

Summary

Conservation Status

Distribution

Image

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**Comprehensive Report:** Record 2 of 2 selected.[<< Previous](#) | [Next >>](#)[See All Search Results](#) | [View Glossary](#)***Percina shumardi*** - (Girard, 1859)

River Darter

Unique Identifier: AFCQC04270

Informal Taxonomy: Animals, Vertebrates - Fishes

- Bony Fishes - Perches and Darters



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Kingdom	Phylum	Class	Order	Family	Genus
Animalia	Craniata	Actinopterygii	Perciformes	Percidae	Percina

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:** *Percina shumardi***Taxonomic Comments:** Includes IOA VIGIL Hay, according to Page (1983). IOA VIGIL was regarded as a senior synonym of P. OUACHITAE by Suttkus (1985). The 1991 AFS checklist (Robins et al. 1991) followed Suttkus and changed the name of P. OUACHITAE to P. VIGIL. Page and Burr (1991) evidently disagreed with Suttkus and continued to use the name P. OUACHITAE for the saddleback darter.**Conservation Status****NatureServe Status****Global Status:** G5**Global Status Last Reviewed:** 25Sep1996**Global Status Last Changed:** 25Sep1996**Rounded Global Status:** G5**Reasons:**

Widely distributed from the Hudson Bay basin in southern Canada through the Mississippi River basin to the Gulf of Mexico drainages of the southeastern U.S.; uncommon; may have declined greatly from historic times, but still present in many river systems; likely under-sampled because difficult to capture; has survived in many rivers despite widespread pollution, impoundments, etc.; thought to be stable at present; trends toward improved river water quality in some areas may help; not many new impoundments are being created on major rivers.

Nation: United States**National Status:**

N5

Nation: Canada**National Status:**

N5

U.S. & Canada State/Province Status

United States

Alabama (S3), Arkansas (S3?), Georgia (S1), Illinois (S2S3), Indiana (S4), Iowa (S3), Kansas (S1S2), Kentucky (S4), Louisiana (S4), Michigan (S1), Minnesota (SNR), Mississippi (S4), Missouri (S3), North Dakota (SU), Ohio (S1), Oklahoma (S2), Tennessee (S4), Texas (S4), West Virginia (S1), Wisconsin (S4)

Canada	Manitoba (S5), Ontario (S3)
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Other Statuses

Committee on the Status of Endangered Wildlife in Canada (COSEWIC): Not at Risk (01Jan1989)

NatureServe Conservation Status Factors

Global Abundance: E

Global Abundance Comments: Population estimates not available. Rarely abundant (Dalton 1990), but likely under-sampled due to difficulty of capture with standard techniques.

Estimated Number of Element Occurrences: DE

Estimated Number of Element Occurrences Comments: Ten states in range provided numbers of EOs or other confirmed records; these totaled over 200 occurrences. At least three other states with apparently secure populations did not provide estimates. Total number of occurrences likely is least 250.

Global Short Term Trend: E

Global Short Term Trend Comments: Always has been rare in Canada; present records indicate populations to be stable (Dalton 1990). Populations in Louisiana (Shively 1993, pers. comm.), Iowa (Howell 1993, pers. comm.), Ohio (Rice 1993, pers. comm.), and Texas (Price 1993, pers. comm.) are believed to be stable. Probably occurred frequently in the pre-impounded Ohio River (Kuehne and Barbour 1983); found singly or in small numbers in Ohio in 1925-1950; none were collected in Ohio in 1955-1980 (Trautman 1981).

Global Inventory Needs: Keep abundance and distribution information up to date.

Global Protection: B

Global Protection Comments: One protected occurrence reported in Oklahoma.

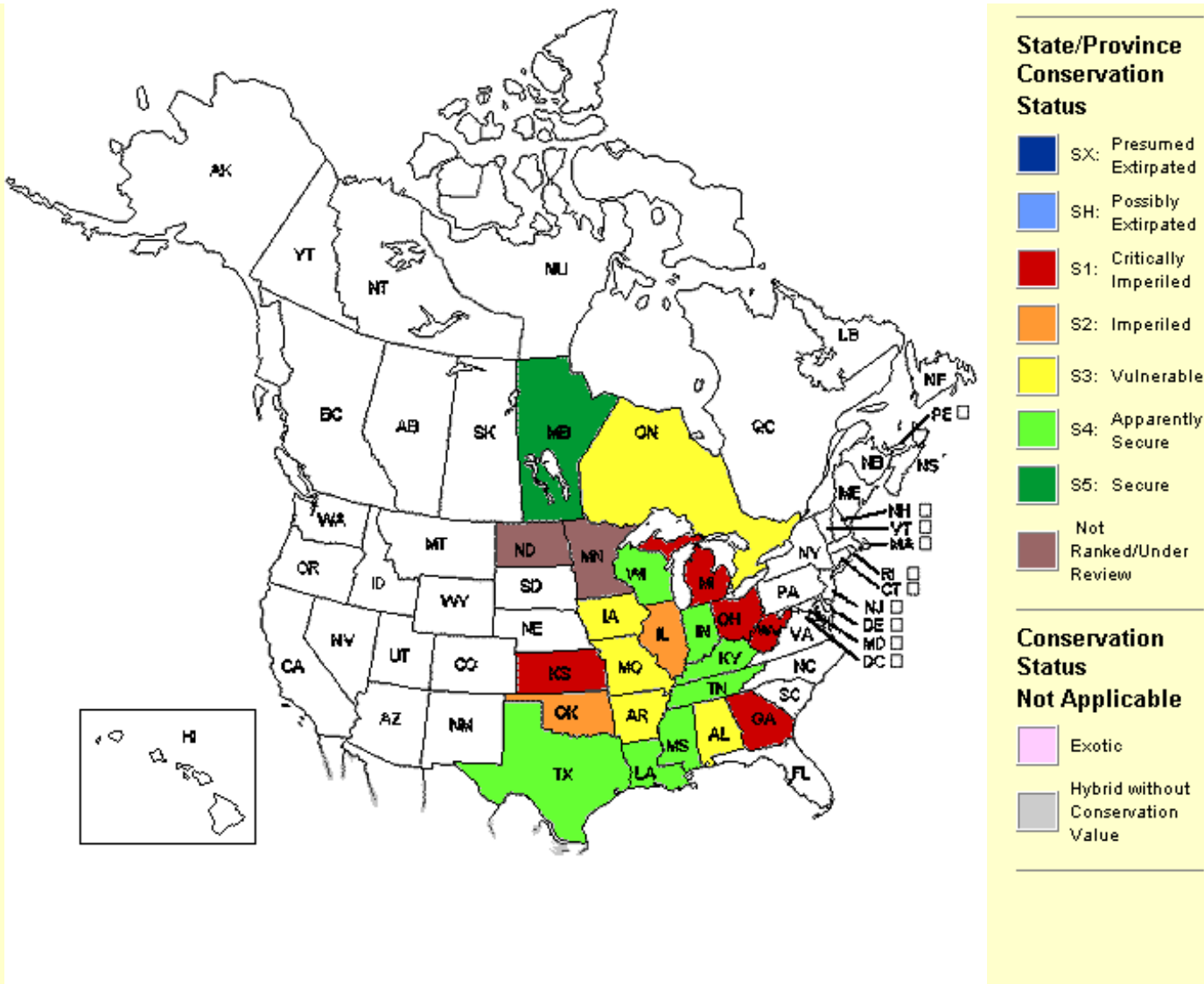
Global Protection Needs: Promote and engage in efforts to preserve or restore riverine habitat to high water quality, natural flow, and native fish communities.

Degree of Threat: BC

Threats: Destruction of habitat seems to be the biggest threat. Impoundments, channelization, and dredging have led to extirpation and declines in some rivers due to loss of shallow water and riffle habitat (Kuehne and Barbour 1983, Lowe-McConnel 1990). Pollution may be a threat, but this species is more tolerant of turbidity than are some darters. Not clear to what extent threats are ongoing, as efforts to improve water quality are ongoing in parts of range, and dam construction has tapered off.

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, GA, IA, IL, IN, KS, KY, LA, MI, MN, MO, MS, ND, OH, OK, TN, TX, WI, WV
Canada	MB, ON

Range Map

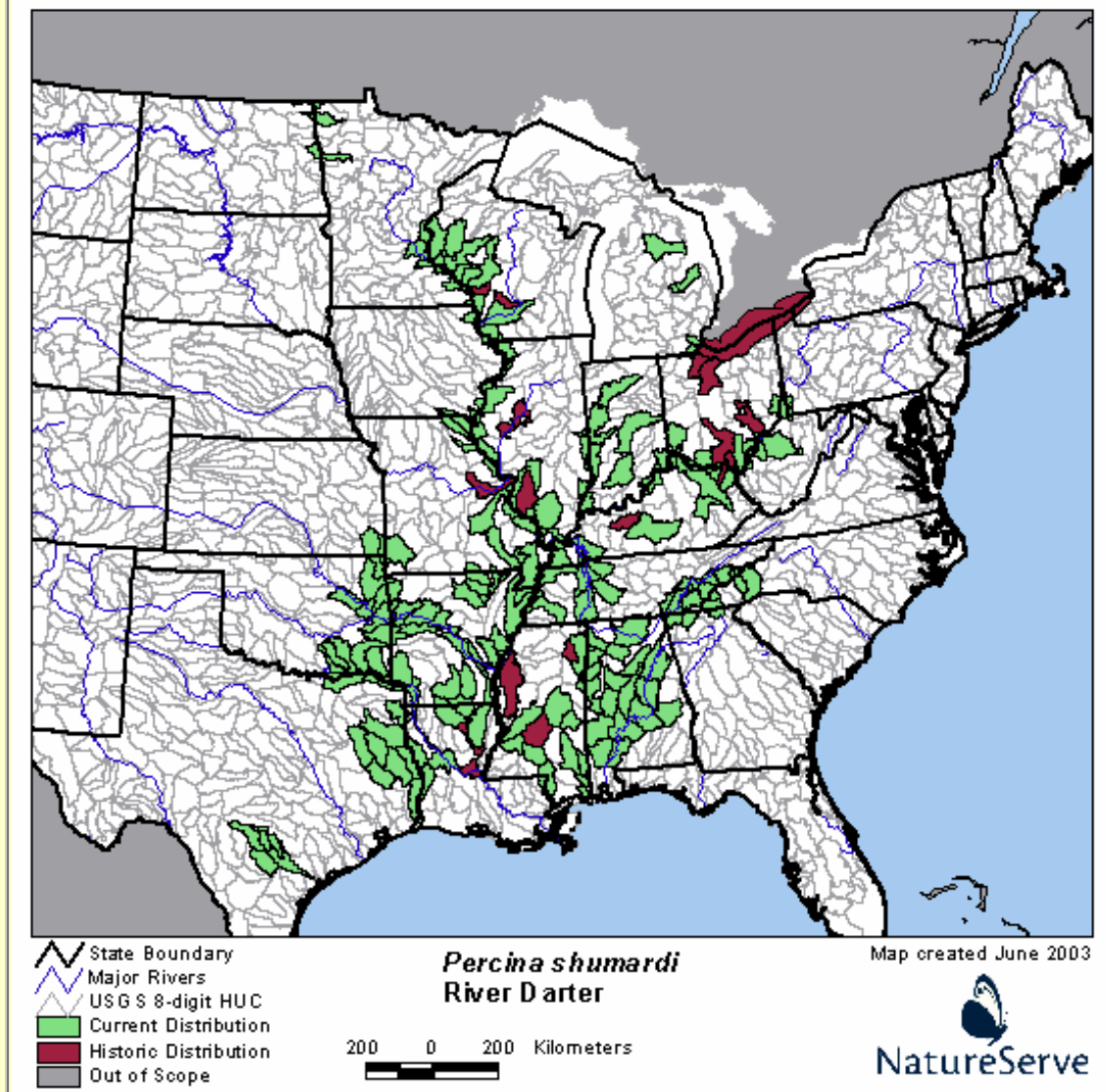
No map available.

Global Range Comments: Hudson Bay basin, Ontario, Manitoba, and North Dakota, and south in Great Lakes and Mississippi River basins to Louisiana; Gulf drainages from Mobile Bay, Alabama, to Neches River, Texas; isolated population in San Antonio Bay drainage, Texas; locally common, the most common darter in very large rivers, including the Mississippi (Page and Burr 1991). Distribution is spotty both among and within river systems. Kuehne and Barbour (1983:52) described the range as follows: "The river darter is present in the lower Mississippi River, and common in the upper Mississippi. It is the most common darter in the Mississippi River channel. It ranges northward into the Hudson Bay drainage of central Manitoba as far as Lake Sipiwesk, then east into western portions of Ontario. It is irregularly distributed in the Ohio River basin (lower), and in somewhat turbid reaches of major tributaries as far east as western Pennsylvania. Populations exist far up in the Tennessee River system. From the lower Mississippi River basin these darters have reached westward into the lower White River, the Arkansas River basin of northeastern Oklahoma and southeastern Kansas, and also the Ouachita-Red basins in Arkansas and Louisiana. Along the Gulf Coast, the river darter is found eastward to the Mobile basin in Alabama and westward to the lower Guadalupe River in Texas."

U.S. Distribution by County (based on available natural heritage records) ?	
State	County Name (FIPS Code)
GA	Floyd (13115)
KS	Cherokee (20021), Labette (20099)
MO	Butler (29023), Cape Girardeau (29031), Dunklin (29069), Jefferson (29099), Lewis (29111), Lincoln (29113), Marion (29127), Mississippi (29133), New Madrid (29143), Pemiscot (29155), Perry (29157), Pike (29163), Ralls (29173), Scott (29201), St. Charles (29183), St. Louis (29189), Ste. Genevieve (29186), Stoddard (29207), Wayne (29223)
OH	Adams (39001), Brown (39015), Hamilton (39061), Scioto (39145), Washington (39167)
OK	McCurtain (40089), Ottawa (40115)
WV	Cabell (54011), Marshall (54051), Mason (54053)

U.S. Distribution by Watershed (based on available natural heritage records) ?	
Watershed Region ?	Watershed Name (Watershed Code)
03	Oostanaula (03150103)
05	Upper Ohio-Wheeling (05030106), Upper Ohio-Shade (05030202), Raccoon-Symmes (05090101)
07	Bear-Wyaconda (07110001), The Sny (07110004), Peruque-Piasa (07110009), Cahokia-Joachim (07140101), Meramec (07140102), Upper Mississippi-Cape Girardeau (07140105)
08	Lower Mississippi-Memphis (08010100), Lower St. Francis (08020203), Little River Ditches (08020204)
11	Upper Black (11010007), Middle Neosho (11070205), Lake O' the Cherokees (11070206), Spring (11070207), Upper Little (11140107)

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



Economic Attributes

Management Summary

Biological Research Needs: Research life-history, reproductive biology, genetics, and ecology. Develop effective sampling techniques.

Ecology & Life History

Short General Description: Small fish.

Reproduction Comments: Spawns January-April in Texas, February-March in Tennessee, April-May in Illinois, possibly June or July in Manitoba (Hubbs 1985).

Habitat Type: Freshwater

Non-Migrant: N

Locally Migrant: Y

Long Distance Migrant: N

Mobility and Migration Comments: Migrates upstream in spring, downstream in fall (Trautman 1981)

Riverine Habitat(s): BIG RIVER, High gradient, MEDIUM RIVER, Riffle

Special Habitat Factors: Benthic

Habitat Comments: Large rivers and lower part of tributaries; deep chutes and riffles where current is swift and bottom is coarse gravel or rock. Smaller individuals generally occur in slower water than do larger ones. Adults generally at depth of 1 m or more. May typically spawn at depths of 1/2 m or a little more in areas of strong current, scattered rubble, and associated clean gravel (Kuehne and Barbour 1983).

Adult Food Habits: Invertivore

Immature Food Habits: Invertivore

Food Comments: Young eat mainly microcrustaceans, adults eat mainly midge and caddisfly larvae. Some populations feed heavily on snails.

Adult Phenology: Diurnal

Immature Phenology: Diurnal

Phenology Comments: Diurnal feeder.

Length: 7 centimeters

Population/Occurrence Delineation

Group Name: DARTERS

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. Though larvae of some species may drift with the current, Turner (2001) found no significant relationship between a larval transport index and gene flow among several different darter species.

Separation distances are arbitrary but reflect the likely low probability that two occupied locations separated by less than several kilometers of aquatic habitat would represent truly independent populations.

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 generally 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

NatureServe Conservation Status Factors Edition Date: 08Feb1995

NatureServe Conservation Status Factors Author: Soule, J., B. Van Dam, and G. Hammerson

Element Ecology & Life History Edition Date: 29Apr1996

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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Acknowledgement Statement for Bird Range Maps of North America:

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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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