

Science Bucks Commonly Held Belief About Why Leaves Fall

Shorter days, not frost or low temperatures, is the main reason trees lose their leaves each fall.

As day length shortens in the fall, chemical changes take place in the leaf stalk. Where the leaf stalk and twig join, conducting vessels, which transport food and water between the leaf and other parts of the tree, become blocked. Then an abscission layer forms. The substance binding the two parts together breaks down and the leaf is easily separated from the tree by fall rains or wind.

Leaf drop is governed by Mother Nature and each tree species responds differently. For instance, black walnut and green ash are among the first to drop their leaves. However, oak, linden and maple trees commonly hold their leaves late into fall. Some trees, such as red oak and pin oak, may

retain their leaves all winter even though the leaves are dry and dead.

Trees kept warm artificially will still lose their leaves as day length shortens. However, trees lighted artificially, for time periods corresponding to summer day length, will retain their leaves long after temperatures have dropped to wintry levels.

No one knows for sure why seasonal behavior is more a response to light than to other environmental conditions. Perhaps the reason is simply that most seasonal changes, such as temperature or rainfall, may vary from year to year, while the hours of daylight are not governed by climatic factors. Day length is the result of the regular movement of the earth around the sun and does not vary from year to year.

Source: Dennis Adams, forester, NU/LANR

Danielle Fenster's Photo Selected by 4-H Foundation



Lancaster County 4-H member Danielle Fenster's photograph "Bronco Rider" was one of 15 photographs chosen by the trustees of the Nebraska 4-H Foundation for promotion in the upcoming year. In past years, the foundation has published a calendar and photo note cards.

Nebraska 4-H Foundation is a private sector partner of University of Nebraska-Lincoln Extension 4-H, dedicated to seeking and managing contributions that will best meet the needs and advance the interests of Nebraska 4-H Club work and maintain 4-H camps and centers for instructive and recreational purposes. For more information, go to <http://4h.unl.edu/foundation>.

Pine Wilt Symptoms Appearing Around Lincoln

When a pine dies suddenly, especially a Scots pine, pine wilt is a leading suspect. Pine wilt is caused by the pinewood nematode which is moved from infested to non-infested pine trees by the pine sawyer beetle.

The most noticeable symptoms appears in mid to late summer when the greatest need for moisture is required, and blocked by the nematodes in the resin canals. In a matter of six to eight weeks the tree becomes a dull green, to yellow, and finally brown.

Currently, no chemicals are available to control the nematode or the beetle.

To limit the spread of pine wilt to nearby healthy trees, diseased trees must be removed and destroyed before the beetles emerge from the wood. Pine sawyers are inactive in winter, so if you find dead trees after October 1, they do not need immediate removal, but they must be removed and burned, buried, or chipped by May 1.

For more information about pine wilt, go to <http://lancaster.unl.edu>.



Photos by UNL Extension Educator Tom Dorn

Public Asked to Vote on Egg Artistry Contest Entries



By Pat Ruge of Walthill — A real honeycomb adorns this egg which shows off the Honeybee, Nebraska's state insect.



By Veronica Kiuntke of Columbus — A real cottonwood leaf adorns this egg. The Eastern Cottonwood is Nebraska's state tree.



By Opal Jardine of Lincoln — "The Enduring Barns of Nebraska" is the theme of this egg.



By Sharyl Batterman of Lincoln — this egg features Chief Standing Bear, a wagon train, Chimney Rock, the State Capitol, a farm scene and Husker football.

Photos by Vantage Imaging

Eleven Nebraska artists have submitted entries in the 12th annual egg artistry contest sponsored by the Poultry and Egg Division of the Nebraska Department of Agriculture. The public can view the eggs and vote for their favorite one at the University of Nebraska State Museum (Morrill Hall) on the UNL City Campus (14th & U Streets) in Lincoln. The eggs will be on display until Oct. 3. Museum hours are:

Mondays through Saturdays from 9:30 a.m. to 4:30 p.m., and Sundays from 1:30 p.m. to 4:30 p.m.

You may also view and vote on the contestants' eggs on the Nebraska Department of Agriculture's Web site at <http://www.nebraskapoultry.org/photos/egg/06contest.htm>.

Eggs are to be judged based on the best depiction of the state of Nebraska. The winning egg will be taken by

the American Egg Board, along with other state submissions, to Washington, D.C. to be on display at the White House during Easter, 2006. A Nebraska artist will have his or her work viewed by the President of the United States and White House visitors.

For more information about the egg artistry display, contact Mary Torell at the Poultry and Egg Division at 472-0752.

"Make It Yourself with Wool" Entries Due Oct. 31

The 2005 "Make It Yourself with Wool" will feature one state contest instead of district competitions. It will be held Nov. 18-19 at UNL East Campus. Garments must be made of wool fabric (or blends made with a minimum of 60 percent wool).

Entry fee is \$5 for Pre-Teens and \$10 for Juniors, Seniors and Adults. Entry forms are due Oct. 31. For an entry form and more information contact Tracy at 441-7180.

Can You Guess It?



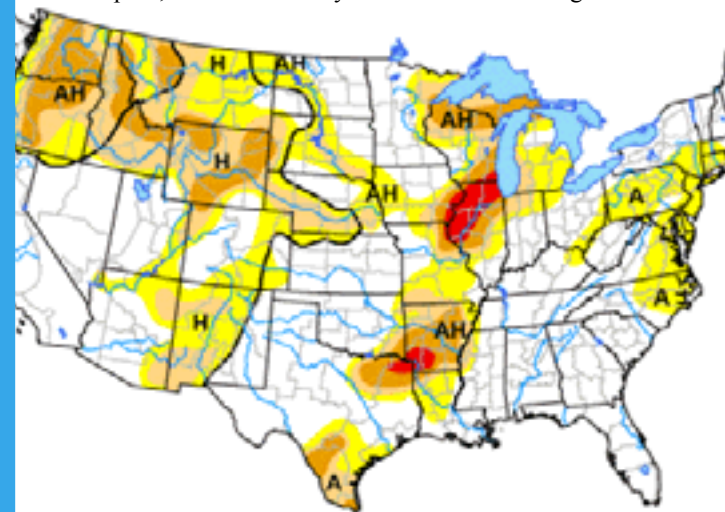
Photo by Stephen Gamet, UNL Viticulture Technologist

Did you guess it? Find out at <http://lancaster.unl.edu>

Did you guess it from the September NEBLINE? The answer was Pyemotes itch mites feeding on oak leaf gall maggots.

U.S. Drought Monitor Map

As of Sept. 6, Lancaster County was in moderate drought conditions.



For the most recent map, visit www.drought.unl.edu/dm
Source: National Drought Mitigation Center, University of Nebraska-Lincoln