



# Of Cows & Plows

## March 2010

### Winter School Continues...

### Metal Recycling

#### March 20-27

#### March 4<sup>th</sup>

• **Farm Ag Weather Services from the UK College of Agriculture with Tom Priddy, UK Meteorologist** – UK's weather site offers lots of weather data for farmers

#### March 11<sup>th</sup>

• **Beef Quality Assurance Certification with Keenan Bishop** - Required for many programs (CPH-45, C.A.I.P. cost share, etc.) Just a good idea period to learn proper techniques for livestock care. **\$5.00 fee.**

#### March 18<sup>th</sup>

• **Energy Efficiency in Homes with Robert Fehr, UK Biosystems and Ag Engineering**, - Good companion to last month's Alternative Energy talk.

#### March 25<sup>th</sup>

• **Organic Fruit and Vegetable Production and Research Reports with Delia Scott and Ben Abell, UK Horticulture**, - Good update on what's going on in the world of organics.

All classes start at 7:00 pm. Farmer's Bank of Frankfort and Farm Credit Services of Shelbyville graciously sponsor the refreshments for these functions. Be sure and thank them for their support! Hope to see you there!

In conjunction with Commonwealth Cleanup Week, the Franklin County Conservation District is once again holding their Scrap Metal and Appliance Recycling Drive.

Old fencing, sheet metal, farm equipment, etc can be disposed of by hauling it to Lakeview Park during daylight hours EXCEPT Sunday. The Conservation District has arranged for a licensed freon removal service, so they can accept old metal appliances at this location. They still will not be able to accept tires, batteries, paint, etc though. For more details, contact them directly at 695-5203 x 3. Conservation District members will be on site daily.



Remember that any profits from metal recycling that the FCCD receives go back into their programs, especially their scholarships!

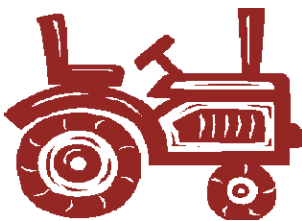
### Last Frost/Freeze?

Average last frost (36\*) is April 18<sup>th</sup> and the last freeze (32\*) is the 5<sup>th</sup> with the last hard freeze (28\*) March 27<sup>th</sup>. But records indicate these can sometimes occur a month later too though!

# Farm/City Banquet



The 52nd annual Whitaker Bank Farm / City Banquet is coming up Thursday April 29th. As always, there will be good food and fellowship! Details to follow in the next issue.



## Business Highlight:

### Spring Farm Filter Sale

Jim Payne, your friendly NAPA manager, wants to remind everyone of their annual Spring Filter Sale. All Gold Filters will be over 50% off during the sale starting March 8th and running until the 14<sup>th</sup>.

## Electronic Newsletter

.Would you rather receive the Cows & Plows on your computer and not in your mailbox? If so, send an email to Gil Thurman at [gil.thurman@uky.edu](mailto:gil.thurman@uky.edu) with the subject line "Cows & Plows".

Visit Our web Page

<http://ces.ca.uky.edu/franklin/>



## Saturday March 27

8:30 am— 3:00 pm

### Diamond Oaks Career Development Campus

6375 Harrison Ave  
Cincinnati, OH 45247

#### 8:30 Registration (with refreshments)

8:50 Welcome, Brian MacGowan, Purdue University

9:00 What is Our Score on Woodland and Wildlife Knowledge? , Doug McLaren, Extension Forester, UK, and Dr. Jeff Stringer, Professor, UK

9:40 Hazardous Algae Blooms: What you need to know Bill Lynch, Ohio State  
Tree Identification with Leaves Kathy Smith, Ohio State  
Bats: Not Just for Caves Anymore Marne Titchenell, Ohio State  
Tax Treatment of Timber Related Expenses and Income (2 sessions) Dr. William Hoover, Purdue

10:40 Nature Photography Dr. Tom Barnes, UK  
Winter Tree Identification Kathy Smith, Ohio State  
White-tailed Deer Management Brian MacGowan, Purdue

#### 11:40 Lunch and Exhibits

1:00 Warm Season Grass Establishment and Management Brian MacGowan, Purdue  
Certification and Carbon Credits Dr. Jeff Stringer, UK  
Managing For Reptiles & Amphibians Marne Titchenell, Ohio State  
Things to Consider before Selling Timber Dave Apsley, Ohio State

2:00 Invasive Plant ID and Management Matt Kraushar, Purdue University  
Silviculture – Making It Work in Small Woodlands Dr. Jeff Stringer, UK  
Who's Who in Raptors Bill Lynch, Ohio State  
Non-timber Forest Products Dr. Deborah Hill, UK

Register by March 18th (\$35)

After March 18th Registration is \$45

Last day to register is March 22nd

**Pre-Registration is Required**

# Botulism- The Deadly Toxin of Inadequate Fermentation

**Dr. Michele Bilderback, Extension Veterinarian, University of Kentucky**

A recent outbreak of botulism (“forage poisoning”) in Nelson County serves to remind us of the potential for deadly consequences from poor quality feed. In December 2009, round bale oatlage was fed to stocker calves that resulted in the deaths of 90 head. Samples of the rumen contents and the oatlage were sent to the Botulism Diagnostic Laboratory at the University of Pennsylvania where both tested positive for the *Clostridium botulinum* Type B spores and preformed toxin. Further analysis revealed a pH of 6.8 in the forage-the perfect environment for a disaster.

The cool, wet spring of 2009 prompted many producers in KY to wrap the first cutting of hay; essentially packing large round bales at high moisture content into individual plastic bags then sealing them to keep oxygen out. Forage cut at the correct stage of maturity, allowed to wilt then baled and wrapped at the proper moisture content will undergo fermentation, a process that drops the pH of the feed to a range where spoilage organisms will not grow. Problems arise when there is a lack of adequate fermentation to reach this low pH. This can occur most often with small grain (rye, oats, barley) haylage because fewer soluble sugars are available for completion of the fermentation process.

Botulism is caused by one of the most potent toxins known to man. This toxin is produced by *Clostridium botulinum*, a spore forming anaerobic Gram + rod. These spores are found in the soil and contaminate plant material during harvest. In the absence of oxygen and a pH greater than 4.5, the spores enter a vegetative state, multiply and

produce toxin. Two forms of the toxin, Types B and C, occur most frequently in KY cattle. Type B is associated with improperly fermented forage while Type C occurs from the accidental feeding of dead birds, dogs, cats or poultry litter contaminated with dead birds in the ration of cattle. Both types produce the same characteristic clinical picture in cattle including:

1. A large number of animals affected at once
2. Progressive muscle weakness leading to recumbency (downers) over a 2-5 day period of time, depending on the amount of toxin ingested. Signs may develop as early as 24 hours to as many as 10 days after ingesting the toxin
3. Decreased Tongue Tone-The “classic” feature of botulism. The tongue may actually hang from the side of the mouth as the disease progresses. Without tongue control, a cow will have other associated signs such as a dirty nose, difficulty chewing and swallowing, and plunging the nose deep in a watering trough to drink.
4. Constipation/Raising the tail while straining. Sometimes see colic (abdominal pain) and a “hunched up” appearance.
5. Death due to paralysis of muscles of the diaphragm.

Treatment consists of supportive care including administering fluids and propping cows up on their sternum. An equine and a bovine origin antitoxin is available but neither will reverse clinical signs already present. Generally, animals less severely affected that do not go down will survive. Dead animals must be disposed of properly (including rendering) as the meat is not safe for consumption.

Diagnosis is difficult and is usually based on history and clinical signs. Rumen contents,

feed samples, and blood can be analyzed for the toxin and can also be injected into mice and observed for death. Other possible causes of muscle weakness and downer cows include low blood levels of calcium, potassium or magnesium, ionophore toxicity (rumensin, lasalocid), organophosphate or carbamate insecticides, heavy metals such as lead, and infectious causes such as listeriosis or rabies. Your veterinarian is the best source of information to determine the cause of your problem.

In summary, because of the cool, wet spring and the potential for large numbers of deaths, it is advisable to test the pH of your small grain haylage to insure adequate fermentation. To do this samples can be submitted to a forage laboratory and a fermentation profile requested. This will often include a pH and volatile fatty acid profile. This is a common practice for corn silage and one should consider this with fermented forages of all types. According to Dr. Garry Lacefield (University of Kentucky Forage Specialist) ,there is no way to look at silage or haylage and tell if botulism is a problem. It can be off color and have a less than desirable smell and still be safe. However, anytime you open a bag and the feed is slimy, off color and sour smelling are strong indicators something has happened resulting in improper fermentation and possibly formation of the botulinum toxin.

***Dr. Michele Bilderback is our new Extension Veterinarian. She replaces Dr. Patty Scharko.***

## **pesticide Training**

*Need your restricted use pesticide card?*

*Category I Training dates are*

***March 11 @ 1:30 and April 8 @ 6:30 pm at the Anderson County Extension Office***

# **USDA FSA & NRCS**

## **Sign-Up Periods**

Rita Jones, USDA Farm Service Agency, wants to remind everybody about the **Noninsured Assistance Program (NAP)**. NAP helps producers reduce their risk when growing food and fiber crops, specialty crops, and crops for livestock feed. These benefits are only available for crops for which crop insurance is not available. Producers filing for coverage under the NAP are required to pay a \$250 service fee per crop per county not to exceed \$750 per producer per county or \$1,875 per producer in all counties. Remember that all crops on all farms in all counties must be insured to be eligible for the SURE Program.

The deadlines to file an application for natural disaster protection are March 1 (Alfalfa, Clover, Grass and Mixed Grass intended for grazing, hay, or seed) and March 15 (Beans, Beets, Broccoli, Cabbage, Canola (Spring), Cantaloupe, Carrots, Cauliflower, Corn, Cucumbers, Eggplant, Gourds, Herbs, Lettuce, Oats-hay, Oats-GR, Onions, Peas, Peppers, Potatoes, Pumpkins, Radish, Sorghum, Soybeans-hay, Soybeans-GR, Squash, Strawberries, Sunflowers, Sweet Potatoes, Tomatoes, Turnips, and Watermelons). For details about this program contact Rita Jones at the Versailles office at 1-888-229-9795.

Peggy Jackson, NRCS District Conservationist, reminds us that her office (103 Lakeview Court) is accepting applications for the **Grassland Reserve Program (GRP)**. Although GRP applications are continually accepted, the application ranking cutoff dates for 2010 are March 15 and June 1. Applications received

after June 1, 2010 will be deferred until the next ranking cycle.

The Grassland Reserve Program is a voluntary program offering landowners and operators the opportunity to protect grazing uses and related conservation values by conserving and restoring grassland resources. The focus of GRP in Kentucky will emphasize preservation of native and naturalized grasslands and protection of grazing operations with excellent land management practices.

All participants in GRP are required to implement a grazing management plan which will be developed in conjunction with NRCS. Eligible land for GRP includes grasslands for which grazing or haying is the predominant use, or land that has been historically dominated by grassland, forbs, or shrub land. Restoration for land enrolled in GRP has a maximum cost share rate of 50%. Additional program information is provided on the NRCS Kentucky Web page: <http://www.ky.nrcs.usda.gov/programs>. Scroll down to Grassland Reserve Program.

There's something for organic producers as well. Tom Perrin, State Conservationist for Natural Resources Conservation Service (NRCS) in Kentucky announces that \$775,000 is available for the **2010 National Organic Initiative** to encourage more organic agriculture production. Funding for the initiative is being made available as part of the **Environmental Quality Incentives Program (EQIP)**. Applications are being accepted until March 12, 2010. Applications received now through March 12, 2010 will be ranked according to the nationally established ranking criteria based on resource concerns linked to the National Organic Program (NOP) objectives and core conservation practices. Cost-share funding is available to certified organic growers and producers as well as those transitioning to organic production.

Interested producers should visit their USDA Service Center at 103 Lakeview Court to determine eligibility or contact Peggy Jackson, District Conservationist at 695-5203. For more information regarding the National Organic Initiative program, visit NRCS Web site at <http://www.nrcs.usda.gov/programs>.

## Nutrients Removed by Hay Crop

---- Approximate lbs per Acre Removed ----

Crop	Yield/A (T)	N	P2O5	K2O
Alfalfa :	5	255	68	245
Red Clover & Orchardgrass:	4	136	47	204
Tall Fescue, Orchardgrass & Timothy:	3	87	29	144

SOURCE: (AGR-62)

## Small Animal Swap Meet

*By Jackie Branham*

Spring is coming and the Swap Meets will be starting on March 27<sup>th</sup> at Lakeview Park. From then on they will be held on the fourth Saturday of every month through October (except June when it will be held the third Saturday).

The Bluegrass Poultry Association will also hold an auction during the April swap and the plan is to have more if it is a success. The auction will start at 11:00. One can sell by way of the auction, swap or both. The auctions have been very successful at other swaps.

The swaps start at 8:00 a.m. so don't be late and miss all the good stuff! Small animals (excluding poultry, rabbits and puppies) must have a current health certificate (30 days). All booth set up fees (\$5.00) go toward the purchase of show cages.

The final swap (October) is in conjunction with the Bluegrass Classic Poultry Show. Last year around 1,200 birds were exhibited. For more info visit [www.bluegrasspoultry.com](http://www.bluegrasspoultry.com)

## Forage Crop Planting Guide (AGR-18)

Crop	lbs/a*	depth	Seeding date
Alfalfa:			
	12-20	¼-1/2"	3/1-4-15
Bluegrass:			
	10	¼-1/2"	2/1-4/1
Alsike Clover:			
	4-6	¼"	2/1-4/1
Red:	8-12	¼"	2/1-4/1
Ladino:			
	1-3	¼"	2/1-4/15
Fescue:			
	10-15	¼-1/2"	2/1-4/15
Orchard grass:			
	10-15	¼-1/2"	2/1-4/15

\*When seeding in mixtures, reduce each by 1/3-2/3

## Bottle Feeding Kids

Terry K. Hutchens, Extension Goat Specialist, UK

1. Newborn kids needs to receive 10 -20% of its body weight in colostrum, preferably within 3-12 hours after birth.
2. After the initial amount of colostrum is fed, additional feeding should be withheld from newborns that are to be bottle-raised for as long as 5 hours.
3. Bottle feeding: feed 10-20% of their body weight in the form of good-quality milk replacer divided into 4 equal feedings.
4. By the third week switch to 2X daily feeding.
5. Creep feeding: Kids should have access to an extremely palatable dry feed. A mixture of corn, oats, alfalfa pellets, molasses and soybean meal that provides 14-16% CP works well. Topdressing the feed with dry milk replacer may stimulate intake. Other palatable ingredients suitable for young ruminants are soybean hulls and various sources of bran, including wheat bran.

*Composition of goat milk replacer on DM bases:  
Protein 25%, Carbohydrate 31%, Fat 34%, Total solids as fed 13%*

## ***KSU Third Thursday: Goats!***

March 18<sup>th</sup>, 10:00-3:00



The morning will cover goat herd health issues and composting of dead stock. They will discuss some basic farm biosecurity issues as well before lunch. The afternoon program will be a FAMACHA training program.

As always there is no charge for attending and lunch is provided. The program is open to the public and held at the Kentucky State University Research and Demonstration Farm at 1525 Mills Lane. For more information call 502-597-5094 or email [kenneth.andries@ksu.edu](mailto:kenneth.andries@ksu.edu).

## 2010 Sheep Activities at the UK Sheep Unit

March 30 <sup>th</sup>	Shearing School
April 6 <sup>th</sup>	Eweproof III School
May 20 <sup>th</sup>	41 <sup>st</sup> Annual Sheepprofit
June 9 <sup>th</sup>	Eweproof I School
October 5 <sup>th</sup>	Eweproof II School

All schools are at the Animal Research Center, 1171 Midway Road, Versailles. For more information contact Dr. Don Ely at 859-257-2717; email: [dely@uky.edu](mailto:dely@uky.edu).

*Keenan Bishop*

Keenan Bishop  
County Extension Agent for Agriculture and Natural Resources

## Return Service Requested

# CATTLEMEN'S MEETING

Tuesday, March 16<sup>th</sup> at the Franklin Co Extension Office

## Hay & Pasture: Renovation and Weed Control

Dow Chemical representative Jon Duran will discuss weed control options for pastures and haylands as well as sprayer tank cleaning. The Franklin County Conservation District will display their new Pasture Spray Rig and discuss rental and use of the unit. Southern States will have examples of tank cleaning solutions on hand as well as a special seed sale just in time for spring seeding!

Meal is sponsored by Southern States Cooperative  
Call 695-9035 to reserve a spot for the meal