



Join the Quest!

Gather your supplies, pack your bag, and get ready for adventure! We invite you join us in exploring the lands of the Concord watershed to learn about science, history, art and other topics this summer. Earn awards from different organizations along the way!

What will you learn? What new places will you explore? What new skills will you develop? Choose some activities and go find out!



Summer Quest Award System

Earn a Certificate in a Subject Area:

Stewardship, Art, Science, Social Studies, Literacy, History

Ages 5-10: 4 activities within a subject

Ages 11 and up: 5 activities within a subject

Earn a Partner "Badge": The Umbrella, The Land Trust, OARS, Minute Man NHP, Drumlin Farms

Ages 5-10: 4 activities of a partner organization

Ages 11 and up: All 6 activities of a partner organization

Earn a Patch:

Ages 5-10: 4 certificates or badges

Ages 11 and up: 6 certificates or badges

(This may seem like a lot, but many activities will count toward a certificate and a badge)

**If you complete all of the activities, we will feature you on social media and send your picture to the newspaper!*

Document and submit any of your Art or Arts & Environment creations to have your work featured in our end-of-summer **#DiscoverYourArts Showcase**, at **TheUmbrellaArts.org/Showcase!**

Categories of Exploration

- Stewardship
- Science
- History
- Social Studies
- Art
- Literacy

Participating Partner Organizations

Concord Land Conservation Trust
Mass Audubon/Drumlin Farm
Minute Man National Historical Park
OARS
The Umbrella Arts Center

Affiliates

Concord Free Public Library
Concord Tourism
Concord Division of Natural Resources
Walden Woods
Arts Arlington
The Old Manse



Learn more at
theumbrellaarts.org/quest

Sites & Subjects	The Land Trust	The Umbrella Arts & Environment	Minute Man NHP NHP	OARS	Drumlin Farm	Affiliates*
Stewardship	Caring for trails and removing invasive plants	Take a Stand! Design a nature logo or poster	Protect Your Park: Learn how to protect Minute Man and take action!	Make our Rivers Healthy. Take action!	Speak up! Make and send an advocacy postcard	Concord Free Public Library COVID-19 Stories
History	Herbivory: Who is eating this plant?	Inspired by Place: Be an Artist in Your Residence	Of Monumental Importance: Learn from the park's markers and monuments	Designated Wild & Scenic, Our Rivers Have History!	Learn about local nature heroes in your town or state	Concord Tourism Pick up a town map from the Concord Tourism Visitor Center
Science	Wildflowers: Discovering what is around you and naming it	Nature senses and patterns: Create a mandala	Ecosystem Exploration: Who lives here?	Discover Who Lives in our Rivers	Ask an expert! Use local resources to learn about the environment	Walden Woods Put your hat on!
Social Studies	Ethnobotany: How do people interact with plants?	Digging deeper: What is Musketaquid? Egg Rock?	Enabling Legislation: Create your own National Park!	Rivers Connect Us: What is Your Watershed Address?	Home Explorer: Go outside with your nature journal	Millbrook Tarry/ Trail's End Building with recycled natural materials...plus ice cream!
Art	Botanical Drawing: The many forms of leaves	Nature Art: Make an Andy Goldsworthy sculpture garden	Artist in Your Residence: Create something beautiful inspired by the Park	Share the Beauty of Our Rivers Through Art	Science/Nature Journal: Learn how to make your own	Arts Arlington Fox & Owl Video Adventure
Literacy	Explore and Observe: Plants on the Land Trust's properties	Nature Journaling: Words, Pictures & Numbers	Primary Source: Document this moment in history with your writing	Famous Authors Wrote About Our Rivers: Share Your Inspiration.	Share! Write a letter or post about your a special find	The Old Manse Write like Emerson



To participate, choose which category, organization, or activities interest you. Go to the partner organization's website to get details on their activities. Submit your activity responses to **summerquestprogram@gmail.com**. Color in the squares as you complete activities and track progress toward an award!

**These activities can be found on each partner website*



The Land Trust Summer Quest Activities

Stewardship



Caring for Trails and Removing Invasive Plants

Age Group 1: Recognize litter along the trails and remove if able, and determine how long it will take to decompose (list below). Help clear sticks and small debris from trails that people can trip on. Let the Land Trust know what you have found and removed, and what trail you were on (or name of property).

Age Group 2: Recognize litter along the trails and remove if able, and determine how long it will take to decompose (list below). Find one invasive plant (from list below) to identify and pull up. Invasive plants are plants not from North America that out-compete native plants and ultimately alter their habitats. Track how many you removed and where along trail. Let the Land Trust know what you have found and pulled, and what trail you were on (or name of property).

In this list you will find some items and their decomposition times. Decomposition will vary depending on weather and site conditions.

Item	Average Decomposition Time
Orange or banana peel	3 to 5 weeks
Paper	2 to 6 weeks
Cardboard	3 to 6 months
Carry-out food bag	4 to 8 months
Cigarette butt	10 to 12 years
Plastic bag	10 to 20 years
Nylon fabric	30 to 40 years
Tin can	50 years
Plastic six-pack holder	450 years
Aluminum can	200 to 250 years
Monofilament fishing line	600 years
Glass bottle	1 million years
Styrofoam container	Never

Common Invasive Plants in Massachusetts

- Asian bittersweet
- Black swallow wort
- Burning bush
- Common Buckthorn
- Garlic mustard
- Glossy Buckthorn
- Japanese barberry

TIP: You can find more photos by looking up these plant names on GoBotany (<https://gobotany.nativeplanttrust.org/>)

Asian bittersweet



Burning Bush



Glossy buckthorn

Common buckthorn

The Land Trust Summer Quest Activities

History



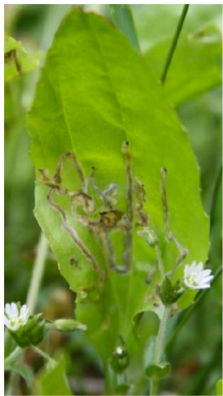
Herbivory: Who Is Eating This Plant?

Age Group 1: Find a leaf that has damage or chewing marks on it and identify type of herbivory from provided chart of choices below. Take a photo and/or draw what you see and write down the type of herbivory to submit.

Age Group 2: Find a leaf that has damage or chewing marks on it, identify the plant, and identify type of herbivory from provided chart of choices. Take a photo and/or draw what you see and write down the type of herbivory and plant identification to submit.

Herbivory: When an animal feeds on a plant. We call animals that only eat plants Herbivores.

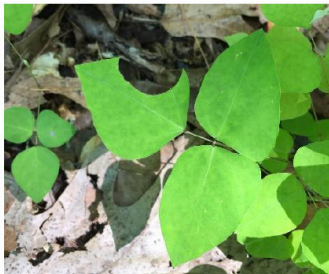
Different types of leaf herbivory by insects you will see on leaves include:



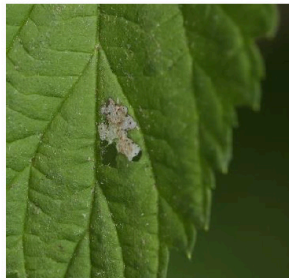
Leaf Miners



Leaf edges eaten



Leaf cutting bees



"window"



Beaver

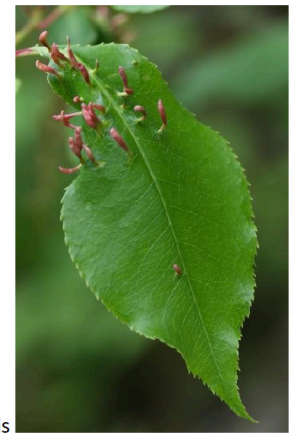


Deer

Other ways that insects use leaves include (and you can count these for this activity):



Leaf shelters



Leaf galls

The Land Trust Summer Quest Activities

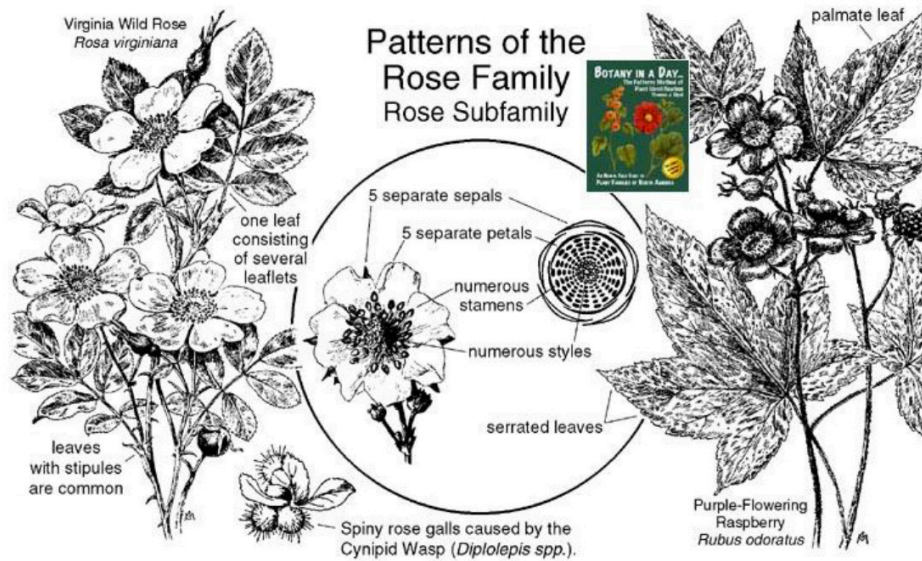
Science



Wildflowers: Discovering What is Around You and Naming It

Age Group 1: Find a wildflower you found on a hike, fill out the New Plant Discovery Form below, and identify the actual name of the plant.

Age Group 2: Find a wildflower you found on a hike, fill out the New Plant Discovery Form below, and identify the actual name of the plant, and the type of habitat it was found in (wet, dry, edge, forest, wetland, field, etc.)



New Plant Discovery Form

Plant height_____ Flower color_____

Draw a picture of the plant – be sure to show the shape, size, stem edges and any other details.

Draw a separate picture of the flower or plant seed.

Additional information for Age Group 2: Where was the plant growing?

Is the plant's stem woody? What kind of soil is the plant growing in? (Moist? Dry? Sandy? Clay? Gravelly?)

How many flowers or seed pods does the plant have? What kind are they? Where are they located?

How do you think the plant spreads its seeds? How do you think the plant is pollinated?

What could animals use this plant for?

The Land Trust Summer Quest Activities

Social Studies



Ethnobotany: How Do People Interact with Plants?

Age Group 1: Find a plant along the trail and explain how humans might use it. Examples of use can include tools, rope, clothing, and shelter, dye, weaving, and building fires. If you need a hint, see the list of plants below. As for edible plants, you can also include these, but please do not eat anything.

Age Group 2: Research a native plant in New England that people used, and see if you can find it on Land Trust properties. Write up the plant you are looking for, what its ethnobotanical use is, and if you found it, where you found it!

New England native plants (non-edible uses):

- Ash
- Basswood
- Birch
- Cattail
- Dog Bane
- Dogwood
- Hawthorn
- Hemlock
- Jewel weed
- Milkweed
- Nettles
- Oak
- Pine
- Willow



The Land Trust Summer Quest Activities

Art



Botanical Drawing: The Many Forms of Leaves

Age Group 1: Find three different shaped leaves and identify the species of tree it comes from. Take a photo and/or draw what you see and write down the species name to submit. Bonus if you can name the scientific and common name of the plant!

Age Group 2: Find three different shaped leaves, identify the species of tree it comes from (common and scientific name) and describe the type of habitat you would find these trees in. Take a photo and/or draw what you see and write down the species name and habitat description to submit.

Trees in New England Forest include:

- Red Oak
- White Oak
- White Pine
- Birch
- Beech
- Sugar Maple
- Red Maple
- Silver Maple
- Hemlock
- Spruce
- Walnut
- Sassafras

Shrubs in New England include:

- Alder (can be a tree too)
- Viburnum
- Spicebush
- Juniper
- Catbrier
- Blueberry/Huckleberry
- Partridgeberry
- Rose (non-native)
- Honeysuckle (non-native)
- Buckthorn (non-native)
- Burning Bush (non-native)

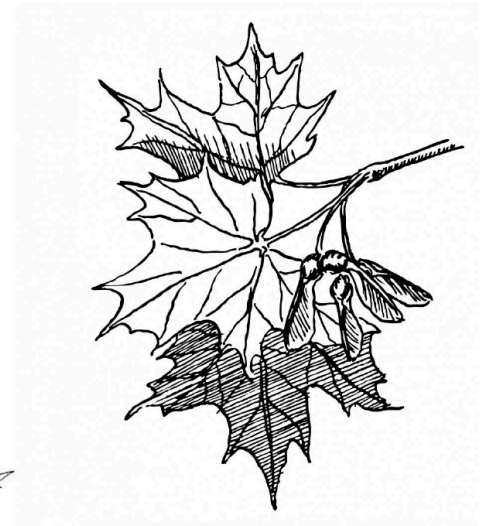
There are many herbaceous (without woody stems) plants, and the best way to complete this activity is with plants that have woody stems such as trees and shrubs.

Habitats in New England include:

- Forest
- Wetland
- Meadow
- Shrub swamp
- Open field

You can also use descriptive words for habitats such as wet, dry, edge, slope, hillside, rocky area, etc. For example, edge: between a forest and a field. Describe what you see!

Sugar maple (*Acer saccharum*)



Red Oak (*Quercus rubra*)

The Land Trust Summer Quest Activities

Literacy

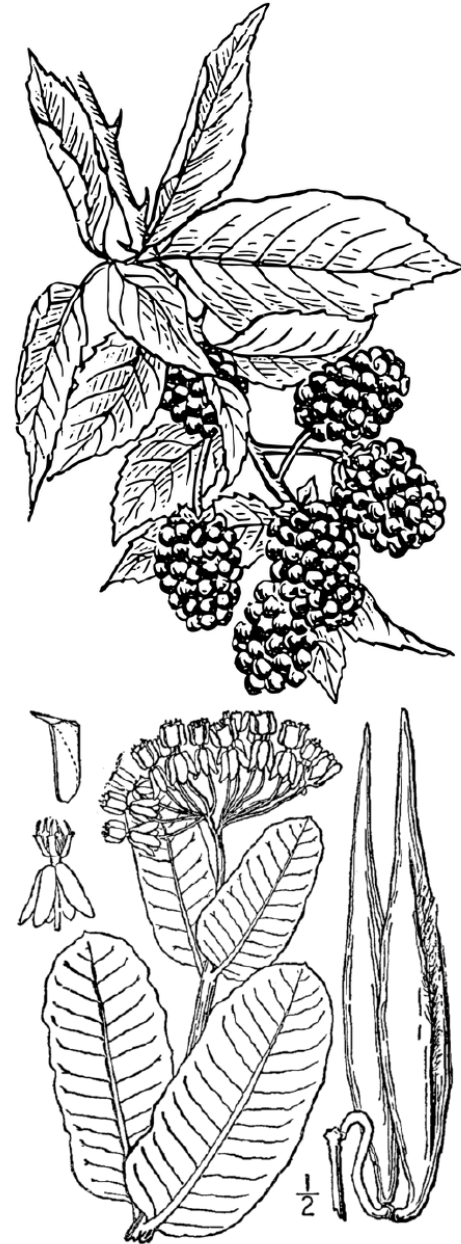
Explore and Observe: Plants on the Land Trust's Properties

Age Group 1: Walk a trail and sketch/describe in writing 5 items listed below

Age Group 2: Walk a trail, sketch/describe in writing 5 items listed below with one fact researched about each of them

Find a plant:

- With a leaf from a plant that has developed broad leaves to gather more sun
- With needles or needle-like leaves
- That is tall and gathers sunlight above surrounding plants
- That is short and grows low to the ground
- That has developed berries to entice animals to carry its seeds
- That grows in wet conditions
- That grows in a forest
- That grows in a meadow or field
- With a seed that is specially adapted to blow in the wind – with wings or fluff
- With a “hitchhiker seed” that travels by sticking to animals and birds
- With a winged seed from a tall plant
- With a colorful flower to attract insects or birds
- With a sweet smelling flower to attract insects or birds
- With thorns or prickles to prevent being eaten



This plant has thorns, black berries, and broad leaves. It grows along the edges of fields and forests in lots of sunlight. It is called blackberry (*Rubus allegheniensis*) and is native to New England.

This plant had a monarch butterfly caterpillar on it, growing in a field and taller than the rest of the plants there. The flowers are showy and pink. It is called clasp milkweed (*Asclepias amplexicaulis*).



The Umbrella Arts & Environment Summer Quest Activities



Stewardship

Take a Stand!

The climate is changing so why aren't we? As our ocean's rise, so must we. Climate justice is racial justice. There is no planet B. These are all slogans from protesters using brilliantly colored and evocative signs to send a message. In this activity, focus on and learn about one specific environmental issue. Design a poster with a clear message to communicate the importance of the environment and protecting it. For inspiration, check out the work of [Extinction Rebellion](#) and the [Sunrise Movement](#).

Materials

Large poster paper or cardboard
Markers, colored pencils, or paint

Activity

1. Consider what environment issue is most urgent or most relevant. There are many issues to choose from: global warming, invasive species, environmental refugees, solar power, or any other issue of interest. If no environmental issues come to mind, research the environment, climate change, and related issues to find something
2. Brainstorm slogan ideas. They don't have to be complicated. They can be one word, a phrase, or a sentence. What matters is the impact of these words on your audience.
3. Take your poster paper and write out your rallying cry. Use pencil for this! Once the lettering fits well on the page, add color, patterns, or graphics to make a bold and brilliant poster.
4. Where will you display your poster? In a window or save for a march? Use your beautiful sign to send a message to the world! Send it to summerquestprogram@gmail.com.

History

Inspired by Place: Be an Artist in Your Residence

Submit a photo, drawing, poem, video to our collaborative Artist in Your Residence project!

National Parks are certainly places of great natural beauty where one can find healing and solace, but they are also where we can learn about culture and history and connect with our shared human experience. In this unprecedented time, when so many of us are isolated and may not be able to visit our favorite trail, museum or historic site, it's going to take some creativity to make that connection.

That's why Minute Man National Historical Park and The Umbrella Arts Center are calling on all of you to create art inspired by your experiences in the park and your connection with the natural landscape, a particular historical site, and/or one of the many stories told here. We're calling the initiative "Artist-in-Your-Residence."

The Umbrella Arts & Environment Summer Quest Activities



Science

Nature Senses and Patterns: Create a Mandala

1. Set aside 15 minutes and put your senses to work. Go outside.
2. What five things do you see? Hear? Smell? What five textures can you touch? What five things might you taste -- do you think they would be bitter or sweet?
3. Write words/draw pictures/make designs to reflect the experience of each sense.
4. Now, using what you recorded as your sensory experiences, create a mandala!
5. Take photo, submit a drawn mandala, make a movie -- whatever you're having the most fun with -- and email it to us at summerquestprogram@gmail.com.

What's a "Mandala"?

A mandala is a symmetrical design that is usually circular in form. Mandalas grow outward from a center point, and can include drawn patterns, geometric forms, and/or recognizable images. Mandalas have a deep history in the Hindu and Buddhist religions, and are recognized world-wide for their balance and beauty. Creating and observing them can be deeply meditative.

Social Studies

Digging Deeper: What is Musketaquid? Egg Rock?

If you already know the answer to these questions, you're well-connected to Concord's Native American history. The Umbrella Arts & Environment program is also known as Musketaquid, as our mission is to connect people to place through the arts. Why did we pick that name? What does it mean? For many years, we held our Solstice celebrations near Egg Rock. What is that? What is the connection to Musketaquid?

Do some research and share your findings. Again—have some fun with it! Send us a video, poem, photograph, drawing, essay, or whatever to show us what you learned. Send it to summerquestprogram@gmail.com.

The Umbrella Arts & Environment Summer Quest Activities



Art

Nature Art: Make an Andy Goldsworthy Sculpture Garden

Andy Goldsworthy is a nature art genius. From England, Goldsworthy makes ephemeral (art that reverts back to nature on its own) sculpture all around the world, using natural materials that are from that particular area. People refer to his work as "site specific" art, or "land art." Click [here](#) and [here](#) to see samples of his amazing work! (How does he think of these things!)

1. Goldsworthy says that all patterns can be found in nature. Check out this sheet.
2. Go outside and see how many of these shapes/patterns you can find in nature! Take a photo or draw examples that you find. Or, jot down descriptions of what you found.
3. Can you make an Andy Goldsworth Sculpture garden? Make a sculpture out of natural materials for each of the patterns. There should be 7! These sculptures could be super small and all fit into a shoe box, or they could be big and take up your whole backyard! Up to you. Take a photo or make a video of your creations! And send to summerquestprogram@gmail.com.

Literacy

Nature Journaling: Pictures, Words, and Numbers

How does a tomato grow from a flower to a fruit? How does the color of a leaf change from morning to evening? How many colors are there in a sunset sky? Nature journaling focuses on learning about the world around you by asking questions and exploring what you see. Besides learning about the environment, you also develop drawing skills. Keeping a nature journal combines science, art, and adventure all together!

Materials

Sketchbook, notebook, journal, or paper
Graphite pencils, colored pencils, or other coloring materials
Ruler or tape measurer
Field guide

Activity

1. Gather your supplies and go outside!
2. Look around and find something that you want to draw - a flower, a tree, a landscape, clouds in the sky, a blue jay, or a squirrel. There are many ways to keep a journal, and you can fill your journal with all the things you find interesting.
3. Write down where you are, the weather, the date, and other details you think are important. You might record the time of day, morning, afternoon, or evening, and how the sunlight casts shadows if there even is any sunlight. If you have a field guide with you, try to identify the organisms in the environment.
4. Count what's around you. How many petals on a flower, how many blue jays, or how many clouds in the sky. If you want you can count the number of leaves on a tree, or you can estimate the number and appreciate the wonder of how many leaves there are!
5. Send your journal entires to summerquestprogram@gmail.com.

Minute Man NHP Summer Quest Activities



Stewardship

Protect Your Park

What is Stewardship?

Stewardship simply means taking action to protect something you care about.

Why should people care about Minute Man National Historical Park?

How can you take care of or protect your National Parks, including Minute Man?

There are many ways you can be a good steward of the National Parks. Here are a few ideas:

1. Follow Leave No Trace Principals when you visit. Read about LNT [here](#).
2. Pick up litter left by others; on your own or with a volunteer group. Make sure you stay safe and use proper equipment. Contact the [park's volunteer program](#) to learn more.
3. Know and respect the rules at each park. Tell a ranger if you see someone breaking the rules or doing something you think is damaging the park.
4. Teach your friends and family about National Parks and how to act when they visit. Maybe you do this on social media, as a school project, or just by talking about what you've learned.
5. Talk to a ranger. The more you learn about a place, the more you can share what you know with others.
6. Follow your favorite parks on Social Media (or ask your parents to).
7. Hold a fundraiser and make a donation to the park or an organization that supports National Parks.
8. Write to your lawmakers to tell them why you care about National Parks and ask them to help protect them.
9. Visit! Have Fun! Parks are only here because people love them.

What will you do this summer to protect this park?

Tell us about your stewardship action. What did you do? How did it feel? Would you do it again?

Minute Man NHP Summer Quest Activities



History

Of Monumental Importance

For younger kids: In order to help us remember important people or events, people in countries all across the world often try to protect the land or buildings related to an important piece of history. Sometimes they also put up monuments, like plaques, obelisks (tall towers) or statues that represent a person or event. There are a lot of both here at Minute Man National Historical Park and they can help you learn a lot about the people who fought in the Revolutionary War which led to the creation of the United States of America. We hope you enjoy exploring and learning about and from these buildings and markers while you visit the park. Check out the activity questions below.

For older kids: Have you visited Minute Man National Historical Park before? Have you noticed the historic monuments and markers though out the park? Do you think you really know what they are telling us about history? There are often clues to hidden meanings locked within these objects and sometimes they tell us more about the people who put them up than the events they are meant to memorialize.

By looking for these clues when you visit a monument, and thinking like a historian, you can learn so much more about the events and people who came before you. You can uncover deeper levels of history and maybe even some bias (unfair prejudice against someone or something) or inaccuracies in the monument's message.

One example of a monument that tells us a lot about the time in which it was erected is the 1836 obelisk.

Activities

For younger kids: The monuments and markers in the park come in many shapes and sizes and are meant to remind us of everything from historic locations, to events, to people. At each monument, read the words and make note of what they look like, then answer these questions:

How many monuments and markers are at the North Bridge?

1. Why do you think there are so many?
2. Look at the shape and style of each monument. How are they the same? How are they different?
3. Is there one that helps you understand what happened here better than the others? Why?
4. Is there a monument or marker you like better than the others? How does it make you feel when you look at it?
5. If you got to design a monument to help people remember why the North Bridge is an important place, what would it look like? What words would you put on it? You can draw your answer!

Minute Man NHP Summer Quest Activities



Science

For older kids: Explore the monuments and markers at the North Bridge and answer these questions:

1. What are the major differences in the look and design of the monuments? How are they the same?
2. Why do you think the monuments are designed to look this way?
3. How are the words on each monument different? How are they the same?
4. How do the monuments describe the British Soldiers who fought there?
5. Why do you think these words were used on each monument? You can ask a Park Ranger if you're not sure.
6. Do you think there is any bias or inaccuracy in these monuments? Any parts of the story that have been left out? Do you think there should be signs helping people understand the context of each monument?
7. If you were to put up a monument today to memorialize the fight at the North Bridge and the start of the Revolutionary war, what would it look like? What would it say? Feel free to draw your answer.

Ecosystem Exploration

An ecosystem is a natural area and all the living and nonliving things in it. This includes the community of plants, animals, and fungi, invertebrates, bacteria and other living beings, as well as the nonliving items found in that community, like water, rocks and soil. Weather and climate are also aspects of any ecosystem.

There are several different ecosystems at Minute Man National Historical Park. We invite you to explore each of them and investigate which living and non-living things live in each. Additionally, we wonder if you can figure out why some plants and animals can live in some ecosystems and not others. What adaptations, or special features, do they have that help them survive and thrive in their homes.

Minute Man NHP Summer Quest Activities



Forests: An area with trees and woody plants. Minute Man has a mixed forest ecosystem, which means there are both deciduous (trees that lose their leaves each fall) and coniferous (evergreen) trees.

Animals

1. Gray Squirrel
- 2.
- 3.

Plants

1. Birch tree
- 2.
- 3.

Non-Living Things

1. Granite rocks
- 2.
- 3.

Adaptations

1. Birch trees have flexible branches so the snow does not break them.
- 2.
- 3.

Wetlands: An area covered by water, including lakes, ponds, rivers and streams, swamps, bogs, marshes and vernal pools. Freshwater wetlands in Minute Man include the Concord River, marshlands near Elm Brook along the Battle Road Trail. There is also a vernal pool trail across the way from Hartwell Tavern.

Animals

- 1.
- 2.
- 3.

Plants

- 1.
- 2.
- 3.

Non-Living Things

- 1.
- 2.
- 3.

Adaptations

- 1.
- 2.
- 3.

Minute Man NHP Summer Quest Activities



Meadows and Grasslands: An area mostly covered in grass, flowers and non-woody plants. At Minute Man this includes traditional meadows, as well as farm fields.

Animals

- 1.
- 2.
- 3.

Plants

- 1.
- 2.
- 3.

Non-Living Things

- 1.
- 2.
- 3.

Adaptations

- 1.
- 2.
- 3.

Developed areas: Areas of the park where there is evidence of human habitation, including buildings, parking lots, gardens, and lawns.

Animals

1. Humans
- 2.
- 3.

Plants

- 1.
- 2.
- 3.

Non-Living Things

- 1.
- 2.
- 3.

Adaptations

- 1.
- 2.
- 3.

Minute Man NHP Summer Quest Activities

Social Studies



What is a National Park?

A National Park is an area set aside by the federal government to protect and preserve natural, cultural, or historical resources for the American people. National Parks are places that tell important stories about the country and its people. Parks may protect wild places, scenic wonders and animals, or battlefields, historic buildings and monuments, or rivers, trails and recreation areas.

Vocabulary:

Resources- Objects, materials, evidence, structures, landscapes, sites, wildlife, ecosystems, etc. Anything of value to humans.

Natural- Caused by nature and natural processes; not caused or created by humans.

Cultural- Related to ideas, customs and social behavior of a society.

Historical- Related to past events.

How does a place become a National Park?

In the United States, a site may be designated as a National Park by an act of Congress. That means law makers in Washington DC vote to create a National Park and then the bill is sent to the President who signs the park into law.

In order to be a National Park, a place must have unique resources or be an outstanding example of a particular type of resource. For example, Yellowstone, the first National Park, has truly unique Natural resources, including geysers and canyons, and many realized these features could be lost to development or destroyed by activities like mining. Denali, similarly, was set aside because of the incredible wildlife population, which was in danger of being eradicated by poachers and hunting by mining and railroad crews. Parks like Gettysburg and Independence were protected in order to preserve the battle grounds, buildings, and artifacts that help us remember and understand how our country was created and shaped.

What types of National Parks are there?

There are a lot of different types of national parks and we can tell them apart based on the types of names they are given. Those names might include national park, national preserve, national monument, national memorial, national historic site, national seashore, or national battlefield. Read more [here](#).

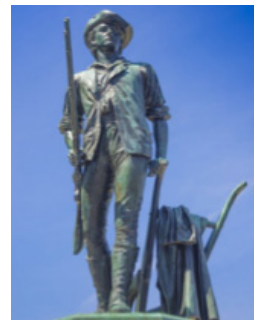
The Arrowhead shows the different types of resources our different kinds of parks protect.

The Arrowhead is the symbol of the National Park Service and its design was very well thought out. Each piece of the arrowhead represents a feature protected within National Park Service sites.



- The Giant Sequoia tree represents all plants.
- The bison represents all animals.
- Together the tree and bison represent natural ecosystems.
- The mountain represents all landscapes and natural features.
- The lake represents all water features.
- Together the Lake and water represent scenic and recreational opportunities.

Many national parks have their own symbols. At Minute Man, the symbol is The Minute Man statue designed by sculptor Daniel Chester French. What do you notice about the Minute Man and what do you think the pieces mean?



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-
-
-
-

Minute Man NHP Summer Quest Activities



Art

What is the purpose of a National Park once it's been created?

There are 419 different park units in the United States. All of them are part of the National Park Service, which was created in 1916. The National Park Service has a Mission Statement or purpose. Each National Park has a mission or purpose too.

National Park Service Mission

The National Park Service preserves unimpaired the natural and cultural resources and values of the National Park System for the enjoyment, education, and inspiration of this and future generations. The Park Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

Minute Man National Historical Park Statement of Purpose

The purpose of Minute Man National Historical Park is to preserve and interpret the significant historic structures and landscapes associated with the opening of the American Revolution which lie along the route of battle of April 19, 1775, and to foster understanding of the events, causes, and consequences of the American Revolution. Another purpose of Minute Man National Historical Park is to preserve and interpret The Wayside, home of major 19th-century American authors.

Now it's Your Turn!

Now that you've learned what it takes to create a National Park, it's your turn to make your own!

1. What is the name of your park (remember all the different park designations)?
2. What resources are you protecting?
3. Write your Mission or purpose statement.
4. Design your own badge.

Artist-in-Your-Residence

Do you like to draw, paint, make models, write poems, create music or do other art projects? If the answer is yes, then this is the activity for you.

For more than a hundred years artists of all kinds have been inspired by the National Parks and have created beautiful paintings, taken incredible photographs, written emotional poems, or composed soaring songs about these protected places. Many Americans, after seeing, hearing, or reading these works of art have visited parks hoping to find that same inspiration. Want to learn more about the special relationship between artists and National Parks? Read more [here](#).

Minute Man National Historical Park is working with The Umbrella Arts Center in Concord to get more people creating and connecting to this park through art. The program is called Artist-in-Your-Residence and we want you to share your art! Learn how [here](#).

You'll need permission and maybe some help from your parent or guardian, so make sure you ask before putting something on-line.

Tell us here what screen name you used to share your art.

Minute Man NHP Summer Quest Activities

Literacy



Primary Resource: Documenting This Moment in History

Early on the morning of April 19, 1775 the sounds of horse hoofs echoed across the countryside while shouts of warning alarmed citizens far and wide. The British Regulars were marching toward Lexington and Concord intent on collecting illegal weapons and arresting those colonists plotting for a war. After crossing through the town of Lexington, British scouts surrounded the famous midnight alarm riders, Paul Revere, Samuel Prescott, and William Dawes. In a flurry of activity William Dawes and Samuel Prescott managed to escape the trap, but the British soldiers captured Paul Revere. After hours of interrogation the British soldiers released Revere, and he returned to Lexington.

The story of Paul Revere and his midnight ride is a classic example of an important event in American History, but how do we know any of this actually happened? We know what happened to Paul Revere and his accomplices because after the events of April 19, 1775, they wrote about it. In diaries, letters, and books many individuals wrote about their experiences on the opening day of the American Revolution, which helps historians, teachers and park rangers teach you about those events today.

Like the midnight riders of April 19, 1775, we live in a time of incredible and world changing history. Keep the spirit of 1775 alive by telling your story, what's happening in your life, what you're learning, what is important to you right now and what you wish for the future. You can write a letter to a friend or family member, make a journal entry, or even create some posts on social media. Remember, only that which is recorded can live on and help people 200 years from now understand what life was like in the spring of 2020.

OARS Summer Quest Activities

Stewardship

Make Our Rivers Healthy. Take Action!

As you explore, learn about, and play on the Sudbury, Assabet, and Concord Rivers, make sure you are doing your part to help them stay healthy and beautiful.

How you can make a difference!

In your home:

- Conserve water
- Choose phosphate-free soaps and detergents
- Pick up after your pet
- Wash your car on the lawn or at a commercial car wash

In your yard:

- Use fertilizer responsibly
- Don't overwater gardens and yards
- Reduce runoff

In your community:

- Volunteer for your local watershed organization
- Learn what they are doing to protect your waters

Activity

What three things will you do to protect our rivers this summer. Make them a habit! Let us know what you are doing and why. Email summerquestprogram@gmail.com.

History

Designated, Wild & Scenic, Our Rivers Have History!

In 1999, 29-miles of the Sudbury, Assabet and Concord Rivers were designated "Wild & Scenic" by the federal government, recognizing their outstanding scenery, ecology, recreation opportunities, and their place in American history and literature.

Over 500 years ago, a group of Native American tribes, called the Agonquians, lived in the area. They called the rivers Musketaquid, which means "place where waters flow through the grasses." The wide, flat meadows attracted early settlers in the mid 1600s and they brought their cattle to graze.

More and more people came to the rivers because of all the resources they provided. Businesses grew and developed. Concord and Sudbury were the first towns to be established along the rivers, and in 1775 the colonists fought for their freedom in the American Revolution.

Activity:

Imagine you are a Native American, early settler, farmer, or mill owner. What did these rivers look like? Were they a lot different from what you see today?

Draw a picture or write a story about what life was like for those who lived on these rivers over 400 years ago.

Send your word search, picture or story to summerquestprogram@gmail.com.

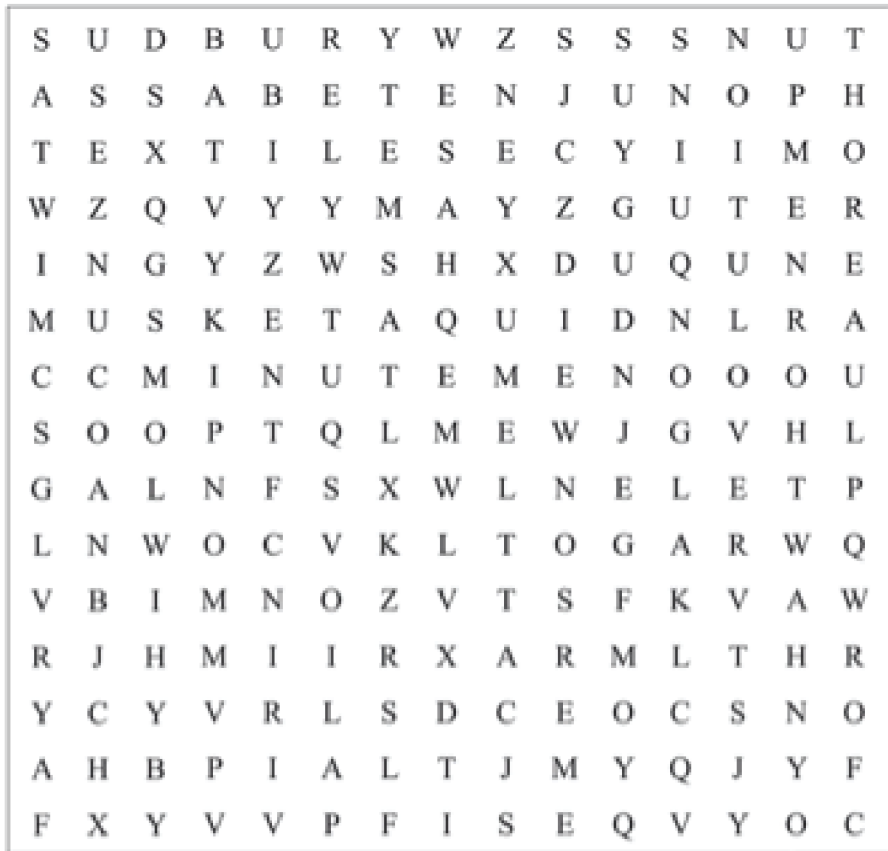


OARS Summer Quest Activities



Find the
history keywords
from the box below
in the word search!

Words can be
across (left to right)
or up and down.



MUSKETAQUID
CONCORD
THOREAU
TEXTILES

COLONISTS
SUDBURY
HAWTHORNE
FARMING

ALGONQUINS
ASSABET
EMERSON
REVOLUTION

CATTLE
MINUTEMEN
SAWMILL

OARS Summer Quest Activities

Science



Discover Who Lives In Our Rivers

Ecology studies the relationships between plants and animals and their surroundings. A habitat is a plant's or animal's home. All together, plants, animals and their habitats are called the environment. Humans are part of the environment too!

Activity 1:

Different animals often need very different habitats to live. What is your habitat like? Describe or draw your home? As you write or draw, think about how your habitat is different from the habitat of animals who live by the rivers. Where do you get your food for? Where do you sleep? Where do they?

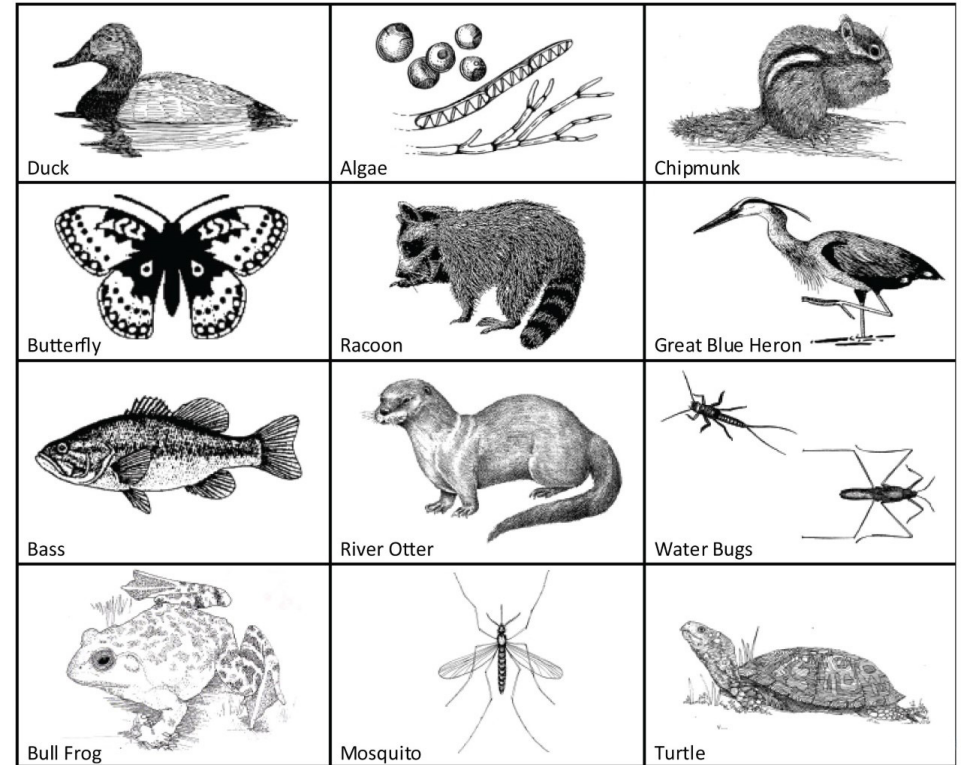
Activity 2:

Let's play BINGO! As you explore the rivers, keep an eye out for the plants, animals, and insects pictured below. Mark each square with an X when you see it!

Get 4 in a row - you're a dragonfly!

Get all 4 corners - you're a painted turtle!

Get All of the squares - you're a great blue heron!



Don't forget to always just observe, or watch, wildlife! These animals won't hurt you on purpose, but could nip or bite if they are scared. Being chased or handled makes them stressed (you would be too, if a giant picked you up!) and could hurt them.

OARS Summer Quest Activities

Social Studies



Rivers Connect Us

Every spot of land is part of a Watershed. A watershed is the area of land that catches rain and snow which drain into a common water body, like a river or lake.

Watersheds come in all shapes and sizes! Think about how much water is in the Mississippi River - its watershed is more than one million square miles and touches 31 states. That's huge!

But even tiny creeks have their own watersheds. They're just much smaller. Small watershed drain into bigger ones, and eventually drain into the ocean.

No matter where you live, you live in a watershed. Everything is connected!

You know your mailing address and your street address but do you know your watershed address?

Where does the water that rains from your home and the surrounding neighborhood go? Whether it's a puddle, a pond, a stream or a lake, that destination determines your watershed address.

Activity: What is your Watershed Address?

Where do you live? Locate where you live on the map. _____

What rivers or bodies of water are nearby? _____

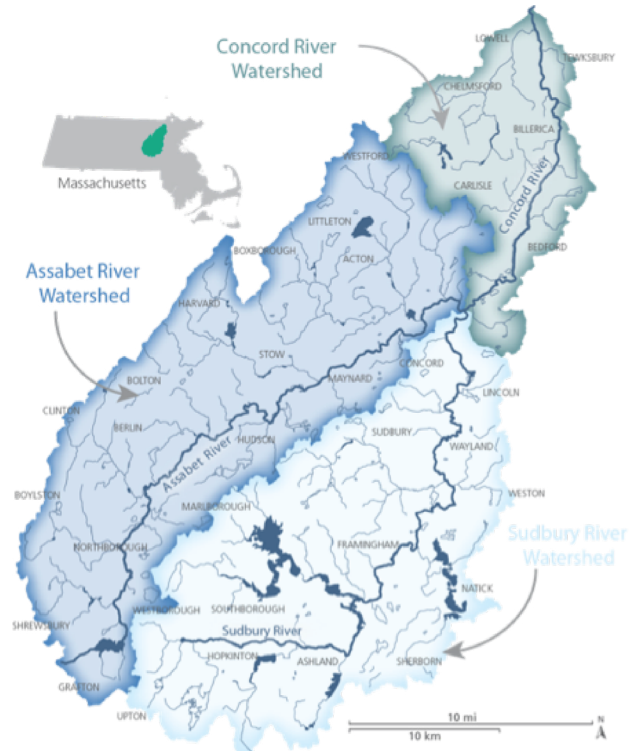
What is the name of your watershed? _____

Where does the river begin? This is the headwaters. _____

Does the river flow into another river? _____

And then another river? _____

Where does the river end? _____



OARS Summer Quest Activities

Art

Share the Beauty of Our Rivers Through Art

The Sudbury, Assabet and Concord Rivers are beautiful rivers and as you boat, hike, walk, cycle or even sit by them, you will find many special places!

Activity 1:

Explore our watershed and rivers. Find a place that has particular interest to you! Draw or paint a picture that describes the special place.

If you are not near a river, use your imagination and draw or paint a picture of the river you are thinking of!

Share a photo of your picture with us at summerquestprogram@gmail.com

Activity 2:

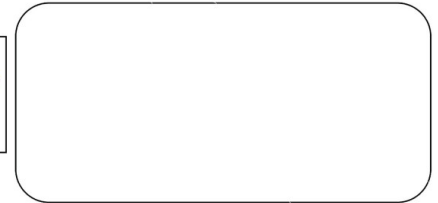
As you explore our streams and rivers, do your part in protecting these areas! Practice "Leave No Trace" (LNT) - take only pictures and leave only footprints.

Draw or describe what you think the rivers would look like if the situation below were true.

If each visitor took one rock from the river, what would happen if we had 1,000 visitors?



If each visitor picked one flower, what would the river look like after 1,000 people came to the rivers?



If everyone made their own path, what would the banks look like after 1,000 hikers walked along them?



If everyone threw their trash on the ground, what would our rivers look like after 1,000 visitors?



OARS Summer Quest Activities

Literacy

Famous Authors Wrote About Our Rivers: Share Your Inspiration

In the mid-1800s, many writers came to this area. Three well-known writers lived right in Concord. They all lived around the same time and were practically neighbors!

- Nathaniel Hawthorne wrote many novels and short stories inspired by New England, and commented on the beauty of the rivers.
- Henry David Thoreau wrote in his journals about his experiences on the river. His writing shows his great observation skills and his love for the natural world.
- Ralph Waldo Emerson wrote prose and poetry while staying in a house overlooking the rivers.

The Sudbury, Assabet and Concord Rivers inspired these writers thinking and we still quote them today.

"A more lovely stream than this, for a mile above its junctions with the Concord, has never flowed on earth." —Nathaniel Hawthorne, talking about the Assabet.

"The river, now that it is so clear and sunny, is better than any aquarium. ...It is an enchanter's want, ready to surprise you with life." —Henry David Thoreau

The rivers inspired Thoreau to dream and wonder and imagine things beyond his experience.

Activity:

Pretend you are a modern day Thoreau and take a quiet walk along the river, stream, on a Rail Trail along the river, or a special place near your house.

What does the river make you dream and wonder about? Write your reflections, a story, poem, or haiku and email it to us at summerquestprogram@gmail.com.



Drumlin Farm Summer Quest Activities

Stewardship

Speak up! Make and Send an Advocacy Postcard

Be a nature hero and speak up for nature! Design your own postcard that lets your local government representatives know why nature is important to you personally, then mail it directly to their offices.

Not sure who your representatives are?

Visit malegislature.gov/Search/FindMyLegislator to find out.

History

Learn About Local Nature Heroes in Your Town or State

Visit the [Young Voices for the Planet website](http://YoungVoicesforthePlanet.org) and learn how three 9 year old girls from Lexington spoke up for nature to make changes in their neighborhood.

Who are your nature heroes and why? Draw or write about them in your science nature journal. What can you and your family do at home to be a nature heroes too?



Drumlin Farm Summer Quest Activities

Science

Ask An Expert! Use Local Resources to Learn About the Environment

Explore local resources (people, books, field guides and internet) to learn more about what you are observing outside. Use the [iNaturalist](#) phone app to take photos and contribute to ongoing data collection about our local plants and animals.

To learn more, visit us at www.massaudubon.org/get-involved/citizen-science/inaturalist

Social Studies

Home Explorer: Go Outside With Your Nature Journal

Make observations (what do you notice), ask questions (what are you curious about?). Draw and record these thoughts and observations in your science nature journal. Include the date, time and weather on all your entries.



Drumlin Farm Summer Quest Activities

Art

Science/Nature Journal: Learn How to Make Your Own

Make and decorate your own science nature journal using recycled paper and materials you find around your home. Use your journal to document your nature findings, observations and questions by drawing or writing about what you find and are curious about. Use our Explore nature at home activity sheets to help get you started. (Nature Bingo, Scavenger Hunt, Coloring pages, Young Explorers). You can also visit us at www.massaudubon.org/get-outdoors/explore-nature-at-home for nature mystery videos and meet our local wildlife videos too.

Explore Nature at Home — Neighborhood Scavenger Hunt

Discover the nature in your yard or neighborhood in a whole new way with our mobile-friendly scavenger hunt. Play with up to four family members or challenge yourself!

How to Play

1. Download the [scavenger hunt PDF](#) directly to your smartphone and then open the file or print a hard copy and tape into your science nature journal.
2. Assign each player one of the letters at the top (A, B, C, or D). Then start exploring!
3. Whenever a player spots something on the list, just tap the corresponding box in that Player's column to check it off.
4. Once you're finished, add up the number of points each player earned—whoever has the highest score wins!



Neighborhood SCAVENGER HUNT

1 POINT | 2 POINTS | 3 POINTS

PLAYERS	A	B	C	D
PINE CONE				
SINGING BIRD				
SMOOTH ROCK				
PERCHING BIRD				
3 TYPES OF LEAVES				
ACORN				
ROUGH ROCK				
Y-SHAPED STICK				
SOARING BIRD				
YELLOW FLOWER				
EVERGREEN SMELL				
BUTTERFLY				
WOODPECKER HOLE				
WORM				
A SEED				
LICHEN				
3 LEAF CLOVER				
BIRD FEATHER				
BIRD NEST				
MAMMAL				
ANIMAL TRACKS				
SPIDER WEB				
TOTAL				

Drumlin Farm Summer Quest Activities



Explore the Outdoors with Nature Bingo

Print out the bingo cards and see if you can be the first to find all the items in a row, column, or corner to corner! Tape your completed Bingo card into your science nature journal. For more bingo cards to challenge you and your family visit us at www.massaudubon.org/get-outdoors/young-explorers/explore-a-sanctuary/nature-bingo



www.massaudubon.org/EcoKids

Drumlin Farm Summer Quest Activities



Beat the Heat Activity Page

Use our Young Explorers Activity sheets to help you be a summer scientist! Make a solar cooker and make a snack using the power of the sun!

Have you ever noticed how hot it gets inside a parked car with the windows rolled up in the summer? Sometimes it can feel as hot as an oven! As it turns out, you can use the same science that makes cars heat up to heat your food by building a homemade Solar Cooker. Here's how!

You'll need:

- A sunny day
- 1 empty pizza box
- Black construction paper
- Aluminum foil
- Plastic wrap, a sheet of clear plastic laminate, or a heavy-duty, clear 1-gallon freezer bag
- Non-toxic glue
- Tape
- Scissors
- Magic marker
- 1 wooden dowel rod or ruler

Instructions

1. Draw a large square on the top of the pizza box, leaving a little space between the edges of the square and the edges of the box. With help from an adult, carefully cut three sides of the square, leaving one side attached so you can fold the square back.
2. Glue a couple of pieces of foil to the inside of the flap you just cut in Step 1 and smooth out any wrinkles as best you can. When the flap is opened, light will reflect off the foil into the box below.
3. Open the box and tape a piece of plastic to the underside of the opening you cut in the lid to create a window. Make sure the plastic is tightly sealed around the edges so no air can get in and out.
4. Glue more sheets of foil to cover the bottom of the inside of the box, then cover the foil with sheets of black paper, gluing them in place.
5. You're ready to get cooking! Place your food to be cooked inside the box. Close the lid and prop open the window lid using the dowel rod or ruler. Position your oven outside in the sun, so that sunlight passes through the plastic and also so that the foil lid reflects sunlight into the window.

Tips

- The best time of day to use your solar cooker is between 11:00 am and 3:00 pm, when the sun is most directly overhead and hottest.
- Try heating up hot dogs or marshmallows for s'mores, or melt some cheese over chips for nachos. You could try toasting a slice of bread or warming up leftovers—use your imagination!
- To keep the inside of the box clean, make sure to place your food on a plate, pie plate, or small dish.
- Use an oven thermometer to test your oven temperature. Make a chart and write down how long it takes to reach different temperatures and how long each item takes to cook.
- Keep the box closed while your food is warming. Opening the box will let all the heat out.
- See if you can increase the temperature inside the box by "insulating" it, or sealing up the edges where air and heat can escape. You could try rolling up newspaper or kitchen towels and lining the inside edges of the box with them (just make sure you can still close the lid all the way!).

Drumlin Farm Summer Quest Activities



Document what snack you made and how in your science nature journal. For more summer science experiments, visit us at www.massaudubon.org/get-outdoors/young-explorers/activity-sheets/beat-the-heat-activity-page

Literacy

Share! Write a Letter or Post About Your Special Find

Write a letter or e-mail to a friend, relative or teacher or post a picture on social media about your favorite journal entry or special nature find.

YOUNG EXPLORERS

BEAT the HEAT

Summer is heating up, and that means everybody's looking for ways to cool down. But it's not just people that need to let off some steam during the hottest part of the year—nature needs to cool off, too! How do plants and animals keep cool, anyway? Can we pick up any tricks from them? And why is it so hot in the first place?

True or false? In the summer, it gets hot because Earth is closer to the sun.

False! Earth is actually farthest from the sun in July and is closest to the sun in January! What matters is Earth's tilt. In summer, the Earth sits in such a way that the North Pole is tilted toward the sun. Since the sun is more directly overhead, its rays land at a steeper angle, which means more heat and longer daylight hours.

Be Cool Like Animals

On a super-hot day, have you ever noticed how much cooler you feel when sitting under a shady tree? When it comes to beating the heat, finding shade is the name of the game. Many wildlife species such as snakes spend the hottest part of the day resting in humid, shady, cool places. Some will even remain dormant through the hottest, driest season.

Drink Up Like Plants

For plants, it's all about water. Some will rotate or roll up their leaves to reduce evaporation (the loss of water through the leaf surfaces). Trees and other plants will draw more water through their roots to make up for all the water evaporating out of their leaves. Some plants even have small hairs on their leaves to protect them from heat and wind.

BE A CLIMATE ACTION HERO

When the temperature rises and the days get hotter, we humans tend to use a lot more energy from electricity to stay cool. Unfortunately, using too much energy can lead to our planet getting even warmer. You can be a climate action hero and help your family "shave the peak." The "peak" is the part of the day when it's hottest and everyone is cranking their air conditioners. But if everyone does a little to reduce their energy use, together we can have a big impact. Some easy ways to shave the peak include:

- Turning off lights when you leave a room
- Unplugging electronics when you're not using them (check with your parents first!)
- Using air conditioners only when absolutely necessary, and in energy-saver mode

Be a Summer Scientist

For some fun experiments you can do using the sun (including instructions for making your own solar cooker!), grab a parent and head over to massaudubon.org/youngexplorers.

Affiliate Summer Quest Activities

Stewardship

Concord Free Public Library: COVID-19 Stories

Please join the Concord Free Public Library in chronicling Concord through Covid-19 for future generations! We are inspired by stories large and small of Concordians sheltering, and stepping up and helping during this time of crisis, and we feel these stories should be captured. They will become part of our Concord history.

Please send your stories or reflections, poems, haikus, photos, or videos that chronicle your experiences, whether you are sheltering in place or working in an essential service outside of the home. Submissions from Concordians of all ages are welcome as we recognize that this pandemic has affected us all.

You can submit as often as you like. Special Collections will compile and preserve your submissions, and with your permission, post selections on our website or social media.

Learn more [here](#). Questions? Please email specialcollections@concordlibrary.org.

History

Concord Tourism: Pick Up a Town Map from the Concord Tourism Center

While exploring Concord's historic sites and conservation lands, stop by the Concord Tourism Office in the town center at 58 Main Street. Pick up a map of Concord and use it to find your next destination! Let the staff at the Tourism Office know that you are on a Summer Quest, and they will give you a special stamp to show you completed the activity.

Learn more at <https://visitconcord.org>.



Affiliate Summer Quest Activities

Science

Walden Woods: Put Your Hat On!

Return to a place in nature in which you are familiar. Maybe this place is in your backyard under your favorite tree or maybe at your favorite park in a wide open field. Now, put on a “scientist” hat or a “historian” hat and examine the area around you as if you had that occupation. What do you notice about the land, the colors, the sounds? Write your observations down! Based on your notes, come up with one question about the area. Jot down a few possible answers, keeping that “hat” on!

Social Studies

Millbrook Tarry/Trail’s End: Building with recycled natural materials...plus ice cream!

William Turville is a sculptor and an architect who loves to create things in many different media. Working by himself or in collaboration with others, he is especially well-known in Concord for making fun, large-scale temporary sculptures out of recycled and unusual materials – from broken bicycle parts to old sleds. Bill will make a sculpture out of furniture, and furniture out of yard waste!

Although his annual sculpture for Concord’s Recycling Day was canceled because of COVID-19 this year, Bill has been building his brand of unique sculptures on the property of Millbrook Tarry, home to Trail’s End Café and Concord Market.

Visit Millbrook Tarry and locate Bill’s sculptures. You’ll have to look carefully! Can you find a throne? The Eiffel Tower? Sketch them in your journal, take a selfie, or create your own sculpture with natural materials and send a photo to summerquestprogram@gmail.com.

When you’re done, visit Trail’s End Café to learn more about Bill while enjoying a free ice cream!



Affiliate Summer Quest Activities

Art

Arts Arlington: Fox & Owl Video Adventure

Introducing Fox and Owl – paper puppets created by artist Kari Percival – that you can take on an adventure! We invite you to make art and tell a story with Fox, Owl, and any characters you invent yourself for the FOX & OWL TINY FILM & PHOTO FESTIVAL later this the summer!

- Make a video of your story or take a photo of Fox and Owl in action
- Create art for your window or porch featuring Fox and Owl
- Learn about our animal neighbors and what you can do to help them

Everything you need is on the Arts Arlington website and in your own imagination. Fox and Owl can have a fantastic adventure in your kitchen, backyard, during a family outing, or in a shoebox theater that you make yourself.

Learn more [here](#).

Literacy

The Old Manse: Write Like Emerson

From 1775 to 1939 – almost 170 years – many people lived in this house. Though they were truly all their own, unique people, many of them did share skills and interests. One big commonality was writing. Many residents of The Old Manse wrote to put their words on paper, whether for stories or essays, future speeches or sermons, letters to friends, or journal entries only for themselves.

Go to the grounds of The Old Manse to continue the legacy of writers who've come here to write their true thoughts and observations.

Here are some prompts to get you started:

For those who observe:

If you're like Manse-resident Sarah Alden Bradford Ripley or frequent visitor Henry David Thoreau, you like to spend time taking careful notice of the natural world around you. Find a spot here on the grounds to sit with writing supplies and note what you see in your surroundings. What do the plants around you look like? What can you hear? Have you noticed any animals? Feel free to add illustrations, if you're inspired to do so!

For those who think outside the box:

If you're like Manse-residents Ralph Waldo Emerson, or his aunt Mary Moody Emerson who was born in this home, then you enjoy writing as a method of getting your big ideas onto paper. Take time to contemplate a theme in your life right now that you think you could give good advice on – anything from marshmallow toasting techniques to working towards climate justice – then write these ideas in your own words. Mary Moody Emerson sent her advice in letters, while Ralph Waldo Emerson delivered his advice in speeches and essays. Decide whether this advice is for others or just for you.



Affiliate Summer Quest Activities



For those who like a good story:

While Manse-resident Ezra Ripley enjoyed writing his own history of the Battle of the Old North Bridge (history which took place right in his backyard!), Nathaniel Hawthorne preferred to write spine-tingling, creepy stories when he lived in this house. Use this space to write the story that's in your mind, whether it's about the past, the present, or the future.

If you want to share your writing with us, we'd love to read it!
Feel free to send it to oldmanse@thetrustees.org

Extend your experience by visiting our Facebook page or The Trustees YouTube channel to see videos related to The Old Manse and other Trustees properties across Massachusetts.