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Dep. of Fisheries, Wildlife and Conservation Resources



Fish and Wildlife Existing in Limited Numbers
in Massachusetts
COLLECTION

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By
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Introduction

Few subjects relating to fish and wildlife receive as much publicity as endangered species. In Massachusetts, as elsewhere, considerable confusion persists also over the frequently-used words, "rare" and "endangered" as well as over the selection of candidate fish or wildlife species for a list of those deserving special protection or management. Nominations of species for endangered status sometimes are based on emotion rather than on supportable facts. On the other hand, some species about which man knows little may, in fact, be threatened with extinction.

Threatened Species--Where Does the Responsibility Lie?

There is seemingly incontrovertible evidence that many animal species have, prior to the environmental degradation attributable to modern man, become extinct. This belief has given rise to some speculation that negative environmental influences chargeable to man may not bear the sole responsibility for the decline of fish and wildlife--that the apparent decline in numbers of some animals may be largely a natural phenomenon. Then, too, some believe that the normal processes of extinction may be accelerating only for those species which are most familiar to man (principally the larger animals which man easily identifies), and that thousands of other living creatures (lesser known) are either stable or expanding with no net change in the earth's total animal populations.

Evidence for Loss of Suitable Habitat

Most contemporary scientists, however, feel that recent human activities have hastened the decline of certain plants and animals. The Smithsonian Institute of Technology, for instance, has pointed out that more than 2,000 native American plants, such as cacti of the Southwestern deserts and wildflowers of the Rocky Mountains, and many butterflies are approaching the endangered status.

The Wildlife Society says that of forty-one "recent" native birds and mammals of the United States known to have become extinct, eighteen have been lost in the present century.

Such information has stimulated increased attention to the status of existing fish and wildlife resources as well as to those human activities which may adversely affect our native fauna by altering or eliminating essential habitat.

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Present Status

Regardless of the legitimacy of claims and counterclaims, over sixty species of vertebrates have been identified as existing in limited numbers in Massachusetts. Some of these are rare or endangered (see definitions) suggesting a cause-and-effect decline, while the minimal presence of others may simply be due to recent range extensions into the Commonwealth or to a paucity of valid information about them.

Those species listed herein have been categorized because they are declining, exist in minimal numbers, or have an undetermined status. Those in the latter category will require further investigation.

New Information Sought

The Massachusetts Division of Fisheries and Wildlife, in its continuing monitoring of the state's fish and wildlife resources, welcomes any information which will add to the state of current knowledge. Submissions of data in support of proposed additions or amendments to the list of those species existing in limited numbers are encouraged.

Contact: Massachusetts Division of Fisheries and Wildlife
100 Cambridge Street
Boston, Massachusetts 02202

Massachusetts Inland Fishes Existing in Limited Numbers

<u>Species</u>	<u>Typical Habitat</u>	<u>Status*</u>
American brook lamprey, <u>Lampetra lamottei</u>	Streams	Rare
Shortnose sturgeon, <u>Acipenser brevirostrum</u>	Streams	Rare and endangered
Atlantic sturgeon, <u>Acipenser oxyrhynchus</u>	Streams and coastal rivers	Rare and endangered
Atlantic salmon ¹ , <u>Salmo salar</u>	Streams and coastal rivers	Rare and endangered
Sockeye salmon, <u>Oncorhynchus nerka</u>	Lakes, ponds	Rare
Lake trout, <u>Salvelinus namaycush</u>	Lakes, reservoirs	Rare
Lake chub, <u>Couesius plumbeus</u>	Streams	Rare and depleted
Northern redbelly dace, <u>Phoxinus eos</u>	Streams	Rare and depleted
Emerald shiner, <u>Notropis atherinoides</u>	Lakes, ponds, reservoirs and streams	Rare and depleted
Mimic shiner, <u>Notropis volucellus</u>	Streams	Rare

¹Landlocked salmon not an indigenous strain; introduced and considered rare.

*Rare - not under immediate threat of extinction but occurring in such small numbers and/or in such a restricted or specialized habitat that it could quickly disappear. Requires careful watching.

Endangered - actively threatened with extinction. Continued survival unlikely without the implementation of special protective measures.

Depleted - Although still occurring in numbers adequate for survival, the species has been heavily depleted and continues to decline at a rate substantially greater than can be sustained.

<u>Species</u>	<u>Typical Habitat</u>	<u>Status</u>
Fathead minnow, <u>Pimephales promelas</u>	Streams	Rare
Longnose sucker, <u>Catostomus catostomus</u>	Streams	Rare
White catfish, <u>Ictalurus catus</u>	Lakes, ponds, reservoirs and streams	Rare and depleted
Channel catfish, <u>Ictalurus punctatus</u>	Streams	Rare
Black bullhead, <u>Ictalurus melas</u>	Streams	Rare and depleted
Threespine stickleback, <u>Gasterosteus aculeatus</u>	Inland and coastal streams	Rare inland
Fourspine stickleback, <u>Apeltes quadracus</u>	Inland and coastal streams	Rare inland
Ninespine stickleback, <u>Pungitius pungitius</u>	Inland and coastal streams	Rare inland
White crappie, <u>Pomoxis annularis</u>	Lakes, ponds and reservoirs	Rare and depleted
Longear sunfish, <u>Lepomis megalotis</u>	Streams	Rare and depleted
Swamp darter, <u>Etheostoma fusiforme</u>	Lakes, ponds, reservoirs and streams	Rare
Walleye, <u>Stizostedion vitreum vitreum</u>	Lakes, ponds, reservoirs and streams	Rare
Northern pike, <u>Esox lucius</u>	Lakes, ponds, reservoirs and streams	Rare
Burbot, <u>Lota lota</u>	Streams	Rare and depleted
Trout-perch, <u>Percopsis omiscomaycus</u>	Streams	Rare and endangered

Massachusetts Wildlife Species Existing in Limited Numbers

<u>Species</u>	<u>Distribution</u>	<u>Estimated Numbers</u>	<u>Typical Habitat</u>	<u>Status*</u>
Eastern cougar <u>Felis concolor cougar</u>	(?) Inconclusive, un- verified sight re- ports from central and western Mass.	If present, cannot be more than a few.	Isolated mature or second growth wood- lands and mountain- ous areas	Endangered
Eastern coyote <u>Canis latrans var.</u>	Berkshire, Franklin, Hampden, Hampshire and northern Worcester Counties	Probably several hundred.	Rural, wilderness areas of second and third growth wood- lands interspersed with farm lots, swamps, and country roads.	Undetermined
Moose <u>Alces alces americana</u>	Occasional strag- glers range into northeastern, central and western parts of the state.	None resident. Regu- lar stragglers appear almost annually.	Wilderness areas of early successional mixed stands inter- sprersed with bogs and shallow ponds.	Peripheral

*Rare - not immediately in peril and possibly stable at present, but existing in such low numbers or with such a restricted distribution that the entire species population could be seriously jeopardized by catastrophic events occurring within its range.

Endangered - in immediate danger of extinction or extirpation from the state due to critically low or drastically declining populations brought about by habitat modification, overexploitation, pollution, diseases or other factors.

Status Undetermined - not in immediate danger of extinction or extirpation, but showing signs of decline and causing justifiable concern; or being little known or apparently uncommon and possibly could be jeopardized by inadvertent actions. More information required to properly evaluate status.

Peripheral - reaches the limit of its usual range outside Massachusetts. Occasional individuals or stragglers may be found but no breeding populations within the state.

Threatened - likely to become an endangered species in the foreseeable future throughout all or a significant portion of its range.

<u>Species</u>	<u>Distribution</u>	<u>Estimated Numbers</u>	<u>Typical Habitat</u>	<u>Status</u>
Gray seal <u>Halichoerus grypus</u>	Muskeget and Tuckernuck Islands, Nantucket County and adjacent waters	12-13	Turbulent waters near rocky shores, cliffs; but in Mass. restric- ted to shallow seas, adjacent to sand bars and low islets.	Rare
Indiana bat <u>Nyctis sodalis</u>	Scattered western Mass. locations	Unknown, but probably few.	Limestone caves, sub- terranean excavations, hollow trees, houses, beneath bridges.	Endangered
Southern bog lemming <u>Synaptomys cooperi stonei</u>	Plymouth County	Unknown	Bogs; dense swamps; cool, dense forest undergrowth.	Undetermined
Yellow-nosed (Rock) vole <u>Microtus c. chrotorrhinus</u>	(?) Unknown, but may occur on Mt. Greylock, Berkshire County	Unknown	Dense forests at high elevations; grassy rock-strewn areas above timberline.	Undetermined
Long-tailed shrew <u>Sorex d. dispar</u>	Known from Mt. Grey- lock, Berkshire County.	Unknown	Cool, moist talus surrounded by dense woodland frequently at high altitudes.	Undetermined
Beach meadow vole <u>Microtus breweri</u>	Known only on Muskeget Island, Nantucket County	5,000-15,000	Sandy beaches over- grown with beach grass (<u>Ammophila</u> <u>breviligulata</u>)	Rare
Southern bald eagle <u>Haliaeetus l. leucocephalus</u>	Migrants regularly at Mt. Tom; summer visitants at Quab- bin Reservation; irregulars state- wide	No breeders. A few have wintered at Quabbin Reservation since 1950.	Isolated woodlands near large bodies of water coastal and interior.	Endangered

<u>Species</u>	<u>Distribution</u>	<u>Estimated Numbers</u>	<u>Typical Habitat</u>	<u>Status</u>
American peregrine falcon <u>Falco peregrinus anatum</u>	Coastal areas	No breeders, migrants usually number less than a dozen annually.	Nests on high cliffs or ledges frequently overlooking water bodies or valleys.	Endangered
Osprey <u>Pandion haliaetus carolinensis</u>	Principally in Bristol, Barnstable and Dukes Counties	A few dozen in breeding season.	Isolated coastal or inland sites adjacent to sizable bodies of water.	Undetermined
Laughing gull <u>Larus atricilla</u>	Coastal, especially Cape Cod.	About 150-200 pairs in breeding population.	Salt meadows, shores of tidal creeks, grassy islets.	Undetermined
Common tern <u>Sterna h. hirundo</u>	Coastal beaches and islands, Plum Island south to Elizabeth Islands.	Fewer than 5,000 pairs.	Sandy beaches and island shores.	Undetermined
Arctic tern <u>Sterna paradisaea</u>	Outer Cape Cod and offshore islands.	Probably less than 50 pairs.	Rocky or sandy coastal and island beaches and shores.	Undetermined
Least tern <u>Sterna albifrons antillarum</u>	Coastal beaches from Essex County south to Bristol County.	Probably less than 1,000 pairs.	Broad flat sandy beaches on mainland and coastal islands.	Undetermined
Short-eared owl <u>Asio f. flammeus</u>	Nesting limited to coastal areas, Boston south to Cape Cod.	Unknown.	Open plains, scrub flats, dunes, and marshes.	Undetermined
Eastern bluebird <u>Sialia s. sialis</u>	Transient statewide, limited breeding, especially in Connecticut Valley.	Unknown	Open woods, swamps, rural roadsides, farmland, burnt-over areas.	Undetermined

<u>Species</u>	<u>Distribution</u>	<u>Estimated Numbers</u>	<u>Typical Habitat</u>	<u>Status</u>
Plymouth red-bellied turtle <u>Chrysemys rubiventris bangsi</u>	Scattered ponds in Plymouth County, Naushon Island and possibly Ipswich.	Probably less than 200.	Quiet, shallow warmwater ponds.	Endangered
Bog turtle <u>Clemmys muhlenbergii</u>	Known only from Pittsfield, Berkshire County	Unknown, but only one colony known.	Wet meadows and sphagnum.	Endangered
Blandings's turtle <u>Emys blandingii</u>	Northern Middlesex County and Haverhill (Essex County) and Lancaster (Worcester County)	Unknown	Shallow, weedy ponds, slow-moving streams.	Undetermined
Northern diamondback terrapin <u>Malaclemys t. terrapin</u>	Buzzards Bay and Cape Cod Bay from Barnstable to Wellfleet.	Unknown	Salt marshes, tidal creeks and estuaries.	Undetermined
Eastern box turtle <u>Terrapene c. carolina</u>	Statewide	Unknown	Fields, meadows, open woodlands, usually near water.	Undetermined
Timber rattlesnake <u>Crotalus h. horridus</u>	Scattered colonies in southern Berkshire, Hampden and Hampshire Counties and Blue Hill Reservation, Norfolk County.	Unknown	Rocky fields, woodlands and mountainsides.	Endangered
Northern copperhead <u>Agkistrodon contortrix mokeson</u>	Blue Hill Reservation, Norfolk County, Connecticut River Valley, southern Worcester and Southern Berkshire Counties.	Unknown	Rocky, wooded hillsides, often moving to bottomlands near water during summer.	Undetermined

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Black rat snake <u>Elaphe o. obsoleta</u>	South-central Mass. east to Webster, west to Westfield, north to Sunderland.	Unknown	Wooded uplands, hillsides, forest edges.	Undetermined
Eastern worm snake <u>Carphophis a. amoenus</u>	Hampden County in vicinity of Connecticut River	Unknown	Lowlands; burrows in soft, moist earth; found under boards, slabs, stones and logs.	Undetermined
Blue-spotted salamander <u>Ambystoma laterale</u>	Recorded from various areas of Middlesex County; Springfield, Hampden County; and a few Essex County towns.	Unknown	Lives underground in moist woodland.	Endangered
Spotted salamander <u>Ambystoma maculatum</u>	Statewide	Unknown	Lives underground in moist woodland.	Threatened
Marbled salamander <u>Ambystoma opacum</u>	Principally Worcester County, with remnant colonies in Middlesex, Plymouth and Bristol Counties.	Unknown	Woodlands	Threatened
Jefferson salamander <u>Ambystoma jeffersonianum</u>	Connecticut River Valley	Unknown	Lives underground in moist woodland.	Undetermined
Four-toed salamander <u>Hemidactylium scutatum</u>	Scattered from Connecticut River Valley eastward to Cape Cod.	Unknown	Swamps, sphagnum bogs, acidic meadows.	Undetermined
Atlantic green turtle <u>Chelonia m. mydas</u>	Coastal seas; Cape Cod and southward.	Unknown	The seas.	Threatened
Atlantic hawksbill <u>Eretmochelys i. imbricata</u>	Coastal seas; Cape Cod and southward.	Unknown	Atlantic littoral waters.	Threatened

<u>Species</u>	<u>Distribution</u>	<u>Estimated Numbers</u>	<u>Typical Habitat</u>	<u>Status</u>
Atlantic loggerhead <u>Caretta c. caretta</u>	Atlantic coastal waters from New Hampshire to Rhode Island.	Unknown, but common summer and autumn.	Probably highly pelagic when young, becoming more littoral with age.	Threatened
Atlantic ridley <u>Lepidochelys kemp</u>	Atlantic coastal waters from New Hampshire to Rhode Island.	Unknown, but rather common summer and autumn.	Atlantic littoral waters.	Threatened
Atlantic leatherback <u>Dermodochelys c. coriacea</u>	Atlantic coastal waters from New Hampshire to Rhode Island.	Unknown	Open ocean in northern migration, often in-shore during autumn.	Endangered