Scientific Name: *Carpiodes carpio*
Common Name: River carpsucker
BISON No.: 010090

Legal Status:

- Arizona, Species of Special Concern
- ESA, Endangered
- ESA, Proposed Endangered
- ESA, Proposed Threatened
- ESA, Threatened
- New Mexico-WCA, Endangered
- New Mexico-WCA, Threatened
- USFS-Region 3, Sensitive
- None

Distribution:

- Endemic to Arizona
- Endemic to Arizona and New Mexico
- Endemic to New Mexico
- Not Restricted to Arizona or New Mexico
- Northern Limit of Range
- Southern Limit of Range
- Western Limit of Range
- Eastern Limit of Range
- Very Local

Major River Drainages:

- Dry Cimmaron River
- Canadian River
- Southern High Plains
- Pecos River
- Estancia Basin
- Tularosa Basin
- Salt Basin
- Rio Grande
- Rio Mimbres
- Zuni River
- Gila River
- Rio Yaqui Basin
- Wilcox Playa
- Rio Magdalena Basin
- Rio Sonoita Basin
- Little Colorado River
- Mainstream Colorado River
- Virgin River Basin
- Hualapai Lake
- Bill Williams Basin

Status/Trends/Threats (narrative):

State NM: Provides limited protection.

Distribution (narrative):

The river carpsucker is found from in the Mississippi basin from Pennsylvania to Montana south to the Gulf of Mexico; Gulf drainages from the lower Mississippi River west to the Rio Grande drainages of Mexico (Hubbs and Black 1940, Fishbase.org 2002). River carpsuckers are native to the lower and middle elevations of the Rio Grande, Pecos, and Canadian drainages where the populations are stable (Sublette et. al. 1990). In New Mexico, no occurrences of river carpsuckers are known outside the range. River carpsuckers are most abundant in pools of mid and higher order streams and in reservoirs below about 2,135 m elevation (Sublette et. al. 1990).

The river carpsucker is native throughout much of the Mississippi basin south to the Gulf Coast drainage of Louisiana and Texas. Introduced into the Rio Yaqui basin of Mexico in the early 1970's (Hendrickson et. al. 1980).

Key Distribution/Abundance/Management Areas:

Panel key distribution/abundance/management areas:

Breeding (narrative)**:**

Spawning begins in early spring when water temperatures reach 18.3-19.1 C and continues until midsummer until water temperatures reach 24.0-27.5 C (Jester and Padilla 1972). Male and female river carpsuckers mature at age III (Jester 1972). River carpsucker eggs, which, are adhesive and demersal (Fuiman 1982). The incubation period for river carpsucker eggs is 3 to 15 days (Lee et. al. 1981).

Habitat (narrative)**:**

River carpsuckers are a schooling species that inhabit quiet waters of rivers, larger creeks, and lakes (Sublette et. al. 1990, Fishbase.org 2002). River carpsuckers prefer relatively shallow water with little organic matter and a large biomass of oligochaetes (Sumerfelt 1971). River carpsuckers are abundant in quiet, silt-bottomed pools of rivers having low to moderate gradients, and frequently in impoundments (Lee et. al. 1981).

Breeding Season:

- January
- February
- March
- April
- May
- June
- July
- August
- September
- October
- November
- December

Panel breeding season comments:

Aquatic Habitats:

Large Scale:

- Rivers
- Streams
- Springs
- Spring runs
- Lakes
- Ponds
- Sinkholes
- Cienegas
- Unknown
- Variable

Small Scale:

- Runs
- Riffles
- Pools
- Open Water

Panel comments on aquatic habitats:

Important Habitat Features (Water characteristics):

Current
- Fast (> 75 cm/sec)
- Intermediate (10-75 cm/sec)
- Slow (< 10 cm/sec)
- None
- Unknown
- Variable

Gradient
- High gradient (>1%)
- Intermediate Gradient (0.25-1%)
- Low Gradient (<0.25%)
- None
- Unknown
- Variable

Water Depth
- Very Deep (> 1 m)
- Deep (0.25-1 m)
- Intermediate (0.1-0.25 m)
- Shallow (< 0.1 m)
- Unknown
- Variable

Panel comments on water characteristics:

Important Habitat Features (Water Chemistry)

Temperature (general)
- Cold Water (4-15°C)
- Cool Water (10-21°C)
- Warm Water (15-27°C)
- Unknown
- Variable

Turbidity
- High
- Intermediate
- Low
- Unknown
- Variable

Conductivity
- Very High (> 2000 µS/cm)
- High (750-2000 µS/cm)
- Intermediate (250-750 µS/cm)
- Low (< 250 µS/cm)
- Unknown
- Variable

Panel comments on water chemistry:

Important Habitat Features (Structural elements):

Substrate
- Bedrock
- Silt/Clay
- Detritus
- Sand
- Gravel
- Cobble
- Boulders
- Unknown
- Variable

Cover
- Rocks, boulders
- Undercut banks
- Woody debris
- Aquatic vegetation
- Rootwads
- Not important
- Overhanging vegetation
- Unknown
- Variable

Panel comments on structural elements:

Diet (narrative)**:**

Food habits (Brown and Thorsen 1951 Montana State College Agricultural Experimental Station Bulletin 480:1-30). The river carpsucker is a detritivore, feeding on large amounts of silt and detritus, it also ingests algae, protozoan, chironomidae, and microcrustaceans (Sublette et. al. 1990).

Diet category (list):

- Planktivore
- Herbivore
- Insectivore
- Piscivore (Fish)
- Omnivore
- Detritivore

Grazing Effects (narrative):

No information is available with respect to the effects of grazing on river carpsuckers, however inferences can be made from existing literature. River carpsuckers prefer relatively shallow water with little organic matter, and cattle grazing may contribute organic matter as well as the possibility of trampling.

Panel limiting habitat component relative to grazing and comments:
Panel assessment: Is this species a priority for selecting a grazing strategy? Throughout the species' distribution in New Mexico and Arizona YES NO UNKNOWN In key management area(s) YES NO UNKNOWN

Principle Mechanisms Through Which Grazing Impacts This Species (list):

May be Revised

- Alteration of bank structures
- Alteration of substrate
- Alteration of water regimes
- Altered stream channel characteristics
- Altered aquatic vegetation composition
- Altered bank vegetation structure
- Change in food availability
- Change in water temperature
- Change in water quality
- Habitat fragmentation
- Increased turbidity
- Other biotic factors
- Parasites or pathogens
- Population genetic structure loss
- Range improvements
- Trampling, scratching
- Unknown

Panel causal mechanisms comments:

Authors

- **Draft:** Magaña, H.A.
- **GP 2001:**
- **GP 2002:**
- **Revision:**

Bibliography:

Fishbase.org. 2002. Cite correctly.

Lee, D. S. Gilbert C. R. Hocutt C. H. Jenkins R. E. Callister D. E. and Stauffer J. R., 1981. Atlas of North American Freshwater Fishes: North Carolina, North Carolina State Museum of Natural History, 1981, c1980

Sublette, J. E., M. D. Hatch, and M. Sublette. 1990. The Fishes of New Mexico. University of New Mexico Press. Albuquerque. 393 pp.