THUNDER BAY TIMBER OPERATORS ASSOCIATION

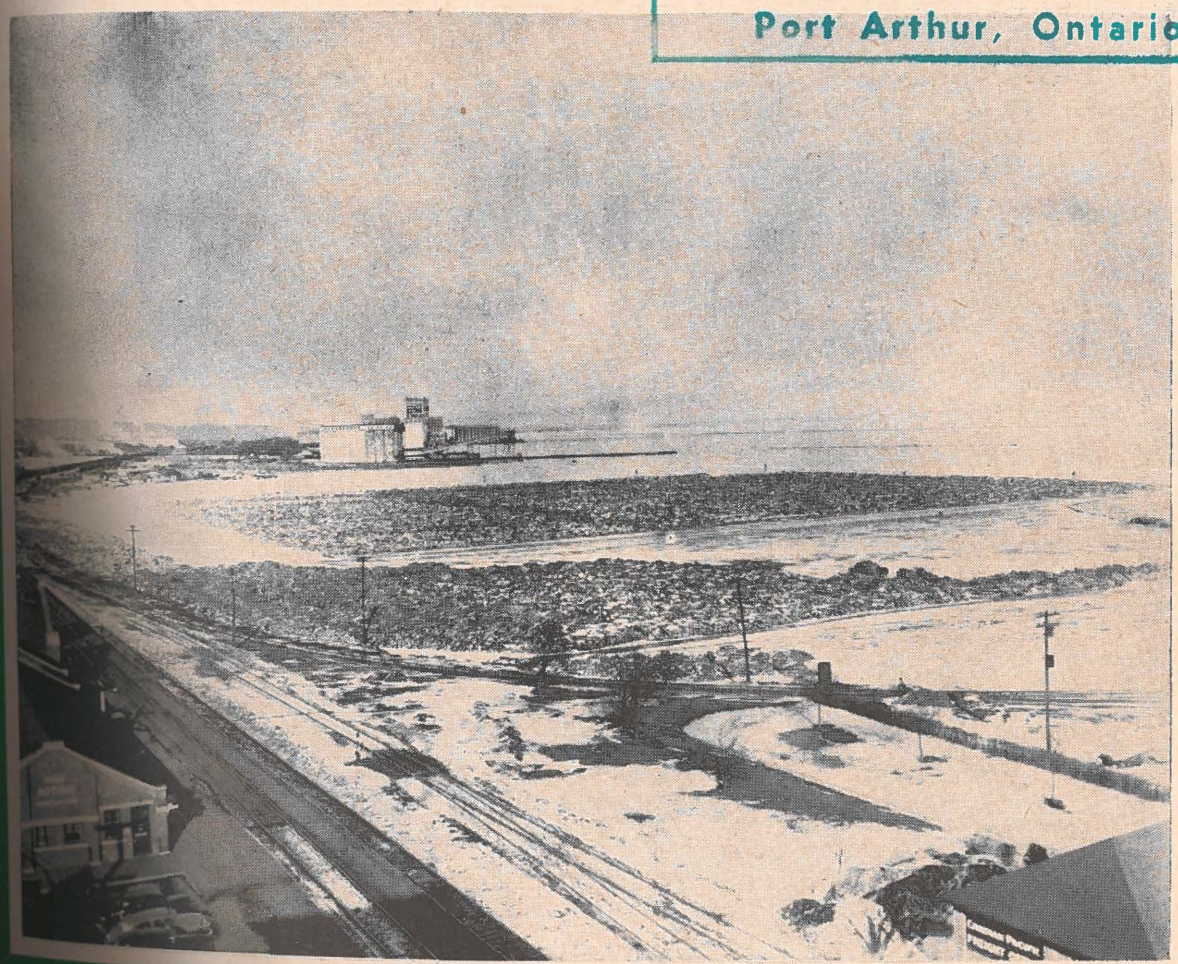
LOG BOOK

MARCH
APRIL
1952

VOLUME 3 PORT ARTHUR, ONTARIO No. 6

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PORT ARTHUR, ONTARIO

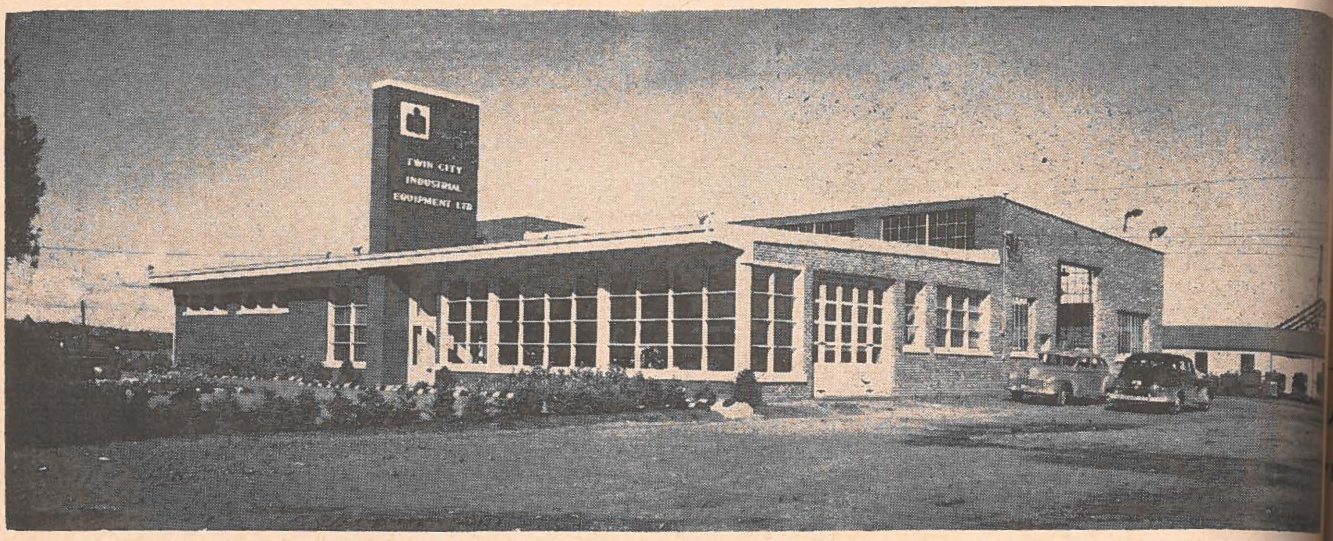
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Published by
THE THUNDER BAY TIMBER OPERATORS' ASSOCIATION
Edited by
T. S. JONES

President's Message

WHAT WILL WE DO IN '52 ?

With the completion of the haul in March the Operators will have seen the end of one of the greatest production years in the history of the Timber Industry of North and Northwestern Ontario. Scarcely three months ago many companies were still concerned about producing enough wood and forest products to fill their requirements —then, with a combination of favourable factors such as an ample labour supply, a perfect fall and winter (particularly for cutting) and a near perfect winter for hauling except for a slight shortage of snow, the situation reversed itself completely. In short, in the case of many companies, we will now find over production.

This brings us to our heading "What will we do in 52? We suspect that responsible Company heads are still not completely free from fears of recessions or "levelling-off", and the dangers of being saddled with what is loosely termed "high-cost" wood. From a purely financial aspect perhaps these fears are justified and no doubt curtailment of production is a wise course to follow.

However, we are willing to go out on a limb and make the prediction that '52 will be another good year and that there is no real foundation for a pessimistic outlook in the long term view.

True enough, Spring and Summer rough wood cutting may be somewhat curtailed, but we believe that peeling and other operations, (drive, construction and maintenance) will more than make up the balance — this plus a strong outlook in the construction and mining fields will mean a busy summer. By fall, it is our firm conviction that Operators will be as busy as ever with a good substantial program of cutting and hauling to be done.

We believe this is a good time to be optimistic about our industry and our country. From every source we hear that this generation and perhaps half century, belongs to Canada — by the same token this generation belongs to the timber industry.

Optimism and confidence in the future breed prosperity and dispel fears — pessimism and gloom can only breed that which we fear.

There are many good reasons why we in the Timber Industry and Canadians in general should look to the immediate future with great hope and with the utmost confidence.

So we say our prediction for this year is that there will be "plenty to do in 52".

H. H. "Bert Styffe.

R.C.A.F. GROUND OBSERVER CORP ESTABLISHES FILTER CENTRE AT LAKEHEAD

Personnel Will Be Asked To Volunteer

The Royal Canadian Air Force are establishing a Filter Station at Fort William, Ontario. The purpose of this Filter Station is to gather and co-ordinate information about aircraft flying in the area from Sault Ste. Marie north along the Algoma Central Railway to Hudson Bay and west to the Manitoba boundary. At the present time the Rainy River—Fort Frances area is tied into a filter station in Minnesota but information coming from the remainder of this territory will be filtered through the Fort William station.

Woods operators with either radio or telephone communication to the "outside" are being asked to give the location of these camps to the Ground Observer Corp Filter Station and in due course, after completing the Filter Station arrangements, the Ground Observer Corp officers will visit camps and enlist volunteers to be members of the Ground Observer Corp.

It is not necessary to stress the importance of early information if any enemy aircraft were to fly over this area and the co-operation of all concerned is assured the R.C.A.F.

WHAT A WINTER ! ! !

A splendid Fall for cutting, a quick freeze-up in December and very little snow.

Practically perfect weather for cutting and hauling operations. An old-timer when asked the last time he remembered a winter like this went back into his memory and came up with the answer — 1930-31.

One of the reports from the Stevens-Caramat area was that they were bothered more with black flies than snow this past winter.

TEST YOUR KNOWLEDGE OF CANADA

1. What is Canada's oldest industry?
2. Has a ship ever sailed from the Pacific to the Atlantic via the Northwest Passage?
3. What kind of trees are most widely used in manufacturing pulp and paper products?
4. How many hours difference in time between Newfoundland and the Yukon?
5. What river drains the five great Lakes?
6. Are more of Canada's forests used up for fuelwood, by the lumber industry, by the pulp and paper industry or through fire, insects and disease?
7. In area, is British Columbia larger or smaller than Ontario?
8. What animal is taken in greatest numbers by Canadian fur trappers?

(Answers on Page 19)

TIMBER CULLERS' ANNUAL MEETING TO BE HELD MONDAY, APRIL 14th.

The Annual Meeting of the Northwestern Ontario Timber Cullers' Association will be held in **Port Arthur on Monday, April 14th, 1952.**

COVER PICTURE— Birds-eye view of the Nipigon Lake Timber Company Limited storage in the Port Arthur Harbour. The storage contains approximately 18,500 cords of 8-foot jackpine. North from the jackpine storage and next to the first elevator may be seen the peeled poplar storage.

Borer Control in Jackpine and Spruce Logs

J. R. Blais, Forest Insect Laboratory, Sault Ste. Marie, Ontario

In 1951 logs were sprayed with DDT in experiments on the prevention of borer damage in skidways on the limits of the Ontario-Minnesota Pulp and Paper Company in Northwestern Ontario. Six skidways of mixed jack pine and spruce logs were used in the study. Two were held as checks; two were sprayed with an oil solution of DDT (5 lbs. of DDT, 1.6 gallons of "Velsicol AR-50-G," 10.8 gallons of kerosene); and two were sprayed with 50% wettable DDT (8 lbs. of powder to 10 gallons of water). The sprays were applied on June 14 before **Monochamus** adults had emerged. All exposed log surfaces were thoroughly drenched although the rate of application varied according to the height of the skidways. The oil spray was applied at the rate of about one gallon for every seven logs in a 2-tier skidway, and at the rate of one gallon for 10 logs in a 6-tier skidway. These rates are approximately equivalent to 1.5 - 2 gallons per thousand board feet. The water suspensions were applied at the rate of one gallon for five logs in a 2-tier skidway and one gallon per seven logs in a 4-tier skidway. These rates are equivalent to approxmately 1.2 to 3 gallons per thousand board feet.

At three intervals during the flight of **Monochamus** spp. the skidways were examined for the presence of adults. During a fixed observation time, approximately seven times as many adults were observed on the check skidways as on those which had been sprayed. Moreover, adults which alighted on the unsprayed logs crawled about normally whereas most of those which alighted on the sprayed logs took flight again almost immediately.

At mid-September, 16 logs from each skidway were examined for borers. One-foot sections were examined at the middle and at both ends of each log and all larvae, except those of bark-beetles, occurring on the surface of the wood were recorded. Entrance holes into the wood were recorded and a proportion of the borers recovered. All larvae collected in the experiment identified by L. M. Gardiner.

A summary of the number of insects record square foot of log surface in the check and treated skidways is shown in Table 1. On the assu that the records for the chack logs represent th population density of all species of borers, the ation of DDT in oil resulted in a decrease of abou of the normal borer population. The correspondi duction from application of wettable DDT was 88%.

If attention be restricted to **Monochamus** which are the only deep-boring species encounte the experiment, and which by mid-September ha etrated to a maximum depth of 3 inches (avera inches, the effectiveness of the spray applicatio be rated as follows:

Basis	DDT in oil	Wettabl
All **Monochamus** larvae	92%	85
Monochamus larvae in wood at mid-September	94%	86

The sample logs were chosen at random fro skidway and consisted, in part, of logs on the s and in part, of logs buried in the skidway. In Ta the data on Monochamus spp. are segregated b origin of the sample logs.

TABLE 1

DENSITY OF BORERS PER SQUARE FOOT OF LOG SURFACE

Species group	Species	Check Skidways	Skidways Sprayed With DDT in Oil	Skidways Sprayed With wettable DDT
Surface feeders	Acmaeops proteus (Kby.)	0.86	0.09	0.05
	Acanthocinus pusillus (Kby.)	0.32	0	0
	Stenocorus inquisitor (L.)	0.16	0	0
	Weevils	3.93	1.31	0.44
Shallow boring species on wood surface	Tetropium cinnamopterum Kby.	6.43	0.05	0.29
	Asemum atrum Esch.	0.18	0.30	0.02
	Xylotrechus sp.	0.04	0.01	0.01
	Buprestids	0.28	0.15	0.34
Shallow boring species in wood	all species pooled	0.71	1.10	0.19
Deep boring species	Monochamus spp. on wood surface	1.75	0.19	0.29
	in wood	3.53	0.22	0.50
	TOTAL	5.28	0.41	0.79
GRAND TOTAL		8.19	3.42	2.13

TABLE 2

Monochamus Larvae per square foot in surface and in buried logs in the skidways.

	SURFACE LOGS			BURIED LOG	
	10 check logs	7 Logs sprayed with DDT in Oil	10 Logs sprayed with wettable DDT	22 check logs	25 Logs sprayed with DDT in Oil
All Monochamus Larvae	**10.46**	**1.47 (86%)**	**2.27 (78%)**	**2.89**	**0.13 (95%)**
Monochamus Larvae in Wood only.	**7.92**	**0.79 (90%)**	**1.31 (83%)**	**1.50**	**0.07 (95%)**

(Per cent control, in brackehs, calculated by comparison with appropriate check logs.)

The attack on the surface logs was four times as heavy as on the buried logs in the check way. The effectiveness of the spray applications is ted in brackets below the density figures for the s logs. The calculated effectiveness of the sprays all cases, slighty greater in the buried than in the face ogs. Of particuar interest was the apparent iveness of the wettable DDT, even though heavy occurred shortly after application and more or tinually throughout the experimental period.

Shipping in and out of Lake Superior throu locks of the St. Mary's River is greater than the combined annual traffic of the Panama, Suez chester and Kiel canals.

—Quick Canad

Another Cummins Success Story

a case of preventive maintenance

The dependability of a Cummins diesel is illustrated very clearly by the record of engine 31227. In 1946, this standard production model HIP-400 Cummins diesel powering a Russel-Hipwell generating set, was installed underground at Maylac Gold Mines at Geraldton, Ontario. It supplied power for a 25 h.p. pump, some small motors, and mine lighting. For 14 months this Cummins set generated 85 amps continuously 24-hours a day, with only 45 minutes off every Wednesday for a regular preventive maintenance check. In this time, the Cummins ran 8,600 hours without any enforced shutdown. Fuel consumption was 1.87 g.p.h.

Maylac Gold Mines closed in 1947 and Engine 31227 was then sold to Theresa Gold Mines at LongLac, Ontario. During the next two years and five months, it clocked 20,669 hours without any major troubles. The oil pan was never taken off the engine. Weekly maintenance was very simple . . . lubricating oil and filters were changed . . . injectors cleaned . . . a shutdown of about one hour a week. Valves were adjusted periodically. It was still in running condition and capable of carrying a 25 K.W. load.



Engine 31227 therefore clocked 29,269 hours after 3¾ years of almost continuous running. It was traded in for a new one and returned to the Owen Sound factory of Russel-Hipwell for a major overhaul. The engine was completely disassembled and all parts checked. New liners, rings, and con rod bearings were fitted; the main bearings were not sufficiently worn to be replaced.

"This engine is really no exception and there are many others like it," stated Eric M. Cordrey, General Service Manager of Russel-Hipwell, discussing this engine with George Moore, Diesel Shop Foreman of Russel-Hipwell. "Dependability is assured in any 'Cummins custom-built Diesel' by a regular preventive maintenance schedule, coupled with no overloading. After every 500 gallons of fuel burned, a preventive lube oil change was made in this case. Normally, we recommend engines be given their major overhaul after consuming 32,000 gallons of fuel. This one, as far as we can check, must have burnt over 60,000 gallons. If this engine had been an automotive one, the truck would have done over one million miles . . . as a generator engine it produced over one million horsepower-hours. It's now ready for service again under our rebuilt engine warranty."

CUMMINS Diesel POWER

50-550 h.p.

Russel-Hipwell

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HALIFAX MONTREAL

OWEN SOUND TORONTO

History . . .

This should be interesting to students of the development and history of Northwestern Ontario.

The Editor of the Geraldton Times-Star reports in his Note Book — — —

We often think of our district as a "new" district but one has occasion from time to time to be reminded that we live in an area rich with past history.

Looking over the notes of Ken Switzer's talk which he gave at the inauguration of Hydro at Long Lac last Monday we learn that Longlac was established as a trading centre "while Napoleon and his armies were marching across the countries of Europe."

"The Henley report refers to two fur trading posts operating in Longlac in 1813 . . . 139 years ago. One belonging to the North West Trading Company . . . and the other to the Hudson's Bay Company. In 1821 these two companies signed a peace pact. The N.W. company being absorbed into the Hudson's Bay company which has operated continuously at Longlac since then."

"The first Hudson's Bay post was located on the point now operated by Mac Gauthier, Tourist Operator, and now known as Gauthier's Point."

When we drive down to the Lakehead in four hours in these days of the modern motor car . . . we have a hard time imagining the trip described by Ken of York boats going up the Making Ground River (Suicide) to the Summit Portage . . . across to Seagram Lake, thence to McKay Lake and down the Pic River to Lake Superior . . . the return trip took three weeks. The boats carried three and a half tons and had to make 25 portages.

The advent of the C.P.R. in 1885 along the north shore of Lake Superior and in 1914 the closer service of the C.N.R. through Long Lac brought modern to the area.

We understand from Ken that John Hebe Bill Otiguam were among those still living at Lo who remember these earlier days.

"The only inhabitants up until 1914 othe the Fur Company Staff and local missionaries, w Ojibway Indians — now our neighbours on Indi erve No. 58 by the Station and Cree Indians, s whom live on Indian Reserve No. 77 . . ."

"About 1925 another basic Canadian Indus gan in Longlac when pulpwood logging was sta Indian Reserve 77. Since that year logging has regular and increasingly important feature of Lo economy. Detroit Sulphite's operations were f closely by Pulpwood Supply Company and again present LongLac Pulp and Paper Company."

Mining activity became a feature of the d economy about 1937 . . . promise flared for time in the operations of MacFarlane Longla Mines about ten miles south of here. This opera not continue but now six miles south of us we operating gold mine and the new community of . . . due largely to the faith and perseverance Alphonse Caouette, an old time Longlac resident

In 1937 . . . co-incident with the start-up wood supply, the Ontario Hydro were carryin major development in this area in the changing Natural Watercourses to make added power ava Ontario . . . a large part of the Kenogami Wa and all of Long Lake watershed diverted south building of two large dams and digging of a canal.

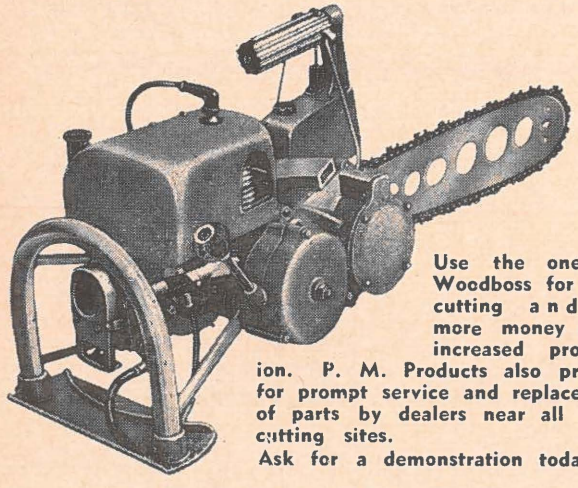
The man who was largely responsible for t ception of and execution of this engineering fea that time the Chief Hydraulic Engineer for Hy and now the Assistant General Manager of the Hydro Electric Power Commissian, Dr. Otto Ho

These remarks of Ken Switzer's banish thoughts in our minds that we have helped to the district . . . We now have most of the conv of the larger Canadian centres both here in G and Longlac.

And the men we have to thank . . . are th with perseverance and foresight . . . and wi thought of the future opened up this "treasure of Canada for us . . . we only hope that we ca rocate by ourselves making it better for those w after.

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NEW ICE AUGER AND WATER PUMP INSPECTED

A Sandvik Canadian Limited representative the Lakehead late in February and a group of operators inspected a new "TYPHON" Ice Au Water Pump which is a Swedish invention and the Sandvik Canadian Limited are planning to in Canada.

Any operator that has to ice roads or would be well to look into the uses of this Au Pump. Further information may be obtained Sandvik Canadian Limited, Montreal, Canada

A giant Douglas fir tree recently felled couver Island for lumber had a circumferenc feet, was 1106 years old, and must have been tree when the Magna Carta was signed in 121
—Quick Cu

Preparation of Pulpwood

By H. W. EVANS

INTRODUCTION:

This article deals with the handling and preparation of pulpwood from the time it reaches the mill until it is turned over to the groundwood mill, in the form of barked and clean logs of the desired size, ready for the manufacture of mechanical pulp, or is delivered to the chemical pulp mill in the form of screened wood chips. Considerable quantities of bark, sawdust, and other refuse produced in the course of the preparation of pulpwood are a by-product, and are usually sent to the boiler plant to be used as fuel.

WOOD DELIVERY:

Wood may be delivered to the mill in a number of ways, such as floating down streams, towing in booms, carried in a barge or vessel, and by rail and truck.

Delivery by water is the most economical and the most common. In colder climates where waterways are not open year round and sufficient wood cannot be delivered during the navigation period for year round operation, it is necessary to bring in some wood by rail and truck.

SEQUENCE OF OPERATIONS:

Assuming that the mill has received unbarked long logs, the usual sequence of operations is:-

(a) Logs are brought to the log haul-up on cars, or by floating in the log pond.

(b) Logs are hauled up to the slasher and cut into convenient lengths.

(c) The cut logs are carried by conveyors from the slasher to the barkers where they are barked.

(d) The logs are inspected for completeness of barking. Logs not completely barked are returned to the barkers. Clean barked logs may be routed to the groundwood mill, chippers, or to the storage pile.

(e) Those that go to the chipper become chips and are classified in chip screens. The acceptable chips are conveyed to the chemical-pulp mill. Oversize chips are crushed and re-screened.

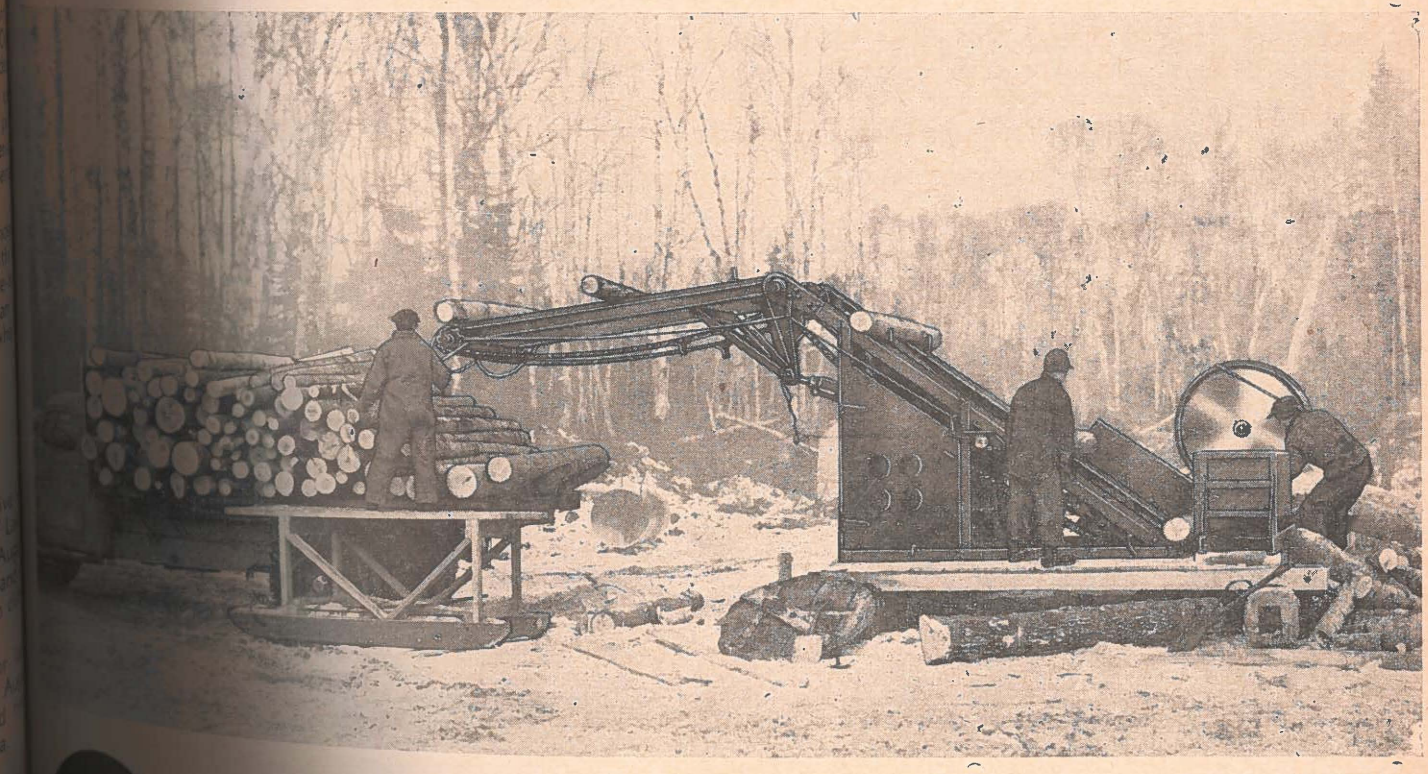
(f) Sawdust, bark and other refuse from the above operations is conveyed to the boiler plant for use as fuel. Culled blocks are chipped in the hog and these chips also go to the boiler plant.

LOG HAUL-UP:

The most economical means of hauling logs from the log pond is by means of a parallel log haul-up. The logs are fed to the haul-up by hand, endless chains come up through the water and the wing links on the

(Continued on Page 8)

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TREE-LENGTH SLASHER AND LOADER
Nesco Equipment Ensures — Economical, Speedy, Continuous Operation

PREPARATION OF PULPWOOD

(Continued from Page 7)

chain engage the logs. The chains convey the logs up an incline to the slasher.

SLASHER:

A slasher is a machine built to cut logs to any predetermined length.

When the logs reach the summit of the log haul-up, they are discharged onto a table. Here the ends are butted against a butt plate, and the logs are again picked up by an endless chain which carries them up the sawing table to the circular saws. These saws may be up to 60 inches in diameter and rotate at 750 rpm. The logs are here cut into two or more pieces of the desired length.

CONVEYORS:

Conveyors are used wherever it is desired to transport wood from one part of the mill to another.

These conveyors may be of the rubber belt type, chain type, or the cable type which has a spur or button attachment to engage the logs.

The belt type is the most common in the wood room itself. Rubber belts usually carry the wood to the barkers from the slasher, and a wide rubber belt operating at about 30 feet per minute is used to convey the wood from the barkers. This allows operators ample time to sort the poorly-barked from the well-barked wood. The chain type conveyor is usually used to carry the wood to the storage pile and the groundwood mill.

The cable type conveyor may be used in conjunction with a series of chain type conveyors to carry wood from the storage pile to the mill. The chain type veyors carry the wood from the blockpile to the conveyor. This is because the chain conveyor m made portable and can thus be moved as the logs pile are used. The cable conveyor is fixed in posi

BARKING THE WOOD:

In order to make pulp of good quality, it is essary to remove the bark from the logs. Bark ha little, if any, fiber value. It consumes chemical steam in cooking without yielding a return. Spec bark result in dirty paper.

There are several methods for removing bar ly the one type of Tumbling-Barrel barker will be sidered here. A common size of barking drum is 1 in diameter by 30 feet long.

In general, barking drums all work on the principle. The logs are conveyed to the upper e the drum and slide down an intake chute into the within which they are tumbled against one anoth the revolving drum. This tumbling rubs off the which passes out through narrow slots in the drum logs gradually are worked to the discharge end drum by the rotation.

The principal advantage of this method is th bark is quickly and cheaply removed from the log out wasting too much of the wood. There is a sm mount of waste, however, as the ends are more "broomed". Particles of dirt are sometimes driv to the broomed ends. Logs are sometimes retain the drum for a considerable time and become slivered.

Continued on Page 23)

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Fort William

Coming! Coming!! Coming!!! The 1952 Fire Season

CHECK YOUR FIRE EQUIPMENT HERE'S AN IDEA — NOZZLE TIPS BRAZED TOGETHER

The idea was arrived at by the Department of Lands and Forests Geraldton District Forest Protection Supervisor and the basic advantages are as fololws:

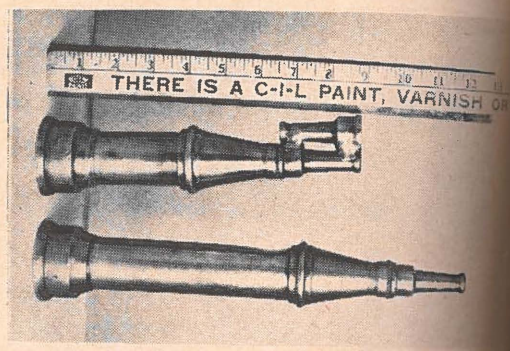
(1) The shorter length saves tool box space and can be carried in a hip pocket without danger of "tipping out" and being lost when walking in the bush.

(2) The principle advantage is in the combined nozzle tips which allows a change in size of tips whenever this is necessary due to fuel types, changes in water pressure and so on without delay or the necessity of sending an extra fire fighter down to the pump unit for the other tip. It prevents the confusion which results in one nozzle man having two ¼" tips and the other from having the two larger tips, which all adds up to a decrease in fire suppression effectiveness.

The shorter barrel should prove more economical as the piece cut from the barrel to shorten it, can be used as a replacement should the first one be damaged.

The greater strength of the shorter barrel should add to the life of the nozzle.

Both tips and nozzle can be screwed on tighter with the grip afforded by the joined tips and prevents loss of water when nozzle is attached to a faulty coupling.



Time now to start and get ready so that in 1952 NO FIRES ARE STARTED BY WOODSWORKERS.

A SPECIAL FIRE-ISSUE OF THE LOG BOOK WILL BE PUBLISHED SOON.

In the meantime study

LAST YEAR'S SCORE

and plan to better it this year!

COCHRANE'S Headquarters for

LUMBERMEN'S, MINING and CONTRACTORS' SUPPLIES

Also EVERYTHING IN HARDWARE for the HOUSEHOLDER

SAVE TIME — SAVE MONEY. DIAL 5-7345 FOR ALL YOUR HARDWARE NEEDS.

COCHRANE HARDWARE (PORT ARTHUR) LIMITED

PORT ARTHUR, ONTARIO

LAST YEAR'S [1951] SCORE

FIRES BY THE MONTH

	MID-WESTERN REGION		WESTERN REGION			CENTRAL REGION		NORTHERN REGION
	Port Arthur	Geraldton	Kenora	Fort Frances	Sioux Lookout	White River	Chapleau	Kapuskasing
	No.	No.	No.	No.	No.	No.	No.	No.
April	—	—	—	—	—	4	1	1
May	19	6	33	5	16	17	10	16
June	3	12	11	1	15	5	—	2
July	16	5	50	16	25	4	3	2
August	5	2	11	1	8	2	1	2
September	1	—	—	—	1	—	1	2
October	2	—	—	—	—	—	—	—
TOTAL	51	25	105	23	65	32	16	25

FIRES BY ORIGIN

Settlers	6	—	8	—	7	1	—	3
Miscellaneous	1	4	6	1	3	5	1	—
Railways	16	4	19	1	2	13	2	4
Lightning	16	9	18	2	27	2	9	5
Campers	5	3	34	17	13	3	1	5
Incendiary	—	—	2	—	1	—	—	—
Road Construction	—	1	3	1	1	2	—	—
Mining Operations	—	—	—	—	4	1	—	—
Logging Operations	1	1	1	1	5	3	2	4
Smokers	6	3	13	—	2	1	1	4
Unknown	—	—	1	—	—	1	—	—
Pospectors	—	—	—	—	—	—	—	—
TOTAL	51	25	105	23	65	32	16	25

MEANS OF DETECTION

Rangers	5	1	8	2	5	.5	—	—
Towers	13	6½	40	5	14	10	7	13
Air Patrol	9	7	22	7	25	2.5	1	1
Public	24	10½	35	9	21	19	8	11
	51	25	105	23	65	32	16	25

AREA BURNT — ACRES

	757½	89½	770.88	57.21	762.50	248	71½	657.71

NUMBER OF FIRES IN COMPARISON

Total 1947 Fires	133	31	45	34	108	—	46	34
" 1948 "	133	62	173	61	183	—	51	48
" 1949 "	116	38	193	55	122	—	45	34
" 1950 "	46	16	59	7	40	12	8	16

ACREAGE BURNT IN COMPARISON

Area Burned 1947	6234	4461	539	26	2233.8	—	5717.6	15003.47
" " 1948	44379	17449	8078	12809	107033	—	151825.08	6110.84
" " 1949	9016.5	460.9	6068	3759	3039.9	—	658.53	44.404
" " 1950	1165¾	77.87	236.16	1.13	179.04	164	8	525.42

Total Ontario Fires

891

Acreage Burnt 100,519 acres

(Two fires accounted for 77,000 acres.)



Quality Production With Safety

This slogan is being used for a purpose.

The purpose is two-fold:

(a) To get quality production.

(b) To have no accidents.

Most accidents in the woods — and there are too many — are **caused** (they just don't happen — they are caused) by by the production workers, the cutters and haulers.

To some it may appear that the cutters and haulers are not skilled trades but, in our opinion, the production of pulpwood calls for skilled workers and the trade is a skilled one. Skilled workers produce quality products and this is even more true in the woods than in factories etc., because in the woods the quality comes from the individual workman and his tools.

Quality production in Northwestern Ontario woods means producing raw forest products — pulpwood, logs for lumber, ties, poles, fuelwood, etc., according to the specifications laid down. The correct species of tree, sound, cut square at the butt to leave a low stump; cut to the required top diameter; branches cut and knots trimmed; bucked into the required lengths; piled as required on skids (non-merchantable wood if possible); the strip-roads cleared as required — all the time ensuring that young growth is not unnecessarily damaged or destroyed — all these ensure **Quality Production.**

The skidders and haulers carry on the Quality Production theme by ensuring that no sticks are left in the bush and that the wood is hauled in the short period (January—early March) available.

All these actions can and should be carried out with SAFETY. All actions in these skilled trades should be done systematically and thoroughly with safety rules being followed at all times.

But, the production produced, while generally of quality standards is **NOT** being accompanied by Safe actions on the part of the individual worker. How to correct this —

1. Your safety associations are doing their part.

2. You must assist — all supervisory personnel must make Safety a part of their job — not a part that can be segregated and done separately but a part that is integrated in all thoughts and actiones. Supervisory personnel must ensure that safety regulations are followed and the only way that this can be done is by constantly checking and correcting wrong actions that may result in accidents.

Let's all help — make
QUALITY PRODUCTION
WITH
SAFETY

A slogan to be proud of.

KLINESTIVER, CURRIE AND EOLL RE-ELECTED BY NORTHWESTERN ONTARIO (WOODS) BR. O. P. P. M. SAFETY ASSOCIATION

At the Annual Meeting of the Northwester ario (Woods) Branch, Ontario Pulp & Paper M Safety Association, held in Fort William late Fe Mr. H. P. Klinestiver, Honorary Chairman, Mr Currie, Chairman and Mr. K. G. Eoll, Secretar re-elected for the third consecutive year.

The year's activities of the Branch were re by both Mr.Currie and Mr. Eoll in their Annual R and, in addition, Mr. D. B. Chant, Secretary-Er o fthe Ontario Pulp & Paper Makers' Safety A ion gave a report of a special Research and D ment Committee being established. Dr. A. H. J of Nipigon, Ontario, presented a paper entitl Doctor Looks At Safety" and Mr. J. S. Coyne anical Superintendent, Abitibi Power & Paper Co Limited, Port Arthur, Ontario presented a pap titled "Which Costs More — Accidents or Sa

At the morning session of the meeting films by member companies were shown and it was o to use portions of these films to fill out the fi is being prepared by the Branch on Safe Pract Felling and Piling Eight Foot Pulpwood.

ENFORCING SAFETY

An authority on supervision and employee states:

"SAFETY can be obtained only through training and supervision, and the only person w best reach workers is the supervisor (the foreman we make safety training a part of the curriculum supervisor's training; when we have trained him point where he realizes that the rule — "Safet first importance in the discharge of duty" mea what it says, then and then only can we hope to satisfactory results."

Penalizing employees may work hardship when you consider the following two points you agree that drastic action is better than a serious ent:

1. **If a foreman sees employees doing their wor unsafe manner repeatedly and does not put a stop to the unsafe practices, THEN HE (the fo can be considered largely responsible for any that follows.**

2. **It should be considered a humane act to re careless employee from danger rather than him to continue and suffer serious injury.**

BE FAIR — BUT STRICT!

Timber Producers

ABITIBI . . . IN PICTURES

The Abitibi Power & Paper Comapy Limited cently issued a booklet entitled "Abitibi . . . In P Which is a story of the Abitibi Power & Paper C Limited since is was re-organized five or six ye

Mr. Scott Young has written the narra along with pictures there is a very interesting of Abitibi's contribution to the nation and growing need of all the products the forests

Of particular interest to woods operators portion dealing with the woodlands program

Abitibi is to be congratulated on this fine relations effort.

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AN WORKMEN'S COMPENSATION BOARD UMBERMEN'S SAFETY ASSOCIATION ORS VISIT NEWAYGO'S AREA OF OPERATIONS

e Mead and Mosher Divisions of the Newaygo Company on the A.C.R. were visited late in by a group including the Chairman of the n's Compensation Board, Mr. E. E. Sparrow; the nt of the Lumbermen's Safety Association, Mr. cNutt; the Secretary-Manager of the Lumber- afety Association, Dr. W. S. Barnhart and Mr. ousette, a Director of the Lumbermen's Safety tion.

osts to the group were Mr. H. S. Mosher, Vice- nt of the Newaygo Timber Company Limited and a director of the Lumbermen's Safety Associa- d Mr. Stanton W. Mead, President of the Consol- Water and Paper Company Limited, the Newaygo company.

r. Ira Boyce, Mr. George Nelson and Mr. Glen k of the parent company along with Mr. V. F. s, Manager, Bank of Nova Scotia, Port Arthur; P. S. Cathcart of Ottawa; Mr. T. S. Jones, Man- f the Thunder Bay Timber Operators' Association; orge and Roy Potts, Lumbermen's Safety Associa- afety inspectors, completed the group.

The party viewed the hauling operations at Mead hen visited the new depot started last year at er, Ontario. Newaygo Timber Company own two hips and Mosher is a depot that has been estab- to develop these townships on a perpetual yield Mosher is an outstanding development of depot s in this area with central steam heat, full electric- nd indoor toilets and all other modern up-to-date eniences.

The story on the development of Mosher will be ed in this booklet in the next issue.

Movies of the Mead hauling operation of previous s were shown and Mr. E. E. Sparrow gave a very esting talk on the responsibilities of the Workmen's pensation Board in the Province of Ontario.

The thanks of the party to Mr. Mosher for the pitality of the Newaygo Timber Company were ex- ssed by Mr. McNutt.

—o—

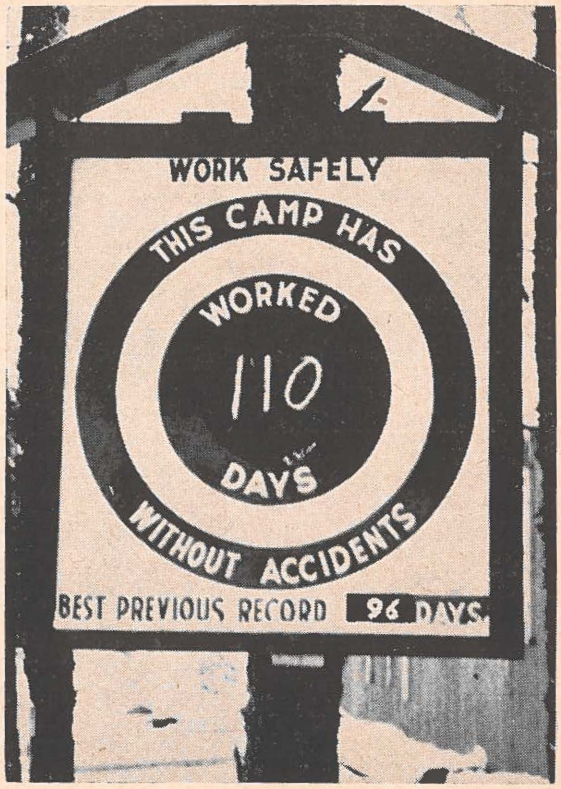
OBILE T.B. X-RAY MACHINE RVEYS BROMPTON EMPLOYEES

The Mobile T.B. X-Ray Machine of the Fort Wil- m Sanatorium spent the period 7th - 21st of February king a survey of the Brompton employees in the mps in the Nipigon - Beardmore area.

Employees in 15 camps were surveyed and of total mp strength approximately 83% of men and women ere x-rayed.

This x-ray survey is provided free of charge and d for from the proceeds of the Annual Christmas al Campaign and is a worthwhile service to the woods dustry in Northwestern Ontario. There is generally higher incidence of T.B. in woodsworkers than in other cations and each time a survey is conducted a few mployees are informed about conditions of the chest at they were not aware of.

From time to time, this mobile machine will be nt to other camp areas in Northwestern Ontario and e full co-operation of all employees is requested so at all camp personnel are x-rayed.



A Safety Sign Board Should Be In Every Camp.

A Camp Safety Sign Board serves as a constant daily reminder to all employees to WORK SAFELY.

Clerks should ensure that the Signs are kept up-to-date. The number in the centre black circle should be changed daily. Failure to do this will result in men not reading the Board and the purpose is lost.

Quality Production With Safety

IS OUR MOTTO.

SIX MISTAKES OF LIFE

1. The delusion that individual advancement is made by crushing others down.
2. The tendency to worry about a thing that cannot be changed.
3. Insisting that a thing is impossible because we ourselves have not accomplished it.
4. Refusal to set aside trivial preferences in order that the important things may be accomplished.
5. Attempting to compel others to believe and live as we do.
6. The failure to establish the habit of saving money.

George W. Olinger.

Forest Pathology in Ontario

By J. T. Basham

3. Deterioration of Balsam Fir Killed by Spruce Budworm

The recent spruce budworm outbreak west and southwest of Lake Nipigon has resulted in the destruction of a very large proportion of the merchantable balsam fir over many hundred square miles in this region. This species, occurring in almost pure stands, was one of the important constituents of these forests. Today, these once valuable stands present an ugly and depressing picture of almost complete destruction. Of far greater significance and importance than the appearance, however, is the loss of the thousands of cords of pulpwood which at one time could have been obtained from these trees. The question of salvaging trees killed in this manner hinges on their rate of deterioration. This paper presents a brief account of the fungal deterioration of trees killed in the Lake Nipigon outbreak. Although for the most part stands in this region are no longer salvable, the information obtained may be useful in connection with spruce budworm outbreaks that will inevitably occur in future years.

A detailed examination of close to 300 dead balsam fir trees has revealed that trees dead for less than one year possess a faint yellowish-red stain in the outer wood of the trunk, varying in depth from one-quarter to one inch. This stained wood suffers no loss in firmness, and presumably is just as suitable for pulping purposes as unaffected wood. The stain is caused fungu,s **Stereum chailletii.** Once a tree has bee fo longer than one year, the outer wood is i throughout the length of the trunk by a second **Polyporus abietinus.** This organism is responsi the soft, punky rot which forms an outer ring of depth in all balsam trees that have been dead th The presence of wood in this decayed condition in substantial reductions in the yield and quality Invasion of the wood by this fungus continues as radially towards the centre until the entire destroyed.

It was discovered that trees dying in the s tend to deteriorate faster than those dying in the This is to be expected since there is practically n or insect activity during the winter, and the lowe erature and moisture content and resulting dry of the wood create unfavourable conditions for fection and growth of fungi.

A definite relationship between the growth the sapwood and the radial depth of penetration erioration was apparent in the trees studied. Fast-g trees, i.e. those with relatively wide growth rings sapwood, were invaded faster than slow-growing The probable reason for this is the increase in th ber of cell walls that must be penetrated in slow-g wood compared to the number encountered

(Continued on Page 15)

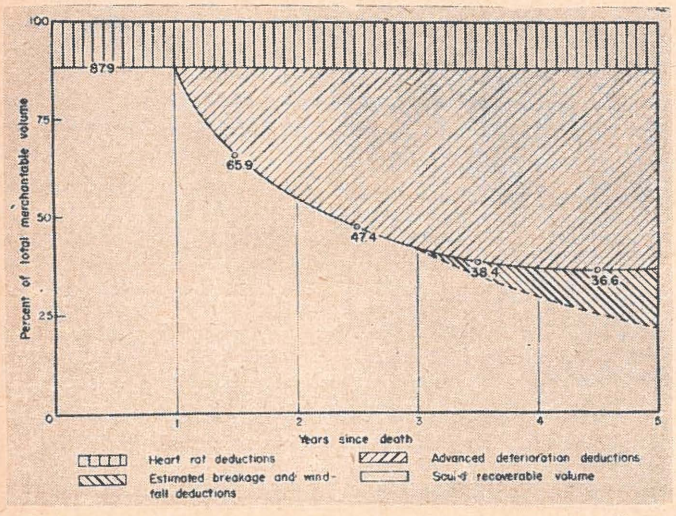


Figure 1. Relation between the amount of wood recoverable and the length of time since death of balsam fir trees killed in the Lake Nipigon spruce budworm outbreak.



1. Fruiting bodies of **Polyporus abietinus** on the trunk of a dead balsam fir tree.



2. Tangential section balsam fir sapwood vanced **Polyporus abie** cay.

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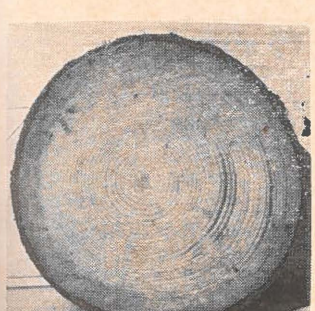
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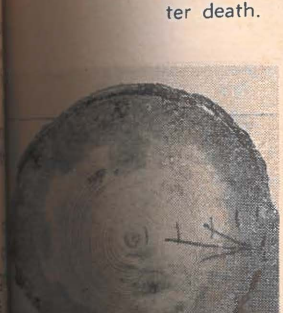
PARTS and SERVICE

ST. PAUL and VAN NORMAN
PORT ARTHUR — PHONE

FOREST PATHOLOGY IN ONTARIO



1. Transverse section of a balsam fir tree examined from one to two years after death.



2. Transverse section of a balsam fir tree examined from two to three years after death.



3. Transverse section of a balsam fir tree examined from three to four years after death.

(Continued from Page 14)

fungus in a similar distance through fast-growing wood.

Figure 1 illustrates graphically the progressive reduction in the sound wood recoverable from balsam fir killed by the spruce budworm as the length of time since the death of the trees increases. After trees have been dead for three years a considerable amount of windfall and breakage often occurs. Since the attitudes of different operators and cutters with respect to the utilization of broken tops or fallen trees are by no means uniform, additional losses due to these causes could only be estimated.

It is evident from Figure 1 that no reduction in yield of pulpwood will be sustained if balsam fir trees are salvaged within one year after they are killed. Trees left longer than this, however, will possess varying amounts of useless, punky wood with corresponding losses in the yield and quality of pulp. Clearly, salvage is out of the question, from a pathological viewpoint alone, after trees have been dead for three or more years. The results of this investigation would seem to indicate that operators planning to salvage balsam trees doomed to destruction by spruce budworm outbreaks must commence operations before the trees are killed. In so doing, they would be in a position to salvage far more trees without encountering those with soft, punky rot, and thereby keep reductions in the yield and quality of pulp to a minimum. Officers of the Forest Insect Laboratory, Sault Ste. Marie, Ontario, are in a position to provide predictions concerning the time, severity and area of tree mortality in connection with current spruce budworm outbreaks in the Province.

SHANTYMEN'S MESSAGE

February 29, 1952

Dear Mr. Jones:

It has not only been a pleasure ,but a source of encouragement in my visiting the camps this fall and winter months, to see the interest the men are taking in the spiritual side of life, their interest and respect which they show the missionary, and the attentive listening to the Gospel message given them, also the eagerness in receiving literature in their own language; we thank God for this.

I have visited camps from Vermilion Bay, Red Lake Road, Ontario-Minnesota Camp Robinson, to Stevens Marathon Camps. In all, I have visited sixty-two lumber camps and six mining camps, which means we have spoken to 5,259 men in lumber camps in this period of time, also 690 men in mining camps starting out October 15, 1951 to February 25. 1952. I am happy to say we have been well received by those in authority as well as the men in the bunkhouse.

May God's richest blessing be upon you all.

John 17:3 And this is life eternal, that they mightknow Thee, the only true God, and Jesus Christ whom Thou hast sent.

Sincerely,
Shantymen's Christian Association Missionary.
James H. Allen.

MANDO'S FORESTRY PROGRAM

A group of Minneapolis, Minn., business men were recently taken on a 3 day, 250 mile tour of M. & O's. northern Minnesota limits.

The business men, members of the Minneapolis Chamber of Commerce, Natural Resources Committee; senior chamber officials; and professional conservationists from federal, state and county governments were shown Mando's pine plantations, logging camps and pulpwood harvesting by Mr. George Amidon, the company's forest management director. Upon their return to International Falls they toured Mando's pulp, paper, and insulation board mills there.

ANNUAL MEETINGS

Quebec Forestry Association — At the 13th Annual Meeting of the Quebec Forestry Association last year's slate of Officers were returned.

Canadian Lumbermen's Association — At the Annual meeting of the Canadian Lumbermen's Association held in Montreal, February 11 - 13, Mr. Roland Bock was re-elected president.

Canadian Forestry Association of Ontario — At the Annual meeting of the C. F. A. of Ontario held February 8th in Toronto, Mr. James A. Vance was elected President and Mr. N. O. Hipel, Vice-President.

USE OF HORSES IN WOODS

The Dominion Bureau of Statistics reports that the number of horses on Canadian farms at the end of 1951 was 1,421,000 as compared with 1,595,000 at the end of 1950. There has been a steady downward trend since 1942.

CANADIANS SHOULD BE HAPPY!

It seemed that this week there has been an emphasis on reasons why people living in Canada should be among the most happiest on this troubled planet.

Firstly we had a long chat with a man who happened into our office and had his descriptions of life as it is to-day in the old world.

Of course, he said, everyone feels a certain kinship to the land of his birth. But he was continuous in his praise of how free a person feels when he comes to Canada. He says that it is a shame that people have to sit down at the same table and have discussions with the officials of countries behind the Iron Curtain . . . they are nothing but "blackmailers."

Then another chap discussed the process which he and his wife had to go through to be allowed to leave a D.P. camp somewhere in Europe.

Perhaps a little description of a D.P. camp wouldn't hurt at this point. In rooms small as a fair size living room perhaps sixteen adults would be living with their children in bunk beds. Home would be a six by four foot square in this room which might be blocked off by blankets or paper.

The innumerable screenings by doctors, investigators, welfare workers, etc., etc., which took months before persons were allowed to immigrate to another country.

Arriving in Canada with one shirt, one pair of shoes, one suit of underwear, one pair of socks.

And trying to rebuild a shattered home from nothing. Geraldton may not seem much to many people when it is compared with larger Canadian centr it feels good to us to realize that here people w down on their luck . . . and whom the world pre considered homeleess . . . should start to feel th have a place under the sun . . . and something t their life worth while . . . their freedom.

C. P. P. A. ANNUAL LUNCHEON

At the Annual Luncheon, Jan. 25, Pres. Fowler, in his annual address said, with referer woodlands: "Excluding those forests veiled behi Iron Curtain, Canada has the last remaining large coniferous forest reserves in the world. It is our d work more than we have in the past for the mainte of a resource which to-day enriches Canada an enhance her position in the world tomorrow."

C. P. P. A. Woodlands Section News Bu

Old Matt, last name unknown, was just as honest a ever handled the "rubber stick," on the pine coming d Peshekee River. In an accident he lost the vision of both so he gradually started scaling logs by feeling them and al correct, so the boys at the mill decided to pull a dandy They asked the local school marm to come to the mill. S obligingly young and curious decided to do as the boys She lay down on the deck of logs as "Old Matt" scaled. H from her head and here were his remarks as he felt ar features. The head and hair—"rotten but," bosom—"two tummy, "a burl," her legs, "school marm," and finally the the book—"a genuine cull."

More than one quarter of all those gainfull ployed in Newfoundland earn their living fro ing, hunting and trapping.

—Quick Canadia



Improve the Baking

In Your Camp Cookhouse!

WRITE FOR SAMPLE AND RECIPES TODAY!

BEST YEAST LTD.

Liverpool, N. S. Thorold, Ont.

IT'S A FREE SERVICE

When it comes to baking, camp workers demand the best!

Your cooks will be able to give them the best, faster and easier, by using BEST DRY YEAST and following the simple, easy-to-bake recipes recommended by our own baking engineers, and approved by camp cooks everywhere!

For quick, easy and economical variety, plus the mouth-watering goodness that camp workers demand, keep your cooks well supplied with BEST DRY YEAST.

PACKED 12 TINS PER CASE





for year-in, year-out endurance

here's the **'51 SUPER - PIONEER**

It's the Power Chain Saw that STAYS on the job. Time out for repairs is a thing of the past when the Super Pioneer goes into action. Its dependability will save you days and months of "down time" and countless dollars you ordinarily spend on chain saw maintenance.



For One-man Operation in Heavy Logging

- Weighs Only 25 lbs. Without Cutting Attachments.
- Provides Power Enough for the Toughest Cutting Jobs.
- Takes Up to A 36 Inch Cutter Bar.
- Balanced Design — For Easy Handling and Carrying.

For two-man operation with the same year-round endurance try the '51 SUPER TWIN . . . also made by Industrial Engineering Limited. The famous trade mark on every saw is your assurance of complete dependability, fast cutting action and top efficiency.

I·E·L Power CHAIN SAWS

Sold and Serviced by:

TWIN CITY INDUSTRIAL EQUIPMENT LTD.

915 MEMORIAL AVENUE — — — PORT ARTHUR, ONTARIO

Advertisers News

SMALL ENGINE MAINTENANCE

"Hey! What stopped that engine?" cries the job foreman.

That's the start of a cartoon story presented in "Small Engine Maintenance Guide," a 28-page, four-color service booklet published by Caterpillar Tractor Co. In the booklet a dealer's serviceman shows how good maintenance will add many hours of top performance to engines.

Maintenance facts apply to the six smaller sizes of "Cat" Diesel engines. marine engines and electric sets. This is the first of a series dedicated to proper equipment maintenance. Copies of the booklet, Form 30246, are available from Powell Equipment Company Port Arthur, Ontario.

—o—

RUSSEL-HIPWELL LOANS INTERESTING MOVIE

The story of the fastest diesel race car yet built, has been filmed. The car first raced in the 1950 Indianapolis Speedway "500" classic . . . qualified with a speed of 129.20 mph. . . . but encountered an accessory failure, forcing it out of the race. Later in the same year at Bonneville Salt Flats, six new American and International records for diesel-powered cars were set, with a top speed of 165.23 mph. over the one-mile course.

The 401 cu. in. diesel engine used in this car was a highly supercharged version of the Cummins Model JBS-600, a lightweight, high-speed truck engine currently appearing on the highways in medium-duty truck and bus applications.

In the race car this engine developed 340-plus horsepower at 4,000 rpm. and weighed 2.06 pounds per horsepower, making it one of the lightest and highest speed diesels ever used in public competition. It was made largely of aluminum and magnesium.

Experience gained with this race engine has been invaluable to the Cummins Research Laboratory.

A film of the Speedway race was produced for the Cummins Engine Co. Inc. and a copy may be loaned to business and technical groups free of charge. It runs for 22 minutes and is 16 m.m. sound and color.

Please address your request to the Sales Development Manager — Russel-Hipwell Engines Ltd., Owen Sound, Ontario.

—o—

VULCAN MACHINERY SPONSOR GENERAL MOTORS DIESEL MOBILE TRAINING UNIT

Owners and operators of General Motors Diesel Engines in the Northwestern Ontario area were invited by the Northwestern Ontario Branch of the Vulcan Machinery and Equipment Limited of Port Arthur to attend the two-day school March 17th and 19th.

The Mobile Training Unit was staffed by factory trained instructors who brought with them complete operating engines as well as cutaway engines, sub-assemblies, torque convertors, training aids and all other training material essential to a well organized, practical operator's training course. The course was free and was a real down to earth program designed to give the men attending the information that will help them to better maintain and operate engines and so reduce operating expenses.

AMERICAN PATENT RIGHTS RE THE CHEMICAL TREATMENT OF LIVE TREES FOR RAPID BARK REMOVAL SOLD BY THE DISCOVERER ALEX R. WHITE

Alex R. White, well known in Northwestern O and who has just retired as Safety Inspector f Lumbermen's Safety Association, announces he ha his first American Patent for easy year round Che Bark removal to the Armstrong Forest Products Co Limited of Johnsonburg, Pennsylvania.

Mr. White has been in communication wit Pulp and Paper Research Institute of Canada re th sibility of developing the use of chemical treatme Canada and is hopetul that the Canadian Industr realize the advantage of using chemical trea methods.

In addition to easy Barking, chemical trea will reduce sinkage losses, and will reduce res Jack Pine pulpwood.

Mr. White points out that the purchase o American Patent Rights re the Chemical Treatm Live Trees for Rapid Bark Removal will mean m the American Industry with their abundant sup hardwoods and should spur Canadians on to give serious study to the process of Chemical Treatm our Canadian hardwood forests as a means of co utilization of the forest crop.



C-I-L PAINTS proved that TAKE IT. T the enduring tough resistanc and weather means true pa my. Cover bet better, last lon cheaper paints ours, black

C-I-L PAINTS

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mended Reading

ds supervisory personnel would be well advised **Stability As A Factor In Efficient Forest Man-** by A. Koroleff, Director of Woodlands Re- PRIC and 23 other Canadian, American and Foresters and Loggers.

ient forest management means getting the of the three factors of forestry — men, tools Drawing upon the wide practical experience enty-four authors, and on the analysis of data l logging cycles, wood yields, losses, and costs from many parts of the world, this book dis- w maximum productivity of each of these three can be achieved.

ainable at $4.00 per copy from the

McGill University Book Store,
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Answers

1. Fishing, which started off the east coast in the 1500s.
2. The R.C.M.P. ship St. Roch succeeded in 1940-42.
3. Spruce and balsam.
4. 5½ hours.
5. The St. Lawrence River.
6. Lumber takes about 28% of the wood used in a year; fire, insects and disease about 24%; pulp and paper about 22%; fuelwood about 21%.
7. Slightly smaller, 363,282 sq. miles compared to 359,279.
8. The muskrat, over 4 million pelts in 1949.

(Material supplied by the Editors of Quick Canadian Facts, the handbook of facts about Canada.)

—o—

In Ontario a paper company started in 1947 a forest nursery to aid reforestation, now has 6,000,000 seedlings in it. —Quick Canadian Facts.

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Here's an article well worth reading . . . . . Reprints (with no advertising) are available for distribution to employees. Order from the LOG BOOK Editor.

$ $ $ BANKING FOR BUSHMEN $ $

By G. M. McKeown

Down through the years the average Bushman has been a rugged individualistic type of citizen. The very nature of his work calls for these attributes and it goes without saying that Canada could not have developed to its present stature were it not for men possessing these characteristics to a marked dagree; nor will it ever reach its proper place among the nations of the world without such men.

Bushmen, however, have never been considered among the most thrifty class of people in the world. Here again the very nature of the occupation is probably the chief contributing factor. Out in the woods for lengthy periods, the average bushman works hard for long hours, often under difficult conditions that would be much too strenuous for urban workers. Naturally the attraction of the nearest town or community of his choice grows in his thoughts day by day as his stay in the bush lengthens. Then comes that glorious moment when he heads for town. A quick stop at the pay office to exchange his time sheets for the company's cheque, which in recent years has reached important figures, then the bank, bar or store to exchange it for cash and then "watch out."

Up until the start of the war no one worried too much about the Bushman or how he spent his money. Some of the old time timber operators even adopted the attitude that the sooner the money was spent the sooner the employee would be back to work and if he was broke the easier he would be to handle. There has been, however, an almost complete change in the thinking of both employer and employee during recent years. Now the trend is to encourage workers to save their money, to emphasize the fact that their earnings are sufficient to permit them to acquire automobiles, radios and so many of the comforts of life formerly beyond their reach. We in the bank were probably the first to notice the change in the attitude of the Bushmen themselves. More and more of the men coming out of the woods open accounts with us and keep them open. They still have a little fling on reaching town, but a good portion of their pay is left on deposit with us before they start and they return to the bush with the nestegg untouched. The longest step towards the savings habit is made when the worker returns to the woods leaving a portion of his last pa deposit in his account. Subsequent additions see come easy.

To encourage this trend towards savings most have devised systems whereby customers and pros ive customers may do their banking by mail. This ation has placed banking facilities at the dispos thousands of people who never before have been a make use of our banks. We have clients we have seen, yet they have been carrying active account us for several years. Accounts can be opened and ated without the client ever going near the bank. F are provided that enable a customer to make dep withdraw cash, or have funds transmitted, all by These forms also indicate the proper way of endo cheques which are mailed in for deposit so that cannot be negotiated by a third party if lost or st Cash required is, of course, always transmitted by istered post.

A back-log of savings does somthing to a m gives a lift to his self respect, to his sense of p somewhere. It makes him feel less vulnerable — willing and able to grasp an opportunity when it c along. Until started, the savings habit seems diffic acquire, but men in your particular field would se have a better than average opportunity of bec savers. Your pay is permitted to accumulate o period of months while you are employed in the thus the back-log of cash is built up for you and a is actually required is to transfer a portion of that log to your savings account; most other workers pa a weekly or monthly basis have so little left after ing their regular commitments that at times, the shown hardly seem to warrant the effort to save

You know it is really surprising the numb ways your bank can serve you. In addition to s accounts which have been covered previously, you operate a chequeing or "current" account for the siring to settle billes by cheque. Payment by c prevents loss from theft or carelessness by elimi the need for handling important sums of money

(Continued on Page 22)

Banking for Bushmen . . . .

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BANKING FOR BUSHMEN

Continued from Page 20)

celled cheques provide, as well, an automatic record of bills paid.

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Where speed is essential, money may be wired or cabled to all parts of the world through any branch bank. At the larger branches such transfers are still further expedited by private direct wire to the principal commerial centres of Canada and the United States.

Should you wish to transfer money to the credit of individuals living in distant centres, your bank will conduct the whole transaction relieving you of all the details.

Travellers cheques and Letters of Credit are sold at all branch banks. These eliminate the need for carrying large amounts of money in cash and they are readily negotiable any where.

The safety of securities, valuable heirlooms and important papers can be assured by the use of Branch Bank Safe Deposit Box or their safekeeping facilities.

In addition to the foregoing there are countless ways in which your bank can serve you. If you have a problem take it to your branch manager. He has daily contacts with a broad cross-section of the community and his experience, usually gathered in a variety of places, makes his advice and guidance of considerable value in helping you reach a decision. He may not have all the answers but he will know where you can get them.

The chartered banks of Canada have been designed to serve you. The Bank Act under which all operate was written originally and is reviewed periodically by the government to see that your interests are protected. The fact that these banks are in competition with each other guarantees that they will continue to strive for your business. Make use of their facilities; that is what they are there for.

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Publications of the Lake States Forest Experi... Station 1949-1951. Station Paper No. 15 (Su... ment No. 1).

Quality of Logs and Lumber Obtained from an Imp... ment Cut in Second-Growth Hardwoods in No... Wisconsin, by Carl Arbogast, Jr. Station ... No. 26.

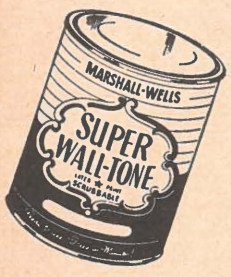
Seeding Jack Pine After Fire in Minnesota, by E... I. Roe. Printed in Forest and Outdoors. Oct.

Copies of these publications may be obtain... request from the

United States Department of Agriculture,
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PREPARATION OF PULPWOOD

(Continued from Page 8)

The bark from this operation goes to a bark press where the water is squeezed out so that the percentage of moisture in the bark is about 60 per cent. This bark is then sent to the boiler house.

CHIPPERS:

For the manufacture of chemical pulp it is necessary to reduce the logs to chips that are from ½ to 1 in. long, and ⅛ to 3/16 in. thick. This is to allow the cooking liquor to penetrate the wood.

All chippers are essentially alike. Chipper knives usually four, are set in a heavy disk. The chipper disk revolves at about 275 rpm. Wood is fed into a spout inclined at about 45 degrees to the chipper disk. The knives slice off the end of the block projecting beyond the bed knife which is a part of the chipper spout. The knives must be changed frequently in order that good quality chips will be produced at all times.

CHIP SCREENS:

After being cut by the chipper the chips contain from 1.5 to 5% sawdust and from 1.5 to 3% slivers. In order to separate the good chips from the sawdust and slivers, chips screens are employed.

A typical installation is the flat screen of the shaker type. A reciprocating motion is given to the screen by eccentrics and rods connected to the driving shaft and screens, the latter being inclined at an ankle of about 8 degrees to the horizontal. The chips are fed to the top screen and chips and sawdust pass through the wire screen and land on the second screen. The sawdust goes through this screen and the good chips are discharged onto a conveyor going to the chemical-pulp mill.

The sawdust is sent to the boiler house. Oversize chips and slivers are crushed and returned to the chip screens.

(One of a series of articles by members of the Mid-West Branch, Technical Section, C.P.P.A.)

ONTARIO PAPER COMPANY CRIBBAGE TOURNAMENT

During the months of November and December a Cribbage Tournament was held throughout the logging camps. After the individual camp tournaments were completed the camp champions met at a central camp where they played off for the championship of the limit.

The Cribbage Tournament created a tremendous amount of interest throughout the camps, everybody being eligible.

John Malec of Camp 47 won the championship with Gerard Duncan of Camp 46 runner-up.

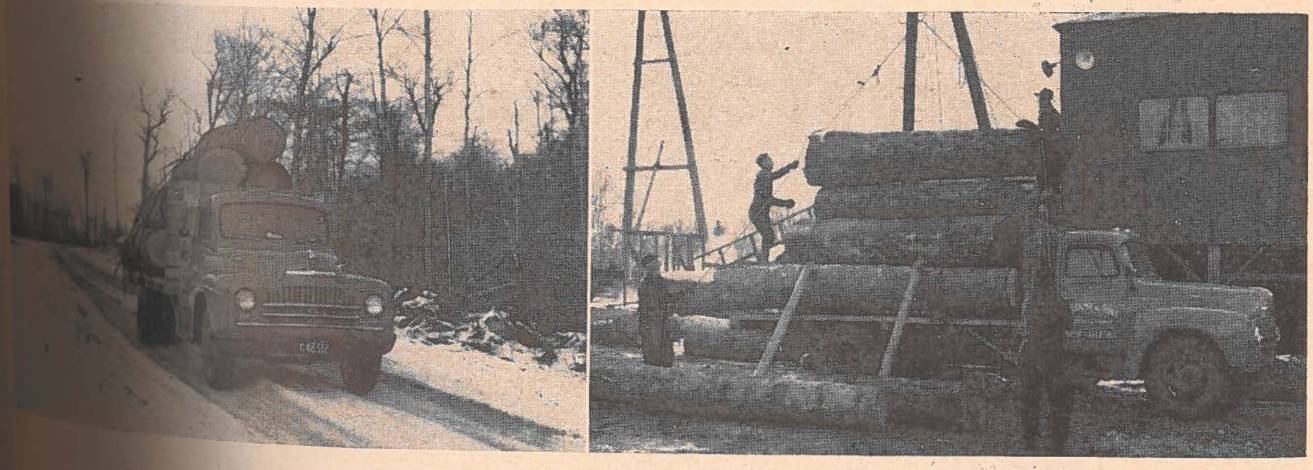
Following are the winners in the individual camps:

Camp 51	James McLean	Camp 11A	Gerard Lelieure
" 50	Louis Malloy	" 49	Adelard Gallant
" 44	Lucien Desharnais	" 47	John Malec
" 46	Gerard Duncan	" 45	Mary Sitar

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