CFAES OHIO STATE UNIVERSITY EXTENSION

Morrow County SCARLET & GRAY News

Volume 15 Issue 2 • January/February 2019

It's Time to Re-Certify

It is that time of year again to renew your pesticide license and/or your fertilizer certificate. We will be holding two classes, one on **February 18th 2019 from 8:45 a.m. – 1:00 p.m.** and another on **March 13th 2019 from 5:15 p.m. – 9:30 p.m. You must arrive before the start of the meeting or you will not be allowed in the room.** Please call our office 419-947-1070 to reserve your spot today. If you cannot make it to one of these classes, please call us to find out where other classes will be offered.

The Pesticide and Fertilizer recertification meeting will be held at the Ag Credit Building in the 2nd floor conference room.

Please preregister for these certifications.

Pesticide Applicator Test Opportunity

If you know of someone who would like to obtain their Pesticide License, OSU Extension Morrow County has set up a testing date with the Ohio Department of Agriculture (ODA) for 2019 to allow private and commercial applicators to obtain a pesticide applicators license. ODA personnel administer the tests and all testing will take place at the AgCredit Building in the second floor conference room on March 14, 2019 @ 9:00 a.m. sharp.

There are a limited amount of spaces available for each testing session. Once the spaces are filled, the testing session is closed. Register to reserve a spot online at http://go.osu.edu/ODAexamregistration, or by phone to the ODA Pesticide Division at 614-728-6987, then press 1 for pesticide licensing.

Study materials for the private pesticide applicator test are available at the Morrow County Extension office.

OSU Extension - Morrow County Services

Did you know we are....

4-H Youth Development

Agriculture and Natural Resources

Master Gardener Volunteers

Family and Consumer Sciences

SNAP-Ed Nutrition Education

Services provided by your levy

Regarding the OSU Extension – Morrow County Renewal Levy

On November 6th, 2018 your OSU Extension – Morrow County Services Renewal Levy did not pass. It lost by 69 votes. Please look to 2019 for the renewal on the ballot again. We will keep you informed.

From the passage of the 2014 Levy for 5 years the office funding/collection of the 0.5 mil tax continues for 2019. Since the passing of the first levy in 2009, our goal was to have OSU Extension – Morrow County services be free or at a discount as compared to other county Extension offices and that will continue in 2019.

At this point, we have no intention of reducing programming and services to help you better your lives, businesses, and make our county great. Please, if you have any ideas or needs related to 4-H Youth Development, Agriculture and Natural Resources, or Family and Consumer Sciences contact our office or us individually.

And thank you to all our supporters and all who believe in this county service, all it does, and what it can do for future generations!

Current Resident or

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OHIO STATE UNIVERSITY EXTENSION MORROW COUNTY

5362 US Hwy. 42 • Suite 101 • Mt. Gilead, OH 43338
Phone: (419) 947-1070 Fax (419) 947-1071
Office Hours: Monday-Friday 8 am-12 noon, 1-4:30 pm
OSU Extension-Morrow County http://morrow.osu.edu
Like us on Facebook: Ohio State University Extension - Morrow County

OFFICE STAFF:
Becky Barker - 4-H Youth Development Educator (barker.157@osu.edu)
Amanda Forquer - 4-H Youth Development Educator (forquer.13@osu.edu)
Carri Jagger - Ag & Natural Resources Educator (jagger.6@osu.edu)
Candace Heer - Family & Consumer Sciences Educator (heer.7@osu.edu)
Liz Ufferman - Office Associate (ufferman.1@osu.edu)
Barb Hildebrand - Office Associate (hildebrand.2@osu.edu)

AGRICULTURE

Central Ohio Precision Ag Symposium

The Central Ohio Precision Ag Symposium will be held on Wednesday, January 16, 2019 at All Occasions Catering 6986 Waldo-Delaware Rd., Waldo Ohio from 9 a.m. to 4 p.m. This year's program will feature the most current technologies available in precision agriculture. These topics will be shared by some of the leading university and industry Precision Ag experts.

This year's program opens with a discussion regarding where we are in Precision Ag today – "The Adoption of Precision Ag Technologies" - Jack Zemlicka, Ag Division Content Director Lessiter Media and ends with a look into the crystal ball – "The Future of Precision Ag" – Dr. Scott Shearer, The Ohio State University.

Data management is a "hot "topic in today precision agriculture. Dr. John Fulton will share his insights on "Data Considerations in Today's Crop Production". You will learn about data security and who can/has access to your data at afternoon breakout sessions from Climate-Fieldview, Agleader–Agfinity, and My JohnDeere. Learn about the value of your data and opportunities for selling your data at one of the Farm Mobile breakout sessions.

Artificial intelligence is changing our industry. Tim Norris will discuss "AI" and share insights from Knox County's first autonomous tractor. "AI" will be part of several other afternoon breakout sessions as well. New datum changes are scheduled for 2022. Jeff Jalbrzikowski will explain how this change could potentially affect our current maps and GPS positioning files.

"To be the premier source of research-based information in the age of digital agriculture" is the vision of the Ohio State Digital Ag Program. Dr. Elizabeth Hawkins will discuss the nearly 100 OSU on-farm research trials conducted throughout Ohio in 2018. Everyone in attendance will receive a copy of the 2018 eFields Report.

Afternoon breakout sessions will include manufacturing and technology updates including how to get the most from your in-cab displays from John Deere, Case IH AFS, Precision Planting, Capstan, AGCO, New Holland and Soil Max.

$50 registration fee includes a buffet lunch, breaks and a notebook containing all presentations. Seating is limited, registration deadline is December 28, 2018.

This symposium will provide up to 11.5 Continuing Education Credits (CEU's) for Certified Crop Advisors, S&W - .5, I.P.M. - 5.5, C.M. - 5.5.

This program is sponsored by The Ohio State University Extension, AgInfoTech, Advantage Ag & Equipment, Ag Leader, B&B Farm Service, Beck's, Capstan, Centerra Co-op, Central Ohio Farmers Co-op, Channel, Clark Seeds, Climate Corp., Evolution Ag, Farm Credit Services, Farm Mobile, First Knox National Bank, JD Equipment, Ohio Ag Equipment, Precision Planting, Seed Consultants, Smart Ag and Soil-Max.

For more information or to download registration form, go to http://u.osu.edu/knox-countyag/2018/11/28/central-ohio-pre...ion-ag-symposium/ or https://knox.osu.edu/news/central-ohio-precision-ag-symposium or contact the OSU Extension Office in Knox County at 740-397-0401 or AgInfoTech 740-507-2503.

CFAES

OHIO STATE UNIVERSITY EXTENSION · MARION COUNTY

Lambing & Kidding School

Saturday, January 13, 2019

10:00 a.m. - 3:00 p.m.

Location:
Jeff Criswell Farm
2965 Keener Rd.
Marion, OH 43302

Cost: **FREE**

Join us for new proven barn ideas!

Contact Tim Barnes: 740-223-4041 or barnes.821@osu.edu
Reservations due by Jan. 9

Schedule:

10:00 a.m. Dr. Michelle "Mitch" Michalak, Maria Stein Animal Clinic:
"Obstetric & Care of Newborns" & "Flock/Herd Health"

11:30 a.m. Lunch by Marion County Sheep Improvement Association

12:30 p.m. Jacci Smith, Delaware County Extension Educator:
"Birthing Problem Simulator & New Technology for Your Farm"

1:30 p.m. Tim Barnes, Marion County Extension Educator:
"Artifical Rearing for Young Offspring"

2:00 p.m. Dallas Miller, Kalmbach Show Feed:
"Nutrition: Gestation, Nursing, Early Growth & Maintenance"

BEEF 509 set for February 16 & 22

Dates have been set for the 2019 edition of BEEF 509.

BEEF 509 will take 'awareness' and quality assurance to a whole new level for participants!

The BEEF 509 program is held to raise the awareness level about the beef that is produced and what goes into producing a high-quality and consistent product. The program will take place on two consecutive Saturdays, February 16 and 23, 2019.

The part of the program held on February 16 will include a live animal evaluation session and grid pricing discussion. Carcass grading and fabrication are among the activities that will take place February 23. The program will take place at The Ohio State University Animal Sciences building in Columbus. It will be critical to attend both sessions as participants will be assigned to teams that will work together throughout the program.

A maximum of 32 spaces will be available on a first come, first served basis. If interest in BEEF 509 exceeds the 32 spaces provided, names will be held and applicants notified of upcoming sessions. The registration fee for each BEEF 509 participant is $150, and may be completed on-line by following this link.

This program is the result of a partnership with the Ohio Beef Council, Ohio Cattlemen's Foundation, The Ohio State University Extension and The Ohio State University Department of Animal Sciences. These entities will be funding all remaining costs beyond the $150 individual registration fee that are associated with the BEEF 509 program.

Bed Bug Awareness

By Carri J. Jagger, Agriculture and Natural Resources Extension Educator, OSU Extension Morrow County

Bed bugs are something you should be very concerned about. If you think that you can't or won't get them, you are wrong. I get a call or actual bed bugs in my office for identification at least once a week. Bed Bugs are not something that should be taken lightly. I'm super paranoid about them and you should be also. According to Dayton Daily News Bed bugs are an epidemic in Ohio and the following cities rank in the top 50 for bed bugs. Columbus ranked Number 5 while Cincinnati landed at Number 8. The Cleveland-Akron-Canton metro area ranked 13th, and Dayton ranked Number 32.

According to the Ohio State University Extension Bed Bug resources page (u.osu.edu/bedbugs/). Bed bugs are small, blood-sucking insects that negatively impact public health and the well-being of all socioeconomic classes. Bed bugs are easily transported, and they have become a major problem over a relatively short period of time in diverse residential and commercial settings. If left untreated or improperly treated, bed bug populations rapidly increase and infestations can quickly spread to impact others.

Compared to other insects, bed bugs are more difficult and expensive to control. Bed bugs necessitate multiple integrated pest management (IPM) strategies that often require professional pest management services. However, in part due to the high cost of professional bed bug control, the public has increasingly turned to over-the-counter (OTC) chemical products as a low cost alternative for bed bugs. Public expectations of these products can range from total eradication to simple decontamination, yet the vast majority of OTC chemical products are contact toxicants that have negligible impacts on bed bug infestations.

If you would like more information about bed bugs you can visit u.osu.edu/bedbugs/ or call our office 419-947-1070 and I can you get you information.

AGRICULTURE

Rabies in Livestock

By Timothy McDermott DVM,
OSU Extension Educator, Franklin County
(originally published in Farm & Dairy)

Many diseases can affect animals on pasture. The most difficult ones to stay aware of are the diseases that are uncommon, where the producer or livestock may never encounter the disease. Many diseases that affect livestock have presentation forms that can mimic multiple other diseases that are more common, leading to a delay in veterinary care or producer awareness. One disease that can affect livestock that fits this description, but should stay firmly in a producer's awareness is rabies.

Rabies is an ancient disease caused by a virus. The Latin translation of rabies means, "To rave or rage". The virus spreads in its host in an unusual way compared to how most people think of viral spread. While many viruses spread through the bloodstream, enter via the respiratory tract or digestive tract by ingestion, rabies is a neurotropic virus, meaning it spread along the nerves in the nervous system. After an infected host bites an animal or human, the virus enters the wound via the contaminated saliva and starts to move along the nervous system towards the brain. Contact with infected saliva or tissue can transmit the disease in the absence of a bite if the skin is broken. Rabies has also been transmitted through tissue transplants of infected donor tissue in one documented case.

Animal species most commonly affected by rabies in Ohio include bats, raccoons, skunks, cats, dogs, horses and cattle, with the largest number of positive test results occurring in bats. Many other mammal species can contract rabies if exposed including fox, coyote, opossum, chipmunks and deer. The virus that causes rabies does not live long outside the host. It has persisted in the environment for thousands of years by living from animal to animal through transmission.

Grazing animals are naturally curious, often investigating a small mammal acting oddly in the pasture, instead of avoiding it as they would a predator or larger mammal such as a human. This behavior puts them at risk of a bite from a rabid animal such as a bat, skunk or raccoon. Common bite sites include the nose or legs. Once bitten there is an incubation period that can be extremely variable, lasting as short of a week but as long as months. Clinical signs usually start within a 3 week to 3-month period, depending on the location of the bite or viral entrance site.

While the commonly known presentation of rabies is the furious form secondary to central nervous system excitement, the list of potential clinical signs is vast. These signs include incoordination, difficulty swallowing, profuse salivation, restlessness, agitation, and partial or full paralysis. These signs can easily be mistaken for other more common problems such as choke, colic, nutritional disease, toxicity, or trauma. Rabies progresses to death in a species showing clinical signs.

Since 2010, the Ohio Department of Agriculture has confirmed case of rabies in bats, raccoons, skunks, dogs, cats and cattle in Ohio. What should a producer do to prevent exposure to this disease? First, when walking pasture or working animals around the barn, if a producer encounters an animal such as a raccoon or skunk, that is acting oddly, especially in daylight, avoid the animal at all costs. Exercise caution if the animal appears dead in case the animal is affected by the virus and paralyzed. Next, the producer should familiarize themselves with the signs of disease listed previously in this article. Contact a veterinarian immediately if rabies is suspected. Vaccines are available for most livestock and companion animal species. Vaccinate dogs and cats on the farm for rabies in every case and keep records of vaccine dates. Work with your veterinarian to develop a livestock vaccination protocol. Keep rabies on the list of diseases that while not common, can have devastating consequences if encountered.

Spring Garden Planning Vision Board Class

On March 30th from 10:00 a.m. – 1:00 p.m. join the Morrow County Master Gardener Volunteers for a fun filled day of planning your 2019 gardens. The Master Gardeners will be teaching about garden planning, layout and journaling as well as the importance of rotation and placement of certain plants. During the class you will get a poster board and will be able to use pictures to plan and create your 2019 garden. During the session Master Gardener Volunteers and Carri Jagger Extension Educator will be able to answer gardening questions you might have. Lunch will be provided. Please RSVP to the Extension Office @ 419-947-1070 by March 25th.

Is your 2018 hay crop trash or treasure? There's really only one way to know! Photo By: Brooke Beam, AgNR, Educator, Highland Co.

Hay Quality: Trash versus Treasure

By Christine Gelley,
Agriculture and Natural Resources Educator, OSU Extension Noble County
(originally published in The Ohio Farmer on-line)

That saying "one man's trash is another man's treasure" usually does not apply to hay, but with as difficult as haymaking was in Ohio this year, it may be true.

The "man" mentioned could be yourself in 2017 versus yourself in 2018. Based on what is available this year, you may be inclined to lower your standards of hay quality to make it through the winter.

But, how low is too low when it comes to hay quality? The answer depends on your class of livestock, their nutritional needs, and your access to supplemental feed.

Without knowing the actual nutritive value of the hay, all recommendations are relative and subject to error. The only way to confidently adjust your feeding program in relation to hay quality is to have hay analyzed by a laboratory.

Characteristics like hay color, scent, dustiness, and texture are all indicators of hay quality, but are not definitive. On the other hand, mold and poisonous weeds are indicators of poor quality and should be avoided if found in stored hay.

Whether you choose to buy hay or make it, having bales tested can save you time and money over the winter. Pay for a good test that tells you more than just crude protein. Levels of digestible fiber and net energy are important too.

Sample multiple bales from each cutting and sample cuttings separately from one another. First cutting bales should be tested separately from second cutting bales.

When you receive your test results back, work with a nutritionist at your feed mill, your veterinarian, and/or your county extension educator to formulate a feeding program based on what your hay can provide.

Depending on the price of local and regional grain commodities, you might find more value in supplemental feed than your hay supply.

Check the current market prices for hay that align with the quality of what you have and negotiate sale prices based on those two factors.

Once you have found hay worth feeding, one of the best ways to preserve your treasure is to store it out of the elements.

Moisture damage can turn that treasured hay into trash overtime. With that in mind, store bales on high ground, elevated off the soil surface if possible. Moisture can be wicked into the bale from the ground. Keep bales covered to prevent seepage into the bale from rain and snow. Air temperature and humidity will impact how significant damages can be.

Round bales stored outside should be oriented with the buff sides facing each other, with the line of bales proceeding north/south rather than east/west, and with three feet between rows. This will allow the bales to dry as fast as possible after a precipitation event.

Hay bale damage by the elements significantly increases the amount of hay waste you will have. On a five foot round bale, the outer four inches make up 25 percent of the total hay. Which means, if that four inches is wasted, you will need 25 percent more hay to feed your animals than you initially accounted for.

When buying hay, ask questions about storage. If the hay has not been tested, request a test. If it has been tested, ask to see the test results. If the test was done months before you are there to shop, it is likely that the nutritive value will not be as good as it once was.

Think of a hay test as an appraiser of valued items. It is the advisor you approach to learn the market value of your perceived treasure. Then, do your best to preserve its condition until you are ready to trade it in for a return on livestock performance.

For more information on topics such as, how to perform a forage test and interpret test results or the basics of making high quality hay, consult your local Extension office.

AGRICULTURE

2018 Ohio Corn Performance Test: Regional Overviews

In 2018, 192 corn hybrids representing 24 commercial brands were evaluated in the Ohio Corn Performance Test (OCPT). Four tests were established in the Southwestern/West Central/Central (SW/WC/C) region and three tests were established in the Northwestern (NW) and North Central/Northeastern (NC/NE) regions (for a total of ten test sites statewide). Hybrid entries in the regional tests were planted in either an early or a full season maturity trial. These test sites provided a range of growing conditions and production environments.

Growing conditions were very favorable for corn production across most of Ohio in 2018. The growing season was characterized by well above average rainfall and heat unit accumulation (growing degree-days). Precipitation and heat unit accumulation were generally greater at OCPT sites in the SW/WC/C region (with rainfall ranging from 23.3 to 26.3 inches and heat unit accumulation ranging from 3270 to 3520 GDDs) than at sites in the NW and NC/NE regions. Moreover, rainfall was generally well distributed at these sites. The impact of dry conditions in July and August on crop performance at the Van Wert and Hoytville sites in NW Ohio and the Wooster and Beloit sites in NE/NC Ohio were mitigated by timely rains in late August and September. Due to the warm, wet conditions, foliar diseases (primarily gray leaf spot) and ear rots (primarily Gibberella and Diplodia ear rots) were present at nearly all test sites. However, the disease severity was highly variable and it was usually most pronounced for a limited number of hybrids. The highest yielding sites were generally associated with foliar fungicide applications at tassel – the major exception being the test site at Bucyrus (the second highest yielding OCPT site in 2018) which exhibited little leaf disease or ear rot. Stalk lodging was evident mostly in the NW and NE/NC test sites but negligible for most of the hybrids evaluated. Warm temperatures in August through mid-October promoted crop maturation and dry down but persistent rains in September through November slowed harvest.

In 2018, USDA's National Agricultural Statistics Service estimates Ohio's corn yield at 193 bu/A, which would be 16 bu/A more than last year's and highest on record if realized. Yields at OCPT test sites paralleled the record yields reported across the state this year. Averaged across hybrid entries in the early and full season tests, yields were 273 bu/A in the Southwestern/West Central/Central region, 238 bu/A in the Northwestern region, and 242 bu/A in the North Central/Northeastern region. Yields at individual test sites, averaged across hybrid entries in the early and full season tests, ranged from 203 bu/A at Beloit to 285 bu/A at Greenville. Performance data for Upper Sandusky in the NW region is not presented because excessive rainfall shortly after planting created variable field conditions that resulted in erratic stands, uneven growth and inconsistent yields.

Tables 1 and 2 provide an overview of 2018 hybrid performance in the early maturity and full season hybrid trials by region. Averages for grain yield and other measures of agronomic performance are indicated for each region. In addition, the range in regional test site averages is shown in parentheses. Complete results are available online at: http://oardc.osu.edu/comtrials/. A bulletin containing the results, 2018 Ohio Corn Performance Test,is also published as an insert in Ohio's Country Journal.

As you review 2018 test results, it's important to keep the following in mind. Confidence in test results increases with the number of years and the number of locations in which the hybrid was tested. Avoid selecting a hybrid based on data from a single test site, especially if the site was characterized by abnormal growing conditions. Look for consistency in a hybrid's performance across a range of environmental conditions. Consider the table providing a "Combined regional summary of hybrid performance" which indicates the performance of hybrids common to nine statewide test sites and the six tests in western Ohio. Differences in grain moisture percentages among hybrids at harvest can provide a basis for comparing hybrid maturity. Yield, % stalk lodging, grain moisture, and other comparisons should be made between hybrids of similar maturity to determine those best adapted to your farm.

Table 1.
A regional overview of the early maturity 2018 Ohio Corn Performance Test.

Region	Entries	Grain Yield (Bu/A)	Moisture (%)	Lodging (%)	Emergence (%)	Final Stand (plants/A)	Test Wt. (lbs/bu)
SW/WC/C	69	269 (218-302)	16.9 (15.5-18.3)	2 (0-17)	96 (92-99)	33400 (27000-37100)	57.6 (54.2-59.8)
NW	59	235 (215-249)	17.0 (15.7-17.8)	3 (0-11)	94 (86-99)	32800 (25700-36800)	58.1 (55.6-60.7)
NE/NC	58	238 (218-256)	18.6 (17.5-19.9)	1 (0-7)	96 (86-99)	33100 (27100-37400)	57.2 (54.7-59.2)

Table 2.
A regional overview of the full season 2018 Ohio Corn Performance Test.

Region	Entries	Grain Yield (Bu/A)	Moisture (%)	Lodging (%)	Emergence (%)	Final Stand (plants/A)	Test Wt. (lbs/bu)
SW/WC/C	60	277 (254-294)	18.3 (16.3-21.0)	2 (0-9)	97 (89-99)	33900 (27100-37200)	57.7 (55.2-60.0)
NW	78	241 (220-256)	18.0 (16.7-19.5)	6 (0-38)	96 (89-98)	33400 (29800-35700)	58.0 (55.7-60.2)
NE/NC	62	245 (226-261)	20.2 (18.3-22.5)	2 (0-20)	97 (90-99)	33900 (27000-37200)	56.5 (53.7-58.7)

2019 Ohio Beef Cattle School Webinar

The 2019 Ohio Beef Cattle School Webinar will be held Tuesday, February 5, 2019 starting at 7:00 p.m. at the AgCredit Building in the 2nd floor conference room

The webinar agenda:

"Winter Management of the Cow Herd to Insure a Productive 2019"

* Introduction: Analyzing the Current Situation: What is the quality and quantity of your hay supply and what is the body condition of your herd?

* Nutritional requirements of the beef female for optimal performance from the last trimester through breeding season.

* Impacts of nutrition on heifer development and conception rates of heifers. Impacts of nutrition on days to return to estrus and conception rates of lactating females.

* Managing calf health born into stressful situations: Weak calves, importance of amount and timing of colostrum intake, colostrum replacers or supplements, suggested newborn treatments and vaccinations, etc.

Speakers will include OSU Animal Science Dept. Specialists and members of the OSU Extension Beef Team.

AGRICULTURE

Preparing for Winter

By Mike Metzger, Michigan State University Extension Educator

(Previously Published on the Michigan State University Extension page: November 15, 2017)

Most goats and sheep spend most of their time outside, but livestock that live outside may need special care when the winter weather sets in.

All animals need some kind of shelter even if it is only a windbreak. They need a place where they can get out of the wind. Shelter can include a building, a three-sided shed or even just a tree line. Ideally, goats and sheep should have access to some type of free choice shelter with a roof so they can get in out of the rain and snow. Michigan State University Extension reminds owners not to completely enclose an animal shelter. Proper ventilation is vital to avoid a buildup of ammonia from urine which can cause respiratory problems in goats and sheep. Sheep tend to handle cold weather and the elements much better than goats, but the exceptions to this are hair sheep or wool sheep that have been sheared late in the year.

Animals utilize more calories to maintain body temperature in cold weather to stay warm. Be sure that they have plenty of hay to eat, as the digestion of this hay in the rumen will help them create heat and stay warm. In very cold weather, you may need to supplement your animals' diets with some kind of concentrate – cracked corn, oats, sweet feed or a complete pelleted feed to add calories to their diet for the overall health of the animal, especially if they are pregnant. Goats and sheep that are giving birth in the cold weather require even more care. Animals should be checked at regular intervals. Newborns need to be dried quickly after birth in sub-freezing weather to prevent frostbite, especially to the ears. It is also important to get colostrum into these newborns as quickly as possible so that they have the calories they need to create body heat and survive. Extra bedding may also help during the cold months to keep young kids and lambs warm. Heat lamps should be used very carefully and sparingly and not within reach of any animals.

Access to fresh water is essential. As temperatures begin to drop, water troughs and buckets can freeze. Be sure to check all your animals' water at least twice a day as the temperature drops below freezing. Any time there is a layer of ice on top of the water trough, it needs to be broken so the animals can get to the fresh water. You may want to consider a submersible water heater to keep the water from freezing.

Help Lambs Beat the Winter Chill

By the Milk Products Team, Chilton, Wisconsin

(Previously published in Morning Ag Clips: November 5, 2018)

With winter here and lambing season near, below are a few quick tips on how to keep your lambs warm and healthy this winter.

Keep lambs growing in cold weather by managing environment, nutrition, and health.

As the temperature drops and snow starts falling, it is time to start thinking differently about how we care for lambs. For sheep raisers in cold climates, winter is a time to take special precautions to ensure lambs grow healthy and strong.

"Despite the lamb's built-in wool blanket, winter can be stressful for young sheep," says Julian (Skip) Olson, DVM, technical services manager for Milk Products. "Sheep are most comfortable at 45-70 degrees Fahrenheit. When temperatures dip below this level, we need to do everything we can to make sure lambs stay healthy and perform.

Here are five areas to consider as you prepare for winter's arrival:

Keep lambs out of cold, wet weather

"Adult sheep are capable of enduring the outdoors during the thick of winter, but lambs are not," explains Olson. "Young sheep need protection from the elements and bitterly cold temperatures."

House lambs in a well-ventilated structure free of direct drafts. Ventilation is important to keep lambs healthy and prevent illnesses like pneumonia. Fresh air reduces moisture, animal odor, and gasses that can cause respiratory problems by diluting the barn air contaminants. Consider opening windows, fans and inlets around the ceiling perimeter to allow fresh, cold air from the outside to mix with warm air before it reaches the lambs.

"Lambs are hardy animals that can tolerate cold temperatures if they have plenty of dry, clean bedding," says Olson. "A thick layer of sawdust or shavings beneath the bedding can provide an extra layer of insulation."

Provide nutrition to meet high requirements

"Nutritional requirements often increase during cold weather, especially if lambs become wet or are exposed to considerable wind," notes Olson. "Typically, in temperatures below 32 degrees Fahrenheit, lambs demand additional energy to maintain normal body temperature."

Quality nutrition is a must to meet the high energy requirements of growing lambs in winter. These energy demands begin on day one.

"Newborn lambs should receive colostrum, or a colostrum replacer specifically formulated for lambs, as soon after birth as possible," says Olson.

Between two and four days of age, switch to a lamb-specific milk replacer. Look for an all-milk protein formula containing at least 23% protein and 30% fat to provide your lambs with high energy to meet your performance goals.

"Depending on the lamb's age, you can supply more energy by adding in an additional feeding of milk replacer per day and by feeding grain or dry hay," says Olson.

To give lambs a boost, feed an electrolyte supplement that contains energy and amino acids to help replenish lost nutrients and fluids.

Watch for signs of hypothermia

"Hypothermia can set in quickly during windy and wet conditions, even in mild temperatures," warns Olson.

A lamb with hypothermia will appear weak, gaunt, or hunched up and have a cold mouth and ears. Use a rectal thermometer to check its temperature. "A temperature below 100 degrees Fahrenheit is considered hypothermic," says Olson. "Feed warm colostrum or milk replacer to increase a hypothermic lamb's body temperature." You can also warm lambs by placing them in a warming box until their temperature reaches 101 degrees Fahrenheit. A warming box is a confined space to keep lambs warm and dry – it can either be purchased or homemade. A homemade warming box can be as simple as hair dryers blowing into dog crates or an insulated cooler with hot water bottles. Warming boxes are designed to provide constant, gentle heat rather than direct heat, which can cause overheating or hyperthermia (above normal body temperature). Make sure to clean and sanitize the warming box regularly.

Don't forget the water

Sheep still need water even when the weather turns cold. Growing lambs drink about 1-2 gallons of water per day, and adult sheep require 3 gallons of water daily. "Provide lambs and expectant ewes with plenty of fresh, clean water," says Olson. "Eating snow or licking ice in winter is not a suitable substitute for water."

Consider installing a tank heater in your water source to prevent the water from freezing.

Offer a clean, dry place for lambing

If you practice late-winter lambing, house ewes in a space that provides newborn lambs with a good start to life.

"Keep ewes close to lambing indoors to ensure they give birth in a dry, clean and draft-free environment," recommends Olson.

Use warming lamps as an aid to dry off lambs. However, use lamps in moderation since overuse may lead to respiratory problems. Also, keep heat lamps away from hay, straw and excessive dust to help prevent fire.

Remember, sheep are most comfortable at 45-70 degrees Fahrenheit. Taking time to prepare for cold weather before it hits, will help your lambs stay healthy and keep growing during winter's chill.

Ohio Agricultural Law Blog—Understanding Ohio's Line Fence Laws

By Evin Bachelor, Law Fellow, Agricultural and Resource Law Program

Since significant changes were made to Ohio's Line Fence Law in 2008, landowners have contacted us with a variety of questions about how it works.

We have compiled many of the frequently asked questions in our new law bulletin, appropriately titled *Ohio's Line Fence Law: Frequently Asked Questions*. The law bulletin answers questions like:

- Who has to pay for a new line fence?
- Can I stop my neighbor from installing a new line fence?
- Who has to pay for maintenance and upkeep of a line fence?
- What is the role of the township trustees?
- What happens when my neighbor and I disagree?

The new law bulletin is available at https://farmoffice.osu.edu/sites/aglaw/files/site-library/Line%20Fence%20Law%20FAQs%20.pdf. Or stop by our office to get a copy of the law bulletin.

If you still have some questions about Ohio's line fence law, check out the Line Fence Law section of our Ag Law Library at https://farmoffice.osu.edu/our-library/lins-fence-law, including our more in-depth fact sheet and our explanation about line fence affidavits.

AGRICULTURE

2018 Forage and Cover Crop Performance Trials Available

By Mark Sulc, OSU Extension Forage Specialist and John McCormick, OSU Senior Research Associate

The 2018 Ohio Forage Performance Trials Report is available online at https://u.osu.edu/perf/. The report summarizes forage yield data collected from forage variety trials in Ohio during 2018, including commercial varieties of alfalfa planted from 2015 to 2017 (3 trials), annual ryegrass planted in September 2017 (1 trial) and cover crops planted in September 2017 (1 trial).

The trials summarize yield performance of 34 alfalfa varieties and 11 annual ryegrass varieties. The cover crop trial summarizes stand establishment and ground cover development in the fall after a mid-September seeding in 2017 and winter injury, ground cover and spring biomass production in the spring 2018 of 22 cover crop varieties including rape, turnip, annual ryegrass, radish, Balansa clover, winter pea, and hairy vetch.

2018 Ohio Soybean Performance Trials - All Yield Results Available

Yield results from all three regions (north, central, and south) are now available online as a pdf at: https://stepupsoy.osu.edu/soybean-production/variety-selection/ohio-soybean-performance-trial Grain quality results and sortable tables will be available in November.

Average yield for the Ohio Soybean Performance Trials by location and trial (early and late) for 2017 and 2018 is shown in the table below. Soybean yield in the north region (Henry and Sandusky County) was much greater in 2018 compared to 2017. (Yield from Henry County was not reported in 2017 due to extremely wet weather causing yield to be variable.) In the central region, soybeans in the early trial yielded greater in 2018 compared to 2018. However, in the late trial, soybean yield slightly decreased in 2018 compared to 2017. Yield in the south region was variable with Preble County yielding less in 2018 compared to 2017 while Clinton County yielded greater in 2018.

Fruit Tree Pruning Clinic

Steve Osborne at Osborne Orchard
Morrow County Master Gardener Volunteers

Join them for an educational afternoon of learning the proper techniques of fruit tree pruning. Discussion will include how and when to properly prune your fruit trees.

The clinic will be held outside at Osborne Orchard, so please dress accordingly.

When: Date to be determined. Please call our office in February for the date.

Where: Osborne Orchard, 6027 US Hwy 42 N, Mt. Gilead, OH 43338.

Contact information: Carri Jagger 419-947-1070 or Jagger.6@osu.edu

Good Agriculture Practices (GAPS) Training

Please call OSU Extension-Morrow County to sign up 419-947-1070

What: The OSU Fruit and Vegetable Safety Team educates growers of fresh produce about Good Agricultural Practices (GAPs). We strive to ensure a strong scientific basis behind the best practices taught and recommended by our team, provide helpful tools and resources to develop risk assessments and food safety plans for the farm, and promote high-quality, safe produce from Ohio growers.

Cost: $30

When: February 11th from 6:30 p.m. – 9:30 p.m.

Where: Ag. Credit Building, 5362 US Highway 42, Mt. Gilead, Ohio 43338, Second floor conference room

OSU EXTENSION CALENDAR OF EVENTS

JANUARY 2019

1 Office Closed – New Year's Day
2 Morrow County Cattlemen, 6:30 p.m., Ag Credit Building Conference Room
7 Jr. Fairboard, 7 p.m., Sr. Fairboard Office
7 Dairy Board Meeting, 12 noon, Ag Credit Building Conference Room
7 Farmer & Farmland Owner Income Tax Webinar 10 a.m.-1 p.m., Ag Credit Building Conference Room
10 Morrow County Pork Producers, 7 p.m., Ag Credit Building Conference Room
15 Ohio State Fair Market Beef DNA Packets Due To State Fair Office
17 Horse & Pony, Ag Credit Building Conference Room, 7:30 p.m.
19 Ohio Birds Youth Program, Morrow County Ext., 9 a.m.-12 noon, **See Page 8**
21 Martin Luther King Jr. Day, Office Closed
22 Livestock Sale Committee, 7 p.m., Ag Credit Building Conference Room
24 Sr. Fairboard, Fairgrounds
26 State 4-H Horse Advisor Update Meeting – Reg. due to State on January 15th
28 Jr. Leaders, Extension Office, 7-8 p.m.
28 4-H Advisor Kick Off Meetings
29 CARTEENS, 6:30 p.m., Ag Credit Building Conference Room
29 Walk With A DOC, Mt. Gilead Cherry Street Admin. Building, 12-1 p.m.

FEBRUARY 2019

2 Morrow County Cattlemen's Banquet, Mt. Gilead Park Avenue Elementary, 5:30 p.m.
4 Jr. Fairboard, 7 p.m., Sr. Fairboard Office
4 Morrow County Dairy Board, 12 p.m., Ag Credit Conference Room
6 State 4-H Conference Registration Due To Morrow County Extension Office
6 Morrow County Cattlemen, 6:30 p.m., Ag Credit Conference Room
7 4-H Advisor Kick Off Meetings
9 Morrow County Dairy Association Banquet, Handlebar Ranch
14 Morrow County Pork Producers, 7 p.m., Ag Credit Conference Room
12-13 Ohio Pork Congress, Columbus
18 Morrow County Pesticide & Fertilizer Recertification, 8:45 a.m. – 1 p.m., Ag Credit Building Conference Room
21 Horse & Pony, Ag Credit Building Conference Room, 7:30 p.m.
25 Jr. Leaders, Extension Office, 7-8 p.m.
26 Walk With A DOC, Mt. Gilead Cherry Street Admin. Building, 12-1 p.m.
28 Sr. Fairboard, Fairgrounds

MARCH 2019

3-9 Ohio 4-H Week
4 Morrow County Dairy Board, 12 noon, Ag Credit Conference Room
4 Jr. Fairboard, Sr. Fairboard Office, 7 p.m.
6 Morrow County Cattlemen, 6:30 p.m., Ag Credit Conference Room
9 Ohio 4-H Conference
13 Morrow County Pesticide & Fertilizer Recertification, 5:15 p.m –9:30 p.m., Ag Credit Building Conference Room
14 Pesticide Applicator Test – Ag Credit Building Conference Room, 9 a.m. SHARP
14 Morrow County Pork Producers, 7 p.m, Ag Credit Building Conference Room
15-17 Ohio Beef Expo
21 Horse & Pony, 7:30 p.m., Ag Credit Building Conference Room
26 CARTeens, 6:30 p.m. to 8:30 p.m., Extension Office Conference Room
26 Walk With A DOC, Mt. Gilead Cherry Street Admin. Building, 12-1 p.m.
28 Sr. Fairboard, Fairgrounds