

University of Nebraska-Lincoln



Forest Health Highlights 2022

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Forest Pests and Problems of Note in 2022

Severe weather

The winter of 2021-22 was dry with little snow cover. The drought progressed in 2022 with the entire state eventually experiencing some level of drought; with most of the state under severe drought or worse (figure 1).

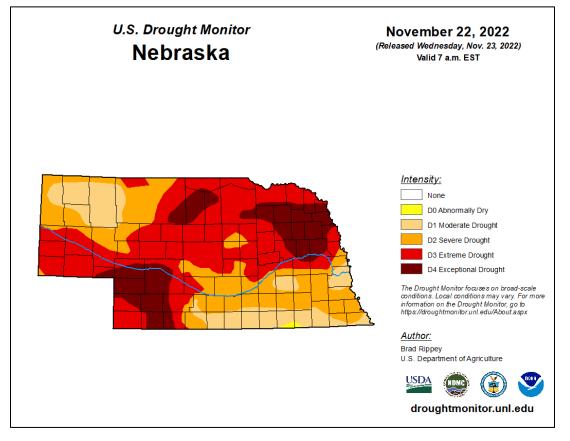


Figure 1: Most of Nebraska under severe drought or worse in 2022.

Other weather events in 2022 included unusually warm temperatures in May followed by a freeze in late May, which damaged new growth on many trees in western Nebraska (figure 2), and severe hail storms in summer damaged many conifers.



Figure 2: Late spring freeze damage in western Nebraska in May, 2022 (Pictures by Chrissy Land, Nebraska Forest Service).

Fire damage

Numerous wildfires burned thousands of acres in 2022. Some tree mortality was noted in the Bovee Fire, which began in the Nebraska National Forest at Halsey. The 4-H camp and the lookout tower were lost (figure 3), but Bessey Nursery escaped damage. Tree mortality occurred also in the Carter Canyon fire in the Wildcat Hills; and the Road 702, Road 739, and the Votaw Road fires in southcentral Nebraska.



Figure 3: Lookout tower burned in Bovee Fire at Nebraska National Forest (pictures by Neb State Patrol)

Young redcedar in windbreaks

For the third year in a row, dying redcedar was reported in young windbreaks in eastern Nebraska (figure 4). The cause appears to be a canker low on the main stem. Early severe fall freezes and drought in the past few years are likely triggering the development of a latent fungal infection.



Figure 4: Dead eastern redcedar in Syracuse, NE (picture by Ashley Rippe)

Ips engraver beetles

Pine engraver beetles (*Ips* spp.) continue to cause some mortality of ponderosa pine in northwest Nebraska (figure 5). Severe drought conditions stress trees and make them more susceptible to engraver beetle attack.



Figure 5: Ips-killed trees in 2022 near Chadron, NE.

Woolly apple aphid

Woolly apple aphid (*Eriosoma lanigerum*) infests roots and branches of apples and other rosaceous plants, living in colonies covered in a white waxy substance ("wool"). Heavy infestations can damage and weaken trees. The aphids also infest elm leaves, causing the developing leaves to twist into spiral shaped clusters on the twigs (figure 6). Sticky honeydew is produced by the aphids, which coats leaves, branches and objects below the tree.



Figure 6: A cluster of twisted elm leaves infested with woolly apple aphid.

Emerald ash borer

No new counties were found to be infested with emerald ash borer (*Agrilus planinpennis*) in 2022. To date, the insect has been detected in Buffalo, Cass, Dodge, Douglas, Hall, Lancaster, Platte, Saunders, Seward, and Washington Counties.

For more information on forest health in Nebraska, please visit the Nebraska Forest Service website:

www.nfs.unl.edu