

Do the Great Plains have Forests?

YES! The Great Plains contain large, narrow tracts of wooded lands with a dense growth of trees and underbrush.

### The Resource

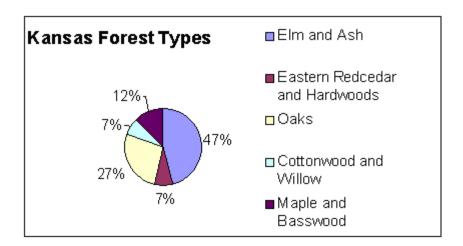
Forests in the Great Plains differ from many of the nation's traditional forests in that these forests tend to be located near river basins and in wooded outcroppings along pasture slopes and hills. Several hundred acres of Kansas' forests contain trees planted for agro-forestry purposes throughout the Great Plains. Add to this the urban forests of Kansas City, Wichita, Topeka, and several other communities of the state, that Kansas has over 2.2 million acres of forest lands with over 99% of these privately owned.

Kansas contains mostly hardwood and deciduous forest lands located in the eastern part of the state near the drainages of the Missouri River. Maples, hickory, pecan, ash, black walnut, willow basswood, elms and other hardwoods comprise these forest sites.

Many of these hardwoods trees also grow with eastern redcedar trees. These mixed-forest sites are found in wooded draws, and shelterbelt plantings of windbreaks and living snow fences in the Great Plains. The shelterbelt plantings contain "working" trees that conserve natural resources and preserve soils, increase crop and livestock production, act as atmosphere scrubbers, and protect water quality and wildlife habitat in the Plains.

Kansas Forest Types	Acreage
Elm/Ash	1,008,665
Eastern Redcedar/Hardwoods	162,921
Oaks	597,310
Cottonwood/Willow	158,296

Total	2,200,296
Maple/Basswood	273,104



# **Special Issues**

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

## **Gypsy moth -** *Lymantria dispar* (non-native)

This is monitored every year in recreational areas and near large cities. There were no gypsy moth issues in Kansas in 2002.

**Bagworm -** *Oiketicus spp., Thyridopteryx spp.* - Hosts: Eastern redcedar, Rocky mountain juniper Populations of bagworm fluctuated around Kansas. The north-central part of Kansas had heavy damage due to this insect while eastern areas had low population levels.

**Cankerworms -** *Alsophila pometaria, Paleacrita vernata* - Hosts: Bur oak, Elm, Green ash, Hackberry, Honeylocust - Average damage occurred in Kansas this year.

**European pine sawfly -** *Neodiprion sertifer* - Host: Scotch pine Reports of damage were quite common from Christmas tree growers in north central Kansas.

**Fall webworm** - *Hyphantria cunea* - Hosts: Cottonwood, Walnut, Hickory, Mulberry This year saw moderate activity of this insect in Kansas.

**Pine needle scale** - *Chionaspis pinifolia* - Hosts: Austrian pine, ponderosa pine, Scotch pine Damage increased to an overall moderate level ranging from light to heavy in Christmas Tree Plantations in Kansas.

**Ash/lilac borer** - *Podosesia syringae* - Host: Green ash These boring pests have caused lodging of green ash in shelterbelt plantings on private lands. Sporadic reports from Kansas were average. This very common pest limits the use of green ash in windbreaks to very fertile, moist sites.

**Pine tip moths** - *Rhyacionia bushnelli, R. neomexicana, Dioryctria albovitella, D. ponderosae, D. zimmermani, D. fumicolella* - Hosts: Austrian pine, Ponderosa pine, Scotch pine, Virginia pine Populations of these branch-destroying insects were almost eradicated in

North West Kansas. However, a new infestation occurred in South East Kansas in 2002. Fumicolella was the species identified in North West Kansas.

**Southern pine engraver** - *Ips grandicollis* - Host: Scotch pine Only a small population occurred in 2002 in Kansas.

**Oak wilt** - *Ceratocystis fagacaerum* - Hosts: Bur oak, red oak Oak wilt continues to be a problem in forests along the eastern edge of the state. Only a few cases of oak wilt were reported in northeast Kansas. The damages occurred in woodlots and housing developments established in previous oak stands.

**Dutch elm disease** - *Ceratocystis ulmi (Non-native)* - Hosts: American Elm, Siberian Elm Dutch elm disease can be a significant problem in riparian areas and cities throughout Kansas. The disease was moderate in level during 2002 in Kansas.

**Russian Olive canker** - *Phomopsis arnoldiae, Tubercularia spp. Lasiodiplodia spp.* - Host: Russian olive This disease continues to be a very serious problem in the eastern half of Kansas; Russian Olive is no longer recommended for use in conservation plantings.

**Pine wilt and Pinewood nematode** - *Bursaphelenchus zylophilus* - Hosts: Scotch pine, Austrian pine Kansas has experienced epidemic proportions of damage due to this disease the last 3-5 years. Heavy mortality linked to this nematode was found frequently throughout Kansas, mostly affecting Scotch Pine. The drought exacerbated the problem and it is now moving into Austrian pines in South East Kansas.

**Brown spot needle blight** -*Scirrhia acicola, Mycosphaerella dearnessii* - Host: Scotch pine Christmas tree growers in Kansas continue to remove and destroy many heavily infected trees due to this disease. In 2002, the disease appeared to be at moderate levels.

**Dothistroma needle blight** - *Dothistroma* spp., *Mycosphaerella pini* - Hosts: Austrian and ponderosa pines.

Damage was reported as light to moderate in the eastern half of Kansas and timely pesticide applications are used to control the disease.

**Sphaeropsis** (**Diplodia**) **blight** - *Sphaeropsis sapinea* - Hosts: Austrian and ponderosa pines Levels for this disease were moderate in Kansas in 2002.

#### **Abiotic Damages**

Drought - Severe drought conditions throughout much of the state continue to weaken trees and make them more susceptible to attack of insect and disease agents.

Chemical Damages - Herbicide damage to windbreaks and other tree plantings continues to be a problem in the central portion of Kansas. Pesticide drift from crop weed control programs causes noticeable decline to agro-forestry tree plantings in parts of Kansas.

### For Forest Health Assistance in Kansas:

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