

**ARIZONA GAME AND FISH DEPARTMENT  
HERITAGE DATA MANAGEMENT SYSTEM**

**Animal Abstract**

**Element Code:** AMAJH04013

**Data Sensitivity:** No

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Puma concolor browni*

**COMMON NAME:** Yuma mountain lion, Yuma puma

**SYNONYMS:** *Felis aztecus browni* Merriam, *Felis azteca browni*, *Felis oregonensis browni*, *Felis concolor browni*

**FAMILY:** Felidae

**AUTHOR, PLACE OF PUBLICATION:** Merriam, Proc. Biol. Soc. Washington, 16:73, 1903.

**TYPE LOCALITY:** Colorado River, 12 mi. below Yuma, Arizona.

**TYPE SPECIMEN:** USNM s.n. Merriam, 1903.

**TAXONOMIC UNIQUENESS:** 1 of 6 North American spp. in genus (Hall, 1981); 1 of 15 North American subsp. (Hall, 1981); 1 of 3 Arizona subsp. (Hoffmeister, 1986). The other Arizona subspecies include *P. c. azteca* and *P. c. kaibabensis*. Subspecies recognition is based primarily on skull, dental, and pelage characteristics. There has been controversy among taxonomists on the validity that the subsp. *browni* is not a valid taxon, due to lack of specimens and taxonomic uncertainties. Also, the actual historical and current range is poorly known, for the same reasons. The California Department of Fish and Game currently tracks the subsp. *browni*. The Arizona Game and Fish (AGFD) will also continue to track the subsp. *browni*, until a comprehensive genetic analysis is conducted to determine if this is a valid subsp., along with field studies determine their current status and geographic range.

**DESCRIPTION:** *Puma concolor browni* is a medium sized mammal, with adult male weights ranging from 110 to 144 pounds (50-65 kg); females likely weigh little more than half as much. Total length including tail varies from 6 or 7 feet (1.8-2.1 m) in males to 6.5 feet (2.0 m) in females. Pelage is more yellow, pale, shorter and finer and their skull is narrower in comparison to the other two mountain lion subspecies in Arizona. The young are black spotted; the spots fade by three or four months of age.

**AIDS TO IDENTIFICATION:** Subspecies recognition based primarily on skull, dental, and pelage characteristics. Pelage is more yellow, pale, shorter and finer and their skull is narrower in comparison to the other two mountain lion subspecies (*P. c. azteca* and *P. c. kaibabensis*) in Arizona.

The cougar is distinguished from the jaguar (*Panthera onca*), the only other large New World cat, by unspotted pelage, and from the bobcat (*Lynx rufus*) by its much longer tail.

**ILLUSTRATIONS:** Color photo (Johnson 1990).  
Color photo of species (Wilson and Ruff, 1999: p. 227)

**TOTAL RANGE:** Southeastern California to southwestern Arizona including Mohave County, from south of Lake Mead and along the Colorado River; La Paz and Yuma counties east to Organ Pipe Cactus National Monument, and on the south the Tohono O'Odham Indian Reservation, Sonora and Baja California.

**RANGE WITHIN ARIZONA:** Western Mohave County, from south of Lake Mead and along the Colorado River; La Paz and Yuma counties east to Organ Pipe Cactus National Monument, and the Tohono O'Odham Indian Reservation on the south.

### **SPECIES BIOLOGY AND POPULATION TRENDS**

**BIOLOGY:** This species is poorly known and most information is best-guess interpretation from what is known about other subspecies of mountain lions. Territory size may range upwards of 400 square miles per individual and probably varies seasonally. Territories of males and females may overlap, but males tend to avoid other males.

**REPRODUCTION:** Litter size is 1-6; may breed anytime during the year; gestation period is 90 (+-7) days. At about 14 weeks the young begin to hunt with the mother. They remain with her until about 1 ½ to 3 years of age. Females become sexually mature at 2 to 3 years old, but mating is probably delayed until a home territory is established. Females remain reproductively active until about 12 years of age.

**FOOD HABITS:** Carnivore: primary food is Burro deer (*Odocoileus hemionus eremicus*) in many areas, and Mule deer when available. The tiny-sized Coue's White-tailed Deer, which was the most abundant deer species along the Colorado River in prehistoric times, may have been the major prey species of *P. c. browni* (CDFG, 2003). *P. c. browni* are highly opportunistic, and in addition to Burro Deer, they will prey upon various large and small mammals including bighorn sheep, mountain sheep, burros, livestock, coyote, squirrels, rabbits and hares, various rodents, along with insects and reptiles.

**HABITAT:** Riparian bottomlands, which historically were cottonwood-willow forests, extensive mesquite bosques, adjacent desert foothills, low rocky mountains, canyons, and remote undisturbed areas. Grinnell (1933) stated that Yuma Mountain Lions lived mostly in the dense vegetation of the bottomland along the Colorado River, and also noted their presence in adjacent, rocky uplands (CDFG, 2003). Habitat requirements are essentially unknown.

**ELEVATION:** Around 1,000-3,500 feet (305-1066 m).

**PLANT COMMUNITY:** Lower Colorado River Sonoran Desertscrub

**POPULATION TRENDS:** Unknown. Most of the riparian floodplain forest of the lower Colorado River and the woody growth along desert washes have diminished or disappeared since the beginning of the last century (CDFG, 2003).

## **SPECIES PROTECTION AND CONSERVATION**

**ENDANGERED SPECIES ACT STATUS:** None (USDI, FWS 1996)  
[C2 USDI, FWS 1994]  
[C2 USDI, FWS 1991]  
[C2 USDI, FWS 1989]  
[C2 USDI, FWS 1985]  
[C2 USDI, FWS 1982]

**STATE STATUS:** WSC (AGFD, WSCA in prep)  
[State Endangered (AGFD, TNW 1988)]

**OTHER STATUS:** Species of Special Concern, (CDFG)

**MANAGEMENT FACTORS:** For the Yuma puma to persist in Arizona, they must be protected from being killed and their habitat destroyed, and they must have an adequate prey base. Other than adult lions, humans are their only major mortality factor. Protection of riparian communities along the Colorado River should be undertaken as soon as possible.

### **PROTECTIVE MEASURES TAKEN:**

**SUGGESTED PROJECTS:** A comprehensive genetic analysis is needed to establish if this is a valid subspecies. Field studies are needed to determine current status, a clearly defined geographic range, along with information on the principal food of this lion to determine current and future prospects for survival and to develop a plan to ensure their recovery. As well as an in-depth field study to determine the general biology, distribution and habitat needs of this species.

**LAND MANAGEMENT/OWNERSHIP:** Most of the land containing *Puma concolor browni* is owned by U. S. Fish and Wildlife Service, the California State Parks Department and the Bureau of Land Management.

## **SOURCES OF FURTHER INFORMATION**

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**MAJOR KNOWLEDGEABLE INDIVIDUALS:**

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Matt Pierce - Arizona Game and Fish Department.  
Lisa Haynes - Tucson, AZ.

**ADDITIONAL INFORMATION:**

The scientific name *Felis concolor*, comes from Latin for cat and for same color.

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