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[View Glo](#)***Campostoma anomalum*** - (Rafinesque, 1820)

Central Stoneroller

Unique Identifier: ELEMENT_GLOBAL.2.102754

Element Code: AFCJB03010

Informal Taxonomy: Animals, Vertebrates - Fishes - Bony Fishes - Minnows and Carps



© Noel Burkhead & Virginia Dept of Game and Inland Fisheries (Fishes of Virginia)

Kingdom	Phylum	Class	Order	Family	Genus
Animalia	Craniata	Actinopterygii	Cypriniformes	Cyprinidae	Campostoma

Genus Size: B - Very small genus (2-5 species)

Check this box to expand all report sections: **Concept Reference****Concept Reference:**

Robins, C.R., R.M. Bailey, C.E. Bond, J.R. Brooker, E.A. Lachner, R.N. Lea, and W.B. Scott. 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:** *Campostoma anomalum***Taxonomic Comments:**

A highly variable species; certain populations appear to be recognizable at the subspecific level; Page and Burr (1991) tentatively recognized three subspecies: ANOMALUM of the Ohio River and upper Atlantic drainages, MICHAUXI of the Santee and Savannah River drainages, and PULLUM of the rest of the range. See Buth and Burr (1978) for information on isozyme variability in this and other CAMPOSTOMA species. Further taxonomic study is needed. CAMPOSTOMA PAUCIRADII and certain populations of C. OLIGOLEPIS formerly were included under the name C. ANOMALUM by Lee et al. (1980). CAMPOSTOMA nomenclature used by Lee et al. (1980) is out of date and should not be used (see Burr and Cashner 1983, Page and Burr 1991). Has hybridized with PHOXINUS ERYTHROGASTER, NOCOMIS LEPTOCEPHALUS, and NOTROPIS CHRYSOCEPHALUS in Clark Creek, Wilkinson County, Mississippi (Grady and Cashner 1988); hybridization with GILA PANDORA, SEMOTILUS ATROMACULATUS, and RHINICHTHYES CATARACTAE also has been recorded (see Sublette et al. 1990). Nelson et al. (2004) defers recognition of *C. pullum* pending publication of a taxonomic

study.

Conservation Status

NatureServe Status

Global Status: G5

Global Status Last Reviewed: 13Sep1996

Global Status Last Changed: 13Sep1996

Rounded Global Status: G5 - Secure

Nation: United States

National Status: N5

Nation: Canada

National Status:N1N2

U.S. & Canada State/Province Status	
United States	Arkansas (S4), Colorado (S5), Connecticut (SNA), Georgia (S5), Illinois (S5), Indiana (S4), Iowa (S5), Kansas (S5), Kentucky (S4S5), Louisiana (S2), Maryland (S5), Michigan (S4), Minnesota (SNR), Mississippi (S4), Missouri (SNR), Nebraska (S5), New Mexico (SNA), New York (S5), North Carolina (S5), North Dakota (S3), Ohio (SNR), Oklahoma (S5), Pennsylvania (S5), South Carolina (SNR), South Dakota (S5), Tennessee (S5), Texas (S5), Virginia (S5), West Virginia (S5), Wisconsin (S4), Wyoming (S4)
Canada	Ontario (S4)

Other Statuses

Committee on the Status of Endangered Wildlife in Canada (COSEWIC): Not at Risk (01Apr1998)

NatureServe Conservation Status Factors

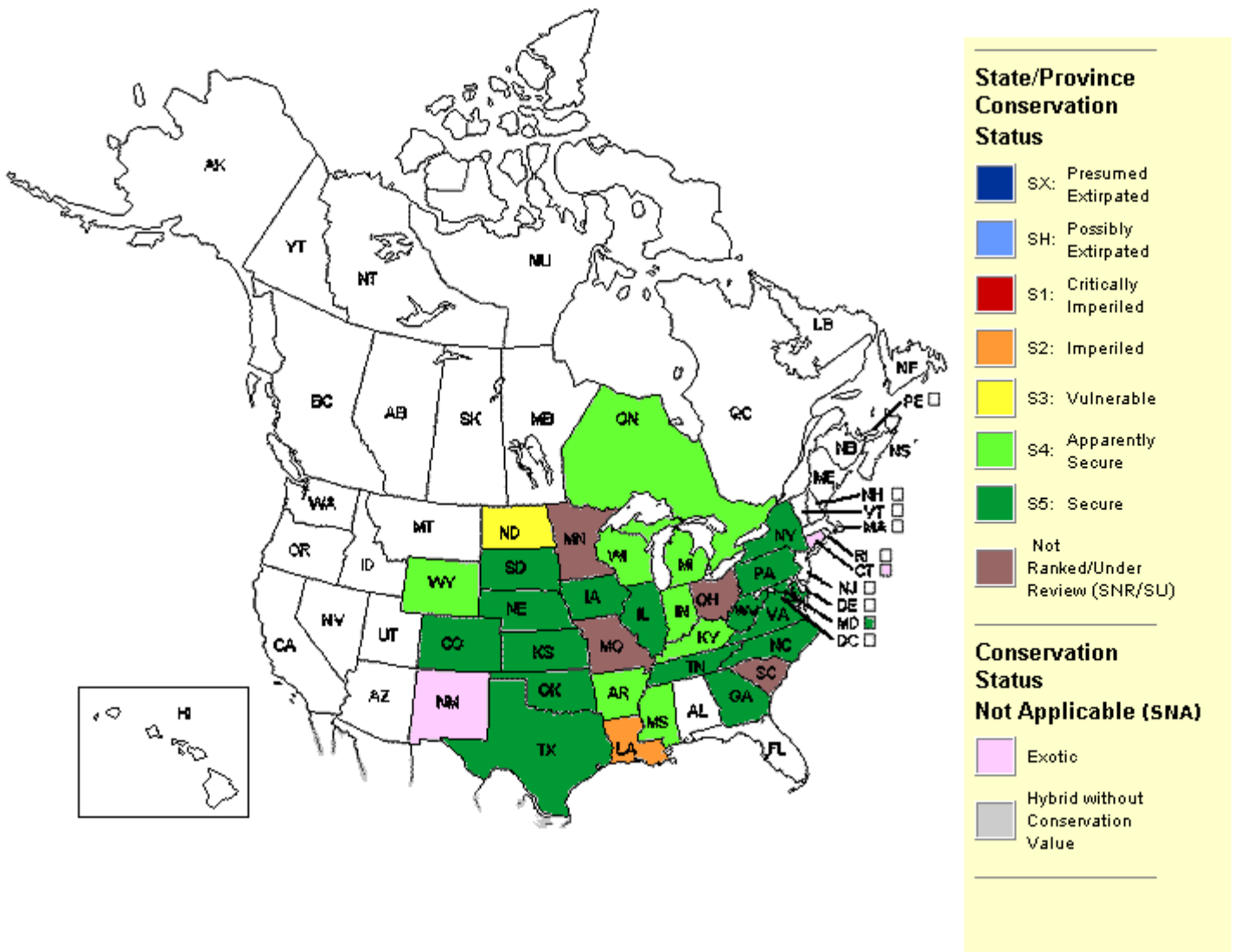
Estimated Number of Element Occurrences:> 300

Global Short Term Trend Comments:

Recently expanded range and abundance in Ontario, Canada, through bait-bucket introductions and natural dispersal (Holm and Crossman 2001).

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	AR, CO, CT [†] , GA, IA, IL, IN, KS, KY, LA, MD, MI, MN, MO, MS, NC, ND, NE, NM [†] , NY, OH, OK, PA, SC, SD, TN, TX, VA, WI, WV, WY
Canada	ON

Range Map

No map available.


Global Range Comments:

Throughout much of the eastern and central U.S. in the Atlantic, Great Lakes, Mississippi River, and Hudson Bay (Red River) basins from New York and southern Ontario west to North Dakota and Wyoming, and south to South Carolina and Texas; Thames River system, Ontario; Gulf Slope drainages from Galveston Bay, Texas, to Rio Grande, Mexico; isolated populations in southwestern Mississippi and eastern Louisiana (Page and Burr 1991). Common to abundant throughout much of range; generally absent on Piedmont and Coastal Plain; uncommon in the Great Plains (Page and Burr 1991). CAMPOSTOMA range maps in Lee et al. (1981) are out of date due to taxonomic reallocations and description of a new species; use instead Page and Burr (1991).

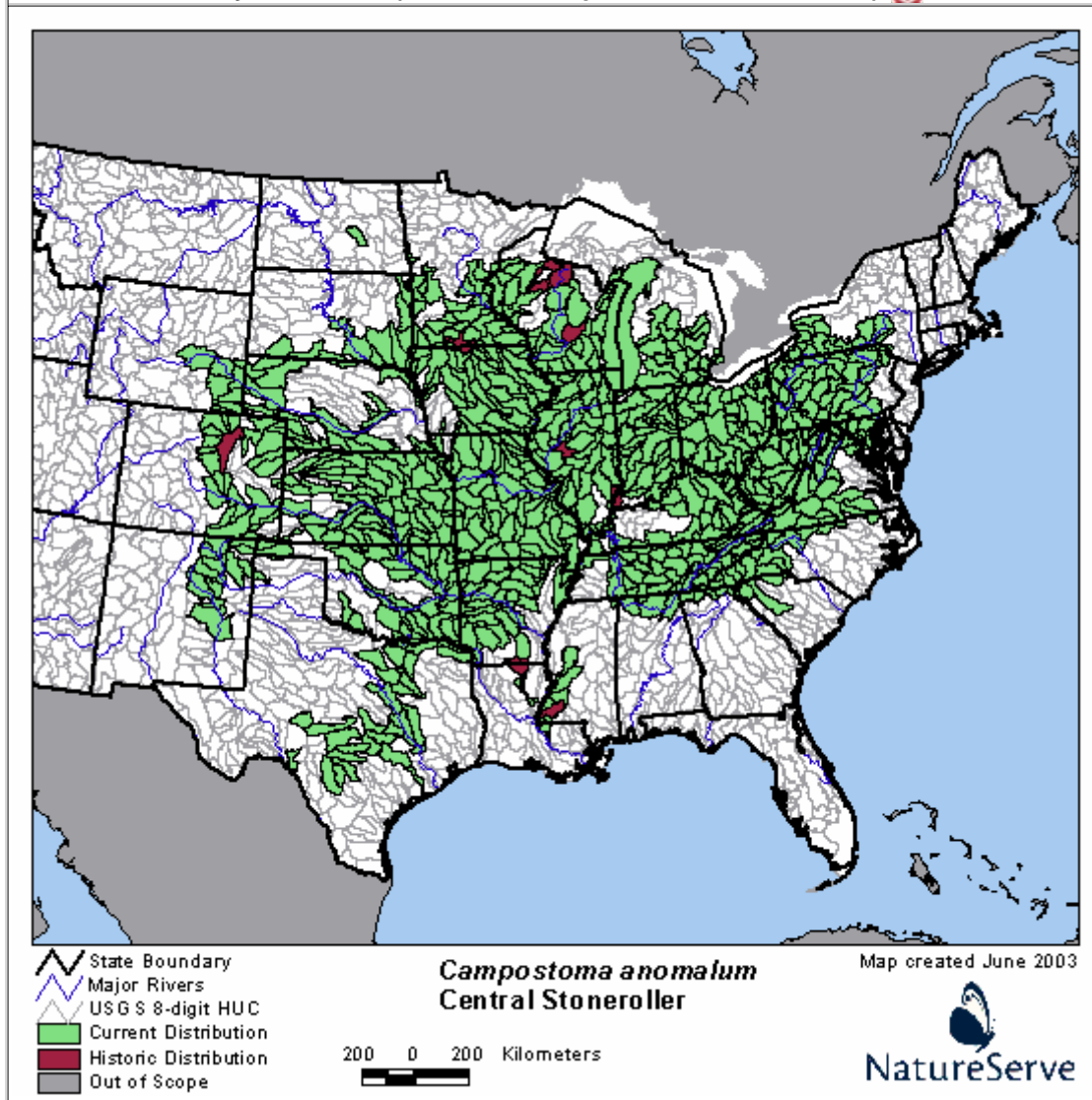
U.S. Distribution by County (based on available natural heritage records)	
State	County Name (FIPS Code)
LA	Catahoula (22025), West Feliciana (22125)

ND	Grand Forks (38035), Walsh (38099)
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U.S. Distribution by Watershed (based on available natural heritage records)

Watershed Region 	Watershed Name (Watershed Code)
08	Lower Ouachita (08040207), Lower Mississippi-Baton Rouge (08070100), Bayou Sara-Thompson (08070201)
09	Turtle (09020307), Forest (09020308)

U.S. Distribution by Watershed (based on multiple information sources)



Ecology & Life History

Reproduction Comments:

Spawns mid-April to early June in New York, May in Ontario. Eggs hatch in 2-4 days. Sexually mature in 2nd or 3rd year in Michigan and probably Ontario, usually 3rd or 4th year in North Carolina. Nesting communal with some territoriality (males cooperate in building groups of nests, Sublette et al. 1990).

Ecology Comments

May occur in schools of thousands. Largest populations are in areas with few or no predators (e.g., bass) (Sublette et al. 1990). Can strongly affect the distribution and standing crop of attached algae in streams (see Matthews and Heins 1987).

Habitat Type: Freshwater

Non-Migrant: N

Locally Migrant: N

Long Distance Migrant: N

Riverine Habitat(s): CREEK, Low gradient, MEDIUM RIVER, Moderate gradient, Pool, Riffle

Special Habitat Factors: Benthic

Habitat Comments:

Characteristic of small to medium rivers with cool clear water, moderate or sometimes rapid current, gravel or rubble bottom. Commonly in pools with current, riffles of small rocky streams; also in medium to large rivers, and sometimes in slow-moving, turbid water (Sublette et al. 1990). May congregate under stones or debris in winter. Rare in lakes. Spawns in nest made by male in riffle or gravel-bottomed pool, typically in shallow portion of stream near deep pool (Sublette et al. 1990). Eggs covered with sand and fine gravel. Will use nests of other cyprinids.

Adult Food Habits: Herbivore

Immature Food Habits: Herbivore

Food Comments:

Eats detritus, diatoms, inorganic material, and green and blue-green algae obtained from surfaces of rocks of stream bottoms (Fowler and Taber 1985). Selective; avoids some species of algae (Sublette et al. 1990).

Adult Phenology: Diurnal

Immature Phenology: Diurnal

Length: 23 centimeters

Economic Attributes



Economic Comments: Used as food fish and bait fish.

Management Summary



Population/Occurrence Delineation



Group Name: MEDIUM CYPRINIDS

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.

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 cyprinids are arbitrary but reflect the presumption that movements and

appropriate separation distances generally should increase with fish size. Hence small, medium, and large cyprinids, respectively, have increasingly large separation distances. Separation distance reflects the likely low probability that two occupied locations separated by less than many 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.

Population/Occurrence Viability

U.S. Invasive Species Impact Rank (I-Rank)

Authors/Contributors

NatureServe Conservation Status Factors Edition Date: 21Feb2002

NatureServe Conservation Status Factors Author: Hammerson, G.

Element Ecology & Life History Edition Date: 29Apr1993

Element Ecology & Life History Author(s): Hammerson, G.

Zoological data developed by NatureServe and its network of natural heritage programs (see [Local Programs](#)) and other contributors and cooperators (see [Sources](#)).

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Note: This report was printed on **August 18, 2008**

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Citation for Bird Range Maps of North America:

Ridgely, R.S., T.F. Allnutt, T. Brooks, D.K. McNicol, D.W. Mehlman, B.E. Young, and J.R. Zook. 2003. Digital Distribution Maps of the Birds of the Western Hemisphere, version 1.0. NatureServe, Arlington, Virginia, USA.

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.

Acknowledgement Statement for Mammal Range Maps of North America:

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NOTE: Full metadata for the Bird Range Maps of North America is available at:

<http://www.natureserve.org/library/birdDistributionmapsmetadatav1.pdf>.

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Version 7.0 (1 February 2008)
Ecological systems data last
updated: June 2008
All other data last updated: February
2008