

Summary

Conservation Status

Distribution

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Bullhead Minnow

Unique Identifier: AFCJB32040

Informal Taxonomy: Animals, Vertebrates - Fishes

- Bony Fishes - Minnows and Carps

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| Kingdom | Phylum | Class | Order | Family | Genus |
|----------|----------|----------------|---------------|------------|------------|
| Animalia | Craniata | Actinopterygii | Cypriniformes | Cyprinidae | Pimephales |

Genus Size: B - Very small genus (2-5 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:** *Pimephales vigilax***Taxonomic Comments:** NOR chromosomal data support monophyly of the four extant species of PIMEPHALES and suggest that the genus PIMEPHALES belongs in a monophyletic assemblage with, among others, the cyprinid genera CYPRINELLA and OPSOPOEODUS (Li and Gold 1991); Coburn and Cavender (in press) also indicated that these three genera are phylogenetically closely related.

Conservation Status

NatureServe Status

Global Status: G5**Global Status Last Reviewed:** 17Sep1996**Global Status Last Changed:** 17Sep1996**Rounded Global Status:** G5**Nation:** United States**National Status:**

N5

Nation: Canada**National Status:**

NNR

U.S. & Canada State/Province Status

| | |
|---------------|--|
| United States | Alabama (S5), Arkansas (S3S4), Colorado (SNR), Georgia (S3), Illinois (S5), Indiana (S4), Iowa (S4), Kansas (S5), Kentucky (S4S5), Louisiana (S5), Minnesota (SNR), Mississippi (S5), Missouri (SNR), Nebraska (SNR), New Mexico (SNA), Ohio (SNR), Oklahoma (S5), Pennsylvania (SU), South Dakota (S4), Tennessee (S5), Texas (S5), Virginia (S1), West Virginia (S2), Wisconsin (S4) |
|---------------|--|

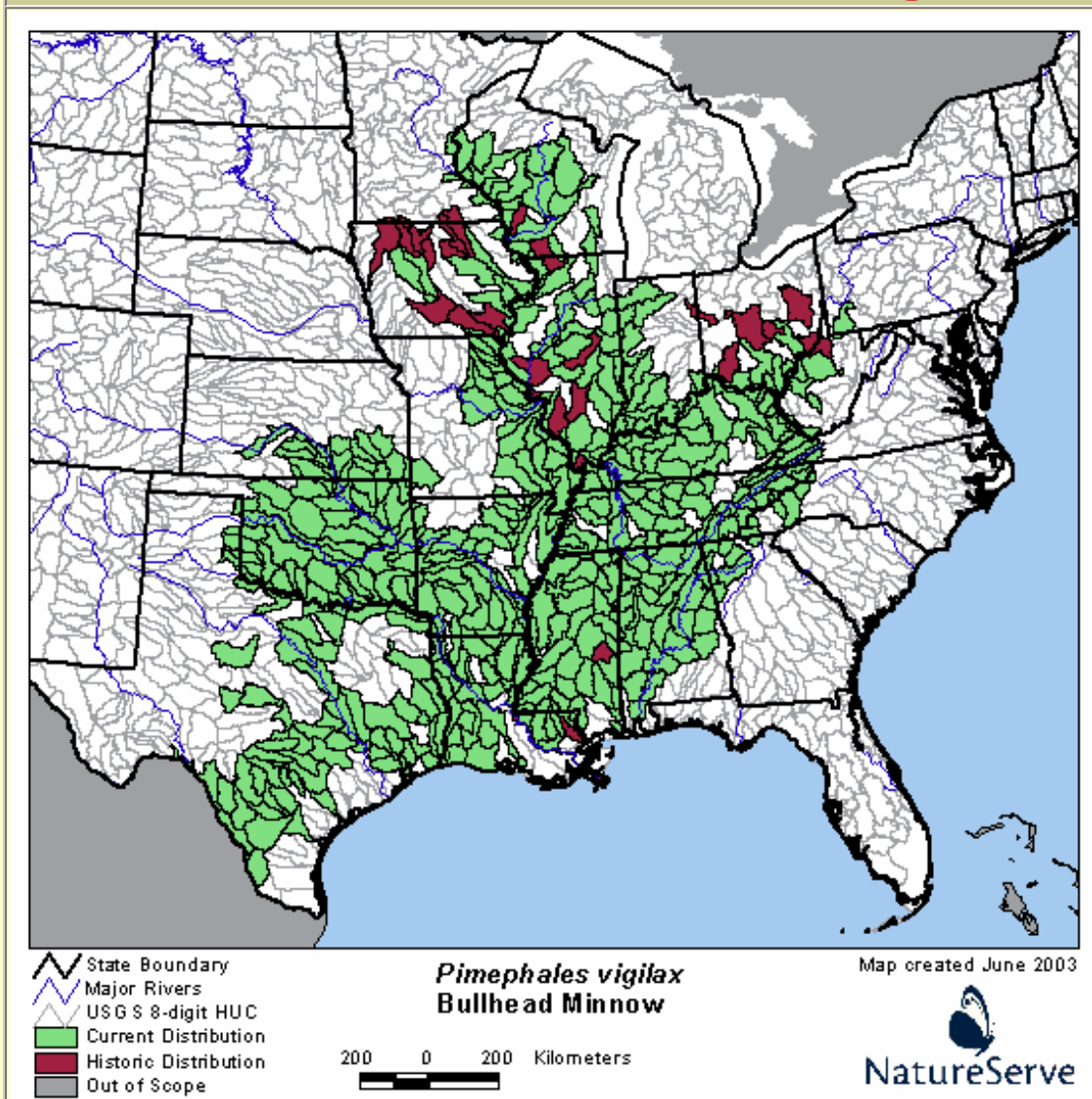
Other Statuses

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

| State | County Name (FIPS Code) |
|-------|--|
| GA | Cherokee (13057), Floyd (13115), Gordon (13129), Murray (13213), Whitfield (13313) |
| PA | Allegheny (42003) |
| VA | Lee (51105), Scott (51169) |
| WV | Kanawha (54039), Wirt (54105), Wood (54107) |

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

| Watershed Region ? | Watershed Name (Watershed Code) |
|--------------------|--|
| 03 | Conasauga (03150101), Coosawattee (03150102), Oostanaula (03150103), Etowah (03150104) |
| 05 | Lower Allegheny (05010009), Upper Ohio-Shade (05030202), Little Kanawha (05030203), Upper Kanawha (05050006) |
| 06 | North Fork Holston (06010101), Powell (06010206) |

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

Economic Attributes

Management Summary

Ecology & Life History

Reproduction Comments: Spawns in late spring and summer. Eggs guarded by male, hatch in 4-6 days at 26-28 C. Sexually mature at age 1 (Becker 1983).

Ecology Comments

Schools in daytime, disperses at night when resting.

Habitat Type: Freshwater

Non-Migrant: N

Locally Migrant: N

Long Distance Migrant: N

Riverine Habitat(s): BIG RIVER, Low gradient, MEDIUM RIVER, Pool

Lacustrine Habitat(s): Shallow water

Special Habitat Factors: Benthic

Habitat Comments: Pools, backwaters, and quiet runs of small to large rivers having continuous flow and low to moderate gradient, over sand, silt, or gravel; most common in medium-sized rivers; also in some reservoirs; tolerant of turbidity; avoids rapid currents; in Guadalupe drainage, Texas, greatest numbers were at upstream end of silty pools (Sublette et al. 1990). Spawns under flat stones or debris in shallow pools or slowly flowing water, in nest constructed and guarded by male (Becker 1983).

Adult Food Habits: Herbivore, Invertivore

Immature Food Habits: Herbivore, Invertivore

Food Comments: Opportunistic omnivore; diet may be mainly algae or aquatic invertebrates or a combination of both (Becker 1983). Primarily insectivorous, feeding on or near bottom on chironomid and trichopteran larvae, also taking other invertebrates and detritus (Sublette et al. 1990).

Length: 9 centimeters

Population/Occurrence Delineation

Group Name: SMALL 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. For some species (e.g., slender chub), an impoundment may constitute a barrier. For others (e.g., flame chub) a stream larger than 4th order may be a

barrier.

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. 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 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 10 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

Authors/Contributors

Element Ecology & Life History Edition Date: 14Sep1993

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 **May 18, 2005**.

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

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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>.

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

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