

Purdue Extension

Greene County Agriculture & Natural Resources Newsletter

Cold Spring Leaves Some Livestock Producers Facing Hay Shortage

With unusually cold temperatures hindering the growth of cool-season pasture grasses throughout the state, two Purdue Extension specialists are offering management tips to Hoosier livestock producers looking to conserve their dwindling hay supplies.

"When spring temperatures are too low to generate much forage growth in the pasture then more hay needs to be fed," said Keith Johnson, Purdue Extension forage specialist. "If pasture growth doesn't get started soon, some producers are going to start running out of hay."

Unseasonably cool temperatures in late March and April have delayed the development of pasture grasses and legumes - which are grazed by livestock - by as much as two weeks, Johnson noted.

"It is early spring and producers are tired of feeding hay to their animals. There have been reports of livestock producers running out of hay to feed. It is tempting to turn out on pasture even though the amount of growth is low yielding," Johnson said. "It is not in the best interest of the forage to graze too early as it can set back plant growth for the entire season. The soil has also been wet and hoof action while grazing could do even more damage."

Ron Lemenager, Purdue Extension beef nutrition management specialist, added that since early season forages are high in moisture content, the rate of passage through the animals' gastrointestinal system is very rapid, resulting in lower forage digestibility and less nutrients available to meet animal requirements.

Lemenager said producers running low on hay should consider three alternatives.

Purchasing hay from a reliable source is typically the easiest option, but could be expensive at this time of year, Lemenager said, especially when stored forage supplies are limited. Johnson recommended that producers carefully inspect purchased hay for signs of invasive plant material before putting it out in their fields.

"It could create a long-term weed problem you'll be dealing with for years," he said.

Lemenager said purchasing hay by the ton is typically the best deal for producers based on a nutrient analysis. Producers also need to factor in cost of transportation when purchasing hay.

Limiting hay feeding access time and supplementing the animals' diet with high-fiber feed such as pelleted soybean hulls, or a pelleted soybean hull-corn gluten combination, is another solution. Purdue studies have shown that reducing access time to eight hours a day could reduce hay inventory disappearance, in the form of hay wastage, by 17 to 18 percent, while still providing all the dry matter intake for a 24 hour period.

Reducing herd size is another option for producers who need to stretch their hay supplies.

"You can consider culling low-performing or unproductive animals," Lemenager said. "As the grass begins to green-up each spring, there is usually a good market for cow-calf pairs."

Johnson and Lemenager have produced a video addressing questions producers might have about the hay supply and pasture conditions. The video is available at <https://vimeo.com/264794213>.

For more information, contact Johnson, Lemenager or your county Purdue Extension Educator. A list of Extension offices statewide is available at <https://extension.purdue.edu/Pages/countyoffices.aspx>.

Source: Darrin Pack, Purdue University



Important Upcoming Dates

Pollinator Workshop

Thursday, May 24 6:30-8:30 PM
York Automotive Building
191 N US HWY 231, Greencastle, IN
RSVP at 756-653-8411 or
https://purdue.ca1.qualtrics.com/jfe/form/SV_10dylLnLultvc0Z

High Tunnel Tour

Wednesday, June 13 7:00-9:00 PM
Southwest Purdue Ag Center
Vincennes, IN
RSVP at 812-886-0198

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A "Pearfect" Nightmare!

Think about what might be the perfect ornamental tree for your yard. Fast, compact growth, pretty white flowers in spring, glossy green foliage in summer, spectacular scarlet – purple fall color, and relatively resistant to pests and diseases. It is easy to propagate and transplant and adapts to a wide range of site conditions. You want one, don't you?

This describes the 'Bradford' cultivar of Callery (ornamental) Pear. It is difficult to find a downtown city center or suburban subdivision that is not adorned by these ornamental pears.

But the big shortcoming of 'Bradford' pear was that it has such narrow branch angles that weaken the architecture of the tree such that it frequently splits at the trunk. So the quest was on to introduce improved cultivars with better branch architecture. Enter additional ornamental pear cultivars such as 'Aristocrat,' 'Chanticleer,' 'Cleveland Select,' 'Redspire', and 'Whitehouse'.

But unfortunately for all of us, that while these ornamental pears did not fruit much if at all on their own, they do become fruitful when they cross-pollinate. The result is that "volunteer" pear trees are seeding themselves in alarming numbers and in many areas where the pear trees have not been planted, helped along by birds. While the ornamental cultivars typically set very small fruit when they are fruitful, there is considerable variability in fruit size amongst the seedling populations.

What can home gardeners do? If you have ornamental pear trees in your landscape, keep a close watch for fruit set. Remove seedling trees immediately or keep them mowed very low to prevent flowering and fruiting. If your existing landscape specimens bore fruit this year, you can spray next spring with fruit inhibitor hormone (e.g. ethephon, Florel Fruit Inhibitor) to reduce fruit set. Note that timing and thorough coverage is critical, the spray must be applied when plants are in early stage of full bloom, before fruit sets. Typically ornamental pear is in bloom for 10 – 14 days. It will be difficult to provide thorough coverage on larger specimens.

Ornamental pears typically do not last long in the landscape, frequently breaking up in high winds and storms. You might consider tree removal, especially for trees that are already in decline or are young enough to easily remove and replace with more appropriate species.

Source: B. Rosie Lerner, Purdue Consumer Horticulture Specialist



Invasive Pests Kill Indiana's Trees: Learn to Spot, Report and Manage Them

Have you heard of emerald ash borers or Asian longhorned beetles, but don't know how to recognize them? Ever wondered who to tell when you find a strange insect destroying your trees? You can learn about how to identify, report and manage invasive pests at the Invasive Forest Pests Early Detector Training Workshops in southern Indiana hosted by Purdue University and the Indiana DNR!

Invasive insects can kill even the healthiest trees and are economically and environmentally costly. For example, emerald ash borer has robbed homeowners of the shade of their beloved ash trees, animals of their vital habitat, and, according to U.S. Forest Service, Indiana alone may spend as much as \$2.9 billion to replace urban trees killed by these beetles. However, the situation is not hopeless! The best way to protect your trees and forests all over Indiana is to be watchful, report what you see, and follow treatment recommendations. Many invasions were stopped in their tracks because observant citizens made a report when they encountered an odd insect or unusual tree damage. Attending one of the early detector workshops will not only teach you how to protect your own trees, but also how to report invasive species and stop their spread.

These workshops are for both the general public and for professionals (we offer continuing education credits: CCHs, ISA CEUs, and SAF CFEs). Presentations will cover the identification, biology, and control of invasive pests including emerald ash borer, Asian longhorned beetle, hemlock woolly adelgid, and spotted lanternfly. Register is free, but required at:

<https://www.surveymonkey.com/r/FPOSP18>. If you have questions or have trouble registering contact Elizabeth Barnes at barne175@purdue.edu or 765-494-0822.

Workshop Schedule (all workshops are identical):

May 22nd
5:30-8:30 PM CST
Mesker Park Zoo
Carousel Event Room
1545 Mesker Park Drive
Evansville, IN 47720

May 23rd
5:30-8:30 PM EST
Falls of the Ohio
Auditorium
201 W. Riverside Dr.
Clarksville, IN 47129

May 24th
5:30-8:30 PM EST
Dearborn Adult Center
311 W. Tate Street
Lawrenceburg, IN 47025

May Garden Calendar

HOME (Indoor plants and activities)

- Many indoor plants can be moved to shady locations outdoors but only after danger of frost is past. Plants will dry out more often outdoors, so keep a close eye on soil moisture. Sinking the pots in soil will help slow down moisture loss.
- Now is a good time to take cuttings of houseplants to increase a collection or share with friends. Root cuttings in media, such as vermiculite, perlite or potting soil. Roots grown in water tend to be weak from lack of oxygen and do not adjust well to planting in soil.
- Fertilize houseplants according to label directions. Foliage plants require relatively high nitrogen fertilizer; flowering houseplants respond best to fertilizer high in phosphorus.

YARD (Lawns, woody ornamentals and fruits)

- Prune early spring-flowering trees and shrubs after flowers fade.
- Plant balled-and-burlapped or container nursery stock, and water thoroughly.
- Remove and destroy overwintering bagworms from landscape trees and shrubs.
- Follow a spray schedule to keep home-orchard crops pest free. While trees are in bloom, use fungicide sprays without insecticide to avoid injury to bees. Follow label directions. More information is available in Purdue Extension publication ID-146 "Controlling Pests in the Home Fruit Planting," <https://www.extension.purdue.edu/extmedia/ID/ID-146-W.pdf>
- Thin fruits of apple trees, if needed, about three weeks after petal fall. Apples should be about 8 inches apart.
- Apply fungicides to roses to control diseases, such as black spot.
- Purdue turf experts recommend that if you are going to fertilize your lawn in May, apply three-fourths to 1 pound N/1,000 square feet with a product that contains 50 percent or more slow-release fertilizer. Try to schedule the application prior to a rain or irrigate following application to move the fertilizers off the leaf blade.

GARDEN (Vegetables, small fruits and flowers)

- Plant frost-tender plants after danger of frost has passed for your area. This includes warm-season vegetables such as tomatoes, peppers, eggplant and vine crops as well as most annual flowers and tender perennials, such as cannas, gladiolus, dahlias, tuberous begonias and caladiums.
- Pinch chrysanthemums and annual flower plants to keep them compact and well-branched.
- Make successive plantings of beans and sweet corn to extend the season of harvest.
- Thin seedlings of early-planted crops such as carrots, lettuce, spinach and beets to their proper spacing.
- Harvest early plantings of radishes, spinach and lettuce.
- Harvest asparagus by cutting or snapping spears at or just below soil level.
- Harvest rhubarb by cutting, or grasp the stalk and pull it up and slightly to one side.
- Control cucumber beetles, carriers of bacterial wilt, as soon as cucumber plants germinate or are transplanted to prevent disease.
- Remove blossoms from newly set strawberry plants to allow better runner formation.
- Remove unwanted sucker growth in raspberries when new shoots are about a foot tall.

Source: B. Rosie Lerner, Purdue Consumer Horticulture Specialist

Where Have All the Flowers Gone?

Winter 2017-18 was pretty harsh compared to most years. Much of central and northern Indiana experienced 13 or more days well below zero, while southern Indiana had four to five days just a few degrees below zero. In addition, gusty winds further injured plants by desiccating buds and twigs.

The consequences remain to be seen. While some spring flowering trees and shrubs may perform admirably this season, some species will have few or no blooms at all, particularly in the northern half of the state. In addition, some plants may be late to leaf out, leaving us concerned that they died overwinter.

Some shrubs (such as forsythia) may flower only on the lower branches, where snow cover and leaf litter insulated them well. But for many specimens, there may be no flowers at all. A recent check of buds on forsythia plants on the Purdue West Lafayette campus revealed significant flower bud damage, evidenced by a brown center in the bud.

Many roses have experienced considerable dieback – some nearly to the ground. Some of these roses will still be able to bloom on new twigs that develop later this spring.

For plants such as magnolia and lilac, our bud checks look pretty good, but there's still more weather to get through before we know for sure.

While it is still possible that these plants may continue to show effects from the harsh winter, most should recover and return to normal blooming next year – assuming reasonable weather.

We recommend conservative pruning to remove only dead branches and to conserve as much foliage as possible, so that plants can maximize leaf area for photosynthesis to aid recovery.

Source: B. Rosie Lerner, Purdue Consumer Horticulture Specialist



Photo shows winter dieback on roses.

Motorists Urged to Share the Road with Farmers

With temperatures on the rise, more farmers will be out in their fields, which means slow-moving farm equipment will soon be on Indiana roadways. To keep motorists and farmers safe this planting season, several state agencies have partnered together to encourage Hoosiers to be alert, slow down and share the road with farm equipment.

"As a top agricultural state, whether you live in rural, urban or suburban Indiana, a majority of motorists will come across large farm equipment on the road this planting season," said Lt. Gov. Suzanne Crouch. "We want to encourage every Hoosier to be mindful, slow down and share the road, which will not only ensure their safety, but also the safety of our farmers."

According to the National Highway Traffic Safety Administration, farm equipment vehicles (other than trucks) were involved in 92 fatal crashes across the nation, with six of those occurring in Indiana.

By law, farm equipment must have the nationally designated slow-moving vehicle sign – a red triangle-shaped reflector – to warn drivers that their equipment is on the road. These vehicles often travel at speeds no higher than 25 mph.

"Roadway safety is a priority of the Indiana State Police, especially when large farm machinery will be crossing state and county roads to farm fields during the planting season," said Indiana State Police Superintendent Doug Carter. "Patience, courtesy and understanding, along with the undivided attention of farmers and the traveling public will help ensure a safe 2018 growing season."

The following list includes several safety tips for motorists approaching large farm equipment:

- Most farmers will pull over when they are able to let you pass, but it may take time for them to get to a safe place to do so. Be patient.
- Farm equipment is wide, sometimes taking up most of the roadway. Be careful when passing.
- Do not pass if you are in a designated "No Passing Zone" or within 100 feet of any intersection, railroad grade crossing, bridge, elevation structure, or tunnel.
- Do not try to pass a slow-moving vehicle on the left without ensuring that the vehicle is not planning a left turn. It may appear that the driver is pulling over for you to pass when it is actually preparing to turn. You will drive right into its path, endangering yourself and the farmer.
- Avoid tailgating, as some farm equipment might have to make sudden stops along the road.
- Allow plenty of time to get to your destination, be aware of alternate routes and avoid distractions.

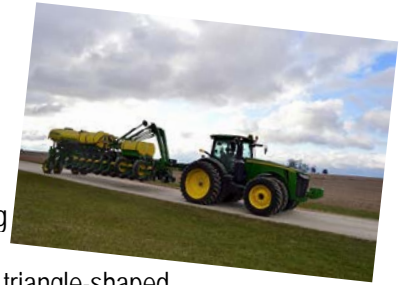
"Due to the size of our equipment, people will often see us before we see them," said Zach Cain, a Montgomery County farmer. "It's important to be patient. Farmers don't want to hold up traffic, but it can take us some time to find a safe spot to pull over."

Bruce Kettler, Indiana State Department of Agriculture director, said that motorists should pay special attention to stationary farm equipment on the side of the road, as there might be farmers working nearby.

"We want to remind Hoosiers to take extra precaution on the roadways this spring," Kettler said. "Leaving a few minutes early will ensure that everyone reaches their destination safely and in a timely manner."

In addition to Lt. Gov. Crouch, ISP and ISDA, the following agencies are also participating in the 2018 planting season driver safety campaign: Indiana Department of Homeland Security, Indiana Department of Transportation and the Indiana Bureau of Motor Vehicles.

Source: Indiana State Department of Agriculture



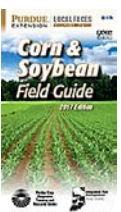
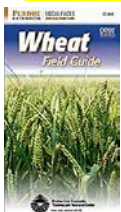
Free Resources Courtesy of your Local Purdue Extension Office

These pocket-size, in-field references provide detailed and descriptive information for corn & soybeans, wheat, cover crops and forages. The 2016 Edition of the Corn & Soybean Field Guide includes topics of identifying and managing insects, diseases and weeds; diagnosing herbicide injuries; soil fertility; making planting decisions and understanding crop growth.

The completely revised third edition of the Forage Field Guide contains more than 300 pages of information for forage and livestock producers and the agricultural industries that serve them. This guide has updated selection information, nutrient management, pest management and more! The Midwest Cover Crops Field Guide is in its second edition. It helps readers effectively select, grow and use cover crops in their farming systems. Topics include choosing cover crops, fitting cover crops into your system and positive and negative effects of cover crops.

The pocket-size, in-field Wheat Field Guide provides detailed and descriptive information for wheat producers. Topics include selecting varieties, harvest practices, insects, diseases, weeds and fertility.

If you are interested in any of these Field Guides, please stop by the Purdue Extension – Greene County Office and speak with Sadie Davis. Feel free to call ahead at 812-659-2122. Supplies are limited so don't hesitate to get your Field Guide!



When to Remove Maple Tree Sucker

Q. I have a maple tree (it is either an 'October Glory' or 'Autumn Blaze') that has (what I assume to be) a rather large sucker at the bottom. The diameter of the sucker is about 2 inches, and the tree trunk is 7 inches in diameter. I have attached pictures of it from different angles. I would like to know if it is OK to remove it. I've read quite a bit about these and that late winter/early spring is a good time to remove them. - J.M., Crown Point, Indiana

A. Some landscape plants produce vigorous, upright stems that become troublesome, because they out-compete better-formed branches and shade out the rest of the plant. These remarkably fast-growing, upright stems are called "suckers" if they come from the root system.

You are correct that the best time to try removing these suckers is late winter and early spring before the new growth begins. You'll want to be careful to avoid injuring the main trunk when you cut. First, remove the top of the root sucker (this can be done in stages) to get the heavy weight off that stem. Then, make closer cuts further down to just above where you see the "V."

We also recommend that you pull the rock mulch away from the base of the tree and, if needed, remove any soil that is covering the root collar (the flare of the trunk at the bottom.) You can see an illustration of these recommendations on the annotated photo, courtesy of Purdue Urban Forestry Specialist Lindsey Purcell.



A maple tree with mature upright root sucker.

For more information, see https://edustore.purdue.edu/item.asp?Item_Number=HO-4-W

Survey: Indiana Remains a Top State for Cover Crops

Indiana farmers planted 970,000 acres of cover crops in 2017, according to a recent survey. Cover crops are now the third-most planted crop in the state, next to corn and soybeans.

"With the late harvest and heavy rains farmers experienced last fall, seeing close to one million acres of cover crops growing is no small accomplishment and worth celebrating," said Jill Reinhart, acting state conservationist for Indiana's Natural Resources Conservation Service. "This year's data shows that Indiana once again sets the bar, nationally, when it comes to incorporating conservation on the farm."

According to NRCS, cover cropping has many benefits including increased organic matter, improved soil biology, as well as better water infiltration and water-holding capacity. This practice also prevents nutrients and sediment from running off the farm, keeping them out of nearby waterbodies and streams.

As a result of the cover crops planted last fall, more than 2.9 million pounds of nitrogen, 1.4 million pounds of phosphorus and 1.2 million tons of sediment were prevented from entering Indiana's waterways. That's enough sediment to fill 12,000 train cars stretching 113 miles long, the survey claims.

"Farmers continue to recognize the importance and are finding value in planting cover crops," said Bruce Kettler, director of the Indiana State Department of Agriculture. "Keeping more nutrients on the land, not only improves soil health and water quality, but also a farmer's bottom line."

Dan Sutton, of Sutton Farms in Lowell, Ind., first planted cover crops in 2008 and started seeing results the following year.

"We found in 2009 a pretty good yield increase on those cover cropped acres," Sutton said. "That turned a light bulb on, and we said, 'Hey, let's look into this more and see what we can do with it.'"

For the past several years, Sutton has tried to plant cover crops on 100 percent of his 1,300 acre farm. Although he's encountered challenges along the way, he believes that the benefits to his soil and the environment outweigh the risks.

In addition to cover crops, the survey also measures trends related to crop residue, which is the organic material left in the field after harvest. Crop residue further reduces sediment and nutrient runoff by protecting the soil from fall, winter and spring rain events. A no-till system leaves the most residue.

The survey shows that Indiana farmers left their crop residues undisturbed on: 67 percent of soybean acres, 63 percent of corn acres, 46 percent of small grain acres and 20 percent of specialty crop acres.

The cover crop transect survey is a collaborative effort between NRCS, ISDA, Indiana's 92 Soil and Water Conservation Districts, Earth Team volunteers and other members of the Indiana Conservation Partnership, who team up to conduct a visual assessment of cropland county by county. The goal of the survey is to help document a more complete story of Indiana's conservation efforts.

To learn more about the survey, visit www.in.gov/isda/2383.htm, or to find transect data for your county, visit your local Soil and Water Conservation District office at www.in.gov/isda/2370.htm.

Source: Indiana State Department of Agriculture

For additional information, please visit our website at:
www.extension.purdue.edu/greene



You can also find the Greene County Purdue Extension Office on Social Media!



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