

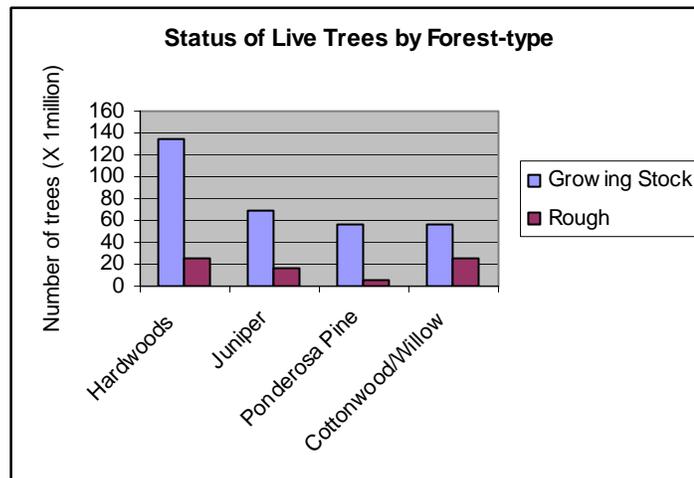
2003 Forest Health Highlights – Nebraska



Forests in the Pine Ridge area near Chadron, Nebraska

The Forest Resource

The most recent, complete measurement cycles of Nebraska's forested lands were finished in 2002 by USDA Forest Service, Forest Inventory and Analysis (FIA) and Nebraska Forest Service. "Status" was evaluated for all living plot trees. "Growing Stock" trees were generally healthy trees with very few damages, while "Rough" trees were often declining due to one or more major damages. Over 30% of the cottonwoods and willows were categorized as "Rough". These trees often grow in riparian areas along streams and rivers and their decline is a major concern to many land managers.



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 remained active in jack pine stands that were defoliated by jack pine budworm on the Bessie Ranger District of the Nebraska National Forest. In severely defoliated areas, up to 25% of the trees had *Ips* beetle attacks. Aerial survey estimated that almost 9000 pines on 3000 acres were killed here in 2003. In the Pine Ridge area, a significant level of mortality caused by *Ips* was noted, with about 12,000 pines killed on 6,500 acres. If drought conditions continue, *Ips* populations will likely remain very active.

Bagworm - *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.

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

Pine tip moths - *Rhyacionia bushnelli*, *R. frustrana*, *R. neomexicana*, and *Dioryctria ponderosae*, *D. tumicolella*, *D. zimmermani* were found on Austrian, Scotch, and Ponderosa pines. These occur throughout Nebraska and cause chronic tip damages in windbreaks, plantations, and landscape plantings

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

Pine wilt (Pinewood nematode) - *Bursaphelenchus xylophilus* on Scotch and Austrian pines - The incidence of pine wilt was high in 2003. Heavy mortality linked to this nematode was found frequently throughout southeastern Nebraska, mostly affecting Scotch pine.

Cercospora blight of juniper - *Cercospora sequoiae* on Eastern redcedar and Rocky Mountain juniper - This disease severely defoliates and kills junipers and redcedars in windbreaks in central and eastern Nebraska.

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

Tubakia leaf spot – *Tubakia dryinia* on bur oak – Defoliation and twig dieback were common and widespread on bur oaks in eastern Nebraska.

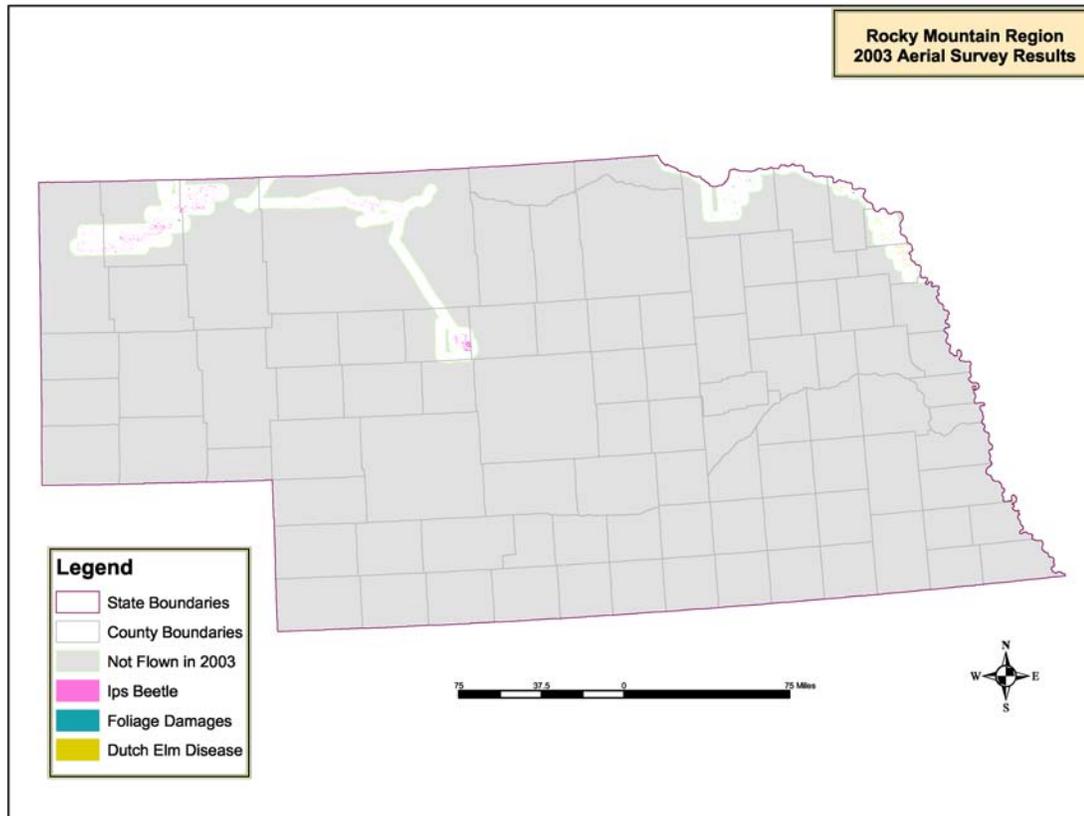
Oak decline – Dieback and mortality of native bur oak were common in eastern and northern Nebraska. Oak decline appeared to be caused by changes in site conditions related to grazing and human activities.

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

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

2003 Aerial Detection Surveys in Nebraska Damaging Agents	Estimated Number of Acres Impacted
Pine Engraver Beetle (<i>Ips</i> spp.)	10,300
Dutch Elm Disease	1,200
Defoliation, Foliar Discoloration, and/or Dieback	1,200

2003 Aerial Detection Survey of Nebraska



Forest Health Information and Assistance

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
Jeri Lyn Harris (Denver Regional Office)
 Ph: 303-236-3760 jharris@fs.fed.us

