

Unit 1



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ILLINOIS EXTENSION
COLLEGE OF AGRICULTURAL, CONSUMER
& ENVIRONMENTAL SCIENCES

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February 2020



Winter Program Calendar

FEBRUARY

2/18 Private Pesticide Applicator Test Only

10 a.m. Freeport (p. 6)

2/20 Certified Livestock Manager Training

9 a.m. Freeport (p. 7)

2/20 Private Pesticide Applicator Test Only

10 a.m. Elizabeth (p. 6)

2/20 Soil & Water Webinar

9 a.m. Rockford, Freeport, and Elizabeth (p. 3)

2/24 Stateline Fruit and Vegetable Conference

Rockford (p. 5)

2/26 US Crop Market Outlook

Freeport (p. 2)

March

3/6 2020 Northwest Illinois Grazing Conference

Elizabeth (p. 1)

3/7 Gardening for Food, Flowers, and Fun

Rockford (visit website for details)

3/10 Private Applicator Training and Testing

Rockford (p. 6)

3/14 Tri-State Forestry Conference

Freeport, (p. 2)

3/21 Spring Break Gardening

Elizabeth (visit website for details)

3/24 Industrial Hemp Production Conference

8:30 a.m. Freeport, IL (P. 2)



For more information:

go.illinois.edu/jsw

2020 Northwest Illinois Grazing Conference

The 2020 Northwest Illinois Grazing Conference is scheduled for Friday, March 6, 2020 in Elizabeth, IL. Plan to join the University of Illinois Extension for this annual conference from 9:30 a.m. to 3:30 p.m. at the Elizabeth Community Building, HWY 20 W. Elizabeth, IL. To register for the 2020 Northwest Illinois Grazing Conference, call the Jo Daviess County Extension Office at (815) 858-2273 or visit us online at go.illinois.edu/jsw. Registration fee is \$20 before February 21, \$25 after February 21, or \$30 the day of the conference. The fee will include some handouts and lunch.

The theme for this year's conference is *"Understanding the Value of Pasture and Forages"*.

Presenters at the event will include Larry Tranel, ISU Extension Dairy Field Specialist, Phil Cardoso, Illinois Extension Dairy Specialist, Laura Lant, Midwest Grass and Forage, Jay Solomon, Illinois Extension Energy and Environmental Stewardship Educator, and Philip Alberti, Illinois Extension Commercial Ag Educator.

Dr. Larry Tranel will present on the topics of Analyzing Profit Centers of Profitable Graziers and Let's Better Manage Our Farm Stress. Phil Cardoso will be speaking on Making the Most of Stored Feeds: How Fungicides and Cutting Height Effect Quality. Laura Lant will be speaking on Renovating vs. Inter-seeding, Jay Solomon will discuss Grazing Management, and Phillip Alberti will share insights on Fertility Needs and Recommendations on forage acres.

For more information visit our website at go.illinois.edu/jsw.

2nd Annual Industrial Hemp Production Workshop Planned

The signing of the Illinois hemp bill has provided opportunities for the cultivation, distribution, and processing of hemp for fiber, grain, and CBD. This versatile cash crop has the potential to empower small farmers, but is not without its own set of challenges regarding planting methods, fertility, harvesting, storage and extraction. To help give some perspective on the lessons learned from the 2019 growing season, University of Illinois Extension will be hosting its 2nd annual “Industrial Hemp Production Workshop” at Highland Community College’s Student Conference Center on March 24th, 2020. The workshop will begin at 8:30 and run until 3 p.m.

“We learned a lot this year, but I am not sure that anyone was truly ready for the challenges associated with growing hemp,” Extension Educator Phillip Alberti said. “We are a long way from giving research-based recommendations to our growers on how to grow hemp, start to finish. But what we can do is bring together those who have faced these challenges head on and share their experiences while research programs are developed.”

The “Industrial Hemp Production Workshop” will host a wide range of presenters who are involved in the industry, discussing topics such as production challenges, variety selection, greenhouse/indoor propagation, seeding methods, extraction, insurance, and marketing.

Those interested in viewing a complete agenda or attending the workshop may register online at go.illinois.edu/jsw or by calling the University of Illinois Extension-Stephenson County at 815-235-4125.

The cost of the program is \$25, which includes light refreshments and lunch. Pre-registrations are encouraged due to limited seating.



Register on-line go.illinois.edu/jsw

US Crop Market Outlook

The University of Illinois Extension will be hosting a program titled: *U.S. Crop Market Outlook* where Todd Hubbs, Clinical Assistant Professor at the University of Illinois will discuss the fundamental drivers of supply and demand for corn, soybean, and wheat markets over the upcoming marketing year. A detailed discussion of topics provides a clearer picture of the impact on market fundamentals and prices. The implications for marketing year average prices as well as the likely pattern of prices over the next year will be discussed.

U. S. Crop Market Outlook will be held on Wednesday, February 26 from 10 a.m. to noon at the Highland Community College Student Conference Center, room 210, 2998 W. Pearl City Road, Freeport, use parking lot A. To register, call the University of Illinois Extension at (815) 235-4125 or visit us on-line at: go.illinois.edu/jsw.

Tri-State Forest Stewardship Conference

Join us for the 25th annual Tri-State Forest Stewardship Conference to be held on Saturday, March 14 at Highland Community College in Freeport, IL. This annual event is hosted by University of Illinois Extension and Iowa State University Extension. The day will feature presentations focused on wildlife, forestry and conservation. The speakers are experts from across the mid-west.

The Tri-State Forest Stewardship Conference will begin at 8 a.m. with registrations and viewing of exhibits. The conference presentations will begin at 9 a.m. and conclude at 4 p.m. Pre-registration is required and can be completed on-line at go.illinois.edu/forestcon. Registration is \$40 and is limited to the first 300 participants. In addition, conference flyers and speaker bios can be found on the registration page.

Agronomy Summit Provides Updates in Pest and Nutrient Management

On January 14th, University of Illinois Extension hosted its annual “Northwest Illinois Agronomy Summit” at Highland Community College in Freeport. The theme for this year’s conference was “Updates in Nutrient and Pest Management” and hosted specialists from University of Illinois and University of Wisconsin-Madison to discuss strategies for weed, pest, disease, and nutrient management. This event, which brought together producers, agriculture students, and agribusiness professionals acted as a forum for attendees to learn about the most up to date research pertaining to agricultural production in the region. All of the presentations are available to access in PDF form here:



go.illinois.edu/AgSummit

Topics addressed at the summit included many hot button issues we have been hearing more about over the last few years including waterhemp, tar spot, and nutrient management. For example, due to the dramatic increase in incidence and severity of water hemp across the state, Dr. Rodrigo Werle, Weed Scientist from the University of Wisconsin Madison discussed strategies for controlling this problematic weed. In addition, Daniel Smith, Nutrient and Pest Management Specialist at the University of Wisconsin-Madison will discussed nutrient management in a challenging year and how these decisions impact future growing seasons.

In addition, University of Illinois specialists Nathan Kleczewski and Nick Seiter discussed some of the results of the applied research report titled “2019 Applied Research Results: Field Crop Disease and Insect Management.” The report serves as a one-stop shop for relevant applied research and includes evaluations of plant varieties, management practices, and insecticide/fungicide applications on corn and soybean. The report is currently

available online here:

go.illinois.edu/AppliedResearch.

“These reports are very useful to our educators and to our producers,” Extension Educator Phillip Alberti said. “They provide local, relevant information and if I get a question about fungicide or insecticide efficacy, this is the first place I am going to look, and I hope others do to.”



go.illinois.edu/AppliedResearch

Soil and Water Webinar

Soil and water interactions will be the focus of a Soil and Water Management Webinar sponsored by University of Illinois Extension on February 20, 2020. The workshop will be held at multiple University of Illinois Extension offices throughout Illinois. Locally, the University of Illinois Extension in Jo Daviess, Stephenson and Winnebago Counties will be hosting the Soil and Water Webinar at EACH of their office locations. Presentations will be delivered via PowerPoint and web conferencing from 9 a.m. to 2 p.m. and lunch will be provided.

Those attending will hear about the latest information on extreme weather and potential soil impacts from Illinois State Climatologist Trent Ford, controlled CRP burns and soil quality from Western Illinois University biologist Dr. Sean Jenkins, and irrigation water use reporting from Illinois State Water Survey hydrologist Steve Wilson. Other presenters are Dr. Kapil Arora from Iowa State University who will discuss in field drainage management using control structures, and Extension Commercial Ag Educator Nathan Johanning to talk on field research on cover crops and soil quality. Certified Crop Advisors will receive 4.5 continuing education units in Soil and Water Management by attending this seminar.

Registration is \$45 per person, which includes lunch. Registration can be completed on-line at go.illinois.edu/jsw.

Applied Research Report: Crop Disease and Insect Management in Northwest Illinois

The 2018 and 2019 growing seasons have been a challenge for our producers in northern Illinois to say the least. Cold, wet springs prevented us from getting the crop in the ground, and extensive late-season rainfall delayed us in getting it out. As a result of these abnormal growing conditions, a wide array of issues have popped up to cause problems for producers. Producers had to deal with nutrient deficiencies as well as a variety of insect pests and disease issues in both corn and soybean. In response to production issues such as this, researchers from the University of Illinois have published the “2019 Applied Research Results: Field Crop Disease and Insect Management,” which is currently available online here:

go.illinois.edu/AppliedResearch

The report serves as a one-stop shop for relevant applied research and includes evaluations of plant varieties, management practices, and insecticide/fungicide applications on corn and soybean. As Dr. Nathan Kleczewski, Extension Field Crop Pathologist with the University of Illinois says “It’s not just diseases; it’s weather, production, and insects. In the future, we hope it can continue to expand to include other areas and crops.” Co-author on the report Nick Seiter, Extension Field Crop Entomologist, exhibited similar enthusiasm over the report, “With these field experiments, we continue to monitor trait and insecticide performance for rootworm control every year to document resistance development and provide efficacy comparisons to our clientele. Our hope is that producers will be able to use this guide to inform their decisions on insect control.”

Researchers and producers continue to react to what mother nature throws our way, continually attempting to find cost-effective methods to reduce disease and insect impact. Despite the development of traits and seed treatments to battle these diseases, responses to these

products are quite variable. “Having this data published annually and stored for posterity is extremely important. You might forget that a year was particularly wet or dry, and that is why certain diseases were problematic or non-issues,” Kleczewski said.

This report is of interest to growers in Northwest Illinois as it contains results from university experiments which were conducted locally, at Highland Community College’s research farm in Freeport. “Every year has its own set of challenges, but it feels like we have had a little bit of everything the last few years” Commercial Agriculture Educator Phillip Alberti said. Tar spot, for example, exhibited a dramatic increase in incidence and severity across the state in 2018 only to be relatively absent the following year due to dry conditions during the middle of the summer. Tar spot, caused by the fungal pathogen *Phyllachora maydis*, is an emerging disease in Northern Illinois. Tar spot symptoms are quite distinct, with infection resulting in small, raised, black spots (ranging from circular to oval) on infected host tissue. The dark spots that form are called ascomata, which contain fungal spores that spread through wind storms and rain splash. The spots are surrounded by a tan or brown halo and may appear on both sides of the leaves, leaf sheaths, and husk; these spots can be found on both healthy and dying tissue.

Although diseases in soybeans were not a major issue in 2019, soybean cyst nematode was still present in most fields to some degree according to the first state-wide nematode survey in nearly a decade. Nematodes are microscopic, soil-borne worms which live in the soil and are quietly responsible for yield losses up to 20% in corn and soybeans. Nematodes feed on plant roots using a piercing mouthpart which can also provide a pathway for root pathogens; pythium, rhizoctonia, and phytophthora in soybean, for example. While soybean cyst nematode (SCN) is often the most talked about, corn nematodes are quickly becoming an area of interest. Nematode damage is often overlooked in fields

because the damage they cause is easily confused with other stress factors such as drought and nutrient deficiencies.

“In this year’s soybean nematode survey, we saw that soybean cyst nematode is really starting to adapt to the commonly used PI88788 source of resistance. This means that this nematode is not being controlled as efficiently as it was in the past. This first year of data really shows that producers need to be monitoring their fields for this nematode to ensure that their yields are not being impacted. Often you don’t see the damage caused, and fields suffer ‘hidden’ yield losses. Routine sampling and implementation of integrated management practices can help keep this pathogen in check. We will be doing more surveys this spring, as the wet and cold end to the season prevented us from sampling in a significant portion of the state,” Kleczewski says.

Nematodes are found in nearly every field, but often not at damaging levels; these fields may experience yield losses of up to 10 bushels and not even know it. Despite the introduction of control methods, repeated use of resistant varieties and nematicides has led to the development of tolerant nematode populations making treatment options less effective. Nowadays, a single control option such as using resistant varieties will not work like it used to; a multifaceted approach which uses crop rotation, resistant varieties, and nematicides may be required to keep populations at a manageable level. There are over 50 known species of nematodes which feed on corn in the U.S., with a wide range of adaptations to soil textures, climatic factors, and production systems. However, not all nematodes are created equal as some can cause significantly more damage than others. It is for this reason that determining the type and number of nematodes present in IL is a crucial component in the development of control options.

Kleczewski notes the report also includes information on management practices that didn’t work. “In applied research, the lack of an

effect of a management practice is just as important as if a practice has an effect. Why? Because management costs money and we want our producers to be as profitable as possible. If something doesn’t work, we want that information out there just as much as if something works,” he says. The emergence of new diseases is nothing new, but this has led to many questions about a disease we are unfamiliar with and producers can combat it. “This is where these reports can become extremely valuable at the local level. If I get a call from a producer asking about control options for various diseases, this is where I am going to get my information every year. It is a great resource and I applaud those who have worked so hard to get this information to us.” Alberti said.

Stateline Fruit and Vegetable Growers Conference

University of Illinois Extension announces the *24th-Annual Stateline Fruit and Vegetable Growers Conference* at Midway Village Museum in Rockford, IL on Monday, February 24. This conference addresses common issues facing fruit and vegetable growers in Northern Illinois & Southern Wisconsin with the hopes of providing the most up-to-date information to ensure a successful growing season.

This year’s keynote presentation will be an “Overview of Small Fruit and Orchard Weed Management” by Dr. Jed Colquhoun of the University of Wisconsin. Dr. Colquhoun is an UW Extension Specialist with a focus on weed management in specialty crops production.

Other breakout sessions will include *Management of Apple Diseases, Soil Health, Building Your Farm Brand, and Management of Cucurbit and Solanaceous Diseases*. In addition, there will be a special session on *Hemp Production for Specialty Growers*.

Cost for this event is \$40 per person with \$30 for each additional person from the same business/family. To register for this conference, please visit our website at go.illinois.edu/jsw

Hay Auctions

The Northwestern Illinois Forage and Grassland Council is again conducting hay and straw auctions at the Boco Mini-Mart on Rte. 26 in Orangeville. The auctions are held on the 2nd and 4th Saturdays beginning at 11 a.m. and continue through April.

A 6% commission is charged to members of the NW IL Forage and Grassland Council, non-members are charged 7%. Quality tested hay, with accompanying printed analysis and scale tickets are encouraged.

Questions:

Cal Schaver, auctioneer, 608-897-4648, or Don Brown, Jr., 815-238-8372.

Private Pesticide Applicator Manuals & Workbooks

The U of I Extension offices in Jo Daviess, Stephenson, and Winnebago Counties have Private Applicator manuals and workbooks available for purchase. Manuals are \$12 and workbooks are \$3. The Stephenson County office is open from 8 a.m. to 4:30 p.m., and the Winnebago and Jo Daviess offices are open from 8:30 a.m. to 4:30 p.m. A limited number of commercial applicator books are available in each of the offices, so call ahead to check on availability.

Manuals can also be purchased online at:

go.illinois.edu/pesticide-safety

Private Pesticide Applicator Self Study

Private applicators that need to renew their license can complete an online training via the internet. The training includes 8 modules that can be completed at your convenience. This training can be viewed at:

go.illinois.edu/privatepsep

There is a \$15 fee to register for the on-line training. The license examination is not offered via the internet and must be completed in person at one of the testing sites.

Private Pesticide Applicator Test Only Session

Private Pesticide Applicators that need their license renewed can take the Private Applicator test on the following dates:

- **Tuesday, February 18, at 10 a.m.**
Highland Community College
Student Conference Center
2998 W Pearl City Road
(Room 201; parking lot A)
Freeport, IL
- **Thursday, February 20, at 10 a.m.**
Elizabeth Community Center
Elizabeth, IL

These are **TEST ONLY** sites and there is no charge, but pre-registration is requested by calling University of Illinois Extension at:

Jo Daviess County — 815-858-2273

Stephenson County — 815-235-4125

or online at go.illinois.edu/jsw.

Private Pesticide Applicator Training and Testing

In cooperation with the Illinois Department of Agriculture, University of Illinois Extension is offering Private Applicator training and testing clinics. Local clinics include:

- **March 10**, at Giovanni's Convention Center,
610 N. Bell School Road , Rockford, IL

Check in time begins at 7:30 a.m. Training starts at 8 a.m. and concludes at 11:30 a.m. Testing starts that day at 11:45 a.m. and concludes at 2:00 p.m.

Pre-registration is required to guarantee a seat at the training and testing clinics. Registration can be completed on-line at:

www.pesticidesafety.illinois.edu or by calling University of Illinois at: 877-626-1650. There is a \$40 registration fee per person/per clinic.

A schedule of additional clinics can be found online at: www.pesticidesafety.illinois.edu

Certified Livestock Manager Training

The 2020 Certified Livestock Manager Training workshops, held in 10 locations throughout the state, will begin January 8, 2020, in Effingham and conclude February 26, 2020, in Springfield. The University of Illinois Extension workshops provide Illinois livestock producers the manure management training they need to meet the requirements of the state's Livestock Management Facilities Act.

The Livestock Management Facilities Act requires facilities with 300 or more animal units to have at least one employee certified in proper manure handling procedures. For facilities with 300 to 999 animal units, at least one employee must attend a workshop or pass the Illinois Department of Agriculture's Certified Livestock Manager exam. Employees of facilities with 1,000 or more animal units must do both to achieve certification.

Please note that all workshops begin at 9 a.m. All trainings will take 3 1/2 hours with the IDOA exam administered after the training.

Remaining 2020 Workshop dates and locations:

February 18th (starts at 9:00 am)

UI Extension/Bork Nurseries Building,
916 W. Seminary Avenue, Onarga, IL

February 19th (starts at 9:00 am)

DeKalb County Farm Bureau Bldg.,
1350 W. Prairie Drive, Sycamore, IL

February 20th (starts at 9:00 am)

Stephenson County Farm Bureau,
210 W. Spring St, Freeport, IL

February 26th (starts at 9:00 am)

Illinois Department of Ag Auditorium,
State Fairgrounds, Springfield, IL

Each workshop will offer a general curriculum designed to keep producers current on the

latest industry practices. The curriculum covers the basics of nutrient management as well as new technologies, research, and trends, so producers who have completed the training and are renewing their certification will benefit.

Registrations are on a first-come, first-served basis. Producers are encouraged to pre-register at least two weeks prior to ensure a seat for the session that fits their schedule. To register, please visit go.illinois.edu/clmt. For questions with registration, please contact UI Extension at 815-858-2273. The registration fee is \$35. If more than one employee from the same farm signs up, each additional registration will cost \$25. Lunch will not be offered, but coffee and snacks will be provided.

The current training manual used for Certified Livestock Manager Training is the Livestock and Poultry Environmental Stewardship Curriculum. This curriculum is available for free online at go.illinois.edu/manual. If you have a manual or CD is older than 2003, you should check the website for information for update options. The IDOA CLM Exam questions are taken directly from this manual. Some of this curriculum will be covered during the workshops. However, it is impossible to cover all of the exam material in one workshop, so acquiring and reviewing the manual in advance is highly recommended.

Please visit the Certified Livestock Managers Training webpage at go.illinois.edu/clmt for more information about registration, manuals, online training options, and other resources.

Producers and employees also have the option of taking five online quizzes. Passing them is the equivalent of having attended a workshop, but does not substitute for passing the state administered Certified Livestock Manager exam. Registration is open for the CLM Online Training Program at go.illinois.edu/clmt. There is no charge to take the online quizzes other than the cost of a manual.

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