2021 Maine 4-H Summer Learning Series

All Workshops

4-H Aquaponics Project – June 15, 4:30 pm kick-off; Tuesdays from 10:00 – 11:30 am, starting June 22nd
Ages 9 & up; open to Maine youth; maximum 10 attendees
Tracks: Marine Science & Aquaculture

The 4-H At-Home Aquaponics Project is an experiential learning program where youth will design, construct, and maintain their own at-home aquaponics system. Prior experience with aquaponics is not required to participate, and start-up funding will be provided for all project participants thanks to the generosity of the Maine 4-H Foundation. The program leaders will mentor youth through the stages of designing and building an aquaponics system through maintenance and harvest. Youth complete their project independently at home (with adult supervision), but they are also members of a state-wide group of youth who are participating in the project together. The program will include learning experiences in introductory aquaponic systems and design, fish husbandry, aquaponic gardening, cooking and nutrition, and more. Youth will practice important life skills such as record-keeping, problem-solving, food safety, collaboration/teamwork, science and math literacy, and more!

NOTE: This is a 5-month project and will run from June - October 2021.

Register here: https://extension.umaine.edu/hancock/4h/aquaponics/

4-H Aquarium Club – July 1, and August 5 (and beyond!), 5:30 pm
All ages; open to all youth; maximum 10 attendees
Tracks: Marine Science & Aquaculture

The 4-H Aquarium Club is open to youth ages 5-18 who are interested in being members of a community of youth aquarium hobbyists! This group is for Maine youth who already have an aquarium hobby, or who are looking to start one, to come together to talk about their love for fish and aquaria. The club is led by aquaculture experts Dr. Scarlett Tudor from UMaine’s Aquaculture Research Institute, and Melissa Malmstedt from the UMaine Center for Cooperative Aquaculture Research (CCAR). For more information, and to register: https://extension.umaine.edu/hancock/4h/aquarium-club/

4-H For All: Chicken Edition – June 27, July 11, July 25, August 8, and August 22, 3:00 pm
For youth ages 5 - 13; open to all youth; maximum 30 attendees
Tracks: Animal Science & Agriculture

This workshop will focus on several chicken-related topics and will be taught by several 4-Hers and their parents. There will be a hands-on activity related to chickens, and plenty of opportunities to share, learn, and create friendships with other youth interested in chickens throughout the state. Registration closes one week prior to each session, as Pre-work/materials will be emailed to participants.

- 6/27 Brooder set up for chicks
- 7/11 Different kinds of chicken breeds
· 7/25 Basic chicken care/vet care
· 8/8 Fun things to do with chickens: training & tricks
· 8/22 Chicken food & healthy treats

4-H Hang Out – Mondays starting June 14 (the week of July 4th, it will be on Tuesday, July 6th), 4:30 – 5:30 pm
Youth ages 9 & up; open to all youth; maximum 20 attendees
Tracks: 4-H@UMaine, 4-H Fun

It's been a hard year and we could all use some time to hang out and socialize. This club is all about having fun and meeting new people in a small virtual group setting. Join 4-H Teen Leaders, Maddie and Nathan for an hour each week to get to know other youth participating in the 4-H Summer Learning Series. We will be mailing you materials that connect to a fun weekly theme, like movie night, glow stick night, and more! Together, we will build a sense of belonging through activities, games, sharing our summer learning experiences, and taking time to just chat with each other. Come sit around the virtual campfire to laugh, learn, reflect, and connect! Registrations will close for each weekly session one week in advance.

4-H Outdoor Activity Book – sign up any time - information will be sent out starting June 21; after that, any new sign-ups will be sent every two weeks during the Summer Learning Series.
All ages; open to Maine youth
Tracks: 4-H Fun, Offline

This handbook includes a series of experiential activities that can be done outdoors in your backyard or neighborhood! The handbook will be emailed or mailed directly to you to complete at your own pace over the summer. Document your experience by sharing photos and/or videos to a group sharing station. Sample activities include but are not limited to: Backyard Camping, Birding, Plant Pressing, Entomology, Wednesday in the Woods Activities, and more!

4-H Passport Around the World – Thursdays starting July 15, 9:30 – 10:30 am
Youth ages 9 & up; open to all youth; maximum 40 attendees
Tracks: 4-H Fun

Join 4-H and Greenheart as we travel around the world virtually and meet other teens from across the globe. Meetings will include a brief presentation from a teen Greenheart Exchange Student about their native country, an activity, and a question and answer period. These meetings are open to youth ages 12 – 18, with a maximum of 50 participants.

The countries we will be exploring are Taiwan, North Macedonia, Tunisia, Ghana, and the Philippines. Activities may include cooking, art, beading, and more. A supply list for each country’s activity will be provided for you to be able to prepare your materials for the meeting upon registration. Registrations will be ongoing. Please allow 48 hours after submission of your form to receive meeting links. Meetings will be held Thursdays from 9:30 – 10:30 am, July 15, 22, 29, August 5 & 12. Schedule (subject to change, please check back for the most up-to-date information). Registrations will close two days prior to the sessions.

Abstract Art: Paint Your Feelings – Wednesday, July 21 and July 28, 3:00 – 4:00 pm
All ages; open to Maine youth; maximum 12 attendees
Tracks: Arts & Crafts
In the movie Inside Out, Riley's emotions Joy, Sadness, Anger, Fear, and Disgust are represented by different colors. In painting, we can use different colors to represent how we feel and what we want to express when we paint. What colors best represent your emotions when you are happy or sad? Can you show how you feel through your painting?

In this two-part workshop, we will talk about color theory, how to mix paint to make new colors, and how we can use color to express different emotions. Participants will have the opportunity to create abstract paintings using what they learn in each workshop, and then share them with the rest of the group. Registration deadline: July 7, as materials will be mailed to participants’ homes.

Archaeology: Past, Present, and Future – Wednesdays June 23, June 30, and July 7, 3:00 – 4:00 pm
For youth ages 11 & up; open to Maine youth; maximum 10 attendees
Tracks: STEM

In this series of three workshops, we will learn about how archaeologists study the past and how the objects that we make and use today will be studied by future archaeologists. In the first workshop, we will learn about artifacts, and how what an object is made of can determine how well it will stay preserved in the ground for archaeologists to find. In the second workshop, we will learn about archaeological sites and how they are mapped. Participants will have the opportunity to use what they learned in the first and second workshops to create their own site plans. In the final workshop, we will use the information we learned in the first two workshops to discuss the concept of ‘context’ and its importance when interpreting the past. Participants will have activities/assignments to complete on their own time, and can then share and discuss at each workshop. Participation in all three workshops is not required but is highly recommended. Registration Deadline: June 16.

The BBQ Cycle – August 13, 3:00 – 4:00 pm
For youth ages 9 & up; open to Maine youth; maximum 30 attendees
Tracks: Animal Science & Agriculture, Food & Nutrition, 4-H@UMaine

Join us for this exciting workshop that is all about Barbeque. Dr. Colt Knight, University of Maine Cooperative Extension State Livestock Specialist will show everyone where barbeque comes from and how it is prepared. Participants will receive a care package with aprons, cookbooks, stickers, spices, and instructions on how to create your own mouth-watering baby back ribs! During the webinar Dr. Knight will highlight different types of barbeque, then we will all break out our spices and create a customized dry rub for our baby back ribs. Once those dry rubs are ready, Dr. Knight will walk everyone through how to prepare and cook the ribs. If you don't have a grill or smoker, don't worry, an oven will work just fine. Registration deadline: July 23, so materials can be mailed out to participants.

Bee a Scientist – June 29, 3:00 – 4:00 pm
For youth ages 9 & up; open to Maine youth; maximum 50 attendees
Tracks: STEM

Join in the challenge to help Maine scientists know where the bees and wasps of Maine are being seen. This session will launch a summer-long citizen science challenge to observe, collect, and contribute data about these insects. Maine 4-H Citizen Science club members will introduce the technology and tools needed to collect this information. State Apiarist, Jennifer Lund, will share about the importance of bees and wasps of Maine, why citizen science is important to her
work, and how you can contribute. Participants will engage in digitally collecting and submitting data through August to contribute to ongoing scientific research. No prior experience is needed, but you will need a digital camera (cell phone camera works) and internet access to submit observations. Interested participants will be invited to a follow-up session on August 10th, to share some of their observations with Jennifer and ask questions. This workshop is in collaboration with the Gulf of Maine Research Institute and the Maine State Library. Registration deadline: June 28.

**Bee a Scientist, Part 2** – August 10, 12:00 – 1:00 pm and 3:00 – 4:00 pm
*For youth ages 9 & up; open to Maine youth; maximum 50 attendees*
Tracks: STEM

This is an optional follow-up to the Bee a Scientist challenge. Participants should have joined the June 29th session and be actively contributing to data collection of bees and wasps in Maine. This session will have participants share observations collected and debrief from their fieldwork as a result of the June challenge. Maine State Apiarist will answer questions, give feedback and share how this project might influence the work of bee and wasp scientists around the state. This workshop is in collaboration with the Gulf of Maine Research Institute and the Maine State Library. Registration deadline: August 9.

**Beekeeping Basics** – July 14, 6:30 - 7:30 pm
*For youth ages 5 - 11; open to all youth; maximum 25 attendees*
Tracks: Animal Science & Agriculture, STEM, 4-H Fun

What is all the buzz about bees? If you are interested in learning all about bees, join us for this one-time workshop presented in cooperation with the Kennebec Beekeepers Association. This interactive workshop will teach you about the basics of beekeeping and leave you buzzing with excitement! Registration deadline: July 13.

**Behind the Scenes Magic** – June 22, 3:00 - 4:00
*For youth ages 5 – 19 & up; open to all youth; maximum 12 attendees*
Tracks: 4-H Fun

Family Entertainer Conrad Cologne is pulling back the curtain on some amazing magic secrets for a few special 4-H’ers. Using some household objects, youth will get to explore something new and mysterious. Conrad will teach you the secrets to some amazing magic and later in the week you’ll get to see even more magic during “Celebrate the Magic of 4-H.” Registration deadline: July 21.

**Build a Boat** - July 26, 10:00-11:30
*For youth ages 5 - 8; open to Maine youth*
Tracks: Offline, STEM

Design and construct your own boat out of aluminum foil. Learn about basic engineering principles — see how far your boat can support a load of pennies! You provide your own pennies, 4-H will provide building materials. Registration deadline July 14th for materials to be mailed.

**Cardboard Challenge** – sign up any time! Information will be sent out starting June 21; after that, any new sign-ups will be sent every two weeks during the Summer Learning Series.
All ages; open to all youth  
Tracks: Offline, STEM

This option will issue a building challenge for participants – with a kick. The challenge will be to construct something using only cardboard, tape, and other recycled materials. What will you build? A rocket ship? A house? Use your imagination and share your creativity with other 4-H engineers. Participants will need to supply their own materials. This activity is open to all ages but participants may need adult assistance to safely cut cardboard. Participants will receive instructions via email and be asked to share a picture of their finished creation.

Celebrate the Magic of 4-H – Our Kick-Off Event for Everyone! – June 24, 7:00 pm  
All ages; open to all  
Tracks: Kick-Off, 4-H Fun

Join Maine 4-H for a virtual night out. Bring your entire family together to experience a magic show presented by 4-H alumni & professional family entertainer Conrad Cologne. This virtual magic show will keep you on the edge of your seat & every seat is in the front row! You'll get to laugh and have fun with your 4-H friends and the magic just doesn't happen on your screen; it will happen in your hands! This show is full of surprises - you won't want to miss it! What is the show like? Watch this video. Registration deadline: June 24.

Design a Virtual Adventure – July 15, 22 and 29, 3:00 – 4:00 pm  
For youth ages 9 & up; open to all youth; maximum 15 attendees  
Tracks: STEM, Arts & Crafts

Learn how to take 3D photos, upload images or videos, and connect them all with easy-to-use software. Create your own “online universe,” and take folks on a virtual field trip, toss them into a digital escape room, immerse them in an interactive story, or show off a family or 4-H project. Check out this example of a virtual adventure in Maine. Participants in this workshop will need access to a smart phone (or tablet) and a computer with browser. The adventure is up to you! This is a three-session series. Registration deadline: July 12.

Eat Well, Be Well with Summer Snacks – Four sessions on Wednesdays from 10:00 - 11:00 am, starting June 16 (this series will be offered again in July)  
For youth ages 9 - 11; open to Maine youth; maximum 10 attendees. Registration deadline: June 15.  
Tracks: Food & Nutrition

· Lesson 1 – June 16: Fuel Your Body Using MyPlate Come and find out how certain foods fuel your body.

· Lesson 2 – June 23: Choosing Healthy Snacks using the Nutrition label. Learn how to use the nutrition label to choose healthy snacks.

· Lesson 3 – June 30: Safety In The Kitchen, Learn the Basics of Knife Safety and Knife Skills. Use your new skills to prepare fun vegetable and fruit critters.

· Lesson 4 – July 14: Healthy Summer Treats. Come and prepare some healthy summer treats! At the end of each lesson, we will provide a recipe you can make at home for a delicious summer treat!
An Eggcellent Cook-a-long Workshop – July 29, 11:00 am – 12:00 pm
*All ages*; open to Maine youth; maximum 15 attendees
Tracks: Food & Nutrition, 4-H@UMaine

Chef Rob Dumas and Caitlin Hillery from the University of Maine for an eggcellent cook-a-long. Participants will learn about the science behind the versatile ingredient of eggs and follow along with a cooking demonstration. Registration deadline: July 14, as materials will be sent to your home.

Exploring the Natural World – July 20, 10:00 – 11:00 am or 3:00 - 4:00 pm
*For youth ages 5 - 8*; open to all youth; maximum 12 attendees
Tracks: Arts & Crafts, STEM

Are you fascinated by the world around you? Ever wondered how things in nature come in all shapes and sizes? Discover how you can become a scientist to find patterns and symmetry that are found in nature. Participants will be provided with their own magnifying glasses, paper tile kits, and a picture book to spark ideas and help get us started in exploring the natural world. This workshop is supported by Maine EPSCoR at the University of Maine. Registration closes July 12 to enable presenters to mail materials to participants’ homes.

First Year in the Lab: Starting Out in Science – June 30, 4:00 – 5:00 pm
*For youth ages 12 & up*; open to all youth
Tracks: STEM, 4-H@UMaine

Katie Stevens, a freshman at UMaine is going to meet with youth to talk about her experience as a first-year college student, and what that has meant for her in terms of working in a lab, and experiencing student life. She’s ready to answer any of your questions about the college experience, and the research she does. Registration deadline: June 29.

Food, Fun, & Reading – Tuesdays starting July 20, 11:00- 11:30 am
*Youth ages 5 - 8*; open to all youth; maximum 10 attendees
Tracks: Food & Nutrition

Are you Ready for an Adventure? Are you 5 to 8 years old? Do you like to have fun stories read to you? Do you like to eat yummy food? If you answered yes to any of these questions then we think you will love Food Fun and Reading; an exciting program where you will hear fun food-related stories and prepare a quick snack yourself. Don’t delay sign up today! Registration deadline: July 13.

Fridays on the Farm – Fridays, July 16, 23, 30, and August 6, 9:00 am – 12:00 pm
*For youth ages 12 & up*; open to Maine youth; maximum 10 attendees per session
Tracks: Animals Science & Agriculture

The goal of 4-H Fridays on the Farm is to expose teens ages 12-18 to Maine agriculture and create workforce development skills through a variety of different hands-on, farm visits throughout the state. Teens may join for one week or all four to experience what different farms across the state have to offer. Each session will include an opportunity for teens to take a tour of operations, gain hands-on experience, and consider their role in the Maine Food System.

Current 4-H enrollment is not necessary for participation. Program materials and instruction are FREE. See the [registration page](#) for more details, required information, and locations.
**Gratitude Flags** – August 11 *(for ages 12 & up)*, August 12 *(for ages 5 – 11)*, 10:00 – 11:00 am
*See dates for ages; open to all youth; maximum 12 attendees*
Tracks: Arts & Crafts

The Gratitude Flag Project was created by the artist Susan Bryand in April of 2020 as a way to connect with her students during the pandemic. The project has since expanded to include hundreds of people from all over the country, and has spawned two special editions, one in Downtown Bangor, and another at Husson University. Now it's time for The Gratitude Flag Project: 4-H Edition! Join Susan for a discussion about gratitude, and hands-on experimentation with the art and science of cyanotype. This simple photographic process, also known as a blueprint or sun print, is developed with the use of the sun. Susan will demonstrate the process and all participants will have a kit to create their own flag. The flags will be collected to become part of a group 4H installation, spreading our artistic vision and gratitude out into the community. You can find out more about the project at SusanBryand.com.
Registration deadline: July 28.

**Great Zucchini Challenge** – June 15 and July 13 and August 10, 4:00 - 5:00 pm
*All ages; open to Maine youth*
Tracks: Animal Science & Agriculture, Food & Nutrition

While lots of folks might grow zucchinis in Maine, have you ever grown one that's square? Have you ever made zucchini bread? It's a great solution to "What do I do with that 2 ft. long zucchini." Plus, we'll be having a contest where we will judge the "Biggest" zucchini, the "Smallest" zucchini, and the "Most Unusual Shaped" zucchini. We'll have lots of helpful growing tips, tips for dealing with insects, as well as recipes you can try. And don't forget--you can always follow that good old Maine tradition--giving away those excess zucchinis. Registration deadline for participants who need seeds: June 8; for participants who have their own seeds, registration deadline is June 14.

**Grow Your Own Microgreens!** – July 15 and July 22, 1:00 – 2:00 pm
*All ages; open to Maine youth; maximum 30 attendees*
Tracks: Food & Nutrition, 4-H@UMaine, STEM

Dr. Stephanie Burnett will lead this two-part series on microgreens, focusing on seed production, growth, and sustainability. Participants will take part in the creation of their very own microgreen garden. Participants must register by July 1 so that the materials for their project have time to arrive.

**Hands-On Homesteading: Bread Baking** – sign up any time! Information will be sent out starting June 21; after that, any new sign-ups will be sent every two weeks during the Summer Learning Series.
*All ages; open to Maine youth*
Tracks: Offline, Food & Nutrition

Welcome to Hands-on Homesteading, a take-home learning series! In this series, youth will have the opportunity to develop some of the most critical skills that are part of daily life in agriculture and homesteading at Lone Spruce Farm in Dedham, Maine. This activity guide will cover some basics of sourdough bread baking, along with some other activities you'll "knead" to try!
Hands-On Homesteading: Junior Weather Spotting – sign up any time! Information will be sent out starting June 21; after that, any new sign-ups will be sent every two weeks during the Summer Learning Series.
All ages; open to Maine youth
Tracks: Offline, STEM

Welcome to Hands-on Homesteading, a take-home learning series! In this series, youth will have the opportunity to develop some of the most critical skills that are part of daily life in agriculture and homesteading at Lone Spruce Farm in Dedham, Maine. Reporting the weather and keeping track of weather conditions and changes over time is important because it can help you (and scientists around the world!) predict what will happen in your own microclimate. This activity guide will help you practice these reporting skills and will put you on the path to become a junior weather observer!

Healthy Diet, Healthy Microbes – July 21, 4:00 – 5:00 pm
Youth ages 12 & up; open to Maine youth; maximum 30 attendees
Tracks: Animals & Agriculture, 4-H@UMaine

The digestive tracts of humans and animals are filled with microbes – many of them help us digest our food and provide nutrients to keep us healthy. The foods we eat attract different microbes, and a healthy diet can help attract the most helpful microbes. This presentation will teach about the effect of diet on microbes and health, in humans versus cows. The at-home activity will teach some of the ways scientists research microbes – you can even learn to grow your own microbial culture!

Dr. Sue Ishaq, Assistant Professor of Animal and Veterinary Sciences, joined the University of Maine faculty in fall 2019. The Ishaq lab focuses on the community of microbes in the gut of animals, and particularly in ruminants, both wild and domestic. Science is still trying to understand microbes and how they affect the health of animals. Our goals are to increase our understanding of microbial communities involved with animals, and particularly in agricultural settings, and to improve the sustainability of agriculture to promote the health of our natural environments. Registration deadline: July 7.

A Healthy Goat is a Happy Goat – July 22, 3:00 - 4:00
Youth ages 9 & up; open to all youth; maximum 12 attendees
Tracks: Animal Science & Agriculture

In this workshop, we'll be looking at how to know if your goat is healthy. We'll learn the normal vital signs of a goat - and how a healthy goat looks. Then we'll look at ways to maintain health in your animals. We'll also talk about how to know if your goat is starting to have a problem and, lastly we'll look at solutions to some of the more common ailments you might face. Participants should have access to a goat to participate in this workshop. Registration deadline: July 21.

Introduction to 4-H Goats – July 1, 3:00 - 4:00
All ages; open to all youth; maximum 12 attendees
Tracks: Animal Science & Agriculture

Have you ever thought about owning a 4-H goat? Maybe you'd like goats for pets. Perhaps you'd like to raise them for meat. Perhaps you want to grow your own fiber for knitting or weaving. Or maybe you want dairy goats so you can make cheese. In this workshop, we'll look at the different types of goats and what they can be used for. We'll dispel some common
misconceptions about goats. We'll look at which type of goat would work for YOU. And we'll talk about what you'd need to have on hand to get started. This will be a fun class and we can easily gear it to the interest level of those who attend. AND we'll have some fun handouts so you can remember the information! Registration deadline: June 30.

**Knot Tying 101** – sign up any time, kits will be mailed out starting June 28  
Youth ages 9 & up; open to Maine youth  
Tracks: Offline, STEM

Everything Knots! Learn the basics of knot tying and how to use knots in your everyday life. Knot tying can become a skill you use around your home and in the wild - from fort building to survival and more. You will receive a kit by mail that includes instructions and materials needed for you to practice your craft. You will also be invited to share pictures and comments about your knots as you practice with others from around the state. This workshop is supported by Maine EPSCoR at the University of Maine.

**Lakes, Ponds, and All Things Water** – July 8, 10:00 - 11:00 am or 3:00 - 4:00 pm  
Youth ages 9 & up; open to Maine youth; maximum 12 attendees  
Tracks: STEM

Who doesn’t love water in Maine in the summer? Learn about the water ecosystem of your local lake, pond, or stream! During this session, everyone will create their own ecosystem to explore what happens underneath the water. Participants will be provided with the materials to build their own biome, as well as a book related to Ponds. This workshop is supported by Maine EPSCoR at the University of Maine. Youth must register by June 23 for supplies to be mailed to attendees’ homes.

**Leadership Series #1: Behind the Curtain** – July 13, 7:00 - 8:15 pm  
Youth ages 12 & up; open to Maine youth; maximum 30 attendees  
Tracks: Teen Leadership

The characters in The Wizard of Oz learned to be their authentic selves through their journey and we learned "who" the Wizard really was when the curtain was pulled back. Let's pull back our own curtains and shine a light on our authentic selves and how we are all wise and powerful wizards! Registration deadline: July 12.

**Leadership Series #2: Don’t Let the Flying Monkeys Get You Down** – July 20, 7:00 - 8:15 pm  
Youth ages 12 & up; open to Maine youth; maximum 12 attendees  
Tracks: Teen Leadership

Winged minions following you and your friends around? Taunting you at every turn? Totally relatable. Sometimes those ‘flying monkeys’ are just us feeling too stressed out! Each participant will receive a bag of building bricks to help us build our yellow brick road and navigate ourselves through our stress on our way to Emerald City! Registration deadline: July 13.

**Leadership Series #3: The Wicked Witch: Dealing with Conflict** – July 27, 7:00 - 8:15 pm  
Youth ages 12 & up; open to Maine youth; maximum 30 attendees  
Tracks: Teen Leadership
Whether it feels like challenges are coming at you like a swarm of Flying Monkeys, or they're small everyday things, figuring out how we deal with conflict is key. In this workshop, we look at common types of conflict and work through some activities that build us up when dealing with challenges. Registration deadline: July 26.

**Leadership Series #4: Lions and Tigers and Bears, Oh My! Easy Ways to Facilitate Groups** – August 3, 7:00 - 8:15 pm  
*Youth ages 12 & up; open to Maine youth; maximum 30 attendees*  
Tracks: Teen Leadership

As part of the Leadership Series, participants will learn four (4) key elements that make you a great facilitator. This interactive session will allow youth to explore these concepts while working together to highlight simple ways to be successful. Registration deadline: August 2.

**Leadership Series #5: What Type of Leader are You?** – August 10, 7:00 - 8:15 pm  
*Youth ages 12 & up; open to Maine youth; maximum 30 attendees*  
Tracks: Teen Leadership

Some leaders are more like Dorothy, some more like the Wizard. In this interactive workshop, you will determine what kind of leader you are, recognize common leadership roles in a group, and explore how different personality traits affect leadership styles. Registration deadline: July 27.

**Leadership Series #6: Following Your Yellow Brick Road** – August 17, 7:00 - 8:15 pm  
*Youth ages 12 & up; open to Maine youth; maximum 30 attendees*  
Tracks: Teen Leadership

We are all on a Yellow Brick Road to achieving our goals. Join us on a journey to visualize how our Ruby Slippers, Scarecrow, Tin Man, and Cowardly Lion can all help us reach the Emerald City. Registration deadline: August 3.

**Maine Trees and Me: Getting to Know Them** – August 11 or August 18, 1:00 – 2:00 pm  
*Youth ages 9 - 11; open to Maine youth; maximum 20 attendees*  
Tracks: Animal Science & Agriculture

In this program, you will learn basics about why trees are important to us, how to identify trees, and some really fun facts about trees that maybe you didn't know about! There will be some hands-on learning in the class and you will also get a copy of Forest Trees of Maine. And there will be plenty of time for your questions! Youth must register by July 29 to allow presenters time to mail materials to their homes.

**Making Seaweed Lava Lamps** – July 21, 1:00 – 2:00 pm  
*Youth ages 9 & up; open to Maine youth; maximum 10 attendees*  
Tracks: Arts & Crafts, 4-H@UMaine, Marine Science & Aquaculture

Do you know all of the amazing properties of seaweed? In this workshop, you will learn about some of these wonders by harnessing seaweed's “gelling” abilities to make Seaweed Lava Lamps right at home! Youth must register by July 7 for supplies to be mailed to attendees’ homes.
Mandalas with Nature – July 27, 10:00 – 11:00 am or 3:00 - 4:00 pm  
Open to Maine youth; maximum 15 attendees  
Tracks: Arts & Crafts, STEM  
Do you see art and patterns in the outdoors? Ever wondered how things in nature come in all shapes and sizes? Discover how you can become a scientist AND an artist with pieces of nature. We will create our mandalas during this session. Participants will be provided with most of the materials via mail, as well as a related book with pictures to spark our creativity. Some gathering of items from outdoors will be required to participate. This session is open to all ages but participants may need adult assistance as participants will need to gather materials and be outside for a portion of this workshop. This workshop is supported by Maine EPSCoR at the University of Maine. Youth must register by July 13 for supplies to be mailed to attendees’ homes.

Master of Invention: Rube Goldberg Challenge – sign up any time!  
Open to all youth  
Tracks: Offline, 4-H Fun  
Do you like to explore, build, and be creative? Join us for this invention challenge. Participants will learn about Rube Goldberg, a master inventor who is famous for making complex inventions to complete a simple task. Participants will need to supply their own materials and will receive the list and challenge instructions. This session is open to all ages but some participants may need adult assistance for safety purposes. Participants will receive instructions via email and be asked to share a picture of their finished creation.

MyGarden to MyPlate – Tuesdays: June 22, 29, and July 6, 13, 1:30 – 2:30 pm  
Youth ages 12 & up; Open to Maine youth; maximum 10 attendees  
Tracks: Food & Nutrition  
Learn about making healthy food choices, where your food comes from, and MyPlate while also learning how to grow and cook with your own vegetables. At the beginning of this four-session series, you will receive an assortment of vegetable seeds and a garden journal that we will use along the way to share the progress of your seeds with your peers. Youth must register for this series by June 9 to have materials shipped to their home.

Nutrition Nuggets – Wednesdays: June 23, 30, and July 7 and 14, 9:30 – 10:30 am  
Youth ages 5 - 8; Open to Maine youth; maximum 10 attendees  
Tracks: Food & Nutrition  
Join us as we read a food-related book and then create an amazing snack that goes with the story. Chefs ages 5yr - 8yrs will be able to create their snacks with very little adult help. Each week we will explore a different food group combination. Learn to follow a recipe, use kitchen measuring tools, and eat what you make!!!! Registration deadline:

Observing Fish Behavior – July 14, 1:00 – 3:00 pm  
Youth ages 9 & up; Open to all youth; maximum 10 attendees  
Tracks: Marine Science & Aquaculture, 4-H@UMaine  
In this workshop, we will explore the exciting and interesting ways that fish behave! Led by Dr. Scarlett Tudor of UMaine’s Aquaculture Research Institute (ARI), youth will learn how to observe fish behavior scientifically and collect observational data by watching a variety of
interesting fishes on video. This workshop is designed to build observational skills, data collection skills, and spark an interest in animal behavior and aquaria. Registration deadline: July 13.

**The Power of the Wind** – Thursdays: July 8, 15, and 22, 1:00 – 2:00 pm  
*Youth ages 9 - 11*; Open to all youth; maximum 10 attendees  
Tracks: STEM

In this three-part series the participants will be introduced to the design process and along the way provide them a chance to "think like an engineer" The fundamentals of wind power will be introduced and the challenges as well as opportunities of how this source of energy can be part of the long term energy sustainability solution. Participants will be building and designing wind powered structures at each of these sessions. Registration deadline: June 24.

**Solar S'Mores** – sign up any time!  
Open to all youth  
Tracks: Offline

Explore the power of solar energy and learn how to make your own solar oven. This hands-on workshop will walk participants through building their own solar oven. You will test your oven’s effectiveness by cooking your very own s’more. This session is open to all ages but some participants may need adult assistance for safety purposes. Participants will receive instructions and a supply list via email and be asked to share a picture of their finished creation.

**Squid Dissection** – July 5, 10:00 – 11:00 am or August 13, 11:00 – 12:00 pm  
*Youth ages 9 & up*; Open to Maine youth; maximum 6 attendees (however siblings can share one screen)  
Tracks: Marine Science & Aquaculture

Youth will learn about the anatomy of a squid during this hands-on dissection, led by Melissa from UMaine Center for Cooperative Aquaculture Research (CCAR). Your frozen squid will be mailed to your home before the workshop along with some basic dissection tools. We'll meet on zoom to do the dissection together as a group! Register by June 21st for the July workshop, and by July 26th for the August workshop; presenters need time to ship materials to attendees’ homes.

**Tree Identification & Leaf Pressing** – August 3 and 5, 2:00 – 3:00 pm  
*Youth ages 9 & up*; Open to all youth; maximum 12 attendees  
Tracks: Animal Science & Agriculture, 4-H@UMaine

Have you ever wondered what trees may be in your backyard? At your favorite park? On your drive home? Join Dr. Bill Livingston as he teaches you about the native tree species of Maine. In between workshops, you'll be tasked with collecting your own leaves to identify, and Dr. Livingston will walk you through the process of leaf pressing to preserve your collection. Registration deadline: August 2.

**Vibing and Tiding: Science on a Cell Phone** – June 22 and 29, 1:00 – 2:00 pm  
*Youth ages 12 & up*; Open to all youth; maximum 20 attendees  
Tracks: Marine Science & Aquaculture
Explore the intertidal zone and help with marine science research! In this workshop, we will learn about animals you might find during low tide and use some amazing equipment to take awesome pictures on your phone to identify them. Along the way, we'll learn about invasive species, climate change, species identification, and how you can participate in research by just taking a picture. Please note that the ability to get to the beach and supervision are required (at least once, between sessions). Access to a phone with a camera. This workshop is supported by Maine EPSCoR at the University of Maine. Register by June 8, so supplies can be mailed to attendees’ homes.

**Vietnamese Spring Rolls** – June 23, 11:00 am – 12:00 pm or 1 – 2:00 pm  
*Youth ages 9 & up; Open to all youth; maximum 8 attendees*  
Tracks: Food & Nutrition

Vietnamese fresh spring rolls are a tasty snack or side dish for a summer meal. Plus, they look great on a plate! Use whatever summer veggies you like to make these rolls, maybe from your own garden. The required ingredients are fairly easy to find. We will also make a yummy dipping sauce to go with them! These rolls are vegan (although you can add a protein to them), gluten-free, and fun to make and eat! Attendees will need to have basic kitchen tools, and ingredients (the presenter will email a list ahead of time). Registration deadline: June 9.

**Virtual Touch Tank** – July 1, 10:00 – 11:00 am or 1:00 – 2:00 pm, or July 28, 11:00 am – 12:00 pm or 1:00 – 2:00 pm  
*Youth ages 5 - 8; Open to Maine youth; maximum 6 attendees (however siblings can share a single screen)*  
Tracks: Marine Science & Aquaculture

Melissa from the UMaine Center for Cooperative Aquaculture Research (CCAR) will introduce participants to some of Maine’s common sea creatures! Youth will visually explore and learn about some of Maine’s sea creatures. Registration closes one day before each session.

**What’s in Your Ecosystem?** – August 4 and 18, 9:00 - 10:00 am  
*Youth ages 9 & up; Open to Maine youth; maximum 15 attendees*  
Tracks: STEM

Learn why it’s important to have a variety of life. Get outside and conduct your own biodiversity investigation in your own backyard. Take a small step towards understanding how healthy Maine’s ecosystems are by collecting and analyzing data in your area. You will develop a better understanding of what makes an ecosystem healthy, and food webs by completing these hands-on investigations. Participants will receive a kit by mail to conduct investigations and gather data in their own backyard. As part of this series, we will compare discoveries about the ecological communities found around the state of Maine to see what might be the same and/or different based on where YOU live. Youth must register by July 23 so presenters have time to mail materials to participants’ homes.

**Wildlife Surveying with Artificial Intelligence** – August 12 and 19, 3:00 – 4:00 pm  
*Youth ages 12 & up; Open to all youth; maximum 15 attendees*  
Tracks: 4-H@UMaine, STEM

Have you ever wondered how researchers are able to observe and survey wildlife around the globe? Artificial intelligence is the answer! Dr. Tom Rounsville will be leading a two-part series on how he uses artificial intelligence in his wildlife research. Registration deadline: August 11.