Classroom Programs and Field Trips Catalog

Cornell
Cooperative
Extension
Oswego County

Cornell Cooperative Extension Oswego County

Dear Partner in Education,

The educators of Cornell Cooperative Extension of Oswego County are pleased to present the newest edition of our <u>Classroom Programs and Field Trips</u>.

4-H Youth Development, the youth component of Cornell Cooperative Extension, links the resources of Cornell University to young people between the ages of 5 and 19 years of age. The program, here in Oswego County and elsewhere, creates opportunities for youth to develop skills, gain practical knowledge and wisdom through observing, doing and reflecting on experiences. 4-H calls this "learning by doing" - an evidence-based learning model that has been successful for over 105 years. Regardless of whether the subject area is engineering, nature, nutrition or science, children who are exposed to 4-H programs are better prepared to accept responsibility for themselves and their role in preserving the environment, and to take active part in their families and communities.

The programs listed in this publication incorporate the foundation of the 4-H program and are based upon the principles of youth development. They are derived from the exciting and innovative curriculums in the areas of agriculture, environmental science, horticulture, fiber science and life skills that have been developed by Cornell University researchers and faculty. Oswego County educators utilize these resources to create educational experiences for Oswego County youth that meet the requirements of many of the New York State Learning Standards and Common Core Standards.

The field trips and school or community based programs have been specifically developed to augment classroom instruction and enhance community programming in libraries, youth centers and parks. Regardless of the site, lesson plans reflect the ages, developmental needs and abilities of participating students. 4-H Clubs, Boy Scout and Girl Scout troops, and other youth groups are encouraged to schedule programs for club and troop meetings.

This publication is organized by subject areas. Booking information can be found on the next page. Please be advised that fields trips to the Amboy 4-H Environmental Education Center can be contracted through CiTi Arts-in-Education Program. You will need to contact your principal for more details about this payment option.

We remain committed to continuing to develop our educational partnership and look forward to your participation in Cornell Cooperative Extension of Oswego County and our programs.

Sincerely,

Your A Horastiers T Paul A. Forestiere II Executive Director

Linda C. Brosch 4-H Team Coordinator

Cornell Cooperative Extension is an employer and educator recognized for valuing AA/EEO, Protected Veterans, and Individuals with Disabilities and provides equal program and employment opportunities.

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Our School Enrichment Program offers the following two components:

- ◆ Classroom visits by Cornell Cooperative Extension of Oswego County staff. There is no charge for classroom visits.
- ◆ Programs at our Amboy 4-H Environmental Education Center.
 See page 8 for Amboy 4H Environmental Education Center fees.

Contact us **today** to schedule your educational program

We can be reached at 315-963-7286:

Monday-Friday, 8:30-4:00pm

Email: Linda Brosch: lcr23@cornell.edu, ext. 400

Sarah McCormick: sam555@cornell.edu, ext. 401 Nathaniel English: ne235@cornell.edu, ext. 402

www.thatscooperativeextension.org

Agriculture in the Classroom

Title: Animal Classification

Audience: 2nd-5th

Educator: Nathaniel English

Program Length: 30-45 minutes

Availability: Year-round

During this program, youth will learn how to classify animals based on their shared qualities or characteristics. Props such as egg replicas, turtle shells, bird feathers, and pelts will help the youth see these similarities and differences.



Title: Buzzing About

Audience: 2nd-5th

Educator: Nathaniel English

Program Length: 45-60 minutes

Availability: Year-round

Bees are such amazing insects! They are a very important part of the agriculture world for two reasons: they produce honey, an important, unique food for humans, and they are our largest group of pollinators. Students will learn about the honeybee, honey production, parts of a flower and pollination. In the process of playing a game, they will learn about plant pollination as they pretend to be honeybees and apple trees.

Title: Discovering Milk with Clover, the Milking Cow

Audience: K-2nd

Educator: Nathaniel English

Program Length: 45-60 minutes

Availability: Year-round

During this program, a milking cow made out of plywood provides a hands-on activity as youth learn about milk

production, animal husbandry and

dairy nutrition facts.



Title: How Corny

Audience: 2nd-older

Educator: Nathaniel English
Program Length: 45-60 minute

Availability: Year-round



This workshop explores the world of corn and popcorn production, as well as the many uses from food to fuel to packing peanuts, that corn has in today's society. Students will make their own flavored popcorn.





Title: Rethink Your Drink

Audience: K-I2th

Educator: 4-H Educator

Program Length: 30-45 minutes

Availability: Year-round

During Rethink Your Drink, youth will learn how to make healthy drink choices. Hands on activities will help youth see how much sugar they are currently drinking and thus recognize healthy selections.



Safety

Title: ATV Safety

Audience: 5th-12th

Educator: Sarah McCormick **Program Length:** 45-60 minutes

Availability: Year-round



Learning how to ride an all-terrain vehicle properly is important AND fun! This program will enforce precautions youth should know while riding. By making sure students know safety rules and know how to use ATVs safely, parents can do their best to help protect them from being injured when at home.

Title: Biosecurity and Safety Around Animals

Audience: 2nd-5th

Educator: Nathaniel English

Program Length: 45-60 minutes

Availability: Year-round

During this program youth will learn ways to keep both themselves and animals they are around safe from pathogens and viruses. Lesson will also include methods of how people should interact

with animals so everyone is safe.



Title: Sun Safety

Audience: K-12

Educator: Nathaniel English

Program Length: 45-60 minutes

Availability: Year-round

Skin cancer statistics are on the rise! Most people receive 80% of their lifetime exposure to the sun before they reach the age of 18. Skin cancer in adults often occurs because of sun exposure and burns they received as kids. The best way to prevent this is to educate youth about cancer, the effects of a sunburn, the need for sunscreens and other barriers to block the sun's UV rays. We teach youth how to develop a personal sun protection program. This is done with age appropriate lessons and activities. Participants will make their own personal UV radiation detector to show them when they are exposed to harmful UV rays. Sun protection is a year round concern for all ages.

Title: Toxic Plants and their Lookalikes

Audience: 5th-12th

Educator: Sarah McCormick **Program Length:** 45-60 minutes

Availability: Year-round

Most students would be able to identify a picture of poisonous ivy if they saw it, but what if that plant was next to another one that looked identical to it? There are a variety of toxic plants throughout the state that have non-toxic lookalikes that are important for students to be able to identify. Students will play a game to test their observation skills, then learn how to be able to identify these plants based on leaf size, shape, stems, etc.



Title: <u>Amphibian and</u>
<u>Reptile Life Cycles</u>

Audience: K-12th

Educator: Sarah McCormick **Program Length:** 45-60 minutes

Availability: Seasonal

Amphibians and reptiles go through various stages throughout their lives. Some even have special behaviors and physical traits that help them to survive in their environments. Using amphibian and reptile life cycles, students will learn the different stages animals go through to reach their adult form.





Title: Birds of Prey

Audience: 3rd-12th

Educator: Sarah McCormick **Program Length:** 45-60 minutes

Availability: Year-round

Students and educators will learn to appreciate the ecological significance of predation in natural systems and understand the role of birds of prey in the environment. They will explore predator-prey relationships, as well as life histories and the ecology of birds of prey. Detailed species accounts of vultures, hawks, eagles, ospreys, falcons, and owls will be investigated.

Title: Earthrise: Earth and Climate Science

Audience: K-4th, 5th-8th, 9th-12th

Educator: Sarah McCormick **Program Length:** 45-60 minutes

Availability: Year Round

We only have one planet Earth and statistics show today's youth have concerns regarding the future of our climate. This program is comprised of lesson plans from NASA that will encourage our students to rise to the challenge climate change presents and become the future stewards of our planet. By studying the Earth, we learn more about each other and what can be done to protect environments all around us.

Title: From Sap to Syrup:
The Sweet Delight of
Maple Sugaring

Audience: 2nd-12th

Educator: Linda Brosch

Program Length: 45-60 minutes **Availability:** February-March

Maple sugaring has been a part of our culture in New York State for many years. Students learn about the sugaring process, including tree identification, tapping, collecting and processing sap, tree biology and the history of maple sugaring.



Title: Insectaganza Excitement

Audience: K-12th

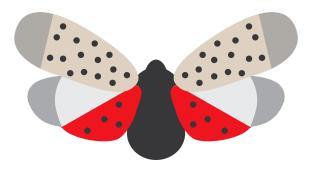
Educator: Sarah McCormick

Program Length: 45-60 minutes

Availability: April- October

Insects are in the cracks of the sidewalk, underneath and inside logs in the woods, and even in our houses. They are everywhere. Insects are the most abundant class of animals in the world. They can be the most destructive, as well as the most productive. This program will introduce students to the insects. Hands-on activities will show the students why these animals are so successful.





Title: Invasive Species

Audience: 2nd-12th

Educator: Sarah McCormick

Program Length: 45-60 minutes

Availability: Year Round

Invasive species are invading our communities and changing the environment. Through multiple games, youth will learn about the plants and animals that are these alien invaders.

Title: Is NesQuik Quick?

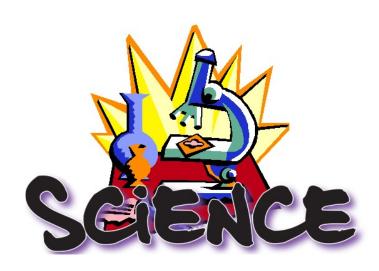
Audience: 3th– 9th

Educator: Linda Brosch

Program Length: 45-60 minutes

Availability: Year-round

What makes NesQuik™ Quick? Students will conduct a series of science experiments and discover how science is used in food technology.



Title: Mammals of Oswego County

Audience: K-6th

Educator: Sarah McCormick **Program Length:** 45-60 minutes

Availability: Year-round

Students learn about the characteristics that all mammals have in common. Through visual aids, they discover the mammals that live around us in Oswego County. Emphasis is on the similarities and differences between the mammals.



Title: Nature Detectives

Audience: 3rd -6th

Educator: Sarah McCormick **Program Length:** 45-60 minutes

Availability: Year-round

Nature Detectives offers fun and easy indoor and outdoor science activities. It encourages young people to explore while discovering science and their local environment through birds.







Title: Power of Wind

Audience: 4th-8th

Educator: Linda Brosch

Program Length: 60 minutes

Availability: Year-round

Youth work with members of a team to design, create, build, and test wind powered devices and are given opportunities to explore wind as a potential energy source in their community.



Title: The Water Cycle

Audience: K- 12th

Educator: Sarah McCormick **Program Length:** 45-60 minutes

Availability: Year-round

Water is all around us. We see it in lakes, ponds, streams, and rivers. But it can be found in many more locations that students may not be aware of. Students will play a game to learn about the water cycle and how their actions might affect the water cycle. A book reading of 'Hey Water'

will accompany this program.

Title: Wired for Wind

Audience: 4th-8th

Educator: Linda Brosch

Program Length: 60 minutes

Availability: Year-round

Wired for Wind, explores how to engineer renewable energy technologies,. During this program, students will conduct an experiment to test the efficiency of different wind mill designs.

Field Trips

Amboy 4-H Environmental Education Center

The Amboy 4-H Environmental Education Center is a 150-acre nature preserve located in eastern Oswego County. The mission of the facility is to promote responsible environmental stewardship by developing a greater understanding, awareness, and appreciation of the natural world and people's relationship to it. The Amboy 4-H Environmental Education Center is a laboratory where youth and adults can observe nature first hand, alone or under the guidance of the facility's environmental educators.

All programs take place outdoors after a brief instructional period and can be adapted to any grade level. Overnight use of the facility is available for a minimal fee.

Cost:

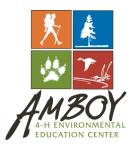
<u>I Program</u> - \$4.00 per person (\$40.00 minimum)<u>2 Programs</u> - \$5.00 per person (\$50.00 minimum)

Teachers and aides are free. Parent chaperones are asked to pay the program cost.

Payment can be made on the day of the field trip or with a purchase order. Cash or check only.

Educator: Linda Brosch or Sarah McCormick

Additional natural history programs can be provided or created upon request.



Title: Adaptations

Audience: 3rd-7th

Program Length: 60 minutes

Availability: Year-round

Animals and plants have special behaviors and physical traits that help them survive in their environment. Students learn what an adaptation is during a brief instructional period. Afterward, they will venture into the nature preserve to investigate how local fauna and flora have adapted to their environment.

Title: Animal Tracks and Traces

Audience: K-4th

Program Length: 60-90 minutes

Availability: Year-round

Students actively investigate the woods to discover how animal tracks and traces reveal varying habits, physical characteristics, and interactions. Students will search throughout the nature preserve for animal signs.



Title: Aquatic Lifecycles

Audience: K-12th

Program Length: 60 minutes **Availability:** Late April-October

The water is home to a variety of animals. During an instructional period, students will learn about the distinct lifecycles of aquatic animals. A walk to a nearby waterway will allow the students to carefully discover some of these creatures in their varying life stages.

Title: Birds of Prey

Audience: 3rd-12th

Educator: Sarah McCormick Program Length: 45-60 minutes

Availability: Year-round

Students and educators will learn to appreciate the ecological significance of predation in natural systems and understand the role of birds of prey in the environment. They will explore predatorprey relationships, as well as life histories and the ecology of birds of prey. Detailed species accounts of vultures, hawks, eagles, ospreys, falcons, and owls will be investigated.



Title: Habitats Audience: K-3rd

Program Length: 60-90 minutes

Availability: Year-round

Students learn that all animals and plants need homes where their survival needs (food, water, shelter, and space) are provided. After a brief instructional period, the class will go into the woods and search for habitats.

Title: Insectaganza Excitement

Audience: K-12th

Program Length: 60-90

minutes

Availability: April- October

Insects are in the cracks of the sidewalk, underneath and inside

logs in the woods, and even in our houses. They are everywhere. Insects are the most abundant class of animals in the world. They can be the most destructive, as well as the most productive. This program will introduce students to these insects. Hands-on activities will show the students why these animals are so successful. This program can be adapted to the appropriate grade level.



Audience: 2nd-12th

Program Length: 60 minutes

Availability: Year Round

Invasive species are invading our communities and changing the environment. Through multiple games, youth will learn about the plants and animals that are these alien invaders.



Title: Leave No Trace

Audience: K-12th

Program Length: 45-60 minutes

Availability: Year Round

Youth will learn the basics behind Leave No Trace and how making small changes can have a big impact on the environment. Age dependent games will accompany this program, as well as a take-home booklet for youth to continue learning more about keeping the outdoors better than they found it.



Title: Mammals of Oswego County

Audience: K-I2th

Program Length: 60 minutes

Availability: Year-round

Students learn about the characteristics that all mammals have in common. Through visual aids, they discover the mammals that live around us in

Oswego County. Emphasis is on the similarities

and differences between the mammals.

Title: Nature Geocaching

Audience: 3nd-12th

Program Length: 60-90 minutes

Availability: Year Round

The Geocaching Program pairs the great outdoors with a touch of tech! Qualified instructors will guide your group through the operation of the Global Positioning System receivers. Participants will learn what the GPS is, how to record locations, and how to navigate their way to unique geocaches hidden all around the property.

Title: Nature Detectives

Audience: 3rd-6th

Program Length: 60-90 minutes

Availability: Year-round

Nature Detectives offers fun and easy indoor and outdoor science activities. It encourages young people to explore while discovering science and their local environment through birds.

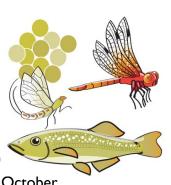
Title: Pond Life

Audience: 3rd-12th

Program Length: 60-90

Availability: Late April - October

The pond environment is filled with fascinating creatures and their interactions. Students will observe and learn about the pond environment through hands-on activities. Subject material varies due to class needs and grade level.



Title: The Power of Wind

Audience: 4th-8th

Educator: Linda Brosch

Program Length: 60 minutes

Availability: Year Round

Youth work with members of a team to design, create, build, and test wind powered devices and are given opportunities to explore wind as a potential energy source in their community.



Title: Snowshoe Wanders

Audience: K-12th

Program Length: 60-90 minutes

Availability: Winter

After an instructional lesson on how to snowshoe, the history of snowshoes, and types of snowshoes, the environmental educator will lead the group into the woods for a hike. Program participants will be able to observe and search for signs of wildlife during the walk.

Title: Stream Safari

Audience: 2nd-12th

Program Length: 60-90 minutes

Availability: Year-round

Students learn that the freshwater community is diverse in animals and plants. Program participants will explore a pond or stream to discover these animals and plants. Pants and shoes that can get wet and muddy are required.



Title: Woodland Ramble

Audience: K-I2th

Program Length: 60-90 minutes

Availability: Year Round

The Woodland Ramble is a generic nature program, where no specific ecological concept is focused on. Participants are lead on a guided walk through the Amboy facility's woodlands while actively investigating for its inhabitants.

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Oswego County





Contact us today to schedule your educational program

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Monday-Friday, 8:30-4:00pm

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Sarah McCormick: sam555@cornell.edu, ext. 401 Nathaniel English: ne235@cornell.edu, ext. 402

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