



DIVISION OF FISHERIES & WILDLIFE

Quaboag Wildlife Management Area Restoration Summary

Location: Brookfield

Overall Size of WMA: Approximately 1,900 acres

Potential size of restoration area: Approximately 400 acres

Size of area currently under active restoration: Approximately 200 acres

The Quaboag River Valley has a long history of fire activity that gave rise to the unique wetland and upland habitats found there. From the late 1600s to the mid-twentieth century, agriculture was a major influence on the landscape. Today, much of the valley's natural communities reflect that legacy of fire and abandoned agricultural practices. MassWildlife began restoration efforts in 2019. The vigor of the restored habitat will be maintained over time with periodic prescribed fire and occasional invasive plant treatments.

Quaboag Marsh Restoration

The Quaboag Marsh is one of the largest and most ecologically important marshes in the interior of Massachusetts. It supports many species of marsh birds, including the largest population of American bittern (*Botaurus lentiginosus*) in southern New England. It also supports the world's largest population of the endangered Long's bulrush (*Scirpus longii*). MassWildlife is working to re-introduce fire to Quaboag Marsh by conducting prescribed burns. These carefully planned fires will reinvigorate the marsh's specialized plants, which will improve habitat for the uncommon wildlife that lives there. Restoration efforts are also being conducted to improve the nearby grasslands, oak woodlands, aspen thickets, and hemlock groves.

Upland Restoration

Upland (non-wetland) areas near Quaboag Marsh are also important habitat. MassWildlife is working to restore and improve the nearby grasslands, oak woodlands, aspen thickets, and hemlock groves.

- **Open oak woodland restoration** includes removing white pines that became established after agricultural fields were abandoned. This habitat will be maintained with periodic prescribed fire to promote a thriving understory of lowbush blueberry, scrub oak, and native grasses. Oak woodland restoration will benefit an otherwise declining suite of shrubland and young forest birds, such as eastern whip-poor-wills, American woodcock, prairie warblers, field sparrows, and eastern towhees. Restoration will also benefit native pollinators like bees, butterflies, and moths. Oak and hickory produce highly nutritious nuts that are important food sources for many animals and birds. Portions of the restoration work at Quaboag are aimed at increasing the resiliency and numbers of regenerating oak and hickory trees.
- **Grassland restoration**, completed in 2019, removed invasive plants from a former pasture and reestablished native warm season grasses to benefit birds and insects.
- **Hemlock grove improvements** will take advantage of the existence of healthy trees on the property. Poor quality white pine and red maple will be removed to promote more hemlock growth. Hemlocks provide important winter cover for many species of wildlife. Compared to other areas in the state, Quaboag hemlocks have largely been spared from the mortality caused by disease (hemlock wooly adelgid).
- **Aspen thickets** are stands of fast growing young aspen trees that grow through root suckers. Ruffed grouse use these dense thickets for cover, feeding, and breeding areas. Aspen thickets are just another piece of the mosaic of habitat types that are critical for maintaining a diversity of wildlife on state wildlife lands.

All required permits and project reviews were obtained prior to work beginning at Quaboag. These include DEP Wetlands permits, MESA permit, MA Forest Cutting Practices Act permit, MA Historic Commission review, and federal tribal review. MassWildlife continues to consult closely with the Brookfield Conservation Commission and Highway Superintendent on this project.



Left: Invasive plant in old pasture. Right: Invasive plants removed in the summer of 2019.



Left: Open oak woodland adjacent as of April 2020. Right: Restored native grassland in summer 2020