A Word from the Agent…

This is a very exciting time for agriculture in Clark County. It seems as though every day I have been able to work with new or beginning farmers, or work with long time farmers that are interested in diversifying their farming operations. We now have farmers producing horticulture crops on a regular basis for the purpose of value added products, we have added several direct market meat producers, and we now have non-traditional grain crops such as blue corn, hops. And of course, we cannot forget about industrial hemp.

If you are looking to improve or diversify your farming operation, I hope you will contact us at the Clark County Extension Service for information that will help you in the process.

Sincerely,

David Davis
County Extension Agent for Agriculture and Natural Resources

Industrial Hemp Interest Meeting

It has been very challenging, but exciting to be involved with industrial hemp production. With little knowledge, this crop is being grown throughout Kentucky as part of the Kentucky Department of Agriculture Industrial Hemp Pilot Research Program. Producers, processors, and researchers are learning more about industrial hemp with each production season. They are identifying challenges to the industry related to producing and marketing the crop. Part of the excitement is that Industrial Hemp offers so many potential uses, and marketing avenues.

To legally produce industrial hemp, each farmer must be a cooperator in the Kentucky Department of Agriculture Industrial Hemp Research Program. Becoming a cooperator begins with the application process. Applications for the 2017 program should be available soon in October. For more information, visit the KDA Industrial Hemp Program website at:

http://www.kyagr.com/marketing/hemp-pilot.html

Clark, Bourbon, Fayette, Madison, and Powell County Cooperative Extension Service will be conducting an Industrial Hemp Interest Meeting on Thursday, October 13, starting at 7:00 pm at the Clark County Cooperative Extension Office. This meeting is open to any producer desiring to learn more about the requirements for producing industrial hemp in 2017. Industrial hemp processors from our area have also been invited to set up to meet with potential producers, and answer questions.

If you plan to attend, please contact the Clark County Cooperative Extension Service at (859) 744-4682.

Beef A. I. Class

Clark County Extension Service will be conducting a beef artificial insemination (A.I.) class November 1st and 2nd beginning at 6:00 pm at the Clark County Cooperative Extension Office. Dr. Les Anderson, UK Beef Extension Specialist will be presenting. Due to the time restraints, participation is limited to 10 participants. The cost for the class is $100. The first 10 participants to register will be admitted.

If you would like more information or to register, contact the Clark County Extension Office at (859) 744-4682.
If you are interested in beekeeping, make sure to join us on Monday, October 17, starting at 6:00 pm at the Clark County Extension Office. The Clark County Beekeeper Interest Group meets the third Monday of each month at the Clark County Extension Office. Anyone interested in beekeeping, learning more about honeybees, or protecting honeybees is welcome. You don’t have to own bees to attend! This month Curt White, a Clark County beekeeper, will be discussing taking hives from homes, buildings, and structures. He will discuss what he has learned through his experience.

Pre-registration is not required, but please do let us know that you plan to attend by contacting the Clark County Cooperative Extension Service by calling (859) 744-4682.

16th Kentucky Grazing Conference

The 16th Kentucky Grazing Conference will take place at The Center for Rural Development in Somerset on Wednesday, October 19. Registration will begin at 8:00 am and the program will conclude at 3:30 pm (EDT). The registration cost to attend the conference is $20 which covers the cost of the proceedings, meal, and refreshments.

The planned program agenda will include:

8:00 am  Registration, visit exhibits, Silent Auction
8:45 am  Welcome
9:00 am  Producer’s Guide to Pasture Based Beef Finishing
9:20 am  Marketing Grassfed Beef 101
9:40 am  Cutting Edge Grazing Research
10:00 am  Break
10:30 am  Farmer Success with NRCS Cost Share
10:45 am  Adaptive Grazing for Healthy Soil
11:15 am  Soil Health: Farmer Wealth
12:00 am  Discussion
12:15 am  Lunch and Awards
1:15 am  Silent Auction Results
1:30 am  Maximizing Sugar Concentration in Cool Season Grasses
1:50 am  Forage Spokesperson Contest

To find out more about this program or to access the online registration website, visit the Kentucky Forages website www.uky.edu/Ag/Forage/. If you have questions or would like additional assistance, contact us at the Clark County Extension Service at (859) 744-4682.

4-H Needs Your Support!

During this semi-annual event, you are invited to support 4-H by donating $1 at checkout at a Tractor Supply Company store to contribute to scholarships that send our kids to 4-H camp and other leadership experiences.
Be Aware of the Increased Risk of Prussic Acid Poisoning (Cyanide Poisoning) for Beef Cattle Consuming Johnsongrass

This year we have had an abundance of Johnsongrass along roads, state and county right-of-way, and in hay fields. I have had discussions with several farmers, some that have been farming in Clark County for a long time, and many say that they haven’t seen Johnsongrass to such a great extent in many years.

Along with sorghum-sudangrass, other forage sorghums, choke-cherry, wild cherry, elderberry, and arrow grass, Johnsongrass is one of the plant species that has the potential to result in Prussic Acid or Cyanide Poisoning when consumed by beef cattle or other ruminants.

These plant species contain compounds called “cyanogenic glycosides”. These compounds, and the enzymes that convert them to free cyanide are found in different locations of plant cells. When the plant cells are crushed, chewed, or otherwise ruptured, the cyanogenic compounds and enzymes can come together and rapidly form free cyanide. As beef cattle or other ruminants consume plant materials, hydrogen cyanide gas is released in the rumen, and rapidly absorbed in the blood stream. Beef cattle and other ruminants are also very susceptible to cyanide poisoning because the rumen microflora contain enzymes that, in the presence of water, are capable of converting cyanogenic glycosides in plants to free cyanide gas. Cyanide prevents hemoglobin in red blood cells from releasing its oxygen to the tissues and animals subsequently die from a lack of oxygen.

To minimize the risk of “Prussic Acid” or Cyanide Poisoning when feeding Beef Cattle or other ruminants keep these points in mind:

- Cattle and other ruminants grazing fields high in Johnsongrass, or the other species that are known to result in Cyanide Poisoning, are the most subject to poisoning when they are allowed to graze fields following a light or non-killing frost. Given the time of year, and the fact that the chances of a light frost are increasing as we continue throughout the fall, make sure to remove animals from fields when conditions are favorable for a light non-killing frost event. As a general rule of thumb, fields containing large amounts of Johnsongrass or other high risk forages should not be grazed within two weeks of a light frost.

- After a killing frost, allow the plant material to completely die down, dry and brown before turning animals in to graze. After a killing frost event, the cyanide toxin typically will dissipate with 72 hours.

- Cyanide gas volitilizes as the forage dries after a harvest. Cyanide poisoning is least likely to occur when cattle or ruminants are fed dry hay containing Johnsongrass or other susceptible forage species. When ensiling chopped forage or hay that contain species known to contain the cyanide producing compounds, delay feeding 6 to 8 weeks after ensiling is complete.

- Young plants, new shoots, and regrowth of plants after cutting often contain the highest levels of cyanogenic glycosides. Avoid feeding harvested forages that contain high amounts of young Johnsongrass, or sorghum species as green chop to cattle. Also, avoid grazing fields with young Johnsongrass shoots after harvesting until plants are at least 18-24 inches tall.

If you would like to learn more about the risk of Cyanide Poisoning in Ruminants consult the UK Publication ID-220 “Cyanide Poisoning in Ruminants. To obtain a copy of this publication, or to find out more about this topic, feel free to contact the Clark County Cooperative Extension Service by calling (859) 744-4682.
Fall Soil Testing

Fall is a great time to take soil samples! There are many benefits to soil testing that include avoiding unnecessary fertilizer expense, better estimating fertilizer application needs, and being able to apply the right fertilizers at the proper rates. Soil testing in the fall also has additional benefits that include avoiding the spring rush, better ability to adjust the soil pH in the “off season”, and the ability to fertilize at the recommended time. If a need for lime is indicated in the soil test, it takes 6 months to a year to receive the benefit of an application. Applying lime in the fall makes use of the “down time” to amend the soil pH.

Soil testing is FREE through the Clark County Cooperative Extension Service, and soil testing supplies are also available. You can pick up a soil probe, soil sample bags, or submit samples to the office Monday thru Friday from 8:00 am to 4:30

Pumpkin Apple Muffins

Preheat oven to 325°F. In a large bowl, combine flours, baking soda, salt and spices. In a small bowl, combine honey, eggs, pumpkin and oil; stir into dry ingredients just until moistened. Fold in apples. Fill greased paper lined muffin cups, two-thirds full. Bake for 25 to 30 minutes or until muffins test done. Cool for 10 minutes before removing from pan.

NOTE: Can substitute two cups granulated sugar for honey, decrease baking soda by ¼ teaspoon and increase oven temperature to 350°F.

Yield: 18 muffins

Nutritional Analysis: 200 calories, 7 g fat, 0.5 g saturated fat, 35 mg cholesterol, 160 mg sodium, 35 g carbohydrate, 2 g fiber, 20 g sugar, 3 g protein.
Industrial Hemp
Interest Meeting
Bourbon • Clark • Estill
Fayette • Madison • Powell

Thursday, October 13, 2016
7:00 pm
Clark County Cooperative Extension Service
(1400 Fortune Drive; Winchester, Kentucky)

TOPICS:
♦ Overview of KDA Industrial Hemp Research Program
♦ Signup Process for 2017 KDA Industrial Hemp Program
♦ Meet with Industrial Hemp Processors

If you plan to attend, please contact the Clark County Extension Service at (859) 744-4682.
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<tr>
<th>Time</th>
<th>Session</th>
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<tr>
<td>9:00</td>
<td><strong>Registration</strong></td>
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<td>Fayette County Extension Office, 1140 Red Mile Rd, Lexington</td>
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<td>10:00</td>
<td><strong>Presiding</strong></td>
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<td>Nick Carter, Fayette Co Agent, Ag &amp; Natural Resources</td>
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<td></td>
<td><strong>Welcome and Opening Comments</strong></td>
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<td>University of KY College of Agriculture, Food &amp; Environment</td>
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<td>Dr. Nancy Cox, Dean</td>
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<td><strong>Current Beef Cattle Situation</strong></td>
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<td>Troy Applehans, Analyst for Cattle-FAX</td>
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<td>11:00</td>
<td><strong>Mineral Supplementation</strong></td>
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<td>Dr. Michelle Arnold, UK Ruminant Extension Veterinarian</td>
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<td>11:30</td>
<td><strong>Profitability in Today’s Market</strong></td>
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<td>Dr. Kenny Burdine, UK Extension Livestock Economist</td>
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<td>12:15</td>
<td><strong>Lunch</strong></td>
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<td><strong>Proven Management Strategies for Current Market</strong></td>
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<td>Dr. Les Anderson, UK Extension Beef Specialist</td>
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<td><strong>Veterinary Feed Directive</strong></td>
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<td>Dr. Darrell Johnson, UK Regulatory Services Director</td>
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<td><strong>Marketing Strategies for 2016</strong></td>
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<td>Troy Applehans, Analyst for Cattle-FAX</td>
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<td>3:00</td>
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Contact your local County Extension Office for more details and registration information.