The Rocky Mountain Research Station (RMRS) is one of seven units within U.S. Forest Service Research and Development – the most extensive natural resources research organization in the world. RMRS maintains 12 field laboratories throughout a 12-state territory encompassing parts of the Great Basin, Southwest, Rocky Mountains and the Great Plains.

RMRS administers and conducts research on 14 Experimental Forests and Ranges (EF&Rs) in seven states. The U.S. Forest Service’s EF&R network represents many of the ecosystem types found in the United States and Puerto Rico. Most EF&Rs contain significant acreage and many encompass large experimental study sites that are used to examine the effects of operational-scale treatments such as prescribed burning and forest thinning. RMRS also oversees activities on several hundred Research Natural Areas, which have been set aside to conduct research while conserving biological diversity.

Scientists work with the Forest Service to help ensure the long-term health of the nation’s forests.
Part of a Nationwide Natural Resource

Established in 1933, Boise Basin Experimental Forest is a part of the U.S. Forest Service’s Experimental Forests and Ranges (EF&R) system. Beginning in 1908 and through today, EF&Rs are protected areas that are set aside for long-term forest and range research to provide applied science information to address management issues.

Ensuring Forest Health Through Research

Unlike other Experimental Forests, Boise Basin includes three distinct areas known as “units.” These units—Bannock, Bear Run, and Headquarters—are located near Idaho City, a historic town and tourist destination with roots as a gold mining boomtown in the 1860s. Together, these three units make up a natural outdoor laboratory covering 8,740 acres in southern Idaho.

Boise Basin offers a wealth of recreation and research opportunities, from pondering ponderosas at Bannock and Bear Run to exploring Idaho City’s historic “Boot Hill” cemetery at Headquarters. Research at Boise Basin has included studies on ponderosa forest health and regeneration, wildfire recovery, beetle infestation, fi flamululated owls, and the effects of various factors on tree growth and survival.

Measuring Historic Human Impacts on Forests

Boise Basin Experimental Forest includes undisturbed “climax” forests that have never been logged. Other parts of Boise Basin have provided data and research opportunities as American society and priorities have changed over time. Old-growth ponderosas were cleared to support Idaho City’s boomtown growth and to rebuild the town after four devastating fires. Hillsides were literally blown out by hydraulic mining in order to expose gold during the richest gold rush in the country’s history.

More recently, reforestation efforts, controlled burns and other forest “treatments” in Boise Basin have helped prevent the extensive wildfires that have scorched other parts of the Boise National Forest. Researchers are also able to measure the effects of recreational use by a wide variety of visitors, including Boise-based weekend mountain bikers, elk hunters, and tourists from far and near.

Where Nature Meets Development

With its location near to a small town and tourist destination (Idaho City) and 30 miles from Boise (with an estimated population of more than 200,000), Boise Basin Experimental Forest is an excellent example of a natural wooded area in what naturalists call the “wildland urban interface”—a place where natural areas and development meet.

As part of the Boise National Forest, Boise Basin Experimental Forest’s public uses include fishing, hiking, biking, horseback riding, camping and hunting—as well as panning for gold on Bannock Creek.

As an Experimental Forest, Boise Basin is extensively used by researchers whose efforts help preserve the health of this forest and others for future generations. Researchers can request Boise Basin’s housing facilities and access to more than 60 years’ worth of data.

Boise Basin Experimental Forest: Research Highlights

1933: BBEF is established. Initial research focuses on slash disposal techniques. Slash includes the treetops and branches left on the ground after logging or as a result of storms, fire, girdling or delimbing.

1935–1942: Through studying and replanting, researchers learn how ponderosa pines are established and how their growth is affected by factors such as slope, plant cover and rodents.

1945: Warm Springs fire burns BBEF Headquarters unit; housing facilities narrowly avoid destruction.

1965–1980: BBEF research studies range from planting techniques and the effects of erosion and beetle infestation on ponderosa pines—one of the most wide-ranging and iconic tree types of western North America.

1981–Present: Research expands from mostly ponderosa studies to a more holistic approach, including erosion studies and alternative management methods to enhance wildlife habitat, diminish the likelihood of catastrophic wildfire, and produce forest products.