

Reducing Wildfire Risk on Cape Cod



The pitch pine and scrub oak vegetation of Cape Cod is considered one of the most fire prone natural landscapes within the north-eastern United States. These forests and woodlands are inherently prone to burning. The flammable conditions of the vegetation, fast draining sandy soils, and increased development

in proximity to this fire prone landscape place homeowners at risk from wildfires.

These same forests and woodlands are important aquifer recharge areas and help maintain water quality. They provide valuable habitat for plants and wildlife, many of which are rare in Massachusetts. The forests and woodlands are also much cherished recreational resources on Cape Cod. Many people choose to live in or adjacent to wildland settings because the areas offer natural scenic beauty, a more relaxed lifestyle, and privacy.

In many areas where forests mingle with homes and other facilities, vegetation management is needed to reduce the likelihood of catastrophic fire losses. Cape Cod Cooperative Extension has initiated the Wildfire Assessment and Preparedness Program to mitigate wildfire impacts on town-owned wild lands throughout Barnstable County. The program works cooperatively with towns, state and federal partners, private citizens and organizations to reduce wildfire hazards on public lands, increase firefighter and public safety, and inform landowners through education and awareness programs.

The Wildland Urban Interface

The Wildland Urban Interface exists wherever homes and businesses are built among trees and other combustible vegetation. Pitch pine, scrub oak, black huckleberry, and greenbrier are especially vulnerable to high intensity fire due to their natural volatility and dense arrangement. Fire hazards also exist in certain non-forested plant communities of Cape Cod, such as phragmites wetlands. Drought conditions, high winds, and the accumulation of dried vegetation may set the stage for destructive interface fires in these settings.

The prevailing threat is from wildfires carried through the shrub and grass layers, but dangerous crown fires are possible where pitch pine and ladder fuels are dense and fire exclusion or storm damage have created a build up of fuels. Interface fires often start as small accidental ignitions. Uncontrolled fire can move from the wildland into a residential community or start within a residential community and spread into adjacent wildlands. The interface area is generally considered that first wave of buildings adjacent to dense wildland vegetation but even some business areas a distance from the interface, can be at risk when wind carries showers of embers from wildfires.

Successful fire protection cannot solely rely on good fire control capability. To be successful, interface stakeholders must implement a combination of appropriate activities to raise awareness, reduce fuel hazards, and plan for potential fire occurrences.



Public land managers use prescribed burning to reduce fuel loads

Reducing Fuel Loads

Fuel management options employed by public land managers of wild lands often involve brush cutting during the summer months followed by carefully executed prescribed burns to reduce the stature and density of the volatile shrub understory and reduce the amount of litter on the forest floor. These management activities limit the spread of surface fires and reduce the risk of crown fires in pine stands. The goal is not to remove all vegetation from the forest, but to thin the area so fires will be of low intensity and more easily extinguished. Fire resistant deciduous trees are retained, and pitch pine trees are selectively thinned and spaced more widely to reduce the potential for crowning fires.

What you can do to make your home less vulnerable to wildfire



- Use fire resistant roofing materials.
- Ensure that your roof is free of combustible debris and no overhanging trees or vegetation provide fuel for airborne sparks and embers.
- Ensure chimneys meet current building code requirements and have approved spark arrestors.
- Use fire resistant building materials for exterior walls and double pane glass in windows.
- Ensure that all eaves are closed in and screen all vents including soffits.
- Keep areas under decks and porches clear of debris and sheath with flame resistant materials.
- Ensure your address is clearly signed on your property for quick identification.
- Maintain adequate emergency vehicle access, and an on-site emergency water supply (such as a pool, pond, or tank).
- Keep shovels, rakes, axes, garden hoses, sprinklers and roof ladders readily accessible to assist firefighters.

Create a Defensible Space Around Your Home

- Maintain at least thirty feet of defensible space around your home in short grass or other nonflammable materials. This is your "first priority zone" to consider for fire protection.
- Clean up your yard. Remove any underbrush, pine needles, dead-fall or long grass. Keep your grass mowed and watered.
- Prune low hanging branches on evergreens up to 8 feet above the ground.
- Store firewood 30 feet or more from your house. If your property slopes, move your woodpile and other flammable materials uphill from the house.
- Keep propane tanks at least 30 feet from buildings and clear vegetation within 10 feet of the tank.
- Contact your utility company if trees or branches are not clear of power lines.
- Maintain driveways 12 feet or wider to accommodate emergency vehicles and keep branches along passageways pruned a minimum of 10 feet above the ground.
- Remove any yard waste from wildland interface boundaries.
- Work with local fire officials to understand what type of wildland vegetation surrounds your home, how flammable it is, and how continuous it is on your property. Determine the need for a second or third priority zone of defensible space on your property.
- Reduce fuels in this second or third priority zone of defensible space around your home. Retain oak trees and other less flammable deciduous trees within this forested zone. Selectively remove pitch pine trees and space pines so that individual trees are at least 30 feet apart. Remove any slash from logging activities. Prune lower branches on remaining pines and other evergreens. Mow or brush cut volatile shrubs and vines such as scrub oak, black huckleberry, and green-brier on a regular basis to maintain a low-stature understory.
- Talk with neighbors and local fire officials about wildfire protection efforts in your area and schedule a neighborhood clean-up event.



Community Involvement

It's important to practice fire safety around your home, neighborhood, and business to reduce the risk of wildfire. A carelessly discarded cigarette, an abandoned campfire, or a wind-driven backyard fire are just some of the ways fire can turn a tranquil setting into a raging wildfire. Like all natural hazards, wildfires do not respect political or jurisdictional boundaries, highlighting the necessity for a regional approach and cooperation among private landowners, communities, private organizations, and all levels of government. Obey all restrictions about fires, never leave a fire unattended, and don't try to get close to a wildfire. Let emergency responders do their jobs. Support public land management efforts to reduce wildland fuels and work together with your neighbors and local fire department to address fire protection needs in your area. *For more information visit these helpful web sites:*

CAPE COD COOPERATIVE EXTENSION

www.capecodextension.org

CAPE COD FIRE DEPARTMENTS

www.capecodfd.com

FEDERAL EMERGENCY MANAGEMENT AGENCY

www.usfa.fema.gov

FIREWISE COMMUNITIES

www.firewise.org

FUELS MANAGEMENT NORTHEAST BARRENS

www.umass.edu/nrc/nebarrensfuels

MA DEPT. CONSERVATION & RECREATION

FOREST FIRE CONTROL

www.mass.gov/dcr/stewardship/firecont

NATIONAL FIRE PROTECTION ASSOCIATION

www.nfpa.org

USDA FOREST SERVICE

www.fs.fed.us

Cape Cod Cooperative Extension

P.O. Box 367
Barnstable, MA
02630-0367

Phone: 508-375-6701 Fax: 508-362-4518

E-mail: bclark@barnstablecounty.org

www.capecodextension.org



Wildland Fire
Protection and
Preparedness Program

Reducing Wildfire Risk on Cape Cod

