Serving Boone, DeKalb, and Ogle Counties
A Message from the County Director

Numbers, when interpreted within context, tell a story.

For fiscal year ending 2022, 30% of unit revenues were from local funding sources: partners, levies, donors, registration fees and small grants. The remaining 70% came from state and federal sources, and 24% of that is matched – meaning the funding was received only because our communities contributed first.

Of the total expenditures, 87% was spent locally on educational programming and the personnel who support it. The remaining 13% of the unit budget supported office spaces.

Addressing the grand challenges of community, economy, environment, food, and health, your local Extension offices offered 2,166 program sessions at 97 sites and had 24,303 participants attending with a recorded total of 47,771 educational session participants. Add to those numbers 4-H club members, meetings, volunteer hours and shows, plus Master Gardener and Master Naturalist community service hours and food pantry donations. Consider the research, media-based education, one-on-one consultations, partner collaborations, economic footprint, and the numerical value of Extension’s presence in Boone, DeKalb, and Ogle emerges.

Yet, the numbers don’t tell the whole story. Within these pages are a few stories that speak to the individual, interactive, and human connection elements of Extension engagement - impacts that numbers alone can’t communicate.

May you celebrate the year with us!
Illinois Extension Makes an Impact

The University of Illinois Urbana-Champaign’s land grant mission thrives each day through Extension’s programs, resources, knowledge, and dedicated staff that are responsive to five grand challenge themes:

- **Community:** Support Strong and Resilient Residents
- **Economy:** Grow a Prosperous Economy
- **Environment:** Sustain Natural Resources at Home and in Public Spaces
- **Food:** Maintain a Safe and Accessible Food Supply
- **Health:** Maximize Physical, Mental, and Emotional Health

### 2022 Engagement

Extension leaders, staff, and stakeholders define priorities that create meaningful, mission-centered outcomes throughout the state:

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<th>Communities Served</th>
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<th>4-H Clubs</th>
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Nestled in the Russell Woods Forest Preserve is the Natural Resource Education Center (NREC), an environmental education center operated by Extension, owned and maintained by the DeKalb County Forest Preserve, with program support from the Soil and Water Conservation District and Wheaton Franciscans – a unique partnership. The center provides education to families, schools, organizations, and the public. The center also houses a small collection of teaching animals, mostly indigenous. The animals are used for field studies and are a hit with elementary school children.

The part-time high school intern that cares for these animals joined Extension in 2021. When asked her interests and plans for the future, her response had been that she thought she would study English in college, but she wasn’t sure. She designed some signs and created a care system for the animals, but English was a stretch to connect to her work, so staff mentored her in other ways. They provided her with new experiences, supported a strong work ethic, and gave value to her voice and the voices of others.

In the summer of 2022, something happened. She was asked by the Forest Preserve staff if she would like to help Dr. Ken Inoue of the Shedd Aquarium, along with his staff and interns, retrieve freshwater mussels from a research site on the Kishwaukee River. English majors don’t usually want to crawl on their hands and knees in unclear water, literally digging with their fingers to find mussels, but with the permission of her parents and the assistance of Peggy Doty, Extension educator, she did just that. They spent an entire day on their hands and knees in cold water up to their chins, feeling the bottom of the river and retrieving as many mussels as the group could locate.

Then came the moment when someone from the Shedd Aquarium asked her if she was going to go to college, and if so, what she would study. The young animal caregiver didn’t miss a beat. She answered “yes” she was going to college, “to study zoology or marine biology.”

As in the starfish story, Extension and its community partnerships mattered to that one!

Over time, the ripples of that day may matter to more than one. The data collected that cold day in the Kishwaukee River, through mark and recapture methods, will be used to determine changes in mussel populations over time and measure the health of the river and its species. Mussels play an important role in aquatic environments and modify aquatic habitat, making it more suitable for themselves and other organisms.
Preserving our watershed

With funding from the Wheaton Franciscan’s watershed grant, Peggy Doty, educator for natural resources, environment, and energy programs, partnered with teachers from the Sycamore Middle School to provide water education to the G-Force STEM Club, a club formed because research indicates many girls start to lose interest in science beginning in fourth grade.

Doty attended 26 club sessions from October 2021 to May 2022. Using the watershed model and various activities, she helped the club build greater understanding of storm runoff, water quality, and quantity. They took field trips around the school property to identify issues and had an online visit with a female water specialist. Doty guided the girls through a six-step process that started with identifying the cause of the flooding near their school and ended with a civic engagement event.

Doty worked with the teachers and students to create two separate proposals for the state RISE Challenge program. This program offers funding to school groups who address natural disasters in their communities. The club choose flooding as their natural disaster because the sidewalk to school occasionally goes under water, making it impassable for students on foot.

G-Force Club was successfully funded for two separate proposals. Their first proposal was for a public education opportunity at the school’s Science Olympiad. The girls hosted a table to share their top five concerns with the public. Those concerns included: trash getting into the river from their school, dog waste on the walking path by the river, rainfall capture on lawns in the adjacent neighborhood, lack of native plants to absorb water, and the amount of salt being used on their school pavements.

The second proposal involved a native plant upgrade to the detention area where much of the school’s water runoff drains. Their proposal was to bring partners together and increase the plant biodiversity of the basin with a special emphasis on native pollinators. They cross-referenced plants by planting zone, soil moisture, and native insects they hoped to attract. G-Force had assistance from the Wheaton Franciscans, Sycamore School District, DeKalb County Forest Preserve, DeKalb County Soil and Water Conservation District, RISE Challenge guidance, Environmental Education Association of Illinois, Master Naturalist volunteers, Extension staff, and with a special thanks to Country Road Greenhouse for helping the girls get all their native plants within their budget.

Both proposals were selected for the top five Rise Challenge projects in Illinois. At the Rise Challenge Summit, they were awarded fifth place for their Science Olympiad project and second place for their plant biodiversity upgrade to the detention basin.

With the confidence of these experiences and funds from the grant, the club’s alumni started working on water conservation kits for low-income fourth grade families in the fall of 2022. Their plan is to deliver them in the winter of 2023.

Providing community service

Master Naturalists and Master Gardeners dedicate thousands of hours each year educating the public, building partnerships, supporting community garden spaces, and helping to preserve our natural resources.
Growing partnerships
Research shows that 80% of brain growth in children happens by age 3. Everyday interactions between children, their parents, and other caregivers can provide opportunities to promote healthy brain development and help every child reach their full potential.

Inspired by these facts, three Toddler Gardens were created in DeKalb County by Basics DeKalb County. The partnership between the DeKalb County Master Gardeners and the Basics DeKalb County Toddler Gardens was formed in 2019.

These toddler gardens, geared for children up to 5 years of age, provide a unique opportunity for children from every background to participate in no-cost creative outdoor experiences while engaged in brain-boosting play. The purpose of the interactive gardens is founded on evidence-based, nurturing practices known as the 5 Basics.

The current garden locations are at Welsh Park in DeKalb, Chamberlain Park in Genoa, and Knights Park in Sandwich. During the 2022 season, Basics DeKalb County reported the programs at the Toddler Gardens connected with 553 children and 395 adults across the three sites. All sites offer year-round programming without residency restrictions. They are open to the public and can be visited anytime outside of scheduled programming.

Master Gardener Cheryl Larson offered three programs at the Welch Park Toddler Garden this year. Programs included songs, finger play poems, stories, and hands-on activities. The activities included releasing ladybugs, tasting various parts of a plant, and making a bird feeder.

“We usually ended the session by visiting the gardens at the park and picking any veggies or herbs that were ready for harvest. Using our five senses to explore and compare the plants in the gardens was also a good opportunity to talk with the adults about the plants and gardening tips,” says Cheryl.

Master Gardener Susan Colgan has volunteered at the Genoa Toddler Garden since 2019. “In 2022, I had three garden plots. One grew purple string beans, grape tomatoes, and carrots. The second was a dirt plot where I grew jumbo sun flowers. As the flowers grew, they shaded the kids perfectly,” says Colgan.

“In my third plot had flowers, zinnias, calendula, borage, and yarrow. The kids and I saw beneficial insects here.”

Colgan plans to put signs next to the veggies and flowers this year to help the children learn the plant names.

Reaching new audiences
Master Gardeners are trained volunteers who provide research-based, regionally appropriate horticultural information on plants, soils, and insects to the public.

This past year, Master Gardeners used the gardens as an educational space to collaborate with the Belvidere Park District Northlands Association for Special Recreation (NASR) program. NASR offers programs to adults and youth with disability-related special needs. It is a cooperative partnership between the Belvidere, Freeport, and Rockford Park Districts. NASR programs are open to any individual with disability-related special needs such as physical, mental, and developmental disabilities and persons with mental illness, behavior disorders, and visual or hearing impairments.

Master Gardeners provided an opportunity for NASR participants to learn gardening from seed to harvest. The group met weekly throughout the summer. They learned how to plant, identify weeds, care for and harvest produce. This year the gardens produced 242 pounds of produce that was donated to a local food pantry and sharing table.

“Our Master Gardeners are such a valuable resource for the community,” says Judy Hodge, Extension program coordinator. “They’re providing life-long learning opportunities to many Boone County citizens of all backgrounds. We are fortunate to have such dedicated individuals.”

In addition to offering library programs, Master Gardeners are available to help answer your yard and garden questions. Call our help desks: Boone County, 815-544-3710; DeKalb County, 815-758-8194; and Ogle County, 815-732-2191.
Encouraging active lifestyles
Teaching Organ Wise Guys and Eat, Play, Grow programs in Ogle County resulted in positive impacts and behavior changes among participating students.

“I often have kids telling me about changes they’ve made in the areas of healthy eating and physical activity,” says Brianne Gugerty, SNAP-Ed community worker. “I have heard exclamations such as, ‘Last night I ate all of my vegetables at dinner and then made sure to go outside and play. Windy Lungs really loves fresh air!’ and ‘My Hardy Heart is really pumping after running at recess!’”

Organ Wise Guys uses characters such as Hardy Heart, Windy Lungs, Calci M. Bone, and Madame Muscle to help the children visualize their internal organs while learning the functions of each. The EatPlayGrow curriculum offers engaging activities and simple strategies that make healthy choices fun and easy to include in daily routines — at home or at school. During the program, SNAP-Ed community workers teach simple recipes that parents and children can make together.

When hummus dip recipe paired with veggies was featured during the healthy snack portion of the program, one mom told Brianne that she and her husband had never tasted hummus before trying it at the class.

“I liked it so much I went to the store and bought all the ingredients to make it myself,” the mom said. “Now we’re big fans of hummus because it’s delicious, affordable, and easy to make,” she exclaimed.

“My job is rewarding and fun,” Brianne says. “It warms my heart when students tell me, ‘I’ve been eating fruits and vegetables and working out every day!’”

Building healthy habits
Eat Fit classes focus on setting healthy eating and physical activity goals. A Perry Elementary student made a healthy eating goal to have breakfast a couple days of the week. She said that she usually doesn’t have time or is not hungry in the mornings. After four weeks, she told the class that she is eating breakfast every morning!

“When I asked if she noticed any difference in how she felt now that she is having breakfast, she replied that she’s not so tired during the day,” said Jan Saglier, SNAP-Ed community worker.

Eat Fit classes were held during physical education once a week for eight weeks. Dave Hendrickson, physical education teacher at Perry Elementary School, said, “Nutrition education is important, and I like the fact that physical fitness is included in the sessions. The kids enjoy it, and the activities are age appropriate. I even had some friendly reminders for my own eating habits.”

Supporting families
Healthy Cents, an adult SNAP-Ed curriculum combining nutrition education and food resource management, is offered weekly at Belvidere Community School. By providing money-saving strategies, nutrition education programs help families extend their resources. Healthy Cents also includes information about community assistance programs that families may be eligible for based on their income.

“The beginning of our second session, I asked if anyone had made a change since we last spoke,” said Jan Saglier, SNAP-Ed community worker. One participant stated, “I’ve added fruits and vegetables into my breakfast and lunch. I’ve been able to eat five servings a day and I feel more awake now.”

Fast forward to session four and the same participant commented, “The MyPlate image has kept me on track to eat healthy. I try to prioritize getting in three servings of vegetables and two servings of fruit every day.”
Challenging thoughts

Brain health is a trending topic. As part of continued efforts to promote healthy aging, Illinois Extension offered monthly Wits Fitness Brain Health exercise classes in Oregon, Polo, and Rochelle. Adopting a vigorous lifestyle has been demonstrated to reduce cognitive decline due to the normal aging process, provide benefits including continued independence, reduce chronic diseases, and improve overall quality of life.

Held in partnership with Rock River Center, Polo Area Senior Center, and Hub City Senior Center, each monthly class featured games and activities that focused on areas of the brain that store memory and that are not typically exercised. Mental functions grow and improve when they are challenged. Stimulating activities geared toward improving memory recall, attention, and critical thinking were offered in a fun and engaging way. One participant explains, “While I feel challenged in the class, it is also very fun. I feel confident that I am helping my mind.”

Monthly classes not only allow for continued intellectual health, but also offer an opportunity for social interaction. “I look forward to this class every month. My brain gets the exercise it needs to stay strong and fit,” remarked an attendee.

This past year, 16 Wits Fit related programs were delivered, reaching 216 people.

I enjoy this class so much that I bring my friends along. The activities we do are interesting and engaging. I never miss a class.

Raising awareness

On a sunny October afternoon, the Extension team partnered with the Oregon Chamber of Commerce to offer farm tours for residents and families. Four area families opened their farms to the public to participate in interactive and educational activities.

Attendees gathered at the Dietrich Ranch in Leaf River and presented three activities and demonstrations to visitors, including a soil testing booth to advise homeowners on how and why to test their soils, a composting demonstration, and a quick tutorial on the value of earthworms and the problem of the invasive jumping worm.

Over 45 visitors to the farm were treated to informative and fun activities throughout the afternoon. And, from the Extension team’s perspective, the highlight of this beautiful autumn day was no doubt the enthusiasm of the kids who competed in the worm races!

Reimagining opportunities

In their book, “Hollowing Out the Middle: The Rural Brain Drain and What It Means for America,” researchers Kefalas and Carr observed that small rural communities often struggle against a long-standing negative narrative that suggests small rural towns have few opportunities for younger residents. In northwestern Illinois, Extension is working to reverse that perception using a curriculum developed by West Virginia Extension entitled My Hometown is Cool.

Mike Delaney, community and economic development educator and Kathy Dombek, 4-H program coordinator, offered the program to high-school seniors at Kishwaukee Educational Consortium in DeKalb County. Using guided critical thinking, students identified positive qualities of their hometowns and then formally pitched an idea to make their hometowns cooler. While practicing their communication and presentation skills, students also developed an appreciation for their hometowns. The team is considering offering an after-school program and a “pitch” competition among teams from various communities and regions, offering prizes to teams for their ideas for cooler hometown projects. Mike and Kathy are looking for additional opportunities to present the curriculum across DeKalb, Boone, and Ogle counties.

Assessing community needs

Broadband — Public awareness of this term has increased dramatically in recent years. Accelerated by the pandemic, the need for affordable, reliable high-speed internet access exploded. This need was most acute in rural America where access lags behind urban and suburban areas. As a result, University of Illinois Extension made concentrated efforts to increase program offerings on broadband topics and collaborated with state agencies to educate community leaders about funding opportunities. Leaders from Boone, DeKalb, and Ogle counties participated in these and other Local Government Education webinars.

A 12-week collaboration between Illinois Extension and the Benton Institute of Minnesota resulted in the Accelerate Broadband infrastructure and planning workshop. The workshop takes leaders through an exercise exploring and quantifying regional broadband needs, collecting public input on those needs, interviewing potential broadband service providers for the region, and ultimately developing a plan for rollout of network connections to households and businesses across the region. These projects are works-in-progress, but they still represent significant advances towards a reduction of the digital divide.
4-H
3,380 Show Exhibits
700 Exhibitors
21,358 Experiences
352 Volunteers
30 Boone
34 Ogle
26 DeKalb
90 Total Clubs
Having fun, making memories
If it's June, it must be time for 4-H Camp! School is out, and the summer is just beginning when the annual 4-H Camp takes place for youth in northern Illinois. This year, a day camp was offered for three days at Rock River Christian Camp in rural Polo. A total of 127 youth between the ages of 8 and 15 attended either one, two, or three days of camp. Participants represented nine counties: Boone, DeKalb, Ogle, Carroll, Lee, Whiteside, JoDaviess, Stephenson, and Winnebago.

Twenty teen counselors were selected and train to take on leadership roles. Teen counselors chose Sail Away to 4-H Camp as the theme and led and supervised sessions for campers to enjoy. Evening programs were planned by the counselors and allowed campers to experience group games and challenges, as well as a traditional 4-H campfire.

“One of the best things about 4-H camp is the opportunity for youth to get to know others across the state in 4-H, as well as develop some independence and cooperative learning,” said Johnna Jennings, 4-H youth development educator. “4-H Camp allows youth to try new things, while also permitting them to choose activities in their comfort zone.”

Incubating curiosity
4-H Chick Incubation and Embryology is one of the most popular school programs offered in Boone, DeKalb, and Ogle counties. This program is a hit with elementary schools and provides a great hands-on learning experience for the teachers and the students. A total of 1,572 students in 78 classrooms were reached, and 861 chicks were hatched.

Teachers involved in the program attend a training every five years conducted by University of Illinois poultry specialist Dr. Ken Koelkebeck and Extension educator Johnna Jennings. The training provides teachers with the knowledge and skills needed to hatch fertile eggs in their classrooms.

“Embryology is a science, and while we can’t guarantee that every classroom will be successful with their experience, we do believe the teachers are better prepared for this program when they attend a training,” says Johnna.

Koelkebeck covers information with the teachers to provide a positive educational experience for their students. Over the years, many teachers say this is one of the best programs they do with their students. It not only teaches students about the development of a baby chick, but it also allows the students to watch a chick hatch and care for it for a few days.

Over the years we have had the opportunity to reach thousands of children with this program, and the excitement the students and teachers have when they successfully hatched chicks never gets old. Chick embryology is the largest 4-H educational program conducted in Illinois.

Johnna Jennings, Extension educator
Building skills and confidence

4-H is all about firsthand learning, and the summer of 2022 was no exception. 4-H staff engaged with students at the Belvidere District 100 Summer School and taught two weeks of cooking to middle school students. Thanks to funding from the Walmart Healthy Living Grant and District 100, and with the help of 10 4-H Teen Teachers, 23 students learned nutritional cooking skills. The program was conducted twice for four days with four-hour sessions each day.

The Boone 4-H Teen Teachers participated in 15 hours of training where they were taught how to interact with youth of different ages, positive youth development, how to handle classroom dynamics, food safety, and cooking skills.

The students enjoyed their experiences while learning to make 12 separate recipes. Teams participated in a food challenge. Students had to make a pizza using either pineapple or chicken and salsa using strawberries, bananas, or lime juice.

“The creativity of the students was impressive as they worked together to produce some amazing pizzas and salsas that everyone was able to try,” says Johnna Jennings, 4-H youth development educator. “Another part of the challenge required the students to present their final product and share how they made the item, including how it fit the MyPlate nutritional guide. Talking in front of others is not something most youth feel comfortable doing, but is an important skill to develop.”

Parent Lee Revels shared, “I just wanted to share how meaningful this was for him. He really enjoyed the class and has been cooking at home regularly since then. It is great to see him think about how to safely cook and is excited about making his own healthy food.

“He has made funny cake several times and loves to make breakfast burritos. I brought in a few peppers from our garden last night and he was thrilled to see them and told me they would be perfect for breakfast burritos.

“I also love seeing the confidence and self-reliance this has built in him. Earlier this week I was struggling to decide what to make for dinner, and he asked if he could make breakfast for dinner. The skills you instilled have been a bright spot for both him and me. Thank you for your ongoing commitment to our community!”

Cultivating leadership

Leonardo Da Vinci said, “We know more about the movement of celestial bodies than about the soil underfoot.” It seems that may still be true. News outlets announce the lunar and solar eclipses, northern lights, and planets lining up in a “planet parade,” prompting us to look to the skies. No one announces the amazing fact that one tablespoon of healthy soil has more organisms than there are people on earth. There are zero news flashes sharing that one acre of cropland is home to 1,400,000 earthworms. Soil is our food lifeline, but many people know less about it than what is happening in outer space.

Since August of 2007, Agriculture in the Classroom (AITC) has been working to change that. Students are getting their hands dirty studying soils, kneading dough for bread, and traveling through the digestive system of a cow. In 2007-2008, the first year of the program, 325 programs were presented with 6,201 student contacts. During the 2021-2022 school year, 19,261 student contacts were made and 999 programs presented.

Some students who were part of the program at its inception are now student teachers, sharing their excitement to incorporate agriculture into their own classrooms. Not only are K-12 students benefiting from the program, but college interns are as well.

“The opportunity to work as an intern in the Ag in the Classroom program prepared me in numerous ways to work in a classroom,” says Renee Gehrke. “It was an awesome experience that helped pave the way for my career.”

The program not only educates young people about food production, but it’s giving them the confidence to share their knowledge with others. Alyssa Miller, a current intern, advanced to the National Professional Agriculture Student contest in the area of Ag Education Teaching and placed second.

“Thank you for allowing me to do the internship because it has helped me tremendously with honing my teaching skill and confidence in the classroom,” Alyssa says. “I feel I did really well because of the Ag in the Classroom experience.”