LOGAN COUNTY EXTENSION NEWS

February 2020

Logan County
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In This Issue

Prescribed Burn Workshop Planned for February 15

By: Brandon Boughen Logan County Extension Educator-Ag/4-H

Logan County OSU Extension and OSU Fire Ecology have partnered to provide a one-day workshop encompassing everything from planning a controlled burn to implementation for February 15, at Lake Carl Blackwell.

The heavy rains we experienced here in Logan County through spring and summer of 2019 have caused an abundance of growth in our native ranges as well as underbrush. This "growth," which I will refer to as "fuel," can cause quite the problem from a fire mitigation standpoint. As a firefighter, the bulk of calls I respond to are grass or wildfires and usually wind up being on some of the most overgrown land in the county. We all know that wildland fires can have devastating results, but most landowners do not understand how to fight fire with fire and how to use prescribed burning as a tool to prevent disaster.

The biggest roadblock that landowners face when trying to identify a fuel management plan is a lack of knowledge and understanding of the use of fire as a tool. The second roadblock is knowing when not to set a fire.

We invite landowners, emergency managers, firefighters, and anyone else interested in learning more about prescribed burning to RSVP by emailing your contact information to brandon.boughen@okstate.edu or calling the Logan County OSU Extension office at 405-282-3331.

New Pesticide Applicator Testing

By: Josh Bushong, Area Extension Agronomy Specialist

The Oklahoma Department of Agriculture, Food, and Forestry (ODAFF) has changed the way pesticide applicators test to become certified applicators. All testing will now be a proctored computer based exam that is currently only provided in Oklahoma at eight PSI Services LLC test centers. PSI has test centers located in Oklahoma City, Tulsa, McAlester, Woodward, Lawton, Enid, and Ponca City. PSI also has test centers in surrounding states. It is advised to check the PSI website, psiexams.com, to see which locations might be closer that offer ODAFF examinations.

All pesticide applicators (private, non-commercial, or commercial) must pass the computer exam at a PSI test center to become a certified applicator. Only certified applicators are allowed to purchase and use restricted use pesticides (herbicides, insecticides, fungicides, etc.). Historically private applicators were able to purchase take home test packets and mail in the exam, but after January 1, 2020 even private applicators will have to test at one of the PSI test centers.

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Prescribed Fire Planning Workshop

Oklahoma Prescribed Burn Association

Saturday February 15th 2020

Agenda

8:30-9:00am
- Registration and Welcome

9:00am-12:00
- Fire Plans
- Fire Weather
- Firebreaks
- Smoke Management
- Pre-burn Management

12:00-1:00pm
- Lunch Provided

1:00-3:30pm
- Fire Equipment
- Conduct Burn
- *(weather permitting)*

Please RSVP by February 10th or for more information contact:
Brandon Boughen at brandon.boughen@okstate.edu or 405.282.3331
John Weir at john.weir@okstate.edu or 405-744-5442

Location:
OSU Fire Service Training Center west of Stillwater, OK
Directions: From I-35 and 51 Hwy 8.5 mi East to Karsten Creek Road then South 0.25 mi
From Stillwater 6 mi West on 51 Hwy to Karsten Creek Road then South 0.25 mi

Pesticide Applicator . . .Continued from page 1

All exams will require an appointment to be made via the PSI website (psiexams.com) or the reservation phone number (1-800-733-9267). Applicators must make an appointment for each exam they wish to take. For commercial applicators, a separate appointment must be made for the core exam and each specific category exam. Each exam will cost $95 (except Private applicators which is $65) and is paid when making the appointment using a valid credit card (VISA, MasterCard, American Express, or Discover). Cash or check will not be accepted.

To make an appointment online, go to the psiexams.com website and first create an account. The applicator will be asked to put in their email address and other contact information. The applicator's name should be spelled exactly as it is on the identification that will be used at the test center. When finding an available appointment time, select "Government/State Licensing Agencies" for the organization; next select "Oklahoma" as the jurisdiction, then "OK Pesticide" for the account. Finally select the appropriate classification for the category exam you wish to take, such as "OK Private Applicator," "OK Core," or "Ok1a Agriculture Plant." By entering your zip code, the nearest test center will appear.

Appointments cannot be made or rescheduled at the testing centers. There are no walk-ins accepted at any of the testing centers. Appointments can be rescheduled or canceled using the PSI website or reservation phone number. Reservations must be rescheduled or canceled two days before the testing date or the applicator will forfeit their exam fees. Do not leave a voicemail when cancelling a reservation, make sure to speak to customer service at least two days before the exam date.

Applicators must arrive at the PSI test center at least 30 minutes before the exam reservation. These 30 minutes will allow time for sign-in, identification check, and familiarizing the applicator with the testing process. If the applicator shows up later than 30 minutes prior to the reservation, or does not show up at all, the exam fee will be forfeited.

Applicators must provide some form of government issued identification, which includes a state issued driver's license, state issued identification card, US passport, US military ID, or US alien registration card. The ID must be valid (non-expired), signature bearing, and have a photo. The exam fee will be forfeited if the applicator does not provide proper identification.

Study materials can be purchased at OSU Extension offices, the OSU Pesticide Safety Education Program website pested.okstate.edu, and/or the ODAFF website ag.ok.go to find out more information.

Horticulture Tips February 2020

By: David Hillock, Consumer Horticulturist

Trees & Shrubs

- Fertilize trees, including fruit and nut trees and shrubs, according to a soil test. (HLA-6412)
  Most bare-rooted trees and shrubs should be planted in February or March. (HLA-6414)
- Finish pruning shade trees, summer flowering shrubs and hedges. Spring blooming shrubs such as forsythia may be pruned immediately after flowering. Do not top trees or prune just for the sake of pruning. (HLA-6409)
- Look for arborvitae aphids on many evergreen shrubs during the warmer days of early spring.
- Gall-producing insects on oaks, pecans, hackberries, etc. need to be sprayed prior to bud break of foliage.
- Dormant oil can still be applied to control mites, galls, overwintering aphids, etc. (EPP-7306)

Fruit & Nuts

- Spray peaches and nectarines with a fungicide for prevention of peach leaf curl before bud swell. (EPP-7319)
- Mid-February is a good time to begin pruning and fertilizing trees and small fruits.
- Collect and store graft wood for grafting pecans later this spring.
- Begin planting blackberries, raspberries, strawberries, grapes, asparagus and other perennial garden crops later this month.
- Choose fruit varieties that have a proven track record for Oklahoma's conditions. Fact Sheet HLA-6222 has a recommended list.

Flowers

- Force spring flowering branches like forsythia, quince, peach, apple, and weigela for early bloom indoors.

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How Much Hay Do I Feed?

By: Brian Freking

With a taste of "Ole Man Winter" greeting us rather rudely, cows are going to require plenty of available feed to maintain body condition throughout the next few months. In some situations, the standing forage in the pasture or in the form of crop residue will provide much of the energy requirements of the cows. However, snow cover in some areas, as well as low quantities of grass may require that harvested and stored hay is made available to the cows. How much hay will the cow eat voluntarily? How much hay do I need to plan to feed this winter? How much hay do I need to put out for the next few days?

These questions are all part of the decisions that ranchers must make each winter. Intake in forage fed to cattle is generally limited by the forage capacity of the digestive tract. Forage intake is correlated with forage quality as shown in table 1. The more rapid rate of digestion and passage of higher quality forage results in considerably higher dry matter intake compared to lower quality forage that is lower in digestibility.

Lactation represents the greatest need for additional energy beyond that needed for maintenance. An average milking beef cow requires 50% more TDN or energy than she does when dry. It should be noted that lactating cows consume more forage compared to gestating cows due to the increased energy demand. Large cows will require more energy than will small cows. Therefore the hay or forage requirements are calculated based on a percentage of the body weight of the cow. Be honest with yourself as you estimate cow size and therefore hay amounts that are needed.

Table 1. Forage capacity of beef cows.

Forage Type and Maturity	Stage of Production	Forage DM Intake as % of BW
Low Quality, i.e. dry winter forage, mature grass hay, straw	Dry, Pregnant	1.8
	Lactating	2.2
Average Quality, i.e. boot stage legume, early bloom grass hay	Dry, Pregnant	2.2
	Lactating	2.5
High Quality, i.e. early-mid bloom legume, fertilized pre-boot grass hay.	Dry, Pregnant	2.5
	Lactating	2.7

Source: Lalman, D.; Beef Cattle Manual. 7th Ed. Oklahoma Cooperative Extension Service

Effect of Heifer Calving Date on Longevity and Lifetime Productivity

By: Britt Hicks, Area Extension Livestock Specialist

Longevity and lifetime productivity are important factors influencing profitability in a cow-calf operation. If a heifer calves earlier in the calving season (first 21-day period), they have more time to heal and resume cycling before the next breeding season commences in order to maintain a 365-day calving interval. Calves born earlier in the calving season will also be older and heavier at weaning. An ongoing study conducted at the University of Saskatchewan in western Canada and published research from South Dakota State University and the U.S. Meat Animal Research Center (USMARC) clearly demonstrate the importance of early conception in beef heifers. In these studies, heifers were grouped based on when they calved in their first calving season (first 21 days - day 1 to 21; second 21 days - days 22 to 42; or greater than 42 days after the start of the calving season).

In all three studies, heifers that calved with their first calf during the first 21-day period of the calving season remained in the herd longer (greater longevity) as compared with heifers that calved in the second 21-day period, or later. Average longevity for South Dakota heifers that calved in the first or later period was 5.1 and 3.9 years, respectively. Average longevity in the USMARC heifers that calved in the first, second, or third period was 8.2, 7.6, and 7.2 years, respectively. In the Canadian study, heifers that had their first calf during the first 21-day period of the calving season had increased longevity compared with heifers that calved in the second and third 21-day periods (7.2, 6.5, and 6.2 years for period 1, period 2, and period 3, respectively).

These data also indicated that the females that calved early as heifers tended to calve earlier throughout the remainder of their productive lives than the females that calved later in their first calving. Due to the fact that these heifers calved earlier, their calves were older and heavier at weaning. In the USMARC data the weaning weight of the first 6 calves born to heifers that calved in the first calving period of their first calving season was greater than those of heifers that calved in the second or third period of their first calving season. Furthermore, calving period influenced the total pounds weaned and average weaning weight, with heifers that calved during the first period having increased weaning weights, total pounds weaned, and average weaning weights compared with heifers calving in the second or later period. Similarly, heifers calving during the second period had increased weaning weights, total pounds weaned, and average weaning weights compared with heifers calving later.

In the Canadian data, when lifetime productivity for each animal was pooled, calf actual average weaning weight and average adjusted 205-day weaning weight were 33 lb. heavier and 20 lb. heavier, respectively, for period 1 and 2 cows compared to period 3 cows. The average number of lifetime calves weaned for cows that calved in the first, second, and third 21-day periods was 5.4, 4.5, and 4.2 per cow, respectively. Due to the combined effects of greater average number of calves weaned over lifetime and actual calf weaning weight, cows that had their first calf during the first 21-day period had greater total weight weaned (2551 lb.) compared with heifers that calved in the second (2087 lb.) or third (1855 lb.) 21-day period.

In conclusion, the results of these studies clearly illustrate that developing heifers to conceive early in the breeding season and subsequently calve early in the calving season is critical for heifer longevity in the herd as well as for performance of her progeny in subsequent generations. This occurs because those heifers will have a longer interval to rebreeding. Calves born earlier in the calving season will be older and thus, heavier at weaning. Moreover, in their lifetime, heifers that calved during the first 21-day period of their first calving season weaned approximately one more calf compared with heifers that calved later in the calving season.

Horticulture Tips for February

- Forced spring bulbs should begin to bloom indoors. Many need 10-12 weeks of cold, dark conditions prior to blooming.

- Feed tulips in early February. Wait to prune roses in March.

Turf

- A product containing glyphosate plus a broadleaf herbicide can be used on dormant Bermuda in January or February when temperatures are above 50 degrees F for winter weed control.

Vegetables

- Cool-season vegetable transplants can still be started for late spring garden planting.

- By February 15 many cool-season vegetables like cabbage, carrots, lettuce, peas and potatoes can be planted. (HLA-6004)

General

- Base any plant fertilization on a soil test. For directions, contact your county Extension Educator.

- Provide feed and unfrozen water for your feathered friends.

- Clean up birdhouses before spring tenants arrive during the middle of this month.

- Avoid salting sidewalks for damage can occur to plant material. Use alternative commercial products, sand or kitty litter for traction.

Do you want to know what Extension is doing in Logan County? Find out on these websites.

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