

### NATURE AND CHILDREN'S HEALTH

Everything you need to think about when hosting a collaborative nature-based family event

This toolkit was created by CHICKS (Climate and Health Initiatives for Children in Kearsarge and Sunapee) and the Child Development (CHI) Program at Colby-Sawyer College, including faculty and students and Windy Hill Laboratory School, as an outcome of their 2023 Earth Day: A Celebration of Nature and Children's Health event. They learned a great deal as they went through the process of conceptualizing, planning, and implementing this outdoor family event. This toolkit is designed to help anyone who would like to host a similar outdoor nature-based family event by identifying the steps and tools they used to create a successful Earth Day celebration.



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## SECTION 1 Understanding the basics

### Why celebrating Earth Day with young children is important

• The primary objectives of our Earth Day: A Celebration of Nature and Children's Health event was to host a family fun outdoor event that would connect children to nature, raise awareness of the interconnectedness of all living things, and raise awareness of the impact of climate on health. We thought this was important because by spending time outside, observing and interacting with the natural world, children can develop a sense of wonder and curiosity about the environment. This curiosity can lead to an interest in learning more about the natural world and help children develop a sense of responsibility and empathy towards the environment. By fostering a love and appreciation for nature from a young age, children can grow up to be environmentally aware adults who are invested in preserving the natural world for future generations.

### How we explain Earth Day to children

• Our beautiful Earth is our home, with lovely mountains, oceans, and forests for us to enjoy. Just like we keep our rooms clean, we also need to care for our Earth by reducing waste, reusing things, and recycling. When we do this, we have clean water to swim and drink, clean air to breathe, tasty fruits and veggies, and fun walks with animals around. Earth Day is a special day to celebrate our amazing Earth. By taking care of our planet, we make sure it stays a happy, healthy place for us to live and play!



## SECTION 1 Understanding the basics

### Leaning more about climate and children's health

- Before planning activities for our Earth Day: A Celebration of Nature and Children's Health event, we learned the impacts of climate change, such as extreme heat, air pollution, and natural disasters, can have a significant impact on physical health. These impacts can lead to an increase in heat-related illnesses, respiratory problems like asthma, vector-borne diseases like Lyme disease, and more. The economic and social consequences of climate change, such as displacement, loss of livelihoods, and food insecurity, can contribute to mental health problems and chronic stress.
- Learning more about the impacts of climate change on health bolstered student support for hosting an Earth Day event. We held our event on Earth Day, but Earth Day should be any day, and chances are good that event attendance will be higher if you have it when the weather is likely to be pleasant. To learn more about the impacts of climate change on health, check out this link for free downloads: https://www.nhclimatehealth.org/family-resources

### Inviting Community Partners to collaborate

• Changes in the climate impact all of us, and we will be more effective if we collaborate to connect children to nature, raise awareness of the interconnectedness of all living things, and learn more about the impact of climate on health. Once the co-hosts defined what they would like the event to be, community partners were invited to participate, and they did. The New London Barn, the Indian Museum, a community physician and nurse, Geisel School of Medicine at Dartmouth students and a host of volunteers from CHICKS and Colby-Sawyer College helped make this event a success.



### Who is doing what, when, and how will it be communicated?

- The event was geared for families with young children, so we decided it would take place from 9-noon, with the goal of not disrupting the breakfast and lunch routine. We also figured it would take about 30 minutes to set-up, so volunteers and students were asked to report for duty at 8:30 am the day of the event.
- Once you have your list of collaborators, it is important to know who would like to be responsible for what, and how to communicate to the group. Initially, we were meeting virtually each week, and then as we got to know each other, we communicated our activities via a group email and only met virtually when needed. Our first meeting was about 10 weeks before the event. The week of the event we shared cell numbers for texting last minute requests or changes. The event was geared for families with young children, so we decided it would take place from 9-noon, with the goal of not disrupting the breakfast and lunch routine.



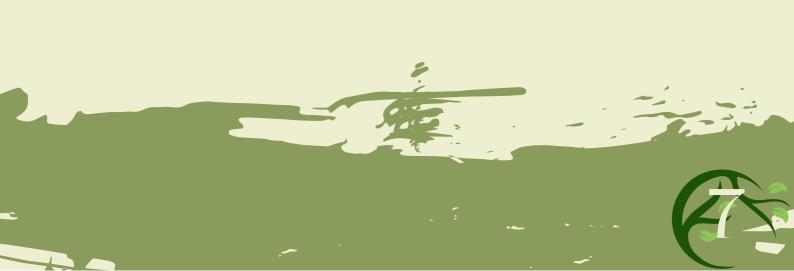
### Who is doing what, when, and how will it be communicated?

We had one person in charge for each of the following:

- Facilities- parking, tables, tents, chairs, water stations, access to bathrooms
- Event set-up and breakdown- many hands were needed and volunteers were essential
- Activities- coordinate with students, faculty, and community partners
- Funding- we wanted to give out free books and a quilt activity, which required a grant
- Materials- once we knew what activities we would be offering, we were able to make a list of needed materials and where to get them.
- Event flyer- we had a flyer that we printed and posted, an e-flyer with a video talking about the event, and we had designated people to distribute the flyer to specific groups within their networks.
- Snacks- we went with seasonal fresh fruit, goldfish, and sliced cheese



We created a list of the activities, and the materials required for the activities. From the materials list, we were able to identify where we could get things and what it would cost. Below is our list of activities and materials. We also got many materials from our local recycle sheds, such as baskets and trays to display materials for the activities.



Earth Day Activities and Materials

### **Sensory Activities**

- Sensory basket, what do you feel? (items from nature)
- Mud kitchen.

### **Building & Construction**

• Create a bird's nest and tell stories about the birds who will live in the nest.

### Story Telling & Writing

- Campfire- create stories about what objects in nature would say if they could talk.
- Journaling in nature with pre-k and older for those who want to write down their stories.
- Quilt squares for an Earth Day Quilt.

### Gardening

- Plant a seed.
- Sprouting-tasting & kits to get started.

### **Animals**

- Match the pawprint to the animal picture card game.
- Match the habitat to the animal picture card game.

### **Music & Movement**

• Move the beat of music, make sounds and move like an animal.



Earth Day Activities and Materials

### **MATERIALS**

(Note-materials should be made of natural material whenever possible.)

Items to be purchased or borrowed:

- Pop-up canopy tents, one per activity station
- Folding Tables, one per activity station except music & movement and matching game)
- 2 Buckets (1 for water in the mud kitchen, 1 for water in the plant-a-seed station)
- I large cleaned recycle bin without holes (for the mud kitchen)
- 2 strainers (for dirt/pebbles in the mud kitchen)
- 2 handheld diggers (for the mud kitchen)
- Seed starter soil
- Fast growing seeds (sugar snap peas work well)
- 2 scoops (for putting soil in the recycled tubes)
- Sprouting seeds for kits
- Card stock for printing animal pictures, pawprints, and habitats
- Large canvas tarp for music and movement
- 2 blankets (1 for matching game and 1 for story telling)
- Colored pencils/markers for journaling
- · White or off-white fabric squares with holes in each of the four corners large enough for yarn
- Earth tone yarn
- Fabric markers



Earth Day Activities and Materials

### **MATERIALS**

(Note- materials should be made of natural material whenever possible.)

Items to be collected from nature

- A bundle of sticks
- Rocks
- Leaves
- Twigs
- Pinecones
- Feathers
- Other (sensory basket)

### Items to be collected from recycling:

- Clear plastic salad container with lids
- Pint size milk or other containers (for planting)
- Large wooden spoons and other mixing utensils (mud kitchen)
- Grapevine wreath (campfire ring for story telling)
- Coco liners from hanging (birds nest)
- Paper for journaling



### Section 2

### Organizing and Executing

Earth Day Activities and Materials

### Earth Day Activity Plan

### **Sensory Basket**

### Description

• Children reach their hand into a basket holding a variety of nature items and then guess what that object is that they picked.

### Materials & setup

• Basket, fabric (to cover basket), 8-10 objects from nature to go into the basket.

### Objectives:

- How will this activity connect children to nature?
  - This activity will give children the chance to connect with nature through their sense of touch. Children will be able to identify the different ways nature shows itself and examine the objects up close.
- How will you link aspects of this nature-based activity to health?
  - While we do the activity, I'll ask the children how they feel being outdoors and breathing fresh air while listening to the birds and other sounds of nature. I'll also suggest they create their own sensory basket to enjoy with their family by going outside and collecting items from nature in their yard. Who will guess the right objects? Being outside is fun and good for our health.

### **Build a Bird's Nest**

### Description

• Children will have a variety of natural materials to select from to build a bird's nest, and then tell a story about why the bird would like the nest, where it should go, and what the bird would add to the nest if it moved in.

### Materials & setup

• recycled coco liners from hanging baskets, small twigs, pieces of hay, moss, and other available natural materials. Put the various materials in their own baskets for children to choose from.

- How will this activity connect children to nature?
  - Children will be thinking about nests they have seen before they select their materials and build their own
    nest.
- How will you link aspects of this nature-based activity to health?
  - Children will think about where the nest should go to keep it and the bird safe from other animals and the weather.

Earth Day Activities and Materials

### Earth Day Activity Plan

### **Mud Kitchen**

Description

• A station for children to make creations out of earth materials - dirt, water, rocks, twigs, etc.

Materials & setup

 Recycle Bin for dirt, bucket for water, recycled wooden spoons and a whisk, strainers, sponges, and measuring cups.

- How will this activity connect children to nature?
  - This activity will link children to nature by allowing them to play with materials that are in nature. They
    will be able to experiment with different materials and explore what we can do with just dirt and water!
- How will you link aspects of this nature-based activity to health?
  - The importance of being outside. If children can see that they can have fun outside with few materials, it may encourage them and their families to go outside more. The importance of recycling. The activity will be using all recycled materials, which is a great talking point about why recycling is important and the benefits of reducing our waste., be more active, and reap the health benefits of being outside. The importance of recycling. The activity will be using all recycled materials, which is a great talking point about why recycling is important and the benefits of reducing our waste.



Earth Day Activities and Materials

### Earth Day Activity Plan

### Campfire Storytelling and Journaling

Description

• Create stories about what objects in nature and what would say if they could talk.

### Materials & setup

Rocks, sticks, grapevine wreath to stack the sticks within, Journals, crayons, markers, and glue. Speaker for
fire sound effects, blanket. Set the blanket out with the grapevine wreath next to it with sticks stacked in the
center. Play the music of fire crackling the in background. Have a basket with the items from nature ready for
children to select from. Have them pick an item, give it to them, and ask what it would say if it could talk. If a
child does not want to talk and would rather draw or write a story, provide a journal and writing tools.

- How will this activity connect children to nature?
  - This activity helped children to see nature as something that is alive and full of personality. By engaging with nature in this way, they may also be more likely to ask questions and seek out answers about the natural world, which can foster a lifelong curiosity about science and the environment.
- How will you link aspects of this nature-based activity to health?
  - By connecting children to nature and helping them understand its value, we can promote a sense of stewardship and responsibility for the environment. This can lead to behaviors that promote environmental health, such as reducing waste and conserving natural resources.



Earth Day Activities and Materials

### Earth Day Activity Plan

### **Seed Planting**

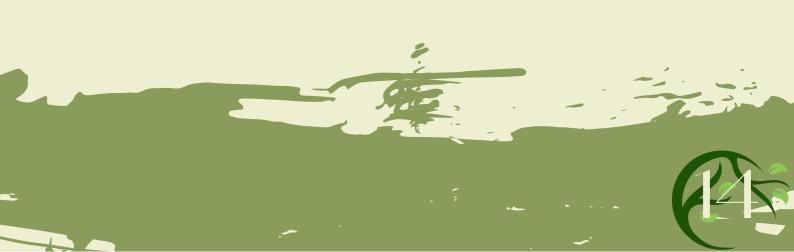
### Description

• Using recycled milk pint containers with the tops cut off as planting containers, children will fill them with soil and plant a seed of their choice. They will then be provided with water to water their plant. Children will be able to keep their plant and watch it grow overtime.

### Materials & setup

- Clean recycled milk pint containers with the top cut off.
- Soil
- Seeds
- Water/watering bucket with a cup
- Hand shovels for the children to scoop into their milk carton planters.

- How will this activity connect children to nature?
  - Children will learn how vegetables are grown and will watch them grow indoors until the plants are strong enough to plan outside. They will understand plants need soil, water, and sun to grow and turn into something that we can eat.
- How will you link aspects of this nature-based activity to health?
  - The children will learn firsthand that vegetables need a healthy environment to grow and if we provide that, then we will get vegetables that we can eat and stay healthy.



Earth Day Activities and Materials

### Earth Day Activity Plan

### **Music and Movement**

### Description

• Play the music, dance, and sing along to the songs making animal noises and movements. Mixture of dancing, karaoke and yoga.

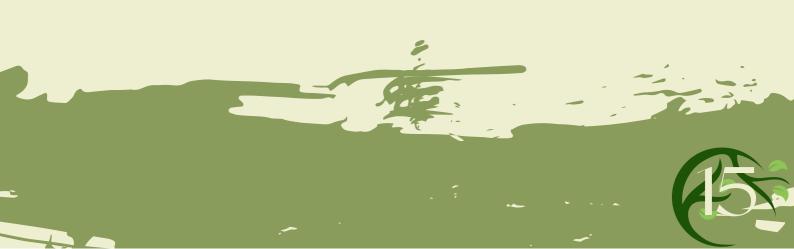
### Materials & setup

• Tarp for "dance floor", an entertainer who plays an instrument, sings, and has child-size instruments for the children to use. If a live entertainer isn't an option, have a Bluetooth speaker and playlist of animal songs and animal noises.

### Play list of animal songs, and animal noises including:

- The goldfish, Baby shark, Old MacDonald, the animal alphabet song, the ants go marching,
- o Animal dance song, Animal sounds song, We're going on a bear hunt, Animal freeze dance
- The penguin dance, Five little monkeys, Baa baa black sheep, We are the dinosaurs,
- Jungle boogie, Bumblebee

- How will this activity connect children to nature?
  - Children will think about the animals in the song and make sounds and move like them. They will be doing this outdoors, enjoying nature with others.



### Section 2

### Organizing and Executing

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### Earth Day Activity Plan

### **Sprouting Kits**

### Description

• Have individual sample containers for people to determine which type of sprouts they like best. In addition to the samples, each family received a kit that included everything they need to grow their favorite sprouts at home.

### Materials in the kits

- Two clean recycled plastic containers with a lid (such as a yogurt, deli or spinach container)
- Two bottle caps
- Sprouting seeds

### Instructions for home sprouting

- Begin by cleaning your recycled plastic containers thoroughly with soap and water. Rinse it out and let it dry.
- Poke several small holes in one of the containers.
- Place bottle caps in the untouched container and place the one with holes on top with cover.
- Place sprouts inside and follow sprouting instructions!
- Choose the type of sprouts you want to grow. Some examples are alfalfa, broccoli, radish, and lentil sprouts.
- Rinse your sprouting seeds with water and then place them in a jar or sprouting tray.
- Cover the seeds with water and let them soak for 6-8 hours.
- Drain the water from the jar or tray and then rinse the seeds with fresh water.
- Drain the water again and then place the jar or tray in a warm, dark place like a cupboard.
- Rinse the seeds with fresh water twice a day and drain off the excess water.
- After a few days, you should start to see sprouts growing! Keep rinsing the sprouts twice a day until they are the desired length. This usually takes about 3-7 days. Once the sprouts are ready, give them one final rinse and then enjoy them in a salad, sandwich, or as a snack! Remember to always wash your hands before handling the sprouts and to wash the container between each use. Happy sprouting!

- How will this activity connect children to nature?
  - Children will learn that the same seeds that are planted to grow food (like radishes, lentils, and broccoli) can also be sprouted, and they are tasty! They will also learn that sprouts need water and air to grow.
- How will you link aspects of this nature-based activity to health?
  - Explain that the sprouts taste good, and they are good for your body too. They will help them stay healthy
    by providing important vitamins every time the cat them.

Earth Day Activities and Materials

### Earth Day Activity Plan

### **Animal Cards Matching Game**

### Description

Match NH animals to their pawprints and habitats. The cards were made from pictures of animals, their
prints, and habitats found online and printed on cardstock. On the back of each card, there was a number that
matched the number on the other cards that were related to the same animal. The numbers allowed the
children to self-correct.

### Materials & setup

 One set of cards face up each with a different NH animal, a second set of cards each with the pawprint of the NH animals in the first deck, a third set of cards each with the habitat that matches the animal and its pawprint.
 A large blanket to put on the ground for the children to sit on while matching the cards.

- How will this activity connect children to nature?
  - Children will think about the animals and prints that they have seen outside while trying to figure out which animal is a match to the pawprint and habitat.
- How will you link aspects of this nature-based activity to health?
  - I'll suggest the children enjoy nature walks with their family while looking for animal, pawprints and habitats, and to remember to keep the area clean because it is where the animals live, and to enjoy breathing the fresh air and exercise that nature provides.



### Section 2

### Organizing and Executing

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### Earth Day Activity Plan

### **Quilt Squares**

### Description

• Each child draws a picture of something they enjoy in nature. Then ask the child "what can you do to help (whatever they drew) stay healthy?" Write their words and name and age on the square. If a very young child does not understand this prompt, they could just tell you about what they drew.

### Materials & setup

Fabric squares with small cuts in each corner wide enough for yarn, fabric markers, masking tape, clipboards. Secure fabric square to clipboard with tape on bottom. 1-on-1 or 2-1 would be best for this activity.
 After the quit squares are ready for joining, use yarn to tie them together at the edges and then suspend the quilt from a large thin branch for display indoors, along with a description of the activity.

### **Objectives:**

- How will this activity connect children to nature?
  - The activity makes requires the child think about nature and what they like best to decide what to draw.
- How will you link aspects of this nature-based activity to health?
  - The follow-up prompt asked after the picture is drawn is what can we do to keep your favorite part of nature healthy?

### **Earth Day Book List**

- "I Love Earth" (Touch and Feel Board Book) Little Hippo Books
- "Counting on the Earth: 123 of our Planet" Mudpuppy, Illustrated by Ekaterina Trukhan
- "Bookscape Board Books: A Forest's Seasons" by Ingela P Arrhenius
- "We are better Together" Bill McKibben
- o "Trees" Lemniscates
- "My Friend Earth" Patricia MacLachlan
- "To Change a Planet" Christina Soontornvat
- "Earth Hour: A Lights Out Event for Our Planet" Nanette Heffernan
- "Tommer's Earthly Friends" Kathy Lowe
- Elementary:
- o "A Kids Book about Climate Change" Zanagee Artis
- Old Enough to Save the Planet Loll Kirby
- "The Great Big Green Book" Mary Hoffman

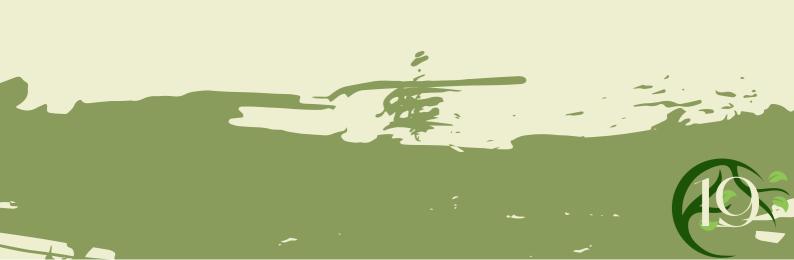


Earth Day Activities and Materials

### Earth Day Activity Plan

### Earth Day Book List

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### Section 3 Debriefing

### Evaluating the success of the event

• On the day we had our event, it was windy and cold, and yet people came! Children engaged in the activities, and everyone seemed happy. The feedback we got from parents was positive, especially about the activities, books and sprouting kits. Additionally, students provided quotes from the children about their activities, and they were heartwarming. We deemed the event a success!

### Thanking Community Partners

Soon after the event, we made sure to thank our community partners and recognize their
contributions that helped make the event a success. We wanted them to know that we were
aware of what they did, sincerely appreciated their support, and looked forward to
collaborating again.

### Deciding where to go from here

• Our event was a success, even though it was cold and windy morning. After our event was planned, we learned that the town was also planning some earth day activities. Next time, we might like to collaborate with our community partners again, and the town, to be part of something bigger to bring our offerings to more children and families





EXPLORE. CONNECT. MAKE A DIFFERENCE.



Climate and Health Initiative for Children in Kearsarge & Sunapee

