

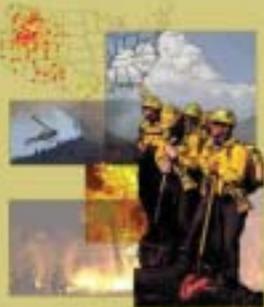
The Central Pine Barrens of Long Island, New York

Steps to Improve Community Preparedness for Wildfire

Community Preparedness Case Study Series

Case Study #11

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The Central Pine Barrens is a mix of terrestrial and aquatic ecosystems. (Photo courtesy of the Central Pine Barrens Commission, and copyrighted by the Commission or other contributing parties)



Road signs mark the location of the Central Pine Barrens, which offer many recreational opportunities to the public.

Although wildfires are typically associated with the Western United States, fire is also a critical part of landscapes in the Northeast. In recent years, wildfire management has been on people's minds in Long Island, New York, a place that does not come immediately to mind when thinking about wildfire risk or fire-prone ecosystems. However, two disastrous fires in the area in 1995 and the resulting creation of a wildfire task force awakened residents of eastern Long Island to the importance of preparing for and managing wildfires.



Much of the focus of Long Island's wildfire management efforts is in the Central Pine Barrens. Recognized as Long Island's last remaining wilderness, the Central Pine Barrens is a mix of terrestrial and aquatic ecosystems, including pitchpine-oak-heath woodlands and dwarf pine. It lies over and recharges a large aquifer, an important source of drinking water for Long Island, and boasts the greatest diversity of plant and animal life in New York. Defined in 1993 by the passage of the Pine Barrens Protection Act, the Central Pine Barrens is divided into a 55,000-acre core preservation area, where new development is prohibited, and a 47,000-acre compatible growth area, where some development can proceed under strict guidelines. It is within the compatible growth area that a wildland-urban interface, an area where human development meets wildland, has emerged.

Many factors have heightened the risk of wildfire in Long Island's wildland-urban interface, including ecological and demographic factors. Years of fire suppression, along with recent drought conditions and the outbreak of the orange-striped oakworm and the gypsy moth, have increased the fuel load in the area. Extensive residential and commercial development in these areas of high fuel loads increases the risk of severe losses from wildfire. Several agencies and organizations realize this risk and are taking steps to improve the Central Pine Barrens preparedness for wildfire.

Keys to Wildfire Preparedness on Long Island

Wildfire Task Force: a vehicle for cooperation

With the experience of wildfire fresh in their minds, the Central Pine Barrens Commission created a Wildfire Task Force in 1995. The task force serves as a communication vehicle among agencies that play a role in maintaining and protecting the area. It consists of 41 agencies and organizations, including Federal, State, county, and local agencies, private organizations, and volunteer fire departments, that own property or have other vested interest in fire protection within the Central Pine Barrens. A complete list of members can be found on the Web at: http://www.pb.state.ny.us/chart_wtf.htm.



Evidence of the 1995 fires can still be seen, as burned trees stand above the regrowth of the understory.

The creation of the Wildfire Task Force brought together, for the first time, players from many different agencies and organizations to talk about and plan for wildfire. Initially, their discussions were contentious from time to time, but members soon learned that they shared many of the same goals in protecting the Central Pine Barrens. Gradually, trust grew, and they realized they could accomplish more by working together and pooling their already-limited resources than by working alone.

Prefire planning

One of the major lessons learned from the fires of 1995 was to have a working fire management strategy in place before wildfire occurred again. In fact, the first responsibility of the Wildfire Task Force was to create a fire management plan for the Central Pine Barrens. Finalized in 1999, the Central Pine Barrens Fire Management Plan includes protocols for incident response, mobilization, and resource deployment; a determination of the wildfire suppression techniques appropriate for use in the Central Pine Barrens; fire prevention education programs; fuel reduction techniques including prescribed burning; and a standard system of record keeping for fire incidents. Several subcommittees were created to help the task force implement the fire plan, including those focusing on fire protection assessments, prescribed fire, public education, fire weather, equipment and training, air-ground firefighting coordination, and fire investigation.



An example of the wildland-urban interface. (Photo courtesy of the Brookhaven National Laboratory)



Brookhaven National Laboratory serves as the pilot for the fire protection assessment.

One of the major planning efforts taking place in the Central Pine Barrens is the fire protection assessment, which includes identifying and mapping wildfire risks and hazards, such as fuel types and possible ignition sources, within the Central Pine Barrens landscape. Human and natural resource protection priorities, such as housing developments and wildlife habitat, are then overlaid with the risks in order to map areas that should receive protection priority. The fire protection assessments will assist in the long-term planning of fuel reduction projects, equipment and training needs, and wildfire education. The pilot area for the assessment is the Brookhaven National Laboratory, a multiprogram national laboratory operated by the U.S. Department of Energy.

Public awareness of wildfire

Public education is also a key to wildfire preparedness in the Central Pine Barrens. The public education subcommittee is a very active part of the Wildfire Task Force. In 2002, it created an educational video called "Wildfire Safety and Awareness," which covers topics such as the history and role of wildfire in the pine barrens, causes of brushfires, advantages of prescribed burning, and instructions for creating defensible space around homes. This video was a finalist for the 2002 Telly Award, which honors non-network and cable video productions. The subcommittee is currently working on producing an educational CD based on the video that can be distributed to schools as part of an environmental education program. Additionally, the public education committee published a series of fact sheets on topics ranging from campfire safety tips to living in the wildland-urban interface. These fact sheets are distributed at community events and can be downloaded from the task force's Web site.



The education subcommittee of the task force created a video to help educate the public about wildfire in the pine barrens. (Photo courtesy of the Central Pine Barrens Commission, and copyrighted by the Commission or other contributing parties)

The fire weather subcommittee, in concert with the public education subcommittee, is charged with notifying the public about current fire conditions. Two fire weather stations have been established in the area to provide information about fire weather and data to volunteer fire departments, land managers, and the general public. For example, fire crews use this

information to anticipate fire behavior, and land managers use it to make decisions about restricting campfires and other activities on public land. Throughout the Central Pine Barrens, several fire danger signs have been posted to inform the public, including one at the entrance to the Brookhaven National Laboratory.



Fire danger signs help alert the public about current wildfire conditions. (Photo courtesy of the Central Pine Barrens Commission, and copyrighted by the Commission or other contributing parties)

Local media also play an important role in raising public awareness of wildfire. News 12, Long Island's news channel, has covered many wildfire issues, especially when the threat of wildfire has been high. The Pine Barrens Society, a non-profit organization, is very active in public awareness campaigns; in fact, the society hosts a monthly television show that covers environmental topics, including wildfire, affecting the pine barrens.

What's Next for the Central Pine Barrens

Train local volunteer fire departments to fight wildfire

Members of Suffolk County's 109 volunteer fire departments receive their training at the Suffolk County Fire Academy; however, the academy focuses on structural fires. Although most of the volunteer fire departments in Suffolk County are equipped with brush trucks and will respond to brushfires, few are trained in wildfire suppression. The New York Wildfire and Incident Management Academy, founded in 1998 and held yearly at Brookhaven National Laboratory, offers wildland training opportunities, including basic and advanced wildland firefighting, prescribed burning, and the incident command system. The academy attracts people from all over the Eastern United States and from all agency levels, allowing opportunities for interagency cooperation and coordination. To attract firefighters from local volunteer fire departments to the training, tuition for some courses is waived. Training volunteer firefighters from Long Island in wildfire techniques would give the Central Pine Barrens a pool of resources to draw upon to fight wildfires and help conduct prescribed burns.



Instruction of power saw use at the New York Wildfire and Incident Management Academy. (Photo courtesy of the Central Pine Barrens Commission, and copyrighted by the Commission or other contributing parties)

Continue educational efforts

In 2002, several members of the Wildfire Task Force attended a FireWise meeting, where they learned how to promote wildfire preparedness at the community and individual level. Their goal is to bring FireWise concepts to the pine barrens by developing seminars for groups with an interest/stake in wildfire, including fire marshals and regional planners. One issue the education subcommittee faces is how to educate the general public about wildfire risk and preparedness principles. A solution may be to target popular local civic organizations as a means of disseminating wildfire education.

The Central Pine Barrens Commission formed a Wildfire Task Force in 1995 to talk about and plan for wildfire. (Photo courtesy of the Central Pine Barrens Commission, and copyrighted by the Commission or other contributing parties)



fire protection assessment, future goals include standardizing the assessment so that it can be applied throughout the entire Central Pine Barrens. The fire protection assessment subcommittee hopes to publish a guide that landowners can use to learn about the risk of wildfire, identify fuel types on their properties, and learn the concepts of defensible space.

Use prescribed burning to reduce fuel loads

Prescribed burning is a common way to reduce heavy fuel loads, thereby minimizing the chance of a severe wildfire. Yet, it remains a relatively unused tool to land managers in the pine barrens and an unfamiliar concept to the general public of Long Island. What little prescribed burning that takes place in the pine barrens is conducted by The Nature Conservancy, the Fish and Wildlife Service, and the New York Department of Environmental Conservation and is performed on such a small scale that it goes relatively unnoticed by the general public.



Prescribed burning will help reduce fuel loads in the pine barrens. (Photo courtesy of the Brookhaven National Laboratory)

As the need for reducing fuel load grows in Long Island, so does the need for larger scale prescribed burning. Recently, the Central Pine Barrens of Long Island became a demonstration site for the Fire Learning Network, a joint project of The Nature Conservancy, the USDA Forest Service, and the U.S. Department of the Interior. The network's major goal is to help bring prescribed fire to the pine barrens. They hope to achieve this by assisting the prescribed fire subcommittee of the Wildfire Task Force in completing a prescribed fire plan as part of the fire management strategy, conducting a wildfire awareness/prescribed fire use opinion poll to gauge local public awareness, and designing and funding prescribed fire demo sites for public education. More information about the Fire Learning Network project in the pine barrens of Long Island can be found at the following Web site: <http://www.tnc-ecomanagement.org/Fire/SiteInformation/index.cfm?SiteID=79>.

Preparing for Wildfire: Lessons for Other Communities from the Central Pine Barrens

1. Communicate and cooperate among organizations and agencies.
2. Plan. Discuss wildfire sooner than later.
3. Identify locations of high fire risk and set management priorities to protect those areas.
4. Use local media to raise public awareness of wildfire.

Web Sites for More Information on the Central Pine Barrens and Wildfire Preparedness

Central Pine Barrens Commission: <http://www.pb.state.ny.us/>

Wildfire Task Force and Fire Management Plan: http://www.pb.state.ny.us/chart_stewardship_main_page.htm#Fire



Many houses were in danger of burning during the fires of 1995. (Photo courtesy of the Central Pine Barrens Commission, and copyrighted by the Commission or other contributing parties)

NY State Department of Environmental Conservation: <http://www.dec.state.ny.us>

Suffolk County, NY: <http://www.co.suffolk.ny.us>

The Nature Conservancy—Long Island Central Pine Barrens: <http://www.nature.org/wherewework/northamerica/states/newyork/preserves/art10990.html>

FireWise: <http://www.firewise.org>

North Central Research Station: <http://www.ncrs.fs.fed.us/>



Dwarf pine compose parts of Long Island's pine barrens.

Unless otherwise noted, photos are from Erika Lang, University of Minnesota, or Rachel Hudson, USDA Forest Service

The Wildfire Preparedness Project of the National Fire Plan

Communities across the U.S. have voiced increasing concern about how they can better prepare for wildfire. Even in areas of the country not traditionally thought of as having high fire risk, storms, changing climate, and pest/disease outbreaks have increased concern about the potential for catastrophic fire. In areas where fire is viewed as a natural part of the ecosystem, the fact that more and more people choose these places to live in means that there is a potential for major fire impacts. A team of scientists funded by the National Fire Plan have been visiting communities across the country to identify the activities communities are undertaking to increase wildfire preparedness, and the resources necessary to support these activities. The project is led by the North Central Research Station, in cooperation with the Pacific Northwest Research Station, University of Florida, University of Minnesota, and Southern Oregon University.

This is one in a series of summaries reflecting findings of the case studies. Hard copies of this summary can be obtained from the individuals listed below. All case study summaries currently available can be found on the web at:

www.ncrs.fs.fed.us/4803/Highlights.htm

For more information contact:

Rachel Hudson
North Central Research
Station
651 649-5163
pjakes@fs.fed.us



UNIVERSITY OF MINNESOTA

Kristen Nelson
and
Erika Lang
College of Natural
Resources
612 624-1277
kcn@umn.edu

National Fire Plan
Managing the Impact of Wildfires on the
Communities and the Environment