



THUNDER BAY TIMBER OPERATORS ASSOCIATION

LOG BOOK

SPECIAL
PREV-FIRE
ISSUE

The 1952 Forest Fire Season Is Here!

WE HAVE A JOB TO DO!

Our Task:

- (1) Preach and Practise **PREVENTION**
- (2) Organize Camp **FIRE CREWS**
- (3) **TRAIN** these crews to know their job.
- (4) **ATTACK** every fire with speed and strength.

RETURN TO
FORESTRY LIBRARY
Woods Division
Marathon Corp. of Canada Ltd.
Port Arthur, Ontario

The Department of Lands and Forests is charged with the responsibility of preventing, detecting and suppressing forest fires on all Crown Lands. Each woods operator pays an annual fire tax to the Department of Lands and Forests but, in addition, has two added responsibilities:—

- 1) Under the Forest Fires Prevention Act, and
- 2) Because we want to keep our forests green and productive forever and this industry in which we work in operation forever.

Woods operators have plenty of fire equipment, tools and machinery on hand to put out fires. Fire suppression equipment on hand in woods operations in

Northwestern Ontario is valued far in excess of \$650,000.00.

Supervisory personnel must ensure that this equipment is in good shape at all times and is **READY** for immediate use.

Each District of Lands and Forests has a District Fire Plan and likewise each company and camp area should have a fire plan. Such plans should be notified to all concerned.

YOU SHOULD KNOW YOUR PLAN — organize all employees into fire crews and train them — **READY FOR ACTION.**

**NO FIRES STARTED BY WOODS WORKERS!
A FIRE FIGHTING PLAN FOR EACH AREA!
EMPLOYEES ORGANIZED INTO FIRE CREWS
— TRAINED AND READY!
QUICK ACTION TO PUT OUT FIRES!**

Smokey Says



This leaflet is circulated to key personnel in the woods industry in Northwestern Ontario to remind all concerned that the prevention, detection and suppression of forest fires is a prime responsibility.

Mr. A.H.C. Carson,
Marathon Paper Mills,
Caramat, Ont.

Here's Last Year's Score!

LET'S PROFIT BY EXPERIENCE

The fire prevention and suppression activities of woods operators in co-operation with the Department of Lands and Forests has paid handsome dividends by fewer fires being started by woods employees and by a smaller acreage being burnt by those fires in the vicinity of woods operations. Quick suppressive action by organized crews has proven the answer many times.

Out of 897 forest fires in Ontario last year, 38 were attributed to woods operations and/or employees.

Let's look at the fires caused by woods operations and/or employees in 1951:

WOODSWORKERS SMOKING.

SIGNAL FIRE BY LOST EMPLOYEE.

SPARK FROM ALLIGATOR OR CIGARETTE FROM ONE OF ALLIGATOR CREW.

OVER-HEATED STOVE (One in Bath House.)

HOT ASHES FROM COOK STOVE IN GARBAGE.

PORTABLE MILL SAWDUST AND DEBRIS PILES.

TRUCK BACK-FIRE (Broken Muffler.)

SPARKS FROM COOKERY.

GAS ENGINE EXHAUST.

UNAUTHORIZED LUNCH FIRE.

RIVER DRIVE LUNCH FIRE.

BURNING MILL.

CAMP BURNED.

SHACKERS CABIN BURNED.

CHILDREN OF WOODS WORKERS PLAYING WITH MATCHES.

BRUSH BURNING AROUND A CAMP SITE.

Of these 38 fires last year 18, or one half, were caused by woodworkers smoking. If we cut out this one cause, we will be doing a lot.

You can see from the above that a few of the thousands of woodworkers in the woods last year were responsible for starting 38 fires. A few careless people were responsible. **Don't you be one this year.**

PROFIT BY EXPERIENCE!

SAFETY SPARK ARRESTERS IMPORTANT ON ALL CAMP BUILDINGS

One type of Safety Spark Arrester that is recommended is **THE NYLUND SPARK ARRESTER** which is the invention of Neil Nylund, Fire Ranger for the Brompton Pulp & Paper Company Limited, Beardmore, Ontario.

The Canadian Pulp & Paper Association, Woodlands Section, awarded Mr. Nylund their annual prize for the best suggestion submitted in 1951. The Nylund Arrester can be made by any tinsmith and the original cost is a little more than the screen type arrester, but its life should be many times longer and its effectiveness much greater.

A plan of the Nylund Spark Arrester may be obtained from the Editor of this booklet upon request.

SURFACE FIRES

Surface fires are those which run over the surface of the ground, feeding in the top layer of dry, loose litter, grass, needles, weeds, small bushes, and the outer surface of logs, etc. They usually are intensely hot and spread rapidly with a fairly large volume of flames. Fires in second growth aspen, grass types, old burns, fern types, etc. are typical.

Ground surface fires consume thick layers of vegetation and use up more than the layers of litter. They tend to spread most persistent and or to extend deep humus peat bogs etc. are



CHECK YOUR PLAN FOR FIGHTING FIRE IN THE AREA AND REMEMBER TO TAKE INTO ACCOUNT THE FOLLOWING FACTORS:

- Major causes of fires in area.
- Past occurrence of fires — location, seasonal period of day, etc.
- Forest type — kinds, density.
- Topography — flat, rolling, steepness of slopes, etc.
- Accessibility — how to get to a fire; transportation, etc.
- Visibility.
- Meteorological factors — wind, temperature, humidity, deepness of forest, precipitation, etc. (The Department of Lands and Forests Fire Weather Forecast takes into consideration these factors.)
- Fire control equipment in area.
- Number of men available.

Kires

es are into three classes

Ground consume the thick layers of other vegetation which usually contain some of the top layers of these fires tend to spread in most persistent and to burn out or to extend needles and deep humus peat bogs, etc. are to

This sticker is to be placed on the wind-shield of a car or truck. Many fires are started by cigarettes thrown from vehicles, and this will serve not only to remind the driver, but also the passenger to

BE CAREFUL

DETACH HERE

of tre type spreads through the tops of trees at a rapid rate. Dense coniferous stands of timber lend themselves readily to this type of fire.

Parts of a Fire

HEAD OF THE FIRE —

This is that part of the fire that is spreading most rapidly. With level terrain this is the lee side or the side in which direction the wind is blowing. Fires burn more rapidly up hill than they do on the level or down hill, and thus the up hill side is frequently the head of the fire.

REAR OF THE FIRE —

On level terrain with a wind this is the windward side or the side from which the wind is blowing. Where the fire is burning on a steep slope, it is usually the side at the base of the slope.

FLANKS OF A FIRE —

The flanks of a fire are the sides connecting the rear and the head of the fire.

FINGERS OF A FIRE —

Generally the forest fire fuels are not uniform; there are patches of slash, small ribbons of meadow or grass, open ridge tops, patches of dense conifers, and other fuel types may all be intermingled. Fires spread more rapidly in some fuels than others. There are often short steep slopes and fires will run up these more rapidly than they will run on level terrain.

Whirl winds, or a shift in wind direction, may temporarily change the direction in which the fire will burn. Any or all of these factors contribute to the irregular shape or cause fingers.

WOODSWORKERS' RULES

- No matches — Use a lighter.
- No factory made cigarettes or free burning cigarette paper.
- No smoking while walking or working.
- No lunch fires.

LET'S NOT FOOL OURSELVES —

While we should and do take full credit for our Forest Fire Prevention and Suppression efforts, we mustn't forget that the weather for the past three years has been one of the main reasons for the small number of fires and the small damage burnt.

The weather runs in cycles just the same as everything else and the chances are that this summer will be a HOT, DRY one. Let's not fool ourselves. Let's prepare!

HONOURARY FIRE WARDENS

Key personnel in the woods each year are appointed Honourary Fire Wardens by the Department of Lands and Forests and this honorary position has important responsibilities, particularly in the prevention of fires.

Honourary fire wardens are appointed by the Minister of Lands and Forests and through the District Foresters they receive a badge and card of authority and instructions re their duties and responsibilities.

While woods industry personnel appointed as Honourary Fire Wardens are primarily responsible in assisting operators and the Department in preventing fires from being started by woods employees, their authority covers all citizens and visitors to operating areas such as fishermen, campers, tourists, etc. These visitors should be checked closely by the Honourary Fire Wardens.

When meeting citizens visiting in the woods, they should be told of the woodworkers' rules and asked to comply with same.

Honourary Fire Wardens have a big job to do! Do it well, and help in this crusade to **Prevent Fires.**

DID YOU KNOW?

Woods operators in Northwestern Ontario have on hand well over \$650,000.00 of fire fighting equipment to be used exclusively for that purpose. In addition operators have available blankets, tents, cooking utensils, axes, shovels, trucks, bulldozers, boats, radio telephone and other equipment carried on logging operations which rates **top priority** in time of fire suppression. Camp Operators —

Make a critical inspection of the fire equipment in your camp —

Any sloppy hose roles? Any defective equipment mixed with working equipment? Any dirty pumps?

Remember, a few minutes delay easily means the difference between a \$50.00 fire or a \$50,000.00 fire.

Good equipment is supplied. YOU be sure and have it ready for immediate use.



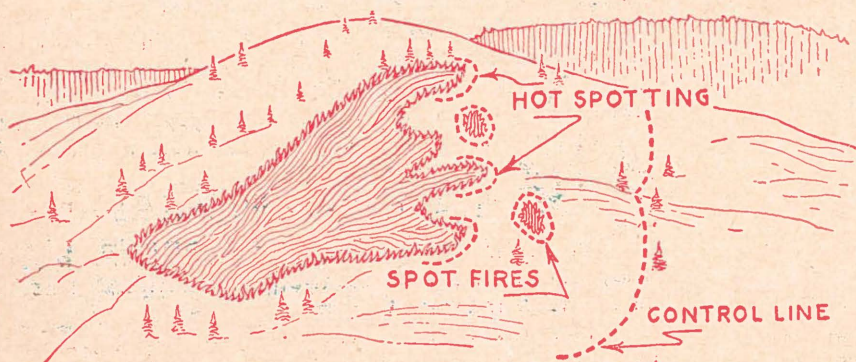
A FIRE DANGER SIGN SHOULD BE IN EVERY CAMP

Arrange with the nearest Dept. of Lands and Forests Station to give you the Fire Weather Forecast DAILY.

Forest Fire Fighting

The most important thing to remember is that a small fire is easily put out by 1 to 5 men, and that it is necessary to get to the fire immediately after it starts if it is to be put out while it is small. The drier the forest fire fuels, the higher the temperature, the warmer the day, and the lower the relative humidity, the more important it is to get there quickly since it is under these conditions that fire spreads most rapidly and becomes a large fire in a short time.

Large fires may require several hundred men and take several days to control and mop up. The suppression of a forest fire can be divided into two separate operations, namely (1) the controlling or checking the spread of the fire and (2) mopping up and patrol operations which involve the completion of the suppression job.



The reader must remember that these are only general rules, that every fire is different and the primary consideration is to check the rate of spread as quickly as possible and then to methodically and systematically mop it up and patrol it.

GENERAL PLAN OF ATTACK

- (1) Attack the "head" of the fire and mop its advance.
- (2) If the front of "head" is too hot for direct attack, attack the flank or sides and pinch in the front.
- (3) When the advance is checked, surround it and extinguish all fires around the fire line.

CONTROLLING OR CHECKING THE SPREAD OF A FOREST FIRE

The first thing to do upon reaching a fire is to carefully review the situation and determine where the initial attack should be made with the objective in mind of stopping the spread of the fire as soon as possible. There are three general ways of accomplishing this: hot spotting, hitting the head of the fire, or hitting it on the flanks. Each of these three ways will be discussed briefly.

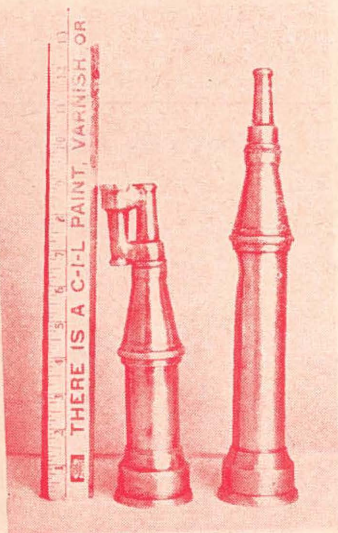
HOT SPOTTING — This is merely concentrating the initial attack upon those sectors of the edge of the fire that are burning in the most dangerous sectors where the fire, if not checked, is likely to get into heavy slash fuels, grass meadows or other fuels where it will spread rapidly and be hard to check. On a small fire, one man with a shovel, bough, wet gunny sack or other suitable tool can concentrate on the hot spots of the fire, knock it down and temporarily check it; go on to the next one and do the same, and keep working around the fire in this manner until reinforcements arrive or until the fire has burned itself out to a point of relative safety. He can then proceed to systematically establish an adequate fire control line around it and mop it up. This same procedure can often be employed quite successfully on larger fires with several men, each man working alone, or by working in small crews.

HITTING THE HEAD OF THE FIRE — Where there is a wind blowing and the fire is spreading rapidly in only one direction the best way to stop its spread is to hit the head of the fire. Making the decision of whether or not it is possible to control the head of the fire is of great importance. If it is attempted and it proves unsuccessful, a great deal of time may be lost and men exhausted; on the other hand, if control of the head is not attempted when it is possible, the fire will continue its rapid spread and soon become a large fire.

Several factors determine whether or not the fire should be hit on the head. It is a decision that experienced forest fire supervisors often find difficult to make. The type of fuel, burning conditions, number of men, and kind of equipment available all must be considered. However, the general rule is to hit the head of the fire if there appears to be a chance of stopping it, even though this means hard work. The heat and smoke, since if the head can be controlled the crew can then handle the rest of the fire and mop it up.

HITTING THE FLANK OF THE FIRE — If the head of the fire is too hot to work and the fire is spreading in one general direction, start control lines at the base of the fire and work up along both sides or flanks, and pinch it out at the head. Quite often one flank of the fire is paralleled with a natural barrier, such as a lake, stream, road, or fuels in which the fire will not spread rapidly. In this case the other flank would need to be worked or have a control line, and the other flank, along the natural barrier, would only have to be watched so no fire will cross.

When travelling in a vehicle — USE THE ASH TRAY.



BE SURE TO HAVE
THE CORRECT
NOZZLE TIPS
WITH YOU.

BRAZE THE TIPS
TOGETHER
AND YOU WILL
HAVE THEM.

Let's have

NO FIRES STARTED BY WOODSWORKERS

in 1952!

USE OF EQUIPMENT

Potential fire fighters and members of fire departments can learn a lot from books, movies and lectures, but there is no substitute for regular field drilling with equipment.

PRACTICE YOUR CREWS!!



...and please make
people careful, and

Remember - Only you can

**PREVENT
FOREST FIRES**