EXTENSION

Ag Insights

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New Pesticide Applicator Testing

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.

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

West Area Office
316 E. Oxford Enid, OK 73701
(580)-237-7677

Dana Zook
Area Livestock Specialist
dana.zook@okstate.edu

Trent Milacek
Area Ag Economics Specialist
trent.milacek@okstate.edu

Josh Bushong
Area Agronomy Specialist
josh.bushong@okstate.edu

OPREC, Goodwell
Phone: (580)-349-5411

Dr. Britt Hicks
Area Livestock Specialist
britt.hicks@okstate.edu

Website
http://oces.okstate.edu/nwareaextension

Social Media
Facebook:
facebook.com/nwareaosuextension

Twitter: @NW_OSU_Ext

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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 “OK 1a 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 will still be available and able to purchase at OSU Extension offices. Visit with your local OSU Extension office, the OSU Pesticide Safety Education Program website pested.okstate.edu, and/or the ODAFF website ag.ok.go to find out more information.

Can you remain profitable under depressed commodity conditions?

Trent T. Milacek, Area Ag Econ Specialist

Producers that have been successful in recent years have learned to maximize efficiency on their operations. Controlling the right costs while investing more money in other parts of the business can increase revenue while decreasing input costs.

Take wheat for example, an accepted standard is that it requires two pounds of nitrogen fertilizer to produce 1 bushel of wheat. Therefore, reducing nitrogen fertility will directly reduce yields. A producer thinking about the production of wheat as a marginal investment should conclude that fertility must be maximized given a fixed amount of moisture. At current prices, the nitrogen to produce a bushel of wheat costs $0.80 and the price of wheat is $4.50 per bushel. The cost of nitrogen fertilizer is a small portion of the total value of a bushel of wheat.

If a reduction in fertility is not a wise way to reduce cost, then what is next? A reduction in tillage or a reduction in herbicide costs is not always possible. A more efficient use of these inputs is likely some low hanging fruit for the operation. Are you tilling a field before weeds are present? Are you waiting too long to spray, resulting in an increase in herbicide rate and cost? Intense management requires more labor, so think critically about the timing of these operations in order to reduce overall costs.

Should a producer attempt to lower rents? This decision is never an easy one. Often a producer must be willing to walk away from a property if the negotiation fails. However, that may be the correct choice if rent is too high to be profitable. In order to determine this, a producer should develop enterprise budgets for their expected crop rotation on a particular piece of land. These budgets may include average crop production and prices. Will the farm make money without including rent? If it will, then the profit above all other costs is used to pay that rent. If the profit is lower than the current cash rent, then the negotiation for lower rents has merit.

If cash flow is failing and farms are unprofitable at current prices, letting those acres go is a fast option for increasing profitability in the short run. The long run effects may be that the operation is less profitable farming fewer acres. For more information on cropland rental rates, producers may request Current Report CR-230 from their local extension office. In north-central Oklahoma, the average cash rental rate is $34.01 per acre down from $39.21 per acre in 2017.

Where does equipment fit into this conversation? As farm profitability has decreased, the value of machinery has as well. This will make it difficult for producers to purchase new equipment, as trade values will be lower. That does not mean that reducing machinery overhead is a bad idea. If the operation owns equipment that is not vital or that can be downsized, then cash on hand may be increased with the sale of those assets. It is a short-term solution, but one that could keep things rolling another year without drastic changes.

As the calendar year ends, so does the tax year. Purchasing equipment to reduce taxes is not always a wise decision. If the operation truly needs the machinery, it can make sense to purchase it to reduce the tax burden. If the operation doesn't need it, why pay a dollar to save $0.20-$0.30?

The Kansas Farm Management Association publishes enterprise budgets compiled from data provided by their producers. They split this data into profit thirds, which is useful in determining how producers become more profitable. The high profit third spends more on things like fertilizer and land. This is a result of investing in more profitable ground and fertilizing for higher yields. They spend less on machinery repair, interest, seed, crop insurance, fuel, herbicide/insecticide, depreciation and labor. Reducing overhead drops the cost per acre while maintaining an investment in the crops that will result in higher yields.

Winter is a good time to reflect on the past year and to plan for the future. If you would like more information on analyzing your farming operation to improve profitability, please contact your local county extension educator.

Winter Feed Management for Beef Cows

Britt Hicks, Ph.D., Area Extension Livestock Specialist

Reducing winter feed costs for beef cows is important to cow-calf producers since Standardized Performance Analysis records have shown that feed costs account for more than 60% of beef producers' annual cow cost with over one-half of these costs attributed to winter feeding. Forage intake is dramatically influenced by forage quality as well as forage availability, and both of these factors can vary dramatically from year to year and month to month. Thus, determining forage quality is an important step in designing an economical winter feeding strategy. Regularly analyzing all available forge (range and/or hay) is recommended. At a minimum, forges should be tested for crude protein and total digestible nutrients (TDN) which allows a producer to compare the cow's nutritional needs with the base forage and choose the appropriate supplement. This allows one to match forage resources to cow requirements and avoid nutrition gaps or wasting costly nutrients.

When comparing supplement alternatives, it is recommended that options be compared on a cost of per unit of nutrient basis. For example, if crude protein is the primary nutrient needed compare prices based on the cost per pound of protein. We will assume that one is evaluating a 20% supplement that cost $280 per ton and a 38% supplement that cost $380 per ton. The cost per pound of protein in the 20% supplement would be $0.70 ($280 per ton divided by 400 lb of protein per ton). Whereas the cost per pound of protein in the 38% supplement would be $0.50 ($380 per ton divided by 760 lb of protein per ton).

For cattle grazing low quality forage, correcting a protein deficiency is usually the first supplementation priority. Research has shown that forage intake declines rapidly as forage crude protein falls below about 7 to 8%, a relationship attributed to a deficiency of protein in the rumen. In forages containing less than this amount of crude protein, feeding a protein supplement will improve energy and protein status of cattle by improving

forage digestibility and forage intake. In fact, energy supplementation will not be effective if dietary protein is deficient.

In general, if ample low quality forge is available, it is recommended that one supplement with a supplement containing a high protein content (greater than 30% crude protein) to stimulate forage intake and digestibility. Whereas, if forage supply is limiting, feeding an intermediate protein supplement (~20 to 25% crude protein) would be recommended. Since one would basically feed double the amount of such a supplement to provide equal amounts of supplement protein, the program would provide additional energy to meet forage deficits.

Another important factor to consider when evaluating supplement alternatives is the labor and transportation expenses associated with supplement feeding (frequency of supplementation). Numerous research studies have shown that supplementing cattle with high protein supplements (cottonseed meal) three times or once weekly usually gives similar performance compared to daily feeding. In contrast, low-protein grain-based supplements should be fed daily to reduce the disruption of ruminal function (due to starch) which results in decreased forage intake and digestibility. Research also suggest that grain-based supplements with intermediate protein levels (i.e. 20%) can be fed infrequently (3 times weekly) with little or only slight reductions in performance. Therefore, feeding supplements on alternate days or three times weekly (eliminate Sunday feeding) instead of daily is a common strategy to decrease cost of production.

In addition, the negative associative effects associated with feeding energy-based supplements should be minimized if the supplements are formulated with high-fiber ("digestible fiber") by-product feeds (wheat middlings, corn gluten feed, distiller's grains and soybean hulls) as compared to grains. Research has generally shown that supplementation with digestible fiber energy sources might still reduce forage intake. However, forage digestibility is generally not reduced with these type supplements due to their low starch content. In general, the data suggests that energy supplements (grain- or digestible fiber-based) with intermediate protein levels (~20%) should be fed daily if the supplementation rate is 1% of body weight or greater per feeding.

The winter supplementation program can be evaluated over the winter feeding period by monitoring cow body condition scores (BCS). Simply put, BCS estimates the energy status (fat cover) of cows. The scoring system used is a 1 to 9 point scale where a BCS 1 cow is extremely thin while a BCS 9 cow is extremely fat and obese. A BCS 5 cow is in average flesh or body condition. A change of 1 BCS is equivalent to about 90 lb of body weight. Research has shown that the BCS of beef cows at the time of calving has a huge impact on subsequent rebreeding performance. Mature cows should calve in a BCS of at least 5. Since 1st-calf-heifers have only reached about 85% of their mature weight after calving and require additional nutrients to support growth, it is recommended that they be fed so they are a BCS of 6 at calving.

Get on the waiting list for Cow Calf Bootcamp 2020!

Dana Zook, Area District Livestock Specialist

Happy New Year! I hope this article finds everyone well and at peace after the holidays. In this New Year, I want to bring your attention to an educational event that will be held in Northwest Oklahoma this spring. Cow Calf Boot Camp is a yearly "camp" that is offered as an all-encompassing three day educational opportunity for cow calf producers.

This unique educational opportunity is designed for both beginner and experienced producers who are interested about increasing their level of management and their bottom line. The three days are packed full of hands-on information dealing with nutrition, health, forage management, and economics of cow calf production. At the camp, participants can expect to work "hands on" with live cattle, solve management problems in small groups, and have ample opportunity for questions and discussion. Since 2011, 10 camps have been held and over 450 people have graduated. This camp is well-known nationwide as it is not uncommon for each camp to have a number of cattle producers from surrounding states.

This year's Cow Calf Boot will be hosted by the Alfalfa County Cooperative Extension office at the Alfalfa County Fairgrounds in Cherokee, Oklahoma April 15th-17th, 2020. In order to offer the best experience, we have limited the participation to 50 people at each camp. This gives participants the opportunity to work closely with some of Oklahoma's best livestock specialists and educators.

If this sounds like something you would be interested in, visit www.osucowcamp.okstate.edu and sign-up on the waiting list. Those on the waiting list will get first call via email for applications on January 13th. In the past, the 50 spots for the camp have been filled from the waiting list, so do not delay if you are interested. If you have any questions feel free to contact Dana Zook at dana.zook@okstate.edu or (580)-237-7677.

www.osucowcamp.okstate.edu

OSU Cow/Calf Boot Camp

April 15-17th, 2020

Registration for this camp will be sent to those producers who are on the waiting list in January 2020.

Visit website to get on the waiting list today!

Save the Date!

A new extension conference is on tap in Northwest Oklahoma

The Chisholm Trail Beef Improvement Conference will be held in Lawton on February 20th and Fairview on February 21st

This year's conference focus will be herd health and we have a great lineup of speakers scheduled.

We are working on the final details but promotional materials will be sent out in early January. If you would like more details in the meantime, contact Marty New or Dana Zook

Roping in the New Year

with the Northwest Area Specialists!

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