



Fishers in Rhode Island

Description:

The fisher (*Martes pennanti*), or fisher cat as it is commonly referred to is a carnivore that is 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. The name fisher may have originated from the French word fitchet, fitche or fitchew used to describe the European polecat that has similar characteristics to the fisher.



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, 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 1/8” to 3 7/8” long by 2 1/8” to 3 1/4” wide while the hind track usually measures 2 1/8” to 3” long by 2” to 3” wide (Rezendes 1999). Fishers have a variety of track patterns, including a bounding pattern common for mustelids. In snow, these pattern registers 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.



Photo by Daniel J. Cox

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 feature.

Life History:

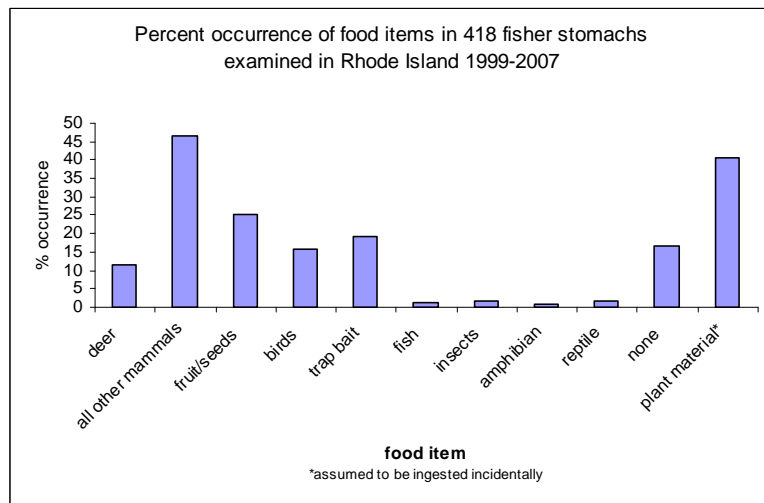
In the northeast, breeding season for fishers occurs during April. Fishers, like other mustelids have delayed implantation, a process whereby the fertilized egg does not immediately implant in the uterus, but remains dormant until approximately ten months after fertilization. Following implantation, 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.

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. Although excellent climbers, most hunting activity takes place on the ground where easily captured prey is available. Fishers are well known as being 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.

Fishers occur in a variety of habitats, being found in upland hardwoods, coniferous forests, mixed hardwoods and conifers, second growth and old growth forests throughout their range. They do avoid large areas without high overhead canopy closure such as agricultural areas or extensive clearcuts. Availability of prey appears to play an important part in selection of habitat. In Rhode Island, fishers are generally common in Providence, Kent, and Washington counties where there is appropriate habitat. They have only

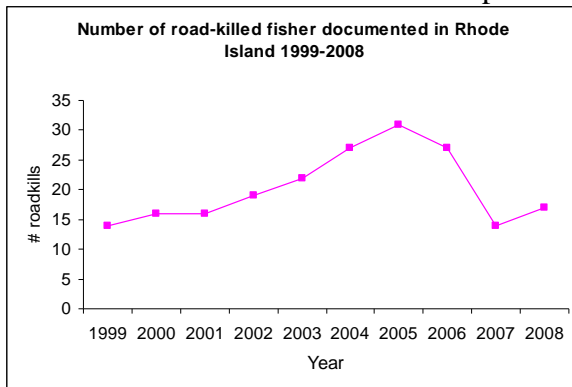


recently made appearances in Bristol and Newport counties, but availability of appropriate habitat will limit their numbers in those counties.

The availability of food, topography, cover, location of dens, and weather conditions 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).

Range Expansion

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. This reoccupation of former range coincides with protection from exploitation and the regrowth of forests within New England. Since the late 1990's, the number of documented roadkills in the state has continued to increase.

Regulations:

Fishers are classified under general law (RIGL 20-16-1) as a protected furbearer in Rhode Island. In 2000, the first trapping season for fisher was established in Rhode Island. 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. Sighting reports and complaints regarding fishers can be reported to the Great Swamp Field Office at (401) 789-0281.

Diseases:

Fishers harbor ticks and fleas but otherwise have relatively few parasites. Rabies, which can affect any mammal, has been confirmed only once in a fisher in Rhode Island.

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, or have questions about wildlife contact the DEM's Division of Fish and Wildlife at (401)-789-0281.

Literature Cited and further reading

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Fisher illustration courtesy of Northeast Furbearer Resource Technical Committee

Photograph of fisher in tree courtesy of Daniel J. Cox

Photograph of fisher in snow courtesy of BritishColumbia.com photo gallery

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