Moxostoma anisurum - (Rafinesque, 1820)

Silver Redhorse

Unique Identifier: AFCJC10010

Informal Taxonomy: Animals, Vertebrates - Fishes

- Bony Fishes - Suckers



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Kingdom	Phylum	Class	Order	Family	Genus
Animalia	Craniata	Actinopterygii	Cypriniformes	Catostomidae	Moxostoma

Genus Size: C - Small genus (6-20 species)

Concept Reference: Robins, C. R., et al. 1991. Common and scientific names of fishes from the United States and Canada. American

Fisheries Society, Special Publishing 20. 183 pp. Concept Reference Code: B91ROB01NAUS

Name Used in Concept Reference: Moxostoma anisurum

Taxonomic Comments: MOXOSTOMA COLLAPSUM formerly was included in this species. Warren et al. (1999) noted a forthcoming taxonomic rearrangement and recognized M. COLLAPSUM of the Atlantic Slope as a species distinct from M. ANISURUM.

Harris and Mayden (2001) used molecular data to examine phylogenetic relationships of major clades of Catostomidae. In all trees, SCARTOMYZON was paraphyletic and embedded in MOXOSTOMA, and CATOSTOMUS was never recovered as monophyletic (XYRAUCHEN was embedded within CATOSTOMUS). They concluded that the phylogenetic relationships and taxonomic composition of taxa presently included in MOXOSTOMA and SCARTOMYZON are in need of further study, as are the relationships and composition of the genera CATOSTOMUS, CHASMISTES, DELTISTES, and XYRAUCHEN, and the phylogenetic affinites of ERIMYZON and MINYTREMA.

See also Smith (1992) for a study of the phylogeny and biogeography of the Catostomidae.

Conservation Status

NatureServe Status

Global Status: G5

Global Status Last Reviewed: 04Feb2000 Global Status Last Changed: 04Feb2000

Rounded Global Status: G5

Nation: United States

National Status:

N5

Nation: Canada

National Status:

N4

U.S. & Canad	U.S. & Canada State/Province Status			
States	Alabama (S2), Arkansas (S1?), Illinois (S3), Indiana (S4), Iowa (S4), Kentucky (S4S5), Michigan (S4), Minnesota (SNR), Mississippi (S1), Missouri (SNR), New York (S3), North Dakota (SNR), Ohio (SNR), Pennsylvania (S3S4), Tennessee (S4), Vermont (SU), Virginia (S4), West Virginia (S4), Wisconsin (S4)			
Canada	Alberta (S2), Manitoba (S5), Ontario (S4), Quebec (S4), Saskatchewan (S3S4)			

Other Statuses

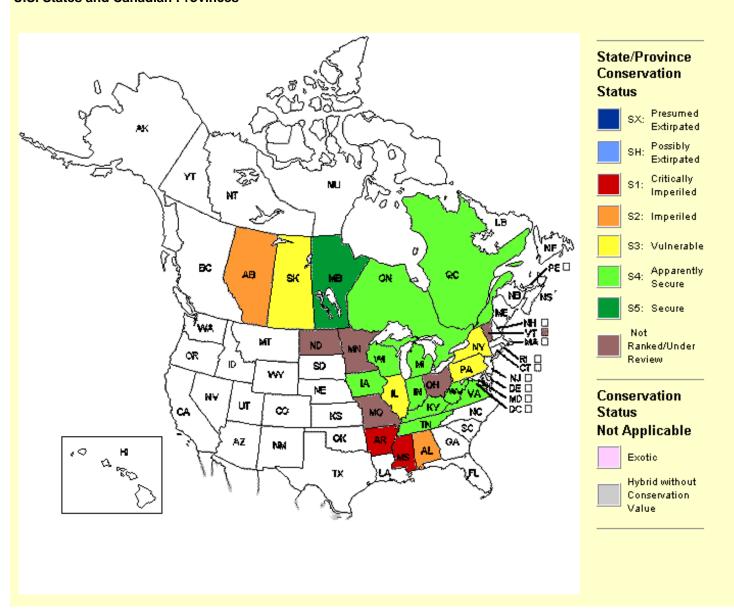
NatureServe Conservation Status Factors

Global Short Term Trend: E

Global Short Term Trend Comments: Currently stable (Warren et al. 2000).

Distribution

U.S. States and Canadian Provinces



Endemism: occurs (regularly, as a native taxon) in multiple nations

U.S. & Canada State/Province Distribution		
United States	AL, AR, IA, IL, IN, KY, MI, MN, MO, MS, ND, NY, OH, PA, TN, VA, VT, WI, WV	
Canada	AB, MB, ON, QC, SK	

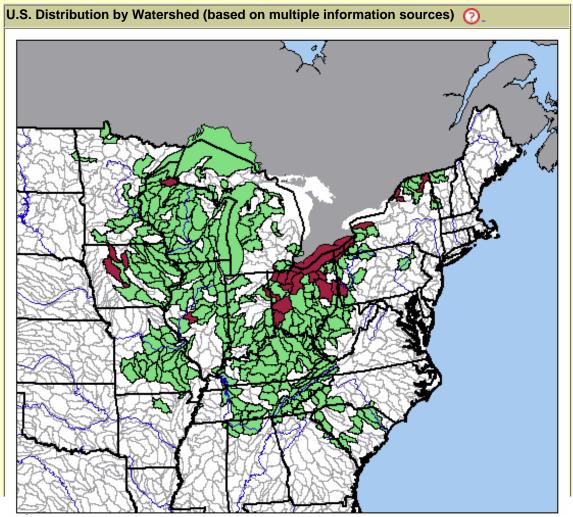
Range Map

No map available.

Global Range Comments: Widespread in upper Mississippi and Great Lakes-St. Lawrence basins, from Quebec to Alberta, and south to Alabama and northern Arkansas, including most of the Ohio River drainage and the eastern and northern parts of the Ozarkian uplands; southwestern Hudson Bay basin (Red and Nelson river drainages); uncommon (Page and Burr 1991, Lee et al. 1980).

U.S. Distribution by County (based on available natural heritage records) 👩		
State	County Name (FIPS Code)	
VT	Rutland (50021)	

J.S. Distribution by Watershed (based on available natural heritage records) 👩		
Watershed Region 👩	Watershed Name (Watershed Code)	
02	Lake George (02010001)	





Economic Attributes		
Management Summary		

Ecology & Life History

Reproduction Comments: Spawns in spring. Sexually mature at age V in Iowa (Scott and Crossman 1973).

Ecology Comments

Relatively sedentary in summer in Iowa (Becker 1983).

Habitat Type: Freshwater

Non-Migrant: Y

Locally Migrant: N

Long Distance Migrant: N

Riverine Habitat(s): BIG RIVER, CREEK, MEDIUM RIVER, Pool

Lacustrine Habitat(s): Shallow water

Special Habitat Factors: Benthic

Habitat Comments: Typically in silty to firm-bottomed pools and runs of small to large rivers; also in natural lakes and impoundments. Often near undercut banks and protruding tree roots. Spawns in main channel of turbid rivers in 1-3 ft. of water over gravel to rubble bottoms (Scott and Crossman 1973).

Adult Food Habits: Herbivore, Invertivore

Immature Food Habits: Herbivore, Invertivore

Food Comments: Eats immature insects, mollusks, algae, detritus, and other small organisms, mostly sucked up from

bottom.

Length: 57 centimeters

Population/Occurrence Delineation

Group Name: MEDIUM SUCKERS

Use Class: Not applicable

Minimum Criteria for an Occurrence: Occurrences are based on evidence of historical presence, or current and likely

recurring presence, at a given location. Such evidence minimally includes collection or reliable observation and documentation of one or more individuals (including eggs and larvae) in appropriate habitat.

Mapping Guidance: Occupied locations that are separated by a gap of 5 km or more of any aquatic habitat that is not known to be occupied represent different occurrences. However, it is important to evaluate migrations and seasonal changes in habitat to ensure that spawning areas and nonspawning areas for a single population are not artificially segregated as different occurrences simply because there have been no collections/observations in an intervening area that may exceed the separation distance.

Separation Barriers: Dam lacking a suitable fishway; high waterfall; upland habitat.

Separation Distance for Unsuitable Habitat: 15 km Separation Distance for Suitable Habitat: 15 km

Separation Justification: Data on dispersal and other movements generally are not available. In some species, individuals may migrate variable distances between spawning areas and nonspawning habitats.

Separation distances (in aquatic kilometers) for catostomids are arbitrary but reflect the presumption that movements and appropriate separation distances generally should increase with fish size. Hence small, medium, and large catostomids, respectively, have increasingly large separation distances. Separation distance reflects the likely low probability that two occupied locations separated by less than several kilometers of aquatic habitat would represent truly independent populations over the long term.

Because of the difficulty in defining suitable versus unsuitable habitat, especially with respect to dispersal, and to simplify the delineation of occurrences, a single separation distance is used regardless of habitat quality.

Occupied locations that are separated by a gap of 15 km or more of any aquatic habitat that is not known to be occupied represent different occurrences. However, it is important to evaluate seasonal changes in habitat to ensure that an occupied habitat occurrence for a particular population does not artificially separate spawning areas and nonspawning areas as different occurrences simply because there have been no collections/observations in an intervening area that may exceed the separation distance.

Date: 21Sep2004 **Author:** Hammerson, G.

Notes: This Specs Group includes catostomids that typically are 20-40 cm in adult standard length.

Population/Occurrence Viability Authors/Contributors

Element Ecology & Life History Edition Date: 04Feb2000 Element Ecology & Life History Author(s): Hammerson, G.

Zoological data developed by NatureServe and its network of natural heritage programs (see <u>Local Programs</u>) and other contributors and cooperators (see <u>Sources</u>).

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Citation for data on website including Watershed and State Distribution maps:

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Acknowledgement Statement for Bird Range Maps of North America:

"Data provided by NatureServe in collaboration with Robert Ridgely, James Zook, The Nature

Conservancy - Migratory Bird Program, Conservation International - CABS, World Wildlife Fund - US, and Environment Canada - WILDSPACE."

Citation for Mammal Range Maps of North America:

Patterson, B.D., G. Ceballos, W. Sechrest, M.F. Tognelli, T. Brooks, L. Luna, P. Ortega, I. Salazar, and B. E. Young. 2003. Digital Distribution Maps of the Mammals of the Western Hemisphere, version 1.0. NatureServe, Arlington, Virginia, USA.

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