

Urban Wildlife Sanctuary along an Electric Transmission Right-of-Way: A Successful Partnership and IVM Demonstration

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Successful implementation of Integrated Vegetation Management (IVM) requires cooperation with and outreach to stakeholders along rights-of-way. This paper describes a long term cooperative relationship between National Grid, an electric power utility in the northeast, and the Massachusetts Audubon Society (MAS). The MAS is one of the largest and most influential environmental groups in Massachusetts.

In the 1958, National Grid's predecessor company New England Power (NEP) acquired land for a powerline in the City of Worcester, Massachusetts. The landlocked wooded land was of such low value the utility bought the right-of-way and the parcels of land it traversed—some 150 acres. A single 115 kV transmission line was constructed to supply a portion of the City of Worcester, current population around 200,000. Over the next twenty plus years, as residential development occurred, this corridor and other abutting properties became an accidental wilderness within Worcester.

In the 1980s, the MAS established a resource office in Worcester and began to look for opportunities to develop an urban wildlife sanctuary and environmental education center. Review of remaining open space in the Worcester revealed an opportunity for a significant area to be conserved that included the powerline right-of-way and larger NEP parcels. Following negotiations, a lease agreement between MAS and NEP was signed in 1991. NEP's 150 acres became the lynchpin for establishment of the Broad Meadow Brook Wildlife Sanctuary. The Sanctuary today includes other surrounding land and totals 430 acres in size.

NEP manages the corridor utilizing IVM principles, including the selective use of herbicides. The resulting plant community is primarily little blue stem grass, forbs and low growing shrubs: together these plants establish biological control and prevent re-establishment of tree species. This habitat contributes to the presence of several early successional habitat birds and butterflies. IVM site evaluation principles were applied to meet MAS land management goals. IVM and right-of-way management are incorporated in the management plan for Broad Meadow Brook.

The Broad Meadow Brook Sanctuary boasts the largest butterfly species count of any Massachusetts Audubon Society Sanctuary—78 different species of butterflies can be found. In 2006, NEP and MAS constructed interpretive kiosks to describe principles of IVM and the habitat and wildlife present in the power line corridor. The kiosks feature displays of the bird and butterfly species supported by the plant community resulting from implementation of IVM. The displays also highlight National Grid's environmental policy and ISO 14001 transmission EMS accreditation. The herbicide treatment methods used on the corridor are also described. The partnership between National Grid and the Massachusetts Audubon Society provides a great opportunity to showcase and demonstrate the results of IVM.