

Summary

Conservation Status

Distribution

Image

Comprehensive

New Search

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

<< Previous | Next >>

[See All Search Results](#) [View Glossary](#)***Cottus carolinae*** - (Gill, 1861)

Banded Sculpin

Unique Identifier: AFC4E02070

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	Scorpaeniformes	Cottidae	Cottus

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:** *Cottus carolinae***Taxonomic Comments:** Three subspecies (CAROLINAE, INFERNATUS, and ZOPHERUS) have been described; populations in the Mobile Bay basin are highly variable and in need of study; population in the Kanawha River system, West Virginia and Virginia, may warrant taxonomic recognition (Page and Burr 1991). Formerly included in the order Perciformes; the 1991 AFS checklist (Robins et al. 1991) followed Nelson (1984) in recognizing the order Scorpaeniformes as distinct from the Perciformes.**Conservation Status****NatureServe Status****Global Status:** G5**Global Status Last Reviewed:** 06Sep1996**Global Status Last Changed:** 06Sep1996**Rounded Global Status:** G5**Nation:** United States**National Status:**

N5

U.S. & Canada State/Province Status

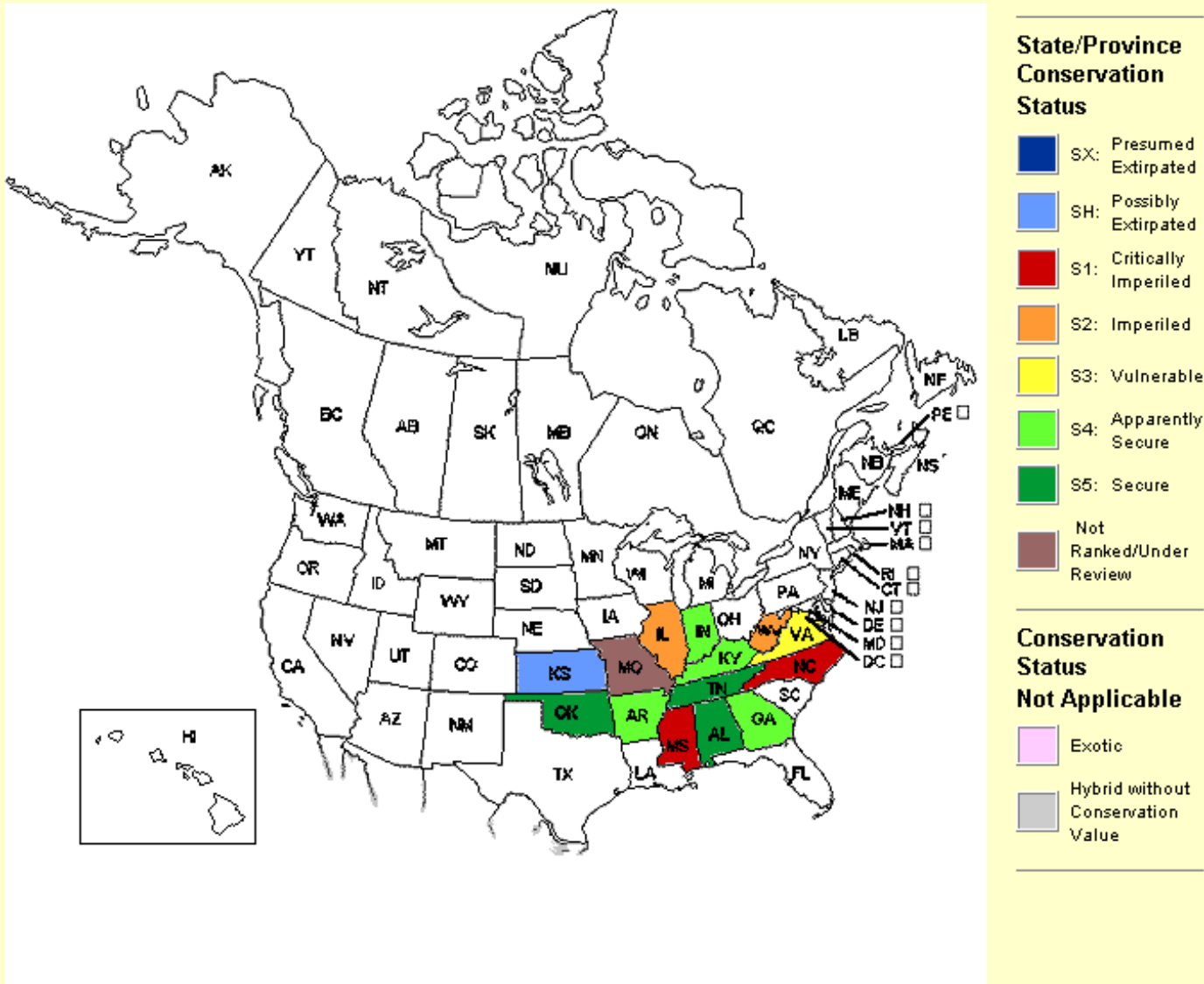
United States	Alabama (S5), Arkansas (S4), Georgia (S4), Illinois (S2), Indiana (S4), Kansas (SH), Kentucky (S4S5), Mississippi (S1), Missouri (SNR), North Carolina (S1), Oklahoma (S5), Tennessee (S5), Virginia (S3S4), West Virginia (S2)
---------------	---

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, MO, MS, NC, OK, TN, VA, WV
---------------	--

Range Map

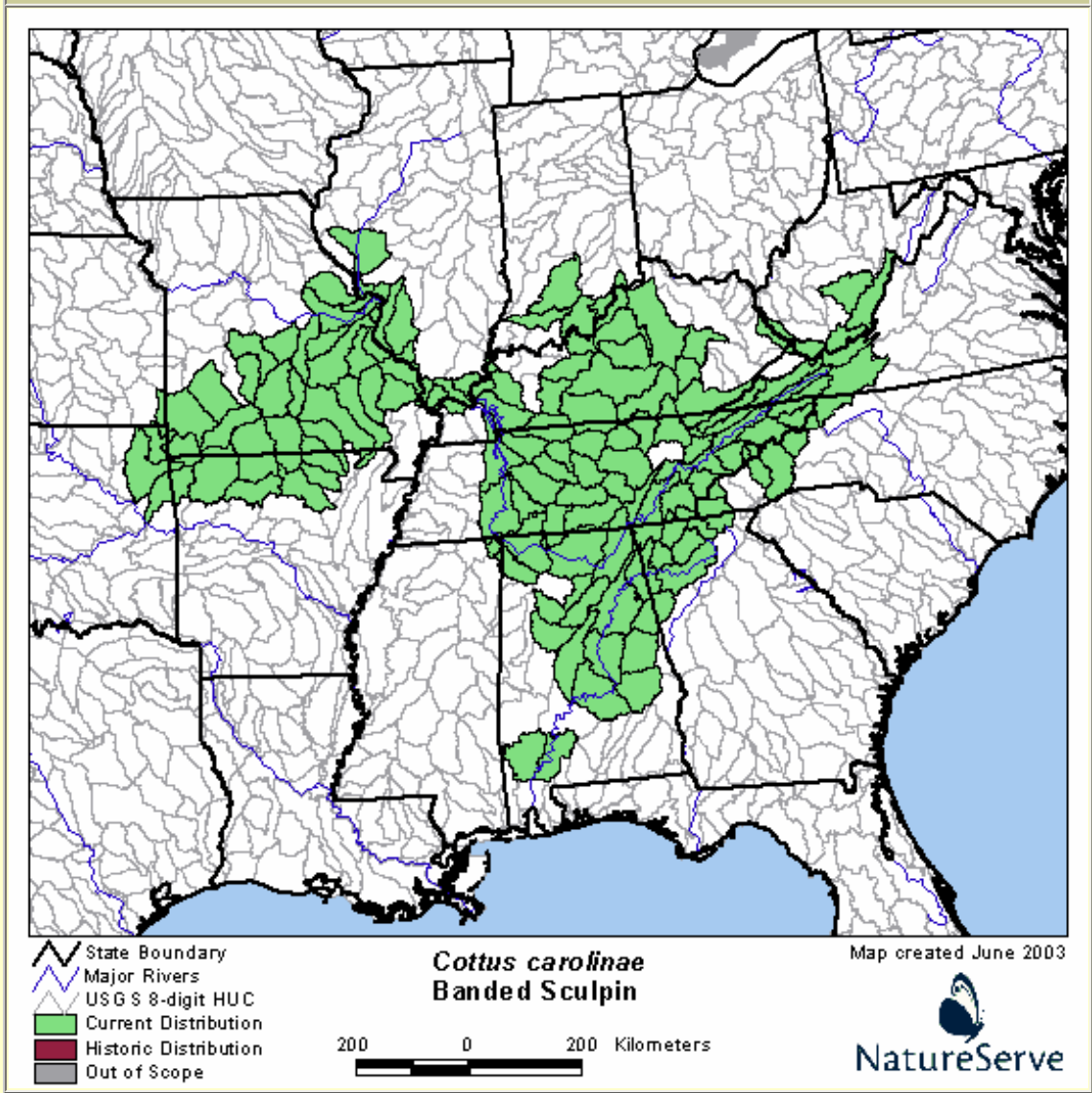
No map available.

Global Range Comments: Upland streams in the Mississippi River basin from the New (upper Kanawha) River drainage, West Virginia and Virginia, across central Kentucky, southern Indiana, and southern and southwestern Illinois to Ozark drainages, southern Missouri, southeastern Kansas, northern Arkansas, and northeastern Oklahoma; south to upland and lowland streams in Mobile Bay drainage, Georgia, Tennessee, and Alabama; common (Page and Burr 1991, which see for subspecies ranges).

U.S. Distribution by County (based on available natural heritage records) ?	
State	County Name (FIPS Code)
KS	Cherokee (20021)
MS	Tishomingo (28141)
NC	Avery (37011), Madison (37115)
WV	Greenbrier (54025), Mercer (54055), Monroe (54063), Pocahontas (54075)

U.S. Distribution by Watershed (based on available natural heritage records) ?	
Watershed Region ?	Watershed Name (Watershed Code)
05	Middle New (05050002), Greenbrier (05050003)
06	Watauga (06010103), Upper French Broad (06010105), Bear (06030006)
11	Spring (11070207)

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



Economic Attributes

Management Summary

Ecology & Life History

Reproduction Comments: Spawns January-February at 9-13 C in south (Lee et al. 1980), probably March-April in Illinois (Smith 1979).

Ecology Comments

Home range in Tennessee was 47 sq m or less; mean density estimated at 0.4/sq m and 0.9/sq m using 2 methods (Greenberg and Holtzman 1987).

Habitat Type: Freshwater

Non-Migrant: N

Locally Migrant: N

Long Distance Migrant: N

Riverine Habitat(s): CREEK, High gradient, MEDIUM RIVER, Moderate gradient, Pool, Riffle, SPRING/SPRING BROOK

Special Habitat Factors: Benthic

Habitat Comments: Small to moderate-sized clear, cool to warm streams (Lee et al. 1980). Gravel and rubble riffles of headwaters, creeks, and small rivers; springs and their effluents (Page and Burr 1991). Probably only in spring-fed streams in Illinois (Smith 1979). Usually under rocks during day, on top of rocks at night in Tennessee (Greenberg and Holtzman 1987). Lays eggs possibly singly or broadcasts them indiscriminately over gravel; no nests have been found.

Adult Food Habits: Invertivore, Piscivore

Immature Food Habits: Invertivore, Piscivore

Food Comments: Eats benthic insects, crustaceans, and small fishes (Smith 1979).

Adult Phenology: Nocturnal

Immature Phenology: Nocturnal

Phenology Comments: Feeds primarily at night in TN (Greenberg and Holtzman 1987).

Length: 12 centimeters

Population/Occurrence Delineation

Group Name: FRESHWATER SCULPINS

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: 10 km

Separation Distance for Suitable Habitat: 10 km

Separation Justification: Data on dispersal and other movements generally are not available. Separation distances (in aquatic kilometers) are arbitrary. 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.

Date: 21Sep2004

Author: Hammerson, G.

Population/Occurrence Viability

Authors/Contributors

Element Ecology & Life History Edition Date: 04May1993

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

- Etnier, David A. and Wayne C. Starnes. 1993. The Fishes of Tennessee. University of Tennessee Press, Knoxville. 681 pp.
- Greenberg, L. A., and D. A. Holtzman. 1987. Microhabitat utilization, feeding periodicity, home range and population size of the banded sculpin, COTTUS CAROLINAE. Copeia 1987: 19-25.
- Koster, W. J. 1936. The life history and ecology of the sculpins (Cottidae) in central New York. Ph.D. thesis, Cornell Univ., Ithaca.
- Koster, W. J. 1937. The food of the sculpin (Cottidae) in central New York. Trans. Am. Fish. Soc. 66:374-382.
- Lee, D. S., C. R. Gilbert, C. H. Hocutt, R. E. Jenkins, D. E. McAllister, and J. R. Stauffer, Jr. 1980. Atlas of North American Freshwater Fishes. North Carolina State Museum of Natural History. 867 pp.
- Nelson, J. S. 1984. Fishes of the world. Second edition. John Wiley & Sons, New York. xv + 523 pp.
- Page, L. M., and B. M. Burr. 1991. A field guide to freshwater fishes: North America north of Mexico. Houghton Mifflin Company, Boston, Massachusetts. 432 pp.
- ROSS, STEPHEN T. 1996. INLAND FISHES OF MISSISSIPPI. SELECTED SPECIES ACCOUNTS. COAUTHORED WITH W. M. BRENNEMAM, W.T. SLACK, M.T. O'CONNELL, AND T.L. PETERSON. ILLUSTRATED BY D.G. ROSS. DRAFT COPY.
- 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.
- Smith, P. W. 1979. The fishes of Illinois. Univ. Illinois Press, Urbana. 314 pp.

The Small Print: Trademark, Copyright, Citation Guidelines, Restrictions on Use, and Information Disclaimer.

Note: Data presented in NatureServe Explorer at <http://www.natureserve.org/explorer> were updated to be current with NatureServe's central databases as of **February 2005**.

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

Trademark Notice: "NatureServe", NatureServe, NatureServe Explorer, The NatureServe logo, and all other names of NatureServe programs referenced herein are trademarks of NatureServe. Any other product or company names mentioned herein are the trademarks of their respective owners.

Copyright Notice: Copyright © 2005 NatureServe, 1101 Wilson Boulevard, 15th Floor, Arlington Virginia 22209, U.S.A. All Rights Reserved. Each document delivered from this server or web site may contain other proprietary notices and copyright information

relating to that document. The following citation should be used in any published materials which reference the web site.

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>.

Restrictions on Use: Permission to use, copy and distribute documents delivered from this server is hereby granted under the following conditions:

1. The above copyright notice must appear in all copies;
2. Any use of the documents available from this server must be for informational purposes only and in no instance for commercial purposes;
3. Some data may be downloaded to files and altered in format for analytical purposes, however the data should still be referenced using the citation above;
4. No graphics available from this server can be used, copied or distributed separate from the accompanying text. Any rights not expressly granted herein are reserved by NatureServe. Nothing contained herein shall be construed as conferring by implication, estoppel, or otherwise any license or right under any trademark of NatureServe. No trademark owned by NatureServe may be used in advertising or promotion pertaining to the distribution of documents delivered from this server without specific advance permission from NatureServe. Except as expressly provided above, nothing contained herein shall be construed as conferring any license or right under any NatureServe copyright.

Information Warranty Disclaimer: All documents and related graphics provided by this server and any other documents which are referenced by or linked to this server are provided "as is" without warranty as to the currentness, completeness, or accuracy of any specific data. NatureServe hereby disclaims all warranties and conditions with regard to any documents provided by this server or any other documents which are referenced by or linked to this server, including but not limited to all implied warranties and conditions of merchantability, fitness for a particular purpose, and non-infringement. NatureServe makes no representations about the suitability of the information delivered from this server or any other documents that are referenced to or linked to this server. In no event shall NatureServe be liable for any special, indirect, incidental, consequential damages, or for damages of any kind arising out of or in connection with the use or performance of information contained in any documents provided by this server or in any other documents which are referenced by or linked to this server, under any theory of liability used. NatureServe may update or make changes to the documents provided by this server at any time without notice; however, NatureServe makes no commitment to update the information

contained herein. Since the data in the central databases are continually being updated, it is advisable to refresh data retrieved at least once a year after its receipt. The data provided is for planning, assessment, and informational purposes. Site specific projects or activities should be reviewed for potential environmental impacts with appropriate regulatory agencies. If ground-disturbing activities are proposed on a site, the appropriate state natural heritage program(s) or conservation data center can be contacted for a site-specific review of the project area (see [Visit Local Programs](#)).

Feedback Request: NatureServe encourages users to let us know of any errors or significant omissions that you find in the data through (see [Contact Us](#)). Your comments will be very valuable in improving the overall quality of our databases for the benefit of all users.



© 2005
NatureServe

Version 4.4 (07 April 2005)
Data last updated: February 2005