

Mexican Spotted Owl Biology



Taxonomy

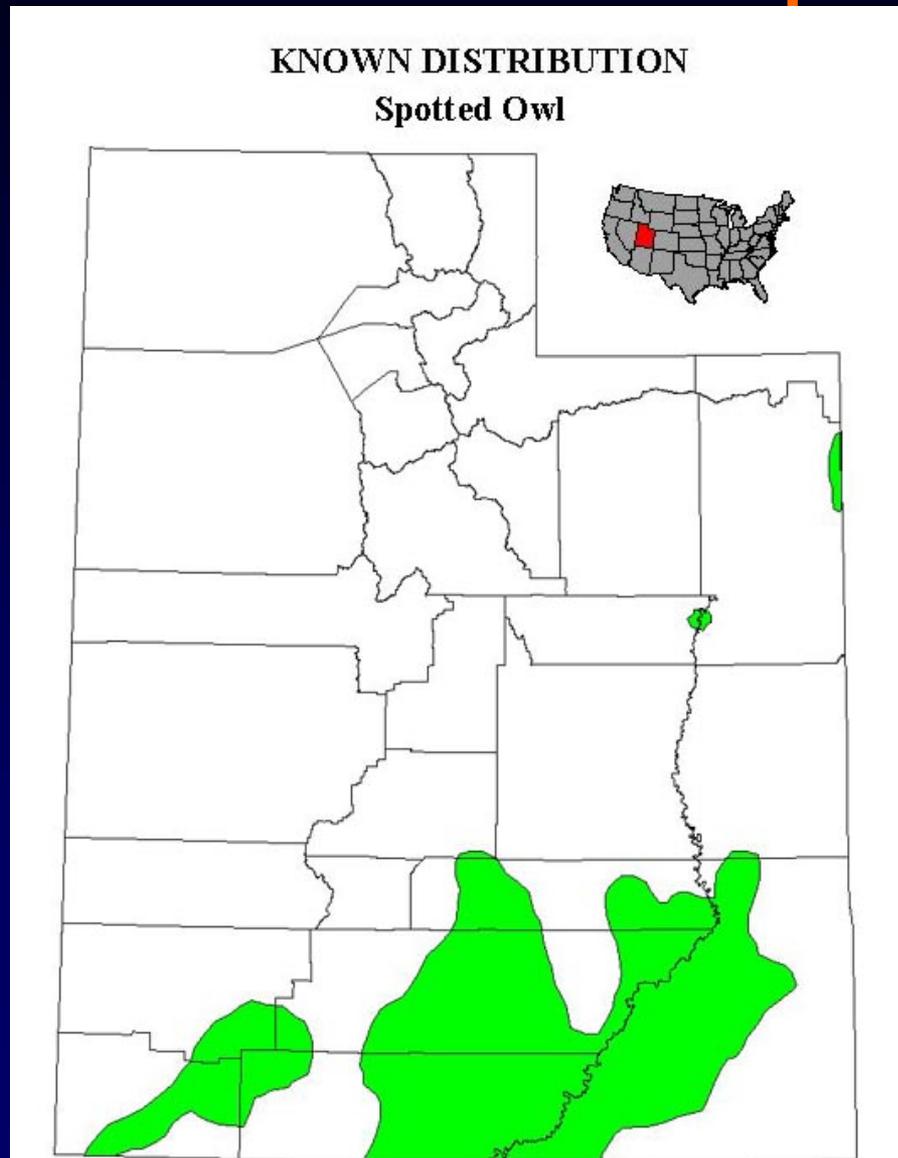
- Three subspecies
 - Northern
 - California
 - Mexican
 - Prob. Separate spp.



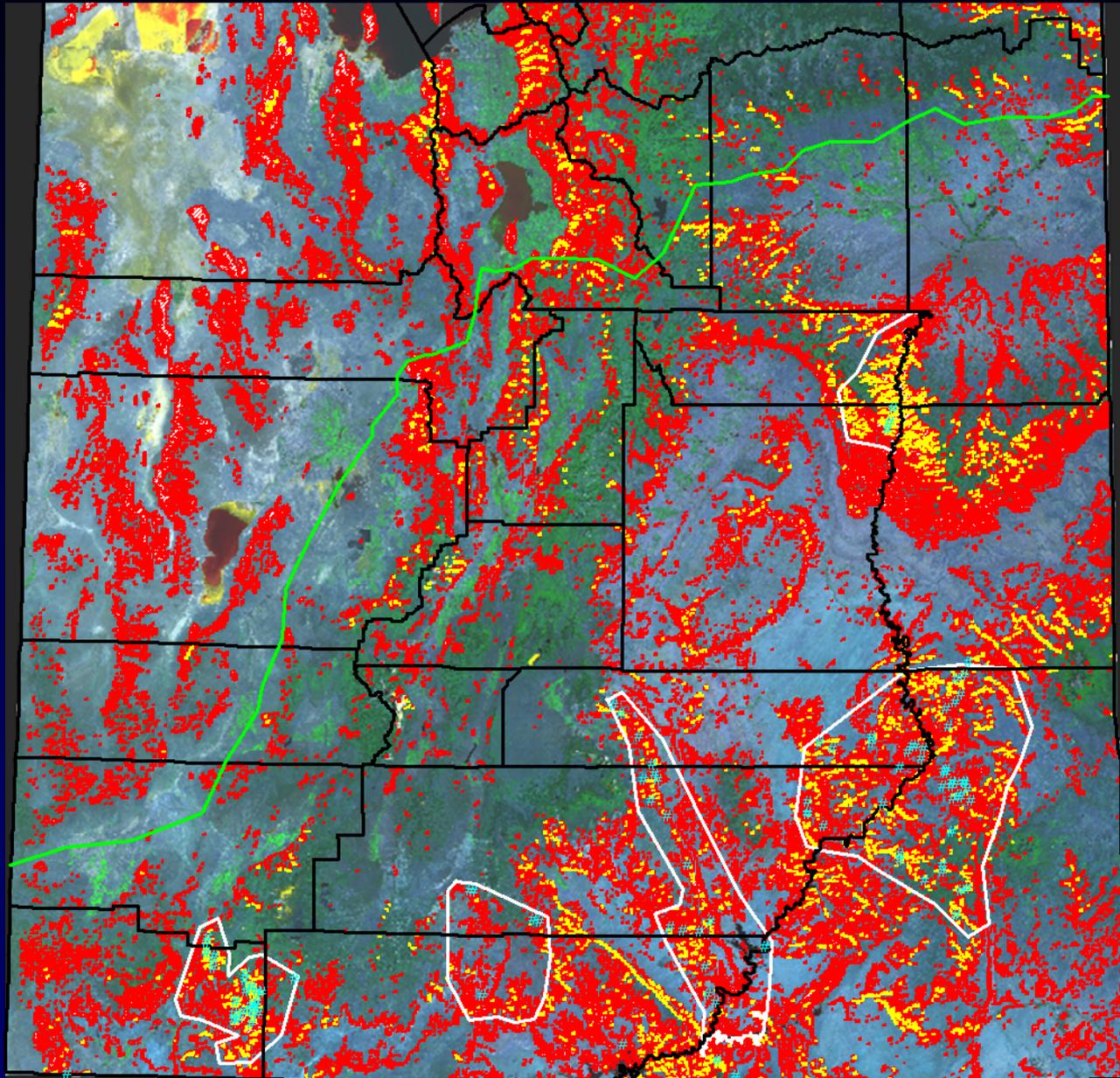
Range of SPOW



MSO Distribution Map for Utah



Utah MSO Range



Description

- Large owl with
- dark eyes and
- no ear tufts
- Sexes alike
 - Female larger
- Subadults have pointed retrices and white terminal band
- juveniles are downy



- Varies with distribution
- Utah - canyons
- AZ/NM - M-C mature forest
- Mexico - Pine - Oak



Habitat



Nest/Roost

Habitat

- Closed canopy forest (AZ and NM)
- Rocky canyons
 - In Utah
 - Nest in caves or ledges
 - Roost on ledges or in trees in canyons
 - Tend toward mesic (moister cooler) canyons
 - Canyons with M-C or riparian component
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Foraging Habitat

- Mostly canyon bottoms and benches
- Also on mesa top in variable habitat
- Prey: woodrats, mice, voles, bats, birds, beetles
- Perch and pounce hunters



Dispersal & Wintering Habitat

- Dispersal
 - Canyons and pretty much anything that occurs between canyons
- Winter
 - usually warmer, more open canyons
 - up to 40 miles from nest canyon (100+)
 - occasionally in forest or foothill habitats

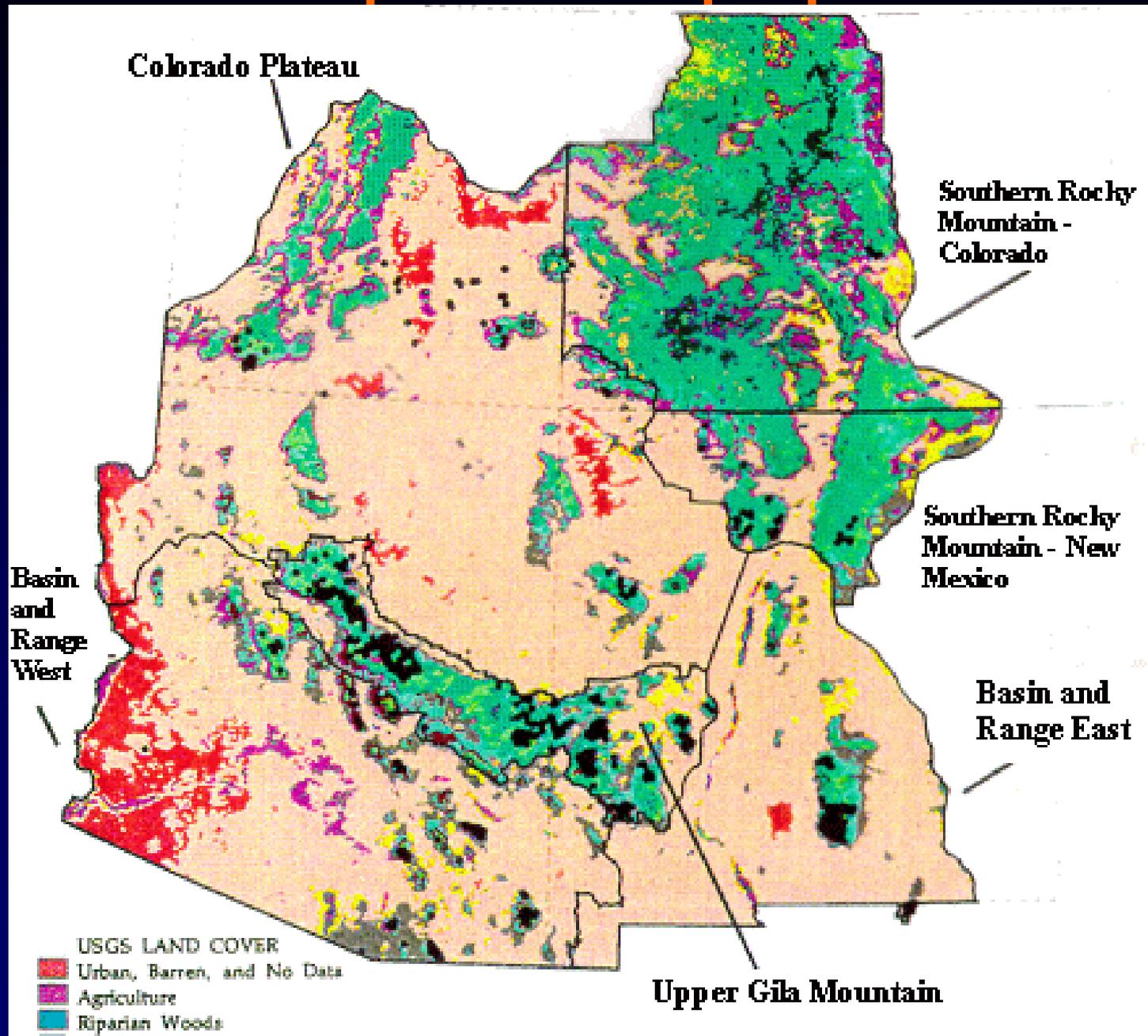


Territory & Home Range

- Upper Gila
 - 261-1053 ha (645-2601 ac)
- BRE
 - 452-937 ha (1116-2314 ac)
- Utah
 - 924-1487 (228-3672 ac)
 - slightly smaller in mesic canyons
 - slightly larger in xeric canyons



Landscape/Metapopulation



Vocalizations

- General, more detail later
- 10 - 14 different vocalizations
 - 4-note location
 - Series
 - Contact whistle
- Peak activity
 - March - June
 - July-August dip
 - Peak 2 hrs after sunset
 - 2 hrs before sunrise
 - 4-8 hours after sunset



Interspecific competition



Nesting Chronology

- March - Courtship
- early April - egg laying
- April into May - incubation (30 d)
- early - mid May - hatch
- June - fledge (at about 5 weeks old)
 - owlets may leave nest 1-2 weeks before flight
 - Parents stay with fledglings until August (feed and teach)
- mid-September - dispersal
 - 15 - 90 miles



Reproduction

- Two eggs are laid (usually by female)
- May not nest every year
- Female incubates and broods
- Male delivers food to female (and young nestlings)



Population Biology

- Adult survival 0.8 to 0.9
- Juvenile survival 0.1 to 0.3



Mortality Factors

- Predation
 - Great Horned Owls
 - Goshawk
 - Red-tailed Hawk
 - Golden Eagle
- Starvation (esp. juveniles)
- Collisions (with cars, powerlines, etc.)





Summary



- Relatively large, K-selected species
- Nests in southern and eastern Utah canyons
- Uses canyon, canyon/riparian, and canyon/mixed-conifer
- Have large home ranges in Utah
- 1-2 young but don't breed every year
- Courtship in March; dispersal in September
- Probably distributed as a metapopulation