

## USDA Forest Service Fernow Experimental Forest Celebrates 85 Years

In a wood and glass box, measuring about 24 inches high, 21 inches wide, and 2 inches deep, in the Timber and Watershed Laboratory (Parsons WV) is an onion-skin carbon-copy of a document with the title – “An Order Establishing the Fernow Experimental Forest of Certain Areas Within the Monongahela National Forest, West Virginia.” The script signature in black ink is of F. A. Silcox, Forester (what the head of the Forest Service was called then) and dated March 28, 1934. The first page of the document is the deed description of the Fernow land base, complete with corner numbers and bearings. This original boundary contained 3,640 acres. The experimental forest is named in honor of Bernhard E. Fernow, a German-born forester who pioneered forestry and forestry schools in America. The document is made up of a deed description, two pages of the basic workings of the experimental forest and its relationship to the Monongahela National Forest, and 4 maps. This land was set aside for experimental and demonstration purposes, a tradition and direction followed to this day, 85 years later.

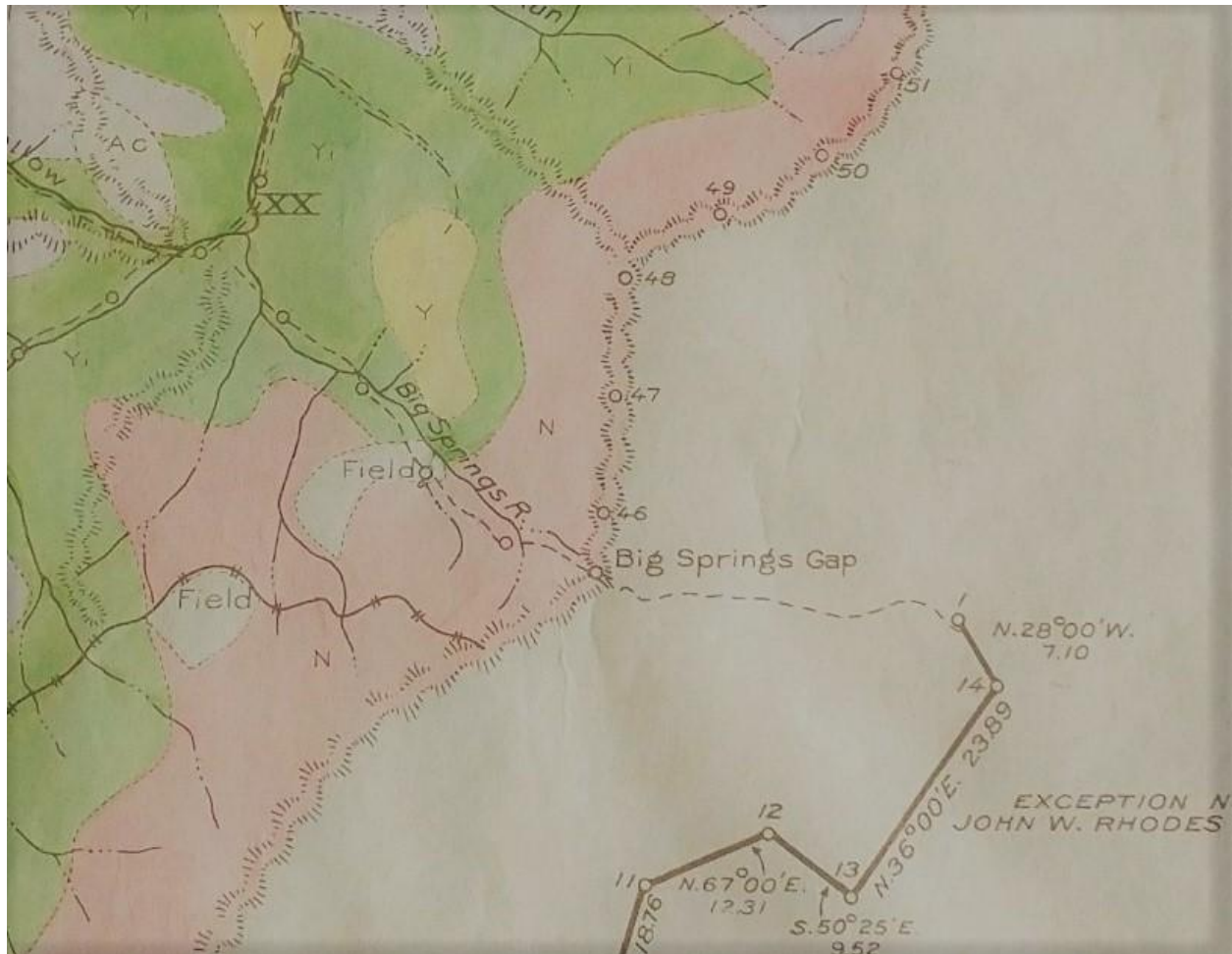
The new Fernow Experimental Forest was a second-growth forest, 20 to 25 years old, dominated by hardwoods. About one-third of the forest was described as yellow-poplar with northern hardwoods, black cherry dominated about 6% of the area, and yellow-poplar dominated about 5%. Some areas were densely covered with American chestnut (generally dry areas). In contrast to those sites, there were other areas with an abundance of rhododendron (generally moist areas). This complex mixture of tree species was a defining trait of the new experimental forest, with species compositions differing within relatively short distances. In some areas, grapevines were noted to have “pulled down everything within their grasp” and control of grapevine damage to young trees continues to be a concern and secondary research topic in our current studies.

Early research activities included collecting inventory data, establishing research areas (called compartments), and constructing weirs on small watersheds. Research on forestry topics began in 1939 with studies concentrated on thinning and crop-tree release in the rapidly regenerating second-growth forest. In 1941, as the country prepared for war, almost all work stopped at the Fernow and buildings were boarded up.

After the war, watershed research began in earnest in 1948 with measurements of stream flow and precipitation on five watersheds and forestry research resumed. An office was built in 1964, on the Nursery Bottom in Parsons, and called the Timber and Watershed Laboratory, which is also the office for the Cheat Ranger District of the Monongahela.

Cooperation between the research branch and the National Forest was built into the establishment of the Fernow. As an example, the staff of the Monongahela built a road through the Fernow to Big Springs Run to aid in research activities. If a fire occurred in the area, researchers and their assistants were to “place themselves under the direction of the forest officer in charge of the fire”. This cooperation continues 85 years later as the Monongahela road crew and engineers still take care of our road system and some researchers are qualified to fight wildfires. Beyond roads and fire, the research results from studies on the Fernow inform management practices on the Monongahela. Water and soil resources on the Monongahela have been better protected through best management practices developed from work on the Fernow. Prescribed fire studies on the Fernow have supported the use of fire on the Monongahela for managing oak forests.

As part of the celebration of the 85th anniversary of the Fernow Experimental Forest there will be a public tour of the forest on May 4<sup>th</sup> from 1 to 4 pm; contact Melissa Thomas-Van Gundy at [mthomasvangundy@fs.fed.us](mailto:mthomasvangundy@fs.fed.us) or (304) 478-2000 ext. 114 for details and to sign up.



A portion of the 1932 stand map for the Fernow Experimental Forest for the area around Big Springs Gap. Pink areas with an 'N' are areas of northern hardwoods, yellow areas with a 'Y' are dominated by yellow-poplar, and green areas with a 'Yi' are areas where yellow-poplar were an important part of the mix.