

North Trail Google Map



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Maps of Alewife Reservation



US Department of Agriculture Exploratory Map for Alewife Reservation

- State Topographical Map of Alewife Reservation and Mugar properties
- DCR –GIS Map of Alewife Reservation and Mugar Properties
 - DCR –GIS map of Arlington, Somerville, Cambridge silver maple forest
- Wildlife Corridor Blockage Maps
- Mass Central Trail
- Horsley and Witten Report- Figure 2 FEMA map



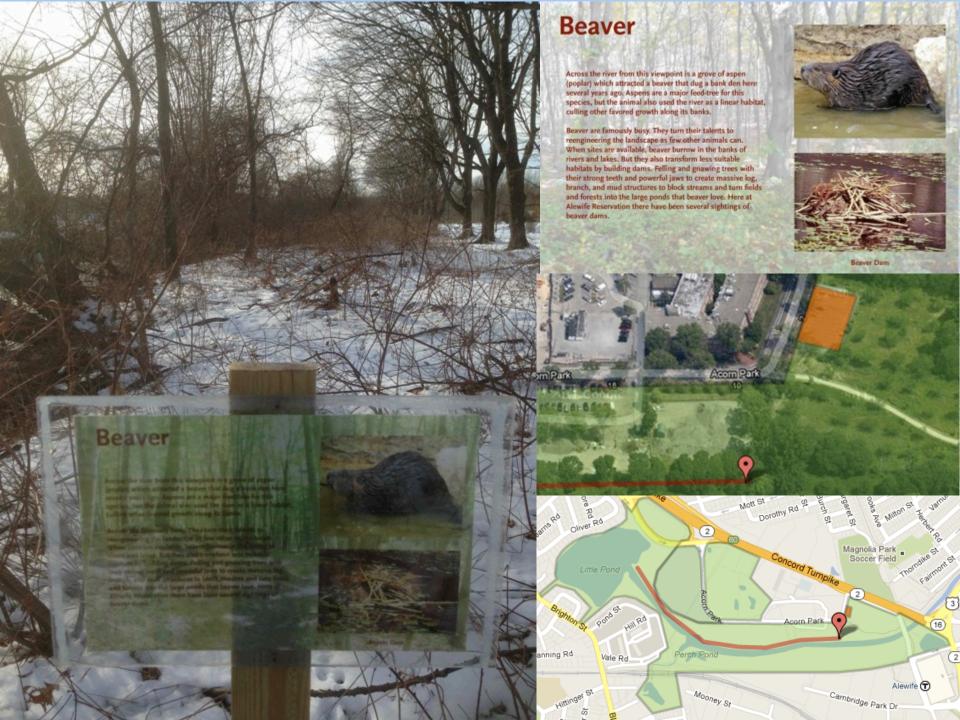


Welcome to the Alewife Reservation

Welcome to 130 acres of Alewife Reservation, an urban wild conservation area for Arlington, Belmont, Somerville and Cambridge that provides habitat for New England animals and birds. The diverse ecosystem is refuge from urban expansion over the last 100 years.. Mink, otter, coyote, gray and red fox, deer, muskrat and woodchuck, beaver have been observed here. Threatened birds find habitat here such as American woodcock. Endangered plant species, Bottle Gentian, found in 2010.

The ecology of Alewife Reservation includes pond/marsh; forest/field; shrub/woodlands; river/stream/bog; wetlands/marsh/pond; and more. This urban wild may be the largest in the Boston area. This is Parkland of the Massachusetts Department of Conservation and Recreation which owns the land and manages it. Friends of Alewife Reservation are stewards of the area.





Beaver

Across the river from this viewpoint is a grove of aspen (poplar) which attracted a beaver that dug a bank den here several years ago. Aspens are a major feed-tree for this species, but the animal also used the river as a linear habitat, culling other favored growth along its banks.

Beaver are famously busy. They turn their talents to reengineering the landscape as few other animals can. When sites are available, beaver burrow in the banks of rivers and lakes. But they also transform less suitable habitats by building dams. Felling and gnawing trees with their strong teeth and powerful jaws to create massive log, branch, and mud structures to block streams and turn fields and forests into the large ponds that beaver love. Here at Alewife Reservation there have been several sightings of beaver dams.





Beaver Dam



A Cottontails Home

Wild animals need food, water and concealment. The groomed landscaping to the north (right) provides food in the form of browse while dense tangles to the south (left) provide all three. During the day both predators and prey can lay up to rest in the thorny brush where few humans or dogs would venture, moving abroad at dusk to search for food. Ecologists call this "early successional" habitat or the natural succession of one plant community by another, or gradual evolution of an old field into a stand of shrubs and young trees, then, the trees grow taller, into middle-aged and older forest. New England cottontails and wildlife, from tiny reptiles and amphibians to large mammals, cannot live in middle-aged or mature woods. Why not? Because the shade of tall trees prevents sun-loving plants and shrubs to grow there densely enough for habitat cover.





Ideal New England Habitat



Deer

Animals use nearby tangles of natural vegetation for concealment. They venture into the office-park landscaping to browse succulent plants and buds. Rabbit browsing is near the ground. Shows neat, angular cuts, while deer browse is higher, square-cut and ragged.

Deer do not have an upper set of incisors. Thus, they show a rough, shredded edge, and usually a square or ragged break. Deer seldom browse higher than 6 feet from a standing position, but are able to reach up to 8 feet by rearing up on their hind legs. They love daylilies (Hemerocallis), hosta and yews (Taxus). coneflowers (Echinacea) and candytuft (Iberis). They even eat plants 'deer resistant'like strong smelling herbs, those with hairy leaves (Verbascum; Lamb's Ear [Stachys]), or poisonous plants (Digitalis; Aconitum)





Staghorn Sumac

Staghorn sumac, the tall growth with furry tips and red, hairy berries, is one of the first plants to invade abandoned fields in the process of forest succession. All the plants you see may be clones of one another, springing from a common rootstock. Eventually the surrounding forest will succeed the sumac and the last evidence of the field will disappear."

The sumac is a beautiful shrub in summer because of its fernlike leaves. It is picturesque in winter and its colors in autumn are most brilliant. Its thick red fruit clusters remain upon it during the entire winter. In June it shows 2 kinds of blossoms on different shrubs. One is whitish and bears the pollen, the other is reddish and iis a pistillate flower later developing into the seed on the "bob" or fruit cluster.





Demonstration Site

This field is a demonstration site, or "lek", for woodcock in March and April. Listen at sunset for chittering overhead and a nasal "peent!" ground-call as the males court nearby females. The woody plants in the field show rough bark gnawing at their base by rabbits, and the matted grass conceals the runways of meadow voles, both favorite prey of foxes, hawks and owls. Woodcock habitats are young, densely growing hardwoodtrees rooted in moist soil that support many earthworms, the birds' primary food.

Trees and shrub habitat include aspen, alder, apple, birch, dogwood, crabapple, and hawthorn. Females nest in young to mixed-age forests near or intermixed with feeding areas. They prefer hardwood stands less than 20 years old -- places where the stems are thick enough that a person would have some trouble threading his or her way through. Hens will nest in cutover areas as few as two years after logging. They also nest in woodlands with small pole-sized trees above a dense shrub layer. There may be little overhead cover (as in old fields), or trees up to 50 feet tall, with the average cover height around 12 feet. Woodcock, like many ground-nesters are in danger.



lek for Woodcock





Red & Grey Fox

Many predators and scavengers use the North Trail to travel from resting areas to hunting ranges such as Eastern coyote and fox. Look for scat composed of fur and berries along the trail. Red fox are social animals, led by a mated pair which monopolize breeding. Subordinates are the young of the pair. They stay with parents to help care for new kits. They eat small rodents, also game, reptiles and invertebrates. Fruit and vegetable matter is food. Red fox may displace or kill smaller cousins, but are vulnerable to coyotes.

Both Grey and Red fox live in the Alewife Reservation. Gray fox prefer deciduous forests with brushy, woodland areas. They thrive where woodlands and farmlands meet. Red fox (Vulpes vulpes) frequent agricultural areas more than gray fox, and both prefer water as preferred habitat. Dens are usually located in hollow trees or logs, in crevices between and under large rocks, and in underground burrows. Dens of Grey fox are sometimes found in lower forest canopy, in hollow tree trunks and limbs. They are the sole species in Canidae family that climbs trees.



Red Fox



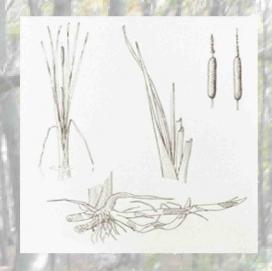
Grey Fox



Cattails

Here in the Alewife Reservation, the rank growth of plants with bulbous seed-heads are cattails, a native plant that grows in marshes with its roots in water. The seed heads provide food for birds. Stalks and leaves provide support for red-winged blackbird nests as well as food and concealment for muskrats and rails and wild geese. Cattails have flat to slightly rounded leaves that twist slightly over their length They grow to 5 or 10 feet high. Flowers form a dense dark brown, cigar-shape at the end of spikes or "catkin".

Cattails can be partially submerged or in boggy areas with no permanently standing water. They spread rapidly because their seeds blow in the wind and float on the water's surface. They spread from underground rhizomes and are home to many fowl and small mammals and pheasant. Submerged, they foster tiny invertebrates along with decomposition called "detritus".







Natural Cavities

Natural cavities developing in the heartwood of older trees do not harm the health of the trees. They provide nesting, denning and hunting areas for about 50 species of birds and mammals in Massachusetts. Associated with older trees, cavities, of various sizes contain crevices, loose bark, decay from broken limbs, lightning strike, etc. Hollow trees are especially valuable. Cavities have a micro-climate adding to biodiversity which provide a niche for specialized forms of life such as fungi, ferns and plants that require dark and humid conditions to flourish.

Owls and small birds; starlings, various tits, nuthatches, flycatchers, tree creeper, redstarts, require the cavity for roosting and nesting. Refuge sites are protection from the weather and predators. Bugs, larvae of wood-boring beetles, tree sap, etc, provide food. Woodpeckers excavate their own cavities.





Mink

Courting behavior of mink was observed at this location with scat signs. Mink are small members of the weasel family with justly-famous luxuriant fur. Seen in Massachusetts along the banks of ponds and rivers hunting for fish and crayfishand other larger warm-blooded prey. Nocturnal and hunt at night for small animals, preferring muskrat and mice. Excellent swimmers that eat equatic animals such as frogs, crayfish and fish and eggs of ground-nesting birds.

They kill more than they can eat and store the excess. Their cache of food is often discovered and pilfered by other animals. The female makes her den in a burrow along stream bank, often in a muskrat hole or another mammal hole. Average birthrate is 6 young. They are weaned at 8-9 weeks and leave soon after, and full grown at 5 months.





Rolling Site

This high bank is a "rolling site" for river otters (weasel family), where these playful animals climb out of the water to defecate, urinate and scratch their abdomens on the ground before reentering the river to hunt for fish and crayfish. Look for scat as small piles of fish scales and crayfish "chiten". Northern river otter is a semiaquatic mammal found along its waterways and coasts. Weight can reach 5 and 14 kilograms (11 and 31lb), protected and insulated by a thick, water-repellent fur. Home in water and on land, the otter establishes a burrow close to the water's edge in river, lake, swamp, coastal shoreline, tidal flat, or estuary ecosystems.

Their dens have many tunnel openings, for entering and leaving. Females give birth in these underground burrows, producing litters of one to six. They eat fish, amphibians, turtles, and crayfish. Habitat loss has reduced their numbers due to trapping and harvesting of pelts. Environmental pollution contributies to decline of their numbers. Reintroduction projects help stabilize the reduction in the beaver population.





Wood Warblers

At this small clearing in the forest, several species of wood warblers have been observed simultaneously during spring migration in early May. The nearly monocultural stand of trees you see around you are silver maples, a floodplain species that can grow to considerable size. Their presence shows that this area has been periodically underwater during spring thaws The American Wood Warblers are the jewels of North America.



Yellow Warbler



Yellow Breasted Chat



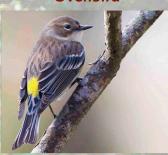
Blackburnian Warbler



Ovenbird



Common Yellowthroat



Yellow Rump Warbler



Floodplain Forests

Over the years, Massachusetts' floodplain forests have been cleared for development due to their attractive real estate value for proximity to river systems. They are plowed under for agriculture due to their rich and productive soils. Intact floodplain forests such as this 7 acre silver maple "small river floodplain forest" contains uncommon plants and animals and are important reservoirs of Massachusetts' biodiversity. Learn to recognize the habitat values of floodplain forests and what you can do to maintain and conserve these special habitats.

Floodplain forests usually occur in the low, flood-prone areas along rivers, typically less than 20 feet above the river channel. They are often associated with oxbows (pools that have become separated from the river channel), temporary wetlands that dry up in summer (vernal pools), open meadows of grasses and wildflowers, and dense shrub thickets. This forest contains all of the above. The periodic floods in these forests recycle sediment and nutrients, creating some of Massachustts'richest soil deposits. This forest consists of silver maple trees and a rich groundcover of wildflowers and ferns that thrive following large-scale floods that are common

in these areas. Foodplain forests also contain red maple trees, along with black ash, black cherry growing among vernal pools, oxbows, and shrub thickets.





Black Cherry Trees Near Little Pond

The larger trees with dark scaly bark are black cherries.

A concentration of these trees in a woodland is a sign of former human habitation. Early farmers grew them near their homes both for the sweet, juicy berries and for the valuable wood, which could be made into tool handles and furniture. The American Wood Warblers are the jewels of North America. My column on Friday in the Brattleboro Reformer focuses on this family, Parulidae Black cherry fruits are an important source of mast for major wildlife species. The leaves, twigs, and bark of black cherry contain cyanide in bound form as the cyanogenic glycoside, prunasin and can be harmful to domestic animals that eat wilted foliage.

The bark has medicinal properties. In the southern Appalachians, bark is stripped from young black cherries for use in cough medicines, tonics, and sedatives. The fruit is used for making jelly and wine. Appalachian pioneers sometimes flavored their rum or brandy with the fruit to make a drink called cherry bounce.









Black Crowned Night Heron





Wood Duck



Alewife (T)

Cambridge Park Dr

Canvas Back Duck



Herring





Little Pond

In mild winters many species of ducks use Little Pond as an over-wintering site. Mallards, hooded mergansers, buffleheads shoveller ducks, wood ducks and Canada geese have all been seen here from time to time. The pond is also a favorite hunting area for both great blue and black-crowned night herons. Look around for piles of fish scales near the root holes that otters use to enter and exit the pond. Several "rolling sites" of this species have been found here along the "undeveloped shore."

The Belmont Pond is a key East Coast spawning destination of alewives going up stream from the Mystic River along the Alewife Brook and Little River tributaries to fresh water. Alewives are related to sea herring: menhadden, shad, pelchard, sprats. They are one of the most important food fish in the world connecting earth history of salt and fresh water living creatures in a frenzied rush up Little River to Little Pond to spawn and return to the ocean as food for big mouth bass. If we give alewives a chance by helping restore them to their ancestral spawning grounds, they will play an important role in bringing our rivers, lakes, estuaries and oceans back to life. A bountiful Mystic River watershed will be the result.



Black Crowned Night Heron



Canvas Back Duck



Wood Duck



Pintail Duck



Herring

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