



Fishers

(*Martes pennanti*)



The name fisher may have originated from the French word fitchet, fitché or fitchew used to describe the European polecat that has similar characteristics to the fisher. Other common names include black cat because of its appearance, tree otter or tree fox because of their ability to climb up trees, and sometimes fisher weasel. Fishers were also called Oochik (Cree), pronounced “wejack”, by early fur traders (Lovallo, 2008).



Based on fur harvest records and historic accounts, fishers were likely common throughout forested areas in Canada and the northern United States, ranging all the way from New England to regions as far as the Pacific Northwest (Lovallo, 2008). These habitats provided what the fishers needed to survive and thrive in these areas. Nevertheless, during the 1800s and early 1900s, wide-scale deforestation and changes in prey resources caused the fisher populations to decline. However, fisher populations have managed to increase over the past couple of decades as a result of forest restoration, reintroduction efforts, and wildlife management programs (Lovallo, 2008).

Description



The fisher (*Martes pennanti*), commonly referred to by its misnomer “fisher cat”, is not a cat but a member of the Mustelidae family, which also includes wolverines, martens, river otters, mink, and weasels. Fishers are intermediate in size between a mink and a river otter.

Fishers have the appearance of being somewhat stocky, with short legs, large feet, and an elongated body with dark fur ranging from black to dark brown. Upon closer inspection, tri-colored guard hairs on the back of the neck often give the fisher a “grizzled” appearance. They have variable white patches on the chest and abdomen. The tail is usually very dark and appears bushy, particularly during fall and winter. The overall length of the animal is between 36 and 48 inches, with males being larger than females.

As with other mustelids such as mink and weasels, fishers are sexually dimorphic, meaning there are physical differences between the males and females. The weight range for adult male fishers is generally between nine and fifteen pounds, with most weighing about twelve pounds. Adult females weigh considerably less, between four and six pounds. Several hypotheses have been proposed to explain the large difference in body size between males and females, including resource partitioning (each sex utilizing somewhat different food resources, thereby reducing competition between sexes) or that sexual selection favors larger body sizes in males, while body size in females is restricted due to the energetic costs associated with reproduction (Powell, 1993).

The fisher has five toes on the front and the hind feet with large retractable claws. Front and hind tracks often appear asymmetrical with the front track registering as a larger print than the hind. Front tracks usually measure 2 and 1/8" to 3 and 7/8" long by 2 and 1/8" to 3 and 1/4" wide while the hind track usually measures 2 and 1/8" to 3" long by 2" to 3" wide (Rezendes, 1999). Fishers also have a variety of track patterns, including a bounding pattern common for mustelids. In snow, these patterns register as two sets of tracks, followed by another set of two, and so on. Fishers are capable climbers, and because they are able to rotate their hind feet almost 180 degrees, can descend trees headfirst.

Life History

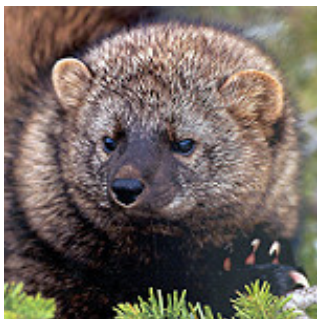
Range and Habitat:

Fishers occur in a variety of habitats; upland hardwoods, coniferous forests, mixed hardwoods and conifers, second growth and old growth forests. They will avoid large areas without high overhead canopy closure, such as agricultural areas or extensive clear-cuts. Availability of prey appears to play an important part in selection of habitat. The availability of food, topography, cover, location of dens, and weather conditions also govern a fisher's movements (Chapman, 1982).

Home range size and population densities for fishers vary with season, sex and habitat. Studies in other states using radiotelemetry have shown male fishers to have larger home range sizes than females. Home ranges of males and females overlap, while overlap between members of the same sex is minimal. In Wisconsin, mean annual home range size for males was 15.3 square miles and 3.2 square miles for females (Kohn, 1993). Home range size for fishers in New Hampshire have been estimated at approximately 10 square miles for males and 5.8 square miles for females (Powell, 1993). Population densities in New Hampshire have been estimated at 1 fisher per 1.1 to 4.1 square miles in summer and a winter density of 1 fisher per 3.2 to 7.7 square miles (Powell, 1993).



Photo courtesy of D. Hill, Tiverton, R.I.



Due to loss of habitat and unregulated harvest, fishers were extirpated from much of their historic range. Today, fishers are found throughout most of New England. Efforts to reintroduce fishers into their former range have proven successful in many states including Massachusetts, Connecticut, Vermont, New York, Virginia and Wisconsin. There have been no reintroduction programs in Rhode Island. Populations that persisted in the states of Maine and New Hampshire have been source populations for fisher dispersal into Rhode Island, as evidenced by DNA studies conducted by University of Vermont researchers on tissue samples collected from Rhode Island fishers. In Rhode Island, fishers are generally common in Providence, Kent, and Washington counties where there is appropriate habitat. In recent years they have become established in Bristol County and mainland portions of Newport County. This reoccupation of former range coincides with protection from exploitation and the regrowth of forests within New England.

Behavior: As is characteristic of other mustelids, fishers possess anal scent glands that contain a musky, strong smelling fluid that is used for scent marking. This, in addition to scat, is used by both sexes to mark scent stations along travel corridors within their home ranges to delineate their territories. These scent stations usually consist of a stump, log, stone, or other elevated features.

Although excellent climbers, most hunting activity takes place on the ground where easily captured prey is available. Fishers are well known as one of the few predators that will regularly seek out and kill porcupines. Porcupines are rare in Rhode Island and have never been found in our fisher stomach content analysis.

Vocalizations: Contrary to popular believe, fishers do not produce the “scream call” that can be heard in the woods during the spring and summer, that is actually the call of the red fox or sometimes the gray fox, which has a slightly different screeching bark.

Food Habits: Fishers are opportunistic predators, consuming any animal that they can capture and kill. However, small mammals are the mainstays of their diet. Fishers also utilize carrion (dead animals), particularly deer. They will also eat a variety of fruits and nuts when available, and they will readily eat pet food left outside for cats and dogs. Examination of stomach contents of fishers in Rhode Island shows the most common food items include small mammals such as mice, voles, red, gray, and flying squirrels, as well as birds and an occasional snake, frog, insects, or fish.



Reproduction: In the northeast, breeding season for fishers occurs during April. Fishers, like other mustelids, have delayed implantation, a process whereby the fertilized egg does not immediately implant in the uterus, but remains dormant until approximately ten months after fertilization. Following implantation, which is believed to be induced by increasing photoperiod, the embryo develops within 30 to 60 days, with birth usually taking place the following March or April. Generally, there are two or three young to a litter. Mating then takes place immediately after the young are born. Males do not participate in the care of the young. Cavities within trees are used almost exclusively for natal den sites and female fishers may routinely move litters to different den sites. Fishers use brush piles, hollow logs, tree cavities, vacant gray squirrel nests and rock piles as temporary resting sites. The young usually reach adult size the autumn following after their birth.

Diseases

Fishers harbor ticks and fleas but otherwise have relatively few parasites and incidence of disease is therefore relatively low. **Rabies**, which can affect any mammal, has been confirmed only once in a fisher in Rhode Island and only a few field studies have documented sarcoptic mange in fishers (Lovallo, 2008).

Regulatory status

Fishers are classified under general law (RIGL 20-16-1) as a protected furbearer in Rhode Island. In Rhode Island, the first trapping season for fisher was established in 2000. Harvest is strictly regulated by the DEM’s Division of Fish and Wildlife to ensure the long-term viability of fisher populations in the state. Carcass collection from

trappers and roadkills provides valuable biological information, such as population age structure, dietary habits and reproductive potential.

Property owners, as provided for under RIGL 20-16-2, may kill, by legal means, any furbearer on their own property that is killing livestock, domestic pets, damaging property or crops, provided that the carcass of the animal is turned over to the Division of Fish and Wildlife. The taking of road-killed furbearers, including fisher, is prohibited without special authorization from the Division of Fish and Wildlife. The law also does not allow for the random taking of wildlife, for the taking of furbearers for their pelts outside the open season, or for killing of animals outside the boundaries of the property of the person with the problem. Also, it does not allow for unlawful methods of take such as poisons, snares, foothold traps, or discharge of firearms in violation of state or local ordinances. The law states that animals taken must be reported to the DEM within 24 hours.



Photo courtesy of J. Scheefer, Hope, R.I.

The DEM does not recommend that property owners attempt to live trap nuisance furbearers unless they are prepared and willing to euthanize the offending animal. State regulations prohibit the live capture and translocation of furbearers. Captured furbearers can only legally be released on the property on which they were captured. Sighting reports and complaints regarding fishers can be reported to the Great Swamp Field Office at (401) 789-0281.

The DEM does not recommend that property owners attempt to live trap nuisance furbearers unless they are prepared and willing to euthanize the offending animal. State regulations prohibit the live capture and translocation of furbearers. Captured furbearers can only legally be released on the property on which they were captured. Sighting reports and complaints regarding fishers can be reported to the Great Swamp Field Office at (401) 789-0281.

Avoiding problems

Eliminating food sources around the yard and home will greatly reduce potential problems with fishers and other wild animals. Fishers will readily eat from pet food dishes, compost piles, and trash containers. Bird feeders, which attract a variety of birds and small mammals, will also attract the animals that feed on them. Free-ranging poultry will always be at risk to predators, whether it is a fisher, fox, coyote or hawks and owls. Keep poultry and domestic rabbits in secure hutches, buildings, and enclosures that are inaccessible to predators. Fishers and other predators may also view domestic cats as potential prey. Keep cats indoors for their protection. Never intentionally feed fishers or other wildlife. Many problems that develop between wildlife and people are associated with intentional feeding.

If you are experiencing problems with fisher or other wildlife, visit www.wildlifehelp.org, a collaborative online resource by government and non-profit wildlife agencies or contact the DEM's Division of Fish and Wildlife at DEM.DFW@dem.ri.gov.

Selected References

Chapman, Joseph A. and G. A. Feldhamer, Editors. 1982. Wild Mammals of North America, Biology, Management, and Economics. The Johns Hopkins University Press, Baltimore and London. pp. 586-597.

Cronan, John M. and A. Brooks. 1968 Revised. The Mammals of Rhode Island. Wildlife Pamphlet No. 6. Rhode Island Department of Natural Resources, Division of Conservation.

Kohn, Bruce E., N.F. Payne, J.E. Ashbrenner, W.A. Creed. 1993. The Fisher in Wisconsin. Technical Bulletin No. 183. Wisconsin Department of Natural Resources.

Lovallo, M. 2008. Status and Management of Fisher (*Martes pennanti*) in Pennsylvania 2008-2017. Harrisburg, PA; Pennsylvania Game Commission, Bureau of Wildlife Management (US).

Powell, Roger A. 1993 2nd Ed. The Fisher: Life History, Ecology and Behavior. University of Minnesota Press. 237 pp.

Rezendes, Paul. 1999 2nd Ed. Tracking and the Art of Seeing: How to read animal tracks and sign. Harper Collins Publishers, New York. pp. 127-135.

Whitaker, John O., W.J. Hamilton, Jr. 1998 3rd Ed. Mammals of the Eastern United States. Cornell University Press. Ithaca, NY. 583 pp.

Unless otherwise noted, fisher photographs courtesy of the United States Fish and Wildlife Service.

It is the policy of the Rhode Island Department of Environmental Management to offer its services and accommodations to all orderly persons, and, as required, to all properly licensed persons, without regard to race, religion, color, national origin, ancestry, sex, age, or disability. If you believe you have been discriminated against in any program, activity, facility, or if you desire further information, please write to the Office for Equal Opportunity, US Department of the Interior, Office of the Secretary, Washington, DC 20240.