

Mashpee

National Wildlife Refuge

Managing Fire to Protect Wildlife and People

Cape Cod, a Legacy of Fire

When you think about Cape Cod do you think about fire? Since the time when only the Wampanoag Indians lived here, wildfires caused naturally or by people have shaped the forests of Cape Cod – sometimes with deadly consequences.

- 1843: Lightning starts 7,680-acre fire in North Falmouth
- 1938: 5,000-acre wildfire kills three Sandwich firefighters on Route 130
- 1946: Slash piles started by German prisoners of war at Camp Edwards blaze out of control and consume 50,000 acres
- 1982 – 1997: Six fires burn about 7,500 acres at Camp Edwards

While most recent large fires were started by military exercises at Camp Edwards, the fact remains – given an ignition source, the woods of Cape Cod are ready to burn.

Mashpee, a Community at Risk

In 2000, many wildfires burned due to a volatile combination of drought and accumulations of plant material built up from years of putting out wildfires. In response, in 2001 the federal government made a list of communities that are at high risk from wildfire on federal lands. The Town of Mashpee was on that list.

What's at Risk?

Possibly your home or business. Mashpee National Wildlife Refuge is about 5,000 acres of pitch pine and scrub oak forests. The needles and leaves of these trees contain oils that are very flammable; hence the nickname “gasoline pine tree” for pitch pines. In dry conditions, accumulations of needles, leaves, and fallen twigs can fuel ground fires. Ground fires can climb bushes and low branches of pines and oaks, ignite volatile oils, and explosively spread fire to the tops of trees. These “crown fires” are



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Firefighters light a controlled burn.

especially dangerous because they throw sparks which can blow in the wind for miles and land on buildings. Many homes lost in wildfires are destroyed this way.

Fire Management on Upper Cape Cod is Nothing New

Controlled burning, burning flammable forest floor debris under carefully selected conditions, is a way to reduce forest fire risk. In fact, early officials of the Town of Sandwich burned their woods annually through the mid 1700's to reduce wildfire hazard. More recently, Camp Edwards has had a controlled burning program since the 1980's. Other ways of reducing fire risk include mowing, grinding brush, and pruning trees.

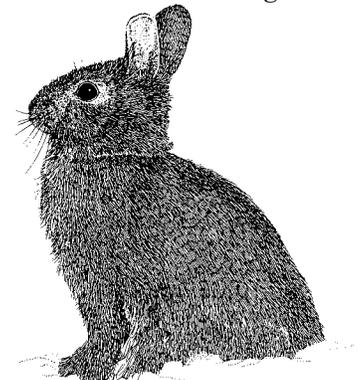
What about Wildlife?

Controlled burns not only protect human communities, they rejuvenate habitat for wildlife as well. For example, the New England cottontail, a rare rabbit, thrives in thickets sprouting up after wildfire. Fire is a natural process and many plants and animals on Cape Cod have lived with fire and other disturbances for

centuries. But because we put out wildfires to protect people and homes, we must now mimic benefits of wildfire. No method does this better than controlled burning.

We're Doing our Part to Protect You

In 2009 the U.S. Fish and Wildlife Service and refuge partners began to reduce wildfire risk as recommended in a 2008 Wildland Fuel Hazard Assessment for Mashpee National Wildlife Refuge. The first action was to make refuge roads safe for firefighters during a wildfire. Partners cleared roadside vegetation and turnaround areas to allow better fire engine access.



New England cottontail

Future plans call for clearing more vegetation along roads to make fire breaks and safety zones to which firefighters could safely retreat during a wildfire, chipping or grinding to remove flammable understory plants, thinning trees to reduce the risk of dangerous crown fires, reducing fire risk near buildings, and using controlled burns to reduce wildfire risk and restore natural areas.

Mashpee National Wildlife Refuge

Mashpee National Wildlife Refuge was established in 1995. It is a natural area with salt marshes, cranberry bogs, Atlantic white cedar swamps, and freshwater marshes. It is home to waterfowl, songbirds, shorebirds, raptors, red fox, and white-tailed deer.

Mashpee National Wildlife Refuge is one of more than 550 refuges of the U.S. Fish and Wildlife Service. It is unique in that the U. S. Fish and Wildlife Service owns less than 10 percent of the land. The remaining property is owned or managed by partners including Waquoit Bay National Estuarine Research Reserve, Massachusetts Department of Conservation and Recreation, Massachusetts Division of Fisheries and Wildlife, Town of Mashpee, Town of Falmouth, Orenda Wildlife Land Trust, Falmouth Rod and Gun Club, and the Mashpee Wampanoag Indian Tribal Council, Inc.

What are You Doing to Protect Yourself?

Improving firefighter access helps firefighters get a jump on any wildfires that start, but fires in pitch pines are among the fastest moving fires in the United States. If a wildfire starts under the wrong conditions, it can burn many acres before it is controlled. Call 911 if you see or smell smoke. You can actually increase the chances of your home surviving a wildfire by taking a few simple steps.

- **Create a defensible space**—remove dry grass, brush, dead leaves, and pine needles. Remove highly flammable plants and replace them with high moisture ones that don't burn easily. Keep woodpiles away from buildings. Keep trees pruned.
- **Make your roof, walls and windows fire-resistant**—if you have wood shingles, treat them with fire retardant or replace them with non-combustible materials such as asphalt shingles, tile, slate, metal, brick or stone. Replace plate glass with tempered glass.
- **Install screens on chimneys, vents, eaves and gutters**—flying sparks can enter through any opening. Keep gutters free of leaves, pine needles and debris.
- **Check all additional structures**—wooden decks, fences, and trellises can act as fuses, leading fire to your house. Clean leaves and debris from under patios. Don't attach wooden fences to your house.



Tom Eagle/USFWS

The refuge and partners cleared roadsides to increase firefighter safety and decrease risk of wildfire.

- **Be accessible**—make sure your driveway is well marked and wide enough for fire trucks to enter.
- **Be prepared**—make a family disaster plan including meeting locations, phone contacts, and an emergency supply kit. See www.redcross.org for what should be in the kit.

Visit www.firewise.org or talk to your local fire department for more information.

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A controlled burn in a pitch pine forest consumes flammable understory plants.