



HABITATS

South Dakota Forests

SOUTH DAKOTA FORESTS

Forests are not the first things that come to mind when most people think of South Dakota. Our state covers a little over 49 million acres. About 750 thousand acres are surface water in the forms of rivers, streams and lakes. Another 46.5 million acres are farms, ranches and prairie. This leaves only about 1.7 million acres of forest land. Compare this to Michigan, a state with only two-thirds the land area of South Dakota, which has almost 19 million acres of forest. While forests are not widespread across South Dakota, they are still a vital part of our state's natural resources.

What Is A Forest?

A forest is more than just a group of trees. It is an assemblage of plants and animals living together in a common environment. Forests are often referred to by forest type. The forest type is named for the dominant tree species in that forest community. For example, elm and ash are the dominant trees in many flood plain forests so the forest type is called elm-ash.

What Types Of Forests Are In South Dakota?

There are three natural forests in South Dakota. The largest in terms of area is the **Black Hills forest**. This forest is primarily composed of ponderosa pine, but

also includes quaking aspen, Black Hills spruce, paper birch, bur oak and several other species. About 27,000 acres are in the quaking aspen forest type and another 19,000 acres are Black Hills spruce. The ponderosa pine forest type extends out from the Hills to scattered locations to the northwest and south-central parts of the state, encompassing about 1.3 million acres.

The Black Hills forest provides habitat for wildlife and recreational opportunities. It is also very important for timber production. The Black Hills forest provides over 242 million *board feet* of lumber each year. This is enough wood to build 30,000 single-family homes!

The second largest natural forest is the **flood plain forest** that occurs along the Missouri River and its tributaries. This meandering forest provides stream bank erosion control, some lumber, firewood, recreation, and habitat for wildlife. The largest forest type in this forest is the 100,000 acres of elm-ash forests along the Missouri and its tributaries. Next in size is the 45,000 acres of oak found along the upper terraces and draws of rivers, and in the Northern Black Hills. The 30,000 acres of cottonwood forest, scattered along rivers and streams throughout the state, is the least extensive of flood plain forests. The flood plains forest was once much larger in

area. Dams and development have eliminated much of the original forest.

On the extreme eastern side of the state, there are a few **upland forests**. These scattered forests are found in the rolling hills of Sica Hollow and Newton Hills State Parks. They contain trees typically found farther east, such as sugar maple and basswood.

While not natural communities, two other forests occur in South Dakota. The **windbreak** and **urban** forests were created over the past 100 years as European settlers moved into the state. Windbreaks reduce soil erosion, protect dwellings, livestock and crops from the wind, and provide cover for birds and game animals. The urban forests provide cooling shade and beauty. These two

forests are composed of many of the native species already mentioned, as well as a number of introduced species.

Information on each of these forests can be found in separate habitat fact sheets: **Black Hills Forest; Windbreaks;** and **Urban Forests**. The upland and flood plain forests have been combined into a **Prairie Forest** fact sheet. In the **Trees and Shrubs** section of the **S.D. Flora** chapter you will find fact sheets on many of the important trees referred to in these forest habitat fact sheets. You will notice that many trees are important members of more than one forest. Bur oak, for example, is part of the flood plain and Black Hills forests. Green ash is found in native flood plain forest and is an important windbreak and urban shade tree.

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