# Special Status Species

Of the Red Rock Ranger District

## Rare Species Include:

- Threatened, Endangered, Proposed, and
   Candidate Species (Endangered Species Act)
- Bald and Golden Eagles (Eagle Act)
- Forest Service Sensitive species (FS policy)
- Neotropical Migratory Birds (NTMB Treaty Act)
- State Species of Greatest Conservation Need (State policy)
- Locally Important Species

# Mexican Spotted Owl



Photo credit Rob Gibbs

•Nests in steep-sloped forests and canyons in old growth mixed conifer, but also in ponderosa pine/Gambel oak Forests

#### •Main concerns:

- Modification to habitat
- Visual and aural disturbance during the breeding season (March 1 through August 31)

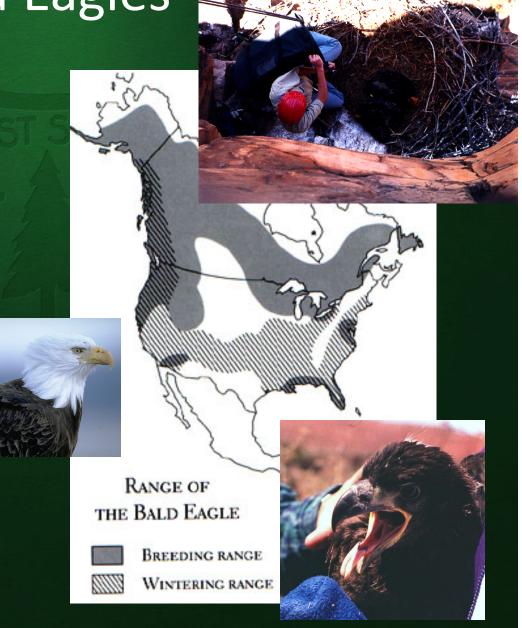
**Bald Eagles** 

#### Resident (Nesting) Eagles:

- Stay year-round
- Stay close to nesting areas on Verde and major tributaries
- Any eagles observed last of April through September are nesting eagles!
- In accessible areas, 6
  month closures protect
  eagles from disturbance.

#### **Wintering Eagles:**

 Here mid-Oct thru mid-April



# Golden Eagles

#### Resident Golden Eagles:

- Stay year-round
- Nest in dry canyons, high up on cliff ledges
- Few nest locations known
- Capable of killing large prey but mainly take jackrabbits.





# Peregrine Falcon





- Nests on cliffs 300' or taller
- •We have 2<sup>nd</sup> highest density (to Grand Canyon)
- Main concerns:
  - trails close by and within line of sight
  - aircraft and drones
  - rock climbing

#### Yellow-billed Cuckoo

- •Nests in riparian areas where mesquite woodlands are adjacent
- •Forage in Mesquite woodlands
- Very secretive
- •Concerns with habitat loss and disturbance from activities in riparian and mesquite woodlands



# Southwestern Willow Flycatcher

- •Nests in dense riparian areas with multiple layers of vegetation, wetted soil, and abundance insects
- Very rare in the Verde Valley
- •Concerns with habitat loss and disturbance from activities in riparian



#### Common Black-hawk

- Migratory (here Mar Oct)
- Nests along perennial streams
- Have higher nest success with native fish, frogs, and low levels of recreation.
- Abandon nest sites if recreation levels are too high.



#### Arizona Toad





- Historic: AZ, CA, NM, NV, UT, and Mexico
- Current: AZ, NM, NV, and UT
- In the Verde Valley before 1960 occurred:
  - Verde River from Clarkdale to Camp Verde
  - Oak Creek (near Sedona),
  - mouth of Wet Beaver Creek



Map. Solid circles mark type-localities, open circles other records.
The type-locality for B. m. mexicanus is too imprecise to plot.

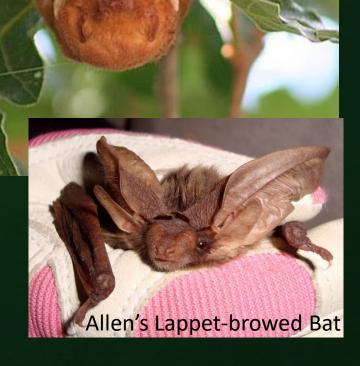


# Rare Mammal Species

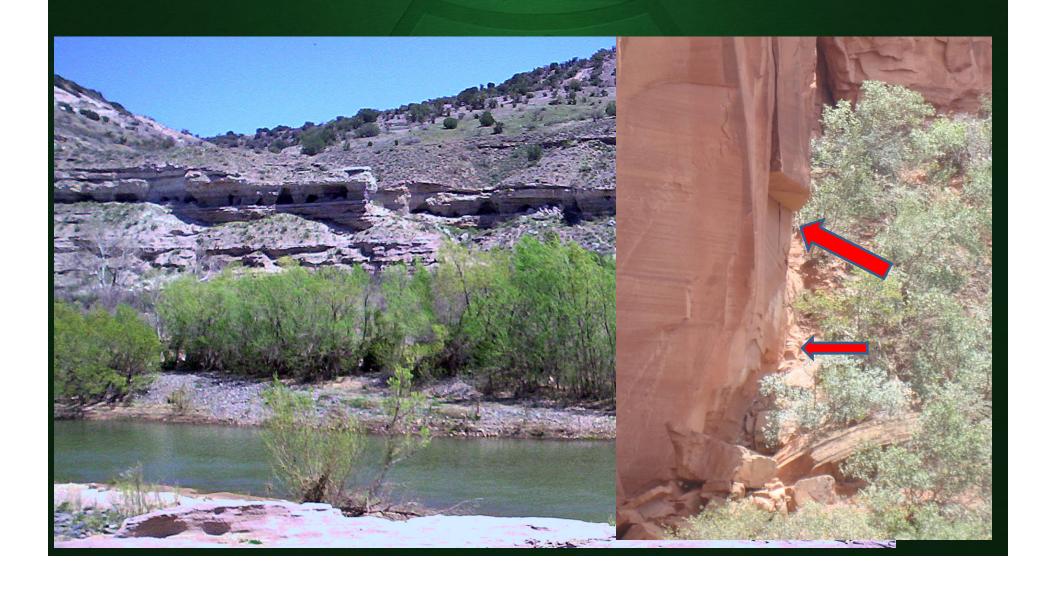








# Roost Abandonment Due to Social Trails and Recreation



### Narrow-headed Gartersnake

- Once present throughout canyon and into middle Oak Creek, now only in canyon and in low numbers.
- Sedimentation/embeddedness issues affect prey species
- Mistaken as venomous and too often killed.
- Overheat and die when handled out of water too long.
- Forages only on soft-rayed fish (not nonnative fish).





## Mexican Garter Snake



## **Leopard Frogs**

Northern Leopard Frog

Lowland Leopard Frog

Chiricahua Leopard Frog





# Efforts to Save Leopard Frogs

- Monitoring
- Crayfish Control
- Drought Emergency Response
  - Hauling water to drying tanks
  - Collecting frogs to avoid dessication
  - Deepening Tanks
- Nonnative Fish Control
- Phased Decommissioning of Fossil Creek
- Temporary Livestock Removal
- Filter Sock Installation
- Predator Control
- Watershed Erosion Control
- Habitat Protection Fencing
- Captive Breeding
- Re-introduction of New Progeny





# Snails & Clams

- Fossil Springsnail
- Page Springsnail

California Floater





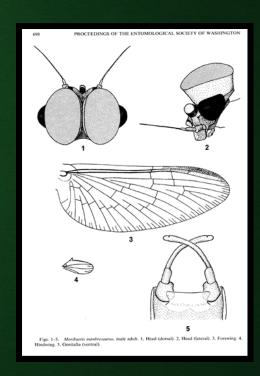


# Invertebrates

- > A Mayfly, Moribaetis mimbresaurus
- > A Caddisfly, Lepidostoma knulli

Balmorhea Saddle-case Caddisfly, Protoptila balmorhea

> A Caddisfly, Wormaldia planae



Extirpated Wildlife
Thick-billed Parrot











# Native Fish are in Peril

- 21 percent U.S. fish species on the Endangered Species List are endemic to the Southwest.
- Arizona ranked 1st in the U.S. for the highest percentage (85.7) of fish species at risk.
- 11 of 13 (85%) native fish species on the Coconino are considered special status species.
- Main causes for decline include introduction of nonnative aquatic organisms (fish, bullfrogs, and crayfish) and alteration of habitat.

#### Introduced fishes harm native fishes by:

- Competing for food or space
- Interbreed (especially trout species)
- Predation (natives as a food source)



## **Small Minnows and Daces**



Gila Topminnow



# The Chubs







# Suckers







# Our Two Big, Big-River Fish



#### Gila Trout

Oak Creek Brook Front. This description was Taken from a freh about a foot long ( See outline and fin formula Nate), taken at Indian Harden, Cak Cur, Yavapai County, Carizona, June 12, 4886. This specimen was com = pared, on the opot, with several others the same size and smaller, which were practically lette it. Fleat portion of the under surface which is judided between the lives of the pretoral and ventral frue is June white; sides to or above the lateral line greenish yellow. Obove He lateral line the ground color is divaccous green, with black spots arranged in longitudial series, their becoming larger and closer together from below whoward until the dossal aspect becomes almost black. In irides are yellow, mottled with black.

Oak Breek B Upon the upp the color is back; but I larger and yellow The spots upon the sides of the body are X-shaped or X-shaped. The pettoral, ventral, and anal fine are unspotted and orange yellow in color. The caudal and dorsal fine are finely and thickly shotted with black whom a greenest yellow ground. The adipose fine is spotted with large, round, black shots. There are four rows of "gills" Or number of individuals, and continued by Mind. Lucy and Mason in Oak Creek were examined as to the contents of their stomastic. In some a quantity of sand and small fiebbles were fround; one quarty pebble from a stomaly was 10 min in diameter and

