

Purdue Extension

Greene County Agriculture & Natural Resource Newsletter

Is Your Bull A Stud or a Dud?



Evaluation of bulls for breeding soundness is one of the most neglected management practices of Indiana's cattle producers. A bull is expected to settle 20 to 50 cows during the breeding season and too often his ability to do so is taken for granted.

The evaluation of bulls should be done prior to the breeding season. Breeding problems that are discovered at pregnancy checking occur far too late to prevent substantial loss of income. Breeders that sell bulls should have them evaluated prior to the sale. Bull suppliers depend largely on repeat customers and selling an infertile bull may cost the breeder a good customer as well as create a lot of bad advertisement.

The breeding soundness exam cannot guarantee fertility, but it is the best method available to predict which bulls will not settle cows. Approximately 10% of bulls will fail the Breeding Soundness Evaluation (BSE). The routine BSE will not detect bulls with low libido; therefore, observation of the bull in the breeding pasture is still important. Observe bulls to confirm that they are finding and mating cows that are in heat. Observe the same cows in three weeks to be sure that he is "settling cows."

The BSE includes an evaluation of structural soundness, evaluation of the reproductive anatomy and, most importantly, evaluation of semen quality. During the BSE, a semen sample is collected and evaluated immediately for percent motile sperm. Minimally, 30% of the sperm must be motile in order for the bull to pass the exam. The same sample is then stained and individual sperm are evaluated. Seventy percent of the cells must be normal microscopically for the bull to be acceptable.

The evaluation charge is \$50 per bull. Bulls must be at least one year old and weigh a minimum of 900 pounds.

The Greene/Lawrence County BSE's will be held on Wednesday, March 29, 2017 at Springville Feeder

Auction. Call the Greene County Extension Office (812-659-2122) or the Lawrence County Extension Office (812-275-4623) should you have any questions.

Appointments are required and must be scheduled by preregistering through the Lawrence County Extension Office (812-275-4623) by 4:30 PM on Tuesday, March 28, 2017.

These BSE Clinics are conducted annually through the joint cooperation of the Purdue Cooperative Extension Service and the Lawrence County Cattle Association along with the cooperation of the Springville Feeder Auction.

Important Upcoming Dates:

Fri., March 17 – Sat., March 18	2017 Indiana Tree Farm Landowners Clinic Nashville, IN
Saturday, March 18	Greene County Ag Day Brunch Greene County Community Event Center
Wednesday, March 29	Greene/Lawrence Counties Breeding Soundness Exams Springville Feeder Auction
Fri., April 28 – Sat., April 29	Greene County Master Gardeners Flower & Patio Show Greene County Community Event Center

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Warmer Temps Not a Threat to Fruit Crops, Specialists Say

After two months of unusually warm conditions throughout Indiana, state climatologists based at Purdue University believe temperatures will slowly return to seasonal norms over the next month, which is good news for fruit growers and home gardeners concerned that their plants might be emerging too quickly.

"There is a lot more weather to come before we know what the fruit crop outlook will be, but as of right now things are in good shape and, in fact, a bit more chilling is needed for some fruit crops," said Bruce Bordelon, professor of horticulture and Purdue Extension viticulture and small fruit specialist.

Bordelon advised growers to be patient, giving trees, bushes and vines more time to get their winter rest.

"The general consensus for now is to delay dormant pruning until a bit later in case there is significant weather to come," he said.

Fruit production is an increasingly important part of Indiana's agriculture industry. The state ranks 10th nationally in blueberry production at 3.6 million pounds annually and produces 26 million pounds of apples per year, ranking 20th in the country. Together, Indiana apple and blueberry crops have a combined value of more than \$13 million.

In addition, Indiana produces about 3 million pounds of peaches each year and is home to a thriving wine grape industry with more than 85 wineries and vineyards statewide.

Fruit-bearing trees go dormant in winter until they register enough "chilling hours" to begin blooming once temperatures exceed 50 degrees Fahrenheit for an extended period. The number of required chilling hours varies by species, ranging from 600 hours for grapes and most peaches to 1,200 hours for apples and blueberries. Three weeks of optimal temperatures can produce 500 chilling hours.

Chilling hours typically occur when the temperature is between 34 and 45 degrees F, with optimal chilling taking place at 42 degrees F.

Daily high temperatures in Indianapolis exceeded 45 degrees F 13 times in January and 15 times in the first three weeks of February. The longest stretch was six days, from Feb. 17-23.

Peter Hirst, professor of horticulture and Purdue Extension commercial fruit tree specialist, says so far temperatures have not been warm long enough to threaten the state's fruit crop.

"We really haven't had that much warm weather," Hirst said. "If we were to have another week with temperatures in the 70s, that would be cause for concern. Another saving grace is that the cool down we are expecting will be moderate and gradual. And we really haven't had any extended periods of extreme cold this winter so fruit buds are in good condition."

If the weather gets too warm too soon, fruit trees might start to bud out prematurely, putting them at higher risk of injury if temperatures drop significantly.

That pattern last occurred in 2012, resulting in severe losses to the state's fruit crop.

Bordelon said that doesn't appear to be the case this year, noting that forecasters at the Indiana State Climate Office see no signs of a sudden deep freeze that could damage early emerging trees this year.

Ken Scheeringa, associate state climatologist, also with Purdue, expects a moderate downturn in temperatures in March.

"Looking about 30 days ahead, the Climate Prediction Center is forecasting a gradual cooling of these unseasonable temperatures week to week," Scheeringa said. "By mid-March, Indiana is forecast to have slightly below normal temperatures."

B. Rosie Lerner, Purdue Extension consumer horticulture specialist, said it is not unusual for some decorative garden plants - daffodils, dianthus and daylilies - to emerge during February warm spells in Indiana.

"The plants will survive just fine," she said. "The longer the mild weather stays around, the more potential there is for damage when below-freezing temperatures return. Foliage that has popped up may be killed back, but the bulbs and storage roots should remain undamaged underground."

Kyle Daniel, Purdue Extension nursery and landscape outreach specialist, said as long as temperatures remain at or near seasonal norms, the risk to ornamental species should be low.

"Nursery growers in the northern part of the state shouldn't be experiencing many species with bud break, but southern nurseries may have bud break on several species," he said.

Rick Foster, entomology professor and Purdue Extension pest management specialist for fruit and vegetable crops, said the warmer weather has resulted in somewhat more insect activity than normal.

"If the warmer weather continues, we could see the emergence of some pest species which may then be killed if we have a freeze," he said. "If temperatures revert to more normal levels, the effects on insects will be minimal."

Lerner said growers should rest easier with the outlook for cooler weather in the near future.

"We could be looking at an early arrival of spring, but if the extended forecast is a return to more seasonal temperatures, then the progress toward spring will slow down a bit and that would be good news for all."

Source: Darrin Pack; Agricultural Communications

March Yard & Garden Calendar

HOME (Indoor plants and activities)

- Start garden seeds indoors for transplanting outdoors later in spring.
- Check stored bulbs and produce for decay; discard damaged items.
- Prune, repot and clean houseplants as needed.
- Begin fertilizing houseplants as new growth appears. Keep spent leaves and flowers removed to improve appearance and encourage more blooms.

YARD (Lawns, woody ornamentals and fruits)

- Plant new trees and shrubs as soon as the soil dries enough to be worked. Plant bare-root plants before they leaf out. Soils may be exceptionally wet this spring as winter snows thaw.
- Fertilize woody plants before new growth begins, but after soil temperatures have reached 40 degrees F.
- Remove winter coverings from roses as soon as new growth begins. Prune out dead canes and fertilize as needed. Delay pruning into live canes until after winter injury can be assessed.
- Apply superior oil spray to control scale insects and mites when tips of leaves start to protrude from buds.
- Prune trees and shrubs, except those that bloom early in spring, while plants are still dormant. If winter injury is a concern, delay pruning until after dieback; desiccation injury can be assessed as plants come out of dormancy.

GARDEN (Flowers, vegetables and small fruits)

- Gradually harden off transplants by setting them outdoors during the daytime for about a week before planting.
- Follow last fall's soil test recommendations for fertilizer and pH adjustment. It's not too late to test soil if you missed last year.
- Start seeds of warm-season vegetables and flowers indoors; in northern and central Indiana, wait until the end of March or early April. Transplant to the garden after danger of frost has passed.
- Watch for blooms of early spring bulbs, such as daffodils, squill, crocus, dwarf iris and snowdrops.
- Remove old asparagus and rhubarb tops, and sidedress the plants with nitrogen or manure. Plant or transplant asparagus, rhubarb and small fruit plants.
- Remove winter mulch from strawberry beds as soon as new growth begins, but keep the mulch nearby to protect against frost and freezes.
- Remove weak, diseased or damaged canes from raspberry plants before new growth begins. Remove old fruiting canes if not removed last year, and shorten remaining canes if necessary.
- Prune grapevines after winter injury can be assessed.
- Plant cool-season vegetables and flowers as soon as the ground has dried enough to work. Do NOT work the soil while it is wet; wait until it crumbles in your hand. If the soil forms a solid ball when squeezed, it's still too wet.

Source: B. Rosie Lerner, Purdue Consumer Horticulture Specialist

Storms are Causing Damage and Tree Cleanup, What to Do Next

Safety first! Stay clear and look for dangerous hanging limbs, broken branches and other failures before beginning cleanup or inspections. Keep others clear of the areas beneath and around damaged trees. Be alert for power lines that could be involved with damaged trees. All utility lines should be considered energized and dangerous.

Lindsey Purcell, Purdue urban forestry specialist, shares, "in my experience, during storm cleanup, many tree owners are faced with the decision of what to do with their trees relative to restoration or removal". There are several types of tree damage that occur from violent weather. Each has its own specific assessment considerations. All parts of the tree should be inspected during a post-storm assessment. This requires the expertise of trained, professional arborists to assist with the decision making regarding the best course of action. Unfortunately, there are those who take advantage of the situation and overcharge or provide poor advice when it comes to the best decision on their trees. Don't make any hasty decisions and be sure you are hiring an International Society of Arboriculture (ISA) Certified Arborist, ask for references and proof of insurance in the process.

For further information, please visit:

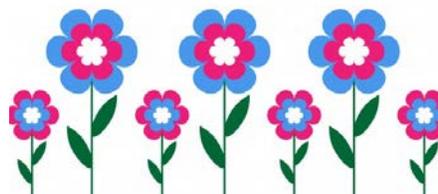
<https://www.purdue.edu/fnr/extension/blog/2017/03/02/storms-are-causing-damage-and-tree-cleanup-what-to-do-next/>

2017 Greene County Flower & Patio Show

On Friday and Saturday, April 28-29, the Greene County Master Gardeners will be hosting their annual Greene County Flower & Patio Show at the Greene County Community Event Center (4503 W State Road 54, Bloomfield) from 10 AM – 4 PM on Friday and 9 AM – 4 PM on Saturday.

On Saturday, Larry Caplan, Vanderburgh County Ag Extension Educator, will be speaking at 11 AM on "Maximizing Your Garden Harvest" and at 1 PM, he will be presenting a youth program called the "Magic Gardener", which will be great for the young ones!

Come out and visit with each of the vendors and learn from our outstanding speaker! Admission is free so bring the whole family.



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

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



Sadie Davis

Purdue Extension Greene County
Ag & Natural Resource Extension Educator
4503 W State Road 54
Bloomfield, IN 47424
davis186@purdue.edu
Office: 812-659-2122
Fax: 812-659-9155
<https://extension.purdue.edu/greene>

Facebook: <https://www.facebook.com/PurdueExtensionGreene>

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Purdue University Cooperative Extension Service
Greene County Office
4503 W State Road 54
Bloomfield, IN 47424