



Cornell University  
Cooperative Extension  
Jefferson County



## 4-H Programming Opportunities

9/20 updated

*These programs can be offered to school groups, homeschool groups or small youth groups. In-person programs will adhere to COVID-19 guidelines. The programs that can be offered virtually are noted. Depending on our staffing situation there may be times when some of these can't be provided. There are costs associated with some of the programs.*

- 1. Water, Woods and Earth:** This civic ecology education program is designed to be flexible in order to accommodate the interests of the youth. Whether it is fishing, hiking/exploration, forestry, gardening, stream restoration, wildlife management, biodiversity conservation, or any other environmental issue(s). Youth will be able to analyze a given ecological issue(s) and develop a method to help alleviate or reverse the problem. This program aims to create civic minded youth who are the necessary agents of change for future environmental and ecological challenges our society will likely face. A useful, hands-on tool that can be used is our Enviroscope, which allows youth to be creative and experiment with real-world land management strategies while demonstrating how science and engineering can help lessen our impact on the environment.
- 2. Beyond the classroom:** Youth will prepare for life beyond the classroom – they will learn about financial planning and budgeting, workforce readiness, leadership, citizenship, service learning and will have the opportunity to explore different career paths. This program is geared toward middle and high school youth. *This program can be offered virtually.*
- 3. Super Simple Science:** Youth are introduced to the principles of scientific inquiry through easy hands-on science experiments and science tricks. Youth will apply the skills they develop through this program by carrying out easy science experiments using everyday house hold items. This program is best with elementary age youth. *This program can be offered virtually by providing a list of materials needed ahead of time.*
- 4. Campfire Magic:** Youth will get the whole 4-H Camp Wabasso experience during this one day camp program. Youth will have a chance to participate in 4-H camp activities like shooting sports, environmental education, hiking, and team challenges, all while learning about their natural surroundings. *We can even offer your group of youth a virtual campfire experience complete with group games, campfire stories and campfire songs.*
- 5. Wild & Wacky Adventures:** Youth will participate in a wide range of team building challenges and adventure games aimed at building trust, self-esteem and leadership. Youth will take part in group activities that use rubber chickens, pool noodles, scooters, snowshoes in the summer,

balls of yarn, fake money, giant cards and other weird and wacky items. Project Adventure curriculum and materials are used for this program. This program can be offered at 4-H Camp Wabasso, at a school, or at another public space.

- 6. Geocaching:** If you have a love for the outdoors, high-tech toys, and adventure, this just might be the hobby for you! Pronounced “geo-cashing”, this adventure/sport has families and individuals searching for hidden ‘treasure’ all over the world using the internet, hand-held GPS units and their wits! Most geocaches can be accessed year round. In Jefferson County there are over 280 geocaches and New York State boasts over 19,000 caches! We can offer this program at a trail/location of your choice, or we can choose the trail/location for you!
- 7. The Universe To You (2 U):** This 4-H science program dives into the amazing world of Astronomy: Stars, Galaxies and Black Holes! Fundamental topics such as the elements and the physics of light will be encountered, all with hands-on, fun activities. Make your own telescope, spectroscope, and then blast into space with your own rocket! (This course can be tailored to your time and interest level.) There is a planetarium available for use based on staffing and coordination, there is an extra charge for this. *Part of this program could be offered virtually by providing a list of materials needed for the activities.*
- 8. The Wonderful World of Water:** Activities such as fishing, studying aquatic life and exploring the chemistry of lakes, streams and ponds will be offered in this 4-H program. Youth will also examine and understand the many roles that water plays in all of Earth’s systems. There are several hands-on activities to help youth learn about the ecology of aquatic habitats found in our county as well as Earth’s entire Biosphere. This program could be offered at 4-H Camp Wabasso or at another body of water of your choice.
- 9. For the Birds:** Beautiful, musical, practical, athletic and territorial – birds are an amazing addition to the animal kingdom. Mankind benefits from them for science inquiry, food, and relaxing hobbies. Youth will participate in citizen science projects through Cornell’s Lab of Ornithology (study of birds) Project Feeder Watch and Great Backyard Bird Count. This course may also include embryology studies with real eggs, depending on the time of the year, there may be an extra cost for this! (would need 3 weeks from start to end) And who says we can’t build bird houses and put them up along a trail? Of course we can. Extra costs associated with this activity. *Part of this program can be offered virtually.*
- 10. Travels Through Time:** The “Living History” 4-H program lets you take a step back in time by learning everyday life skills from a certain time period. History will come to life for youth as they explore period clothing, cooking skills and recipes, as well as use tools and play games from the decade of your choice. They will experience the sounds, tastes, smells and textures of the past. Decades to choose from: 1810’s, 1860’s, 1920’s, 1940’s, 1950’s, 1970’s.
- 11. Crank It Up! Small Engines Project:** Take apart a small engine and learn how it works! Learn the parts and proper tools needed to work on them. Safety skills and the science of engines will be gained through hands on activities. The type of engine used in this program can be found in mowers, splitters and tillers.
- 12. Hit the Nail! Woodworking Project:** Complete simple and practical woodworking projects in this 4-H program. Youth will make a bird house, tool box, raised bed garden box, and/or shelves/bookshelves. Participating in these projects will help youth develop the skills needed to

complete more advanced projects in the future. Participants will gain life skills in safety and learn how to make wise choices when purchasing the correct wood and hardware for a project. There is an extra cost to this program if selected, due to the cost of the woodworking projects.

- 13. The Lost Lady Bug:** Native ladybugs such as the two-spot, the nine-spot and the transverse ladybugs, once common, are now very rare. Ladybugs are beneficial predators with an important job to do. They eat harmful pests that feed on plants and orchard trees. If you like these colorful bugs, help a scientist while we connect kids to Cornell. We will also explore invasive insect species and their predators. Learn about how you can become a citizen scientist through this program! *This program can be offered virtually.*
- 14. All the World's a Stage!:** Get your creative juices flowing! This 4-H program offers a chance for you to learn skills in a variety of stage arts: Public Speaking, Drama, Stage Design, Puppetry and Demonstrations. The 4-H Public Presentation program is well known for helping youth overcome any "stage fright" issues they might have by participating in fun, interactive games and short skits.
- 15. All Warm & Fuzzy!:** Are you interested in small animals and how to care for them? If cavies (guinea pigs), rabbits, mice, gerbils, rats and hamsters interest you, this program is for you. Learn about different small animals, where they originate from, the scientific differences between them and how to care for them.
- 16. Is It the Tail that Wags the Dog?:** Are you a dog person? If you are, then this is the program for you! Learn about basic dog care and grooming, training, and the variety of activities that you can do with dogs. Get to visit and watch these dogs perform a variety of 'jobs' from obedience, rally obedience, agility and tracking. You might even get to work with a dog! Dogs used in this program have passed or are working on their AKC Canine Good Citizen title, are show dogs nearing their conformation championship, and have performance titles. They are also used in the local 4-H dog program.
- 17. From Seed to Salad!:** The Seed to Salad program will connect youth to where their food comes from as they discover how to grow their own food. Although Seed to Salad is a gardening program, the underlying theme is youth decision-making and team work. From start to finish the youth are making decisions that will affect how successful their "Garden Party" will be. Through the process of planning, planting, and harvesting their own garden youth will see first-hand all the hard work that goes into growing their own food. The reason salad greens were chosen for this project is because they are quickly maturing vegetables that have an earlier harvest time than most other vegetables. So let's get our youth out in the sunshine and their hands in the soil!
- 18. Project Learning Tree:** Youth will learn about current environmental issues through a variety of hands-on, interdisciplinary activities. The goal of this curriculum is to teach youth how to think and make informed decisions about relatively complex issues while enhancing scientific knowledge and environmental awareness.
- 19. Nature Detectives:** This hands-on, experiential learning curriculum teaches youth about general Ecology through the study of birds. Activities are fun, interactive and adaptable to many grade levels. This program will encourage youth to explore their local environment and find answers to their own scientific questions. *This program can be adapted to be offered virtually.*

- 20. Biodiversity Basics:** Youth will gain a strong understanding of the importance of conserving biological diversity. Using a variety of hands on scientific techniques, youth will learn to observe the diversity of life around them as well as how to minimize their impact on all living species. Several mathematical and scientific principles and concepts will be addressed.
- 21. Food Fun:** Learn how to make a fruit and vegetable smoothie with a bicycle! Discover what is in that soft drink, fruit drink and glass of milk? Are we really what we eat? Let's test our sense of taste. All this and much more in Food Fun. We will use the 4-H Choose Health: Food, Fun and Fitness curriculum for this program. This program must be at least six hours to complete. *This program can be adapted to be offered virtually.*
- 22. Teen Cuisine:** A weekly cooking club for grades 6 to 12 to help them increase their confidence, knowledge, and kitchen skills. By teaching teens how to make informed food and lifestyle choices, they develop important life skills to promote optimal health — both in the present and in the future.
- 23. Teen Health Ambassadors:** After undergoing their own nutrition training, teens become peer-leaders by developing a social marketing and media campaign aimed at: Drinking fewer sugary beverages, eating more fruits and vegetables, and encouraging teens to be active.
- 24. Harvest of the Month:** Nutrition Education promotes childhood health, growth, and intellectual development to enable all children to reach their full academic potential. Programming can take place virtually, in classrooms, at assemblies, in afterschool programs and with other community youth groups. Each workshop is designed specifically for the age group and grade level requested. Lessons are interactive and often include food demonstrations of featured vegetables and fruits (locally grown when possible!).
- 25. Up for the Challenge:** Focuses on lifetime fitness and healthy decisions. In this 6-10 session program, youth will learn about all aspects of wellness and leading a healthy lifestyle. Session activities will range from determining how much sugar is in various beverages, making healthy snacks, and learning fitness activities that are fun and easy. Over the course of the program, youth will set a goal for a wellness challenge that they'd like to complete by the end of the program. *This program can be adapted to be offered virtually.*
- 26. Project WET:** Teaches youth about water resources through hands-on, investigative activities. This can be adapted to youth in grades K-12. Youth will learn about water and how it is all connected throughout the planet. Additionally, youth will learn about the cycles of water, water as a natural resource, watersheds, water quality, and how to test water. This program can be offered at 4-H Camp Wabasso, a school, or another public space.
- 27. Project WILD:** is a conservation and environmental education program that highlights wildlife. It works to connect youth to nature using the great outdoors as a classroom, and can be transitioned into service learning project. It teaches youth about ecology, sustaining fish and wildlife resources, how people interact with wildlife, habitats, ecosystems, and habitat and natural resource management. Youth learn how to conduct experiments and investigations in the natural environment around them. This can be adapted for K-12 youth. This program can be offered at 4-H Camp Wabasso, a school, or another public space.
- 28. The Power of the Wind:** Will give youth the opportunity to work with a team to design, create, build and test a wind powered device. Youth are given opportunities to explore wind as a

potential energy source in their community. Skills such as teamwork, learning from others, planning, organizing and following through on a project are developed and utilized throughout this program.

- 29. The ABCs of Energy:** Is critical today. Energy is in the headlines every single day as New York State pushes towards the goals of Climate Leadership and Community Protection Act. Most of the energy we use comes from non-renewable fossil fuels. Youth in this program will learn to distinguish renewable and non-renewable energy sources and learn how they are utilized at home and around our community.
- 30. The Magic of Electricity:** Takes youth through a typical day's worth of energy use. The alarm clock that wakes us up, the light bulb which brightens our day, clothes we put on which were woven and sewn by machines using electricity. Even our orange juice was brought to the store by a truck that used a battery to get it started. This program will introduce youth to the wonders of electricity. A special feature that can be brought to this program are electronic snap circuit activities where there are over 100 ways to make alarms sound, bells jingle, whistles blow and small wind mills to move.
- 31. Learn to Solder:** Is a six-session program that reviews the basics of electronic engineering and progresses to teach youth soldering techniques and safety practices. After learning the basics, youth will design a final project using the skills that they learned in this program. Additional costs are associated with this program.
- 32. 4-H Shooting Sports:** Is a great way to learn archery, air rifle or air pistol basic skills. All three teach appropriate rules of safety, proper equipment selection, care and beginning shooting techniques. Youth will receive a broad, sound foundation for learning the discipline which can develop into a hobby enjoyed over a lifetime. Parental consent is mandatory for participation and there are age restrictions associated with each discipline. Potential program sites must have a safe place to set up a range – evaluation by the Instructor will be necessary before the series is offered. There are age requirements based on the discipline being taught. Contact 4-H staff to learn more.
- 33. Public Speaking – Oh my!:** Many of us are uncomfortable with speaking in front of an audience, whether it is for a school project, a sporting event, etc. This program will teach youth how to prepare a presentation, how to set up for the presentation and how to deliver a presentation in style! This can be adapted for a variety of youth ages. *This program can be offered virtually.*
- 34. Youth Leadership Matters:** As youth get older. It is important to start to develop leadership skills at an early age, and refine the skills. Youth will participate in team building activities, learn what it takes to be a leader and collaborate with others to accomplish tasks – taking the lead at times.
- 35. Mad City Money:** is a 2.5-hour simulation for high school youth. Each participant receives an “about me” sheet that contains: an occupation and salary, student loan debt owed, credit card debt owed, and cost of medical insurance. Some participants will have a spouse; some will be single; and some will be single parents. Participants build a monthly budget based on their incomes. They visit nine merchants in Mad City to purchase housing, transportation, food, day care and other needs. There's a mall for wants and, of course, a credit union for financial services. The Fickle Finger of Fate randomly visits each participant during the simulation and

distributes unexpected windfalls and unplanned expenses. Participants use debit cards for their purchases and must balance both their debit card registers and their budgets. The simulation can serve up to 150 middle/high school youth. *This program can also be delivered in a 90-minute virtual session for up to 50 middle/high school youth.*

- 36. 4-H Yoga for Kids:** Is a six – ten session healthy living program. This program will explore, teach and practice breathing techniques, poses, partner poses and team building activities. Youth will gain knowledge of how to increase endurance, balance, strength and flexibility. The goal is to equip youth to work towards achieving their optimal physical, social, and emotional well-being.
- 37. Recycle and Compost:** Leads youth through a six – ten session educational opportunity to learn why recycling and composting are so important to our environment. Youth are provided with opportunities through hands on activities to explore what can be recycled and what is compostable and why.
- 38. Character Education** is aimed at elementary age youth. Youth learn and develop to be civic, good mannered, accepting, healthy citizens. The curriculum covers leadership, diversity and how to be proactive and empathetic. Lessons include team building activities. *This program can be adapted to be offered virtually.*
- 39. Kids in the Kitchen** is a hands on nutrition/cooking curriculum appropriate for youth ages 6-15 in after school programs. Youth learn how to prepare simple, healthy foods that they can make for themselves and for other family members at home. There is a food safety practice included in each lesson. Group size limited to 12 youth is ideal to allow each youth to experience the cooking practice. Cooking utensils and supplies can be provided, however a large space with a sink is needed.
- 40. 4-H Junk Drawer Robotics** is a hands on 4-H curriculum where youth create robots using items found around the house, the office and maybe even in the garbage. Through this program youth can explore infinite possibilities of a variety of cool uses for their “drunk drawer” items. Lots of experiential and active learning for youth.
- 41. Sewing** is a hands on life skill with practical applications such as learning how to thread a needle, sew on a button and do hand stitching. Youth will use sewing machines to make a simple item(s) by the end of the session. This program requires transporting the sewing machines – please be mindful they will need safe, dry storage until the program is complete. Two embroidery machines are also available for use with the program.
- 42. Maker Space** programming is of great interest today. 4-H has a variety of exciting gadgets that we can bring to your program for youth to learn how to put something together, take it apart or build. Youth explore how items work, what makes them work and much more.
- 43. Photography** is both a science and an art. Youth will learn the basic functions of a camera, what makes a great photo and what composition is. We have the equipment to support 10-15 youth for this program.
- 44. Technology Marvels** introduces youth to 3D pens, high speed data collection vests, makey-makey kits, coding, drones, augmented sand box/topography, lego robotics and more. This programming can be modified based on age and interest or perhaps a full program of coding, drones, high speed data collection vests, etc. can be requested.

- 45. Junior Iron Chef** – in this healthy cooking program, youth will develop a culinary team and compete in the annual Jefferson County 4-H Junior Iron Chef contest. The Junior Iron Chef contest is a team contest for youth ages 12-18 with each team consisting of 3-5 youth. Teams are judged on floor/kitchen skills, nutritious food choices, taste, plating/garnishing, and a short oral presentation. In this minimum 6 hour program, youth will learn all of these topics plus teamwork and communication skills in order to be a successful team. (Note: minimum 6 hours required for this program. This program is intended for middle and high school youth ages 12-18).
- 46. Culinary Creations** – we can design this program especially for you – want to learn cake decorating skills, or maybe print your favorite photo with our edible printer and then eat it on top of your cake/cupcake, or maybe you want to really explore the world of 3D food printing. Whatever, works for you, we can make it work!
- 47. Get Experience through Mindfulness (GEM)** is a five hour program for youth 10 and up. This program leads youth through a series of activities that place an emphasis on stress management taught through practical and interactive mindfulness based activities to facilitate experiential learning.
- 48. Mindful Me!** introduces youth ages 5-8 to basic concepts in mindfulness practices. The program promotes mindful practices that lead to improvements in managing one’s own goals, developing a sense of self, time management, stress management, emotional regulation, and mindful eating practices. Specific outcomes from youth participation in the curriculum include short-term (skill development and knowledge gain), mid-term (increased stress management, mindful eating, etc.), and long-term (physical, mental and social). This is a six hour program.
- 49. 4-H Bicycle Safety program** is a 6-hour program teaching youth all about bicycle safety using the 4-H research based bicycle curriculum. Youth will learn all about the parts of their bicycle and how to safely take care of their bicycle and conduct minor repairs. Youth will learn all about highway traffic safety regulations, rules and laws. And ride a bike around! We have 10 bikes available to use with the program.
- 50. Augmented Reality Sandbox** is a unique learning tool that uses a combination of sand and sensors to project micro-geography right in the classroom. Youth can be taught a myriad of topics in this program including principles of topography, geography, natural sciences, watershed ecology and computer sciences!
- 51. Engineering Fun for younger youth** uses Kid Sparks mobile labs for younger elementary youth. The labs support a broad range of technologies and curriculum. This is all hands-on learning, very little lecture involved. Youth learn about mechanisms and movement, applied mathematics, programmable robotics and computational thinking, simple and compound machines and rapid prototyping. Youth drive their own learning through the hands-on design and engineering challenges by defining problems, asking questions, and challenging their own thinking to learn.
- 52. NYS Natural Resources 4-H Wild Edibles, (A Guide to Tradition, Safety and Conservation)** – everyone will enjoy this program – this program explores our natural environment, gets youth outside and moving; and the youth can prepare wild edibles and give them a try! This program is for youth 12 and up.

- 53. Circuitry Galore!** This program can be adapted for youth ages 6-18. Youth will learn all about how electricity flows! Activities include paper circuits, squishy (playdough) circuits, wearable circuits, and more! This program can be adapted based on the interest of the youth, and can be anywhere from 1 to 6 sessions. *This program can be offered virtually by providing the materials for the activities prior to the start of program.*
- 54. Be a 4-H Scientists! Sustainable Polymers Project:** This program is offered to youth in grades K-2, 3-5 and 6-8. Participants will dive into what plastics are, what they are made from, their impact on the environment, and how to reduce the impact on our environment! Youth will get to do some fun polymer experiments like Oobleck and Slime, as well as learn about recycling and compostable plastics.
- 55. Trout In The Classroom:** Trout (or Salmon) in the Classroom (TIC or SIC) offers students of all ages a chance to raise Salmonids in a classroom setting and then release them into a nearby stream or river. Caring for the fish fosters a conservation ethic in the students, and the act of walking to a streambank and directly releasing the fingerlings into the water makes a concrete connection between caring for the fish and caring for the water.
- 56. Soilless Growing Systems:** Youth will learn how to grow plants without soil! Youth will also learn how the hydroponics industry has developed, the most common types of soilless growing systems, and explore advanced plant nutrition. Included also are activities related to conservation and limited resources and comparing and contrasting soil-based and soilless growing systems. At the end of the program, youth will harvest and eat what they have grown connecting them to the process of where their food comes from!