

NYS Department of Environmental Conservation Division of Forest Protection

New York State Forest Ranger Wildland Fire Reporting Database Overview

General Description

The Department of Environmental Conservation's Division of Forest Protection ("*Forest Ranger Division*") is designated New York's lead agency for wildfire mitigation in the state's Comprehensive Emergency Management Plan. It is the policy of the state that local government and emergency services are the first line of defense for emergency response. In the case of wildfire, the local fire department has the primary responsibility (incident command) for the control and containment of wildfires in their jurisdiction. The Forest Ranger Division has a statutory requirement to provide a forest fire protection system for 657 of the 932 townships throughout New York. This area excludes cities and villages and covers 23.5 million acres of land including state-owned lands outside the 657 towns. The Lake Ontario Plains and New York City-Long Island areas are the general areas not included in the statutory protection. During some years, the largest and most destructive wildfires occur on Long Island or in New York City. The Lake Ontario Plains were once New York's most active agricultural lands but much of the area has reverted to hardwood forests. Wildfire occurrence in this area will be collected from fire department reports to evaluate any need to expand statutory responsibilities. Regardless of jurisdiction or location of a wildfire, fire departments and forest rangers have a long history of working together to control the most serious wildfires that occur anywhere in the state.

Data Collection

Wildfire occurrence reporting in New York is based on two data sources. The New York State Forest Ranger force has fought fires and retained records for 128 years. New York does not have a consistent wildfire season. New York's fire history indicates periods of time when wildfires are much more numerous and destructive than the 25-year average would indicate. Years 1991, 1995, 1998, 1999, 2001, 2008 and 2012 were all above average years with 11,730 acres burned in 1989 alone. In 2008, a 2,800-acre wildfire occurred in Minnewaska State Park killing approximately 50% of the old growth forest cover in this very popular and scenic park. In 2012, a 992-acre wildfire burned through Long Island's Central Pine Barrens destroying three homes and one fire engine.

In addition to forest rangers documenting wildfire occurrence, New York's 1,700 fire departments do the same but in a very different format. Data collected by the state Office of Fire Prevention and Control (OFP&C) indicates that since 2000, fire departments throughout New York responded to over 77,126 wildfires, brush fires, grass fires or other outdoor fires (all natural vegetation fires). Fire department data for years since 2000 has been shared and published with the National Association of State Foresters at <https://fam.nwcg.gov/fam-web/>.

Analytical Issues

The Forest Ranger Wildland Fire Reporting Database is updated by dispatchers and forest rangers as fires occur and fire control status change. The database is designed to provide a situational report of active wildfires under the command of DEC Forest Rangers in real time. The data provided in this project reflect fires that have been extinguished and the individual fire report has been completed and approved by a forest ranger supervisor.

Limitations of Data Use

Since forest rangers report about 2.7% of the total number of wildfires reported by all fire departments in New York, the data in this project cannot be used to completely define wildfire occurrence within the state. Since forest rangers are required to document and report any and all wildfires 10.0 acres and larger in size, the data sets of these larger fires is considered a complete dataset of these fires occurring in New York.