Comprehensive Report: Record **2** of **2** selected.
See All Search Results | View Glossary
<< Previous | Next >>
---Jump to Section---

Catostomus commersoni - (Lacepede, 1803)
White Sucker
Unique Identifier: AFCJC02060
Informal Taxonomy: Animals, Vertebrates - Fishes - Bony Fishes - Suckers

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

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: *Catostomus commersoni*
Taxonomic Comments: See Smith (1992) for a study of the phylogeny and biogeography of the Catostomidae.

---Jump to Section---

Conservation Status

NatureServe Status

Global Status: G5
Global Status Last Reviewed: 18Sep1996
Global Status Last Changed: 18Sep1996
Rounded Global Status: G5

Nation: United States
National Status:
N5

Nation: Canada
National Status:
N5

U.S. & Canada State/Province Status	
United States	Alabama (S4), Arkansas (S3?), Colorado (S5), Connecticut (S5), Delaware (S5), District of Columbia (S4), Georgia (S3S4), Illinois (S5), Indiana (S4), Iowa (S5), Kansas (S5), Kentucky (S4S5), Maine (S5), Maryland (S5), Massachusetts (S5), Michigan (S5), Minnesota (SNR), Missouri (SNR), Montana (S5), Navajo Nation (SNA), Nebraska (S4), New Hampshire (S5), New Jersey (S5), New Mexico (S5), New York (S5), North Carolina (S5), North Dakota (SNR), Ohio (SNR), Oklahoma (S3), Pennsylvania (S5), Rhode Island (S5), South Carolina (SNR), South Dakota (S5), Tennessee (S5), Utah (SNA), Vermont (S5), Virginia (S5), West Virginia (S5), Wisconsin (S5), Wyoming (S5)
Canada	Alberta (S5), British Columbia (S5), Labrador (S5), Manitoba (S5), New Brunswick (S5), Northwest Territories (SNR), Nova Scotia (S5), Ontario (S5), Quebec (S5), Saskatchewan (S5), Yukon Territory (SNR)

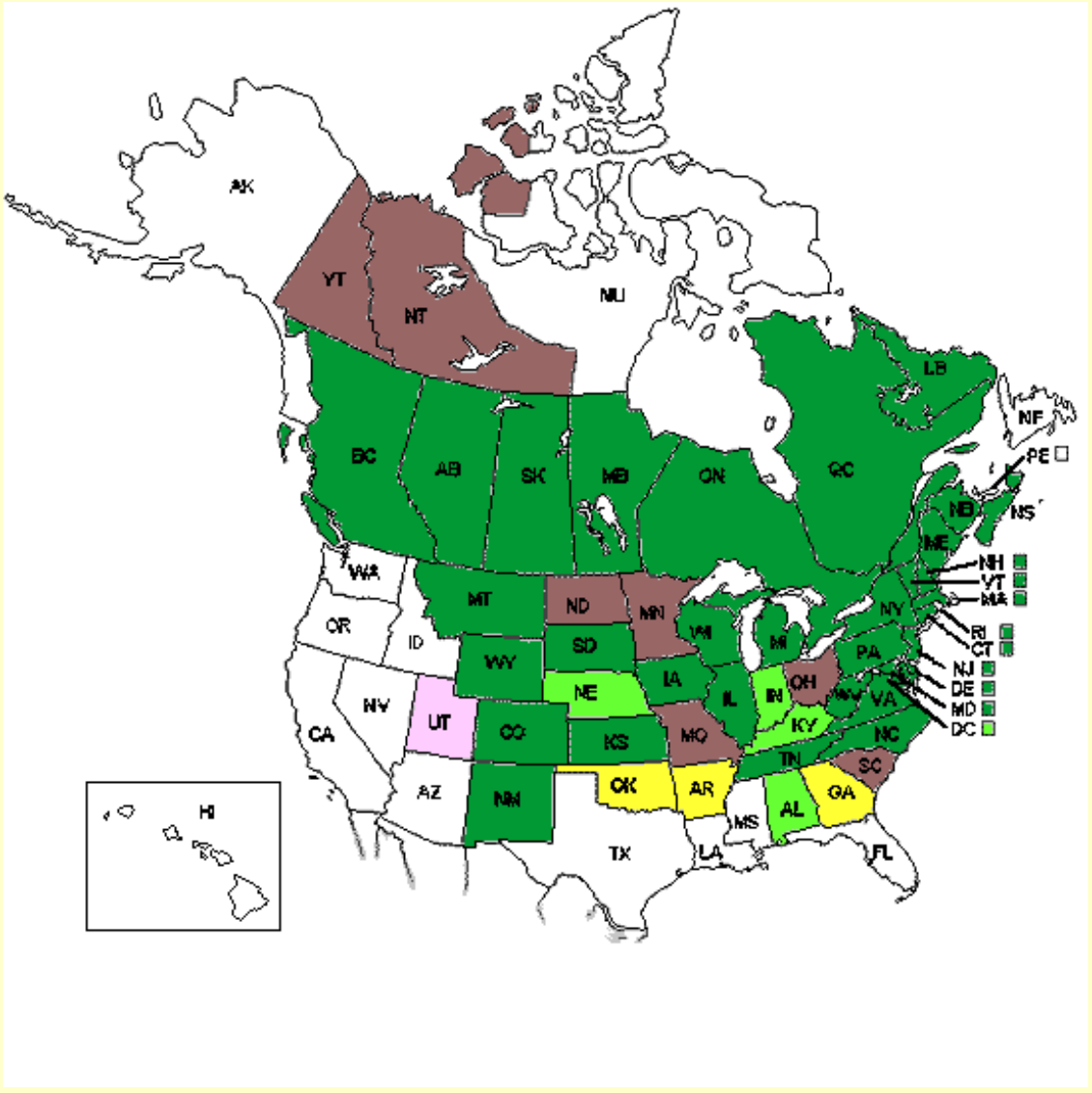
Other Statuses

NatureServe Conservation Status Factors

---Jump to Section---

Distribution

U.S. States and Canadian Provinces



State/Province Conservation Status

- SX: Presumed Extirpated
- SH: Possibly Extirpated
- S1: Critically Imperiled
- S2: Imperiled
- S3: Vulnerable
- S4: Apparently Secure
- S5: Secure
- Not Ranked/Under Review

Conservation Status Not Applicable

- Exotic
- Hybrid without Conservation Value

Endemism: occurs (regularly, as a native taxon) in multiple nations

U.S. & Canada State/Province Distribution	
United States	AL, AR, CO, CT, DC, DE, GA, IA, IL, IN, KS, KY, MA, MD, ME, MI, MN, MO, MT, NC, ND, NE, NH, NJ, NM, NN, NY, OH, OK, PA, RI, SC, SD, TN, UT, VA, VT, WI, WV, WY
Canada	AB, BC, LB, MB, NB, NS, NT, ON, QC, SK, YT

Range Map

No map available.

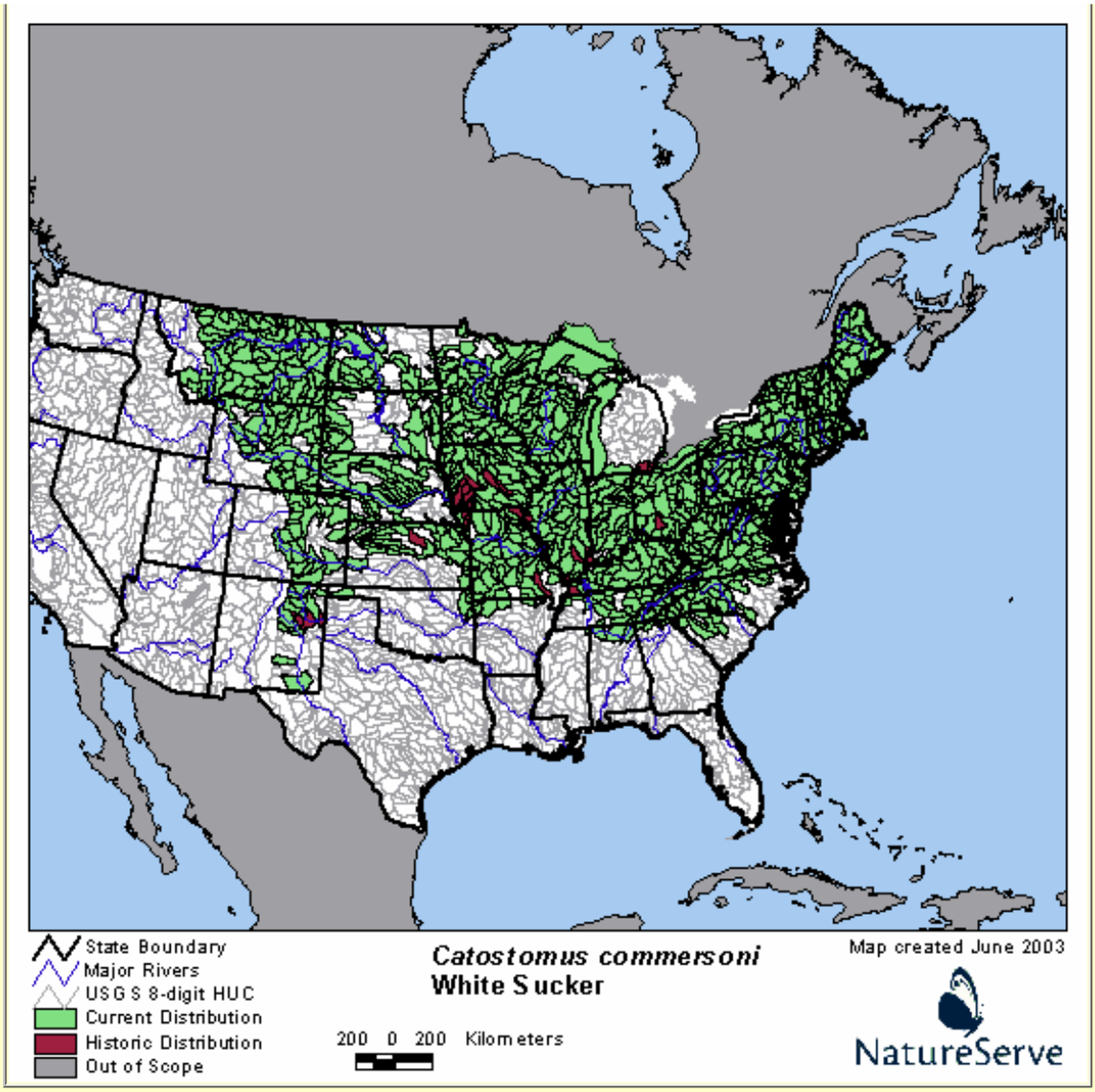
Global Range Comments: Atlantic, Arctic, Great Lakes, and Mississippi River basins from Labrador to the Mackenzie

River, south to the Tennessee River drainage, northern Alabama, and the Arkansas River drainage, New Mexico; south on the Atlantic Slope to the Santee River drainage, South Carolina; upper Rio Grande drainage, New Mexico; Skeena and Fraser river drainages (Pacific Slope), British Columbia; introduced in the Colorado River drainage, Wyoming, Colorado, and Utah (Page and Burr 1991).

U.S. Distribution by County (based on available natural heritage records)	
State	**County Name (FIPS Code)**
AL	Madison (01089)
NM	Bernalillo (35001), Catron (35003), Cibola (35006), Colfax (35007), Eddy (35015), Guadalupe (35019), Harding (35021), Lincoln (35027), Mora (35033), Rio Arriba (35039), San Juan (35045), San Miguel (35047), Sandoval (35043), Santa Fe (35049), Taos (35055), Union (35059), Valencia (35061)

U.S. Distribution by Watershed (based on available natural heritage records)	
Watershed Region	**Watershed Name (Watershed Code)**
06	Wheeler Lake (06030002)
11	Canadian headwaters (11080001), Cimarron (11080002), Upper Canadian (11080003), Mora (11080004), Ute (11080007), Upper Beaver (11100101)
13	Conejos (13010005), Upper Rio Grande (13020101), Rio Chama (13020102), Rio Grande-Santa Fe (13020201), Jemez (13020202), Rio Grande-Albuquerque (13020203), Rio San Jose (13020207), Pecos headwaters (13060001), Pintada Arroyo (13060002), Rio Hondo (13060008), Upper Pecos-Black (13060011)
14	Upper San Juan (14080101), Animas (14080104), Middle San Juan (14080105)
15	San Francisco (15040004)

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



Economic Attributes

---Jump to Section---

Management Summary

---Jump to Section---

Management Requirements: Often dominates a body of water, so fishery managers sometimes reduce the number of white suckers in lakes (Sublette et al. 1990).

Ecology & Life History

---Jump to Section---

General Description: See Snyder and Muth (1990) for a guide to the identification of larvae and early juveniles.

Reproduction Comments: Spawns usually in spring (or early summer). Eggs hatch in 5-15 days, depending on temperature. Sexually mature in 3-8 years, depending on locality; males mature at younger age than do females (Becker 1983, Scott and Crossman 1973). Mature individuals may not spawn every year (Trippel and Harvey, 1989, Can. J. Zool. 67:2180-2188).

Habitat Type: Freshwater

Non-Migrant: N

Locally Migrant: Y

Long Distance Migrant: N

Mobility and Migration Comments: May migrate dozens of kilometers between spawning and nonspawning habitats (Becker 1983).

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

Lacustrine Habitat(s): Deep water, Shallow water

Special Habitat Factors: Benthic

Habitat Comments: In a wide variety of lake and stream habitats. Adults may reside temporarily in spawning stream before returning to lake. Usually in small, clear, cool creeks and small to medium rivers (Page and Burr 1991). Spawns in swift water or rapids of lake tributaries or on lake shoals, beaches, or rivermouths (areas with wave action in lentic habitats); usually in water less than 30 cm deep. Eggs sink and usually stick to and become lodged in gravel.

Adult Food Habits: Herbivore, Invertivore

Immature Food Habits: Herbivore, Invertivore

Food Comments: Larvae feed near surface on protozoans, diatoms, small crustaceans, and bloodworms. Adults feed opportunistically on bottom organisms, both plant and animal (e.g., chironomid larvae, zooplankton, small crayfishes) (Becker 1983, Sublette et al. 1990).

Adult Phenology: Circadian

Immature Phenology: Circadian

Phenology Comments: Active day and night.

Length: 64 centimeters

---Jump to Section---

Population/Occurrence Delineation

Group Name: LARGE SUCKERS

Use Class: Not applicable
Subtype(s): Spawning Area
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 10 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. For example, individual blue suckers may move more than 160 km between spawning and nonspawning habitats; these widely separated locations are part of the same occurrence.
Separation Barriers: Dam lacking a suitable fishway; high waterfall; upland habitat.
Separation Distance for Unsuitable Habitat: 20 km
Separation Distance for Suitable Habitat: 20 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 20 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: 22May2001
Author: Hammerson, G.
Notes: This Specs Group includes catostomids that typically are larger than 40 cm in adult standard length.

Population/Occurrence Viability

---Jump to Section---

Authors/Contributors

---Jump to Section---

Element Ecology & Life History Edition Date: 01Sep1994
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

---Jump to Section---

- Atton, F.M. and J.J. Merkowsky. 1983. Atlas of Saskatchewan Fish. Saskatchewan Department of Parks and Renewable Resources, Fisheries Branch Technical Report 83-2. 281pp.
- BEAMISH, R.J. AND E.J. CROSSMAN. 1977. VALIDITY OF THE SUBSPECIES DESIGNATION FOR THE DWARF WHITE SUCKER (CATOSTOMUS COMMERSONI UTAWANA). J. FISH RES. BOARD CAN. 34(3):371-378.
- Beamish, R.J. 1974. Growth and survival of white suckers, CATOSTOMUS COMMERSONII, in an acidified lake. J. Fish. Res. Board Can. 31(1):49-54.
- Becker, G. C. 1983. Fishes of Wisconsin. Univ. Wisconsin Press, Madison. 1052 pp.
- Bigelow, N.K. 1923. The food of young suckers, CATOSTOMUS COMMERSONII, in Lake Nipigon. Univ. Toronto Stud. Bio. ser. 24. Publ. Ont. Fish. Res. Lab. 21: 83-115.
- Dence. W. A. 1948. Life history, ecology, and habits of the dwarf sucker, CATASTOMUS COMMERSONI UTAWANA (Mather), at the Huntington Wildlife Station. Roos. Wildl.Bull. 8(4):81-150.
- Etnier, David A. and Wayne C. Starnes. 1993. The Fishes of Tennessee. University of Tennessee Press, Knoxville. 681 pp.
- Fisheries Branch. 1991. Fish Species Distributions in Saskatchewan. Report 91-7. Saskatchewan Parks and Renewable Resources, Fisheries Branch. Regina. 102pp.
- GEORGE, C.J. 1980. THE FISHES OF THE ADIRONDACK PARK. NYS DEPT. ENVIRON. CONSERV. ALBANY, NY 94 PP.
- Goodyear, C. D., et al. 1982. Atlas of the spawning and nursery areas of Great Lakes fishes. Vol. XIII. Reproductive characteristics of Great Lakes fishes. U.S. Fish and Wildl. Serv. FWS/OBS-82/52.
- Hoover, E.E. (ED.) 1938. Biological Survey of the Merrimack Watershed. Survey Report No.3. New Hampshire Fish and Game Department., Concord. 238 pp.
- Huffaker, Steve. 1971. Upper West Fork of the Whitewater River Stream Survey Report; Wayne, Randolph, Rush, Henry, Fayette Counties. Indiana Department of Natural Resources, Division of Fish and Wildlife. 28 pp.
- 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.
- Lee, D. S., C. R. Gilbert, C. H. Hocutt, R. E. Jenkins, D. E. McCallister, and J. R. Stauffer, Jr. 1980. Atlas of North American freshwater fishes. North Carolina State Museum of Natural History, Raleigh. 867 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.
- Platania, S.P. 1990. Biological summary of the 1987 to 1989 New Mexico-Utah ichthyofaunal study of the San Juan River. Prepared by Department of Biology, University of New Mexico, Albuquerque, for New Mexico Department of Game and Fish, Santa Fe, under contract 78-516.6-01, and U.S. Bureau of Reclamation, Salt Lake City, UT, under cooperative agreement 7-FC-40-05060.
- 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.
- Ryden, D.W. and F.K. Pfeifer. 1993. Adult fish collections on the San Juan River (1991-1992): draft annual progress report, March 15, 1993. Submitted to U.S. Fish & Wildlife Service, Grand Junction, CO.
- Saskatchewan Environment and Resource Management. 1996. The Fisheries Regulations being Chapter F-16.1 Reg 1 (effective 9 May 1995) as ammended by Saskatchewan Regulations 13/96.
- Scarola, J.F. 1973. Freshwater Fishes of New Hampshire. New Hampshire Fish and Game Department. 131 pp.
- Schneberger, E. 1972c. The white sucker, its life history, ecology, and management. Wis. dep. Nat. Resour. Publ. No. 245-72. 18 pp.
- Scott, W. B., and E. J. Crossman. 1973. Freshwater fishes of Canada. Fisheries Res. Bd. Canada, Bull. 184. 966 pp.
- Scott, W.B. and E.J. Crossman. 1979. Freshwater Fishes of Canada. Fisheries Research Board of Canada, Ottawa. 966 pp.
- Scott, W.B. and E.J. Crossman. 1979. Freshwater Fishes of Canada. Fisheries Research Board of Canada. Bull. 84. 966pp.
- Sigler, W. F., and J. W. Sigler. 1987. Fishes of the Great Basin: a natural history. University of Nevada Press, Reno.
- Smith, C.L. 1985. The Inland Fishes of New York State. New York State Department of Environmental Conservation. Albany, NY. 522pp.
- Smith, G. R. 1992. Phylogeny and biogeography of the Catostomidae, freshwater fishes of North America and Asia. Pages 778-826 in Mayden, R. L., editor. Systematics, historical ecology, and North American freshwater fishes. Stanford Univ. Press, Stanford, California. xxvi + 969 pp.
- Snyder, D. E., and R. T. Muth. 1990. Description and identification of razorback, flannelmouth, white, Utah, bluehead, and mountain sucker larvae and early juveniles. Colorado Division of Wildlife Tech. Publ. No. 38. 152 pp.
- Stewart, N.H. 1926. Development, growth, and food habits of the white sucker, CATOSTOMUS COMMERSONII (LeSueur). Bull. U. S. Bur. Fish. 42, Doc. 1007: 147-184.
- Sublette, J. E., M. D Hatch, and M. Sublette. 1990. The fishes of New Mexico. University New Mexico Press, Albuquerque, New Mexico. 393 pp.
- WERNER, R.G. 1980. FRESHWATER FISHES OF NEW YORK STATE. N.Y.: SYRACUSE UNIV. PRESS. 186 PP.
- Warfel, H.E. 1939. Biological Survey of the Connecticut Wa tershed. New Hampshire Fish and Game Dept. Concord, NH. 2 56pp.
- Woodling, J. 1985. Colorado's Little Fish: A Guide to the Minnows and Other Lesser Known Fishes in the State of Colorado. Colorado Division of Wildlife, Denver.

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 merchantibility, 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.

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