



**2009 Municipal Inland Wetland Commissioners Training Program,
Segment 3**
Connecticut's Inland Wetlands and Watercourses:
Agricultural Practices

Great Mountain Forest Fact Sheet

The Great Mountain Forest, which today encompasses approximately 6,000 acres, is located in the northwestern hills of Connecticut in the towns of Norfolk and Canaan. For many years the largest portion of the forest was owned by the Hunts Lyman and the Barnum Richardson Iron Companies, and most of the forest was repeatedly cut for charcoal with which to smelt iron ore from the hills to the west. During the charcoaling days, forest fires burned frequently and extensively in the cut over hills. In addition to this, most of the hemlock stands were felled to provide tanbark for the local tanneries. Thus in 1909, when Senator Frederick C. Walcott and Starling W. Childs acquired the first parcels of land, much of the area was reduced to burned-over scrub and brush land.

In general, the Great Mountain Forest covers a broad upland of heavily glaciated crystalline rock. Elevations range from 1,200 feet to nearly 1,800 feet except at the southwestern extremity where the upland drops sharply to the ancient limestone formations of the Housatonic Valley with an elevation of just under 700 feet. There is a maintained network of 13 miles of gravel roads on the forest that provide access for forest management, fire control and research activities as well as passive recreational activities.

Perhaps the most important single factor during the past 100 years has been the elimination of fire. With the elimination of wildfires as well as careful forest stewardship practices, the forest has regenerated and has again become productive timberland. The forest now is mainly composed of transition hardwoods, with a strong representation over much of the area of northern hardwoods mixed with hemlock and white pine. Native stands of red spruce and red pine can also be found. At the lower elevations fronting the Housatonic Valley, some typical Appalachian hardwoods appear, such as tulip poplar, black and chestnut oaks, various hickories, dogwood and sassafras.

As a National Weather Service Cooperative Weather Observer Station, daily weather readings have been recorded since 1932. The climate here is favorable for tree growth with an average annual rainfall of 52 inches, well distributed throughout the year. The average annual snowfall of 96 inches usually produces a snow cover, which remains well into April, and thus helps to reduce the spring fire hazard. The warmest month of the year is July with an average mean temperature of 67.8° F, while the coldest month is January with an average mean temperature of 20.3° F. The annual average mean temperature is 44.4° F.

The official station name is Norfolk 2 SW. It is a National Weather Service (NWS) Cooperative Weather Observer Station, one of 165 in Connecticut. There are currently about 11,700 cooperative stations in the United States. The station is currently located at the Childs family's Coolwater estate on Windrow Road, and thus is often referred to as the Coolwater weather

station. The station's elevation is approximately 1,340 feet. The Great Mountain Forest Corporation (GMFC) currently maintains the station.

The GMFC forestry office has on file the Coolwater weather station daily readings sheets that date back to January of 1932, and is fortunate to also have copies of the daily weather readings sheets taken by J.W. Beach of Norfolk that date back to November of 1884. This remarkable resource, utilized by numerous individuals over the years, will prove to be even more important in the future, as climate becomes more of a major concern in the world.

Research conducted at the facility includes projects on carbon fluxes and uptake, reestablishment of the American Chestnut, forest hydrology, wildlife, and invasive species.

GMF Mission Statement (from GMF website: www.greatmountainforest.org)

From Great Mountain Forest Corporation's Certificate of Incorporation in 1962:

To encourage, in the broadest and most liberal manner, the investigation, research, discovery and application of knowledge to the development and use of all types of trees, forests, forest lands and other natural resources. To conserve land and water areas and, in particular, forest areas. To conduct, endow and assist investigation and study related to such purposes and activities in any department of science and to this end to cooperate with governments, universities, colleges, technical schools, learned societies and individuals.

In an article E.C. Childs and D.F. Russ wrote for [The Northern Logger](#), published in June 1953:

Recreation, the establishment of both research and demonstration projects, the application of forest practices that will best protect the watersheds and maintain an abundant and healthy wildlife population, are all integral parts of a multiple use program. It is a program, however, **where the primary purpose is one of forest management for the production of wood for industrial use**

Great Mountain Forest Fun Facts:

- **1955 Wettest year on record: 76.0"**
- **1956 Most annual snowfall: 175.1"**
- **1998 Warmest year on record: 48.4 degrees (F), average is 44.7 degrees (F)**
- **2009 Maximum rainfall event: 8.6 inches (Oct 7-9)**
- **1996 Maximum snowfall event: 32.7 inches (December 5-8)**
- **2009 GMF Centennial Celebration and weather of some sort is guaranteed**