PURDUE EXTENSION | LOCAL FACES COUNTLESS CONNECTIONS

SPARKing an Interest in Indiana 4-H

Heather VonDielingen – Jackson County

Rae Ann O'Neill – Huntington County

Extension Educators, 4-H Youth Development

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What is a SPARK club?

- Offered to youth in grades 3-12 to SPARK a new interest in the county 4-H program
- Intended to capture attention of youth with single focus “out of the box” interests
- SIX hours of contact time, allowing flexibility for both volunteers and youth

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- Includes a culminating activity to showcase what was accomplished during SPARK club sessions
- Youth may participate in an unlimited number of SPARK experiences each year once enrolled in 4-H
- The possibilities are ENDLESS!

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What types of SPARK Clubs have been organized in your county?

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Jackson County SPARK Clubs – 2015/2016 Program Year

Bicentennial SPARK Club

Session 1: Bicentennial Headquarters
Session 2: Jackson County Visitor Center
Session 3: Jackson County History Center
Session 4: Freeman Field Airport Museum
Session 5: Medora Covered Bridge
Session 6: Jackson County Courthouse

Culminating Activity: The group put together a poster of pictures and facts they learned during their experience. The poster was on display at the Jackson County Fair.

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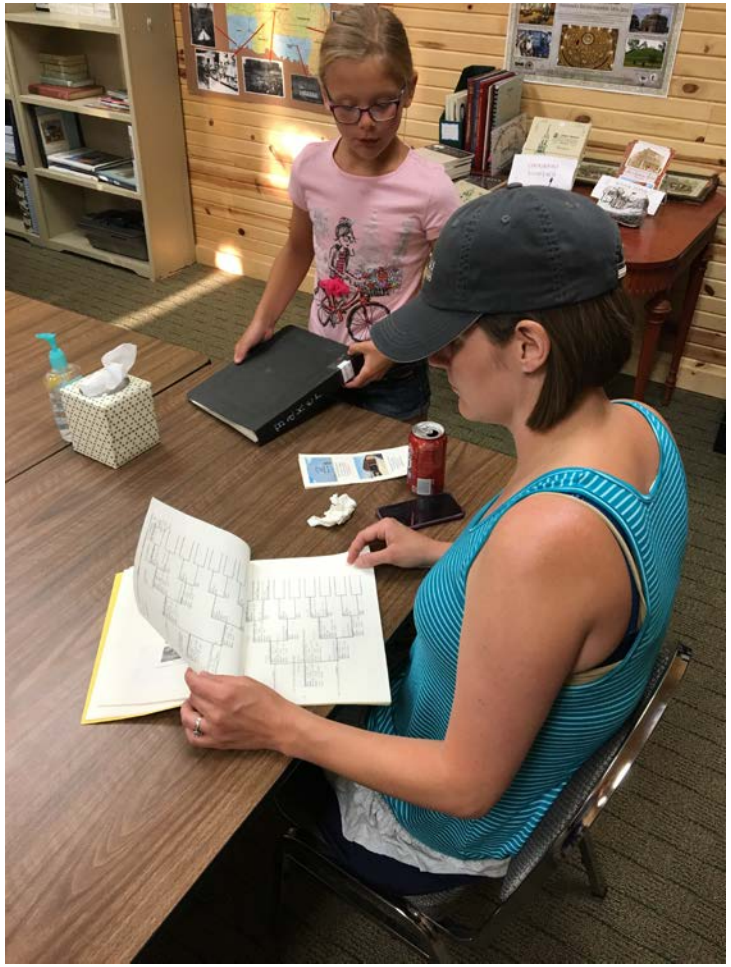
Jackson County SPARK Clubs – 2015/2016 Program Year



- <u>One</u> new youth recruited to county 4-H program, who went on to join a community club
- A visit to the genealogy lab at the History Center sparked an interest in the genealogy project of a current 4-H member

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Jackson County SPARK Clubs – 2015/2016 Program Year

Origami SPARK Club

Session 1: spinning tops, ninja stars
Session 2: spinning tops, ninja stars
Session 3: animals (pigs, cranes, frogs)
Session 4: animals (pigs, cranes, frogs)

Culminating Activity: Youth left each session with origami creations. They also made a poster with pictures to be displayed in the 4-H Building at the Jackson County Fair.

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Jackson County SPARK Clubs – 2015/2016 Program Year

- Attended Japanese ESL class to recruit volunteers
- One volunteer led origami activities in the 4-H Building during the fair as well

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Huntington County SPARK Clubs – Beginning Crochet

LEARN TO CROCHET

A WORKSHOP FOR BEGINNERS

Learn the basics of crochet from how to choose your yarn and hook; how to begin (chain) and several simple stitches that will have you crocheting lots of easy projects. You will be provided with a skein of yarn and a crochet hook as part of the class fee.
Youth can bring along an adult to learn along with them.

Tuesdays: October 18, 25, November 8, 15, and December 6

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Youth Grades 3-12

Adults can learn along with the youth

$20 for youth (includes 2017 State 4-H fee)

$5 for an adult to attend with a youth

Yarn, crochet hook and instructional materials included.

PURDUE EXTENSION
1340 S Jefferson
Huntington, IN 46750
(260) 358-4826

Make your reservations by October 14

Adult could take the class along with a child.
1 mother with 3 children
1 mother with 1 child

Goal was to attract youth to 4-H through Arts & Crafts.

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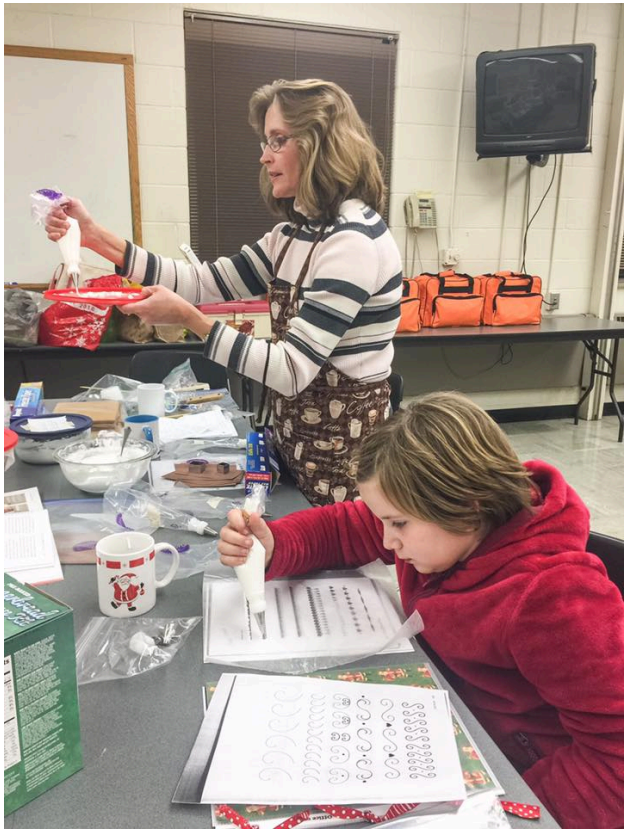
Allen County SPARK Clubs – Gingerbread House



The December Gingerbread House went so well they are doing a similar offering for Valentine's Day.

The goal is to attract youth to 4-H through an interest for the Cake Decorating.

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Jackson County SPARK Clubs – 2016/2017 Program Year

Science, Technology, Robots…Oh My! SPARK Club

Session 1: Engineering
Session 2: HEXBUG Challenges
Session 3: LEGO Robot Building
Session 4: Introduction to LEGO Robot Programming

Culminating Activity: Parents were allowed to come in the last ten minutes of each session so that the youth could show them what they learned.

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Jackson County SPARK Clubs – 2016/2017 Program Year

- 16 youth registered within one week of advertising
- Nine new youth recruited to county 4-H program
- Laptops secured from community partner, JCIDC

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LaGrange County SPARK Clubs – 2015/2016 Program Year

sustainable funding solution from the possibility of shifting more sales "I think when yo

PATRICK REDMOND

Sixth-grader Ayden Marks holds up a computer he just finished building Wednesday night during his first night with Spark Club, a new 4-H program. The program aims to provide youth participants with a basic understanding of computers and computer coding, which could lead them to a career in computer science.

New club 'sparks' learning

4-H program helps develop youths' computer skills

BY PATRICK REDMOND
predmond@kpcmedia.com

LAGRANGE — After connecting a couple of circuits and snapping together a plastic case, Ayden Marks slipped a flash card into its slot, plugged in two USB cables and then a power supply. In less than 15 minutes Wednesday night, Marks had built his first computer.

Marks is part of a new 4-H computer coding club in LaGrange County, created to help teach youths the basics of computer science. Called Spark Club, this newest 4-H offering is aimed at reaching out to kids who may not have considered joining the organization before.

Club members meet twice a month to work with 4-H-provided computers. Each club member builds his or her own small, inexpensive, palm-sized computer, then hooks it up to a flat-screen monitor and keyboard to bring it to life.

The computers use an open-source operating system and software to teach club members basic computer science using different games.

"Gaming helps teach them the foundations of computer science," said John Emerson, the LaGrange County Purdue Extension educator in charge of 4-H youth development. "It's an effort to reach kids we haven't reached before with a different kind of curriculum.

PATRICK REDMOND

Kalei Bollinger, 14, Howe, right, learns coding on the computer she built while 4-H volunteer instructor Jeff Perusky works in the background with Brooklyn Burkhead, 11, also of Howe. The girls are part of a new 4-H computer science club started by Purdue Extension in LaGrange County.

This isn't about farm animals."

The computers were created by an English company and specifically designed to be easy to build and use, and serve as an effective means of teaching youths about computers and computer coding. The computers cost about $200 each and have the comparable computing power of an iPhone 5.

"They've got a little bit of juice," Emerson said.

The computers and monitors were

SEE SPARK, PAGE A6

SPARK: *Many computer science jobs go unfilled*

FROM PAGE A1

purchased using money donated to the county 4-H program by Indiana's Juvenile Detention Alternatives Initiative program.

Marks, who said he likes math and computers, appeared to be a natural during his first night with the club. Once his machine was up and running, he quickly started coding without help from the club's leaders.

He took his new computer and monitor home with him at the end of the night and will bring them back when the club meets again in two weeks.

It costs $15 to join 4-H. This club, though small, is loyal, and Emerson said it's seeing 100 percent attendance so far.

4-H created Spark Club to help stimulate an interest in fields like computer science. Emerson's club borrows its curriculum from Code.org, an online, nonprofit computer science education resource center.

"We're using the lesson plans from Code.org," he said. "It's a national computer science organization that believes every kid should have an opportunity to receive an education about computers."

> "Gaming helps teach them the foundations of computer science."
>
> – John Emerson, Purdue Extension

Computer science is a growing career field that tends to be flush with jobs and starved for applicants. It's estimated more than 6,000 computer science jobs went unfilled last year in Indiana.

Two girls are part of the LaGrange club, and Emerson said he and his volunteers are working hard to recruit more. According to Code.org, more than 1,200 students graduated from Indiana colleges with computer science degrees in 2014, but only 17 percent of those graduates were women.

Parent and club volunteer Jennifer McBride said her 14-year-old daughter spends hours at home each week working on her computer, learning all she can about coding.

"She wants to be an engineer now," McBride said.

If the program continues to grow, Emerson will need to find more sponsors to help him pay for computer kits and monitors. The club meets at the LaGrange County Courthouse Annex, and so far, the biggest problem Emerson seems to have encountered is finding enough power strips to plug in all of the computers and monitors.

"We'd like to grow, but we may not have all the outlets we need," he said with a laugh.

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Jackson County SPARK Clubs – 2016/2017 Program Year

Fire Safety SPARK Club

Session 1: Develop fire exit strategy plan, identify fire hazards, learn how to place a 911 call.

Session 2: Identify three different types of fires and practice extinguishing them properly.

Session 3: Learn about different careers in the emergency field and meet various service workers.

Culminating Activity: Youth will create a poster to be on display at the Jackson County Fair, showing the community what they learned.

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Jackson County SPARK Clubs – 2016/2017 Program Year

- Volunteers secured donations of fire extinguishers to be used during the program
- Don walked into my office and asked what was new in 4-H, so I told him about SPARK Clubs. He left the office and returned two hours later with a completed application and an idea for a new SPARK Club in Jackson County!

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Huntington County SPARK Clubs – Science Investigators

5 youth participated in our first year.

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Allen County SPARK Clubs – Gluten Free

Encouraging youth with food allergies that they too can be part of our 4-H Foods project.

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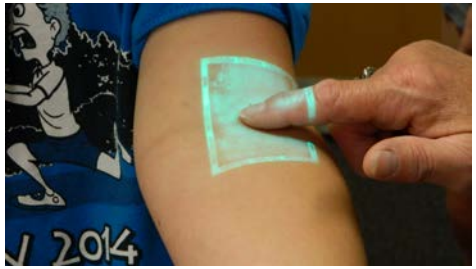
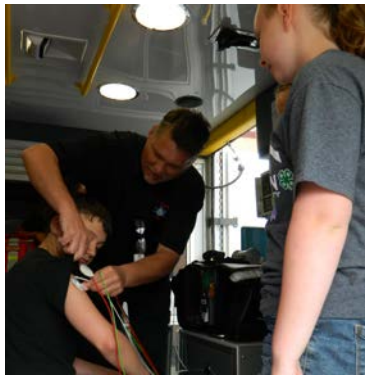
Huntington County SPARK Clubs – Heath Careers





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Allen County SPARK Clubs – Science

Some schools are not able to offer HANDS ON Science activities.

The youth are having a GREAT time "playing" with science.

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Pork SPARK Club

Session 1: Local farm visit to learn about pigs.
Session 2: Visit to a local butcher shop.
Session 3: Cookout with pulled pork!

Culminating Activity: Youth will learn about the process of raising a pig for food consumption. They will see pigs on the farm, visit the butchering facility, and then finally enjoy a meal of pulled pork at the third session! Youth will film a video of their experiences to be shared on social media.

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MOOving ALL Science Forward!

- Animal Science & Agriculture
- Applied Mathematics
- Consumer Science
- Engineering
- Environmental Science & Natural Resources
- Life Science
- Technology
- Food Science

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Huntington County SPARK Clubs – 2016/2017

RAISING RABBITS

WHEN
7:00—8:30 PM
Meets Monthly—see schedule to the right.

WHERE
Huntington County Fairgrounds,
First Federal Savings Bank
Community Building

COST
FREE TO CURRENT 4-H MEMBERS
$15 (SERIES) FOR NON-MEMBERS

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PLEASE RSVP
260-358-4826

JANUARY 19
Hygiene and Nutrition

FEBRUARY 15
Breed Specifics

MARCH 14
Grooming

APRIL 19
Getting Ready for Show

MAY 9
Entering in 4honline (New)
Tattooing will be available
Getting ready for Fair!
*********Livestock Express Pavilion—Poultry Barn*****

18 USC 707

Wells County SPARK Clubs – Outdoor Pursuits

4-H OUTDOOR PURSUITS

Basic Outdoor Skills Classes Offered

Do you enjoy being outdoors? Would you like to learn more about basic outdoor skills? Then these workshops are for you!

Classes will be offered on:
September 10th, 17th and 24th
9:30 AM—12:00 PM
at the Wells County 4-H Park

Activities at each workshop will include:

September 10th
- The Rule of 3
- S.O.S. Signals
- Survival Packs / Gear
- Basic First Aid

September 17th
- "Leave No Trace" Practices
- Food (what & where / how to get) - snares, bows, rock traps
- Fire Starting / Types of Fires
- Outdoor Cooking

September 24th
- Shelters (emergency & long term)
- TEAM CHALLENGE—Show your knowledge and skills! Practice what you've learned.

Sign up Information & Details

- Youth in grades 3-12 may participate in these workshops
- You do not need to sign up in advance—sign up information will be taken at the first workshop on September 10th
- There will not be a fee for this year's Outdoor Pursuits workshops. If this develops into a 4-H club or project, we may have a fee next year.
- Classes meet in front of the Quonset Building at the 4-H Park.
- Classes will be held rain or shine, so please dress accordingly.
- Parent volunteers are welcome to participate.

Questions?
Contact Mark Durham at 260-273-6508 or
Roger Sherer at 260-824-6412

Thank you to our 2016 Outdoor Pursuits sponsors: Wells County 4-H Association
Wells County 4-H Shooting Sports
Wells County Whitetails Unlimited

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- Creative Concepts
  - ✓ New and exciting
- Consistent Communication
  - ✓ Press releases, website, social media, schools, community organizations
- Collaboration with Community Connections
  - ✓ Get to know community leaders

Keys to Success

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Let's Plan a SPARK Club!

Key Items to Remember when Planning a SPARK Club

- Grades 3-12
- Single focus, out of the box interests
- SIX hours of contact time
- Youth learn something new during each session
- Culminating activity

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What are your SPARK Club ideas?

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Maker Movement

Coding

Bird Watching

Sign Language

Creative Cooking

Tea Time!

Golf

Cookies & Canvas

Farming

Running

Web Design

Bug Camp!

Winter Survival

Bowling

Model Airplanes

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Questions or Comments?

schneidh@purdue.edu or 812-358-6101

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