

Summary

Conservation Status

Distribution

Image

Comprehensive

New Search

**Comprehensive Report:** Record 1 of 1 selected.

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Northern Studfish

Unique Identifier: AFCNB04020

Informal Taxonomy: Animals, Vertebrates - Fishes

- Bony Fishes - Other Bony Fishes



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

Kingdom	Phylum	Class	Order	Family	Genus
Animalia	Craniata	Actinopterygii	Cyprinodontiformes	Fundulidae	Fundulus

Genus Size: D - Medium to large genus (21+ 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:** *Fundulus catenatus*

Taxonomic Comments: F. STELLIFER is the sister group of F. CATENATUS-F. BIFAX, the latter two of which are sister species (Rogers and Cashner 1987, Cashner et al. 1992). See Grady et al. (1990) and Rogers and Cashner (1987) for information on evolutionary and biogeographic relationships among populations throughout range (some populations are electrophoretically distinctive). See Rogers and Cashner (1987) for a phylogenetic analysis of the subgenus XENISMA. The genus FUNDULUS was removed from Atheriniformes: Cyprinodontidae and placed in Cyprinodontiformes: Fundulidae by Parenti (1981); pending confirmation based on other character suites, this change was not accepted in the 1991 AFS checklist (Robins et al. 1991). See Wiley (1986) for a study of the evolutionary relationships of FUNDULUS topminnows based on morphological characters. See Cashner et al. (1992) for an allozyme-based phylogenetic analysis of the genus FUNDULUS.

Conservation Status**NatureServe Status****Global Status:** G5**Global Status Last Reviewed:** 20Sep1996**Global Status Last Changed:** 20Sep1996**Rounded Global Status:** G5**Nation:** United States**National Status:**

N5

U.S. & Canada State/Province Status

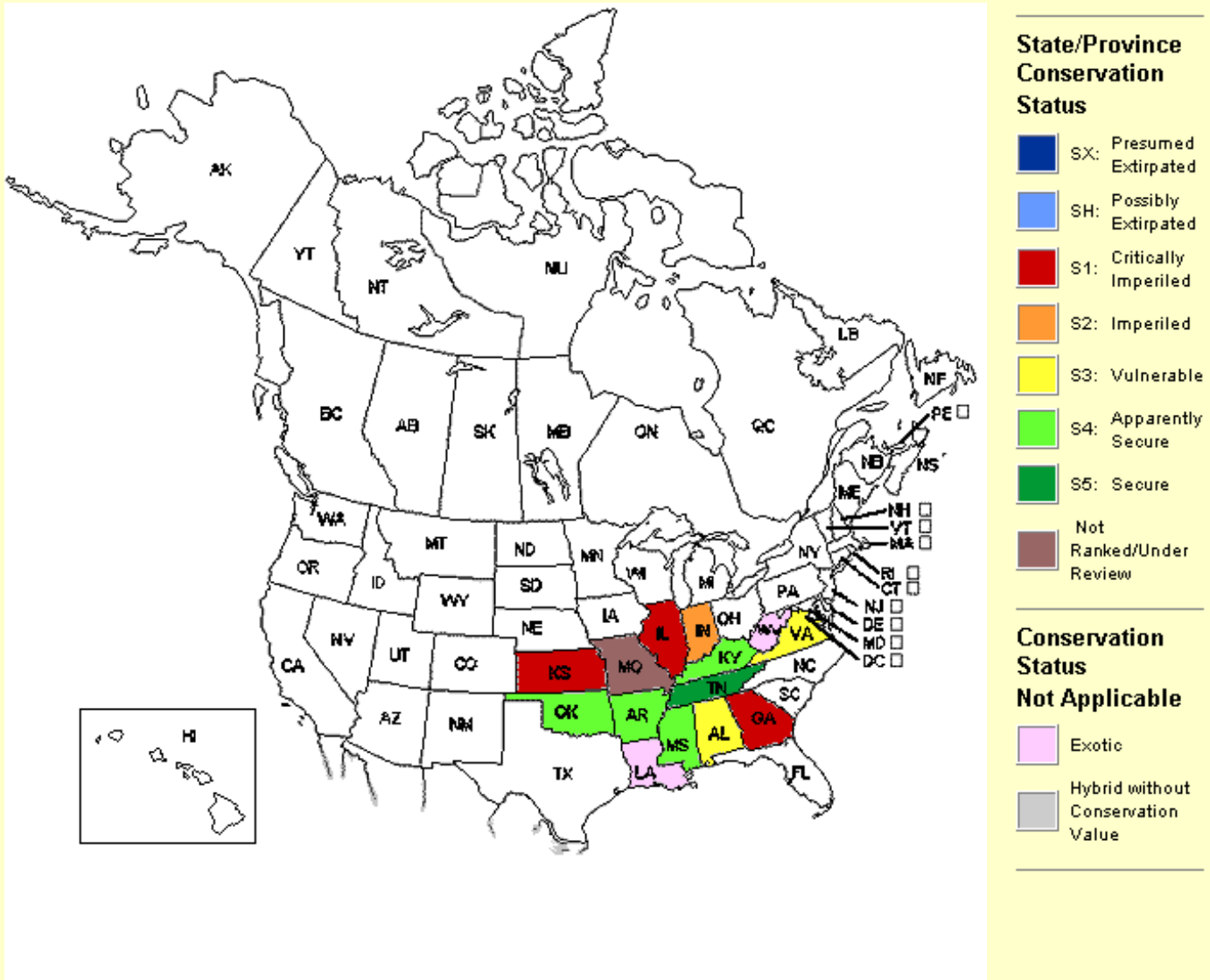
United States	Alabama (S3S4), Arkansas (S4), Georgia (S1), Illinois (S1?), Indiana (S2), Kansas (S1), Kentucky (S4S5), Louisiana (SNA), Mississippi (S4), Missouri (SNR), Oklahoma (S4), Tennessee (S5), Virginia (S3), West Virginia (SNA)
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Other Statuses

NatureServe Conservation Status Factors

Distribution

U.S. States and Canadian Provinces



Endemism: endemic to a single nation

U.S. & Canada State/Province Distribution

United States	AL, AR, GA, IL, IN, KS, KY, LA, MO, MS, OK, TN, VA, WV
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Range Map

No map available.

Global Range Comments: Upper East Fork White River system, Indiana; upper Salt and Kentucky river drainages, Kentucky; upper Green, middle and lower Cumberland, and Tennessee river drainages, Virginia, Kentucky, Tennessee,

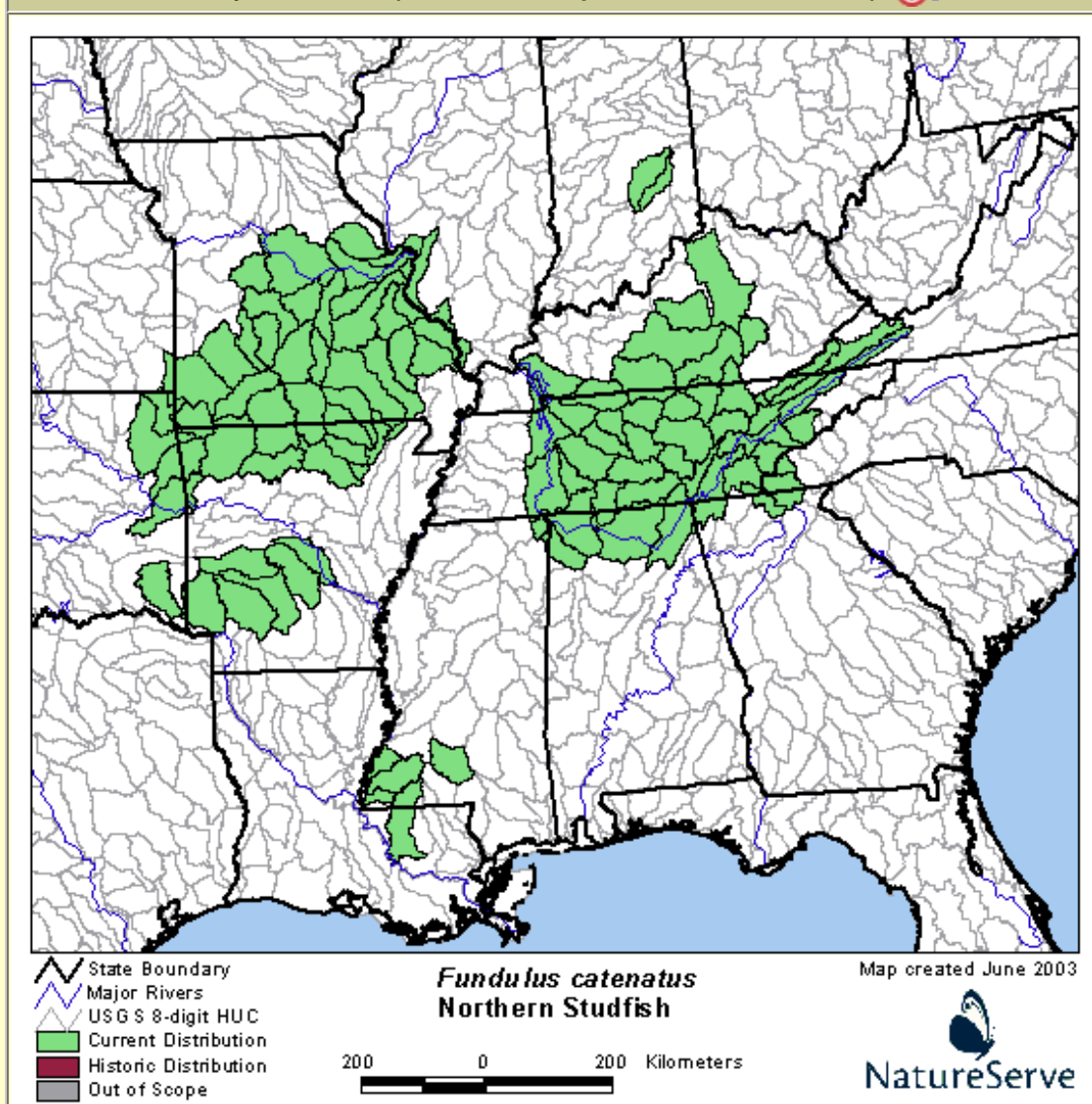
and Alabama; west of Mississippi River, primarily in Ozark and Ouachita uplands, in central and southern Missouri, southeastern Kansas, eastern Oklahoma, and southern Arkansas; southwestern Mississippi in Mississippi (Coles Creek, Homochitto River, and Buffalo Bayou) and Gulf Slope drainages (Amite River and Pearl River); common (Page and Burr 1991).

U.S. Distribution by County (based on available natural heritage records) ?

State	County Name (FIPS Code)
IN	Bartholomew (18005), Jennings (18079), Johnson (18081), Shelby (18145)

U.S. Distribution by Watershed (based on available natural heritage records) ?

Watershed Region ?	Watershed Name (Watershed Code)
05	Driftwood (05120204), Flatrock-Haw (05120205), Muscatatuck (05120207)

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

Economic Attributes

Management Summary

Ecology & Life History

Reproduction Comments: Spawns mid-May to early August. No nest prepared, but males establish and defend small territories.

Habitat Type: Freshwater

Non-Migrant: N

Locally Migrant: N

Long Distance Migrant: N

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

Habitat Comments: Margins, pools, and backwaters of creeks and small rivers with moderate to high gradients, permanent flow of clear water, and bottoms usually of sand, gravel, rock, and occasionally an admixture of silt; most common in shallow sandy backwaters adjacent to clear gravelly creeks. Males establish and defend small territories in shallow quiet-water spawning areas.

Adult Food Habits: Invertivore

Immature Food Habits: Invertivore

Food Comments: Bottom feeder; eats mainly insects and some molluscs.

Length: 18 centimeters

Population/Occurrence Delineation

Group Name: KILLIFISHES (CYPRINODONTIDS)

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.

Alternate Separation Procedure: Each spring system that is undivided by a barrier constitutes a single distinct occurrence. Otherwise, use a separation distance of 10 km for any type of aquatic habitat.

Separation Justification: Separation distance is arbitrary. 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.

Date: 21Sep2004

Author: Hammerson, G.

Population/Occurrence Viability

Authors/Contributors

Element Ecology & Life History Edition Date: 06Oct1993
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](#)).

References

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Note: This report was printed on **May 18, 2005**.

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

NatureServe. 2005. NatureServe Explorer: An online encyclopedia of life [web application]. Version 4.4. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: May 18, 2005).

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:

"Data provided by NatureServe in collaboration with Bruce Patterson, Wes Sechrest, Marcelo Tognelli, Gerardo Ceballos, The Nature Conservancy-Migratory Bird Program, Conservation International-CABS, World Wildlife Fund-US, and Environment Canada-WILDSPACE."

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

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

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

<http://www.natureserve.org/library/mammalsDistributionmetadatav1.pdf>.

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