Spotlight on an Experimental Forest and Range
Argonne Experimental Forest

In 1908, the Forest Service established a system of Experimental Forests and Ranges (EFRs) to be set aside for environmental research. One hundred years later, 80 of these areas are spread across the United States (figure 19). The smallest of these is 47 hectares, and the largest is 22,500 hectares. Multiply the number of hectares by 2.47 if you want to find out the size of these areas in acres.

Much of the research on these EFRs is concerned with environmental changes that occur over long periods of time, over large areas, or both. Over 30 of
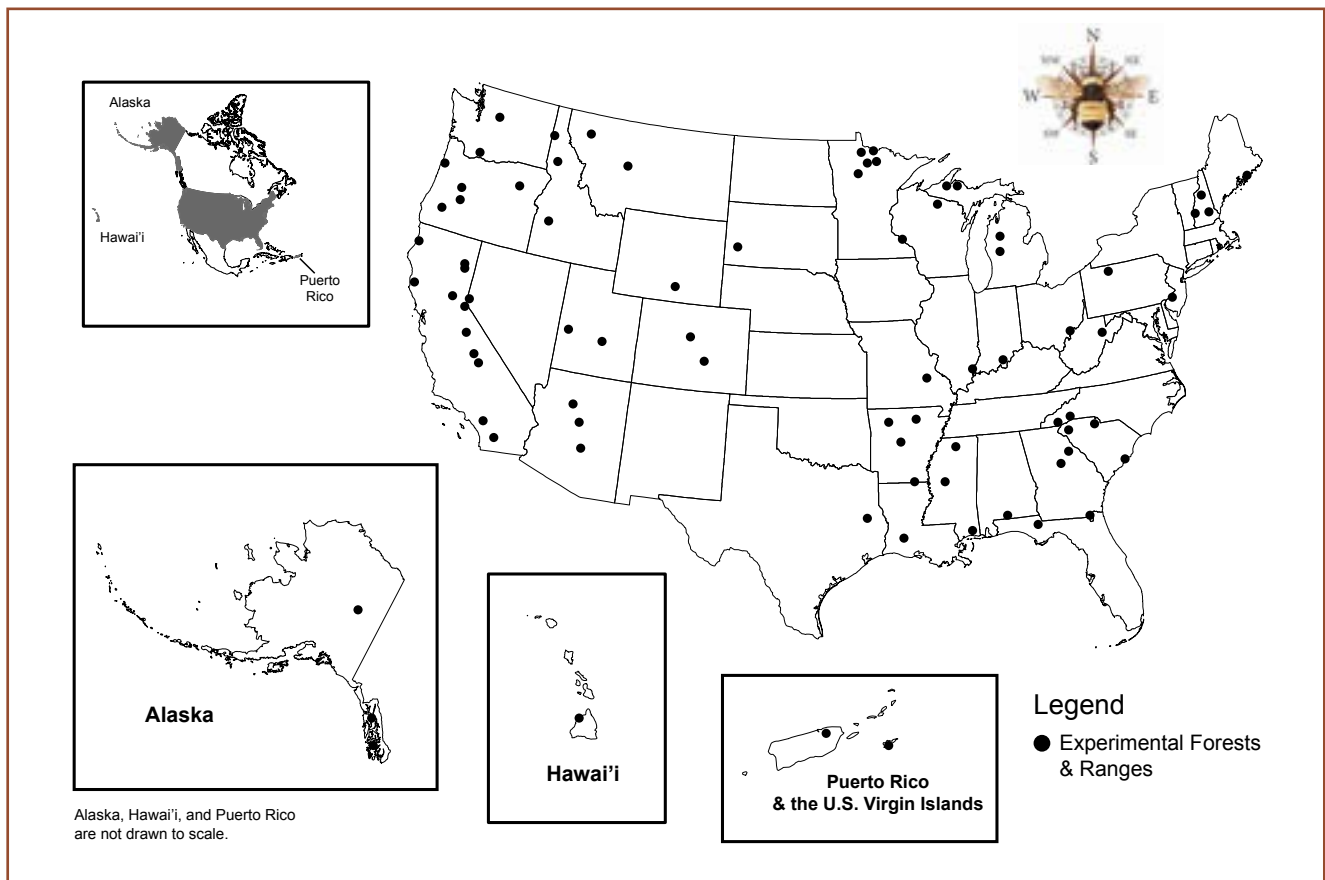

Figure 19. Experimental Forests and Ranges are located all across the United States. What one is closest to where you live?

Map by Carey Burda.

the areas were established at least 70 years ago. In some cases, experiments are designed to last 40 or more years.

On EFRs, scientists continually collect information about the weather, the amount of snowfall and rainfall, the soil, and the ecosystem in that location. The research in this monograph called "Batter Up! Investigating What Type of Wood Makes the Best Bat" was conducted at the Forest Products Lab in Madison, Wisconsin. There are three EFRs located in Wisconsin: Argonne, Coulee, and Rhinelander. Argonne EFR is the oldest out of the three EFRs in Wisconsin and has been chosen as the spotlight for this journal.

Argonne EFR was established in 1947 and is located within the Chequamegon-Nicolet (shə **wä** mə gən ni kə **lā**) National Forest (figure 20). The research at Argonne focuses
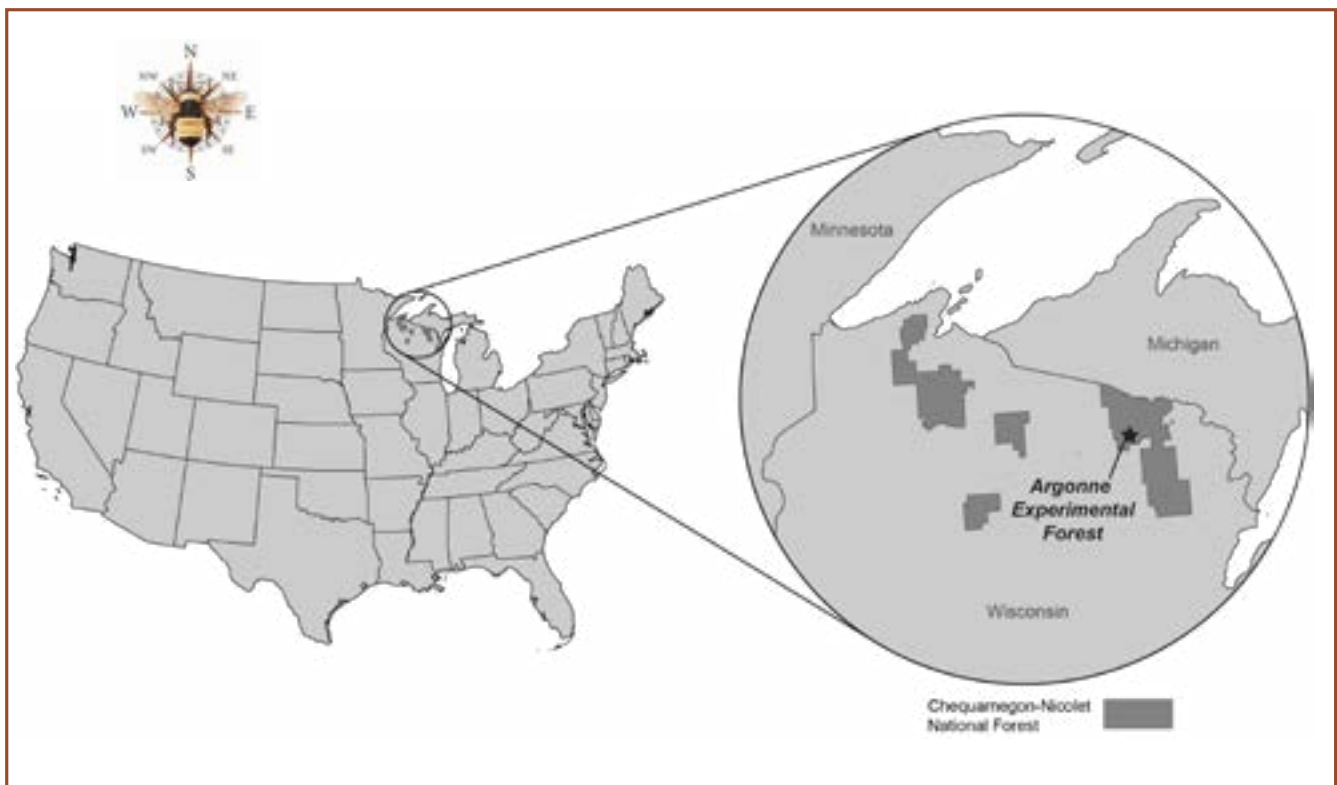

Figure 20. Argonne Experimental Forest is located within Chequamegon-Nicolet National Forest. Map by Carey Burda.

on developing guidelines for the management of second-growth forests containing northern hardwood trees. Second-growth forests occur after a disturbance, such as an insect infestation, wildfire, or logging. Examples of northern hardwood trees include sugar maple, beech, hemlock, and yellow birch (figures 21a and 21b).
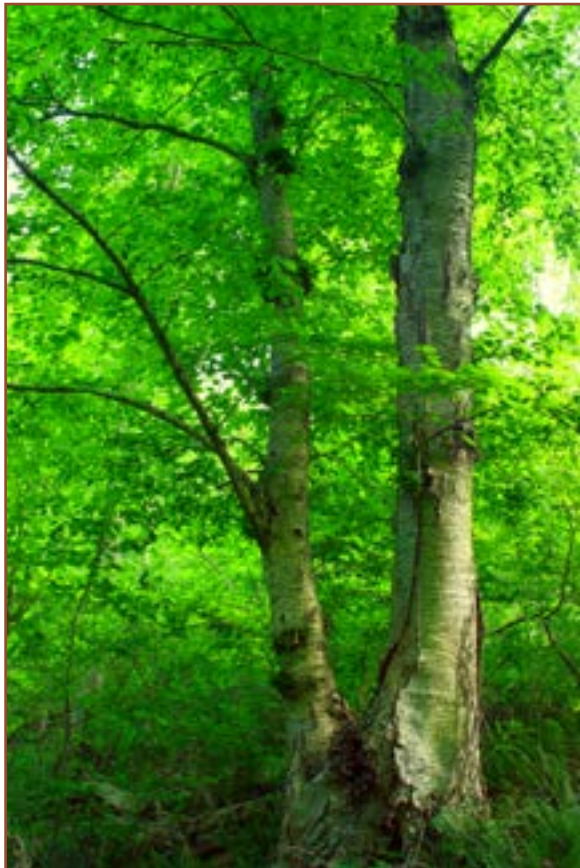

Figure 21a. Yellow birch is a common northern hardwood and was discussed in the "Batter Up!" article.

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Figure 21b. Sugar maple trees typically have beautiful color as the season changes from fall to winter.

Photo by Chris Aquino, U.S. Fish and Wildlife Service.

Photo courtesy of Cristel Kern, USDA Forest Service.

Information from the studies at Argonne has been used to develop Northern hardwood forest management guides. These guides are widely used by forest managers throughout the region. Additionally, the Cutting Methods study, which examines nine different methods of cutting trees, is the most important study being done now on the EFR. A new large-scale study has recently been added. This large-scale study examines how to promote old-growth forest characteristics in second-growth forests. Old-growth forests are the original forests in an area. These forests have special characteristics because of their old age.

Argonne Experimental Forest is just one example of an EFR. To learn more about all the EFRs, visit https://www.fs.fed.us/research/efr/. To learn more about Argonne Experimental Forest specifically, visit https://www.nrs.fs.fed.us/ef/locations/wi/argonne/.