The Southeast Forest Region



South-Central

West-Central

What trees are around you?

The answer changes depending on climate, topography, and natural disturbances. Together, these factors create a mosaic of different forest types called forest regions. Each of Montana's eight regions is characterized by certain types and compositions of trees and other plants. The Southeastern Forest Region includes the vast ponderosa pine forests and grasslands east of Big Timber and south of Miles City.



Northwest Other Topography Other

North-Central

SASKATCHEWAN

Southeast

Southwest

NONTAN

Havre

While the Southeastern Forest Region lacks the towering mountain peaks of western Montana, topography still plays a large role in tree and forest growth. North-facing hillsides tend to be moister and support stands of ponderosa pine and thick, shrubby undergrowth. Meanwhile, south-facing slopes tend to be more open, with grassland undergrowth.

Central



The Southeastern Forest Region includes the cultural homelands of the Sihásapa, Tséstho'e (Cheyenne), Itazipco, Séliš-Qlispé, Cayuse, Umatilla and Walla Walla, Očhéthi Šakówiŋ, Niitsítpiis-stahkoii الم` ان-ط· ל"ג´ (Blackfoot/Niitsítapi الم` ان-اح), and Apsáalooke (Crow) peoples.



The Southeastern Forest Region has hotter summer conditions and more humid weather than anywhere else in Montana. Coupled with cold, dry winters, the climate supports minimal tree and forest growth. The ponderosa pine groves that do grow favor moist sites like riverbanks and north-facing hillsides. Drier sites tend to be characterized by grassland or shrubland.

Disturbances

While topography and climate change forests over thousands of years, natural disturbances can change the way a forest looks in months, days, or even hours. Fire, pests, disease, and storms are natural parts of the Southeastern Forest Region. Often these disturbances help keep forests healthy by creating new space for trees to grow and returning nutrients to the soil. After a major disturbance like a fire, the forest grows back in stages over many years. This process is called succession. The pictures to the right depict a typical succession cycle for a ponderosa pine forest in the Southeastern Forest Region. While some areas may go through all stages of succession, many areas in the Southeastern Forest Region are unable to support later succession stages. Often, grasslands and shrublands act as the climax stage.

Resources



Disturbance

Disturbances occur at many different scales. For example, the grasslands of the Southeastern Forest Region historically burned every 3-20 years. Ponderosa pine forests, meanwhile, historically burned every 15 years, though the thick bark of ponderosa pines protects the trees from all but the most severe fires.

7 Pioneer Species

The first grasses and flowers to grow after a major disturbance are called pioneer species. Many wildflowers, like goldenrod and fleabane, serve as pioneer species in the Southeastern Forest Region. Some areas will remain grasslands indefinitely.





Shrubland

Over time, saplings and shrubs establish in the disturbed area. Often, the relatively short fire intervals of ponderosa pine forests means this undergrowth burns before the saplings can mature.

Climax Stage

In some areas, the ponderosa pine saplings of the shrubland stage will mature into a "climax forest." The mature trees that make up the climax forest will persist until the next largescale disturbance.



Read more about disturbance and succession in "Fire Ecology of Montana Forest Habitat Types East of the Continental Divide" at: https://www.fs.usda.gov/research/treesearch/29570

Read more about the different forest regions in "Forest Regions of Montana" at: https://www.fs.usda.gov/research/treesearch/32532