

Issued by  
The School of Forestry, University of Idaho, Moscow, Idaho.  
Devoted to  
The Dissemination of Information Concerning the  
Forests and Forest Industries of Idaho.

THE FOREST FIRE SEASON

OF 1924 IN IDAHO

With the fall rains came the close of another fire season in Idaho sufficiently unlike preceding seasons to give added weight to a common saying among forest fire fighters to the effect that the abnormal and unusual season is the average one here. Even those longest associated with the fire game in this region are unable to recall another season with behavior similar to the 1924 season. Briefly the high lights are:

1. Unusually light winter snow-fall followed by the driest April and May ever recorded.
2. A remarkably small number of lightning storms with those that did occur of unusual severity.
3. Unusual and heartily welcome relief in the shape of rain, with several damp, cold days, July 18 to 21.
4. General fall rains marking the close of the season starting considerably later than usual.

It may be worth while to consider at this time what this combination of conditions brought about and to endeavor to formulate plans which will prevent a recurrence of the needless losses and expenses which resulted.

Two principal requirements enter into the making of a forest fire: first, there must be weather conditions favorable to the drying out of the fuel. Second, there must be a spark to start the fuel off. The unusually dry spring began furnishing the first requirement in a marked degree in April and contin-

ued to deliver in quantity until May 24, when showers intervened. During the first ten days of May, well-meaning ranchers and lumbermen furnished an abundance of ignition through their efforts to clear land and burn logging slash at a favorable time, and at a time of year which is so generally safe that the State fire laws leave it open to burning without permit. The combination commenced to deliver a few reportable fires during the last few days of April but no serious trouble was experienced until May 12, when the combination of weather conditions took many of the fires out of hand and fanned them to dangerous proportions within a few hours. Nearly two weeks of dry, hot weather ensued and all protective agencies in the north end of the State were taxed to the utmost to get forces into the field to meet a condition that had arrived about six weeks earlier than is usual even for a bad fire year.

No very heavy losses of green timber resulted from these early fires but there was a great deal of damage to young growth in previously burned areas and in cut-over areas. It is probable that a number of these losses on privately-owned land were not recognized and not reported. There were rather heavy losses in decked logs and logging improvements, and some minor ones in logging equipment and ranch property. The total losses were the largest ever sustained so early in the season in a record of sixteen years duration. A proclamation issued by the Governor on May 13 prohibiting the unrestricted use of fire during the remainder of the month doubtless

was of great help and might have largely averted the damage which did occur had it been issued a week earlier.

Following the rains and cool weather of late May and early June, there was a respite until the latter part of June, which gave all organizations an opportunity, after they had experienced a stern warning, to build up their organizations, open trails and telephone lines and make full preparation for the strenuous period which followed. It is safe to say that the strongest fire protective forces which ever took the field in Idaho were on the ground to meet the situation before July 1. These forces unquestionably prevented heavy losses during two critical periods later in the summer.

One of the most severe electric storms that has happened in years swept over the Clearwater region the night of July 1. In the Clearwater region alone over a hundred fires were set by this storm and others which followed during the next two or three days. This series of storms also extended, with less severity, to other parts of the state and a great many fires were handled during the first twenty days of July with losses that were small considering conditions during that period. The National Forests north of Salmon River alone handled 488 fires in the first twenty days of July. Figures for other agencies for the period are not available

but they are known to be large. Rather general rains followed by damp, cool weather for several days set in on July 18. During this period all organizations gained full control of their existing fires.

Rather serious conditions again existed in late August and early September and some losses were sustained, but at no time after July 20 were fire protective organizations severely taxed to meet the situation.

So far as they are completed and available at this time the fire statistics for the season are given below. Further checking and compilation of the records will make only minor changes.

STATISTICS

FIRES: Causes.

Lightning.....	921
Railroads.....	146
Camp fires.....	191
Smokers.....	236
Brush burning.....	146
Incendiary.....	15
Lumbering.....	89
Miscellaneous.....	59
Unknown.....	64

Total.....1867

Classes

A.....	1200
B.....	383
C.....	284

Total.....1867

- Class A-less than 1/4 acre.
- Class B-1/4 acre to 10 acres.
- Class C-over 10 acres.

	Timber
	Burned
	M. Feet B.M.
National Forest Land.....	12,000
Other Lands.....	17,480
Totals.....	29,480

Young	Damage to
Growth	logs, improve-
Killed	ments, etc.
Acres	
13,500	\$8,600
10,350	55,000
23,850	\$63,600

	Total Acreage	Area Burned 1924	Percentage Burned 1924
National Forest Lands.....	20,616,000	38,273	.0018
All other forest lands.....	2,324,000	69,688	.0299
Totals.....	22,940,000	107,961	.0048

Perhaps one of the most outstanding and hopeful signs in connection with the season's work is the interest taken by the various agencies in the relation of weather to forest fires. Weather records were more generally kept and more closely scanned than ever before. Several instruments for measuring and recording relative humidity (air moisture) were installed by the various protective organizations and used to point an index to fire conditions. At the Priest River Forest Experiment Station intensive studies of fuels and fire weather conditions were carried on with promising results. At this station radio forecasts from Pacific Coast weather forecasters were regularly received and made use of. The 36-hour weather forecasts of the U.S. Weather Bureau were received by wire at Forest Supervisors' offices in North Idaho each morning and were given consideration in planning the day's work. A careful check for the 1923 season showed that these forecasts attained an accuracy of 82 per cent for that season. Records are available which will enable a similar check of their accuracy this year.

A study which contemplates the prediction of lightning has yielded much valuable information concerning this one nonpreventable cause of more than half of the forest fires in Idaho. The study is arousing new and broadened interest in a topic hitherto regarded as a closed book. Lightning fires were this season dealt with more successfully than ever before in the history of Idaho fire protection. Increased knowledge and appreciation of the subject played its part, along with more improvements, better equipment, and closer organization.

Another promising line of fire research work carried on at the Priest River Station has to do with long range weather forecasts which predict thirty days in advance or for entire seasons. Such forecasts have been carefully investigated and those based on sunspots especially seem to promise very useful results.

Idaho's fire losses for the season, although relatively small, were still too large because they were chiefly of a preventable nature. The practice of forestry on large scale in Idaho is impossible without effective fire protection. The lumber industry cannot continue indefinitely on its present scale in Idaho unless fire losses are greatly reduced. The annual cut of timber, plus the annual fire loss, is in excess of the highest estimates of annual timber growth. Which shall it be, fires, smoke, devastated lands and uncertain and destructive stream flow, or a lumber industry that can continue indefinitely to bring a revenue of 15 or 20 million dollars a year into the State and still leave us forested mountains which will deliver a regulated flow to the streams? The choice rests with the people of the State.

The great outstanding needs for better forestry in Idaho are:

1. Constructive new forestry legislation.
2. Technical forest administration permanently free from political vicissitudes.
3. Additional funds for fire protection.

KEEP FIRES OUT OF IDAHO FORESTS

IT CAN BE DONE