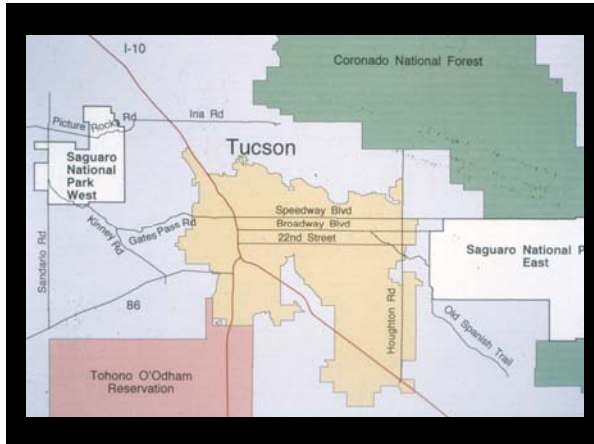




**National Park Service  
Organic Act (1916)**

“The fundamental purpose...is to conserve the scenery and natural and historic objects and the wild life 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

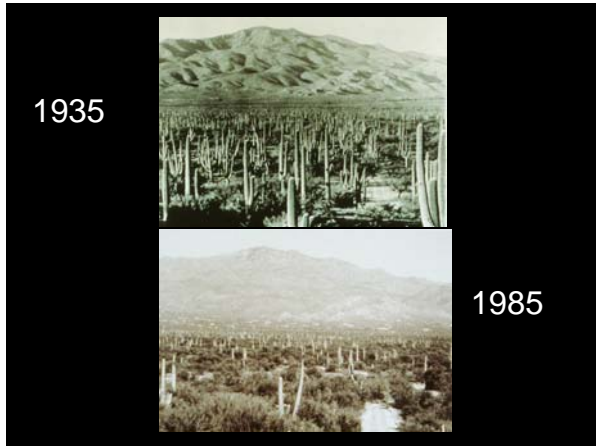
- Saguaros
- Charismatic megafauna
- Endangered species
- Biodiversity











How Many Saguaros in Saguaro National Park?

Tucson	Rincon
1990: 798,245	1990: 190,000
2000: 1,091,181	2000: 243,375



**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

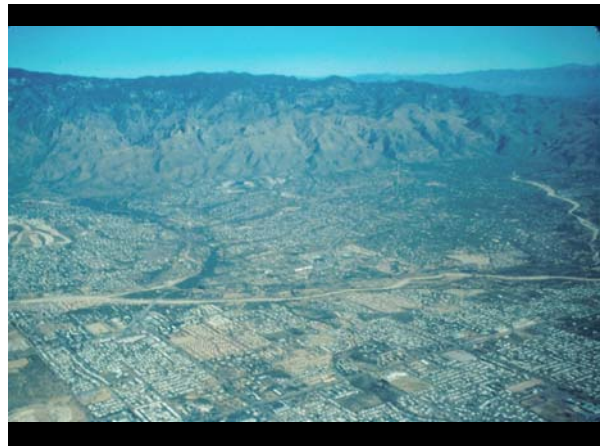
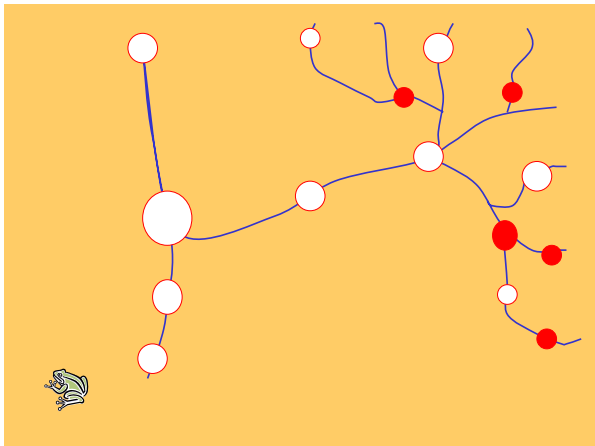
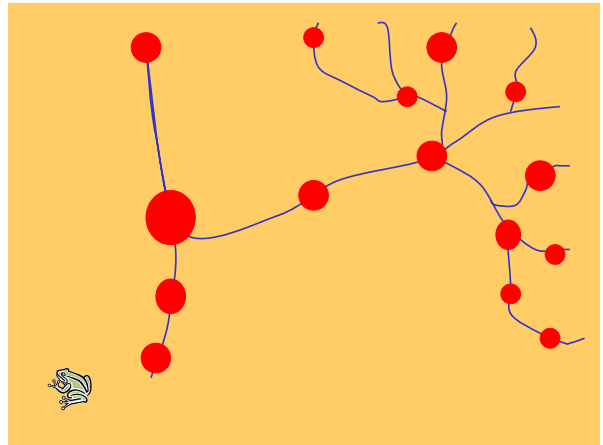
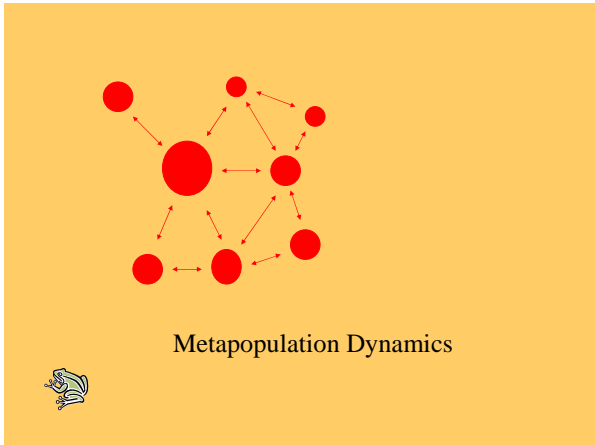
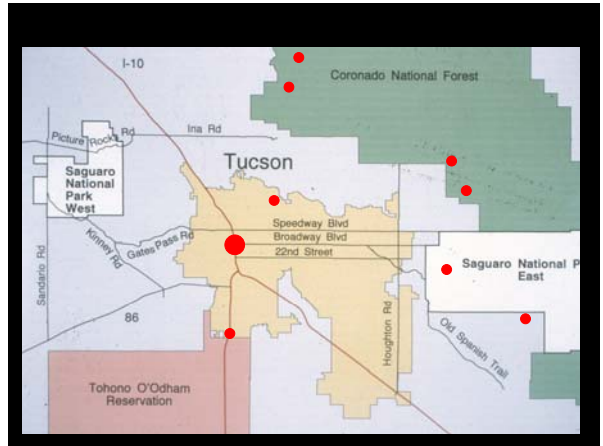
**Declining**  
Plains leopard frog  
Northern leopard frog  
Lowland leopard frog

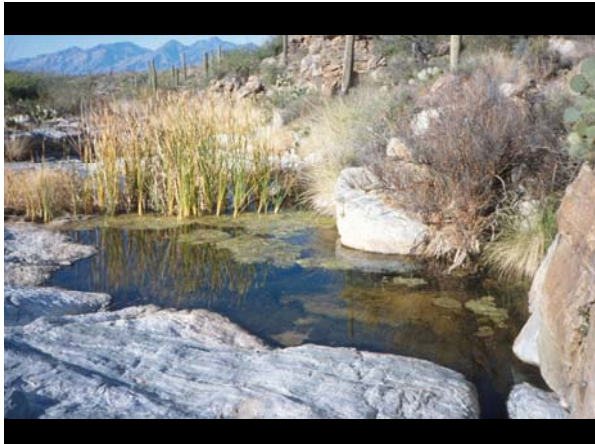
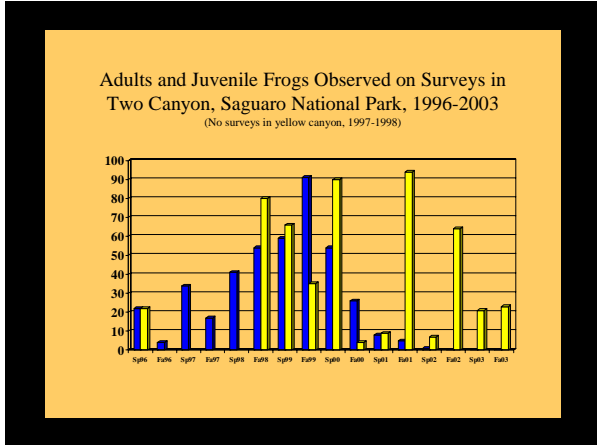
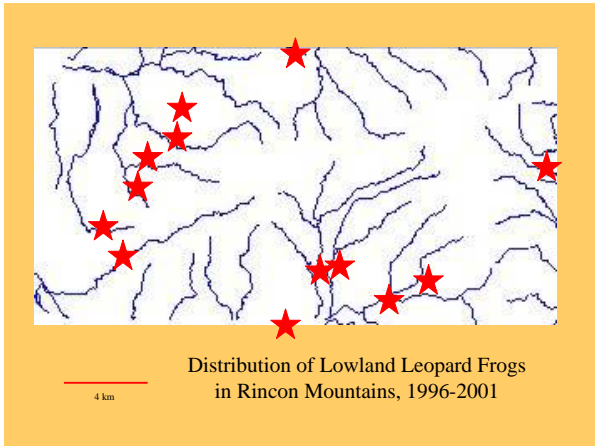


## Why are the Frogs Croaking?

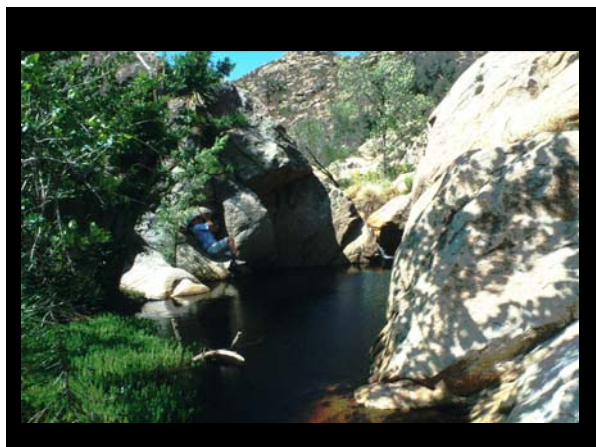
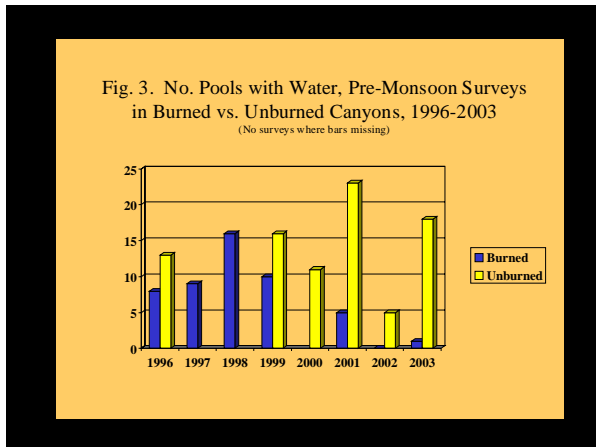
*Habitat Loss*  
*Disease*  
*Exotic Species*  
*Pollution*  
*Global Climate Change*



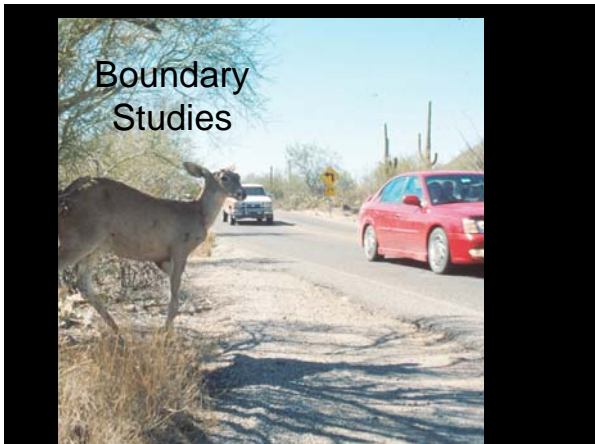



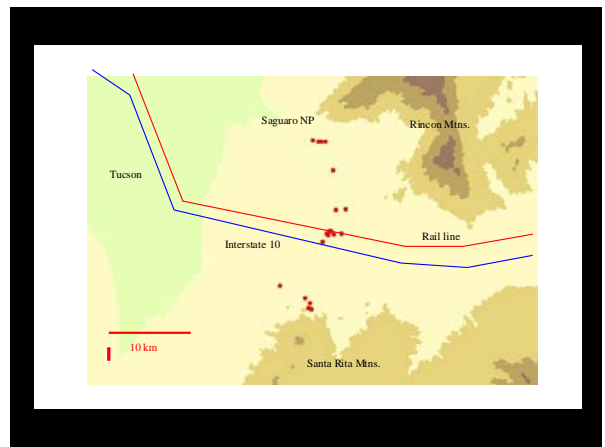
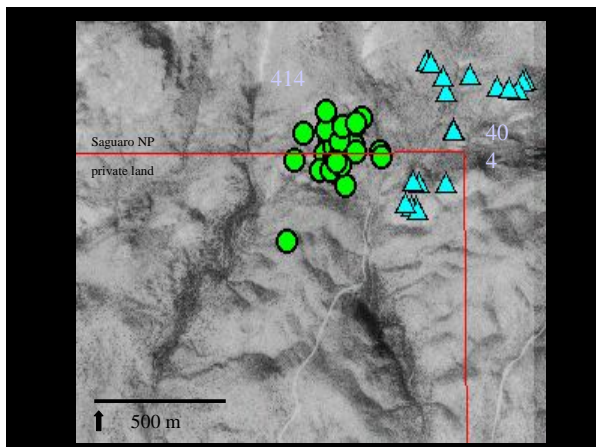
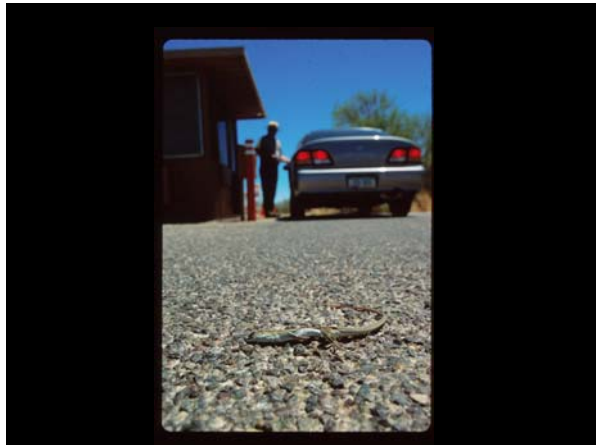




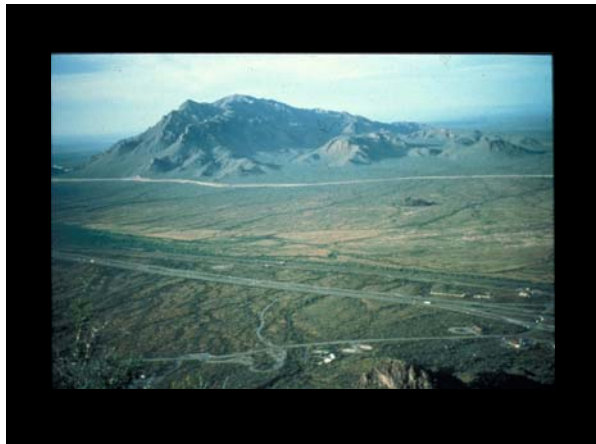


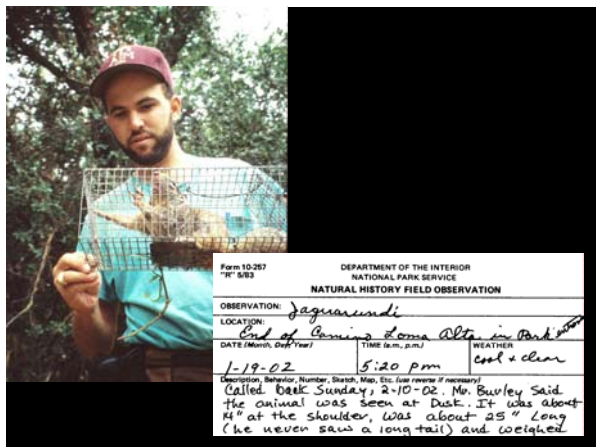




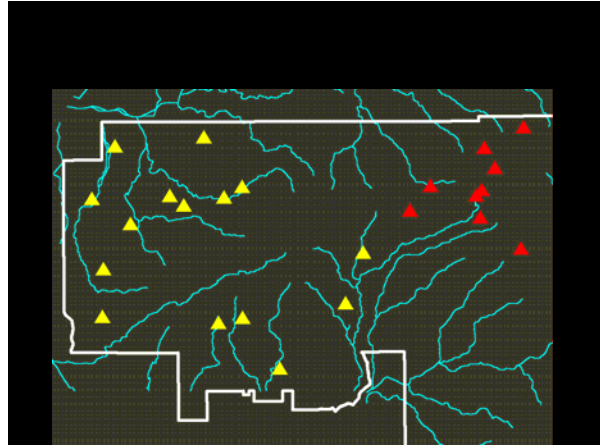






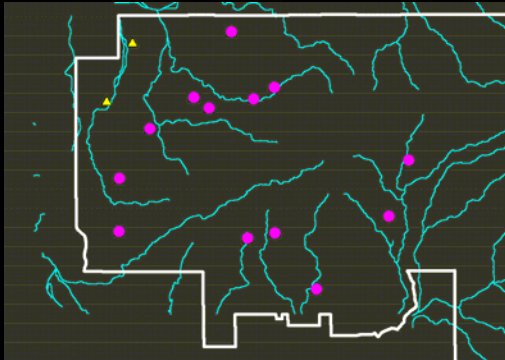




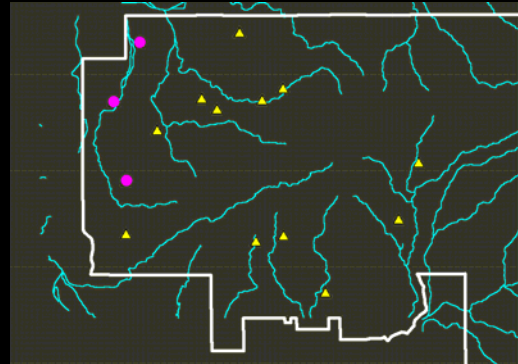


### Gray Fox Locations

<1600 m



### Coyote Locations

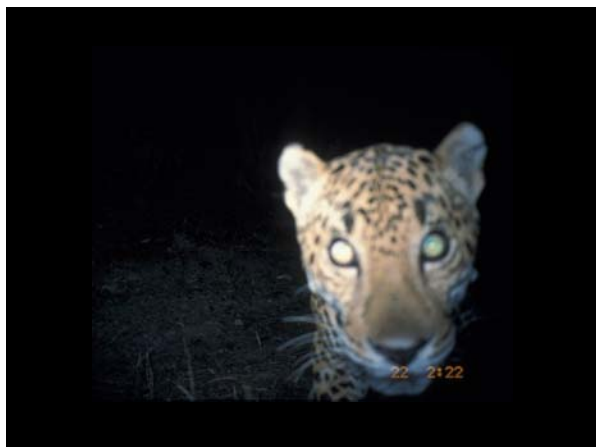












# DNA Analysis



## 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

