

# Fells Resource Management Plan

## *Comments by David Brown*

Ref: *“Final Report: 1998 & 1999 Tracking Survey of the Middlesex Fells Reservation”*, conducted by David W. Brown for the Friends of the Middlesex Fells and the Metropolitan District Commission.

I should begin by observing that a park is more than its trees. It has or should have a normal complement of wildlife such as birds, mammals, wildflowers, anurans, insects, with which to enrich visits by the public.

Metropolitan parks such as the Fells were disparaged at the time by wildlife agencies as “squirrel parks” and that was the attitude I had when I began the survey. Certainly I found right away many of the mammals that I expected. There were gray squirrel tracks all over the reservation, a finding that I attributed to the many old oak trees with their abundant acorns. In addition I found a very large number of raccoon trails. In spring thaw-mud I found tracks of striped skunk, freshly out of its winter den and one trail of an opossum near Doleful Pond. At the time opossums were newcomers from the south, spreading their range north, first in the metropolitan heat islands and later farther away from sources of warmth.

However, there were some surprises: 200 yards off the road on the first day in the eastern Fells I encountered the trail of an animal bounding in the snow, leaving a neat trail of two tracks arranged on a repeating slant, which I recognized as a fisher. Fishers are large members of the weasel family that, according to the books at the time, was restricted to deep wilderness. Yet here it was in a metropolitan park surrounded by high-density human development and cut through by a major interstate highway. It turned out from examining scat and trail behavior that these predators were preying on the abundant squirrels, a practice not recorded in the books as having been observed before. Today it is easier for me to find fisher sign in the Fells than in the woodlot forests that we euphemize as “wilderness” in more remote parks in the commonwealth.

More surprises followed. It was not long before I discovered the trails of another predator, mixed in with the trails of man and dog which proliferate in the Fells. The neat patterns of direct registrations about 22” apart identified them as the trails of the Eastern coyote. Following these animals in the Fells over two winters, it was clear that they were trying to remain wild, that is, to avoid contact with people, no easy trick in a park laced with a dense trail and fire-road network.

In future visits I found the elegant trails of red foxes, as well, not surprising since this fox is the logo for the Friends of the Fells. However, although I had found during the survey one ambiguous track of an animal that I thought might be a gray fox, it was not until a few years ago that I found conclusive evidence of this animal in the vicinity of Whittemore Brook. The evidence was an isolated pair of tracks that showed the cat-like

impressions characteristic of this canid. Gray foxes are another species that has been moving northward in the Eastern forest during the last couple of decades, reclaiming its ancestral range.

It might seem surprising that an animal as large as a white-tailed deer could hide itself in a reservation covered by a dense trail system and visited by a lot of people. But deer are clever about finding places where people and dogs don't go and hiding themselves there, and so although I found many trails of these animals, I never saw one during the 2-year span of the survey. Today, of course, sightings of these animals are increasingly common, as their population has grown.

### **What is causing this diverse population of wild mammals in the Fells?**

- Metropolitan parks such as the Fells are approaching “older growth” status: a mix of large old trees, standing and fallen deadwood, successional growth in the sunspace created by tree mortality, natural cavities in old trees and an abundant annual mast crop. An old growth forest has this kind of vertical complexity in abundance, and the metropolitan parks, since they do not get cut over periodically to remove marketable wood, are developing many of these characteristics.
- “Vertical complexity”, the close proximity of vegetation in various growth-stages, promotes diversity: brushy areas that grow up in sunspace caused by tree mortality provide cover for prey animals, such as ruffed grouse and cottontail rabbits, and so attract their predators such as the red fox and fisher. In the natural cavities of old trees and standing deadwood cavity-denners and nesters have places to retreat from the cold and to use as birthing and rearing sites. The presence of fishers relates directly to this since these animals require a large, elevated cavity for birthing and frequently hunt squirrels in cavities where these new prey animals have taken refuge.
- Species of birds and mammals that inhabit various growth stages find those mixed stages within the forests of the metropolitan parks to a greater extent than they do in woodlot forests farther west. So in a sense the Middlesex Fells and other metro parks are becoming the “new old-growth forests” of the commonwealth. As such they represent a valuable wildlife resource with which to enrich visits by the public to these natural areas as well as an educational tool with which to acquaint the surrounding public with wildlife and its ecology.
- While the survey revealed an impressive variety of wild mammals, it could support larger populations with less constant disturbance. As such one of the recommendations that I made in the report was a reduction in trail density, actively obstructing many of the redundant trails in the park, as well as the creation of one or two large trail-less areas. I have been associated with Breakheart Reservation 4 miles north of here for most of my life. The density and variety of wildlife sign there is greater than it is in the Fells, a finding that I attribute to a much less dense trail network, the presence of trail-less areas and the fact that, being a little farther out, it gets less intense visitation by the population of the Boston metro area.

- Whether the Fells can sustain its wildlife population under the pressure of intense human and pet visitation over the long term is an open question. Until it is answered, humans and wildlife will coexist at some level in an uneasy relationship.

I recommend the final report of the tracking survey as a source of information to help guide the RMP. Much of it is as valid today as it was in 1999 and contains more information about the natural ecology of the park than I can provide here in a 15 minute presentation.

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