

PreK-12

ENVIRONMENTAL EDUCATION PROGRAMS

To schedule your program, please fill out the 'Contact Us' form found at campfiremn.org/education/k12.

UPDATED JUNE 2024



WELCOME TO CAMP FIRE MINNESOTA!

We are always working hard to adapt and meet the needs of Minnesota's educators and youth. We offer in-person field trips, at-school programs, and virtual classes. Whether you are a group of unschoolers, homeschoolers, or a public or private school, our environmental education program offerings can be customized to fit your classroom's learning model.

STATEMENT OF INCLUSION

Camp Fire believes in the dignity and the intrinsic worth of every human being. We welcome, affirm, and support young people and adults of all abilities and disabilities, experiences, races, ethnicities, socio-economic backgrounds, sexual orientations, gender identities and expressions, religion and non-religion, citizenship and immigration status, and any other category people use to define themselves or others. We strive to create safe and inclusive environments that celebrate diversity and foster positive relationships. All are welcome at Camp Fire.

Discover what inclusion looks like at Camp Fire at campfiremn.org/inclusion.

CONTENTS

STEM (Science, Tech, Engineering, Math) Lessons	3-7
Outdoor Recreation & Skillbuilding Lessons	8-11
FAQs & Sample Schedules	12-15



STEM

(Science, Technology, Engineering, Mathematics)



All STEM lessons are tied to MN State Science Standards.

ANIMAL ADAPTATIONS & POPULATIONS



Grades: PreK-12

Locations: Camp Fire Minnesota, at-school, virtual **Time Required:** 30 min per 20 students (grades PreK-3),

30-45 min per 30 students (grades 4-12)

Students will explore a variety of animal bones and learn about the different adaptations associated with them. Students will be able to identify adaptations of many animals, this includes defining skull characteristics of carnivores and herbivores. Additionally, they will play a game that embodies population and predator/prey dynamics.

MN State Standards: oL.1.2.1.2, 1L.3.1.1.1, 2L.4.1.1.1, 3L.4.1.1.1, 4L.4.1.1.1, 5L.4.1.2.1, 7L.2.1.1.1, 9L.3.2.1.5, 9L.4.1.1.1



ANIMAL TRACKS



Grades: PreK-12

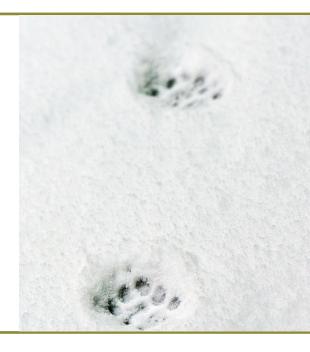
Locations: Camp Fire Minnesota, at-school

Time Required: 30 min per 20 students (grades PreK-3),

30-45 min per 30 students (grades 4-12)

Students will get to explore animal tracks with this hands-on lesson. PreK-2nd grade will get a sensory experience and use animal track casts to make imprints in sand or snow. They will also play a game that explores animal movement. Older students will learn how to create their own animal track casts and take home the ones they created or go on an animal tracking walk in the woods.

MN State Standards: oL.1.2.12, 1L.3.1.1.1, 2L.3.2.2.1, 3L.3.2.1.1, 3L.4.2.1.1, 4L.4.1.1.1, 7L.4.1.2.2, 9L.3.2.1.5



BIG WOODS EXPLORATION

** **

Grades: PreK-12

Locations: Camp Fire Minnesota, virtual

Time Required: 30 min per 20 students (grades PreK-3),

30-45 min per 30 students (grades 4-12)

Using their observation skills, students will discover plants and animals living in the Big Woods. Younger students will explore the woods through a hands-on nature hike. Older students will experience the Big Woods in a variety of ways depending on the season. Activities may include identifying tree species, playing Nature Bingo, making leaf prints, learning about tree rings, or investigating the impact humans have on the forest ecosystem.

MN State Standards: 0L.1.2.1.2, 1E.4.2.1.1, 2L.4.1.1.1, 3L.1.2.1.2, 4E.1.1.1.2, 5L.4.1.2.1, 6E.1.1.1.3, 7L.4.1.2.1, 9L.3.1.1.3



BIRDS & MIGRATION



Grades: PreK-12

Locations: Camp Fire Minnesota

Time Required: 30 min per 20 students (grades PreK-3),

30-34 min per 30 students (grades 4-12)

Students will take a walk through the Big Woods to observe birds and learn the basics of bird watching. Students in PreK-2nd grade will get to craft their own binoculars to take home. 3rd-12th grade will focus on bird identification, working with binoculars, and the basics of migration. Students will also learn the effects of human development on birds' migratory patterns and habitats.

MN State Standards: oL.1.2.1.2, 1E.4.2.1.1, 2L.4.1.1.1, 3L.3.1.1.2, 4L.4.1.1.1, 5L.4.1.2.1, 7L.4.1.2.1, 9L.2.1.1.2



CLIMATE CHANGE IN MN



Grades: 6-12

Locations: Camp Fire Minnesota, at-school. virtual

Time Required: 45 min per 30 students

This lesson explores the impact of climate change in Minnesota. Students will be able to articulate the basic scientific principle driving climate change, as well as name specific impacts climate change is having on seasonal weather patterns, native wildlife, and humans.

MN State Standards: 6.1.2.1.4, 6.2.3.2.3, 7.1.1.1.1, 7.4.2.2.1, 7.4.4.1.2, 8.1.1.2.1, 8.3.2.2.1, 8.3.4.1.2, 9.1.1.1.5, 9.1.3.1.3, 9.3.2.3.1,

9.3.4.1.2, 9.4.4.1.2



EVOLUTION

Grades: 6-12

Locations: Camp Fire Minnesota, at-school. virtual

Time Required: 45 min per 30 students

Students will learn about the origins of the theory of evolution, including concepts such as fitness, natural selection, convergent evolution, and sexual selection. They will learn to recognize the impacts of evolution on the plants and animals they encounter every day and recognize how evolution connects humans with the natural world.

MN State Standards: 7.1.1.1.1, 7.4.3.2.3, 9.4.3.3.1, 9.4.3.3.4, 9.4.3.3.5



INVASIVE SPECIES

Grades: 3-12

Locations: Camp Fire Minnesota, virtual Time Required: 30-45 min per 30 students

Students will learn what invasive species are, examples of Minnesota invasive species, and their effect on our ecosystems. Students will learn how to identify these species and create artwork to educate others about Minnesota invasive species.

MN State Standards: 3.L.3.2.1.1, 5L.4.1.2.1, 6E.3.2.1.3,

7L.3.2.1.1, 9L.2.1.1.2



LITTLE SCIENTISTS

Grades: PreK-2

Locations: Camp Fire Minnesota, at-school
Time Required: 30 min per 20 students

Bring science to little minds with these lessons! Students will explore basic scientific concepts with these sensory activities and crafts. Science experiments may include observing reactions with baking soda and vinegar, investigating sound by creating musical instruments, and more. Naturalists will select which activity to do unless a specific craft is requested.

MN State Standards: oE.1.1.1.2, oP.2.2.1.1, 1P.2.1.1.1, 2P.1.1.1.1, 2P.2.2.1.1



MICROSCOPIC EX(CELL)ENCE

Grades: 5-12

Locations: Camp Fire Minnesota, at-school Time Required: 30–45 min per 30 students

Students will get an up-close look at different parts of living things, including blood cells, cat hair, and butterfly wings, as they learn introductory methods on how to use a microscope, proper lab procedures, and the anatomy of different plants and animals.

MN State Standards: 5P.1.2.1.3, 7L.1.2.1.1, 7L.4.1.1.1, 9L.3.1.1.1



POLLINATOR GARDEN

Grades: PreK-5

Locations: Camp Fire Minnesota, at-school, virtual

Time Required: 30-45 min per 30 students

Students tour the pollinator garden while learning why pollinators are crucial to our ecosystem and their populations' challenges in the Anthropocene. Additionally, students learn about seed dispersal and engineer devices that model pollen movement by insects.

MN State Standards: oL.1.2.1.2, 1L.3.1.1.1, 2L.3.2.2.1,

3L.3.1.1.2, 4L.4.1.1.1





RENEWABLE ENERGY

Grades: 3-12

Locations: Camp Fire Minnesota, at-school, virtual

Time Required: 30-45 min per 30 students

In this introductory lesson on renewable energy and innovation, students will work together in small groups to build a model wind turbine. Students will test the wind turbine outdoors and evaluate its functions.

MN State Standards: 2P.1.1.1.1, 4E.4.2.1.1, 5P.3.2.2.1,

6E.3.2.1.3, 8P.2.1.1.2



SOIL SCIENCE

Grades: PreK-12

Locations: Camp Fire Minnesota, at-school **Time Required:** 30–45 min per 30 students

Test and compare soil samples from various locations at Camp Fire Minnesota or at your school. Students will use methods scientists use to determine the percentages of sand, silt, and clay to identify the soil type. Through the identification process students will learn which animal and plant life lives in certain soil types and draw conclusions about the advantages and disadvantages of the different types of soil. Classroom extension activity available.

MN State Standards: 7L.3.2.1.1, 7L.4.1.2.1, 9E.1.2.1.2, 9L.3.2.1.2



STARS AND CONSTELLATIONS

Grades: 6-12

Locations: Camp Fire Minnesota, at-school. virtual

Time Required: 45 min per 30 students

Using our planetarium projector, students will learn to recognize major constellations, stars, and the Milky Way. We will learn about the history of some of these constellations and hear stories from several different cultures. We will also discuss light pollution and reflect on how it affects the natural environment as well as society.

MN State Standards: 0.1.1.2.1, 3.1.3.2.1, 8.1.3.3.2, 8.3.3.1.1



WETLANDS INVESTIGATION

Grades: PreK-12

Locations: Camp Fire Minnesota, virtual

Time Required: 30 min per 20 students (grades PreK-3),

30-45 min per 30 students (grades 4-12)

In this lesson, students will learn about multiple wetlands at Camp Fire Minnesota, the many benefits of wetlands, and perform a field study on this diverse habitat's flora and fauna. Additionally, students will explore the environmental impacts of wetland removal and the importance of wetland ecosystems.

MN State Standards: oL.1.2.1.2, 1E.4.2.1.1, 2L.4.1.1.1, 3L.3.1.1.2, 4L.4.1.1.1, 5L.4.1.2.1, 7L.4.1.2.1, 9L.2.1.1.2



Outdoor Recreation & Skill-Building



In these programs, we focus on developing cognitive social competencies with students through a social emotional learning (SEL) framework. We specifically reflect on self-awareness, self-management, and social awareness.

ADVENTURE COURSE: HIGH ROPES, ROCK AND BOULDERING WALLS



Grades: 3-12

Locations: Camp Fire Minnesota

Time Required: 90 minutes per 30 students

Our Adventure Course program offers a comprehensive progression of teambuilding activities and high-challenge elements that take place outdoors, utilizing cables, ladders, ropes, and a rock wall. Our approach is grounded in best practices recommended by the Association of Challenge Course Technology (ACCT), which includes beginning with 30 minutes of teambuilding activities to encourage communication, trust, and teamwork. This approach is integral to the overall experience and sets the foundation for the rest of the program. Following teambuilding, our highly trained instructors guide students through belaying techniques and challenges on the rock wall and ropes course. For students who are not comfortable with heights, we offer a bouldering wall as an alternative to practice their skills.



Adventure Course Ratios (Example)

Session Length	Number of Participants	Number of climbs (per participant)
	10	2+
90 minutes	20	1-2
	40	1

*First 30 min. dedicated to teambuilding

*When group size exceeds 20 students, it may be necessary to choose between the high ropes and climbing wall activities due to time limitations. We aim to ensure that each young person has the opportunity to climb as many times as safely possible within the program duration. Please note that the chart provided offers estimates only and is not a guarantee. The number of climbing attempts for each participant is subject to a variety of factors including group dynamics, individual comfort levels, and the ability to follow instructions.

ARCHERY



Locations: Camp Fire Minnesota

Time Required: 60-90 min per 20 students

It is time to hone your archery skills! Students will go to our archery range to practice the basics and try to get a bullseye on one of our targets. Students will also learn about our archery safety rules and the best ways to shoot an arrow.





CANOEING ADVENTURES

(weather dependent)

Grades: 3-12

Locations: Camp Fire Minnesota

Time Required: 60-90 min per 20 students

During this program, students will learn the basics of canoeing. Naturalists explain the structure of a canoe and encourage students to work as a team to steer, paddle, and navigate through the water.

*All visitors are required to wear our provided life jackets.





COMPASSES & ORIENTEERING

Grades: 3-12

Locations: Camp Fire Minnesota, at-school Time Required: 30 min per 30 students

This lesson teaches students about cardinal directions and ways of telling directions using a compass and the sun. Students will apply their findings in a scavenger hunt activity. Classes interested in building compasses using magnets can opt for a compass engineering extension.



FIRE BUILDING



Grades: 5-12

Locations: Camp Fire Minnesota

Time Required: 45 min per 30 students

Students will learn how to build a safe and successful fire with our experienced outdoor living skills team. This includes the needed components of fire, safety concerns for self, others, and the environment, and how to source material in an environmentally conscious way.



GPS NAVIGATION

Grades: 4-12

Locations: Camp Fire Minnesota

Time Required: 45 min per 20 students

Each class will split into small groups to learn the basics behind GPS Navigation. Students will use handheld GPS devices and a map to navigate to different points across Camp Fire Minnesota. The class will learn the history of GPS and how both explorers and animals have used other navigation methods to get around.



SHELTER BUILDING



Grades: PreK-12

Locations: Camp Fire Minnesota, at-school

Time Required: 30 min per 20 students (grade PreK-3)

45 min per 30 students (grades 4-12)

Students will engage in hands-on shelter-building activities that vary according to the season. Working collaboratively in teams, they will have the opportunity to construct shelters using readily available materials such as camping supplies, branches, and compacted snow. These activities foster teamwork, problemsolving skills, and practical knowledge of shelter construction in different environments.



SNOWSHOES



(snow-dependent)

Grades: K-12

Locations: Camp Fire Minnesota, at-school Time Required: 60-90 min per 20 students

This lesson provides another opportunity to explore and have fun in the snow. Snowshoe along the Big Woods trails at Camp Fire Minnesota or local school grounds while learning about ecology and how snowshoes have supported people throughout history.



TEAMBUILDING IN NATURE



Grades: PreK-12

Locations: Camp Fire Minnesota

Time Required: 30-45 min per 20 students

Team-building programming at Camp Fire Minnesota during the spring and fall utilize our custom-built challenge course. To complete the challenge course, students will need to communicate and support each other through the obstacles. At-school team-building activities encourage teamwork, communication, and relationship-building through activities such as giant jump rope, name games and more.



SO, YOU WANT TO BE A NATURALIST?



Grades: 7-12

Locations: Camp Fire Minnesota, at-school, virtual

Time Required: 30-60 min (no student limit)

This program is an introductory informational session designed for students who want to learn the ins and outs of the naturalist career. Students will have a chance to submit questions ahead of time, and the naturalists will answer them through a Q&A session. Students will also get the opportunity to view or interact with materials that naturalists use in their work and learn more about other careers in the environmental field.



FAQs

Where are you located?

• Camp Fire Minnesota's 103-acre property is located at 3300 Tanadoona Dr, Excelsior, MN 55331. Camp Fire is on the lands of the Dakota people.

When are you available for programs?

- All programs: Tuesday Fridays, 8:00 AM 5:00 PM.
 - We do not accept program reservations on weekends and we cannot accommodate visits to our site
 in Excelsior during the summer or during school-break days, such as MLK Day, President's Day, MEA
 Days, Spring Break, etc.

What is the minimum and maximum number of students for a program?

- We require a minimum of 10 students.
- Up to 120 students are allowed to attend a field trip at Camp Fire Minnesota. If you have more than 120 students, the Environmental Education Programs Manager can work with you to provide other accommodations.

How much does programming cost?

• Our pricing is based on a sliding scale according to the Free & Reduced Lunch (FRL) rate of the school. To determine the FRL rate of your school, we use the Minnesota Report Card. We also have a different pricing structure for home schools. The pricing breakdowns can be found here.

How does payment work?

- To secure the program date, we require a 50% deposit.
- While schools have the option to pay the entire invoice at the time of booking, we recommend only paying the 50% deposit. This will ensure that the school is billed accurately after the program, based on the actual number of students in attendance. Paying in full upfront may result in overpayment if the number of attending students is less than the anticipated number.
- Please note that refunds will not be provided on deposits, except in cases where Camp Fire Minnesota cancels the program. The program will proceed as scheduled and the deposit will be retained even if attendance falls below the 50% deposit threshold. Rest assured that the program will occur regardless of weather conditions, as we have contingency plans for outdoor activities.

How much do chaperones pay to attend?

- We do not charge chaperones to attend. At Camp Fire Minnesota, we want our staff to focus solely on delivering quality programs. We do not charge chaperones because we request that all chaperones handle behavior management and have a hands-on approach during programs.
- Please note that all chaperones must be 21+ and the school must provide a minimum of one chaperone per 10 students.

Do your programs meet academic standards?

• Yes. All programs in our STEM lessons support the Minnesota Science Standards.

What does a typical program look like?

• Please see pages 14-15 for example schedules reflecting on-site, at-school, and virtual programs. Lessons may differ slightly from the brochure descriptions due to weather, season, group size, etc.

Is lunch provided?

- We do not have any food or beverage services on-site. All visitors should bring a **nut-free lunch** and reusable water bottle. We do have tote bins that are used to store lunches.
- Although we do not coordinate lunch orders, schools are welcome to get food catered and delivered to our site.

Do you provide transportation?

• We are unable to provide transportation for students; however, we do have limited funds available to reimburse bussing costs. Please reach out to the Environmental Education Programs Manager to learn more about our first-come-first-serve transportation fund. You can also apply for funding if you are located in Hennepin County.

How far in advance should I submit my request?

• We request that groups submit at least one month in advance of their first-choice date although we recommend submitting your field trip request form as early as possible for the best selection of available dates and programs. Our programs are extremely popular and fill up quickly! Sign up for our mailing list to get the latest updates on our school programs.

What happens in the event of inclement weather?

• We know Minnesota weather can be unpredictable. Although we aim to lead programs outdoors as much as we can during the year, our brand-new Community and Dining Center allows ample space for indoor programs. See below for our weather plans:

Excessive Heat:

- In any of the following instances, programs will be moved to an air conditioned space or include cool down opportunities such as a sprinkler:
 - a. Heat index of at least 105 degrees F for more than three hours per day for two consecutive days, or
 - b. Heat index of more than 115 degrees F for any period of time, or
 - c. Heat index of between 91-103 for three consecutive days or more

Cold Temperatures:

• We always keep students inside if the wind chill is colder than -10 degrees below zero.

Rain:

• If the forecast shows rain, we will create an alternative plan that will happen indoors.

Lightning and Thunder:

• If lightning is detected within 10 miles or there is audible thunder, participants will seek shelter indoors until there has been 20 minutes since the last audible thunder and no more strikes within 10 miles are detected.

EXAMPLE SCHEDULES

EXAMPLE SCHEDULE - Virtual Program

*Schedule reflects a plan for 30 fifth-grade students attending virtually

Time	Group 1: Black Bear 30 students	
9:55 AM	CFMN Staff Login	
10:00 AM	Student Online Arrival and Large-	
	Group Welcome	
10:05 AM	Renewable Energy: Studying Wind	
10:50 AM	Reflection, Evaluation and Large-	
	Group Farewell	
11:00 AM	Log Off	

EXAMPLE SCHEDULE - At-School Program

*Schedule reflects a plan for 6o High-5/PreK students participating in a program at your school

Time	Group 1:	Group 2:	Group 3:	
	Black Bear	Wolf	Lynx	
	20 students	20 students	20 students	
9:45 AM	Camp F	ire Minnesota Staff Arrival &	Set-Up	
10:10 AM		Transition		
10:15 AM	Studer	nt Arrival and Large-Group W	elcome	
10:30 AM		Transition		
10:35 AM	Animal Adaptations &	Birds & Migration	Animal Tracks and	
	Populations		Movements	
11:05 AM	Transition			
11:10 AM	Birds & Migration	Animal Tracks and	Animal Adaptations &	
		Movements	Populations	
11:40 AM	Transition			
11:45 AM		Lunch & Bathroom Break		
	*Monitored by School Staff			
12:15 PM	Transition			
12:20 PM	Animal Tracks and	Animal Adaptations &	Birds & Migration	
	Movements	Populations		
12:50 PM	Transition			
12:55 PM	Reflection, Evaluation and Large-Group Farewell			
1:25 PM	Transition to Clean Up			
	*Camp Fire Minnesota Staff ONLY			
2:00 PM	Estimated CFMN Staff Departure			

EXAMPLE SCHEDULE - Field Trip to Camp Fire Minnesota

*Schedule reflects a plan for 120 third-grade students visiting Camp Fire Minnesota

Time	Group 1:	Group 2:	Group 3:	Group 4:
	Black Bear	Wolf	Lynx	Otter
	30 students	30 students	30 students	30 students
10:00 AM		Welcome & Int	troduction	
10:15 AM		Transit	ion	
10:20 AM	Compass &	Renewable Energy:	Wetlands	Animal Adaptations
	Orienteering	Studying Wind	Investigation	& Populations
10:50 AM	Transition			
10:55 AM	Renewable Energy:	Compass &	Animal Adaptations	Wetlands
	Studying Wind	Orienteering	& Populations	Investigation
11:25 AM	Transition			
11:30 AM	Lunch, Bathroom Break & Free Time			
	*Monitored by School Staff			
12:00 PM	Transition			
12:05 PM	Animal Adaptations &	Wetlands	Renewable Energy:	Compass &
	Populations	Investigation	Studying Wind	Orienteering
12:35 PM	Transition			
12:40 PM	Wetlands Investigation	Animal Adaptations	Compass &	Renewable Energy:
-	, and the second	& Populations	Orienteering	Studying Wind
1:10 PM	Transition			
1:15 PM	Reflection, Evaluation & Farewell			
1:30 PM	Estimated Departure			

EXAMPLE SCHEDULE - Field Trip to Camp Fire with Speciality Program

*Schedule reflects a plan for 60 students in ninth grade visiting Camp Fire Minnesota

Time	Group 1: Black Bear	Group 2: Wolf	Group 3: Lynx 15 students	Group 4: Otter
	15 students	15 310000113	15 310000113	15 310000113
9:45 AM		Welcome &	Introduction	
10:05 AM		Transition		
10:10 AM			GPS Navigation	Teambuilding in Nature
10:55 AM	High Ropes, Rock and Bouldering Walls		Transition	
11:00 AM			Teambuilding in Nature	GPS Navigation
11:45 AM	Transition			
11:50 AM	Lunch, Bathroom Break and Free Time *Monitored by School Staff			
12:25 PM	Transition			
12:30 PM	Teambuilding in Nature	GPS Navigation		
1:15 PM	Transition		High Ropes, Rock and Bouldering Walls	
1:20 PM	GPS Navigation	Teambuilding in Nature		
2:05 PM	Reflection, Evaluation and Farewell			
2:25 PM	Estimated Departure			