

EDITOR'S NOTE

June 22, 1911 marked the creation of the Division of Forestry. Exactly 100 years later, we invite you to enjoy this Special Edition of Roots along with your regular issue of the May-June 2011 Roots, which contains the usual articles on current issues, retirements, and "Forestry Folks."

Within a year after the Minnesota Legislature created the Minnesota Forest Service in 1911, *The North Woods* was launched. The first of many publications written for and about its employees, this short magazine recorded and promoted Minnesota forestry. We've reprinted a few articles in this newsletter.

In November 1923, another monthly newsletter appeared from Department of Conservation. This publication, *The Smoke Screen*, used the motto "Prevent forest fires, it pays!" It extolled the use of Minnesota resources and proudly reminded readers that its light brown cover pages consisted of 100 percent Minnesota-grown tamarack while the interior pages consisted of 90 percent poplar and 10 percent spruce.

It's not known when *The Smoke Screen* ceased to exist, but in November 1932 the editor stated, "conditions have made it necessary for us to curtail its size. We find ourselves in the midst of moving our offices and equipment. In addition to this grief, the Department of Administration and Finance have borrowed our printing press nor have we been favored with many contributions from the men in the field."

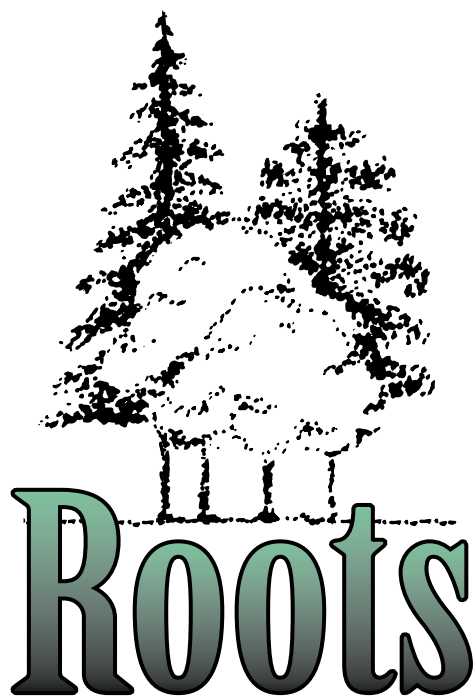
Governor Olson shared his holiday greetings in December 1932: "The pioneers of Minnesota triumphed over want and hardship, never lacking courage, never losing faith. Let us prove ourselves worthy of our lineage by meeting the trials and tribulations of today with strong hearts. Let us, though in the midst of adversity, look to the future with cheerful spirits and the willingness to cooperate for the promotion of a common happiness." The words still ring true in 2011.

1911

Back row, left to right (Name, District): Chris Burns, Cass Lake; H.H. Winslow, Northome; William Kilby, Baudette; Percy Vibert, Cloquet; Hans Kasper, Grand Marais ; J.P. Saunders, Brainerd; Walter Eisenach, Aitkin; Percy Records, St. Paul; and Edgar E. Chappel, Ely.



Minnesota's State Foresters in 1911. Front row, left to right (Name, District or position): A.C. DePuy, Park Rapids; C.A. Peterson, International Falls; William T. Cox, state forester; L.F. Johnson, Bemidji; Hugo C. Nelson, Hibbing; Fred W. Bessette, Orr; Michael J. Thornton, Deer River; E. Arthur Linder, Warroad; and Dillion P. Tiernery, assistant state forester.



A newsletter that gets to
the bottom of things



Minnesota Department
of Natural Resources

Division of Forestry



May-June 2011
Special Edition

1912



Patrolmen for 1912, *The North Woods Magazine*

By the editor of The North Woods, March 1912



When patrolmen were chosen by the state forester for the summer of 1911, the positions were new; few knew the nature of the work to be done and many who applied were ill-fitted for the business at hand. Many put in applications who looked on the position as an opportunity for a cheap vacation with plenty of canoe trips and horseback riding thrown in. This necessitated much disagreeable work in sorting out the unfit men and probably led some of the disappointed candidates to feel the selection had not been wholly impartial.

In order to do away with these undesirable features, the (state) forester has issued the following notice to all applicants: ...examina-

tions will be given for those desiring positions as patrolmen. New applicants who take the examinations must be between the ages of 18 and 40 years. The age limit will not in any case disbar from examination any man who did satisfactory work in the Service last season. The questions are of a practical nature and are designed to bring out the applicant's knowledge of all kinds of woods work.

Those who pass the examination will be placed on the list of eligibles, from which positions will be filled.

About *The North Woods Magazine*

The North Woods magazine was considered the "official bulletin of the Minnesota Forestry Association and the State Forest Service." In 1916, the annual subscription (12 issues a year) was \$1. Occasionally, a subhead, "Forest Schools the Foundation of Forest Health," graced the inside cover.



Editors' Note

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In 1919, the Minnesota Forestry Association offered an essay contest for Minnesota 7th and 8th graders. They received 384 entries. Miss Gudrun Grimsrud, a 13-year-old from St. Hilaire (a small town in northwestern Minnesota), won one of four first prizes and \$5. Here is her essay, exactly as written in the July and August 1919 edition of The North Woods.



Why Should Trees and Forests Be Planted and Protected in Minnesota

By Gudrun Grimsrud

Trees should be planted and protected in Minnesota because we have so few forests left. Fires have destroyed so many forests, and extravagant cutting shows in the few forests that remain.

There is great danger in being left without forests. If there are no forests there will be no windbreaks against hot winds in summer and cold winds in winter. The soil would have no protection from gravel and sand which are carried down on valley lands. The soil would have no protection from erosion on hilly lands. Without forests, there would be no leaf mold on the ground, to check rapid off-flow of water which causes floods in the rivers. There would be no wood for fuel in homes and factories if there aren't trees. There would be no wood for telephone posts, pillars in mines, bridges, houses, boxes, sidewalks, furniture, and for ship-building. There would be no pleasant woods to use for summer and health resorts. And the birds and animals would have no woods for their homes. When our forests are gone, it will be necessary to build of brick and stone, which costs more. This may force many people into tenement houses, thus having an important social effect. Trees grow very slowly for the first ten years, they grow faster for several decades, then slower again. It takes, therefore, a long time before a tree is large enough to be of value. We should protect our present trees so they will last until the trees which are planted, will be large enough to use.

The state is at present paying fifty thousand dollars a year to protect its forests. Two-thirds of this is used in fire control. It is now necessary for each forest ranger to cover from twenty to thirty townships. If the bill now up before the legislature passes, it will yield three hundred and thirty thousand dollars annually.

This would provide one ranger for four townships, so they could do much better work in saving forests from destruction. Such a fund would also start more planting of forests.

We must continue planting trees if we are to supply the demand. The present trees won't last long if they are to be cut down at the rate they have been. Many forests could be grown on scrub land which is of little value for farming. The people can help the state by planting trees on scrub land and in that way, getting a valuable crop from land which could not be used for farming profitably. There are vast tracts of swampy land, useless for farming as it is, in Northern Minnesota. If the government would drain this land, and plant trees on it, in some years there will be large tracts of forests for use. If the state would give trees free, to farmers to plant on their land and take care of, these farmers would in some years have wood enough for their own use and they wouldn't have to call on the state for wood. A very good way to interest our citizens in trees would be to follow the suggestion to plant trees in avenues and groves in memory of those who have died in this war. Any community can well afford to do this in memory of these brave men.

The public schools should give a course of study in Forestry to interest the boys and girls who are growing up now. The state could send more literature about forests to the schools. The observance of Arbor Day is a good way to help in planting and protecting trees in Minnesota.

1927

Developing the Sixth Sense of the Forest Service

By John Kuenzel, assistant in fire weather investigations, September 1927

Realizing the importance of weather conditions in affecting the occurrence and spread of forest fires, the Forest Service has for the past two years conducted a weather and research station at the Larsmont Station, for the purpose of studying the phenomena of weather in connection with fires and to determine in advance the advent of "fire weather."

A study of fire weather divides itself logically into two phases. One phase includes an investigation of all the factors influential in creating fire hazard, and the other deals with the application of the data in forecasting periods favorable for the start of new fires or the spread of existing.

Investigations at Larsmont are concerned primarily with weather affecting forest conditions. With few exceptions, the method of taking data is similar to that taken thru observations of air temperature, relative humidity, air pressure, wind velocity, evaporation, precipitation, and cloudiness. These observations are made at the tower where the relation of the weather conditions to the occurrence of fires can be observed each day.

Field experiments include investigations of rainfall and evaporation under various types of forest cover, also measurement of duff, air, and soil temperatures and determinations of duff moisture content. In jack pine stands near the tower, daily inflammability tests are made to note the ease of starting a fire in the pine needles with such agencies as matches, pipe heels, cigarettes, and duff samples taken to determine the amount of moisture present when such tests are made.

From long experience some forest officers may be sufficiently well informed to know when to indicate when conditions are generally safe or dangerous, but to interpret records of humidity, temperature, rainfall, and other weather conditions to tell just how serious conditions are apt to become is a more difficult problem. It is a simple matter to indicate at the close of a day whether conditions have been safe or dangerous for fires, but to have known this in the morning, or the evening before would have been more useful.

We still have to learn about the correct application of humidity and temperature records, since extremes of these do not cause the same hazard in the hardwood type that they do in pine, nor are they of the same importance in the late spring and summer as in the early spring or fall.

In connection with the fire weather investigations, the Fire Weather Warnings received from the Duluth office have been useful in preparing for periods of fire hazard. Besides using these in planning investiga-



CHECKING FIRE WEATHER AT WILTON.

tions, copies of the warnings were posted in the hotels and other tourist headquarters to call to the attention of the public the coming hazardous conditions, since as it takes but a bit of carelessness to start a fire, the same amount of effort applied toward prevention will likewise prove useful in preventing one.

Rating of Risk of Forest Fires in Minnesota

By J.A. Mitchell, Lake States Forest Experiment Station, April 1927

Based on the records of the last 10 years, Minnesota has, on the average, from 100 to 1,200 fires a year, burns over approximately 400,000 acres annually, and suffers an annual loss of close to \$1 million. Comparing the average figures for the two 5-year periods, 1916-20 and 1921-25, we find that the number of fires per year has increased 100 percent or from 639 to 1,279, but that the total area burned over has decreased 25 percent. This indicates an increasing hazard, but improved and much more effective protection.

Lookout Stations as Public Relations

By Clarence Prout, assistant in investigations, September 1932

There is at the present time in the neighborhood of 100 lookout towers owned by the Minnesota Forest Service. Many of these towers are located on or near main travelled highways. Those towers situated in accessible places have a very definite place in the public relations plan of the districts. They enable the ranger thru his men to contact the public and put over the various forestry lessons so necessary in fire protection in this state.

Tourists and neighboring peoples come to the tower for information and recreation. At many of the towers, picnic grounds are maintained while at others campgrounds are being established.

Towers serve primarily for the detection of fires. The lookout man on duty has as his principal duty the detection and location of fires. During his work, he may contact a goodly number of people who visit him. The patrolmen located at the tower are also given an opportunity to meet these people. It is thru these contacts that much of the Forest Service's educational work is accomplished.

To further this work and to encourage the public to visit the towers a number of things are possible. One is the drawing cards or the squirrel cards given to all who climb the towers. One district has a set of exhibit boxes in the making. He also has a bench at the tower base so that the visitors may be comfortable while talking to the patrolman. Pictures of the views from the various towers also attract considerable attention. Attractive



GRAND PORTAGE FIRE TOWER, CIRCA 1930.

entrance signs, archways, and well maintained roads are inducements to visit the tower.

The grounds should be well brushed cut, kept clean and neat. The crows' nest should be orderly and not cluttered up with magazines and non-essential equipment. A small map of the area with two or three of the towers shown on it helps to illustrate the method of locating fires.

A well displayed set of fire fighting tools are interesting to any of our tourist visitors. This display opens an avenue for fire protection talk and a chance to caution people as to the handling of their campfires, smokes, and matches.

It is well known that the men at the towers know the country surrounding the tower. The men

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Managing Managing Managing Managing

1932

Badoura Nursery

By Clarence Prout, May 1932

The Badoura nursery presents a very active picture during the spring. Seedlings are coming up; transplanting is going on; seed frames are being constructed; and the rodents becoming troublesome.

This year there is over 200 beds planted to white and Norway pine and white spruce. During May, approximately 26,000 2-year-old white pine seedlings were lined out in transplant beds and about 1,600 2-1 stock planted in the experimental area.

The seed for the most part, has been planted in the fall and germinates in the middle of May. The beds are shaded, watered as the weather demands, and they are carefully watched for any diseases that may attack the tender seedlings.

The area not in trees or seedlings are kept cultivated or growing in some field crop so as to prepare the soil for future use. Rodents are controlled by trapping, shooting, or poisoning. The pocket gopher is probably the most annoying. The



nursery has now planned approximately 5 million seedlings that will be available for planting on state forests by 1938. This will mean we will have to plant around 5,000 acres each year to take care of this number of trees.

The seed used at the nursery is purchased from the Extension plant

of the U.S. Forest Service at Cass Lake. The public finds the nursery an interesting place and the visitors are welcomed as this affords a chance to put forestry facts across. A small campground is being prepared which will serve as a picnic and meeting ground for the farmers and tourists.

Lookout Stations (continued)

should know not only the roads, trails, names of lakes, and the various timber types, but also these men should be able to tell about the fishing, hunting, scenic spots, and other bits of information that those who visit the tower may want to know.

The towers are an important link in our educational program. The more accessible ones should be manned by men able to meet people and pass on information in a clear and concise manner. There is no doubt that our towers can serve us in a much wider field if the time is taken to build an educational program that fits in with the plans of each ranger district.

Mosquito Chaser — Michigan Dope

THIS IS THE DOPE THAT KILLED FATHER
"LET'S GET A MOVE ON US"



You have been troubled with mosquitoes, and have tried everything on the market, but you probably have not tried MICHIGAN DOPE. This is the dope that will actually give you comfort while out fishing, hunting or camping. You have no risk to run. If the dope does not give satisfaction I refund the money paid for it.

At all dealers or postpaid 1-oz. can, 25c; 4-oz. can, 50c.

R. C. KRUSCHKE Dept. N **Duluth, Minn.**
SEND FOR CIRCULAR

1952

School Forests—‘Conservation Educators’ (excerpted from *The Conservation Volunteer* magazine)

By Earl J. Adams, forest management



On December 3, 1952, Chester S. Wilson, Commissioner of Conservation, signed a certificate of approval for establishing and maintaining a school forest on Lot 4 and the SW1/4 of NW1/4 of Section 4, Township 148, Range 30. Thus a new school forest to be administered by Beltrami County School District Number 3, for the benefit of conservation education by the Blackduck school, was added to the growing number of school forests in Minnesota. Subsequently, a school forest for the Big Falls Elementary School in Koochiching County was approved on December 6, 1952.

These are not the first such forests in our state, but their approval by the commissioner is significant because

they are the first school forests to be established under the provision of the school forest law (Minnesota Statutes 1949, Section 89.41 and 89.42) passed by the state legislature in 1949. Existing laws prior to 1949 were not entirely clear on the subject; hence the new law filled the need by specifically authorizing educational units of the state to establish and maintain forests and to sell or otherwise dispose of timber or other forest products grown thereon, with the approval of the commissioner.

Students should have available a

study area where they may learn to distinguish different species of trees and how to grow them under good forest management practices.

They will want to learn about the wildlife that inhabit our woods, to recognize the flowers and shrubs common to Minnesota's forests, (and) to understand the role of forests in soil and water conservation.

That there is currently a great deal of interest in school forests is evidenced by the several applications as well as inquiries. Surely the passage of the law has opened the way...

In 1941, *The Conservation Volunteer* (later renamed as the *Minnesota Conservation Volunteer*) magazine emerged on the scene. Since their first issue, they've printed more than 200 articles about Minnesota's forests.

JUST FOR FUN

The “Old Timer’s” Method of Persuasion

By H. G. Leyde, Patrolman, February 1927

On a recent slash inspection trip, I had walked all day and night approached. As far as I knew, I was several miles from human habitation. I began to think that even a tent would be preferable to walking very much farther, when I saw, in a small clearing, what first appeared to be a root house with a stovepipe extending up thru the roof. As I neared the place, I found it was a cabin, a shelter against the elements.

I knocked at the door and was bidden to enter, finding the cabin occupied by an old man of 86 years who resented the inference that he was old. He invited me to spend the night with him and I gladly accepted. I noticed upon entering that the cabin contained only one bunk and that was too small for both of us. I mentioned that with a blanket or two, I could make myself comfortable on the floor by the stove. This was met by curt refusal and I was told that I would sleep in the bed. When I demurred, the old man pulled a “forty-four” and pointing it in my direction said, “You will sleep in the bed or outside and go out feet first. What is the answer?” Looking at the young cannon in his hand, I came to the conclusion that the bed was just where I wanted to sleep and said, “You win.”

I awakened in a couple of hours and seeing the old man was anything but comfortable, I arose and insisted he take his turn at the bed, which he did without argument.

I have been put to bed in a good many different places and in a good many different ways, but this is the first time it was ever necessary to use a “forty-four” to get me to bed and I can't say I slept any better for having thus been put to bed.