Yield Monitor Calibration Will Be Challenging This Year in Some Indiana Fields

Understand this one simple fact about yield monitors: They do not measure yield. How’s that for an opening statement?

What I want you to understand is that yield monitors ESTIMATE yield by converting electrical signals received from a mass impact or optical sensor in the clean grain elevator into ESTIMATES of grain flow (lbs.) per second or two of travel time. Along with ESTIMATES of distance traveled (usually based on DGPS positions), header width, and ESTIMATES of grain moisture content...the yield monitor’s firmware/software then CALCULATES “dry” grain yield per acre at a moisture content of your choice that are logged every second or two in the display’s memory or uploaded by cellular connection to a Cloud-based Web server.

Yield monitor calibration involves a series of steps to ensure that the ESTIMATION of each of these factors is accurate. One of those steps involves the harvesting of calibration "loads" of grain that are used to “teach” the yield monitor’s “black box” how to accurately convert the electrical signals from the sensors into ESTIMATES of grain flow rates. The calibration "loads" should be harvested in such a way as to mimic the range of grain flow rates (i.e., the range of yield) you expect to encounter when harvesting a field. Ideally, each calibration load is calibrated at a different, but uniform grain flow rate. Some folks harvest strips at different speeds to accomplish this. Some folks harvest strips of varying widths (full header, 3/4 header, 1/2 header, etc.). In our field-scale nitrogen research trials where we have a wide range of N rate strips, our calibration loads typically come from 5 to 6 different N treatment rates because that often gives us a wide range of grain flow rates.

The challenge this year in accurately calibrating grain flow estimates of yield monitors will be in those fields that suffered extensive damage from excessive rainfall early in the season. Yield will vary dramatically throughout such fields, maybe as great as 200 bushels per acre. It will be difficult to harvest calibration loads at uniform grain flow rates to obtain an accurate range of grain flow rates for yield monitor calibration. Similarly, grain moisture will vary dramatically within some fields where crop development was seriously delayed due to saturated soils or where areas were replanted. Combine moisture sensors can usually be adjusted to accurately estimate grain moisture content within a narrow range of moisture. However, it is my experience that moisture estimates become less accurate when the combine encounters hybrids or areas of fields with significantly different grain moistures. Inaccuracies in grain moisture estimates influence the accuracies of “dry” yield grain by the display.

The bottom line is that extra care and attention to details will be important when calibrating yield monitors this fall. Dig out that users guide for your yield monitor system NOW. Before the end of summer, devote some quality time to reading the sections on yield monitor calibration. Familiarize yourself with all aspects of yield monitor calibration. Attend a yield monitor workshop. Create your own checklist of calibration steps and follow them faithfully every time you calibrate the monitor. Do not forget the little things like vibration settings, header height stops, offset of the DGPS antenna, etc. Recognize that accurate weighing devices (grain carts, weigh wagons, farm scales) and moisture meters are crucial for the calibration of the monitor’s wet weight estimates and adjusting the combine’s moisture sensor readings.

And remember the old adage about computers… Garbage in equals garbage out.

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How to Write a Nutrient Management Plan

When: Tuesday, Sep. 29, 2015 - 9:30 a.m. to 3:00 p.m.
Where: University of Maryland Wye Research & Education Center, 124 Wye Narrows Dr., Queenstown, MD 21658

Participants will learn how to write a nutrient management plan from beginning to end and how to use the nutrient management planning software, NuMan Pro. Participants will not come out of this training with a finished nutrient management plan; rather, they’ll have a better understanding of the plan development process and inputs needed to create a plan. This program will award 6 Maryland Nutrient Management continuing education credits. This is intended for newly certified nutrient management consultants.

Cost: $20 ~ Contact Phone: 410-841-5959
SEPTEMBER 2015:

01 - **Timely Ag Issues, 7:30 a.m.**, Tilghman Terrace, Centreville, MD. $2/person: coffee, donuts, etc.

01 - Dec. 15: **UME General Forestry Course**. Register at [http://extension.umd.edu/forestry-course](http://extension.umd.edu/forestry-course) Call 410-827-8056 x-107, nstewart1@umd.edu.

09 - **Late Summer Horticultural Crops Educational Twilight Tour**, 6:00-8:00 p.m., Wye Research & Ed Center, Queenstown, MD. See page 3.

09 - **Kent County To Start A Beekeeping Association**, 6:30 p.m., Kent Co. Public Library, Chestertown, MD. Free and open to the public. Register/questions: Dick Crane: 410-507-9539; rcranes4@gmail.com.

09 - **Fall & Early Winter Gardening Using Cold Frames**, 1:00-2:00 p.m., Delaware Cooperative Extension Master Gardener Workshops, Delaware State Outreach & Research Center, 884 Smyrna-Leipsic Rd., Smyrna, DE. FREE. Call 302-730-4000 to register.

09 - **Women In Ag Webinar: How To Create A Word Press Blog**, 12:00 Noon. Register by visiting: [http://www.eventbrite.com/e/wednesday-webinars-registration-11452674257](http://www.eventbrite.com/e/wednesday-webinars-registration-11452674257) FREE.

10 - **2015 Crop Insurance Workshop**, all day event. FREE. Location to be announced. Sponsored by UME, Ag & Resource Economics Dept. Contact Howard Leathers at howard1@umd.edu.

10 - **Timely Ag Issues, 7:30 a.m.**, Tilghman Terrace, Centreville, MD. $2/person: coffee, donuts, etc.

12 - **Seed Saving Workshop With Sabine Harvey**, 6:00 p.m., Kent County Public Library, Chestertown, MD. Call 410-778-1661 for more information. Free and open to all.

16 - **New Grower Training**, 8:30 a.m. to 3:00 p.m., 8320 Detour Road, Williams Building, Denton, MD 21629. See details page 4.

16 - **MAEF Scholarship Golf Tournament**, Oakmont Green Golf Course, 2290 Golfview Lane, Hampstead, MD. For more info and to register, go to [www.maeefonline.com/golf](http://www.maeefonline.com/golf) or call 410-939-9030.

23 - **Women In Ag Webinar: Agvocacy, 12:00 Noon.** We need positive voices to tell our ag story. Learn how to effectively communicate and “agvocate” in this arena. FREE! Register by visiting: [http://www.eventbrite.com/e/wednesday-webinars-registration-11452674257](http://www.eventbrite.com/e/wednesday-webinars-registration-11452674257).

23 - **The Result of Composting is “BLACK GOLD”, 1:00-2:00 p.m.**, Delaware Cooperative Extension Master Gardener Workshops, U.D. Paradee Center. FREE. Contact 302-730-4000 to register.

29 - **Timely Ag Issues, 7:30 a.m.**, Tilghman Terrace, Centreville, MD. $2/person: coffee, donuts, etc.

29 - **How To Write a Nutrient Management Plan, 9:30 a.m. to 3:00 p.m.**, WREC, Queenstown, MD. Call 410-841-5959.

30 - **Poultry Grower's Disease Control Workshop: Keeping Disease Off of the Poultry Farm. 10 a.m. - Noon, Pocomoke City, MD; 2-4 p.m., Bridgeville, DE; 6-8 p.m. - Ruthsburg Community Club, Queen Anne, MD. Register on line, [Click here](http://www.eventbrite.com/e/wednesday-webinars-registration-11452674257).**

OCTOBER 2015:

03 - **Food Preservation Class**, 9:00 a.m. - 5:30 p.m. Caroline County 4-H Park, Denton, MD. Register by Sept. 25. Call 410-479-4030. See p.3.

5&6 - **Beef Production & Marketing Workshop for Advanced Grazers, 10:00 a.m. - 3:00 p.m.** both days. See page 6.

12-14- **National Meeting On Poultry Health, Processing and Live Production, Ocean City, MD.** To register, call Bill Satterfield, 302-856-9037.

13 - **Timely Ag Issues, 7:30 a.m.**, Tilghman Terrace, Centreville, MD. $2/person: coffee, donuts, etc.

14 - **Food Business Risk Management Class, UME Washington County 9:15 a.m. - 3:30 p.m.** See page 5.

15 - **The Old Fashioned Garden, 1:00-2:30 p.m., Delaware CES Master Gardener Workshops, U.D. Paradee Center. FREE. Call 302-730-4000 to register.**

22 - **Sheep & Goat Clinic, 6:30 p.m., Kingstown Farm Home & Garden store, 7121 Church Hill Road, Chestertown, MD. RSVP 410-778-1551.**

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**Lawn Fertilizer Blackout Dates Begin November 15 for Homeowners; December 1 for Lawn Care Pros**

The Maryland Department of Agriculture (MDA) reminds citizens that November 15 is the last day they may fertilize lawns under Maryland’s Lawn Fertilizer Law. Lawn care professionals have until December 1, provided they use specially formulated products that reduce the risk of nutrient runoff into streams, rivers and the Chesapeake Bay. Both citizens and lawn care pros may resume lawn fertilizer applications of nitrogen and phosphorus on March 1, as long as the ground is not frozen or heavy rain is not predicted.

For more tips and information on Maryland’s Lawn Fertilizer Law, visit the University of Maryland’s Home and Garden Information Center website at [http://mda.maryland.gov/Pages/fertilizer.aspx](http://mda.maryland.gov/Pages/fertilizer.aspx)

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**BEEKEEPER SERVICES**

Having trouble with honey bee swarms, yellow jacket nests, hornet nests? Call your local Extension Office for a list of MDA-provided names and phone numbers of those who will collect the swarms/nests.

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**Gardening Questions? Pest Problems? The Home and Garden Information Center can help!**

Visit the HGIC website at: [http://extension.umd.edu/hgic](http://extension.umd.edu/hgic)
FOOD PRESERVATION CLASS

The University of Maryland Extension office in Caroline County is offering a hands-on food preservation class on October 3, 2015 at the Caroline County 4-H Park in Denton from 9:00 a.m. to 5:30 p.m.

The morning class will focus on water bath techniques and the afternoon class will be Pressure Canning. A Fall harvest lunch will be included. Cost of the class is $30 and includes a copy of USDA approved “So Easy to Preserve” book, along with handouts and materials for a hands-on canning activity. Take home 2 jars of produce at the end of the class!

Space is limited so pre-registration is required. Please register by September 25, 2015. Please call 410-479-4030 for a registration form or for more information, contact Dr. Melissa Welsh at drmwelsh@umd.edu.

LATE SUMMER HORTICULTURAL CROPS EDUCATIONAL TWILIGHT TOUR

September 9, 2015
6:00 - 8:00 p.m.
Wye Research and Education Center in Queenstown, MD.

Our program will begin at 6:00 p.m. and will include presentations and a tour, focusing on the following: Management of insect populations; sweet corn “BT” technology; food production safety; Asian pear variety trial; and pumpkin variety/fungicide spray trial.

NO CHARGE
A light meal will be available.
RSVP BY SEPTEMBER 4!

Program Highlights:
- Hear the latest from Cerruti Hooks, of the Department of Entomology, about his work using companion crops in vegetable production for the management of insect populations.
- Listen to Galen Dively and new crops entomologist Kelly Hamby give an update on the latest Sweet corn “BT” technology.
- Learn about Shirley Micallef of the Department of Plant Science and Landscape Architecture & Center for Food Safety and Security's work with food production safety.
- Get Chris Walsh's overview of the results of the regional Asian pear variety trial - what's good and what's not.
- Walk the pumpkin variety/fungicide spray trial with 10 varieties to see and hear what Kate Everts, Extension Specialist in Plant Pathology, and Jerry Brust, State Vegetable Specialist, have to say about the challenges of growing this year.

Please RSVP by September 4 to Debby Dant, ddant@umd.edu, 410-827-8056 X115. For program information contact Michael Newell, mnewell@umd.edu, 410-827-7388.
New Grower Training Poultry Farm Management for New & Existing Growers

Wednesday, September 16, 2015
8:30a.m. to 3:00 p.m.
Denton, Maryland
(Caroline County 4-H & Youth Park, 8320 Detour Road, Williams Building, Denton, MD 21629)

The University of Maryland Extension has created a one-day workshop for new poultry farmers on Delmarva focusing on poultry farm management and will be held Wednesday, September 16, 2015. With today’s environment, it is important to learn about the many changing aspects of poultry management.

The topics that will be addressed are: farm management, site management and maintenance, best management practices, mortality, manure handling, litter management, windbreaks/vegetative environmental buffers, financial/recordkeeping, concentrated animal feeding operation regulations, nutrient management, comprehensive nutrient management plans, inspection and emergency preparedness. We will also share all the information to take back to the farm for future reference. A certificate of completion will be awarded to each participant.

Registration cost of $30 includes a continental breakfast, lunch, and materials.

Please register by Friday, September 11, by contacting: Sheila Oscar at 410-741-1178 or soscar@umd.edu (link sends e-mail) OR Shelia Shorter at 410-758-0166 or sshorter@umd.edu (link sends e-mail).

Contacts: Jon Moyle, Poultry Specialist, 410-742-1178 x309, imoyle@umd.edu (link sends e-mail) or Jenny Rhodes, Extension Educator, 410-758-0166, jrhodes@umd.edu (link sends e-mail)

This workshop is open to all. **If you need special assistance, please register and let us know two weeks before the date.

See more at: http://extension.umd.edu/news/events

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SHEEP & GOAT CLINIC

SHEEP & GOAT CLINIC
OCTOBER 22ND

Goat & Sheep Care, Medical Issues – Nutrition & More will be discussed.

Thinking of getting a small ruminant, or already have a few and want to learn more? This is the event for you. Speakers include Dr. Sarah Mainardi, VMD from Chestertown Animal Hospital and Brian McAlister from Purina Mills.

Milk – Meat – Wool – 4-H – or Homesteader, this clinic has something for you!
Thursday October 22nd, 6:30 p.m. at Kingstown Farm Home and Garden store, 7121 Church Hill Rd., Chestertown, MD. RSVP 410-778-1551.

Refreshments will be served and you may even see some sheep and goat products to sample!!

Clinic Sponsored in partnership by: CHESTERTOWN ANIMAL HOSPITAL

KINGSTOWN FARM HOME & GARDEN
University of Maryland & Penn State Extension to Offer Food Business Risk Management Class

Because consumers have grown more concerned about how their food was grown and processed, every food business owner (and every farmer who is selling products directly to the public) needs to understand the ways that he or she can lessen the liability associated with placing food products in the marketplace. To respond to this need, Penn State Extension, in collaboration with the Maryland Rural Enterprise Development Center and University of Maryland Extension, is offering a one-day class, Managing Risk for Food Businesses, at the University of Maryland Extension, Washington County Office, 7303 Sharpsburg Pike, Boonsboro, MD 21713 on Wed., Oct. 14, 2015.

The primary instructor will be Winfred McGee, Penn State Business Management Educator. The session will run from 9:15 a.m. to 3:30 p.m., and will combine educational presentations, discussions with successful food entrepreneurs, and a highly interactive learning environment, to address the following topics:

- Good Agricultural Practices (GAP)/ Good Handling Practices - general procedures that producers and packers of farm-fresh products should follow to ensure food safety of their product—especially for products sold to large, national customers.
- Hazard Analysis Critical Control Point (HACCP) Planning - Steps or procedures to eliminate or reduce hazards associated with food production – learning what the producer or his/her co-packer should monitor for food safety.
- Liability Insurance - The amount of coverage that is warranted and what purpose it will serve in protecting farm assets—learning from the experiences of those well and poorly insured in case studies.
- Allergen Warnings - Complying with FDA regulations that food labels must state clearly if food products contain any ingredients that contain protein derived from the eight major allergenic foods.
- Pro-active Recall Processes: Coding batches, keeping accurate records so the entire product line need not be recalled in an emergency.

REGISTRATION
Registration for Managing Risk for Food Businesses, is $40.00 (includes lunch and all handouts). To pay by credit card go to: https://mrfb.eventbrite.com To register by mail and pay by check go to: https://extension.umd.edu/sites/default/files/docs/events/MRFB_MailinRegistration_2.pdf Mail your check payable to University of Maryland with registration form to: Susan Barnes, University of Maryland Extension, 18330 Keedysville Road, Keedysville, Maryland 21756-1104. Registration deadline: Tuesday, October 6, 2015.

For more information, please contact Ginger Myers at (301)432-2767 x338 or e-mail gsmyers@umd.edu. Funding for this project was provided by the Northeast Center for Risk Management Education, the USDA National Institute of Food and Agriculture, and North East Sustainable Agriculture Research and Education. The Pennsylvania State University is an equal opportunity employer.

Poultry Grower’s Disease Control Workshop: Keeping Disease Off of the Poultry Farm

Wednesday, Sep. 30, 2015 (All day) 3 different locations throughout the day. (See below)

Organization/Sponsor:
University of Delaware Cooperative Extension, Maryland Dept. of Ag, Delaware Dept. of Ag, Delmarva Poultry Industry, Inc. Please note: this program was offered in Princess Anne, MD, Georgetown, DE and Harrington, DE on June 11, 2015. You may only receive nutrient management credits for attending this program ONCE.

- 10:00 a.m. – 12:00 noon: Elks Lodge #1624, 1944 Worcester Hwy., Pocomoke City, MD
- 2:00 p.m. – 4:00 p.m.: Bridgeville Fire Hall, 311 Market St., Bridgeville, DE
- 6:00 p.m. – 8:00 p.m.: Ruthsburg Community Club, 105 Damsontown Rd., Queen Anne, MD

Topics Include:
Avian Influenza Outbreaks in Commercial Poultry in the U.S., Dr. David Shapiro, Veterinarian, Perdue Farms
Practical Biosecurity Best Management Practices for Broiler Growers
Dr. Jon Moyle, Extension Specialist, University of Maryland Extension
Ms. Jenny Rhodes, Ag Extension Educator, University of Maryland Extension
Mr. Bill Brown, Poultry Extension Agent, University of Delaware Cooperative Extension

Avian Flu Response and Control Plan on Delmarva, Dr. Don Ritter, Veterinarian, Mountaire Farms

Two DE & MD Nutrient Management Credits Available ~ REGISTRATION DEADLINE is September 25, 2015

Please register online by visiting: http://extension.udel.edu/blog/keeping-disease-off-poultry-farms/ When registering, please be sure to choose the location of the workshop you would like to attend. For more information contact Lisa Collins at lcollins@udel.edu (link sends e-mail) or call (302) 856-2585 x702. Event is hosted by University of Delaware Cooperative Extension and University of Maryland Extension, in cooperation with Delmarva Poultry Industry, Inc., Delaware Department of Agriculture and Maryland Department of Agriculture.

2-Day, On-Farm, Grass-Fed Beef Production & Marketing Workshop for Advanced Grazers

The demand for grass-fed and finished beef from consumers and food service providers continues to outpace supply. Maryland’s grass-fed beef producers who are trying to meet that demand and looking to programs should plan to attend a two-day, on-farm workshop to learn how to move their production and profits forward. A workshop designed for experienced grazers will be held at Peace Hollow Farm, Myron and Janet Martin, 2148 Rohrersville Rd., Knoxville, MD 21758, Monday, October 5, 2015, Tuesday, October 6, 2015, with the program running 10:00 AM – 3:00 PM both days. Pre-registration is required.

Featured speakers include:

Forrest Pritchard - Spring Meadow Farm, a seventh generation farmer and New York Times bestselling author.
Ray Archuleta - Conservation Agronomist at the NRCS East National Technology Center, in Greensboro, North Carolina.
Ed Rayburn - Forage Extension Specialist, West Virginia University
Jeff Semler - University of Maryland Extension Educator

Workshop topics include:

- The key elements needed to produce high-quality pasture-finished meats
- Understanding practices to improve pasture soil health
- How to design efficient paddock and watering systems layout
- How to select animals to get the best genetics for grass-finsishing
- A description of the various marketing options, and requirements (permits, etc.) to meet for different marketing systems

There is a registration fee of $30 for one day or $50 for both days for this event. This fee covers lunch both days and handout materials. Make check payable to: University of Maryland

Registration Deadline: Friday, September 25, 2015

To register, or for more information, contact the Western Maryland Research and Education Center by phone at 301-432-2767. COMPLETE AND MAIL REGISTRATION BELOW TO: Western Maryland Research and Education Center, Attn: Ginger Myers, 18330 Keedysville Rd., Keedysville, MD 21756

Name: ________________________________
Address: ________________________________
City: __________________ State: ____________ Zip: ____________
No. Attending: _______ Monday _______ Tuesday
Telephone: __________________________ E-mail Address: __________________________