Summer Activity Guide







What's Inside

Nature in the summer is at its busiest; the days are longer, plants begin producing fruit, birds are raising their young and so much more.

This booklet is full of ideas and activities to guide you as you explore nature, whether you are at one of the forest preserves or in your own backyard.

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Tips for a Great Outdoor Adventure in the Summer



Summer is one of the best times for outside adventures because of the longer days and beautiful weather. Here are some tips to help make the most of your time outdoors.

- Plan Ahead. Research where you are heading. For example, if you are going to one of the Champaign County Forest Preserves, visit www.CCFPD.org where you can find trail maps, open hours, attractions and highlights, and driving directions. Also, be sure to check out the weather before heading out to make sure there won't be any storms approaching.
- 2. Sunscreen and Bug Spray. It is important to protect your skin from the sun and bug bites. Apply a sunscreen that is 30 SPF or higher and make sure to reapply often if you're sweating or in the water. Also apply bug spray to keep bugs at bay.
- 3. Stay Hydrated. Drink lots of water throughout the day to help prevent heat related illnesses. You can also stay hydrated by eating apples, berries and watermelon that is high in water.
- 4. Respect Nature. Never chase or harass wildlife. This may cause them to use up valuable energy needed for survival. Always leave a natural area in better condition than you found it in. Please don't let trash become litter.

Nature Survey

Conduct a nature survey by focusing on a small area. Go outside and find an area that has plants. You only need a spot that is the length of this paper. Mark out your nature area with sticks, rocks or pine cones.



What is the weather like outside? Is it cloudy, sunny, rainy? Is it hot or cold? Windy?
Is there anything moving around in your nature area? Draw or write what you find. Worms? Ants?
What do you hear and smell in your nature area? Do you hear things moving around or the wind moving through the plants? What do you smell?

Draw a picture of your nature area. Make sure to include the plants and animals.	
Name your nature area.	
Visit your nature area at a different time of the Are there any changes? Are there signs that an animal visited?	

Nature Art

Nature provides all the tools you need to create amazing art. All you have to do is bring your creativity!

Explore your backyard or the forest preserve for natural objects to use in your art. Make sure to only use natural items that are no longer being used. Examples of things to use: tree seeds that are on the ground (not still on the tree), flower petals that have fallen off the flower and leaves that have fallen off trees.

Use your creativity to make a work of art on the ground.





Fairy and Gnome Homes

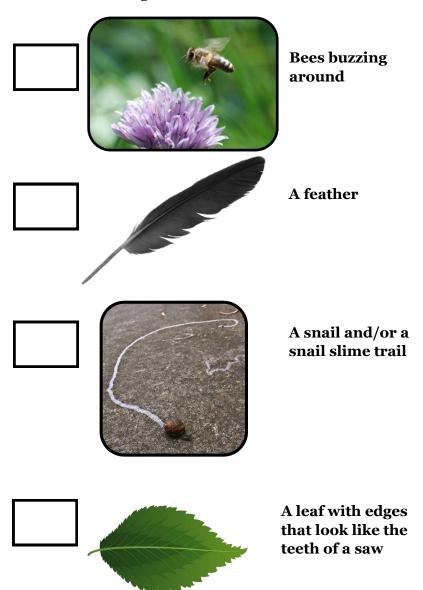
Have you ever played pretend while out in the forest? Imagine tiny creatures walking and flying around the forests like fairies and gnomes. What would their houses look like? Use your creativity to build their houses using only natural materials.

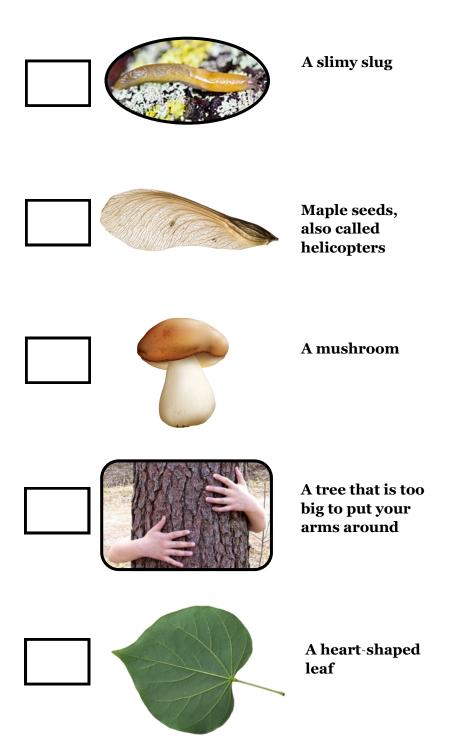
- Collect natural materials like pine cones, dried leaves, twigs, small rocks and acorns. Please don't pull leaves and seeds off trees; only collect ones that are on the ground.
- 2. Find a good area to build your fairy or gnome house. A good place could be next to a trail or by a tree in your backyard or in one of the forest preserves.
- 3. Build your fairy or gnome house and have fun!
- 4. Leave your fairy or gnome house and come back later to see if anything is using it as a home.

Draw a picture of your fairy or gnome home.

Nature Scavenger Hunt

While you are out and about this summer, see if you can find all these things in nature.





Meet a Tree

This is a great observation activity to give you a new perspective on a tree.



Walk around your yard or one of the forest preserves and choose a tree or plant that interests you. Walk around the tree observing its size, shape and leaves.

Draw a picture of your tree from how you see it where you stand or sit.

Take notes recording what you notice about the tree at this scale: What does the bark look like? Do you see anything living in the tree?

branch with a bud on it, the bark or even the leaves. Draw what you see up close.
Take notes about what you observe when you are this close that you didn't see before: Is it rough? Is it smooth? Are there new colors?
What parts of the tree did you notice at each scale? What made these parts similar or different?

Zoom in on one part of your tree. You can choose a

Check up on your tree regularly to see how it changes through the season! Make drawings and notes for each season and compare them to see how the tree changes.



Make a Sundial

Sundials were used in ancient times, and are still used today, to tell time. You can make a simple one using only a stick, rocks, a sunny place and a watch.

- 1. Choose an area that is sunny. Make sure to choose a spot that won't be in the way.
- 2. Put a stick in the ground so it is standing straight up.
- Place a stone at the end of the shadow cast by the stick. Repeat this step every hour from sun up until the sun sets.
- 4. Now your sundial is ready to use. When you want to tell the time, just look for the shadow. To make telling time easier, label each stone with the corresponding hour in which it was placed.



Cricket Chirp Challenge

Did you know that you can tell the temperature outside by counting cricket chirps?! Back in 1897, a scientist named Amos Dolbear published an article "The Cricket as a Thermometer" that said there is a link between the outside temperature and the rate at which crickets chirp.

A cricket's muscles contract to make the chirping sound. The warmer the temperature, the easier the cricket's muscles work, making the chirps faster. The colder the temperature, the harder it is for them to react, making the chirps slower.

- 1. Go outside in the evening to a place where crickets are chirping. *Don't forget to bring a stopwatch*.
- 2. Pick out the chirping sound of a single cricket.
- 3. Count the number of chirps in 14 seconds.
- 4. Add 40 to get the temperature in Fahrenheit.
- 5. Check the temperature on an outdoor thermometer or a weather app. Are the two temperatures the same or close?

Why do crickets chirp?

Chirping is a cricket's way of communicating or talking. They may be chirping to attract a female or alerting other crickets that there is danger nearby.



Cicadas

Have you ever heard a super loud buzzing sound coming from the trees in the summertime? It is probably male cicadas trying to find a mate. They sound like a tiny maraca shaken at high speed. They are one of the loudest insects in the world!

Cicadas are insects that spend most of their life underground as a nymph. They then emerge and metamorphosize into their adult form where, for around a month, they sing, mate, lay eggs and then, unfortunately, die.

There are twenty different species of cicadas in Illinois. One common cicada is the Dogday cicada. It gets this name because it emerges from the ground in the dogdays of the summer, the hottest part of the summer. The nymphs live underground for 2-5 years feeding on tree roots before



Lake County News-Sun/Steven D. Bailey

emerging from the ground to metamorphosize into an adult.

Brood X Cicadas

In 2021, parts of Illinois will be seeing one of the periodical cicadas that has spent the last seventeen years underground! You might not be able to see them here in Champaign



AP Photo/Charles Bennett

county but if you head over to Vermillion or Edgar county there is a good chance you will see or hear them. Their babies won't emerge from the ground until 2038!

Cicadas Shells

Cicada nymphs emerge from the ground sometime in May or June. They quickly crawl up the closest object; a tree, building, and sometimes sign posts. They shed their skins as they molt into adults, leaving behind their empty shells. Shortly after molting, their wings unfurl and their skin darkens as their exoskeleton completely hardens.



David Sosnowski

Walk around your neighborhood or local park and collect cicada shells. Then try out one of these activities.

How many cicada shells can you hang on the side of the





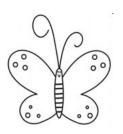


Paint the shells. Gently paint the cicada shells different colors then let them dry.

What else can you do with cicada shells?

About CCFPD

The forest preserves are great places to visit year-round, with loads to see and do in the summer.





Make more of your summer with CCFPD

- Visit the Natural Playscape at Homer Lake Forest Preserve.
- Check out the night sky at the first and only International Dark Sky Park in Illinois-Middle Fork River Forest Preserve.
 Visit www.ccfpd.org for more information and directions.
- Keep your eyes to the skies when the sun starts going down for bats. A great place to check out is the Covered Bridge at Lake of the Woods Forest Preserve.