

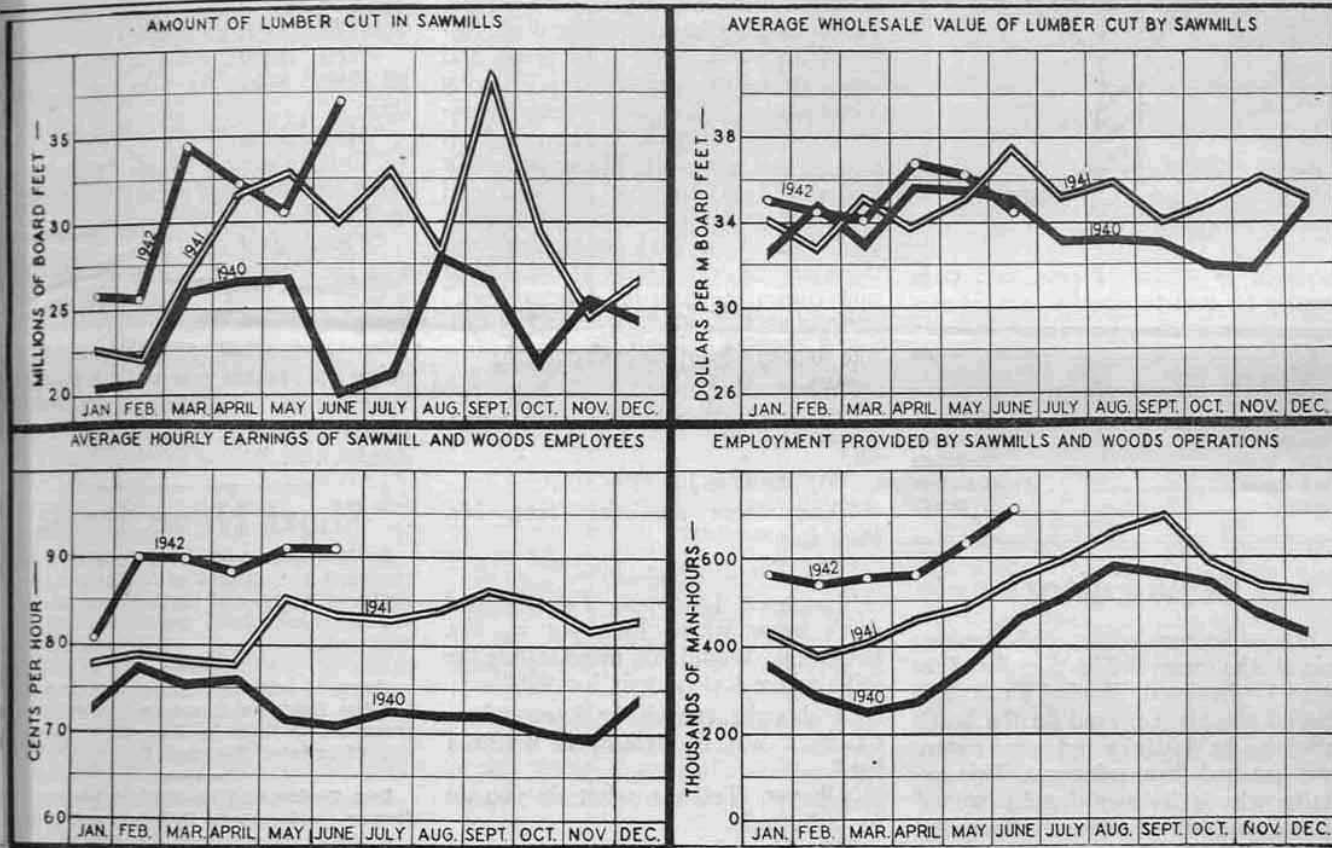
THE FAMILY TREE

Published by Potlatch Forests, Inc.

Vol. VI

Lewiston, Idaho, July, 1942

No. 10



TO ALL EMPLOYEES:

We produced more lumber in the 12-month period ending with June than in any previous 12-month period in the company's history. Production in June was over 37 million feet and for the first six months of 1942 exceeded 183 million. All departments of the company shared in the war production schedule. Logging camps are working six days each week and the sawmills have generally been on a two-shift six-day basis. The box factory at Lewiston has been running three shifts and will probably do so for an indefinite period. During the first six months of 1942, 8,140,000 feet of shooks was shipped from the box factory which is almost as much as in the entire year of 1941.

WAR CONTROLS—War restrictions on supplies and equipment have not greatly affected the production schedule. Although many materials needed are scarce and hard to get, there have been no shutdowns on account of inability to get needed equipment. To the extent that we can continue to get along with what equipment we have, we will continue to make an important contribution to the winning of the war.

Some other war controls have been felt more directly. Last February, price ceilings were imposed on lumber and other products

manufactured by the company. Although the selling price of lumber was frozen, no accompanying ceilings were placed on labor costs or other expenses.

More recently the government took control of the distribution of lumber by prescribing the agencies—chiefly governmental—to whom lumber could be sold and shipped. The wisdom of this course is unquestioned as long as vast amounts of lumber are needed in the conduct of the war.

INCREASE IN SHIPMENTS—Shipments this year will probably be the highest in history and exceed those of 1941. During the first six months of this year shipments totaled 208,432,246 feet. Much of this went to governmental agencies and most of the balance went to the government contractors or holders of war orders. The Weyerhaeuser Sales Company tells us that in the first six months of 1942 over 95 per cent of our lumber went into the war effort and into essential civilian use.

WAGES RISE—Wages are the highest in our history. Months ago I warned you not to "Cut Your Own Wages" by thoughtless buying of articles not needed. Our government is trying desperately to safeguard our savings by attacking the threat of inflation. Excess buying power in a restricted market will inevitably drive prices upward. The best way

to drain off the excess buying power is to buy War Bonds. Buying bonds is more than a patriotic duty—it is an ace in the hole for our future.

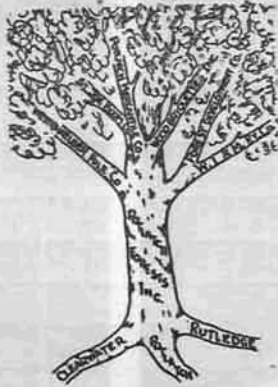
EMPLOYMENT RISES—Increase in production has naturally caused an increase in employment. During June we employed 4,010 persons—2,260 in the woods and 1,750 in the plants. As the months pass by, more and more men are being called into the armed forces—our last compilation shows 235 names. These men have left holes hard to fill. Many a newcomer to our industry has replaced a trained man. One of the best and most effective ways for you to aid the war effort is to make a conscious effort to help these new people to learn the ropes. Give them a break whenever you can and especially try to keep them from getting hurt until they have learned their way around.

The women who have lately joined our organization are doing good work. We shall undoubtedly have more of them before the war is over.

Lumber is now a critical material. The charts above show how we stack up in the war effort so far. If you have the will to win, we can keep up this gait indefinitely.

C. L. BILLINGS,
General Manager.

THE FAMILY TREE



Published by Potlatch Forests, Inc., Once Monthly for Free Distribution to Employees

Editor E. F. Rapraeger

Correspondents

Vacant	Rutledge
Vacant	Clearwater
Mable Kelley	Potlatch
Carl Pease	Headquarters
Vacant	Bovill

New Editor

When former editor Sid Jenkins joined the army, *The Family Tree* faced orphanhood. Having an orphan around the place preyed on the boss's mind. So he dutifully put some names in a hat and drew mine out. This explains why a forester dazedly spread his wings over *The Family Tree* and mothered it along.

A permanent editor has now been chosen and with a mixture of regret and gladness I hand to him the heritage which is rightly his. Included in the legacy is a supply of midnight oil and a boundless wealth of unwritten stories pertaining to the woods, sawmills, and other far flung branches of the company's operations. All that the editor must do is unearth these stories, and stonily reject those of limited interest or quality. Sounds easy, doesn't it? Each issue contains the equivalent of 10,000 words. Six issues equal a 250-page novel. Preparing each issue can become a heavy task even for nimbler writers than any of us claim to be. It is the job of each of us to send in suitable contributions. Don't make the editor do it all.

The new editor is Leo Bodine. He will be editor of the August issue and those thereafter. He has been employed by the company for the past 12 years. Many of you know Leo. He is a swell fellow.

The-Man-on-the-Street Interviews Joe Pohckrop

"This is the-man-on-the-street with a fifteen minute parade of interviews, folks. And by the way, folks, don't forget Wanta-cola, America's finest and most refreshing drink. You'll enjoy Wanta-cola, folks. Visit your neighborhood soft drink emporium and get a cool tall glass of Wanta-cola. Or better still, go to your neighborhood store and get an entire case of Wanta-cola. It's cool and refreshing and there's twice as much for a nickel. And now comes the parade of interviews."

"Good afternoon, Sir: Would you like to speak over the microphone?"

"Who? Me?"

"First of all, what is your name, Sir?"

"My name is Joe Pohckrop."

"And where are you from, Mr. Porkchop?"

"Me, I'm from Latchpot."

"Latchpot, Latchpot. I'm afraid I don't know where Latchpot is, Mr. Porkchop. Would you mind telling the folks where Latchpot is located?"

"I thought everybody knew where Latchpot was. Latchpot is where I log."

"Oh yes. Tell me, what do you do for a living?"

"Me, I'm a logger."

"Well, that is certainly very interesting. You chop trees, I suppose, Mr. Porkchop?"

"Yuh."

"Well, that's certainly interesting. Would you mind telling the folks about the details of logging, how it is done, and so forth."

"Well, we don't do it like we used to."

"Well, that's certainly interesting. Just how do you do logging nowadays? I must confess that logging is a subject with which I am not very familiar. You chop trees, I suppose."

"Well, we used to use horses. Now we use tractors and trucks."

"Tell me, Mr. Porkchop. How long have you been logging?"

"Ever since I was twelve."

"And I suppose you have engaged in other professions? Have you ever worked on a farm?"

"Oh, yuh."

"And perhaps you have driven trucks?"

"Oh, yuh, and tractors."

"Well, you have certainly had a wide range of experience. I imagine that logging is hard work, isn't it, Mr. Porkchop?"

"Oh, yuh, but it isn't nearly as hard as haying."

"Well, logging is certainly interesting. I suppose that pretty soon there won't be any trees left to chop."

"Well, there's quite a few left, all right. What they do now is to mark them."

"Mark them?"

"Yuh, some guys go around marking them. There's an article about it in *The Family Tree*."

"Thank you, Mr. Porkchop. You was Joe Porkchop, folks, who has told us all about logging. We are grateful to you Mr. Porkchop, and show our great appreciation by going to present you with a bottle of Wanta-cola. Wanta-cola, folks, is America's finest and most refreshing drink . . ."

Short News Items

In 1941 the sawmills of Potlatch produced 39 per cent of the lumber in northern Idaho and northeastern Washington (Stevens, Pend Oreille, and Blaine counties).

Camp 14 has rigged up a flagpole on the top floats an American flag was presented to them by Ranger Roy L. the Clearwater National Forest.

Don Garber and his brother, Wayne, former employees of Potlatch, and the Navy, recently met by chance on the Hawaiian Islands.

A short circuit in an electric motor dry kilns was the cause of a small fire at the Potlatch sawmill on July 8. The fire was quickly extinguished by the automatic sprinkling system.

Laugh Looseners

Visitor: "Are there any slick crooks in this town?"

Native: "You bet there are. One night at a dance some crooks stole my pants. I hung weights on my suspenders so they wouldn't miss them."

Joe Meek and his wife stood looking at a dentist's showcase. "If I have false teeth, I'll take that pair," said Joe Meek as he pointed.

"Hush," snapped his wife, "Haven't you that it is bad manners to pick teeth in public?"

Lawyer: "Can you repeat the exact words used by the prisoner when he confessed to stealing the tires?"

Witness: "He said, Sir, 'he stole the tires' (trying to be helpful): 'Did he steal the tires,' or 'I stole the tires'."

Witness: "He said he did it, Judge. My name wasn't even mentioned."

Timber Marking

By ROYCE COX,
Chief Timber Marker

Everyone agrees that it is desirable to leave trees for forestry purposes. But many a sweating sawyer has cursed at the sight of a comparatively small, punky white pine marked for cutting while next to it, standing unmarked, is a large, smooth tree with a better gyppo scale. Recent changes in the timber-marking policy have lead to even greater puzzlement, and for that reason the timber-markers are taking this opportunity to explain why they do the things they do.

First, let me state that the purpose of timber-marking is to select trees for cutting in a manner which conforms to the program of continuous production which Potlatch Forests, Inc. is practicing in the Clearwater woods.

Because of the huge investment involved and the social responsibility attending its operations, Potlatch Forests deems it wise to avoid the bad effect of a cut-out-and-get-out policy. Potlatch Forests, Inc. wants to be in operation generations from now, and the success of the endeavor depends greatly upon the way in which the present timber supply is treated. We all know who will suffer if Potlatch Forests, Inc. has to close down—the people of the towns and cities dependent upon the woods and mills for a livelihood.

Now to get on to the more practical side of the job. The problem of logging in a conservative basis is many-fold. First and foremost, enough timber must be removed from an area to make the operation pay. Second, a sufficient number of trees must be left to provide mutual protection against windthrow, and to provide a second cut. Third, if another cut in the same stand is not advisable, the area must be sufficiently opened to permit enough light for the establishment of a seedling stand, and at the same time it must be kept sufficiently closed to reduce over-exposure and drying out of the soil. Fourth, timber intended for a future crop must not be damaged. In country such as the Clearwater, this is a tough combination to satisfy. However, in the light of knowledge gained from past experience, a marking policy has been worked out which seems to meet most of the requirements of the problem.

Of course, the selection of the trees to be cut could be left to the sawboss



(Above) Trees to be cut are marked with a blaze. (Right) Reserved trees are marked with a seed tree tag.



or to the sawyers. However, the sawboss has enough troubles, and the gyppo has not only grief, but he lacks the time to bother with deciding whether or not a certain tree should be cut. The most practical way of selecting the trees to be cut seems to be through the use of a timber-marking crew. This ties down the responsibility, eliminates haggling between gyppo and sawboss, and lets the timber markers bear the brunt of the gyppo's cussing.

Briefly stated, the timber marking rules are as follows:

Rule 1: In all types of stands, leave white pines which are smaller than 17 inches in diameter at breast height. Exceptions to this rule are:

(1) White pines larger than 14 inches d.b.h. which are within 15 feet of a road or which are so badly cat-faced, rotted, scarred or otherwise injured that they will not survive a forty-year period are to be marked for cutting, providing they are merchantable.

(2) White Pines over 17" d.b.h. that are of doubtful merchantability (they won't pay their way out of the woods) are to be left uncut. Many such trees are good seed producers.

Rule 2: In all types of stands leave an adequate seed source of white pine on areas that are adapted to white pine growth. The number left varies from 8 to 16 per acre, depending upon the size and vigor of the trees. Choose the best available trees in sizes from 17" to 18" or under and give preference to sound, healthy windfirm trees. The diameter limit may occasionally be raised higher in order to secure the required number of trees. Leave trees of other species to make up any deficit.

Rule 3: In nearly pure white pine areas (stands containing over 70% white pine)

mark none of the mixed timber except trees that are suppressing white pine trees or trees which are of poor vigor. The purpose of this rule is to assure adequate protection from wind and provide a second cut.

Rule 4: In stands containing less than 70% white pine, mark for cutting not more than 50% of the mixed timber, leaving the smaller, most vigorous trees where possible. The reasons for leaving a part of the mixed timber are to provide protection against damage from high winds, to furnish ground cover for seedling establishment, and to provide for a second cut in the future.

All trees to be cut are marked on the downhill side with a blaze containing a "C.T." stamp. Reserved trees are identified by red tags containing in black letters the words, "Seed tree—Do Not Cut or Damage." Fallers and skidding crews are asked to avoid as much as possible any damage to a tagged tree or to reproduction. These tagged trees represent the source of future stands, and if they are lost, the future stands will suffer.

This just about sums up the timber-marking situation. In closing, let me say that no one consider sthe timber-marking policy perfect. Undoubtedly, mistakes will come to light and improvement will follow. But in the meantime we all should derive satisfaction from knowing that a conscientious effort is being made to make Potlatch Forests, Inc. the first big timber outfit to do business on a permanent basis. At least from now on, we hope the gyppos will have a better idea as to just why they are cussing, and maybe they can get a little satisfaction from that or cuss harder.



(Below) Headquarters, Idaho, before logging in 1926. (Above) Headquarters, Idaho, after logging in 1942.





IN the early 1920's the Clearwater Timber Protective Association occupied the present site of Headquarters town. It was a place where roads ended and trails began.

In August of 1926 the Headquarters town of today came into being. The initial development was a sawmill which cut lumber for buildings and ties for the railroad. Soon bunkhouses replaced shake-thatched cabins and logging teams foraged in meadows where pack stock formerly grazed. Over nearly impassable roads, tote teams hauled supplies into the new community. Credible authorities report that the mud along the route was so deep that a team drowned in the middle of the highway. Hundreds of other hardships and months of heavy toil entered into the building of Headquarters.

The days passed; weeks went by; rains washed the autumn air; and winter came. But before another year unrolled, Headquarters bustled with logging activity. In August, 1927, the Clearwater sawmill at Lewiston slabbd its first log and has run ever since on timber supplied by the camps in the Clearwater woods.

Today, many years later, Headquarters is still the loggingest town in Idaho. Production this year is approaching an undreamed of peak. But in spite of years of logging, the surroundings of Headquarters are typically virginal. Folded in the silence of mid-mountain, the town is fringed by forests of pines, firs and lance-like larches.

On nights when the moon is round and full, deer feed in the open meadow and the hooting of owls can be heard in the midnight air.

Since logging started in the Clearwater woods, 1,400,000,000 feet of timber has been cut in the company camps and in the camps of contractors. One-third of this came from the river camps. The balance was hauled by the railroad connecting Headquarters and the sawmill at Lewiston.

Lumberjax in the Clearwater woods speak of the "river camps" and the "railroad camps." The river camps, located along the north fork of the Clearwater river, are designed by letters of the alphabet. Their logs go down the river to Lewiston. The railroad camps are designated by number as Camp 29, Camp 30, Camp 31, and so on consecutively.

Camp A, the first of the river camps, was established in 1925 near Bruce's eddy about 1 1-2 miles above Ahsahka. It supplied piling for the Forebay at the Lewiston sawmill while it was under construction. George McKinnon, the wiry Scotchman and premier pathfinder of the Clearwater woods was foreman at Camp A. At present he is foreman at Camp 14.

Fourteen major log drives have come down the Clearwater river. The total footage in these drives was 485 million feet. The first drive arrived in the spring of 1928, although prior to then some piling

were rafted from Camp A. The largest drive was in the spring of 1938 when 50,062,970 feet of logs started down the river of their own accord on the crest of a mighty flood. Some of them broke the booms at Lewiston and continued downstream. This was the shortest log drive of record. The crew worked only five days at driving. The longest log drive was the one this year which lasted from April 4th to June 26th, a total of 84 days of rearing. In 1934 there was no drive which was fortunate because in December, 1933, the river reached the highest stage of record and had there been logs on hand, the ocean would have been their destination.

It hardly seems possible that one man could be at so many places but his wife reports that after being foreman at Camp A, George McKinnon became foreman at Camp 1. His clerk was Harry Rooney, now purchasing agent for the company. Camp 1 was the first railroad camp. It operated on Three-mile creek between Jaye and Pierce. The starting date was May 7, 1926.

Thousands of lumberjax and some loggerettes have worked in the Clearwater woods. I wish there was space to tell about them all, of the camps in which they worked, of the way they logged in the 1920's. Someday, I hope, someone will write a history of the Clearwater lumberjax so that the knowledge of the early days will remain with us.

TNT And Wooden Containers

Uncle Sam isn't saying much these days about the actual quantities of war materials he is buying and shipping or where they are going. But a hint or two concerning the vastness of the high explosives program will certainly give no aid or comfort to the enemy. So here is the hint: One manufacturer of high explosives expects to need half a million TNT boxes monthly—enough to produce more TNT than was being produced monthly by all



Wooden boxes of lock corner construction are used for TNT containers. Solidified TNT has the appearance of maple sugar.

plants operating at the close of World War I. Here is another hint: In the northern Rocky Mountain region, millions of TNT box shook will be produced from white pine, ponderosa pine, white fir, and spruce.

TNT, formally known as Trinitrotoluene and pronounced "Try-Ny-Trow-Tol-You-Wean," combines highly destructive properties, under combat conditions, with relative safety in manufacture, loading, transportation, and storage. TNT as the name indicates is made by combining nitric acid with toluene, a benzene compound. It is insensitive toward ordinary shocks and can be readily poured into shells. It melts at 175 degrees Fahrenheit.

Although a charge of 1 1/4 pounds of TNT shatters a 10-pound 75-mm projectile into approximately 400 fragments, the explosive is remarkably stable under ordinary conditions of manufacture and handling. Unless closely confined it will burn freely without explosion if ignited by a match or other flame. But if the TNT is closely confined in a projectile, it becomes a high explosive.



Left: Bulk TNT is being placed in a steam heated melting unit. Right: Liquid TNT being poured into 20-pound aircraft bombs.



Besides being used in high explosive shells, TNT is used for rifle grenades, aerial bombs, naval submarine mines, depth bombs, and as a constituent of propellant powder. TNT is also used for demolition purposes and for land mines. For demolition work, the explosive is made in the form of small, compressed blocks enclosed in a fibre container which renders the TNT waterproof and prevents it from crumbling. Solidified TNT—and TNT is a solid at ordinary temperatures—has much the same appearance as maple sugar.

The wooden box is preferred for the storage and shipment of TNT. Most of these boxes are of lock-corner construction. The shook from which the boxes are made must be free of loose knots, worm holes, shake and wane. In many cases the TNT boxes are delivered to the TNT plant in the form of shook. At the explosives plant the lock corners are cut and the boxes glued and assembled.

The major assignment of the TNT box is to carry bulk explosives from the manufacturing plant to plants where the TNT is loaded into projectiles, bombs, grenades, mines, depth charges, and other ammunition for warfare. In addition to serving in this country, the boxes are also used for shipping TNT in bulk to our allies.

Certain grades of lumber are classified by the War Production Board as Class I critical items. Wood is playing a tremendous part in the war. It is used not only for TNT boxes but for thousands of other items too

numerous to mention. There is a shortage of rubber, of quinine. These items also fall in the Class I group of critical materials listed by the War Production Board. A great distinction must be made, however, between a shortage of rubber and a shortage of lumber. The shortage of rubber results because it cannot be obtained hurriedly from materials available in this country. But the same is not true of wood. Lumber is available in quantities. If a shortage of lumber continues it will be because there is a shortage of men needed to manufacture wood products. The sawmills and the logging camps are a part of the production line. Our soldiers need equipment. Some of this must come from the mill production line. Unless they have the equipment, the TNT, the boxes, and the other things they need, our soldiers will suffer heavy casualties in a battle against a better equipped force. So in order to give our fighting men the best opportunity to come out of this war alive, we must shower them with equipment. We must get the equipment, still more, everything we can get. And in order to provide the equipment, you and I have got to work hard, every minute, every day—until we win this war.

(Acknowledgment is made to the War Production Board, U. S. Army for the use of photographs which illustrate this article. The Editor of "The Wooden Box" who granted permission to draw from an article dealing with wooden boxes which appeared in the June, 1942 issue).

"Minute Man" Awards Made At Sawmills

Official "Minute Man" banners—one for each of three sawmills—were awarded during the month to the sawmill departments which were investing the highest percentage of their earnings in War Bonds. Ten-Percent pins were also distributed to eligible employees who became members of the "Ten Percent" club.

The "Minute Man" banners were awarded for the first time this month and will be re-awarded monthly to the department at each sawmill which makes the best showing in War Bond purchases. Said Mr. Leuschel in awarding the banner to the Re-manufacturing department at the Lewiston sawmill: "This 'Minute Man' banner is an excellent symbol of the spirit of patriotism which has caused so many men in our employ to voluntarily set aside ten percent or more of their monthly earnings for the purchase of War Bonds."

The ten top department at the three sawmills were:

(1) Re-manufacturing—	
Lewiston	10.19%
(2) Dry Kilns—Lewiston	9.42
(3) Sawmill, Pond, Lath Mill—	
Potlatch	7.91
(4) Plant Offices—	
Lewiston	7.56
(5) Pond Crew—Lewiston	7.55
(6) Superintendents, Ware-	
house, Mill Office, Town-	
site, Store—Potlatch	7.40
(7) Power Plant—Potlatch..	7.17
(8) Graders—Lewiston	7.07
(9) Pres-to-logs—Potlatch	6.94
(10) Planer, Re-mfg., Mldg.	
Potlatch	6.87

In the doghouse (three lowest departments) were:

Planing Mill—Rutledge	2.41%
Construction and guards—	
Rutledge	2.14
Green chain—Rutledge	1.41

Plant averages were:

Highest—Potlatch	6.78%
Second—Lewiston	5.53
Worst—Rutledge	3.12

We are willing to wager our spare automobile tire that when the records for July are assembled, the Rutledge sawmill will show a better score and that all mills will show a sharp upswing. The goal is ten percent or more in every department.

Short News Items

Camp 36, which has been operating in a ponderosa pine stand from a spike camp at Camp Laird since November, moved back to the upper camp on the South Fork of the Palouse river, which was abandoned last fall when the roads became impassable for logging trucks. Oscar Hagbom, the foreman, has had several gravel trucks rocking the main road from Laird Park into the upper camp where the white pine operations will begin as soon as the camp is well established.



C. L. BILLINGS

The boss recently made a trip into the Clearwater woods and another into the Potlatch woods. In case you didn't see him, here is his picture, taken at the Camp 11 landing.

From our Potlatch woods comes word that the steel from the famous Three Bear Railroad line has been picked up to a point within two miles of Park. All of Dick's Creek timber, all of the Three Bear timber and all of the timber on lands draining into Long Meadow Creek, as well as that in the Park area, was removed over this line. It was built in 1929 by Morrison-Knudsen, Idaho contractors, who were contracting on the government project at Wake Island at the time of the Japanese attack. Joe Parker, woods superintendent, expects to have all the steel from this railroad removed by late fall.

How Much Land Does a Man Need

Strakoff was a Russian peasant. He was not rich but he was content. One day he heard of fertile lands along the Volga river, free for the asking. Night and day he thought of the Volga country. He finally became dissatisfied with his lot in life. So Strakoff sold his house and land. He went to the Volga valley and settled there. He tilled the soil and prospered. He

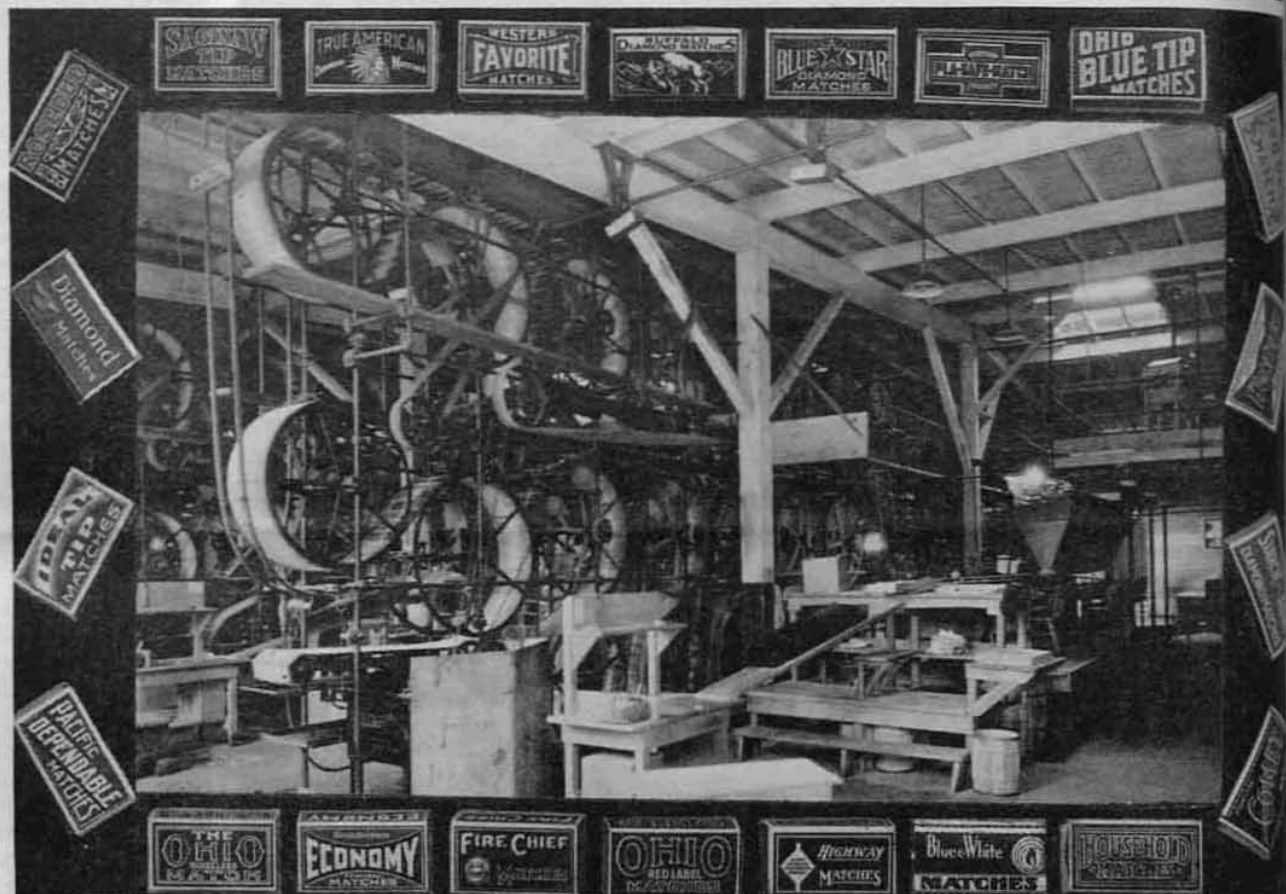
thought he knew how much land a man needs.

But once again glorious tales reached him. They told of unplowed terrain in the land of the Bashkirs. According to all reports the soil was black and deep. It was beautiful soil. Thousands of acres could be bought for a song. Strakoff was fascinated by the prospects. He decided to chase this rainbow and leave the Volga. So he gathered all his belongings and traveled to the land of the Bashkirs. He was well received by the headman of the village. Strakoff could have all the land he needed. All the land a man could walk around in one day was his if he would first deposit one thousand rubles in the village treasury. There was only one stipulation. If he failed to return within a day and to the place from which he started, his money was forfeit. Strakoff was delighted. His strong sturdy legs could cover a vast area in one day. Before another day was over he would have all the land that a man needs.

When the sun crept over the horizon next morning, Strakoff started. The Bashkirs silently watched him as he ran across the plain. For hours he kept in a straight line, mile after mile. The farther he went, the better the land became. It began to grow warm but he still kept on. He wanted to continue ahead but the sun was high in the heavens. So he finally made a mark on the turf, turned a corner, and kept on in a new direction. Again he went for a long distance in a straight line and late in the afternoon turned the second corner. Strakoff was getting tired but there was no time to rest. The sun was sinking lower and lower. Strakoff quickened his pace. His money was at stake. Strakoff's lungs ached and his heart was pounding terribly. But he kept on. He could see the starting point where a group of Bashkirs were waiting. Strakoff collected his waning strength, threw himself forward and with arms outstretched, collapsed at the finish line. He had won! Or had he? One of the Bashkirs turned him over. Blood trickled out of Strakoff's nose and mouth as he lay there dead. How much land does a man need? The Bashkirs took a shovel and dug a grave in the lonely prairie. It was seven feet long and two feet wide. It was all the land that Strakoff needed.

Moral: Don't chase rainbows.

(Abstract from news letter published by the School of Forestry, University of Montana.)



One hundred years ago matches cost a penny apiece. Nowadays, machines like the one illustrated manufacture 750,000 matches per hour. Some of the brands of matches sold in the west appear in the illustration.

THE wooden matches which the United States produces in one hour amount to millions and a year's production to about 280 billion. Wooden matches are used at the rate of about 9,000 per second. Almost all wooden matches are made from Idaho white pine. About 80 million feet of lumber known as match plank are used annually for this purpose.

It is estimated that the average white pine tree in Idaho contains somewhat over 300 board feet of commercial lumber plus enough match plank to make a million matches. For making the wooden matches produced in the United States, almost 300,000 white pines must be cut annually. To supply this timber, the pine must be cut from about 12,000 acres—an area two miles wide and about ten miles long.

The utilization of Idaho white pine for matches contributes greatly to the economic and social welfare of northern Idaho. In lean years or prosperous periods the market for the grade of lumber known as match plank is steady. It is not a market which surges upward in prosperous times

and downward during depressions. Numerous sawmills and logging camps benefit from the existence of this market. Other beneficiaries are the block factories in which match plank is sawed into match blocks. There are five such block factories at Spokane, one at Orofino, and another at Bovill. Potlatch Forests, Inc. produces match plank for some of these factories. In 1941 Potlatch Forests supplied enough match plank to make 70 billion matches.

It might appear to a casual observer that a match could be made from any splinter of wood. However, to produce matches in quantities and at low cost, requires careful selection of lumber. The selected lumber—the match plank—is chosen for straightness of grain, soft texture, white color, and a high yield of match blocks. Dressed-dry match plank is either two inches or two and one-half inches thick. After being seasoned it is surfaced and sawed into match blocks. Each block is as long as the length of a match. Sawing the plank into blocks is done at the match block factories. Blocks are shipped

from these points to match factories.

The main machine in the match factory is an interesting assembly of wheels, cutting knives, belts, blow heated drums, and dip troughs. Match blocks are fed into the machine where they meet a row of forty circular knives, flashing up and down at the rate of about five strokes per second, which slice off individual match sticks on the downward stroke and on the upward stroke pass them into a steel plate which is part of an endless belt. Look at a wooden match sometime and note the small end which results from being squared into the perforation on the top.

Taking into account supply, quality, and technical qualities, no wood is better suited to match manufacture than Idaho white pine. All match companies draw supplies of match material from Idaho. Many of the match plank from Potlatch Forests. The matches made from our match plank enter almost every home in the United States. In this respect, almost every person in the United States is a customer of Potlatch Forests.