

Fish, Amphibians, Reptiles, and Mammals



of Montezuma Castle National Monument

Compiled by:

Charles Drost

U.S.G.S., Biological Resources Division
Colorado Plateau Research Station
Box 5614, Northern Arizona University
Flagstaff, AZ 86011

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Montezuma Castle National Monument was established in 1906 to protect the spectacular Sinaguan-age cliff dwellings from which the Monument takes its name. The limestone sinkhole lake and associated cliff dwellings called Montezuma Well were added to the Monument in 1943. The Native American people who built these dwellings throughout the Verde River valley supplemented their agriculture with hunting and trapping. Archaeologists have uncovered many animal bones in debris mounds left behind by inhabitants of the Castle and nearby cliff dwellings. Bones of fish, beaver, and deer are found in these debris mounds, and rabbit bones are quite common. These represent some of the animals used by the Verde Valley's early inhabitants for food and clothing. Migratory birds such as Canada geese, ducks, and coots, taken from Beaver Creek and the Verde River, also supplemented their diets.

Habitats within the Monument include the rich cottonwood riparian forest along Beaver Creek, and varied desert upland habitats ranging from creosote bush flats and mesquite forests to the desert woodland dominated by the tall, spiny crucifixion thorn. This combination of habitats supports a wide variety of animal species in the small area (842 acres, or approximately 1.3 square miles) included in the Monument. The reptile, mammal, and bird (covered in a separate checklist) faunas are particularly diverse.

The protection provided by Montezuma Castle National Monument and adjacent National Forest lands are important to the preservation of this rich fauna. However, the fauna has changed over the past 100 years, mostly due to habitat changes associated with the settling of the Verde Valley. The loss of many of the native fishes from Beaver Creek is particularly striking, and is symptomatic of losses throughout the southwestern United States. The gray wolf, grizzly bear and jaguar all survived in central Arizona into the early 1900's, and probably roamed around Montezuma Castle. However, they are now extirpated from the entire Southwest. Pronghorn also occurred in the area until at least the late 1800's, but are now gone from the vicinity of the Monument. Elk were not originally native to central Arizona, but have migrated into the area from Rocky Mountain stock introduced in northern Arizona. They are now common at the Monument.

This list is based on intensive surveys of Montezuma Castle National Monument conducted between 1992 and 1995, along with a review of available literature. Researchers who conducted the surveys include Laura Ellison, Gloria Hardwick, Bill Leibfried, Erika Nowak, and Charles Drost. Montezuma Castle Chief Ranger Steve Sandell provided information on Native American use of animals in the area. Relative abundance and status codes used in the list are as follows:

R - *rare*; only known from a very few records

U - *uncommon*; occurring in relatively low numbers, or scattered distribution

C - *common*; present in relatively high numbers, generally widespread

A - *abundant*; a common species that is quite numerous

X - *extirpated*; a species that occurred in the area at one time, but is now absent

I - *introduced*; species not originally native to the area; introduced by man

MOCA - Montezuma Castle unit

MOWE - Montezuma Well unit

Threatened - Federally-listed *Threatened* species

FISH

Suckers (Family Catostomidae)

Sonora Sucker (<i>Catostomus insignis</i>)	U (C at MOWE)
Desert Sucker (<i>Pantosteus clarki</i>)	C

Sunfishes (Family Centrarchidae)

Green Sunfish (<i>Lepomis cyanellus</i>)	C (I)
Smallmouth Bass (<i>Micropterus dolomieu</i>)	C/A (I)
Spotted Bass (<i>Micropterus punctulatus</i>)	X (I)
Largemouth Bass (<i>Micropterus salmoides</i>)	(I)

Minnows (Family Cyprinidae)

Longfin Dace (<i>Agosia chrysogaster</i>)	R
Red Shiner (<i>Cyprinella lutrensis</i>)	C/A (I)
Common Carp (<i>Cyprinus carpio</i>)	C (I)
Roundtail Chub (<i>Gila robusta</i>)	R
Spikedace (<i>Meda fulgida</i>)	X (Threatened)
Speckled Dace (<i>Rhinichthys osculus</i>)	X
Loach Minnow (<i>Tiaroga cobitis</i>)	X (Threatened)

Catfishes (Family Ictaluridae)

Black Bullhead (<i>Ameiurus melas</i>)	(I)
Yellow Bullhead (<i>Ameiurus natalis</i>)	U (I)
Channel Catfish (<i>Ictalurus punctatus</i>)	(I)

AMPHIBIANS

True Toads (Family Bufonidae)

Red-spotted Toad (<i>Bufo punctatus</i>)	R
Woodhouse's Toad (<i>Bufo woodhousii</i>)	C

Treefrogs (Family Hylidae)

Canyon Treefrog (<i>Hyla arenicolor</i>)	U
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True Frogs (Family Ranidae)

Bullfrog (<i>Rana catesbeiana</i>)	R (I)
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REPTILES

Pond Turtles, Terrapins and Box Turtles (Family Emydidae)

Common Slider (*Trachemys scripta*) U (I)

Mud and Musk Turtles (Family Kinosternidae)

Sonoran Mud Turtle (*Kinosternon sonoriense*) A

Softshell Turtles (Family Trionychidae)

Spiny Softshell Turtle (*Trionyx spiniferus*) R

Alligator and Glass Lizards (Family Anguidae)

Arizona Alligator Lizard (*Gerrhonotus kingii*) U

Geckos (Family Gekkonidae)

Western Banded Gecko (*Coleonyx variegatus*) R

Beaded Lizards (Family Helodermatidae)

Gila Monster (*Heloderma suspectum*) X ?

Iguanid Lizards (Family Iguanidae)

Greater Earless Lizard (*Cophosaurus texanus*) U

Collared Lizard (*Crotaphytus collaris*) U

Short-horned Lizard (*Phrynosoma douglassii*) R

Clark's Spiny Lizard (*Sceloporus clarkii*) U

Desert Spiny Lizard (*Sceloporus magister*) C

Eastern Fence Lizard (*Sceloporus undulatus*) U

Tree Lizard (*Urosaurus ornatus*) C/A

Side-blotched Lizard (*Uta stansburiana*) A

Whiptails and relatives (Family Teiidae)

Gila Spotted Whiptail (*Cnemidophorus flagellicaudus*) U

Little Striped Whiptail (*Cnemidophorus inornatus*) R

Western Whiptail (*Cnemidophorus tigris*) A

Desert Grassland Whiptail (*Cnemidophorus uniparens*) C

Plateau Striped Whiptail (*Cnemidophorus velox*) U

Colubrid Snakes (Family Colubridae)

Glossy Snake (<i>Arizona elegans</i>)	R
Ring-necked Snake (<i>Diadophis punctatus</i>)	U
Night Snake (<i>Hypsiglena torquata</i>)	R
Common Kingsnake (<i>Lampropeltis getulus</i>)	R
Coachwhip (<i>Masticophis flagellum</i>)	R
Striped Whipsnake (<i>Masticophis taeniatus</i>)	U
Gopher Snake (<i>Pituophis melanoleucus</i>)	U
Long-nosed Snake (<i>Rhinocheilus lecontei</i>)	R
Western Patch-nosed Snake (<i>Salvadora hexalepis</i>)	U
Ground Snake (<i>Sonora semiannulata</i>)	U
Black-necked Garter Snake (<i>Thamnophis cyrtopsis</i>)	U
Western Lyre Snake (<i>Trimorphodon biscutatus</i>)	R

Coral Snakes and relatives (Family Elapidae)

Sonoran Coral Snake (<i>Micruroides euryxanthus</i>)	R
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Vipers (Family Viperidae)

Western Diamond-back Rattlesnake (<i>Crotalus atrox</i>)	U
Black-tailed Rattlesnake (<i>Crotalus molossus</i>)	U
Mojave Rattlesnake (<i>Crotalus scutulatus</i>)	R

MAMMALS

Insectivores

Shrews (Family Soricidae)

Desert Shrew (*Notiosorex crawfordi*) R

Bats

Free-tailed Bats (Family Molossidae)

Brazilian Free-tailed Bat (*Tadarida brasiliensis*) U

Evening Bats (Family Vespertilionidae)

Pallid Bat (*Antrozous pallidus*) U

Big Brown Bat (*Eptesicus fuscus*) U

Red Bat (*Lasiurus borealis*) R

California Myotis (*Myotis californicus*) U

Small-footed Myotis (*Myotis leibii*) R

Arizona Myotis (*Myotis occultus*) R

Fringed Myotis (*Myotis thysanodes*) R

Cave Myotis (*Myotis velifer*) U

Yuma Myotis (*Myotis yumanensis*) C

Western Pipistrelle (*Pipistrellus hesperus*) C

Townsend's Big-eared Bat (*Plecotus townsendii*) U

Rabbits, Hares, and Pikas

Rabbits and Hares (Family Leporidae)

Black-tailed Jack Rabbit (*Lepus californicus*) C

Desert Cottontail (*Sylvilagus audubonii*) C

Eastern Cottontail (*Sylvilagus floridanus*) U

Rodents

Beavers (Family Castoridae)

Beaver (*Castor canadensis*) U

New World Rats and Mice (Family Cricetidae)

White-throated Woodrat (*Neotoma albigula*) C

Mexican Woodrat (*Neotoma mexicana*) R

Stephens' Woodrat (*Neotoma stephensi*) U

Muskrat (*Ondatra zibethicus*) U

Northern Grasshopper Mouse (*Onychomys leucogaster*) U

Brush Mouse (*Peromyscus boylii*) A

Cactus Mouse (*Peromyscus eremicus*) A

White-footed Mouse (*Peromyscus leucopus*) R

Deer Mouse (*Peromyscus maniculatus*) U

Western Harvest Mouse (*Reithrodontomys megalotis*) U

Arizona Cotton Rat (*Sigmodon arizonae*) X

Porcupines (Family Erethizontidae)

Porcupine (*Erethizon dorsatum*) R

Pocket Gophers (Family Geomyidae)

Botta's Pocket Gopher (*Thomomys bottae*) C

Kangaroo Rats, Pocket Mice and relatives (Family Heteromyidae)

Ord's Kangaroo Rat (*Dipodomys ordii*) U

Hispid Pocket Mouse (*Perognathus hispidus*) X

Rock Pocket Mouse (*Perognathus intermedius*) U

Squirrels and relatives (Family Sciuridae)

Harris' Antelope Squirrel (*Ammospermophilus harrisi*) U

Arizona Gray Squirrel (*Sciurus arizonensis*) R

Rock Ground Squirrel (*Spermophilus variegatus*) C

Cliff Chipmunk (*Tamias dorsalis*) U

Carnivores

Dogs, Wolves and Foxes (Family Canidae)

Coyote (*Canis latrans*) UGray Fox (*Urocyon cinereoargenteus*) U

Cats (Family Felidae)

Mountain Lion (*Felis concolor*) ROcelot (*Felis pardalis*) XBobcat (*Felis rufus*) U

Weasels, Skunks and relatives (Family Mustelidae)

Hog-nosed Skunk (*Conepatus mesoleucus*) UStriped Skunk (*Mephitis mephitis*) UWestern Spotted Skunk (*Spilogale gracilis*) RRiver Otter (*Lutra canadensis*) RBadger (*Taxidea taxus*) R

Raccoons and relatives (Family Procyonidae)

Ringtail (*Bassariscus astutus*) URaccoon (*Procyon lotor*) C

Bears (Family Ursidae)

Black Bear (*Ursus americanus*) R*Ungulates*

Pronghorns (Family Antilocapridae)

Pronghorn (*Antilocapra americana*) X

Deer, Elk and relatives (Family Cervidae)

American Elk (*Cervus elaphus*) C (I)Mule Deer (*Odocoileus hemionus*) CWhite-tailed Deer (*Odocoileus virginianus*) U

Peccaries and Pigs (Family Tayassuidae)

Collared Peccary (*Tayassu tajacu*) U

Species not included in list:

Salmonidae

Rainbow Trout (*Oncorhynchus mykiss*)

Brown Trout (*Salmo trutta*)

Brook Trout (*Salvelinus fontinalis*)

All three of these species have been stocked by AGFD in Wet Beaver Creek upstream from Montezuma Castle, but (presumably because of their affinity for cooler water) have never been reported from the waters within the Monument (Montgomery et al. 1995).

Southwestern Toad (*Bufo microscaphus*)

Populations of this species occur near Montezuma Castle NM, but there are no confirmed records within the boundaries of the Monument (Drost et al. 1996).

Northern Leopard Frog (*Rana pipiens*)

Yavapai Leopard Frog (*Rana yavapaiensis*)

Rana yavapaiensis was collected at the confluence of Beaver Creek and the Verde River in Sept. 1938 (UMMZ and ASU (?)). Recent surveys have not found leopard frogs in that area. There are no definite records within Montezuma Castle National Monument boundaries.

Sonoran Mountain Kingsnake (*Lampropeltis pyromelana*)

Only unconfirmed reports of this species within Montezuma Castle National Monument

Hoary Bat (*Lasiurus cinereus*)

Collected in surrounding area; no records from Montezuma Castle or Montezuma Well.

Southern Grasshopper Mouse (*Onychomys torridus*)

No records for MOCA or MOWE

Arizona Pocket Mouse (*Perognathus amplus*)

Two collection records from Camp Verde; no records from MOCA or MOWE.

Old World Rats and Mice (Family Muridae)

House Mouse (*Mus musculus*)

Five records from Camp Verde / Rimrock area, plus note on House Mice in Taylor and Jackson. No records from MOCA or MOWE.

Gunnison's Prairie Dog (*Cynomys gunnisoni*)

Range well to north and to west.

Gray Wolf (*Canis lupus*)X

Jaguar (*Felis onca*)

Grizzly Bear (*Ursus arctos*)

Range probably included MOCA and MOWE, but no specimen records from the area, and now long since extirpated.

Hooded Skunk (*Mephitis macroura*)

One specimen record from Camp Verde; no records from MOCA or MOWE



United States Department of the Interior

USGS BIOLOGICAL RESOURCES DIVISION

Colorado Plateau Research Station

P.O. Box 5614

Northern Arizona University

Flagstaff, AZ 86011-5614

Phone: (520) 556-7466

FAX: (520) 556-7500

March 21, 1997

Superintendent

Montezuma Castle National Monument

P. O. Box 219

Camp Verde, AZ 86322

Dear Glen:

I have received and incorporated final review comments on the fish, amphibian, reptile, and mammal checklist for Montezuma Castle National Monument. I am enclosing four copies for distribution among your library and staff. Note that the same basic species lists are also included in the final reports on fish, mammals, etc.; this combined format, containing species lists only, may be more useful to you in some situations. Also enclosed is one additional copy to be sent to SPMA. A fish / amphibian, reptile, mammal list should be a nice complement to your bird checklist.

Note that the last two pages (8 and 9) of the "Park" copies of the list are comments on species not included on the list. These pages are not included in the copy to be sent to SPMA. The notes on these two pages are background information about the list that will be of interest to Park staff.

Mark Sogge is nearing completion of his update to the bird species list for the Monument. You should be receiving that soon as well. If you have any questions or comments on this, please let me know.

Thanks --

Best regards,

Charles Drost

Charles Drost

Zoologist

*Two copies
sent to MOCA
library. ZH*

MONTEZUMA CASTLE

MAR 24 '97

RECEIVED

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Sup	ZH	
Admin		
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Ch. Rgr		
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