

Mammals of Minute Man National Historical Park

Report by Evelyn S. Jones

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Field Work was conducted between April and October 1992. In summary, 24 trips were taken to the park and 1555 mouse snap trap nights were set. Of a theoretical 42 species of wild mammals, 32 were confirmed to be present. Of the remaining 10, four probably do occur and were simply not detected during this survey. The following is a list of the 42 species, with annotations regarding locations where each was found to occur or that the particular species was not found, with some explanation. Also included with each of the 42 is a summary.

Didelphis virginianus

summary: The opossum is relatively common throughout the park.

Fur found on south side of SR2A immediately south of Battle Road Visitor Center parking lot.

Skull found in woods on south side of SR2A just southwest of Battle Road Visitor Center parking lot.

Fur in brush just west of Wm. Smith house.

Tracks on path leading from Fiske house site on Wood Street to the top of Fiske Hill.

Road kill on SR2A just west of junction with Sunnyside Lane.

Road kill on SR2A just east of junction with Bedford Road and Virginia Road at Wm. Smith house.

Road kill on SR2A at Battle Road Visitor Center

Blarina brevicauda

summary: The short-tailed shrew is apparently the most common mammal in the park. It occurred wherever samples were taken and, where they were not taken, habitat is ideal (e.g. fields between the North Bridge Visitor's Center and the Concord River).

Skull found in discarded bottle at edge of marsh adjacent to Elm Brook.

Skull found in discarded bottle along SR2A just south of Battle Road Visitor Center parking lot

Dead individual found in brushy undergrowth in open woods on south side of SR2A just south of Battle Road Visitor Center parking lot.

Dead individual found just northeast of Paul Revere Capture Site parking lot.

Collected in overgrown apple orchard, south of old field, due south of Paul Revere Capture Site.

Collected in bunch grass along drainage ditch on western edge of power line right-of-way southwest of Fiske Hill parking lot on SR2A

Collected under European buckthorn at swamps edge, western edge of power line right-of-way southwest of Fiske Hill parking lot on SR2A.

Collected in grass field on top of Fiske Hill.

Collected in grass/milkweed on top of Fiske Hill.

(Blarina brevicauda continued)

Collected among rocks, jewel weed, and red maple at eastern base of Fiske Hill, must west of Fiske house site on Wood Street.

Collected in jewel weed and rose between Wm. Smith house and picnic area.

Collected in grass, poison ivy, black night shade, stinging nettles, and brush just southeast of Wm. Smith house.

Sorex cinereus

summary: The masked shrew is predictably common in relatively undisturbed habitats, which are relatively scarce in the large eastern portion of the park (e.g. Elm Brook) and relatively abundant in the North Bridge portion.

Skulls found in discarded bottle at edge of marsh adjacent to Elm Brook.

Sorex palustris

summary: It is unlikely that the water shrew occurs in the park, because potential habitats are greatly disturbed.

No records during 1992 survey, and no historical records (MA NHES files).

Parascalops breweri

summary: Although the hairy-tailed mole was not located during this survey, it may well occur within the park, potentially in the overgrown field between the North Bridge Visitor's Center and the Concord River.

No records during 1992 survey, and no historical records (J.P.Kelly, personal communication).

Scalopus aquaticus

summary: Although theoretically possible, it is doubtful that the eastern mole is present.

No records during 1992 survey, and no historical records (J.P.Kelly, personal communication).

Condylura cristata

summary: Although found only at the eastern end of the park, during this survey, it is likely that the star-nosed mole occurs throughout the park.

Behavioral sign in runway at edge of swamp, western edge of power line right-of-way, southwest of Fiske Hill parking lot on SR2A.

Collected in grass and milkweed on top of Fiske Hill.

Eptesicus fuscus

summary: The big brown bat is predictably one of the two most common bats in the park.

No records during 1992 survey, except probable roost in barn on Marrett Street. Specimens collected on 18 and 22 July, 20 August; 17 October 1986; 20 October 1987; 18 May 1988; 28 July

(*Eptesicus fuscus* continued)

1989 in Lexington (MA Dept. Public Health, Rabies Lab., printout FY 1987; *ibid*, FY 1988; *Ibid*, FY 1989) and on 15 May 1989 in Concord (*Ibid*, FY 1989).

Lasionycteris noctivagans

summary: It is probable that the silver-haired bat has/does/will occur in the park, but not commonly.

No records during 1992 survey.

Lasiurus borealis

summary: It is probable that the solitary, tree roosting red bat is relatively common in the park.

No records during 1992 survey. Specimen collected in Lexington (MA Dept. Public Health, Rabies Lab., printout FY 1987).

Lasiurus cinereus

summary: It is probably that the solitary, tree roosting hoary bat has/does/will occur in the park.

No records during 1992 survey. Specimen collected in Lexington (MA Dept. Public Health, Rabies Lab., printout FY 1988)

Myotis lucifugus

summary: It is likely that the little brown bat is common in the park. It typically roosts in houses.

No records during 1992 survey. Specimen collected in Lexington (MA Dept. Public Health, Rabies Lab., printout FY 1987).

Myotis septentrionalis

summary: It is probable that the northern long-eared bat occurs in the park.

No records during 1992 survey. Specimen collected in Sudbury (MA Dept. Public Health, Rabies Lab., printout FY 1988).

Pipistrellus subflavus

summary: I have no idea. *gsj*

No records during the 1992 survey.

Sylvilagus floridanus

summary: The eastern cottontail is common throughout the park.

Partial skeleton and skull found in leaf litter just east of Elm Brook along SR2A.

Live individual observed in wet woods between Battle Road Visitor Center parking lot and SR2A.

Live individual observed southwest of Battle Road Visitor Center parking lot on south side of SR2A, in woods.

Scats in open field near marsh on south side of SR2A, just southwest of Fiske Hill parking lot.

(*Sylvilagus floridanus* continued)

Two live individuals in field on top of Fiske Hill.

Road-kill individual 150 yards east of Concord town line on SR2A (=about 50 yards east of Old Bedford Road intersection from north).

Live individual observed on edge of Virginia Road about one quarter mile northwest of Wm. Smith house.

Scats in weeds and brush of power line right-of-way southwest of Fiske Hill parking lot on SR2A.

Scats scattered in southwest portion of field on top of Fiske Hill.

Individual on Hawthorne Lane just south of The Wayside parking lot, MMNHP

Tamias striatus

summary: Due to its frenetic activity and call, the eastern chipmunk is very apparent. It is abundant throughout the park.

Live individuals in rock wall, south side of SR2A just south of Battle Road Visitor Center parking lot.

Live individuals in secondary woods on north side of SR2A just south of Battle Road Visitor Center parking lot

Numerous individuals in woods, plantings, and brush between Battle Road Visitor Center and parking lot.

Abundant along rock walls on south side of SR2A, due south of Paul Revere Capture Site parking lot.

Live individuals in woods on both sides of SR2A, just east of Fiske Hill parking lot.

Live individuals in woods and along rock wall at eastern end of field on top of Fiske Hill

Individuals in brush and along stone wall at site of Fiske farmhouse.

Individuals in stone walls on both sides of SR2A west of Bedford Road junction with SR2A...

In rocky outcroppings on south side of SR2A west of Bedford Road junction with SR2A...

In brushy field/woods east of Bedford Road junction, on south side of SR2A...

In woods east of Wm. Smith house on north side of SR2A.

In woods by the Wm. Smith house.

Calling on north side of SR2A in mixed woods just west of Wm. Smith house, in angle created by Virginia Road heading northwest.

On south side of SR2A about 200 yards west of Bedford Lane.

On south side of SR2A, about 50 yards east of Sunnyside Lane in brush.

On north side of SR2A, about 50 yards east of Sunnyside Lane in swamp edge.

Between Bedford Road and Sunnyside Lane on north side.

Two individuals in pines with deciduous undergrowth, on eastern border of rock wall rectangle, east of Sunnyside Lane, south side of SR2A.

Along Virginia Road at Samuel Hartwell House.

At angle where Old Bedford Road becomes Virginia Road.

(Tamias striatus continued)

At both ends of North Bridge (Minuteman Monument), in rock walls and brush

In plantings at North Bridge Visitor Center.

In brush near Monument Road at Brown House remnants.

Individual in woods along Old Bedford Road about 0.2 mile north of SR2A.

Individual on remnants of barn stone foundation, eastern base of Fiske Hill, just west of Fiske house site on Wood Street.

Individual in woods southeast of Wm. Smith house.

Numerous individuals throughout North Bridge portion of MMNHP, in rock walls, brush, and woods.

Marmota monax

summary: Although relatively few were observed, the woodchuck occurs throughout the park.

Road-kill on SR2A between Battle Road Visitor Center and Minute Man Vocational High School.

Two in meadow on south side of SR2A east of Brooks Road (0.2 mile west of Concord town line sign on north side of highway).

Road kill on SR2A about 50 yards west of junction with Bedford Road and Virginia Road (at Wm. Smith house).

Sciurus carolinensis

summary: The eastern gray squirrel is found throughout the park.

An individual in open woods just northwest of Paul Revere Capture Site parking lot on SR2A.

Live individual at Fiske Hill parking lot on SR2A.

In woods at northeastern corner of field on top of Fiske Hill.

In trees at west end of North Bridge

Road kill on SR2A about 100 yards east of junction with Lexington Road

Individual in trees above rock barn foundation at eastern base of Fiske Hill, just west of Fiske house site on Wood Street.

Road kill at junction of Lowell Road and Concord River, just northwest of MMNHP

Road kill on Lexington Road about 0.25 mile east of Haywood St.

Individual on SR2A about 0.3 mile west of Elm Brook

Road kill on Old Massachusetts Avenue, about 0.3 mile northeast of junction with SR2A.

Road kill on SR2A at Fiske Hill parking lot.

Road kill on SR2A at Battle Road Visitor Center

Two along SR2A, 100 yards east of Paul Revere Capture Site parking lot.

Road kill on Lexington Road, about 200 yards northwest of SR2A.

Road kill on Lexington Road, about 300 yards northwest of SR2A.

Tamiasciurus hudsonicus

summary: A comparatively secretive tree squirrel, at least in eastern Massachusetts, the red squirrel predictably occurs throughout the park.

Two in mixed woods east of Wm. Smith house, just east of pond.

Cuttings below Norway spruce at Fiske house site on Wood Street.

Glaucomys volans

summary: There is little doubt that the southern flying squirrel occurs in the park, but no signs or individuals were observed.

No records during 1992 survey.

Castor canadensis

summary: Occurs along Concord River (T. Hayes, personal communication).

Peromyscus leucopus

summary: The white-footed mouse occurs throughout the park, but was not abundant during this survey.

Collected in brush/overgrown apple orchard, south of overgrown field, south of Paul Revere Capture Site.

Collected among rocks, jewel weed, and red maple within rock foundation of barn at eastern base of Fiske Hill, just west of Fiske house site on Wood Street.

Collected in red maple, jewel weed and rose immediately west of Wm. Smith house.

Collected under white pines, in jewel weed and rose between Wm. Smith house and picnic area.

Clethrionomys gapperi

summary: The red-backed vole occurs in relatively small numbers in low, wet areas in the eastern end of the park

Trapped under European buckthorn between drainage ditch and swamp, western edge of power line right-of-way, southwest of Fiske Hill parking lot on SR2A.

Microtus pennsylvanicus

summary: The meadow vole is abundant in grassy and brushy areas throughout the park.

Skull in raptor pellet in marsh along Elm Brook at Lincoln/Concord line on SR2A.

Skull in discarded bottle in scrub at edge of Battle Road Visitor Center parking lot.

Runways at edge of marsh on south side of SR2A just southwest of Fiske Hill parking lot.

Runways in field on top of Fiske Hill

Individual observed in marsh, west of Elm Brook.

Runways southwest corner of junction of Sunnyside Lane/SR2A

Teeth and partial skeleton in discarded bottle in overgrown apple orchard on south side of SR2A, south of old field, due south of Paul Revere Capture Site.

(Microtus pennsylvanicus continued)

Trapped in grass at edge of dogwood thicket on top of Fiske Hill.

Trapped in grass and milkweed on top of Fiske Hill

Trapped among rocks, jewel weed, and red maple in rock barn foundation at eastern base of Fiske Hill, just west of Fiske house site on Wood Street.

Trapped in grass, poison ivy, black night shade, stinging nettles and brush just southeast of Wm. Smith house.

Microtus pinetorum

summary: Due to the preference of the pine vole for orchards and secondary growth, it is likely that it occurs in the park, but none were collected or found in the survey.

No records during 1992 survey.

Ondatra zibethicus

summary: The muskrat occurs in appropriate habitat throughout the park.

In Elm Brook and Concord River (T. Hayes, personal communication).

Road-kill on Cambridge Turnpike, just northwest of Hawthorne Road

Synaptomys cooperi

summary: There appears to be no appropriate habitat in the park for the southern bog lemming.

No records during 1992 survey, and no historical records (MA NHES files).

Rattus norvegicus

summary: The exotic Norway rat undoubtedly occurs on Hanscom AFB and on the farms and in the few stores that occur on or are adjacent to the park. As indicated by the one record, they can and do also occur near houses.

In garage on SR2A, about 0.2 mile east of Sunnyside Lane.

Mus musculus

summary: The house mouse may occur in the park, but its distribution in Massachusetts appears to be primarily in the bigger cities, not in the suburbs where the white-footed mouse becomes the "house" mouse.

No records during 1992 survey.

Zapus hudsonius

summary: The meadow jumping mouse predictably occurs in the wet, brushy/weedy habitats in the park (e.g. field between the North Bridge Visitor's Center, also Elm Brook). It typically does not occur in large numbers.

Individual in jewel weed, at edge of white pines, bordering picnic area at Wm. Smith house

Canis familiaris

summary: There is evidence of free-ranging domestic dogs throughout the park. Whether or not they are in the company of humans is not known.

Scats along rock wall on south side of SR2A in pine stand surrounded by large rectangle of stone walls, east of Sunnyside Lane.

Tracks on Concord River bank at east end of North Bridge, at Minuteman Monument

Scats on abandoned blacktop road through power line right-of-way southwest of Fiske Hill parking lot on SR2A.

Canis latrans

summary: Coyotes appear to occur throughout the park, probably in small numbers.

Federal officers reported coyotes calling and ranging throughout the eastern portion of the park.

Scats on south side of SR2A, across from Fiske Hill parking lot.

Vulpes vulpes

summary: The red fox surely occurs throughout the park; the habitat is ideal.

Field edge behind barn along SR2A, about 100 yards east of Sunnyside Lane.

Urocyon cinereoargenteus

summary: The gray fox is presumably uncommon in the park. The best habitat is from Elm Brook east to Hanscom AFB entrance, and that is quite limited in size.

Skull found in brush along Virginia Road, west of Wm. Smith house.

Procyon lotor

summary: Consistent with the rest of eastern Massachusetts, the raccoon is relatively abundant in all habitats in the park. It is by far the most common medium-sized mammal.

Road-kill individual 0.3 mile east of Sunnyside Lane on SR2A, on south side of 2A.

Scats in brushy woods west of Wm. Smith house.

Road-kill on south side of SR2A, about 150 yards west of Bedford Lane

Road-kill on south side of SR2A across from Bedford Lane intersection

Tracks on Concord River Bank at east end of North Bridge, at Minuteman Monument

Tracks between Brown House remnants and Concord River

Scats along edge of swamp on west edge of power line right-of-way southwest of Fiske Hill parking lot on SR2A.

Scats under European buckthorn between drainage ditch and swamp, western edge of power line right-of-way, southwest of Fiske Hill parking lot on SR2A.

Road kill about 0.25 mile south of junction of Monument Street and Liberty Street

Road kill on SR2A just east of junction with Bedford Road and Virginia Road, just east of Wm. Smith house.

Road kill on SR2A, 250 yards west of junction with Bedford Road and Virginia Road at Wm. Smith house

Mustela erminea

summary: The ermine appears to be far less common than the long-tailed weasel. It may occur in the park but there is no record.

No records during 1992 survey.

Mustela frenata

summary: The long-tailed weasel occurs, but its relative abundance is not known.

DOR on SR2A near Elm Brook

Mustela vison

summary: The mink reportedly occurs along virtually all of the streams in the vicinity of the park.

Occurs along Elm Brook, Concord River, and in the swampy areas (T. Hayes, personal communication)

Mephitis mephitis

summary: The striped skunk is common throughout the park.

Strong odor in southeastern portion of field on top of Fiske Hill.

Road kill on SR2A at Elm Brook.

Road kill on SR2A just east of junction with Lexington Road.

Road kill on SR2A at entrance to Hanscom AFB.

Lutra canadensis

summary: While not common, the river otter is present in both of the major portions of the park.

Reported in Elm Brook and Concord River (T. Hayes, personal communication)

Felis catus

summary: Cast-off or stray domestic cats are common in Massachusetts. The park is not an exception.

Live individual observed in wet woods between Battle Road Visitor Center parking lot and SR2A.

Generally appeared feral, including very long fur.

Live kitten found on south side of SR2A, just southwest of Battle Road Visitor Center parking lot.

Appeared feral; had broken leg.

Odocoileus virginianus

summary: White-tailed deer occur in all portions of the park, with the possible exception of The Wayside.

Scats found in woods on south side of SR2A just south of Battle Road Visitor Center parking lot.

Scats and spore in scrub, and scats in mixed woods, beyond open field on south side of SR2A, south of Paul Revere Capture Site.

(*Odocoileus virginianus* continued)

Tracks in brush/overgrown apple orchard south of overgrown field south of Paul Revere Capture Site.

Scats in woods on south side of SR2A, south of Fiske Hill parking lot.

Adult doe in marsh, west of Elm Brook.

Tracks in mud/sand creek bank, brushy/woods eastern edge of marsh.

Tracks on Concord River bank at east end of North Bridge, just north of Minuteman Monument.

Tracks in sand on abandoned blacktop road through power line right-of-way southwest of Fiske Hill parking lot on SR2A.

Deer chewed joe-pye weed at edge of mown field and woods edge of Concord River near remnants of Brown house.

Trips to Minute Man National Historical Park

1992

5, 18 April

28 May

5, 10, 19, 24 June

3 July

4, 5, 6, 11, 12, 13, 19, 20, 21, 25, 26, 27 (twice) August

1, 7 September

11 October

Total trips - 24

Total trap nights = 1555

42 species theoretically

32 confirmed

miles traveled = 2160 X \$0.27 = \$583.20