



MASSWILDLIFE

DIVISION OF  
**FISHERIES & WILDLIFE**

1 Rabbit Hill Road | Westborough, MA 01581  
**MASS.GOV/MASSWILDLIFE**

Director: Jack Buckley

## ***Habitat Site Walk and Information Session, Thursday, September 29, 2016***

Learn about work that the DFW Biodiversity Initiative is doing through the new Key Sites effort to enhance habitat for multiple rare species in fire-adapted ecosystems like Montague Plains. The Key Sites effort seeks to protect the Commonwealth's existing investment in land acquisition by improving habitat for the species these lands were originally purchased to conserve. At Montague Plains this involves partial tree clearing and mowing to reduce fuel loads, release understory shrubs, and establish fuel breaks to facilitate prescribed burning. In addition to benefiting rare species of moths, butterflies, and plants, this project also benefits declining songbirds like prairie warbler and whip-poor-will, and game birds like ruffed grouse and wild turkey.

### **3:00pm – 5:00pm, 9/29/2016 Habitat Site Walk, Montague Plains WMA**

Join DFW habitat biologist Brian Hawthorne for a walk through portions of a pitch pine/scrub oak restoration project area on the Montague Plains. More than 880 acres have been treated since 2004 on a combination of DFW, DCR, and Town of Montague lands. The walk will be one to two miles on relatively flat ground, so wear sturdy shoes. Bring bug spray, drinking water, and binoculars if you have them.

Meet on Old Northfield Road in Montague, Massachusetts between Turners Falls Road and Lake Pleasant Road beneath the large powerline that crosses Old Northfield Road.

(Map: <http://goo.gl/maps/jTrKx> )

### **7:00pm – 9:00pm, 9/29/2016 Information Session, Great Falls Discovery Center**

DFW biologists and representatives from other state and local agencies will give a presentation about the history of the Montague Plains, habitat restoration efforts at Montague Plains, prescribed fire as a habitat management tool (why we burn, how we burn, and where we burn), and the contributions of these efforts to public safety.

Great Falls Discovery Center, 2 Avenue A, Turners Falls, MA 01376

The Great Falls Discovery Center is the first red building on your right immediately after the bridge.

Handicap accessible parking is available immediately after the bridge on the right.

The main parking lot is just around the corner. Take the next right onto Second St, then a right to enter the lot.

(Map: <https://goo.gl/maps/GWyxTWPZ9R62> )

## Background information on Montague Plains Wildlife Management Area

Montague Plains is the largest remaining example in Massachusetts of an inland sandplain ecosystem. The 1,600 acre sandplain includes globally rare habitats such as pitch pine-scrub oak community, as well as state priority habitats of scrub oak shrubland, sandplain heathland, and sandplain grassland. These rare habitats require frequent fires and support not only common game species, but also at least forty-seven species of conservation need, including rare reptiles, birds, moths, plants, and bees. One bee species new to science was discovered on Montague Plains in 2015.

In 1908, the Commonwealth of Massachusetts paid \$140 to purchase about twenty-five acres of land on what was then called Millers Plain “for the purpose of experiment and illustration in forest management.” Over the next seventy-five years, the Commonwealth purchased additional parcels in the area, including what is now the Bitzer Fish Hatchery. In 1999, the Commonwealth purchased nearly 1500 acres from the Quinnehtuk Corporation “for fish and wildlife conservation, natural habitat protection, and associated public recreation,” creating the Montague Plains Wildlife Management Area. Recent years have seen the addition of another 175 acres, bringing the total area protected on and around this regionally important glacial sandplain to nearly 1800 acres.

Trees were harvested during the 18<sup>th</sup> and 19<sup>th</sup> centuries, and farmers subsequently plowed most of the area for crops. The marginal cropland was abandoned by the early 20<sup>th</sup> century, and dense thickets of pitch pine seeded in on the plowed areas. Periodic high-intensity wildfires were common, including the 1907 fire that destroyed 130 homes in Lake Pleasant, a 1200-acre fire in 1937, a 1000-acre fire in 1944, a 475-acre fire in 1957, and several 100-acre fires. Fire suppression efforts increased and improved after these wildfires, and recent decades have seen more frequent, but smaller, wildfires. Between 1939 and 1985, these suppression efforts allowed large areas of young pitch pine to grow into an extensive closed canopy forest. Fire-intolerant species such as white pine began filling in underneath, and in 1999, a dense forest of mixed pitch pine and white pine covered most of the sandplain. The historical shrubland with scattered oak and pitch pine trees remained only in a few small areas that had never been plowed. Habitat quality for native, fire-adapted plant and wildlife species declined with these changes.

Over the past 16 years, the Massachusetts Division of Fisheries and Wildlife (MassWildlife) has used a combination of tree harvesting, shrub mowing, and prescribed burning to benefit rare species and to reduce the risk of a catastrophic wildfire. Approximately 880 acres have been treated since 2004 to restore woodland and shrubland habitats of scattered oak and pitch pine trees over shrub oaks, blueberry, huckleberry, and other heath species.

MassWildlife has cooperative agreements with the Department of Conservation and Recreation and the Town of Montague Conservation Commission to restore sandplain habitats on their inholdings within the WMA, and works closely with local fire departments and the DCR Bureau of Fire Control to ensure that firefighters have adequate access in the event of a wildfire and are familiar with the changes in vegetation and fuels resulting from our habitat management. All prescribed fire operations are conducted in coordination with and the assistance of these fire officials and their crews.

The response by wildlife to restoration has been very encouraging. For example, researchers from UMass recently reported that the restoration “supports songbirds of regional conservation concern, promotes a distinctive bee fauna, creates preferred habitat for hognose snakes, and provides foraging and nesting habitat for whip-poor-wills.”

In 2015, a climate change adaptation analysis identified management goals, objectives, and tools for the sandplain natural communities at the Montague Plains WMA. The analysis assessed potential broad-scale climate change impacts and vulnerabilities, evaluated management objectives in the light of these impacts and vulnerabilities, identified adaptation approaches and tactics for implementation, and proposed criteria for monitoring the effectiveness of implemented actions. This analysis and its implementation continue today and are being integrated into an updated habitat management plan for the WMA.