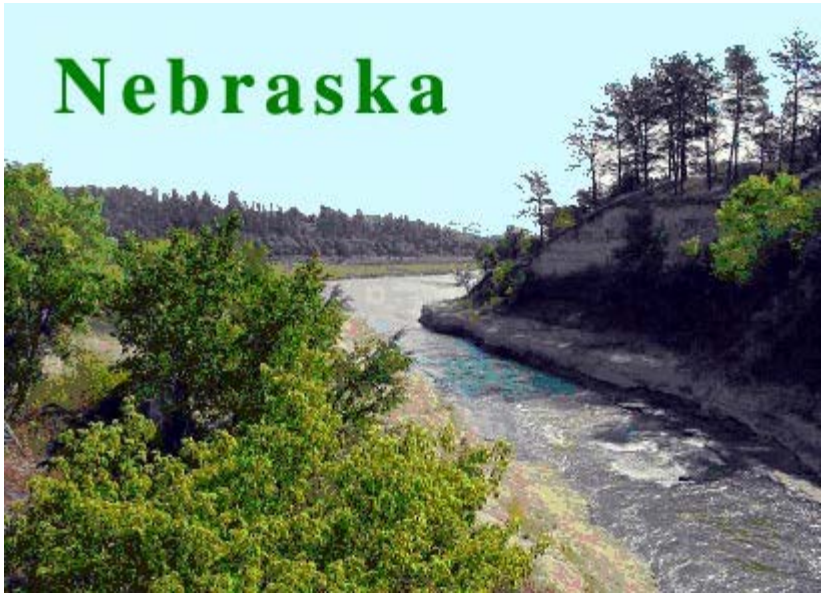


Do the Great Plains Have Forested Lands?

Yes! The Great Plains contain many large tracts of wooded lands with a dense growth of trees and underbrush.

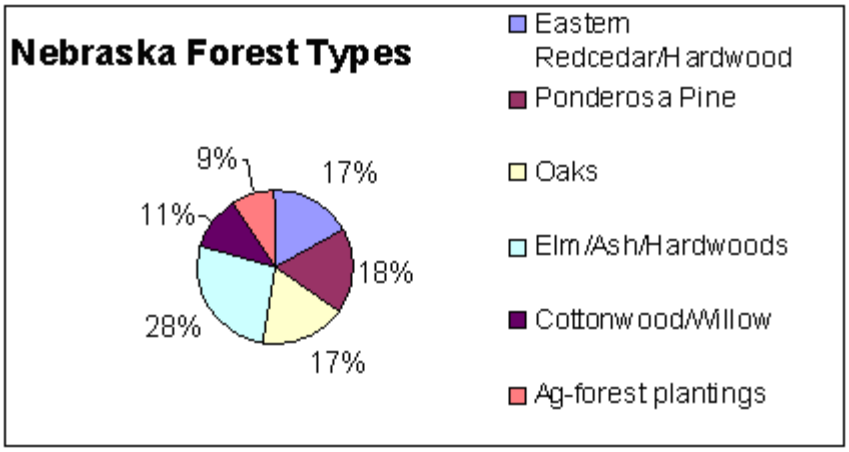
Riparian forests near the Niobrara River in northern Nebraska

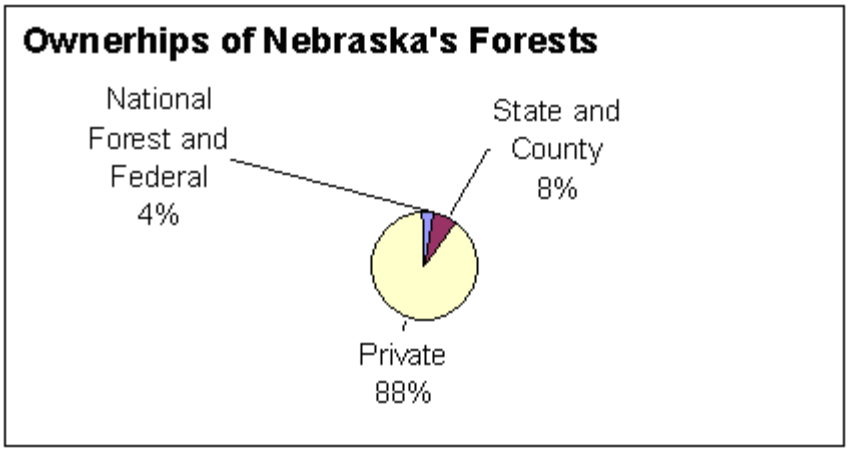
The Forest Resource

Forests in the Great Plains differ from many of the nation's traditional forests in that these forests tend to be located near river basins and in wooded outcroppings along pasture slopes and hills. Serveral hundred acres of Nebraska's forests contain trees planted for agro-forestry purposes. Adding to these forests are Nebraska's urban forests in Omaha, Lincoln, North Platte, Scottsbluff, and other communities. Nebraska's forest lands total over 1 million in acres with over 85% of these sites privately owned.

Much of Nebraska's forests contain hardwoods and deciduous trees and are located along the river drainages of the Missouri , Niobrara, and Platte Rivers. Maples, hackberry, ash, locust, black walnut, cottonwood, oaks, elms, and willows grow here. Ponderosa pines may also be found along some portions of these rivers.

Almost 20% of the forests in Nebraska contain pines. Some of the conifer forests are naturally occurring in wooded draws on plateau tops and in gulches. Significant portions of Nebraska's forested lands are in plantations; over 20,000 acres of plains in the center of the state were planted with ponderosa, jack, and European pines in the early 1900's. These were propagated at Bessey Nursery, the first US Forest Service tree nursery, located at Halsey, NE. These plantations, and other agro-forestry plantings, are highly valued in the region and help conserve soils and waterways while promoting crop and livestock production. These hand-planted forest sites in Nebraska also supply recreation opportunities and wildlife habitat.





Special Issues

Listed below are damaging forest insects, diseases, and abiotic agents of concern in Nebraska.

Engraver beetle - *Ips* spp. on Ponderosa and Jack pines. - *Ips* populations moved into jack pine stands that had been defoliated by jack pine budworm on the Halsey unit of the Nebraska National Forest. In severely defoliated areas, up to 25% of the trees had *Ips* attacks. In the Pine Ridge area, there was light and scattered mortality caused by *Ips*.

Bagworm -*Oiketicus* spp.,d *Thyridopteryx* spp. on Eastern redcedar and Rocky mountain juniper - Bagworm populations continued to be higher than normal in some areas in eastern Nebraska.

European pine sawfly - *Neodiprion sertifer* on Scotch pine - Reports of damage were quite common from landowners and Christmas tree growers in eastern Nebraska.

Yellownecked caterpillar - *Datana ministra* on oaks, basswood, elm, fragrant sumac, and maple - Populations were higher than normal and occasionally caused substantial defoliation.

Ash/lilac borer - *Podosesia syringae* on Green ash - This is consistently a problem for young ash in urban and rural plantings throughout Nebraska.

Dioryctria pine moths - *Dioryctria ponderosae, D. tumicolella, D. zimmermani* on

Ponderosa, Austrian, and Scotch pines - *D. ponderosae* and *D. tumicolella* in central and western Nebraska and D. *zimmermani* in eastern Nebraska continue to kill branches and entire trees in pine windbreaks, plantations, and landscape plantings.

Pine tip moths - *Rhyacionia bushnelli,R. frustrana, R. neomexicana,* and *Dioryctria albovitella* on Austrian, Scotch, and Ponderosa pines - Pine Tip Moths (*Rhyacionia neomexicana* and *R. bushnelli* in western Nebraska and R. *frustrana* in eastern Nebraska. *Dioryctria albovitella* continues to cause chronic tip damage on seedling and sapling pine hosts.

Oak wilt - *Ceratocystis fagacaerum* on Bur and red oaks - Oak wilt continues to be a problem in forests along the eastern edge of the state of Nebraska.

Dutch elm disease - Ceratocystis ulmi (Non-native) - Dutch elm disease was a problem in riparian areas and cities throughout Nebraska.

Russian Olive canker - *Phomopsis arnoldiae, Tubercularia* spp.and *Lasiodiplodia* spp.- Continues to be a very serious problem in Nebraska; Russian Olive is no longer recommended for use in conservation plantings.

Pine wilt and Pinewood nematode - *Bursaphelenchus xylophilus* on Scotch and Austrian pines - The incidence of pine wilt was high in 2002. Heavy mortality linked to this nematode was found frequently throughout southeastern Nebraska, mostly affecting Scotch Pine.

Cedar apple rust - *Gymnosporangium juniperi-virginiana* on apple species, Eastern redcedar, Rocky Mtn. and Utah junipers - A serious economic pest in some fruit orchards with moderate to heavy infection reported this last year.

Cercospora blight of juniper - *Cercospora sequoiae* on Eastern redcedar and Rocky Mtn. juniper - This disease continues to severely defoliate and kill junipers and redcedars in windbreaks in central and eastern NE.

Sphaeropsis (Diplodia) blight - *Sphaeropsis sapinea* on Austrian and ponderosa pines - This continues to be a serious problem in pine windbreaks and landscape plantings in eastern Nebraska.

Weather Damages - Severe drought is affecting all tree species in Nebraska.

Chemical Damages - Herbicide damage to windbreaks and other tree plantings are a serious problem in Nebraska. Pesticide drift from crop weed control programs cause noticeable damages nearby trees.

For Forest Health Assistance in Nebraska:

Nebraska Forest Service
Mark Harrell (Lincoln, NE)
Ph: 402-472-6635 mharrell2@unl.edu
Laurie Stepanek (Lincoln, NE)
Ph: 402-472-5503 lstepanek2@unl.edu

US Forest Service - Rocky Mountain Region
Kurt Allen (Rapid City, SD office)
Ph: 605-394-6151 kallen@fs.fed.us
Frank Cross (Denver Regional Office)
Ph: 303-275-5061 fjcross@fs.fed.us

Updated: February 2003