

AGLINE

PURDUE UNIVERSITY COOPERATIVE EXTENSION SERVICE, Fulton County
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Purdue Center for Commercial Agriculture

Housed in the Purdue Department of Agriculture Economics is the Purdue Center for Commercial Agriculture. This group of individuals have a variety of programming available including Agriculture outlook sessions. On Friday, August 20, 2021 from 12:30 - 1:30 P.M. EDT The Center will be hosting a free webinar discussing the 2021 Purdue Farmland Values and Cash Rents Survey results. Purdue agricultural economists Todd Kuethe, James Mintert and Michael Langemeier will break down the Purdue Farmland Values and Cash Rents Survey and the USDA Land Values report They will also discuss marketing strategies for 2021 corn and soybean crops, and make projections for 2022 corn and soybean returns.

The web site to sign up for this is located here: <https://ag.purdue.edu/commercialag/home/>

Each year Purdue conducts a land value and rent survey. These are normally published in August. Now they have a webinar to go along with the result of this survey.

Pesticide License Renewal Opportunities

2021 Central Indiana Field Day

Without our many meetings this past year some farmers have missed opportunities to get credits for their Private Applicator Pesticide License. There is a field day coming up from 8 a.m. to 2 p.m. on August 25th at Kitchel Ag Solutions in Logansport, IN that has credit for that license renewal. We have attached the news release for that event and a flyer to go along with it .

Pinney Purdue Field Day

Also attached is a flyer for the Pinney Purdue Field Day. This is another chance to become educated and get pesticide credit.

FOR IMMEDIATE RELEASE:

CENTRAL INDIANA FIELD DAY SET FOR AUGUST 25TH

During the 2021 Central Indiana Field Day in the nine-county area of Carroll, Cass, Clinton, Fulton, Grant, Howard, Miami, Tipton and Wabash counties, speakers will talk to attendees about a wide range of topics to improve various aspects of farm production. Discussions range from recent research on soil health, entomology to the use of drones in farming and a farm budget update.

The event will be held from 8 a.m. to 2 p.m. on August 25th at Kitchel Ag Solutions in Logansport, IN.

The list of speakers will include **Fred Whitford**, Clinical Engagement Professor of Purdue Pesticide Programs. He will discuss USDA Farm History. Dr. Whitford has served as the Coordinator of the Purdue Pesticide Program since 1991. Fred is the author of *The Grand Old Man of Purdue University* and *Indiana Agriculture: A Biography of William Carroll Latta*, *The Queen of American Agriculture: A Biography of Virginia Claypool Meredith*, and *For the Good of the Farmer: A Biography of John Harrison Skinner*, Dean of Purdue Agriculture, among several other publications.

Dr. Michael Langemeier will be on hand to provide a farm budget update. Professor Langemeier is the Associate Director for Purdue's Center for Commercial Agriculture. Most of his research has been focused on efficiencies and production costs of farms and ranches, crop and livestock enterprises. Prior to joining Purdue in July of 2012, Dr. Langemeier spent 22 years in the Department of Agricultural Economics at Kansas State University.

Other speakers include:

***Mike Titus**, Co-Alliance, will have the grain bin entrapment rescue simulator.

***Austin Pearson and John Scott**, Purdue Extension Quad Squad, will discuss how quadcopter (UAV), also known as drones, can be used to improve production.

***Dr. Shawn Casteel**, Purdue University, will present the 2021 Soybean Update.

***Conservation Cropping Systems Initiative (CCSI) - Joe Rorick**, Conservation Agronomist, will talk about his insight on improving soil health.

***Dr. Christian Krupke**, Purdue University, will talk Pro's and Cons of Insurance Pest Management, the New IPM.

***Dr. Daniel Quinn**, Purdue University, Professor of Agronomy, will present the 2021 corn update.

***Master Trooper Aaron Schaal**, Indiana State Police, will provide farm truck regulation information.

***Logansport Fire Department**, will be on hand to give First Aid/CPR instruction.

During the Central Indiana Field Day, lunch will be served. Participants can earn PARP, CCH and CEU credits by attending the event. Register by visiting <http://bit.ly/CentralFieldDay21> or by contacting Mark Kepler at Purdue Extension – Fulton County office by August 20th. Our phone number is 574-223-3397.



Extension



2021 CENTRAL INDIANA FIELD DAY

Serving Carroll, Cass, Clinton, Fulton, Grant, Howard,
Miami, Tipton & Wabash Counties

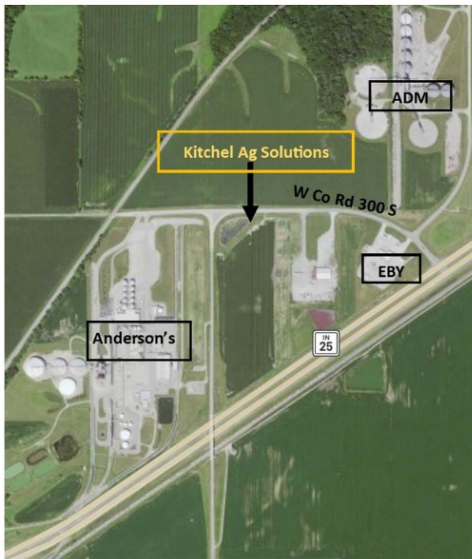
Kitchel Ag Solutions

3155 W. Co. Rd. 300 S.
Logansport, IN 46947

August 25th
8:00 AM - 2:00 PM

Register at:

<http://bit.ly/CentralFieldDay21> or by calling one
of the nine county Extension offices by Aug. 20



PARP, CCH & CEU credits available

Farm Budget Update

- Dr. Michael Langemeier, *Purdue University*

Farm Truck Regulations

- Master Trooper Aaron Schaal, *Indiana State Police*

Basic First Aid/CPR

-Logansport Fire Department

Improving Soil Health

- Joe Rorick, *Conservation Cropping Systems Agronomist*

Pro's & Cons of Insurance Pest Management, the New IPM.

-Dr. Christian Krupke, *Purdue University*

Grain Entrapment/Bin Simulator

- Mike Titus, *Co-Alliance*

2021 Corn Update

- Dr. Daniel Quinn, *Purdue University*

2021 Soybean Update

- Dr. Shawn Casteel, *Purdue University*

Aerial Crop Scouting Technology

- John Scott & Austin Pearson, *Purdue Extension Quad Squad*

USDA Farm History

- Fred Whitford, *Purdue University*

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Spittlebugs

I always get excited to see a bug working on a weed I consider a pest. Maybe, just maybe, it will do enough damage to hurt or kill the weed. Rarely is that the end consequence.

Last month I was walking through my pasture and came across a patch of Canada thistle. This is a weed that nobody wants on their property. It spreads to become a thick patch of a prickly unpalatable plant. But not inedible to everything. There, on all the plants was what looks like spit. This is the home of one of several types of aptly named spittlebugs. These insects form that spit mass to protect themselves from predators while they live in the area drawing sap from the plant.

While my goal is the complete destruction of this plant, they do very little damage. Like spittlebugs on alfalfa, they may reduce the plant vigor. That may decrease a plant's yield but with Canada thistle, the goal is elimination and that will not happen. Therefore, there is no glee in me to see this plant die.

Later in the year, some of these thistles may start turning white. Again, joy fills my heart. This time the plants are infected with a bacterium that stops photosynthesis in the upper leaves and stems. It actually affects growth enough that some plants might die and others have decreased growth and seed production. This is a good deal for the haters of Canada thistle but it's not all-out eradication. So, in the words of the cartoon villains, "Curses, foiled again."

Black nightshade is the nasty cousin in the potato and tomato family. Rarely do you find one that does not have some type of hole eaten into its leaves. The plant is a favorite of flea beetles, aphids, and the famous Colorado potato beetle. But that beetle favors potatoes and so the black nightshade weeds that are currently growing in my flower bed are thriving. They were, but that ended with their uprooting.

Then there is ma armyworm winging her way up from southern Texas in the spring looking for a nice weedy grass area to lay her eggs. She spots a soybean field filled with grass weeds. The eggs are laid in an abundance of problem weeds where her young can thrive. Wouldn't it just be neat if the young could just eat the weeds out of the soybeans and then pupate and leave?

It does not work that way. The soybeans get sprayed with an herbicide to kill the grass. The still not mature armyworms, then feed on the soybeans or do what armyworms do, and march out of the area, across the road to the neighboring corn, which is also a type of grass, stripping the leaves away.

This whole concept of natural control does have many success stories. As the summer goes on and the fly population starts to annoy you, just remember I have heard this unsubstantiated statement, "the descendants of one pair of flies, if all lived and reproduced normally, would cover the entire land area of the world to a depth of 18 feet."

I should quit my complaining.

Mark Kepler, Extension Educator- Agriculture and Natural Resources



*Another chance to become educated and get the pesticide credit.
Check out the flyer below for the Pinney Purdue Field Day.*



Extension

Pinney Purdue Field Day

Wednesday, August 18, 2021



Pinney Purdue Ag Center, 11402 S. County Line Road, Wanatah, IN 46390
(All times are Central Daylight Savings Time)

7:30 – 8:15 am CDT Registration, PARP Sign-up, Exhibits

Register at the new machine shed on east side of County Line Road

8:15 – 9:15 am CDT Welcome, Introductions & Keynote Speaker

- Dr. Michael Langemeier – *Agriculture Economy Outlook*
 - **9:20 am – 12:00 pm CDT Tours and Program Presentations**
 - Darcy Telenko – *Managing Diseases in Corn & Soybean*
 - Dan Quinn – *Corn Management*
 - Fred Whitford – *Using Straps and Chains to Tie Down Loads*
 - Brian MacGowan – *Wildlife Damage*
 - Bill Johnson – *Weed Management*
- } Choose one session

12:00 pm CDT Sponsored Pork Chop Lunch

- Darcy Telenko – *Field Crop Pathology Research Plot Tour*
- Visit exhibits, sponsors & visit with your neighbors
- Pinney Purdue Field Day sponsored in part by:



INDIANA
SOYBEAN
ALLIANCE



INDIANA
CORN
Marketing Council

Pinney Purdue Field Day - Twilight Program

5:30 – 6:00 pm CDT Registration, PARP Sign-up, Exhibits

6:00 pm – 8:00 pm CDT Program Presentations

- Jim Camberato – *Nutrient Management*
- Phil Woolery – *Minibulk Regulations*

- ⇒ Exhibits from local agribusinesses, dealers, and ag services companies
- ⇒ Certified Crop Adviser CEUs and Commercial Applicator CCHs credits
- ⇒ Private Applicator Recertification Program (PARP) Credit - This is an opportunity to fulfill 1/3 of your Private Applicator Permit requirements (bring permit). The normal fee is being sponsored by Indiana Corn Marketing Council and Indiana Soybean Alliance.
- ⇒ More information and directions at www.agriculture.purdue.edu/pac/ppac/

If you have a disability that requires assistance for your participation in this event, please contact Purdue Extension-La Porte County at 219-324-9407 or Pinney PAC at 219-733-2379 at least 3 days prior to the event.

Purdue University, Indiana Counties and U.S. Department of Agriculture Cooperating
An Affirmative Action/Equal Opportunity Institution

Weevils

Alfalfa is called the queen of forages. It is the perfect crop for those involved in livestock production. It produces great yields and is highly nutritious containing very digestible fiber and protein. Once planted, it can last for many years depending on how well the producer takes care of it. Harvested too many times a season and the stand will thin. This native of the "Cradle of Civilization" area of the world, which includes Turkey, Syria, Iraq, and Iran has a deep taproot that allows it to grow in low moisture areas.

Just like alfalfa being imported from Southwest Asia, its major pest, alfalfa weevil also came from that area of the world. This year, those insects' numbers are up dramatically. The little green worms hatch from eggs laid last year and start feeding on the tips of alfalfa. This year the cold and dryness of spring slowed the alfalfa growth allowing these little larvae to do extensive damage. As they consume new growth on the plant they also reduce the amount of tissue that can photosensitize, slowing the plant growth even more.

My first introduction, as a boy, to this insect, was baling hay. Riding the hay wagon, stacking bales during the first cutting in June there would be thousands of brown bugs with a black stripe down its middle and a short snout. These are the adult weevil. They have pupated from the larva stage which is a small, light green worm with a wide, white stripe down the center of its back. The adult beetle also feeds on alfalfa but does not do near the damage as the larva.

There are almost 100,000 known species of weevils with adults the ones who have the elongated snout with chewing mouthparts. There are many species of weevil that consume grain by boring holes into seeds. Purdue has been involved in a project in Africa to help farmers protect stored cowpeas from weevil damage. They trained farmers on the use of a special bag that could store grain and seal out moisture, leading to the death of any infesting weevils. This resulted in about half a billion dollars per year in saved grain each year.

There is a type of weevil in fruit and nut production called a curculio. The plum curculio is a major insect in apples and cherries. The adult female cuts a crescent shape into a small developing apple and lays an egg. If the apple falls to the ground, the insect will develop. If the damage is not severe enough to cause the fruit to drop, then the growing apple will crush the bug and leave a tan scar on the fruit. Either way, the fruit is lost or damaged.

The weevil that has had the most publicity is the boll weevil. The Boll Weevil Song reached number 2 on the music charts in 1961. This insect severely damaged cotton crops and led to destitute farmers especially during the depression years of the 1930s. The eventual answer was to use insecticides like calcium arsenate and DDT as they became available.

Just like the alfalfa weevil, it is the boll weevil larva stage that does the most damage. The alfalfa weevil really only has one damaging generation per year while the boll weevil can have 10. Most farmers solution to alfalfa weevil is to cut the crop early and reduce the weevil population. Some may survive and feed on the second cutting and have to be sprayed with insecticide.

When it comes to feeding the world there is a weevil somewhere bent on thwarting your efforts. Man has been successful in outsmarting the boll weevil by perfecting a synthetic attractant pheromone blend, creating a lure that is used to trap the boll weevils. Combining that with timed insecticide applications has almost eradicated the bug in the US. No such luck for us alfalfa farmers here in Indiana.

Mark Kepler, Extension Educator- Agriculture and Natural Resources



Animal House

“I just want to go home” I could hear the patient say as they walked down the hall of the hospital. We all have a time when the familiarity of home is what we desire. Being away from home is stressful and even though we constantly get told we need to embrace change. It is not easy for humans or animals to exist in unfamiliar surroundings.

I know where my home is but where is home to your animals?

My cattle have a pasture right by the house where their water is and during certain times of the year, they are fed grain. The herd's main grazing area is back a lane. Once they have had their fill they come up for water and now it is time to lay around ruminating. That is almost exclusively done in that pasture. There are times, the farthest of my pasture rotations has a water source and so they may come to the house less frequently but they do come. It seems to me that my home, in a roundabout way, is their home.

My goats are extremely home-centered. They have a place east of our house that is home. It is the area they were raised as kids and fed during the winter. It also has several animal houses for weather protection. Moving them to an area on the west side of the house where there is ample pasture is frightening to them. When I did this, I had to add more strands of electrified high-tension wire to stop them from bolting through the fence to go back “home”.

With goats, I am convinced that part of the definition of home, is where the humans are. Goats are skittish. In the circle of life, cattle and goats are prey species. They must fear for their lives from predators and part of their protection is in their herd mentality. Goats take being in a group to a more extreme level than cattle. As goats wander out from home all it takes is for one of them to move quickly or even sneeze and the whole herd comes running towards the house. Their grazing is continually interrupted.

Goats do not like feeding in tall grasses as they are scared that something is lurking in that tall grass that is going to eat them. When a human accompanies them to the grazing area, the sudden running can be quickly stopped with some smooth soft talking. My goats will follow me to an area they have never been but if I leave, they will run to the house. So, for goats, is home where the humans are?

I was raised on a small dairy farm; my job was to bring in the cows from the pasture to the barn. This was never a hard job as all I needed to do was get them started and they would follow the familiar cow paths to the barn. There, they would go to the same stall every time, an area they were familiar with that also contained some grain. Occasionally a cow got in the wrong stall initiating all kinds of consternation.

Continued from page 7....

Was that stall, home to them? I would like to believe that but if I would get behind them any other time of the day, other than morning or evening, they knew something was up and there was no way they were going into the barn.

Cattle out on the South Dakota range, at my wife's native home, have less interaction with humans. They find themselves in large pastures well away from people's homes. The human bond is less, still it is there, as they were fed at one time in a feedlot for a short period. Do those cattle have homes? I posed that question to Dr. Karl Hoppe Area Extension Specialist for Livestock Systems at the North Dakota State University Carrington Research Extension Center and my former graduate school roommate. He says, "Cattle have places they bed down at night. It varies out on pasture. Might be next to water or corrals or protected by the wind. Usually a softer place as cattle like bedding more than hard concrete or hard frozen dirt. On a hot day, cattle will seek wind and/or water to cool off. In winter cattle avoid wind if possible."

Salt blocks, mineral feeders, creep feeders, lick tubs and waterers are an attraction for a place to rest for the night. So, we usually place the feeders there and the cattle know it.

Cattle can also be trained with food – just like us. A couple of feedings with 'cake' and the cows come running when they see the pickup. An ear of corn treat will get a cow addicted to seeing you for the delicacies. If you want cows to find a new place to bed down for the night (AKA home), you can bait them with food and keep doing that for a few days, and cattle will make a new home."

Homes in these cattle is fleeting and dedicated by humans and the animal's taste buds. That is essentially my observation, when you drive through a rolling 1000-acre pasture, the cows could be anywhere. Eventually, they will come to a watering hole and stand around, or in it, depending on the temperature. Where there is good grass or another type of feed inducement, is where you will find them. And that is also where they will lay down.

I went to Russia several years back and they spent a lot of time with their animals. A dairy cow herd was accompanied by small boys to a fenceless pasture. Individuals stood along the roadside with a few grazing cows in another location and the wandering goat herd crossed the road in the accompaniment of five people. When given the opportunity, it just seems that home for many animals is where the humans are found. That may be reason they call them domesticated animals.

Mark Kepler, Extension Educator- Agriculture and Natural Resources

This information is being sent to you by

Mark Kepler, Ag/NR Purdue Extension Educator- Fulton County Indiana

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