The Great Plains Shelter-belt Project of the 1930s

Editor’s note: This article was taken from “The USDA Forest Service—The First Century” FS-650, July 2000. The reason it was chosen for the “Newsletter” is because it illustrates an aspect of conservation history in the United States, the idea of co-op forestry. The Shelter Belt program on the Great Plains in the 1930s was probably the largest project involving the Forest Service, States and private individuals ever undertaken. Included with this article is a map from the collection of the National Museum of Forest Service History illustrating the National Forest system in 1935. It shows the Shelter Belt area, the existing National Forests and the proposed purchase areas, portions which later became National Forests.

During the great “Dust Bowl” of the 1930s on the Great Plains, millions of acres of farm land was literally being blown away. In the dry, rainless condition, soil was lost at a horrendous rate and many farmers and ranchers were forced from their land. Dust and dirt filled the air and sands were drifting across fields, covering fences and houses, and Continued on page 3

Map from 1935 showing the “Shelter Belt” area. Also note the locations of NF Purchase Areas authorized under the Weeks and Clark-McNary Acts. Some of these areas never became part of the NF system.

Continued on page 3
The inside of the Bungalow Ranger Station Residence is complete except for finishing touches on the baseboards. Jack Fisher, retired Forest Service employee and member of the Board of Directors, is a master carpenter and the mastermind behind the restoration of this building. Thanks to Jack and the many volunteers who accomplished this task. Ah, success is so sweet!

Due to the recognition of an opportunity by Executive Director Frank McKinney and his wife Jane for the donation of asphalt millings, we now (August 6) have milled asphalt material on site creating a temporary access road and parking lot adjacent to the residence. The last significant hurdle to opening the building with an exhibit for the viewing public is the toilet facilities. We’re working on it.

August 22, 2002, was the date of the annual picnic of the Northern Rocky Mountain Retirees Association (Forest Service, R-1) at the Museum site. Also in attendance was the leadership of the National Association of Forest Service Retirees, the leadership of the National Forest Foundation and the Board of Directors of the National Museum of Forest Service History. The Museum’s goal to have an exhibit in the cabin and the road and parking lot in place at the time of this event was accomplished.

The Museum’s office will be moved to a new location at 14th and Catlin, Missoula, Montana. This Forest Service lease will allow the housing of our collection of archives and artifacts and national headquarters under one roof. Our telephone number, web-site and e-mail address and post office box number will remain as they were at our old headquarters location.

The mission of the NMFSH is to collect, preserve and interpret the material cultural history of the USDA Forest Service and conservation efforts in the U.S. We are committed to the development of a National Museum for the interpretation of Forest Service history and are committed to the use of professional museum standards in the acquisition, preservation and interpretation of our collection.

Your Board of Directors is continuing efforts to increase membership numbers, to make decisions that affect short and long term goals, and to determine ways to increase funding for the construction of the 10,000 square foot building and infrastructure for dedication in 2005, the 100th anniversary of the Forest Service. Please help us accomplish this by providing your financial support.

Let’s continue the momentum.

Gary G. Brown
President

FROM THE EXECUTIVE DIRECTOR

There was this rookie smokejumper on his first training jump near some
ing animals. By the early 1930’s, one of many prac-
tices the Great Plains Agricultural Council proposed
to slow or halt the damage was the planting of trees
to reduce wind and drought-caused soil erosion.

In the summer of 1932, then Presidential candi-
date Franklin D. Roosevelt proposed that the Federal
Government begin a program of planting trees in
belts across the hardest hit farm lands on the Great
Plains. To reduce wind erosion and protect crops
from wind damage, millions of trees were planted on
private property in “shelterbelts,” as they became
known. Under Roosevelt’s Administration from
1934 to 1942, the program saved the soil and re-
lieved chronic unemployment in the region.

The Forest Service was responsible for organiz-
ing the “Shelterbelt Project,” later known as the
“Prairie States Forestry Project.” This project, head-
quartered in Lincoln, Nebraska, was directed by Paul
H. Roberts from the Research Branch of the Forest
Service. The “Prairie States Forestry Project” in-
cluded the states of North Dakota, South Dakota,
Nebraska, Kansas, Oklahoma, and the northern part
of Texas.

Trees were usually planted in long strips at one-
mile intervals within a belt 100 miles wide. It was
felt that shelterbelts at this spacing could intercept
the prevailing winds and reduce soil and crop dam-
age. The project used many different tree species of
varying heights, including oaks and even black wal-
nut. Shelterbelts, with trees and shrubs of varying
heights, could reduce wind velocities on their lee-
ward sides for distances of 15 times the height of the
tallest trees. Reduced winds tend to create more fa-
vorable conditions for crop growth, reduce evapora-
tion of water in the soil (and thus reduce the need for
irrigation), reduce soil temperatures, stabilize soils,
protect livestock, increase wildlife populations, and
provide a more livable environment for farm fami-
lies.

One of the project’s first tasks was to obtain tree
and shrub seeds and then to establish nurseries to
grow the stock for replanting. Funding for the pro-
ject almost ended in 1936, but Agricultural Secretary
Wallace pushed Congress for a continuation. On
May 18, 1937, the Norris-Doxy Cooperative Farm
Forestry Act expanded the shelterbelt project by re-
quiring greater Federal-State cooperation.

Although Works Progress Administration and
Civilian Conservation Corps workers planted the
trees and shrubs, landowners were responsible for
their long-term care and maintenance. During 1939,
the peak year of the project, 13 nurseries produced
more than 60 million seedlings. Over the project’s
duration, over 200 million trees and shrubs were
planted on 30,000 farms—a total length of 18,600
miles in all! The shelterbelts worked amazingly well
and the results can be seen today, although many of
the shelterbelt trees have been cut for their highly
valued wood.

Since 1942, tree planting to reduce soil losses
and crop damage has been carried out by local soil
conservation districts in cooperation with the Soil
Conservation Service (now the Natural Resources
Conservation Service).

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**Blister Rust Control**

*The Following is a letter received from NMFSH*
*member Arvin White. Arvin and his father Lee were
both involved in blister rust work.*

Dear Frank:

BRC = Blister Rust Control. Blister rust is a
fungus disease that attacks and kills white pine
trees. The Forest Service used to fight it by 1)

Above: blister rust workers fill spray cans with sodium
clorate and water in the 1930s. Millions of pounds of
sodium chlorate were sprayed in the forests of western
Washington, northern Idaho and northwestern Montana
in an attempt to kill the ribes (gooseberry and currant)
plants that harbored the *Cronartium ribicola* fungus in its
first stage of life. The fungus completes its lifecycle in the
white pine, usually killing the tree. Photo from USDA
Forest Service.
pulling ribe [sic] bushes from the forest floor and letting the sun kill the roots, 2) spraying the ribe [sic] bushes with chemicals, and 3) spraying the "cankers" on the white pine tree. There was also an effort to develop a genetically superior white pine seed that was rust resistant.

Much has been published about the program, mostly about the blister rust - what it is, where it came from, the damage it caused, how it was fought, the economics of trying to save the white pine tree, etc. Little was "published" of how many young men were able to pay their way through college by working in the summer hire program or how many firefighters were available during the fire season.

In 1959 there were almost 350 "seasonal" employees, from all over the USA, in the BRC program on the Kaniksu National Forest headquartered in Sandpoint, Idaho. It took me two & one half to three days (every two weeks) just to type the headings on the individual time and attendance reports.

There were also BRC programs/camps run from Coeur d'Alene, St. Mary’s, and Orofino, Idaho, that went back to when the CCC’s (Civilian Conservation Corp) worked the program for the USDA (United States Department of Agriculture). Way back when, folks that worked in the BRC Program started an annual Get-Together. I attended one 25 years ago and most of the 29 in attendance are now dead. The reunions go on and there are 44 still on the mailing list.

A.L. White, Albuquerque, NM

The editor attended this reunion on the 7th of August and was able to tell the 20 or so in attendance about the NMFSH. There was also a talk on the current status of blister rust and the development of blister rust tolerant white pine.
small town in Montana. He received the tap on his leg and out the door of the plane he went. He felt the jerk of the static line and looked up to find that his chute had malfunctioned. He opened his reserve and threw it out only to have it tangle in the main chute. Down he went crashing into a tree, knocking him out. He woke-up some time later finding himself dangling from the tree. He looked down and there was an old-timer from the small town who said, “Boy! don’t you know that nothing around here opens on Sundays!”

I told that joke at a reunion of the Civilian Public Service Smokejumpers at Glacier Bible Camp in Hungry Horse, Montana on the 17th of July 2002. They got a kick out of the joke. I had a lot of fun meeting these folks and hearing their stories. One story I thought was particularly interesting was the story of the wedding of one of the CPS Smokejumpers. For that story see page 4 “From the Museum’s Collection.”

I also had the opportunity to go to a reunion of a group of people involved in the Blister Rust Control Project beginning in the 1930s. For more details on BRC and the reunion see page 3.

History is about stories, the thousands of little stories that make up the big picture. That is the importance of what we do here at the NMFSH. Our members and friends continue to help in our efforts at preserving the stories that make-up the big picture of conservation history in the United States. Thanks a lot and keep it coming.

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Progress Report on the Bungalow

The first and second week of August, 2002 we saw a huge improvement to the site bringing us quite a bit closer to the opening of the Bungalow as our first museum facility. We installed a parking lot. Thanks to the generosity of an anonymous friend who works for a large contractor in the Missoula area, the Missoula Airport and volunteer Mike Uszuko, we were able to acquire blacktop millings for the lot.

With the installation of the base trim, Jack Fisher has completed the inside of the cabin. Now we must begin the planning and installation of an exhibit and the gift shop area.

Next on the list are toilet facilities and landscaping. As Gary Brown stated in his message at the beginning of this newsletter, we are very grateful for the continued and growing support of our membership: “Let’s continue the momentum.”

Note the piles of parking lot material!

The Bungalow’s interior. Looking good!
Monetary Donations
Received since
May 2002 (To 8/9/02)

BFI Waste Systems
Mary Ellen Bosworth
James Brunk
Richard Bury
Herman C. Dill
Bill T. Dresser in memory of Dorothy Dresser
Ed Ellenberg
Linda S. Feldman
T.B. Glazebrook in memory of John McGuire
Thomas Johnson
Charles R. Joy in memory of C.A. “Chic” Joy
Donald H. Morton in memory of Errol C. Crary,
    Chester J. Olsen, Arnold “Barney” Standing
    and T.H. “Tom” Van Meter
Skip & Donna Oetzel
Paul E. Packer
R. Max Peterson in memory of John McGuire
Chris Risbrudt
Saint-Gobain Corporation Foundation
Val Smith in memory of Lyle Smith
Society of American Foresters Washington DC
    Chapter in memory of John McGuire
Robert D. Wray
Rodney F. Young

A huge thank you goes out to all
those listed above.
Your help is very much appreciated
and needed.

New Office Location

By the time you receive this newsletter, the
National Museum of Forest Service History
administrative office and collections storage facility
will have moved to the new 14th and Catlin St.
facility in Missoula.

The National Museum of Forest Service History
has secured a special use permit from the Forest
Service for use of one of the old Technology
Development Buildings at the Motor-pool Facility,
14th and Catlin St. This move will allow us 100%
access to our artifact and archival collections. We
will also have space for exhibit fabrication and we
will be able to monitor our collection for
environmental and insect damage more closely then
we have been able to in the past.

Thanks to Jack Fisher (NMFSH Board
Member) for rounding-up the help to clean the
interior of the building.

Our new facility at 14th and Catlin in Missoula.

You see things; and you say, "Why?" But I dream
things that never were; and I say, "Why not?"

- George Bernard Shaw (1856-1950), "Back to Methuselah"
Membership Application
Fill out, detach, and mail to: National Museum of Forest Service History, P.O. Box 2772
Missoula, MT 59806-2772

Name: __Mr. __Ms. __Dr. ___________________________ Address: _____________________________________________

City/State/Zip: ___________________________________________ Daytime Ph.: ____________________________

E-mail: ______________________ □ New □ Renewal

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Profession*:__________________ Age*:______________________

Income Range*: $__________/yr. Educational level*:____________

*These are optional

The Company Store

Get your NMFSH merchandise here!

“Guardian of the Headwaters” by Monte Dolack: A print dedicated to the men and women of the Forest Service on the 100th Anniversary of the USDA Forest Service. $30.00+$6 S&H unsigned, $100.00+$6 S&H signed and numbered, 50¢ for postcards.

NMFSH Cap: White w/ forest green bill and NMFSN logo, or solid green w/ white logo, cotton, adjustable, $12 ppd.

NMFSH Sweatshirt: Stylish, heavyweight, cotton/polyester sweatshirt. Forest green with cream logo. (L&XL only) $25 ppd.

NMFSH Tee: Comfortable, cotton/polyester white tee with logo in green. (L&XL only) $12 ppd.

They Hired Out to be Tough Tee: Cotton/polyester, white with green graphics. (L&XL only) $12 ppd.


“Conservation Motifs” Notecards: same design as the poster (with envelope) $1 each ppd.

Send check or money order only to: National Museum of Forest Service History
P.O. Box 2772
Missoula, MT 59806-2772

Please allow 3 weeks for delivery of all items
HARDSHIP OF A FOREST SERVICE EMPLOYEE

It seems that 'bout this time of year
The big shots always drop in here
And cause the rusty wheels to hum –
Upset our equilibrium.
'Tis then we go our merry way;
Don't do too much to earn our pay.
We take the district for a ride
And let the work we don't like slide.
But when the brains show up in force
Then each one hits the ball, of course.
When Fitting, Bosworth, Baker, Space,
Show up we work to save our face.
It seems they always cast a spell
That causes us to work like hell.
We work and strive and do our best
And hope they'll go so we can rest.
We do our best to win their praise
And hope that they'll suggest a raise.
So far it hasn't worked at all -
We all need something on the ball.
They teach us how to do our work,
Explain it doesn't pay to shirk,
And tell us plainly that we should
Dig in -promote the common good.
But when they're gone we'll soon forget;
At least it never has failed yet.
This thing is just a bunch of tripe.
I know we have no cause to gripe.
They always meet us man to man
And know we do the best we can.
They know that we can't be too bright,
So make excuses -treat us right.
So let 'em come. We're glad to give
An insight how the others live.
Our lack of brains we must deplore.
That can't be helped and we're not sore,
But when a guy shows up too hot
Missoula grabs him on the spot.
We do our stuff with what is left.
A common bunch -of brains bereft.

From *Forest Service Rhymes and Other Verse*, by Ernest W. Smith, 1949