

EXCERPTS FROM THE  
STATE OF NEW HAMPSHIRE  
BIENNIAL REPORT OF THE FORESTRY COMMISSION  
FOR THE YEARS  
1909 - 1910

THE MOUNTAIN LOOKOUT SERVICE.

The present forest fire law, while it works well in the, southern part of the state, and, with a few changes, will be sufficient protection for the woodlot region, is altogether inadequate to protect the large areas of wild land in the mountain region. On account of the scarce population a fire may burn for a long time before being discovered. There are fewer roads or other breaks in the forest from which a fire can be successfully fought. On account of the rough topography it is hard to get a crew on the ground after a fire starts, and slower work fighting. There are fewer fires in the mountain region than in the southern part of the state, but the average mountain fire burns over more territory and does more damage.

An idea. of the different conditions in the two regions is gained by comparing the fires that have occurred in Carroll, Coos, and Grafton counties with those that have occurred in the remainder of the state. Within the last two years there have been only 76 fires reported in the three upper counties, while in the other seven counties 394 were reported. The average fire in the north, however, burned over 137 acres and caused \$619 damage: while the average fire in

the southern counties burned only 30 acres, causing \$108 damage. The fires in the south were discovered soon after they started and were easier to extinguish.

An adequate system of fire protection for the northern region must be one that prevents fires or at least prevents them from getting under great headway. For this purpose mountain lookout stations have been used with considerable success in Maine, New York, and in the national forests of the West. A mountain commanding a good view of the surrounding timberland is selected for the purpose and a telephone line built to the top. A watchman is kept on the mountain whenever there is danger of fire. He has field glasses, maps, a compass, and a range finder. As soon as a fire is discovered the watchman immediately telephones the nearest forest fire warden, or other person in charge of fire fighting, telling him the location of the fire and the easiest way to get there.

Two lookout stations have been maintained by timberland owners in New Hampshire for several years. The Mount Pleasant Hotel Company has long maintained a patrol over the Rosebrook range in times of drought, a telephone line having been built to the top of Mt. Rosebrook, the best lookout point. A station has also been maintained on Croyden mountain by the Draper Company and the Blue Mountain Park Association. Both these operators expected to continue their work this season and were glad to cooperate with the commission. The forester, therefore, furnished each with the names and telephone connections of all forest fire wardens in the territory surveyed by each mountain, and since then fires have been promptly reported to the wardens.

During August, 1909, it became evident that the four thousand dollars appropriated up to September 1, 1909, would not be all used on account of the fact that many towns were not sending in their forest fire bills promptly. The money left over could not be held for payment of bills, and the commission therefore applied to the Governor and

Council for authority to use part of this money in purchasing equipment for mountain lookout stations. The request was granted, and telephone wire, fixtures, and instruments enough to equip five stations were purchased. Aside from this initial expense of \$599.39 no state money has been used for any of the lookout work.

No money from the state appropriation could be used for building or maintaining these stations. The money which had been placed at the disposal of the commission by Mr. R. E. Faulkner was used for this purpose, and in the fall of 1909 a station was built on Mt. Kearsarge. This mountain overlooks the towns of Conway, Eaton, Madison, Albany, Bartlett, Jackson, and Chatham, and parts of other towns. Since its establishment twenty-six fires have been discovered and reported by the watchman.

#### TIMBERLAND OWNERS CONTRIBUTE FOR LOOKOUT STATIONS.

Realizing the need of a better protective system than could be furnished under the present law, the commission requested the large timberland owners to meet them' at Gorham, N. H., on March 30, 1910, for a discussion of the best means of securing fire protection.

The response was gratifying and clearly showed that the timberland owners are awake to the serious effect of fire on the future timber crop, the attendance representing an ownership of over one million acres. At this meeting Mr. W. T. Cox of the United States Forest Service outlined the fire protection work of the government and the timberland owner's protective associations in the West; Hon. E. E. Ring explained the system of fire protection used in Maine; Mr. Austin Cary was unable to be present but sent a paper covering the methods used in New York, and Mr. Austin Hawes spoke of the fire situation in Vermont. The State Forester then outlined the work done in New Hampshire under the present forest fire law, after which the better protection of our timberlands was thoroughly discussed by the owners.

As a result of this meeting the timbermen contributed \$4,100 toward the immediate building of lookout stations, and appointed a committee to consider the advisability of forming a permanent association for the purposes of fire protection. The contributions of individuals and corporations are given in the financial statement of this report.

#### LOOKOUT STATIONS ESTABLISHED.

With this money lookout service was established on ten mountains, making thirteen in all. The location of these stations is shown on the accompanying map. On Mt. Moosilauke, Mt. Agassiz, and Mt. Madison telephone lines were already installed, the only expense being the employment of a watchman. On Mt. Zinco, which is operated by the State of Maine, an arrangement was made whereby fires occurring in New Hampshire were reported to the wardens, and in return fires in Maine were reported if discovered from New Hampshire lookouts. On Mts. Magalia (Pittsburg), Sugar Loaf (Stratford), Signal (Millsfield), Black (Cambridge), Pine (Gorham), Carrigain (Livermore), and Osceola (Waterville), it was necessary to build telephone lines and construct camps.

#### THE VALUE OF LOOKOUT STATIONS

Most of the New Hampshire lookouts were constructed late in the summer of 1910 and used only for a short time, a few, however, were in use during the spring, summer, and fall. Five of these stations proved the value of this method of fire protection. In all 44 fires were reported as follows: Mt. Agassiz, 2; Mt. Moosilauke, 5; Mt. Madison, 3; Croydon Mt., 8, and Mt. Kearsarge, 26.

A lookout station is not always available on account of clouds cutting off the view of the observer. On the other hand, the fire danger is most imminent in periods of drought, when the air is usually clear. On account of the number of cloudy days which occur on the very high peaks and also

from the increasing amount of haze in the air the mountains of less altitude seem better adapted to serve as lookout points.

The value of the lookout station is greatly increased if the watchmen are provided with good maps of the surrounding country so that any visible smoke can be accurately located. Maps such as the one shown in Plate X should be made for the country around each lookout station, also panoramic maps should be made showing all tile hills and mountains visible from each station. Plate IX shows the panorama around Mt. Moosilauke. This is the only mountain for which such a map could be secured.

Two notable cases showing the value of the lookout service in New Hampshire are worthy of mention.

#### CON WAY.

On July 11, 1910, a fire was set in a heavy pine stand only a short distance from the Kearsarge postoffice. It was supposed to have been started by a careless smoker, and was in a dangerous place, as a number of buildings and young growth pine were close at hand. The watchman on Mt. Kearsarge saw the first curl of smoke, and immediately telephoned the forest fire warden, who summoned help and was on the ground before most of the people in the immediate vicinity knew of the fire.

Four hours hard fighting sufficed to extinguish the fire. Considerable damage was done to young pine, but the promptness of the lookout man and fire warden saved a great deal of property.

#### LANCASTER.

On August 30, 1910, a fire was started in the south part of the town for the purpose of clearing land. The fire was seen from Mt. Agassiz, a distance of twelve miles. The forest fire warden was notified immediately and started for the fire. He arrived within two hours from the time the fire started, and was able to prevent the fire from doing any particular damage.

There was a dense growth on two sides of the field where the fire started. Had it not been for the prompt discovery by the watchman and the quick action of the fire warden the fire no doubt would have reached the woods and caused a great deal of damage and expense.

#### MORE LOOKOUT STATIONS NEEDED.

The mountain lookout service in New Hampshire and other states has undoubtedly proved its worth. It should be extended so that all wild land may be under observation in times of drought. On Plate VIII the locations of proposed stations are shown. There should be seven or eight more established in the northern part of the state. One is needed near the Canadian boundary to overlook the country north of the Connecticut lakes. It is probable that arrangements could be made with the Province of Quebec to share in maintaining such a station. Dixville peak commands a good view, and a station is needed on one of the peaks of the Pilot range. One station is needed which commands the entire main valley of the Pemigewasset, looking into the Franconia Notch. Mts. Grandview or Pemigewasset would serve this purpose. On the east side of the state a large area of country is not yet covered by lookouts. Black mountain in Jackson would cover the Wild river valley and some parts of Jackson that cannot be seen from Mt. Kearsarge. Farther south, a lookout is needed to cover Sandwich, Tamworth, and a part of Albany. For this purpose Mt. Whiteface is perhaps best situated, although Mt. Israel and Mt. Chocorua cover wide ranges of territory. If a lookout is needed in the lake region, Mt. Shaw would probably be the best point of observation.

For the central and southern parts of the state it is doubtful if lookout stations will prove so valuable as they do in the north. The forest is more broken and the denser population enables fires to be apprehended sooner after they start. Nevertheless, the Croydon lookout covers a country which is largely a woodlot region and it has proved to be

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very valuable. It must also be remembered that considerable areas of land have been abandoned and grown up to forest, so that there are good-sized tracts of practically unbroken second growth. Then, too, the proximity of the manufacturing cities invites a careless element of our population to traverse the wood, and this largely increases the number of fires. The mountains in this region which have been suggested to the commission as desirable lookout points are shown on the map. Mts. Cardigan, Kearsarge, and Lempster would command good views, but fires have not been frequent in the vicinity of these mountains. The landowners around Monadnock have been considering equipping this mountain for lookout service. It commands a good view and would prove a valuable station. Mt. Uncanoonuc in Goffstown and Federal Hill in Wilton have been suggested by landowners on account of the frequency of fires in the immediate vicinities.