

1910 Fire
REPORT FOR DISTRICT I, UNITED STATES FOREST SERVICE

MONTANA AND NORTHERN IDAHO.

* * * *

The fire season of 1910 was by far the most disastrous ever encountered by the Forest Service in this District. The months of May, June, July and August were characterized by exceptional drouth and high winds. Owing primarily to these conditions, fires broke out in a number of forests in the Western portion of the District between June 15 and July 5. By July 20, the situation was serious on practically every National Forest West of the Continental Divide, with a number of large fires on each Forest and small fires starting every day. The exceptional drouth and frequent severe winds made it impossible for the ordinary force to cope with the situation. Fires which in ordinary seasons would burn slowly for half a day, enabling a single patrolman to extinguish them if discovered with reasonable promptness, spread with great rapidity, requiring in many cases a crew of ten to fifteen men to bring them under control within even three or four hours of the time of starting. The country became so smoky that the lookout and patrol system in the interior portions of the Forests were rendered practically useless.

Authority was secured from the Secretary of Agriculture to exceed the very meager appropriation available for emergencies of this character and the organization

strengthened at every possible point. It was of course impossible in many instances to secure, on such short notice, an adequate force of competent patrolmen. The temporary labor obtainable was on several Forests very unsatisfactory because of its more or less irresponsible character. In this emergency, however, we did the best we could with the material at hand and employed as many men as could be properly directed, equipped and supplied. The period of active fire fighting extended over forty-five days. During that time, an average of 4,000 men was maintained continuously on the patrol beats and fire lines in the National Forests most seriously threatened, an aggregate area of 18,300,000 acres. Our total expenditures for fire fighting and patrol were \$863,000. Of this amount, \$134,000 was from the regular appropriation for the field force of the Service. \$50,000 was from the appropriation for fire emergencies. The balance, 79% of the total expenditure, is a deficit which we have asked Congress to make good at the coming session. Had this amount been included in our original appropriation for patrol, it is unquestionable that at least a large percentage of the fire losses could have been prevented.

The situation was held under fair control, although with much more serious losses than in any preceding season when this area was under National Forest administration, until August 20. A hurricane which swept the Bitterroot Mountains along the Idaho-Montana state line on that date

carried every smouldering fire, including several which had previously been brought under control, into the crowns of the timber and devastated an enormous district within forty-eight hours. The velocity of the wind was sufficient to uproot a large percentage of the timber in many localities, before the fire reached it. At least 80% of the total damage of the season was done between August 20 and 24.

A rough approximation of the fire losses on public and private lands, within and adjacent to the National Forests of the District, places the total area burned over at 2,912,572 acres and the total damage at \$21,500,000. This amount will be reduced by whatever may be salvaged through sales of dead timber. The timber in the burned districts aggregates a little over 6,000,000,000 feet, but I am confident that a considerable proportion of this amount has survived on areas which were jumped by the rapidly moving crown fires and on areas where ground fires did not kill the more resistant species.

An analysis of the conditions leading to this enormous destruction of Government property, with a view to future betterment, is called for. The situation may be put in a nutshell. The present organization, equipment and resources of the Forest Service in this District are perhaps adequate to restrict the fire losses during an ordinary season to a reasonable figure, say, .5 of 1% of our total

area. They are utterly inadequate to meet such an emergency as the climatic conditions of last summer brought upon us. In the first place, a considerable percentage of our employees must give the major portion of their time to other duties than fire protection; sales of timber, segregation of agricultural lands and the like. These duties are laid upon us by the laws of Congress and the demand of the resident population for such uses of the National Forest areas. Any attempt to postpone their discharge inevitably results in insistent criticism and public and political pressure. These administrative duties, furthermore, necessarily require the more competent and experienced men. The great problem which has confronted me in every annual allotment of the funds available for my District, is how to provide for unavoidable administrative work and at the same time make anything like an adequate provision for fire patrol.

During the past season the best allotments for patrol which I was able to make on the heavily timbered Forests west of the Continental Divide was on the average basis of one Guard for each 59,400 acres. It ought to have been not more than 30,000 acres. The other employees, engaged chiefly in administrative work, were of course available in emergencies and assumed direction of the work whenever serious fires broke out. The inadequacy of the patrol force, however, was convincingly shown by the season's results. Each Supervisor was forced to concentrate his

patrolmen on the portions of his Forest subject to the greatest fire danger. 27% of our area was thus adequately patrolled. On 73% the patrol was inadequate. As the fires increased in number, practically all of our regular employees in many districts had to be placed in charge of fighting crews, leaving patrol to inexperienced, temporary help or abandoning it altogether. During the season, we had 1,679 fires. 854 of these were promptly extinguished by the Forest Guards in the heavily patrolled districts. 388 more were extinguished by the patrolmen with such assistance as could be immediately secured within twenty-four hours after starting. 437 fires were of serious proportions and required organized crews. 200 of these were extinguished before serious damage was done. The remainder, or about 15% of all the fires which occurred during the season, were responsible for the great losses. And it is of striking significance that practically the entire 15% were located in country either inadequately patrolled on account of lack of men, or inaccessible on account of lack of trails and telephone lines.

Insufficient equipment in trails and telephones is the second fundamental element in the unpreparedness of the Forest Service for an emergency like that of last summer. A close estimate recently made of the amount of equipment of this character, chiefly trails and telephones, with small expenditures for roads and buildings, which is urgently needed for the protection of the 30,000,000 acres of National Forest land in my District totals \$1,116,000.

Under the Congressional appropriations, we have been receiving annual amounts for this work of \$100,000 or \$125,000, and last year but \$45,000. The results of the lack of such facilities was strikingly shown by last summer's fires. We had 1,490 fires accessible to roads and trails. They burned over 1,166,536 acres, an average of 783 acres to the fire. We had 189 fires inaccessible to roads and trails. They burned over 1,746,036 acres, an average of over 9,200 acres to the fire. There were 975 fires accessible to telephone lines, with an average per fire of 462 acres. There were 704 fires inaccessible to telephone lines, with an average per fire of 3,497 acres.

A stronger patrol force and a much more adequate trail and telephone system constitute the first essential in bettering the protection of the National Forests in my District.

The second respect in which our organization should be steadily strengthened is in co-operation with private owners and other parties whose interests, as to certain portions of our area, are identical with our own. During the past season, the Forest Service in my District extinguished 364 fires which were wholly or in part outside of the National Forest boundaries but which threatened our lands. On 176 of these fires, we had the co-operation of the private owners whose interests at stake were fully equal to our own. On the rest we worked alone. Many other fires within the Forests damaged or menaced private holdings. We had in force last summer co-operative agreements for patrol and fire fight-

ing with the four Timber Protective Associations of Northern Idaho, and with the Bonners Ferry Lumber Company, the Julius Neils Lumber Company and the Big Blackfoot Milling Company in Western Montana. The Service found its fire work materially strengthened by all of these agreements. While modifications are doubtless advisable in certain cases, to make the joint efforts under the agreements most satisfactory to both parties, I feel strongly that co-operation of this character should be continued and strengthened in the future.

Of special importance in my judgment is the continuance and strengthening of the co-operative agreements between the Forest Service and the railroad companies. Our agreements with the Great Northern and Northern Pacific Companies were put to the severest test last summer and they stood the strain. 56% of our fires were started on railroad rights of way. On the Forests having the greatest number of fires and the greatest railway mileage, 80% of the fires originated directly or indirectly from railroad operation. The patrol maintained by the Service, however, and the efforts of the railroad employees, under the terms of our co-operative agreements, prevented all but a very small proportion of these fires from escaping and doing serious damage. No two things were more clearly demonstrated to me last summer than: First, that the railroads within the National Forests are the most prolific

of all causes of Forest fires; and second, that it is practicable to restrict the damage from railway fires to a negligible quantity by stronger co-operation along the lines already initiated.

Lastly, our experience in the fire season of 1910 indicates conclusively the need of more stringent State laws and more effective enforcement of those now on the statute books. 135 fires, 9% of the total, started from slash or brush burning on private lands or claims. Many of these fires, located in relatively inaccessible places, proved the most difficult and costly to bring under control. The fires of this origin were about equally divided between Idaho, which has a season closed to unregulated brush burning, and Montana which has none. In several of the Idaho cases, convictions could not be secured in the face of conclusive evidence on account of the antipathy of the settlers to the present law. Uniform legislation on this subject in the two States; its rigid enforcement; and a campaign of education to enlist the support of the people generally are in my judgment essential steps in reducing the fire risk to Forest properties.