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Summer is definitely here crops and gardens have been planted and now we battle the weather, insects, disease, and weeds that come in. If you have any questions about any of these items feel free to reach out and I would be happy to help.

Once produce is ripe many will start canning. Check the Health and Human Science section to learn more about the pressure canning class as well as ServSafe training, and Extension Homemakers.

When many think of summer the Knox County Fair also comes to mind. Remember our office will move to the fairgrounds so if you cannot reach us at the office try the fairgrounds. Also, make sure to review all the fair dates and times in the newsletter.

If you have any 4-H, health, human science, agriculture, natural resource, or gardening questions feel free to call us at 812-882-3509.

Valerie Clingerman Extension Educator

Agriculture and Natural Resources/County Extension Director

**Pizza/pasta container gardening course teaches participants how to raise produce**

As part of the grant our office received a container gardening program was offered. This program taught 10 individuals about how to raise produce such as tomato, pepper, oregano, onions, and basil in containers. Participants got hands on experience planting their own container that they got to take home with them. Of the survey respondents:

\*100% of respondents stated they learned something new and will likely share information from today's program to friends.
\*83% stated that this workshop increased their confidence in container gardening
\*100% stated they will likely continue container gardening in the fall or next year.
Additional comments included: "Very fun too!"

If you have questions about container gardening feel free to contact us 812-882-3509 or clingerman@purdue.edu.

**4-H & Youth Development**

Mitch Wagoner

Extension Educator - 4-H Youth Development

mwagoner@purdue.edu

**4-H Fair Schedule**

 **Deadlines**:

* June 29: Creative writing projects due to Extension Office by 3:00pm (hard copies or email to Mitch)
* July 1: State Fair 4-H early bird registration deadline.
	+ State Fair website: <https://exhibitorscorner.indianastatefair.com/>
* July 6: Fair Entry Closes
* July 6-16: General Record Sheets and Livestock Record Sheets can be turned in to the Extension Office to receive your 4-H Fair Pass.
* July 21: Auction animals need identified and auction pictures are due

**4-H Fair Set-up & Tear Down:**

* July 9: Livestock Cleanup Day at the Fairgrounds at 8:00 am
* July 9: Rabbit members will be hanging cages at 8:00 am
* July TBA: Horse & Pony clean-up will be announced during a Horse & Pony Club Meeting.
* July 11: Building Setup at the Farm Bureau Exhibit Hall at 6:00 pm.  Clubs responsible: North Knox, Vigo Powers, and Junior Leaders
* July 23: Building Tear Down at the Farm Building Exhibit Hall at 10:00 am.  Clubs responsible: Monroe City, Decker/St. Thomas, Little Rascals, and Junior Leaders.
* August 27: Livestock Clean-Up Day at 8:00 am

**The Farm Bureau Exhibit Hall Information**

* July 13: In-person non-perishable project judging at the Farm Bureau Exhibit Hall from 5:00-8:00 pm.
* July 16: In-person perishable and sewing project judging at the Farm Bureau Exhibit Hall from 8:00-11:00 am.
* July 18-22: Farm Bureau Exhibit Hall hours to the public is from 11:00 am to 1:00 pm then from 4:00 pm to 10:00 pm.
* July 22: Building projects released from 9:00 to 11:00 pm
* July 23: Building projects released from 9:30 to 11:30 am and from 5:00 to 7:00 pm

**Mini 4-H Information**

* Mini 4-H building projects can be turned in either day during judging on Wednesday, July 13 from 5:00 – 8:00 pm or on Saturday, July 16 from 8:00 – 11:00 am.

**Other Fair Information:**

* July 13: Extension Office moves to the Fairgrounds.
* July 14: Consumer Clothing Judging at 5:45 pm and Fashion Revue at 6:45 pm at the First Church of God in Monroe City.
* July 21: Ag Olympics starts at 3:00 pm
* July 21: 4-H Parade of Champions for the Grand & Reserve Grand Champions for Exhibit Hall, Dog, & Cat starts at 5:00 pm
* July 22: 10 Year Member Awards starts at 5:00 pm

**Animal Show Information:**

* July 17: Dog Agility at the Schmidt’s residence starting at 6:30 pm
* July 17: Livestock Check-in from 4:00 to 10:00 pm
* July 18: Poultry Show starts at 8:00 am at the Poultry Barn.
* July 18: Rabbit Show starts at 9:00 am at the Show Barn.
* July 18: Horse and Pony Contest Show starts at 4:00 pm at the Horse & Pony Arena.
* July 19: Swine Show starts at 7:30 am at the Show Barn.
* July 19: Dog Obedience & Showmanship starts at 8:30 am at the VU Pavilion.
* July 19: Goat Show starts at 5:30 pm at the Show Barn.
* July 20: Beef show starts at 8:00 am with the Dairy Show between the Heifer and Steer Show at the Show Barn.
* July 20: Cat Show starts at 3:00 pm at the VU Pavilion.
* July 20: Sheep Show starts at 5:30 pm at the Show Barn.
* July 21: Horse and Pony Show starts at 9:00 am at the Horse & Pony Arena.
* July 21: Llama and Alpaca Show starts at 9:00 am at the Show Barn.
* July 21: Round Robin starts at 7:00 pm at the Show Barn.
* July 22: Horse and Pony Show starts at 8:00 am at the Horse & Pony Arena.
* July 22: 4-H Livestock Auction starts at 5:30 pm at the Show Barn.
* July TBA: Livestock Release will be announced in the 4-H Fair newsletter.

**State Fair Project Information:**

* July 29: All projects except foods will be transported to State Fair
* August 3: Food projects will be transported to State Fair. More information to come.
* August 23: State Fair Projects can be picked up from the Extension Office.

**General Information:**

* July 4: Independence Day – Office Closed
* October 1: 4-H Enrollment begins for the 2022-2023 program year

**Knox County 10-Year Members!**

Blaine Beard

Tori Candler

Lillee Cardinal

Salena Dellinger

Shaunessy Dunkerly

Danica Dunn

Ryan Garner

Gwenyth Hayes

Katelyn Hedge

Carson Holscher

Natalee Holscher

Ian Kixmiller

Grace Kotter

Dylan Petty

Augustus Rusch

Will Sloan

Hope Sydow

Kaitlyn Williams

Luke Williams

Kyla Wolfe

10 Year Member will be recognized before the Livestock Auction on Friday, July 22 at 5:00 pm at the Show Barn.

**Social Media**

Facebook: “KnoxCountyIN4H”

Instagram: “@knoxcountyin4h”

Twitter: “@knox\_in4h”

## **Health & Human Sciences**

Tonya Short-Extension Educator

Health & Human Sciences

Short43@purdue.edu

# Meet Me at the Fair

By: Barbara Holscher

President – Knox County Extension Homemakers

Meet me at the fair!I am sure many of you heard those words as kids growing up in Knox County. The Knox County Fair was the big event of the summer throughout Knox County. This year’s fair will be held July 18th thru July 23rd. Each year individuals from Knox County and beyond work hard to prepare their food items, crafts, quilts, photography, flowers, produce, food preservation, sewing and much more, to exhibit at the fair in the Open Class Department. Last year was the first year for Open Class in the newly remodeled McCormick Building- which for those who may not know, was the former 4-H building. As the open class volunteers all walked through the building, there was a flood of memories of days gone by when we were 4-H exhibitors as youngsters. As adults, we continue to strive for the joy of winning a prized ribbon for our exhibit! It is appropriate that some have coined Open Class as “adult 4-H.” Anyone can exhibit, regardless of whether you live in Knox County or not. If you have a talent in any category listed in Our Open Class Exhibit book, please consider joining us for a week of fun and sharing. If you have questions about becoming an exhibitor in Open Class, please contact Pat Summers, Open Class Chair or Barbara Holscher, Associate Chair. The open class book can be found at area businesses or online at <https://extension.purdue.edu/news/county/knox/2022/03/2022-official-openclass-listings.html>

My memory lane of being in the old 4-H building, prompted me to do a little research into the history of the fair. The Knox County Fair has made many changes over the years. According to a news story in the Western Sun news article dated December 13, 1889, an organized annual fair had been held as early as 1871. In fact, Knox County is known as the oldest fair in Indiana with other records taking it as far back as 1809. If that’s correct this will be the fair’s 213th year!

In the early years, the indoor fair events were held in the coliseum and the YMCA with other activities across the county. On September 9, 1921 an article in the Western Sun General Advisor stressed that everything at the fair was to be free. The only thing that had a charge was the Progress Banquet. No vendors were allowed and there would be no commercial exhibits. The fair was strictly about the people of Knox County exhibiting from their fields and homes. Some accounts said as many as 4,000 visitors were expected form across the state and neighboring Illinois. Special trains were routed through Vincennes to handle the expected travelers and anecdotes say it was quite a feat getting all 4,000 persons back home as the trains couldn’t haul them out fast enough.

We hope that you can come out this year and be a part of Knox County’s long-standing tradition. Regardless of how things might change over the years, this is still the people’s fair, guaranteed to be something for everyone. So, watch your mailbox for the fair schedule and come Meet Me At the Fair!

# Extension Homemakers—Dates



July 6: County Council Meeting

July 18-23: Knox County Fair

July 29-August 21: Indiana State Fair

August 16: Fall District Meeting, Warrick County – see below

Sept 7: County Council Meeting

Oct 7-22: IEHA week

Fall District Meeting

When: August 16, 2022; 8:30AM-3PM CT / 9:30AM-4PM ET

Where: Warrick County 4-H Center, Boonville

More information to come. Information will be mailed to club presidents when I get it and emailed to anyone with an email address on record with the Extension Office.

# Pressure Canning Class

In this session:

• learn canning basics, food safety guidelines for home canning, where to find resources

• course includes lecture, handouts and hands-on practice in the kitchen

• participants will take home their own sample of home-canned product that they make

**When:** August 4, 2022, 12-4PM

**Where:** Vincennes University, Shircliff Humanities Bldg, Room A 204 (130 E. Harrison St.)

**Cost:** $20 per session

**Deadline to register**: July 29

****Register by sending the following information to Purdue Extension –Knox County 4259 N. Purdue Rd., Vincennes, IN 47591. Make check payable to Purdue Education Fund

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Phone:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Email: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

If you need a reasonable accommodation to attend this program please contact Tonya at 812-882-3509 at least 10 business days prior to the event.
Find out more or download the full flyer at <https://extension.purdue.edu/news/county/knox/2022/04/home-food-preservation.html>

# Can you actually “boost” your immunity?

If we are exposed to pathogens, the strength of our immune system is a large factor in how sick we become and how long it takes us to recover. While there are a number of products out there that claim to boost your immunity most of them are – at best – a waste of money and – at worst – potentially harmful. Rather than reaching for a pill, think more about your day-to-day lifestyle factors that can silently impact the strength of your immunity.

1. **Tobacco, alcohol or drug use** – whether or not we use tobacco products and how much or how often we use tobacco can impact the strength of our immune system. Likewise with alcohol or other drugs. These substances are actually toxins, hence the term intoxication, and it takes our body’s precious energy to filter these toxins out of your system. After a while this starts to wear the body out. If you regularly use tobacco, alcohol or other drugs, think of it like putting dirty gasoline in your car. It might run, but it’s also going to cause excess wear and tear on the engine over time and eventually that damage become irreversible.
2. **Hygiene and food safety habits** – this sounds so simple but staying healthy really does start with the basics. Things that we have heard over and over like regular and proper hand washing, cleaning frequently touched items like doorknobs and making sure we keep our food safe by using clean hands to prepare food, cooking it properly and storing it properly so it does not become contaminated. Think of having poor hygiene and food safety habits like intentionally pouring dirt in your gas tank.
3. **Sleep habits** – Sleep is when the body recharges and regenerates. Just everyday activities take a lot of energy and fighting off pathogens takes even more. That’s why resting when we feel tired and having a regular sleep schedule of 7-8 hours per night is imperative. Think of being chronically sleep deprived like never changing the oil in your car. Eventually that oil becomes so dirty and thick that it bogs down your engine to the point it cannot even start.
4. **Stress levels** –While the connection between stress and mental health may seem natural, there is also a strong connection with our physical health. When we are stressed, our body is flooded with stress hormones that are meant to prepare us to take action. When stress becomes chronic and continuous, these stress hormones begin to do harm to our body and wear it out. Think of chronic stress as constantly running your car in the RPM red zone. Your car’s engine can only withstand running that high for a very short period of time. It’s also important to note that your car does not necessarily produce its maximum power at its highest RPM. You are no different and constantly running at a high RPM will wear out your immune system.
5. **Physical activity level** – Regular physical activity can do amazing things for maintaining a strong immune system. Think of physical activity like having high-quality tires on your car. Your car can run on old, bald tires, but the drive won’t be nearly as smooth, there is bound to be a lot of bumps and road noise and you’re just asking to have a break down. And when that break down happens you might just end up with something worse than a bent rim.
6. **Nutritional choices** – Several nutrition components are known to have a direct impact on the immune system with many more playing supporting roles. Rather than focusing on pills or supplements, strive to eat a variety of foods from all five food groups. Unless you are actually deficient in a particular nutrient, taking supplements is not going to “boost” your immune system. Your body only needs so much and the excess either ends up wasted or possibly even causing harm. If you think you might have a deficiency, please consult with your medical provider for a correct diagnoses and treatment.

# ServSafe Manager vs Food Handler: What’s the Difference?

Scan me with your phone camera

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| --- | --- | --- |
|  | ServSafe **Manager** | ServSafe **Food Handler** |
| ServSafe Logo / Misc / Logonoid.comWhat the course/exam covers | All aspects of food service management including but not limited to: foodborne microorganisms and allergens; personal hygiene; proper food handling during all steps of the process including: purchasing, receiving, storage, preparing, cooking, and serving; facilities management; cleaning and sanitation and pest management. | All aspects of food handling for a food service worker including but not limited to: basic food safety; personal hygiene; cross-contamination and allergens; time and temperature control; cleaning and sanitation. |
| Class Length | 8-16 hours | 2.5-4 hours |
| Exam | 90 questions; time limit 2 hrs  | 50 questions; No time limit  |
| Exam must be administered by ServSafe proctor | Yes | Paper exam – yesOnline exam - no  |
| Length of certificate | 5 years | 3 years |
| Who **must** have this certificate according to Indiana law | At least one person per food establishment – This course satisfies Indiana requirements to become a “certified food protection manager” | Anyone operating as a home-based vendor (most persons who sell at farmer’s markets and roadside stands are home-based vendors) Learn more about home-based vendor laws here: [https://bi t.ly/HBV2022](https://bit.ly/HBV2022)  |
| Who else should think about having this certificate | One person per shift at each food establishment | All employees or volunteers who handle food in any way. |
| Look for upcoming classes hosted by Purdue Extension | <https://bit.ly/ServSafe22> select “ServSafe Program” in program dropdown menu | <https://bit.ly/ServSafe22> select “ServSafe Food Handler” in program dropdown menu Scan me with your phone camera |
| For additional questions | Call your local Extension office or find your nearest ServSafe educator here: [www.purdue.edu/servsafe/meetoureducators](http://www.purdue.edu/servsafe/meetoureducators) |

## **Agriculture & Natural Resources**

Valerie Clingerman-Extension Educator

Agriculture & Natural Resources Facebook@

clingerman@purdue.edu

\*\*Like **Purdue Extension Knox County Ag and Natural Resources on Facebook.**

**\***\*To receive monthly e-newsletters call 812-882-3509 or e-mail me to be added.

**Upcoming Events**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date | Event | Time (Eastern) | Location | Contact info. |
| July 7, 21, Aug. 4, 18 | AgrAbility Webinars | - | Webinar | Register at: [https://tinyurl.com/ agrabilitywebinars](https://tinyurl.com/%20agrabilitywebinars)  |
| July 13 | Corn and Soybean Outlook | - | Webinar | Register at: <https://tinyurl.com/PurdueAgOutlook>  |
| July 18-23 | Knox County Fair | - | Knox County Fairgrounds, Bicknell | 812-735-2344 |
| Aug. 2, 9, 16, 23 | Getting into the Farm Business | 7:00pm-8:30pm | Princeton Public Library, Princeton | Register at: [https://tinyurl.com/Getting intofarm](https://tinyurl.com/Getting%20intofarm)  |
| Aug. 16 | Soil Health Expo | 10:00am-3:00pm | Toyota Events Center, Princeton | Register at: [https://tinyurl.com/Soil Expo](https://tinyurl.com/Soil%20Expo)  |
| Aug. 23 | Agriculture Sprayer Drone Technology Day | 9:00sm-1:00pm | Southwest Purdue Ag Center, Vincennes | 812-882-3509 [https://tinyurl.com/drone fieldday2022](https://tinyurl.com/drone%20fieldday2022) |
| All spring/summer | Add a Row Produce Donation Program (See article on page 11) | All summer | Your home or field | Register at: [https://tinyurl.com/2022 AddARow](https://tinyurl.com/2022%20AddARow) or call 812-882-3509 |

**Agriculture Sprayer Drone Technology Day**

Purdue Extension-Knox County, The Pantheon Theatre, and the Southwest Purdue Agriculture Center have teamed up to offer a sprayer drone field day. Participants who attend will learn about drones in agriculture specifically license and regulatory requirements, practical applications, and procedures when flying. We will then have speakers discuss software, swarming, commercialization opportunities, and have a flying demonstration.

* **When:** August 23rd,9:00am-noon eastern
* **Where:** Southwest Purdue Ag Center (4369 North Purdue

 Road Vincennes, IN 47591)

* **RSVP by August 19th** by calling 812-882-3509 or scan the

QR code with your phone to access the registration website.

**Japanese Beetles out in full force**

 I have started seeing Japanese beetles out and feeding in my garden. These beetles are known to feed on over 250 different species of plants. I have noticed them on some pigweeds this year but they also enjoy roses, grapes, smartweeds, soybean foliage, and corn silks.

 The adult beetle has bronze colored wing covers and a metallic green head and thorax (middle section). On each side of the abdomen there are six tufts of white hair. The adults we are seeing right now overwintered in the soil as grubs. These grubs fed on grass roots and decaying vegetation. They then pupated and are now emerging from the soil.

Adults are problematic because they can clip corn silks preventing proper pollination. Leaf feeding can also occur and causes leaves to look skeletonized (see photo by J. Obermeyer).

To scout fields, look at five random plants, in five areas of the field. Count the number of adult beetles you see on the plant. Also, estimate the length of remaining silk left on the plant as well as the maturity of the silks. Lastly, determine if pollen is still being shed by shaking the tassels. If you do see silk clipping also look for corn rootworm beetles as they can cause this damage as well. Typically, Japanese beetle are found in the outer 12-15 rows.

Control may be needed if silks are clipped back to less than ½ inch when less than 50% of the plants have pollinated and beetles are still present. If control is needed visit <https://extension.entm.purdue.edu/publications/E-219.pdf> for specific insecticide options or call the Extension Office 812-882-3509. Additional information can be found at <https://tinyurl.com/Japanesebeetlecorn>.

**Heat and Drought Stress on Corn**

We are experiencing record high temperatures which are now blending with dry conditions so what does this mean for the corn crop?

Good news is that corn originated from a tropical grass that can tolerate short periods of temperatures upward of 112 degrees F. However, growth slows down when temperatures are above 95 degrees F. Dry conditions early in the year can also encourage roots to go deeper search for water, which will help the plant later in the season. Drought related stress is seen when corn starts to roll leaves to limit transpiration of moisture. The earlier this starts in the day the more stressed the plant is and the more potential for yield loss. There is a table at the resource below that has the plant growth stage and estimated yield loss.

When corn is near maximum height and pollination this is when heat and drought can impact yield the most. High water and heat stress that happens 7-10 day before silking and through pollination can delay silk emergence, reduce silk elongation, and silk desiccation. Once the tassel emerges pollen shed will begin and will only last about seven days. Therefore, if silk emergence is delayed there can be a reduction in kernel number and yield. Good news though is peak pollen shed typically occurs in the morning during cooler hours. Overall, corn is pretty tolerant to heat and drought during vegetative stages however during silking and pollen shed this can cause problems.

For more information visit: <https://extension.entm.purdue.edu/newsletters/pestandcrop/> or contact the Extension Office.

**Most Common Issues of Young Arborvitae**

Arborvitae can serve a nice role in many landscapes as a screen or windbreak. They also grow fairly fast and are fairly inexpensive. However, there are some issues that can come about in the first five years of growth that are important to know before planting.

1. Root ball size: If you buy a balled and burlaped tree it is important to make sure the roots are large enough to support the top growth of the tree. Trees with small root balls will suffer from transplant stress for up to several years.
2. Planting depth: Many of our trees including arborvitae get planted too deep. Growth may be stunted and stem girdling roots likely will form. Trees will decline slowly over time so it can be hard to diagnose the issue.
3. Soil moisture: Too much or too little can both cause reduced growth or tree death. Remember to water new transplants during times of drought.
4. Winter burn: Watering until freezing temperatures come in is very important. Winds can quickly dry out foliage if the root system of the tree is not established. Spring planted arborvitae have more time for root establishment but they will require more watering during the summer.
5. Shade intolerance: Arborvitae need full sun or else growth will be inhibited. Also, remember as they age and shade out lower limbs it is common for those lower limbs to lose foliage. If arborvitae are planted too close together they will shade each other out so even though wider spaces take longer to infill the plants will be healthier in the long run.

**Ways to prevent stress:**

1. Pre-planting: Grade the planting site to remove areas of standing water.
2. Planting: Check planting depth and reduce deep planting. On ball and burlap trees remove soil from the top of the root ball until the root flare is found or the top most root.
3. Mulch: Add three inches of mulch and avoid mounding mulch around the trunk.
4. Irrigate: Make sure to water weekly if there is little to no rainfall. Water less often but for a longer time to get moisture into the root zone.
5. After the first year: Add fertilizer as recommended by a soil test.

For more information visit <https://www.purduelandscapereport.org/> or contact the Extension Office 812-882-3509.

**Knox County Add a Row Produce Donation**

\*The Knox County "Add a Row" Produce Donation Program aims to connect local produce farmers and home vegetable gardeners to local organizations in Knox County that accept produce donations for the food insecure residents in community.

\*Participants will have the opportunity to report produce donations weekly through the growing season. There is no expectation that participants will have produce to donate every week nor is there a minimum donation requirement; every donation of any amount is appreciated!

\* To participate in the program, please sign up at the following link. <https://tinyurl.com/2022AddARow> We will then follow up with additional information including food pantries and their hours.  If you have questions, please contact Valerie Clingerman (clingerman@purdue.edu) or Tonya Short (short43@purdue.edu).

locust, and poplar are labelled as 

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Knox County

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**This Purdue Extension-Knox County newsletter is sponsored by Good Samaritan Hospital**

Look inside for agriculture & natural resource, health and human science, and 4-H updates.