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[View Glo](#)***Erimyzon sucetta*** - (Lacepède, 1803)

Lake Chubsucker

Unique Identifier: ELEMENT_GLOBAL.2.104017

Element Code: AFCJC05020

Informal Taxonomy: Animals, Vertebrates - Fishes - Bony Fishes - Suckers



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Kingdom	Phylum	Class	Order	Family	Genus
Animalia	Craniata	Actinopterygii	Cypriniformes	Catostomidae	Erimyzon

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:** *Erimyzon sucetta***Taxonomic Comments:**

Two subspecies formerly were recognized, but most authors have regarded this species as monotypic (Lee et al. 1980).

Harris and Mayden (2001) used molecular data to examine phylogenetic relationships of major clades of Catostomidae. In all trees, SCARTOMYZON was paraphyletic and embedded in MOXOSTOMA, and CATOSTOMUS was never recovered as monophyletic (XYRAUCHEN was embedded within CATOSTOMUS). They concluded that the phylogenetic relationships and taxonomic composition of taxa presently included in MOXOSTOMA and SCARTOMYZON are in need of further study, as are the relationships and composition of the genera CATOSTOMUS, CHASMISTES, DELTISTES, and XYRAUCHEN, and the phylogenetic affinities of ERIMYZON and MINYTREMA.

See also Smith (1992) for a study of the phylogeny and biogeography of the Catostomidae.

Conservation Status**NatureServe Status****Global Status:** G5**Global Status Last Reviewed:** 17Aug2001**Global Status Last Changed:** 17Aug2001**Rounded Global Status:** G5 - Secure**Reasons:**

Fairly large range primarily in the southeastern U.S. and southern Great Lakes states; populations have been reduced or eliminated in some areas due to habitat alteration (e.g., siltation) caused by agricultural practices; secure throughout at least 50% of the range.

Nation: United States**National Status:** N5**Nation:** Canada**National Status:**N2

U.S. & Canada State/Province Status	
United States	Alabama (S5), Arkansas (S2?), Florida (SNR), Georgia (S5), Illinois (S2S3), Indiana (S3), Iowa (SX), Kentucky (S2), Louisiana (S5), Michigan (S4), Mississippi (S5), Missouri (S2), Nebraska (SNA), New York (SH), North Carolina (S3), North Dakota (SNR), Ohio (S2), Oklahoma (S3), Pennsylvania (SX), South Carolina (SNR), Tennessee (S3S4), Texas (S3), Virginia (S2), Wisconsin (S3)
Canada	Ontario (S2)

Other Statuses**Committee on the Status of Endangered Wildlife in Canada (COSEWIC):** Threatened (01Nov2001)**NatureServe Conservation Status Factors****Global Abundance:** 10,000 to >1,000,000 individuals**Global Abundance Comments:**

Common on the lower Coastal Plain, less abundant in inland portions of the range (Lee et al. 1980). Occasionally abundant in lakes in Alabama and the Mobile basin; abundance may be overlooked because individuals generally do not bite a hook (Mettee et al. 1996). In Wisconsin, collections generally produce only 1-2 individuals per site (Becker 1983). Sporadic and rare in Kentucky (Burr and Warren 1986).

Estimated Number of Element Occurrences:81 to >300

Estimated Number of Element Occurrences Comments:Lee et al. (1980) mapped hundreds of collection sites that represent at least 100 distinct occurrences. Likely there are at least 100 extant occurrences. Trautman (1981) mapped 6 collection sites in Ohio for the period 1955-1980. Smith (1979) mapped about two dozen post-1950 collection sites in Illinois; these encompassed about 6 distinct clusters of sites. Burr and Warren (1986) mapped 16 collection sites in Kentucky; these represent perhaps 14 distinct occurrences.

Global Short Term Trend: Declining (decline of 10-30%)**Global Short Term Trend Comments:**

Declining in many parts of the range (Mandrak and Crossman 1996), but ranked as currently stable in the southern United States (Warren et al. 2000). Becoming increasingly rare and localized in Missouri and could disappear there if trends continue (Pflieger 1997). Abundance likely has declined in Arkansas in recent decades (Robison and Buchanan 1988). Likely has declined throughout Tennessee range (Etnier and Starnes 1993). In Ohio, several populations greatly decreased in abundance or disappeared during 1925-1950, and several populations were extirpated during 1955-1980 (Trautman 1981).

Smith (1979) indicated that this fish is apparently extirpated from various localities in southern Illinois. Extirpated in Iowa (Roosa 1977). Known in Pennsylvania from only an old record from the Erie Basin; not collected there in recent years (Cooper 1983).

Global Long Term Trend: Substantial decline (decline of 50-75%)

Global Protection: Unknown whether any occurrences are appropriately protected and managed

Degree of Threat: Substantial, imminent threat

Threat Scope: High

Threat Severity: Moderate

Threat Immediacy: High

Threats:

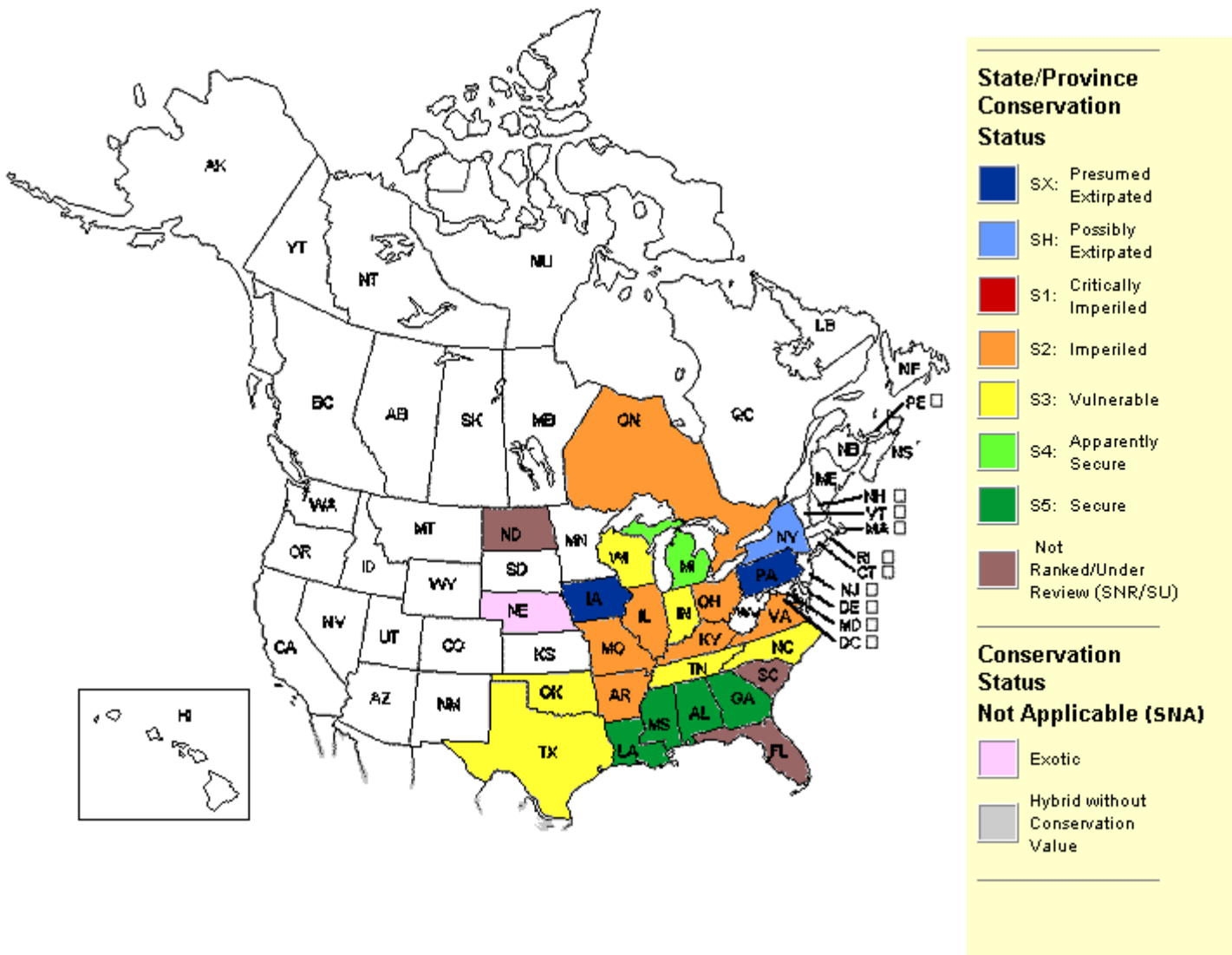
Populations apparently have declined in areas subject to siltation (Lee et al. 1980). In Tennessee, perhaps extirpated from many habitats altered by agricultural practices (Etnier and Starnes 1993). Almost certainly was more abundant in the Lowlands region of southeastern Missouri before that region was ditched and drained (Pflieger 1997). A decline in abundance in Arkansas likely has occurred due to large-scale clearing of land throughout the Delta region (Robison and Buchanan 1988). Threatened by siltation and drainage of limited habitat in Canada (Mandrak and Crossman 1996). Burr and Warren (1986) recommended a status of "threatened" in Kentucky and implied that water acidification from mining was a threat (Burr and Warren 1986:366).

Environmental Specificity: Narrow. Specialist or community with key requirements common.

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, FL, GA, IA, IL, IN, KY, LA, MI, MO, MS, NC, ND, NE, NY, OH, OK, PA, SC, TN, TX, VA, WI
Canada	ON

Range Map

No map available.

Global Range: 200,000-2,500,000 square km (about 80,000-1,000,000 square miles)

Global Range Comments:

Atlantic Slope from southern Florida to southeastern Virginia; Gulf Slope drainages from southern Florida (Charlotte Harbor) to the Guadalupe River, Texas; Great Lakes and Mississippi River basin lowlands from southern Ontario to Wisconsin and south to the Gulf; sporadic in the north, common on the lower Coastal Plain (Page and Burr 1991). Occurs in all Mobile basin drainages below the Fall Line and in all coastal drainages between the Escatawpa and Chattahoochee drainages in Alabama (Mettee et al. 1996).

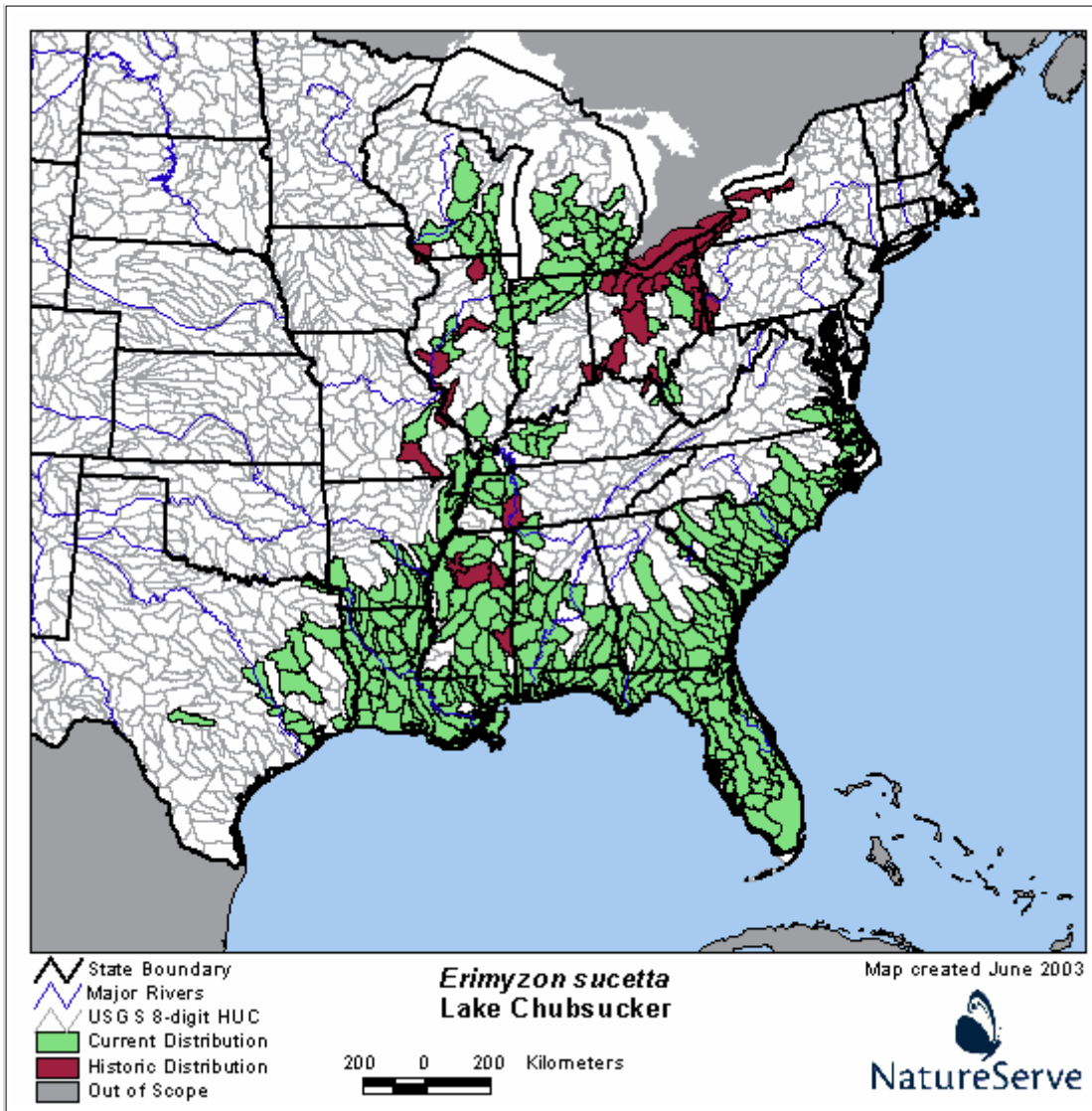
U.S. Distribution by County (based on available natural heritage records) ?	
State	County Name (FIPS Code)
AR	Arkansas (05001), Ashley (05003), Bradley (05011), Calhoun (05013), Clark (05019), Columbia (05027), Desha (05041), Ouachita (05103)

KY	Ballard (21007), Caldwell (21033), Carlisle (21039), Fulton (21075), Graves (21083), Henderson (21101), Hickman (21105), Hopkins (21107), Livingston (21139), McCracken (21145), Mclean (21149), Muhlenberg (21177), Ohio (21183)
MO	Bollinger (29017), Cape Girardeau (29031), Carter (29035), Crawford (29055), Douglas (29067), Dunklin (29069), Madison (29123), Mississippi (29133), New Madrid (29143), Pemiscot (29155), Scott (29201), Stoddard (29207), Wayne (29223)
NY	Erie (36029), Monroe (36055), Onondaga (36067), Wayne (36117)
OH	Ashland (39005), Champaign (39021), Gallia (39053), Geauga (39055), Jackson (39079), Licking (39089), Logan (39091), Pickaway (39129), Portage (39133), Summit (39153), Williams (39171)
VA	Isle of Wight (51093), Southampton (51175), Suffolk (city) (51800), Surry (51181), Sussex (51183)
WI	Columbia (55021), Crawford (55023), Dane (55025), Fond Du Lac (55039), Grant (55043), Green Lake (55047), Iowa (55049), Jefferson (55055), Kenosha (55059), Manitowoc (55071), Marquette (55077), Milwaukee (55079), Racine (55101), Richland (55103), Sauk (55111), Shawano (55115), Sheboygan (55117), Walworth (55127), Washington (55131), Waukesha (55133), Waupaca (55135), Waushara (55137), Winnebago (55139)

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

Watershed Region ?	Watershed Name (Watershed Code)
03	Nottoway (03010201), Blackwater (03010202), Albemarle (03010205)
04	Manitowoc-Sheboygan (04030101), Upper Fox (04030201), Wolf (04030202), Pike-Root (04040002), Milwaukee (04040003), St. Joseph (04100003), Cuyahoga (04110002)
05	Tuscarawas (05040001), Mohican (05040002), Upper Scioto (05060001), Lower Scioto (05060002), Upper Great Miami (05080001), Raccoon-Symmes (05090101), Rough (05110004), Lower Green (05110005), Upper Cumberland (05130101), Tradewater (05140205), Lower Ohio (05140206)
06	Lower Tennessee (06040006)
07	Grant-Little Maquoketa (07060003), Lower Wisconsin (07070005), Upper Rock (07090001), Crawfish (07090002), Des Plaines (07120004), Upper Fox (07120006), Meramec (07140102), Whitewater (07140107)
08	Lower Mississippi-Memphis (08010100), Bayou De Chien-Mayfield (08010201), New Madrid-St. Johns (08020201), Upper St. Francis (08020202), Lower St. Francis (08020203), Little River Ditches (08020204), Lower White (08020303), Lower Arkansas (08020401), Little Missouri (08040103), Lower Ouachita-Smackover (08040201), Lower Saline (08040204), Bayou D'arbonne (08040206)

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



Ecology & Life History

Basic Description: A fish (chubsucker) that reaches a length of up to 41 cm.

Reproduction Comments:

Spawns in spring and early summer; eggs hatch in about a week; sexually mature at age III (Becker 1983). Lives up to 5-6 years (Etnier and Starnes 1993).

Habitat Type: Freshwater

Non-Migrant: N

Locally Migrant: N

Long Distance Migrant: N

Riverine Habitat(s): Low gradient

Lacustrine Habitat(s): Shallow water

Palustrine Habitat(s): FORESTED WETLAND

Special Habitat Factors: Benthic



Habitat Comments:

Ponds, lakes, oxbows, sloughs, swamps, impoundments, and similar waters of little or no flow that are clear and have bottoms of sand or silt mixed with organic debris; aquatic vegetation usually is present; rarely occurs in streams (Lee et al. 1980, Page and Burr 1991). Eggs are broadcast over beds of vegetation or in gravelly area cleared by male (Scott and Crossman 1973). Spawns usually over gravel in streams or in still water over vegetation (Etnier and Starnes 1993).

Adult Food Habits: Herbivore, Invertivore

Immature Food Habits: Herbivore, Invertivore

Food Comments: Eats small crustaceans, chironomid larvae, algae, and other small aquatic organisms (Becker 1983).

Length: 39 centimeters

Economic Attributes**Management Summary****Population/Occurrence Delineation**

Group Name: MEDIUM SUCKERS

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.

Mapping Guidance:

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 migrations and seasonal changes in habitat to ensure that spawning areas and nonspawning areas for a single population are not artificially segregated as different occurrences simply because there have been no collections/observations in an intervening area that may exceed the separation distance.

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 catostomids are arbitrary but reflect the presumption that movements and appropriate separation distances generally should increase with fish size. Hence small, medium, and large catostomids, 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 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.

Notes: This Specs Group includes catostomids that typically are 20-40 cm in adult standard length.

Population/Occurrence Viability



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



Authors/Contributors



NatureServe Conservation Status Factors Edition Date: 28Aug2001

NatureServe Conservation Status Factors Author: Dirrigl, F., Jr., and G. Hammerson

Element Ecology & Life History Edition Date: 13Sep1995

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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"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."

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