


A NOTE TO CAREGIVERS

We hope that you and your child enjoyed the Junior Naturalist experience. These activities were designed to introduce young explorers to the natural wonders of Sky Meadows State Park. There are many other opportunities for self-guided exploration every day at the park.

Make the most of your field explorations with our Discovery Backpacks. These backpacks are stocked with the guides and tools you'll need to spend a day of self-guided discovery at the park.

We have 3 different Discovery Backpack themes that allow you to explore the various natural and cultural wonders of Sky Meadows State Park:

-  Beginning Birding
-  Insect Investigation
-  Woodland Wonders

Each Discovery backpack includes field guides, maps, activity cards and other tools that will help you enjoy a day of exploration.

Backpacks are available at the Visitor Center on a first-come, first-served basis. There is no charge to check out and use a Discovery Backpack, however, an adult 18 years or older must be present to sign for the backpack.

For more information on the programs, events, and services available at Sky Meadows State Park, please visit our website at www.virginiastateparks.gov or call the park at (540) 592-3556.

Sky Meadows State Park
11012 Edmonds Lane
Delaplane, VA 20144

Sky Meadows State Park

Junior Ranger Program

Naturalist Activity Booklet

For children ages 5-7





SKY MEADOWS STATE PARK JUNIOR RANGER PROGRAM

Welcome to our Jr. Ranger– Naturalist booklet! By opening this book you begin your journey to becoming an official Sky Meadows State Park Jr. Ranger. After completing this booklet and attending one nature program, bring your completed book to the Visitor Center. Present it to the Ranger. They will review your book and issue you your official badge!

Good luck in your journey, and remember to tread lightly on the land. Practice 'Leave No Trace' principles at all times in the park, and most importantly, have fun!

Leave No Trace Principles

1. **Plan ahead and prepare:** Learn about the park rules. Check the weather before you come. Bring enough water, sunscreen, bug spray with you. Dress for the weather.
2. **Travel and Camp on durable surfaces:** Stay on the trails.
3. **Dispose of waste properly:** Don't litter. Take your trash with you when you leave.
4. **Leave what you find:** Don't pick flowers or leaves. Don't take home rocks, pinecones, or any other souvenirs.
5. **Minimize campfire impacts:** Fires are only allowed in certain areas. If you build a fire, keep it small and make sure that it is completely out before you leave.
6. **Respect wildlife:** Watch all wildlife from a safe distance. Do not try to touch or feed any wildlife. If you have a pet with you, keep it on a leash and under your control at all times.
7. **Be considerate of other visitors:** Be kind to other people in the park. While on the trails, keep your voices quiet so that you and other people can enjoy the sounds of nature.



Activity Alerts!

Poison Ivy - When completing these activities, keep an eye out for *POISON IVY*. Remember: "leaves of three, let it be". Not every plant with three leaves is poison ivy, but unless you are certain of the identification, it is best to keep your distance.



Ticks - Be sure to apply insect repellent around your lower legs and arms before the hike; check



NATURE PROGRAM

Now, that you are done with the activities in this booklet attend a program, or speak with a ranger. Ask the Ranger to sign their name on the line marked "Ranger Signature." Once you are done with this page return your booklet to the Visitor Center to receive your badge!

Name of Program Attended: _____

Date: _____ Time: _____

Two things that you learned from the program that you did not know before attending:

1. _____

2. _____

Ranger Signature:

* For a complete listing of Nature Programs, check the Visitor Center or visit our online Calendar of Events at www.virginiastateparks.gov



TREES

Naturalists identify trees by their branches, leaves and bark. Find some trees in the park that are interesting to you. Use *the Tree Finder* and *Peterson's First Guides: Trees books in the Woodland Wonders Discovery Backpack* to identify two types of trees that you see on the trails: one *Evergreen* and one *Deciduous*.

My tree is an **Evergreen**:

Its leaves are like needles?

How many needles are in each bundle? _____.

Does your tree have pinecones? _____.

My tree is a _____.

Draw a picture of the needle bundle here:

My tree is **Deciduous**:

Its branches are opposite or alternate? (Circle one)

Its leaves are simple (one leaf per branch) or compound (many leaves per branch)?

Its leaf edges are smooth or toothed? (Circle one)

Its seeds are like _____.

Its flowers look like _____.

My tree is a _____.

Draw a picture of the tree's leaf here:



WHAT IS A NATURALIST?

A naturalist is a person who studies nature. The most important skill you can have as a naturalist is "observation". This is how you begin to understand and experience the world around you.

The closer you look, the more you will discover about nature. When you begin to notice nature's details and how they interact, you begin to understand the importance of preserving the environment and how nature works within it.

At Sky Meadows State Park, all of the Park Rangers spend time getting to know the natural world around them. The Rangers hike the park trails throughout the year to observe the seasonal changes to our beautiful park environment. Becoming a Junior Ranger will increase your observation skills to fully appreciate nature more as our Rangers do; to observe the winter snows melt and the flowers and trees begin to bloom; to watch as birds build nests and lay their eggs; to see the snakes and frogs emerge from their winter dens and enjoy the warmth of Spring and Summer months. As Summer turns to Fall, the leaves change color and the birds begin to migrate to their winter homes. All year long, the Rangers and Junior Rangers watch as nature completes its yearly cycle. These observations allow us to care for our cherished land.

By becoming a Junior Ranger- Naturalist, you will develop the skill to observe and appreciate nature in all of its splendor. Help us to preserve our environment.

This book belongs to:

Junior Ranger - Naturalist In Training

Date

NATURE JOURNALING

Find a place in the park that has a variety of plants and looks like it could be good habitat for different animals and birds. Sit and observe the area for 5 minutes. **Using the box below, draw the plants, animals, birds and natural land features that you see. Label the things you draw. Be sure to fill in the information below to document your observations like a true Naturalist!**

Observation Area

Location:

Date:

Weather:

Time:



PLANTS

There are thousands of different trees and plants species in Virginia (too many to list in this booklet) The activities below will help you observe the variety of plant life at Sky Meadows.

Take a hike on one of the park's wooded trails such as Boston Mill Road, South Ridge Trail or Gap Run Trail? **As you hike the trails, observe and count the plants that you find along the trail. Complete the scavenger hunt list below (write in the number of plants that you found in the provided block). The trail guides found in the "Woodland Wonders" Discovery Backpack will help you in naming the plants that you observe.**

1) Are growing on the ground in the shade	
2) Are growing on the ground in full sun	
3) Are not green in color	
4) Are growing on a rock	
5) Are growing on another plant or tree	
6) Does not have flowers	
7) Are taller than you	
8) Are smaller than your thumb	

Think of the most interesting plant you observed today. Draw it here and use three words that made it interesting to you:



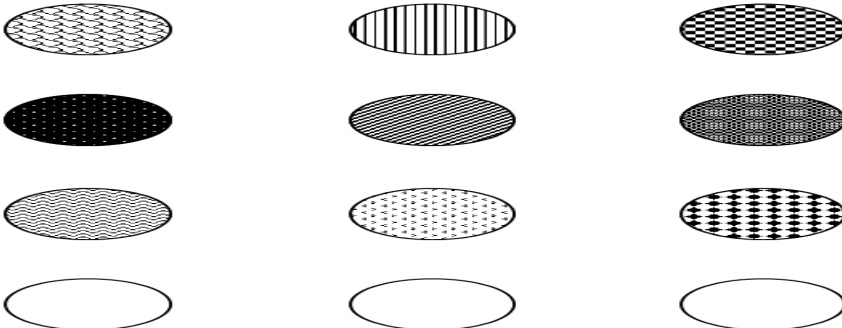
INSECTS

Explore one of the trails that takes you through open fields, [The Rolling Meadows Trail, the Piedmont Overlook trail, or the Hadow Trail.] Find an insect on your hike. Carefully collect it and use one of the magnifiers in the Insect Investigation Discovery Backpack to observe it. Use the insect field guide found in the Insect Investigations Discovery Backpack to discover what kind of insect it is. Answer the following questions. Be sure to return it to the trail when done with your observations.

Did you find the insect? On a leaf or on the ground?	
What is its color?	
How many legs does it have?	
Does it walk or fly?	
Are its wings bigger than its body?	
Does it have big or small eyes?	
Are its antenna larger than its body?	
Is it bigger than your thumb nail?	
Does it have 3 sections (head, thorax, & abdomen)	

What kind of insect is it ? (use the field guide to help you)

Look at your insect and try to find as many patterns as you can. Circle the patterns that you find. If you find a different pattern, draw it in the blank circles.



BIRDS

The shape and size of a bird's beak gives clues to what kind of food it eats, how it catches its food and what sort of habitat it might prefer. Match the pictures of beak types below with the description of their functions. Use the books found in the "Beginning Birding" Discovery Backpack to help you in this activity.



1.Straw - ____
Ruby Throated



2.Chisel - ____
Red Headed



3.Tearing-____
Bald Eagle



4.Strainer-____
Mallard



5.Cracking-__
Cardinal



6.Tweezers __
Bluebird

A



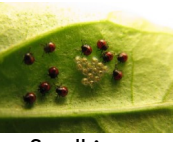
Plants & insects found in water

B



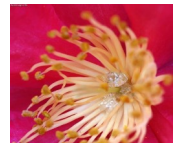
Insects in bark

C



Small insects

D



Plant Nectar

E



Animals

F



Seeds

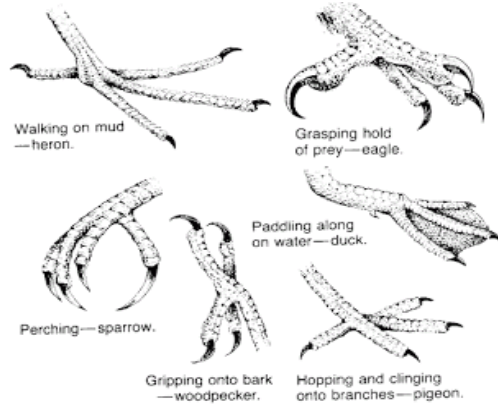


BIRDS

In addition to different beak types, birds have other physical adaptations to help them survive.

Feet:

Birds' feet come in different shapes and size. Feet with long toes are good for walking on soft mud, while feet with sharp talons are good for capturing prey.



Feathers:

All birds have feathers. Bird's feathers help them fly and keep them warm.

Birds have different types of feathers. Some feathers enable the bird to fly silently through the forest or soar high in the sky.

Feathers vary in colors and designs. Some birds' feathers change color with age or with seasons. Most male birds are more colorful than female birds (of the same species.)

Why do you think males bird have more colorful feathers?

Design your own bird. What kind of beak and feet does it need? What color or colors are its feathers?



ANIMALS: REPTILES & AMPHIBIANS

The most common reptiles in Virginia are snakes and turtles. The most common amphibians in Virginia are frogs and toads. Both reptiles and amphibians lay eggs. Amphibians lay their eggs in water. Reptiles lay their eggs in the sandy soil. When the babies come out of their eggs, they have no protection. They are tiny and many animals could eat them!



Wood frog eggs



Painted turtle eggs



Black Rat snake eggs

Find an area of the park that has water near it. Turner Pond is a good choice, but any area along Gap Run will work as well. Pretend you are a frog or snake parent. Look around for the safest place to put your eggs. Would a prickly bush help the babies? What about under a log? **Find the safest spot on the trail for an egg. Draw the picture of this safe place below.**

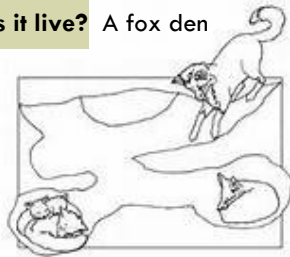
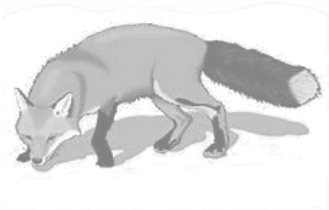


ANIMALS: MAMMALS

Mammals are soft furry animals that feed their babies milk. Mammals live close to where they can find food for themselves, and where they can be safe from animals that may eat them. We call the places where animals live *habitats*. Take a hike on one of our trails, [The Snowden Trail, the Gap Run Trail, and the James Ball Trail have great mammal habitats.] **Find a mammal on your hike and write or draw what you see.**

Mammal: Fox

Where does it live? A fox den



What does it eat? Fruit, rodents, birds

What might eat it? Hawk

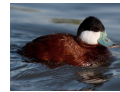


Mammal:

Where does it live?

What does it eat?

What might eat it?



BIRDS

Learning to observe, identify and name birds in the wild is the first step in becoming a birder. Below are twenty birds that are common to Sky Meadows. Many of these birds are at the park year-round, others migrate south for the winter. Spend some time exploring the park, looking for these birds. **Circle the pictures of the birds that you observe. Use the *Bird Field Guide* found in the "Beginning Birding" Discovery Backpack to help in your observations.**

B	I	N	G	O
 Eastern Bluebird	 Great Blue Heron	 Turkey Vulture	 Eastern Meadowlark	 American Kestrel
 American Goldfinch	 Dark-eyed Junco	 Tufted Titmouse	 Carolina Wren	 Mourning Dove
 Chipping Sparrow	 Canada Goose	 Red-headed Woodpecker	 Indigo Bunting	 Red-winged Blackbird
 White-breasted Nuthatch	 Northern Cardinal	 Red-tailed Hawk	 Downy Woodpecker	 Carolina Chickadee
 Scarlet Tanager	 Blue Jay	 Northern Flicker	 Red-eyed Vireo	 American Crow