**Introduction**

When Colonel William C. Rogers bequeathed his “Triple R Ranch” to the University of Wyoming in 2002, he stated in his will that the 320-acre parcel of forested land in southeast Wyoming’s Laramie Mountains should be used, in part, for research relating to the improvement of forestry and wildlife resources (Rogers, 2002). One could argue that such research begins with the study of air, water, and soil—three natural resources that wildlife and forests depend upon.

This paper summarizes Rogers Research Site (RRS) Bulletin 6, which focuses on soil as a natural resource. Understanding the ability and capacity of soil to support an ecosystem plays an important role in land-management decisions (U.S. Forest Service, 2017), including those involving both forestry and wildlife resources.

**Objectives**

Our objectives were to map the soils of RRS to provide important baseline data for future studies at the site that will be carried out by UW faculty and staff members, undergraduate and graduate students, and others.

**Materials and Methods**

Soil inventory efforts began in 2009 and continued after the 2012 Arapaho Fire, which burned ~98,000 acres in the north Laramie Mountains near Laramie Peak, including RRS lands. The high-intensity fire killed the majority of ponderosa pine (*Pinus ponderosa*), and also changed soil characteristics, which are discussed in other papers in this section.

Lead author Larry Munn completed his field work in 2014, using standard mapping methods to map the soils of RRS. In 2018, Munn and co-author Robert Waggener worked with Shawn Lanning in the Wyoming Geographic Information Science Center (WyGISC) to create five digital soils maps, including the one in this paper (Fig. 1). Backdrop images for the maps were taken in 2009, three years before the Arapaho Fire, and in 2015, three years after the fire. Munn also created a schematic cross-section of ridge showing representation of common locations of soil mapping units on slope positions at RRS.

**Results and Discussion**

RRS has (1) thin to moderately deep and coarse-textured soils, which support coniferous forests on hillsides and ridge tops; and (2) thick, dark, fine-textured soils in areas where the water table is high, which support herbaceous vegetation in meadows and riparian zones. The representative soils for mapping units at RRS are classified as the following four series: Alderon (RRS-01, an Alfisol), Cathedral taxajunct (RRS-02, an Entisol), Dalecreek (RRS-03, a Mollisol), and Kovich (RRS-04, a Mollisol) (Fig. 1).

See RRS Bulletin 6 to learn more about the soils at RRS, including a discussion that addresses the question: why these soils? The publication is available on the James C. Hageman Sustainable Agriculture Research and Extension Center website at http://bit.ly/RogersResearchSite.

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**Literature Cited**

Rogers, W. C., 2002, Amended living trust of Williams C. Rogers, 18 p.


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Figure 1. General soils map of the Rogers Research Site, showing the boundaries of the Alderon, Dalecreek, and Kovich soils, and the Cathedral taxajunct. (Soils mapping by lead author Larry Munn; digital GIS and cartography work by Shawn Lanning, WyGISC; base map from Esri World Topographic Map).