



Chronology

**12,000
years ago**

Early arrivals found a forest of thick spruce and bogs in what is now southwestern Minnesota. To the north and east, they found wet tundra with dwarfed spruce and, to the north and west, a huge glacial lake.

**10,000
years ago**

Minnesota's climate warmed, glacial lakes drained and spruce, fir and tundra landscapes were replaced by a growing deciduous forest of birch, aspen and coniferous trees, such as balsam fir. As the land continued to warm, those forests were replaced by huge stands of white pine, red pine and jack pine. By 8,000 years ago, those trees were giving way to oaks, maples and beech.

Prairies began to emerge in the southwestern part of Minnesota and people followed the game northward into the forests.

**7,000
years ago**

The climate had warmed so much that prairie ecosystems, called oak savannas, could be found occasionally as far north as what is now the U.S.-Canadian border.

People living on the edges of forests and prairies hunted and gathered food and fished the lakes. Living in small groups and extended families, their impact on the forest was limited. They may have practiced selective forestry techniques, cutting non-maple trees to favor sugar maples and burning forested islands to spur berry growth and increase animal populations.

**5,000
years ago**

The Minnesota climate and the forest ecosystem began another slow change. The climate cooled, and northern prairies receded southward. The northern forests, called the North Woods, evolved once again into hardwoods and eventually into vast stands of red, white and jack pines, white and black spruce, balsam fir, tamarack and white cedar interspersed with mixed hardwoods of birch, maple, oak, elm, aspen, and basswood.

This mosaic of woodlands yielded in the central and southeastern portions of Minnesota to the Big Woods, a belt of hardwood trees dominated by oak, elm, basswood, maple, black walnut and butternut.

A sea of wild grass often six feet tall surrounded the forests with big blue stem, side oats gramma and blue-joint grasses. As native populations grew, their sophistication in landscape manipulation grew as well. People managed both forests and fields through agriculture and fire to encourage different plants and animals.

**4,000
years
ago to
modern
era**

Major climate change slowed and the balance between field and forest remained relatively steady until the present day. European Americans entered these Tall Grass Prairies, Big Woods and North Woods. With increased populations, advancing technology, and a different cultural attitude, they changed the forests and fields again.

1800s	<p>When Euro-Americans began to settle Minnesota in the early 1820s, they found about 19.5 million acres in natural prairie systems and about 31.5 million in forests. Fewer than 200 years later, only about 0.3 percent of the natural prairie remains. And forests have shrunk to fewer than 18 million acres. The vast pine stands have been harvested and replaced with aspen and birch hardwoods.</p> <p>Climatic shifts that changed boreal forests to prairies and back again were macro changes in the forests. The changes brought on by modern Minnesotans may be just as drastic.</p>
1830s	<p>Lumbermen entered Minnesota (then part of Wisconsin Territory) along the St. Croix River and to harvest pines along the river banks. The tree of choice was the white pine.</p>
1839	<p>A group of New England businessmen headed by Orange Walker and L.S. Judd started the Marine Lumber Company, the first sawmill in Minnesota, along the St. Croix, and soon a community, Marine on St. Croix, formed around the mill.</p>
1840	<p>A second commercial mill was erected at Stillwater and Minnesota's lumbering boom had begun.</p>
1860s	<p>The saw-milling center moved from the St. Croix River to the new city of Minneapolis at St. Anthony Falls, using the vast white pine forests of the Mississippi River Valley.</p>
1870s	<p>Steam power was introduced into saw milling, replacing the need for water power and allowing saw mills to move away from St. Anthony Falls to other Mississippi River towns. Steam power and new, faster circular saws enabled logging camps to increase production.</p>
1880s	<p>With increased commercial railroad building in the state, larger sawmill steam engines and the invention of the band saw (a belt of steel that worked faster and left less wood waste), sawmills increased in size and expanded around the state. Brainerd, Little Falls, Crookston, Cloquet, Duluth, and International Falls became saw-milling towns.</p>
1890s to 1910	<p>The golden era of lumbering in Minnesota. Logging railroads reached deep into the woods as steam power became the mover of logs. Over 20,000 lumberjacks and half that number of draft horses were working in the northern pineries of the state. An equal number of men worked in the state's sawmills and another 20,000 people worked in related wood-production factories. Yet, dark clouds emerged on the lumbering skyline; catastrophic forest fires fueled by logging operations leaving dry tree tops called "slash" swept the landscape and devastated many northern communities—Hinckley in 1894, Chisholm in 1908, Baudette in 1910 and Cloquet-Moose Lake in 1918.</p>
1900	<p>The peak year of white pine logging with over 2.3 billion board feet of lumber, about 4.7 million cords, cut from the state's forests. From that year alone, Minnesota pine could build over 600,000 two-story homes or a boardwalk nine feet wide encircling the earth at the equator. In each of the next 10 years, nearly equal cuts of pines were made in the state.</p>
1910	<p>The annual cut of Minnesota pine began to drop and sawmills began to close their doors around the state. With the industry in decline, lumber companies began to look to the Pacific Northwest and the South for timber.</p>

1911	Seeing a need to begin conservation measures and fight the growing danger of forest fires the state created the Minnesota Forest Service (MFS), a forerunner to the Department of Natural Resources. With a small but dedicated force of foresters and forest firefighters they enforced new and stricter laws governing slash removal, regulated railroads to prevent sparks from locomotives, requiring burning permits and created Forest Ranger Districts throughout the North Woods.
1929	The Virginia and Rainy Lake Lumber Company, in Virginia, Minnesota—the largest white pine lumber company in the world—closed its doors signaling the end of the big-pine logging era in the state. In less than 100 years, the industry had logged over 68 billion board feet of pine from the state’s forests, enough lumber to fill boxcars stretching from the earth to the moon and halfway back again.
1930s	Lumber companies that remained in Minnesota shifted production from saw logs to pulp, paper, matchsticks and manufactured building materials. The work force was reduced to less than 20,000 men statewide and the annual cut dropped to less than a half-million cords of timber. The last log drive in Minnesota occurred on the Little Fork River in 1937.
1940s	The war years of WWII increased the state’s timber output and expanded its workforce. However, it was clear that the era of the lumber industry had vanished. The state invested in the Minnesota Forest Service, renaming it the Conservation Department in an effort to rebuild the state’s natural resources.
1950s	The state’s forest industries remained a minor factor in the state’s economy with an annual harvest of less than one million cords and less than 10,000 people employed in the entire industry.
1960s	The state witnessed a small increase in forest industry growth with annual harvest levels reaching one million cords and a statewide work force of 20,000.
1970s	Timber harvest inches upward to 1.5 million cords.
1980s	Minnesota’s timber industry enters its “Second Forest Revolution.” Changes in the wood fiber industry such as manufactured building materials, improvements in paper production and increases in the nationwide print industry fuel the industry. A dozen major pulp, paper, waferboard, oriented strand board, specialty wood plants and sawmills expand in the state. Capital investments in mills, which were less than 600 million between 1975 and 1985, exploded to nearly 1 billion dollars in the five years between 1985 and 1990. Wood-fiber based employment jumps from 30,000 in 1980 to 52,000 in 1985. Harvest increases from 2.2 to 3.7 million cords in the same era.
1990s	The state’s forest industries continue to expand, becoming the third-largest manufacturing industry with over 8 billion dollars in wages. Annual harvests reached nearly 4 million cords. With the increases in harvest and forest utilization, some Minnesotans became concerned about the supply of trees and the overall health of the state’s forests. In 1993, the state completed a comprehensive study of the state’s forest and timber harvest—the Generic Environmental Impact Statement on Timber Harvest. The study provided direction to the state in managing its forest-based ecological resources. It also resulted in the passing of the 1995 Sustainable Forest Resources Act and created a taskforce—the Minnesota Forest Resources Council—to recommend policies and practices to protect and provide sustainable management for the state’s forests.