



Jenny Rees 1-5-2020

Winter programming is upon us and there's plenty of opportunities to attend meetings somewhere nearly every day! Below is more information regarding some January opportunities from Extension. Also, thank you to those who provided feedback to my end of the year survey! It really is short, so if you haven't provided feedback, please consider doing so at <https://slido.com> and enter the code 4EXT. It really helps me as we have to justify the ways that we serve our constituents in our annual reports. Thank you!

Crop Production Clinics (CPC) provide an opportunity for commercial, non-commercial, and private pesticide applicator recertification. CCA credits can also be obtained. Besides the 'traditional' track of insect, disease, and weed science information, topics at the York location (Holthus Convention Center) on Jan. 14 also include: farm bill info, financial considerations for 2020, extreme weather impacts on ag, cover crops and forage management, manure and other soil amendments, pivot performance, and sprinkler packages. Registration at: <https://agronomy.unl.edu/cpc>.

Nebraska Crop Management Clinic (NCCMC) at the Younes Convention Center in Kearney Jan. 22-23 expands the offerings of the CPC into a 2-day conference with additional outside speakers. Commercial, non-commercial, and private recertification training are options in addition to obtaining up to 14 CCA credits (over 2 days) and chemigation training. Registration at: <https://agronomy.unl.edu/nccmc>.

Good Farmer, Great Manager: I'm really excited to bring this program to the area! This program isn't about teaching specific tools like Quicken, Quickbooks, or others. It's about better understanding the true financial position of the farm. Keeping good records make it possible to track an operation's true financial position. Inaccurate records can lead to misguided management decisions. Tina Barrett, Executive Director of the Nebraska Farm Business Inc., will teach this class on Jan. 23 (1-5 p.m.) and 24 (8 a.m.-Noon) at the 4-H Building in York. It is required to attend both days, cost is \$50, and the class is limited to 25 participants. Topics include understanding what are good tax records, getting good tax records, moving to management records, and financial statements and ratios. You can register at: <https://wia.unl.edu/GFGM>. You can also hear Tina share more about this class at: <https://youtu.be/LaVZRPzG1HM>.

Weed Science School will be held at the Eastern Nebraska Research and Extension Center near Mead, starting at 8:30 a.m. and ending at 3.45 p.m. on January 29th. "Dr. Bryan Young, professor of weed science at the Purdue University is an invited speaker to present his research experience for dicamba off-target movement in soybean," said Amit Jhala, extension weed management specialist and program coordinator. Tim Creger, pesticide/fertilizer program manager with the Nebraska Department of Agriculture, will be discussing NDA's experience investigating dicamba complaints the last three years, including what evidence they look for, types of violations, and the regulatory action taken in response to violations. Additional topics include: Overview of Weed Control and Herbicide-Resistant

N EXTENSION

Weeds in Nebraska (Amit Jhala); Herbicide Discovery in an Era of Industry Acquisition and Merger (David Simpson, senior product development manager, Corteva); Corn Ear Formation Issues (Jenny Rees); Soybean Response to 2,4-D or Dicamba (Stevan Knezevic); Weed Identification (Ethann Barnes and Parminder Chahal Agronomy research assistant and associate); Managing Waterhemp (Chris Proctor, weed science extension educator); Nozzles, Nozzles: Selection and How to Use (Bob Klein, Extension western Nebraska crops specialist). There is no cost to attend; register at <https://agronomy.unl.edu/weedscienceschool>. Certified Crop Advisor (CCA) Continuing Education Units will be available.

N EXTENSION

Jenny Rees 1-12-2020

Great to see and meet so many at the York Ag Expo last week! And, to the 156 of you who attended pesticide training, thank you again for your kindness and grace with the packed room and overflow to the hallway. Sharing this week on February upcoming ag programs and adding the flyers to <https://jenreesources.com>.

Jan. 28th is the Farmers and Ranchers Cow-Calf College at the US Meat Animal Research Center near Clay Center. Registration begins at 9:30 a.m. with program beginning at 9:55 a.m. Topics include: Forage Sampling, Understanding Annual Cow Costs, Questions to Ask Your Vet before Calving Season, Blockchains: Connecting Consumers with their Food (IMI Global), and Alternative Meats and Alternative Statistics: What the data says. There is no charge and meal is provided. It's best to pre-register to save time and you can do so at <https://go.unl.edu/frcollegereg>. You can also RSVP at (402) 759-3712.

Feb. 4 is the Hamilton County Ag Day at the fairgrounds in Aurora (Reg. at 9 a.m. with program beginning at 9:30 a.m.). Attendance at this event qualifies for UBBNRD nitrogen management training. Many have asked about nitrogen research and this event is geared towards providing that. Topics include: In-season nitrogen application, management to reduce nitrate leaching, fertigation equipment & procedures for in-season management, crop nutrients from manure, cover crops and nitrogen management, optimum irrigation application, on-farm research for evaluating N management, land rental considerations for 2020, in addition to updates from Nebraska Corn and USDA. There is no charge.

Feb. 13 is the Nebraska Cover Crop Conference near Mead with registration beginning at 8:30 a.m. and program from 9 a.m.-3:30 p.m. This year's focus is on interseeding cover crops into corn/soybean. Loran Steinlage from Iowa will share what he's doing with 60" row spacings and keeping something growing in his fields 365 days of the year. Noah Seim from Merrick County (30" rows for a few years) and Jay Goertzen from York County (36" rows for 1 year) both have interseeding projects with Nebraska on-farm research and will share their experiences. Additional Topics/Speakers include: Finding the right fit with cover crops (Abbey Wick from NDSU), Selling cover crop seed in Nebraska (Steve Knox with Nebraska Crop Improvement), Accelerating soil health adoption by quantifying economic and environmental outcomes (Brian Brandt, Ohio), Review of cover crop demonstrations in the Central Platte NRD (Dean Krull), Cover crops by helicopter: FAQ (Brent Wulf, Hexagon Helicopters, Inc.), and Soil Health (Aaron Hird, NRCS). There is no charge for this event including meal and it's a large event. Registration is required by Feb. 7. More info. and register at: <https://extension.unl.edu/statewide/enre/nebraska-cover-crop-conference/> or 402-624-8030.

Nebraska On-Farm Research Updates: Believing in the value of on-farm research, these are among my favorite meetings each year! These meetings give you an opportunity to hear from your peers regarding research they're trying in cooperation with Nebraska Extension. We often wouldn't have research on topics many of you ask me about if it wasn't for our on-farm

N EXTENSION

research cooperators, so I'm grateful to them! Dates include: Feb. 18 at Holiday Inn Express in Beatrice, Feb. 19 near Mead at ENREC, Feb. 20 in Norfolk at the Extension Office, Feb. 26 in Kearney at the Extension Office, and Feb. 28 in York at the Holthus Convention Center. The Feb. 28 meeting in York will be unique focusing only on cover crop and soil health research and that meeting also qualifies for UBBNRD nitrogen management training. Each meeting runs from 9 a.m.-4 p.m. (registration at 8:30 a.m.). Meal is included and there's no cost thanks to our partnerships with Nebraska Corn, Soybean, and Dry Bean Boards and Growers' Associations. Please pre-register at least 2 days in advance for meal planning purposes to: onfarm@unl.edu or 402-624-8030.

This week was asked to share on these additional Jan./Feb. meeting opportunities. Also, **Please Save Feb. 3** for the York County Corn Growers Tour! I'm working on the tour details-will share next week.

A few times a month, I receive questions about hops or hemp. For those interested in hops, the Nebraska Brewer's Conference will be Jan. 27-28 at the Younes Convention Center in Kearney. You can learn more details here: www.growbrewnebraska.com.

Merrick Co. Ag Day is Jan. 28 at the Fairgrounds in Central City. Topics include weed control in prevent plant acres, farm bill, pivot wheel track management, understanding the hydrogeology of wells in Central Nebraska, groundwater protection/water quality sampling and testing, and domestic/farm level water treatment equipment. There is no charge and please RSVP for meal to 308-946-3843.

72nd Annual York-Hamilton Cattlemen's Banquet will be Jan. 28 at the Holthus Convention Center in York beginning with social at 6:30 p.m. and prime rib meal at 7 p.m. Entertainment will be Jay Hendren, a farmer from Ohio. Hendren uses his experiences in farming to tickle the funny bones of audience members of all walks of life. Hendren has entertained groups across the country from banquets and conventions to comedy clubs. Tickets are \$25 per person. Sponsorships are also available that include two banquet tickets and recognition at the banquet for \$150. Cattlemen's Banquet tickets can be purchased from any of the York-Hamilton County Cattlemen's Directors including Brian Blase of Hordville; Brock Ekhoft and Terry Ross of Aurora; Jeff Underwood of Exeter; Allen Klute and Mark Klute of Hampton; David McDonald of Phillips, Jeff Meradith, Kim Regier and Josh Chrisman of York; Kim Siebert of Henderson, plus the UNL Extension Offices in York County and Hamilton Counties.

Lambing and Kidding School Jan. 25: The closest location to this area will be in Broken Bow at the Fairgrounds. Registration begins at 10 a.m. Topics include: Keeping ewes healthy through disease control and treatment (Dr. Brian Vander Ley DVM, Great Plains Educational Center); Economical feeding programs for the doe (Dr. Steve Hart, Goat Extension Specialist OK); Economical feeding programs for the ewe (Dr. Ivan Rush, sheep producer, Scottsbluff); Treating chilled newborns, tubing lambs/kids/Q&A session (local veterinarians). The program is followed by a hands-on tour to Beth & Hannah Smith's Farm 44306 Road 786 Broken Bow. More info and pre-register at: ne.sheep.goat@gmail.com or 308-386-8378.

2020 Sorghum Symposium will be held at the NE College of Technical Ag in Curtis on Jan. 30th. I don't have details regarding the time, but program highlights include: weather (Al Dutcher); sorghum production and management (Dr. Brent Bean, Agronomist); D.C./Farm Bill Update (Jerad Reimers, Office of Congressman Smith); grain sorghum variety performance in 15" and 30" rows (Strahinja Stepanovic, UNL);

sorghum TAPS program panel; how to win an argument without arguing via social media (Nate Blum). The annual meeting will follow the program and several vendors will be present. There's no charge but please RSVP for meal count to sorghum.board@nebraska.gov or 402-471-4276.

Annie's Inspired: Feb. 3rd from 6-8 p.m. is the next Annie's Inspired Workshop for women involved with agriculture. It will be held at the Library in David City. Glennis McClure will cover Farm/Ranch budgets and financials. These workshops include a light supper, plenty of networking time and hands-on learning. Cost is \$5 to cover supper. Please RSVP to 402-367-7410 or 402-362-5508 if you're interested in attending!



Jenny Rees January 27, 2020

Corn Quality Concerns: The two main questions I've received: "Are you hearing others mentioning low/variable test weights on corn?" and "Are you hearing of loads being rejected (to ethanol plants) due to mycotoxins?" While I'm unsure how widespread this is, I have been receiving these questions. A reminder to check your grain quality if you haven't already been hauling or checking it.

Test Weight is a volumetric measurement (weight of corn grain per unit of volume), and as such, doesn't directly correlate with yield. Standard corn test weight is 56 lbs/bu (1 bushel is 1.24 cubic feet). The size, shape, slipperiness of surface, and density of the kernel impacts test weight. Hybrids can show differences in test weight. Test weight is different than kernel weight, and thus not directly correlated with yield. Test weight gets at how tightly packed the starch is within the kernel. Reducing kernel moisture can allow for increased test weight if the starch loses water allowing for it to be packed more tightly within that kernel. Dry kernels that slide past each other may pack better allowing for increased test weight.

Lower test weights can result with disease, insect, and environmental stresses that impact photosynthesis and the movement of nutrients to the kernel during grain fill. These can include foliar and stalk diseases, drought stress, lack of nutrients, freeze prior to physiological maturity, late planting, and below normal temps during grain fill. Rewetting of kernels in the ear can impact test weight as kernels can swell and not shrink back to the same shape as previously. We know that moisture events happened after physiological maturity causing some sprouting of kernels in some ears prior to harvest. We did have high foliar disease pressure this year and reduced stalk quality. Compromised integrity of the kernel due to insect, disease, and mechanical damage can also impact test weight. I didn't see the amount of kernel damage as I did in 2018. But there are certain hybrids that are high yielding and widely planted that I tend to see starburst patterns on kernels (due to Fusarium) and shortened husks exposing ear tips to more insect damage/ear molds. There are also hybrids that had a large amount of top dieback, husk tissue that turned brown early, or refuge in a bag plants that died early in fields. All of these may be factors potentially impacting test weight as well. Thinking about photosynthesis, we had reduced solar radiation during grain fill. I can't help but think that could also impact it but didn't easily find research that correlates solar radiation to test weight. There's research correlating solar radiation to yield and kernel weight, though.



Regarding vomitoxin levels, the starburst patterns on kernels, insect damage leading to ear molds, wet corn not properly dried or cooled in bins can all impact greater Fusarium growth and the potential for vomitoxin to be produced. If vomitoxin (also called DON) is an issue, concentrations can triple in the ethanol process of producing the distiller's grains. Hogs and poultry are more sensitive than cattle, so the end user may be a factor in addition to the vomitoxin levels. I don't know the levels being rejected so I can't speak more to this.

York County Corn Grower Tour: Corn growers and spouses are welcome to join us February 3 for a tour of ag industries in the Lincoln area. We will meet at the York Co. Extension Office at 7 a.m. and will carpool leaving at 7:15. Our first stop will be RealmFive which focuses on wireless connectivity for ag operations. We will then tour Smart Chicken in Waverly which offers retail- and foodservice-packaged organic chickens and antibiotic-free chickens from Kansas, Iowa and Nebraska. Lunch at Lazlos is next followed by learning about the UNL hops program and research using corn gluten meal and soybean meal. Possibly another stop on way home. Please RSVP to me at jrees2@unl.edu if you're interested in attending by Feb. 2nd. Hope to have a good group who can join us! Flyer at jenreesources.com.