

Wisconsin School of the Air  
Afield with Ranger Mac  
November 6, 1939

SCHOOL FORESTS - NATURE WORKSHOPS FOR CHILDREN

Hello Boys and Girls:

This is your day  
Let's be up and away!

Among the many and many books that Trailhitters would delight most to read is "The Boyhood of a Naturalist". It is an autobiography; that is it was written by the man himself about himself. The author of this book is John Muir, a son of Wisconsin by adoption. When a boy, John came to Wisconsin from Scotland, settled on a farm near Portage, helped his father clear the land for the plow, grew to young manhood following much the same channels of the average boy, except that he had to work unusually hard and he had an appetite for books and the outdoors that he was never able to satisfy. He spent most of his adulthood in the far West. Because of his studies and his efforts, many of the gorgeous works of nature have been set aside as National Parks for people to visit and have their souls refreshed. About two weeks ago, I visited one of these parks set aside as a monument to this great man and called after him, Muir Woods. To get there we travelled about twenty miles out of San Francisco, over rugged barren land and finally made a long steep descent into a valley where the giant redwoods were growing, the Sequoia, protected from the winds by the surrounding mountains, surrounded by fog and humid air that they require. It was Sunday morning and we were in the groves that were God's first and greatest temples. Ranger Mac thought of you then and wished you could be present to be thrilled by the sight of century old sentinels, that made a cathedral of the woods. But these gigantic trees were very small trees, once upon a time, centuries ago; just as small as the trees the school children are planting in Wisconsin. So I thought, as I bent my back to see the top-most branches; and maybe some day, if nature is kind, man is thoughtful and children keep their faith in trees, the trees these school children plant today will grow to be groves that will thrill the hearts of men in the days to come.

Really, from many standpoints, the children in our schools should be the planters of trees. They might not be able to plant the trees quite so well as experienced adults, and the death rate among trees might be greater when children plant, but the planting of trees is something that cannot be learned out of books; it must be learned by doing. Children who plant trees and grow up with the trees they plant become tree protectors; they learn the friendship of trees and find new joys have been added to their lives. "I love to walk among the trees I planted and watch them grow" wrote a boy in his 4-H Forestry record book. And now that boy, grown to man's estate, finds in the trees he planted the sources of his greatest joy on his farm. Some people tell boys and girls that it is their duty and obligation to plant trees. I like to tell them that it is their privilege to do so because of the joys and satisfactions that trees bring to them -- joys started in youth that extend throughout the lifetime. Children who plant trees are quicker to detect the things the woods have to offer. They see more. That's only natural. And seeing more, they live more abundantly. So the trail stretches ahead for children, way ahead thru the years, and if that trail is tree lined, it is quite sure to be a more pleasant trail. All this is quite aside of the values that trees bring in the way of lumber, fuel and the influences of trees in retaining the moisture, enriching the soil and providing habitats for birds and animals. These things come also to him who plants trees.

The School Forest is a place where school children learn how to plant trees, what kind of trees to plant; how to protect and care for them. It is a laboratory where children learn to do these things, just the same as the manual training room in your school is the place where you learn how to make articles out of wood - learning to do it by actually making the articles. The school forest is a laboratory for teaching the things about nature, just as the chemistry laboratory is the place where students perform experiments in order to learn the principles of chemistry. There is no technique in teaching that beats 'learning to do by actually doing.' No one ever learned to swim lying stomach flat on the parlor table. One has to get into the water

and get wet to learn how to swim. And likewise, one must plant trees, be among trees, care for them, protect them, work with them, in order to understand them and appreciate them.

So the School Forest is a laboratory where pupils learn at first hand about trees, and as well are given a chance to add to the beauty and economic value of the land. The size of a School Forest is generally 40 acres, though there is one in the state of twenty acres, many of 80 acres, and one as large as 320 acres. Most of the school forests are in the northern part of the state, and most of them are tracts of land once owned by lumber companies, from which all the good trees have been removed, some burned over many times. The lumber companies after removing the trees, formed land companies to sell the land to individuals for farming purposes. Some of it was good for farms, much of it was not. Thousands of men bought this land hoping to make homes for their families, only to meet with disappointment and heartaches. Unable to make a living off the land, they were not able to pay taxes, and the land went back to the county. This is called tax-delinquent land. Land companies, unable to sell their land for farming purposes, failed to pay taxes, and this land went back to the county. So, many counties in the north found themselves in possession of great tracts of land, some counties with 100,000 acres or more. Encouraged by the state with both technical help and money most of the northern counties now have blocked off this county owned land into county forests, and now over 1,500,000 acres of forest land are in the county forests of the state. From these county owned lands most of the county boards have given tracts to schools upon application from the school boards. That is how most of the schools secured land for school forest purposes. The school board signs an agreement to develop the land by planting trees, and the children sign a covenant that they will plant and protect the tract. The school forest then becomes the property of the school district, administered by the school board, and free from taxation. At some places the school board purchased outright a piece of land which they wanted. This was done at Albeman in Sauk County. At Mauston, the Kiwanis Club purchased an abandoned farm and gave it to the school for a school forest. At La Crosse, the Park

Board gave a piece of land to the school to develop. And so we find many different ways by which land is secured. In Portage county a merchant gave land to schools; and a lady bequeath land to schools - that is she remembered the schools in her will.

After the land is secured, the Conservation Department sends a forester to map the area and make out a working and planting plan. His map shows what trees are growing in the area and what trees should be planted. The map shows the roads, trails and streams; where the playground should be located; where the fireplace should be established for school picnics, and other features that make the tract usable and interesting to the youthful planters. The Conservation Department does more than that - it furnishes the trees to plant, the kind of trees recommended by the forester. These trees are furnished without any cost except for the transportation. Large schools, with many large boys devoted to their tasks, plant 2000 trees each spring, while small country schools, with fewer boys to do the harder part of the work, plant 500 to 1000 each spring. The trees are planted six feet apart, or two paces. This means that each tree will occupy 36 sq feet, and since there are 43, 560 square feet in an acre, 43,560 divided by 36 will give you 1210, or the number of trees it takes to plant a clear acre. Where the land is quite free from trees and stumps, it is best to plow shallow furrows six feet apart and plant the trees at the bottom of the furrows. These furrows remove the competition of grass, the force of the wind is broken by them; they collect and hold the moisture where it is needed; leaves blown over the ground collect in them and decompose. When furrows are not plowed, the sod must be removed for a space of 2 square feet for each tree to remove root competition for the first two or three years. This is called scalping the ground; and is the hardest job of all the operations. After planting operations start on the school forest, protection is given the trees from the danger of fire and from the destruction caused by cattle grazing. In many schools where we have school forests, a group of boys is organized called the Junior Forest Rangers. They meet the requirement of this organization by planting trees on the school forest, but it falls to them to see that the trees which are planted are protected and cared for. They are the guardians of the School Forest.

I chanced to go into a school the other day that has a school forest. On the wall at one side of the room I saw a collection of pressed leaves, and I found upon inquiry that the pupils and teacher had a leaf specimen of every kind of tree growing in their school forest. They were fortunate in having the tract close at hand, and with many trees still growing on the land. So they used their School Forest as a Nature study laboratory.

This in brief is the little story about school forests. We have 164 of them in the state now and they have a total area of over 11,000 acres. School children planted over 250,000 trees on these tracts last year. If you want to know more about forests write Ranger Mac asking for the folder on School Forests. It will give you all the information about plans and purposes of this important piece of work.

After our talk on bird migration last week, many trailhitters wrote in asking what bats do in the winter. Sometime if you look in old deserted sheds, in the hollow of trees, or in the caverns in rocks, you may chance to find a poor little shrivelled bundle of fur, tightly clasped in its own skinny fingers, hanging head downward, and having no more appearance of life than a mummy from an Egyptian tomb. Should such a figure reward your search, you may know that you chanced upon a bat in the deep trance of its winter's hibernation. Indeed, you may find as many as six or eight that have selected the same protected place for their winter's trance. Carry one of them into a warm room and hang head downward. As it warms up, it begins to show signs of life, and when thoroughly warmed will start on a tour of inspection of its surroundings. But we do not want to break this death-like trance for too long, so we freeze it up again and place it back in the care of old Nature. This you will see and more if you are so fortunate as to discover the hiding place of a hibernating bat. Hibernation is a strange thing, and one which is little understood. But that is what happens to this strange little creature in winter.