

Staunton River Battlefield State Park Ranger Quest Activity Book



Wild About Nature

Welcome to the Staunton River Battlefield State Park Ranger Quest Activity Book—Wild About Nature!

We are about to embark on a journey as you explore the unique stories of Staunton River Battlefield State Park. You will discover the **Staunton River**, **wetlands**, and **forest and wildlife**. If you are ready, let's get started. Follow my tracks!

Hi, I'm Parker Redfox!



Instructions

This book contains various activities. You can complete these activities by visiting Staunton River Battlefield State Park, a nearby park, or your own backyard! Hidden in the activities, you will find three **Quest Clues**. You can find a Quest Clue Log on the second to last page to keep track. Once you have found all **three**, you will be awarded a **Staunton River Battlefield Park Ranger Patch**. Please email your name, address, and the **Quest Clues** to srbattle@dcr.virginia.gov and we will mail it to you.



There is also a glossary located on the last page.

Here are some tips from Parker before you start your journey:

- **Leave no trace - As you explore, please place any trash that you find in designated trash and recycling cans.**
- **Be courteous to wildlife - Nature is their home and if you do find a critter, you may take pictures but do not touch!**
- **Have fun! We encourage you to share your discoveries and adventure with others!**

The Staunton River Quest

Throughout time, the Staunton River has been utilized—as a source for fresh water for people, a prime habitat for wildlife, and as a channel for transportation.

People have lived along the Staunton River for centuries—dating back as far as 900 AD. Ancestors of the modern Sappony Indians settled on land adjacent to the river. The river provided both fish and plants as



The Staunton River

food and a way to transport people and goods.

Fast forward to the 18th century when colonizers were establishing homes and businesses in the area. The river provided a channel for steamboats to travel. People also continued to fish during this time as a good source of food.

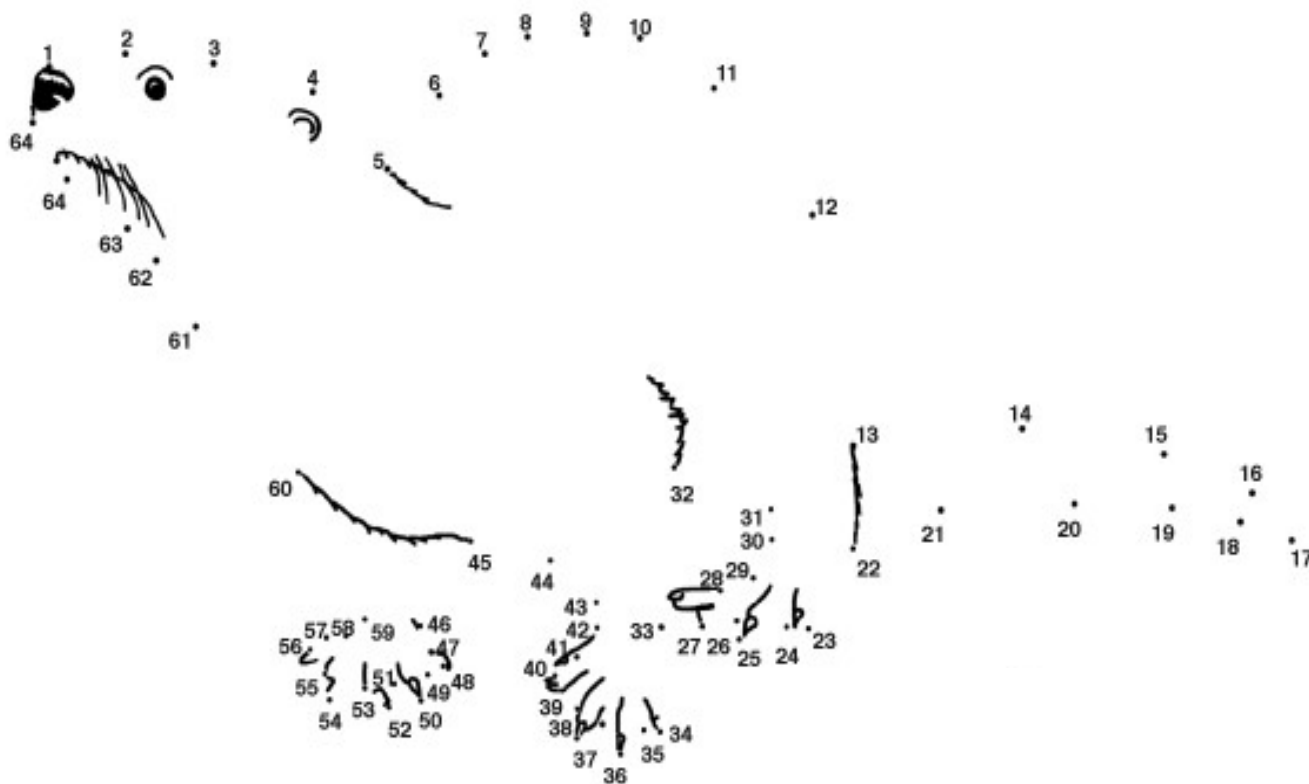
Even today, you can catch a glimpse of boats floating down the river. However, instead of steamboats or hand carved vessels, you're more likely to see

modern kayaks and canoes. People today also fish in the river, but for sport and for food.

In addition to providing access for people to navigate through the area, the Staunton River is a diverse habitat for an array of wildlife.

Who's in the River?

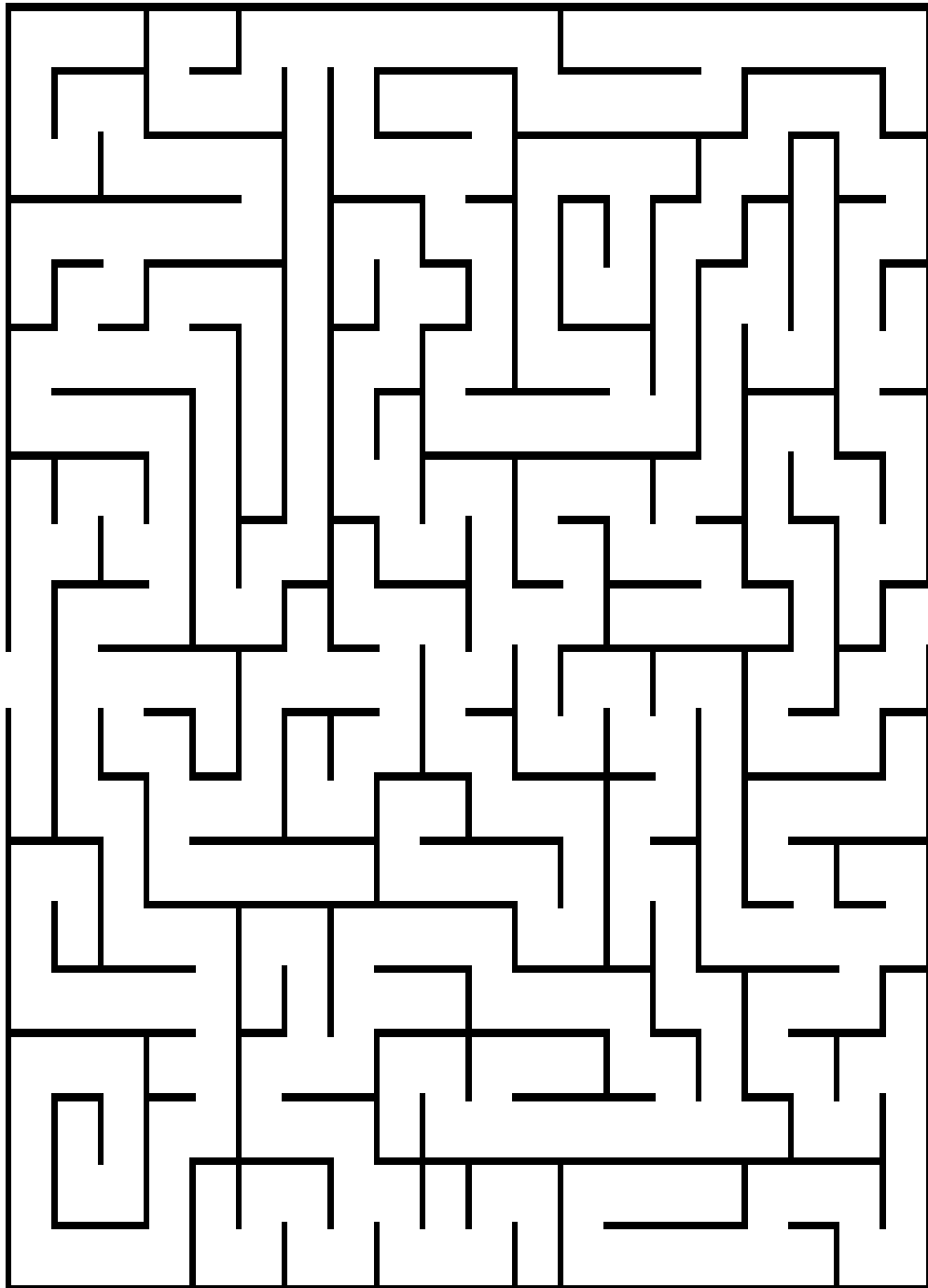
Think about the river. Who may live here? Fish, reptiles, mammals, amphibians, or insects? It's actually all of the above! Connect the dots below to reveal one of the residents of the river. This type of animal is **Quest Clue #1!**



Did you know that this critter can hold its breath underwater for 8 minutes and can dive to a depth of 60 feet!

A-maze-ing Catfish!

Among the turtles and otters in the river are various types of fish including largemouth bass, bluegill, and catfish. Help the Mama catfish find its baby!



Navigating the Waters

Before cars, the river was like a road and served as a quick way to travel. Just as people and technology evolved, so did the types of boats people used. Boats seen on the river over the years include steamboats, canoes, kayaks, and even boats constructed from logs! Which one would you choose? Draw your own boat below!

Wetland Quest

The wetlands of Staunton River Battlefield State Park are a unique ecosystem where semi-aquatic mammals, waterfowl, reptiles, and even tiny organisms thrive.



The wetland at Staunton River Battlefield
State Park

So what makes an area a wetland? A wetland is an area that is covered in shallow water, either permanently or seasonally, and allows for numerous aquatic plants to flourish. Wetlands can contain freshwater, saltwater, or a mix of both depending on the location of the wetland.

So why are they important?

Wetlands not only provide a suitable habitat for a variety of species, but wetlands also help purify water by filtering sediment and absorbing pollutants. Wetlands also act as a sponge during heavy rainstorms. This is especially important when the wetland is near another body of water. At the park, the wetland area stores water from storms which reduces the risk of flash flooding in the Staunton River.

Let's take a closer look at the inhabitants of the wetlands at the park.



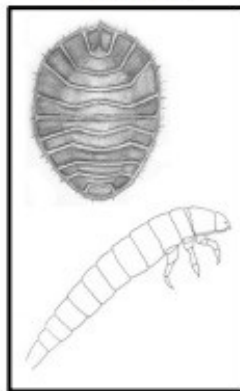
A frequent resident of the
wetlands

Diving into the World of Macroinvertebrates

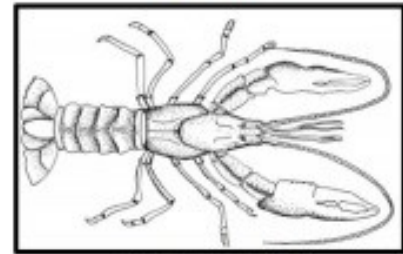
While the word macroinvertebrate might be large, in reality, these little critters are quite small! Macro means you can see them without using a microscope and invertebrates means they have no spine. Some are the aquatic larval stages of many insects you know. Others are adults insects, clams, and shellfish. People study and monitor macroinvertebrates because their presence or absence in water can tell us a lot about the quality of that water. They are also a food source for many of the other wildlife that inhabit the wetlands. Let's take a look at some what some of these macroinvertebrates look like!



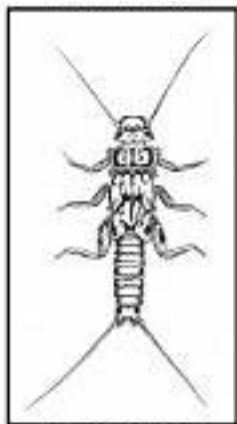
ODONATA
dragonflies



COLEOPTERA
beetles



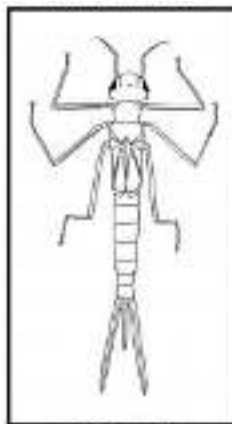
DECAPODA
crayfish



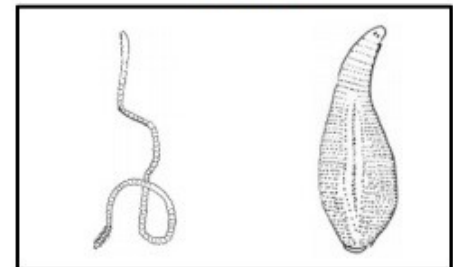
PLECOPTERA
stoneflies



EPTHEMEROPTERA
mayflies

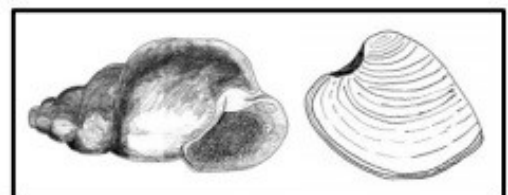


ODONATA
damselflies



ANNELIDAE
aquatic worm

HIRUDINEA
leech



MOLLUSCA – *snail, clam*

Macroinvertebrate Word Search

H	D	W	S	K	O	E	G	N	D	M	U	E	J	M
V	S	G	A	R	Q	L	Q	A	I	O	J	L	F	S
C	S	I	H	T	I	X	M	P	D	B	Y	T	S	M
U	Y	K	F	O	E	S	J	B	R	C	Z	E	Q	Y
B	X	D	X	Y	E	R	Y	F	A	L	S	E	H	A
J	U	R	B	L	A	L	P	T	G	A	M	B	D	F
W	L	O	F	J	F	R	O	E	O	M	E	G	B	M
V	M	L	A	Y	Q	I	C	G	N	Z	J	U	F	J
L	Y	W	A	B	U	N	U	Y	F	N	I	R	K	H
G	J	M	L	E	E	C	H	I	L	S	Y	U	Z	N
V	S	K	A	I	J	D	G	U	Y	V	N	H	A	U
Y	L	F	E	N	O	T	S	E	P	S	H	A	J	I
R	G	E	Y	V	Y	S	T	Q	E	K	V	D	I	U
M	F	K	P	F	N	F	M	Y	I	V	Q	Y	M	L
G	C	R	A	N	T	K	V	L	I	X	E	L	Q	K

DRAGONFLY

MAYFLY

BEETLE

CRAYFISH

LEECH

STONEFLY

WATERPENNY

DAMSELFLY

SNAIL

CLAM

Waterfowl Wonderland

While many of the wetland critters are small, some like waterfowl, are much easier to spot. Wetlands are vital to migratory species which frequent the



A pair of mallards

wetlands seasonally, while other species are permanent residents. The abundance of water and food such as aquatic plants, fish, and invertebrates makes wetlands an ideal home for many birds including ducks, herons, geese, and more!

Decode the Puzzle

Match the letter to the corresponding number using the key. The fifth word is **Quest Clue #2!**

A	B	C	D	E	F	G	H	I	J	K	L	M
1	2	3	4	5	6	7	8	9	10	11	12	13
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
14	15	16	17	18	19	20	21	22	23	24	25	26

13	1	12	5		13	1	12	12	1	18	4	19		1	18	5	
3	1	12	12	5	4		4	18	1	11	5	19		1	14	5	

6	5	13	1	12	5		13	1	12	12	1	18	4	18		1	18	5

3	1	12	12	5	4		8	5	14	19	

Wildlife and Forest Quest

Critters can be found all over parks and your own backyard, but they especially love the forest. Snakes, deer, raccoons, oh my! And that's only naming a few. So why would wildlife make their home in the forest?

Trees provide shelter and food for forest dwellers. Leaves, twigs, and stems are consumed by herbivores such as deer while the fruits, berries, and insects living on trees are eaten by omnivores (animals that eat both plant material and meat) such as bears, possums, and raccoons.

The forest also provides perfect spots for above ground nests and below ground dens. Many species of birds construct their nests high up in the trees to protect their young from predators. Certain birds, such as raptors, also use the tree branches to perch and stalk their prey. Owls can often be found in the tree canopy at the park, but because of their camouflaged coloration, you may only hear them rather than see them!

The leafy canopy of the forest provides shade which is vital during the hot summer months as well as cover during rain storms.



Trees on Edgewood Trail at Staunton River
Battlefield State Park

Head out to a natural forested area such as a park or your own backyard and take a closer look at the trees.

Tall, Tall Trees

Do you see many trees during your exploration? I bet you do! Trees play many important roles in the forest ecosystem. Trees can live for hundreds of years and we are thankful they stick around. Below are some examples of foliage (leaves, needles, and scales) you may find on the trees or on the ground, depending on the time of year. Unscramble the letters to reveal its identity.



pmeal _ _ _ _ _



einp _ _ _ _ _



ewets umg _ _ _ _ _



kao _ _ _ _



dreca _ _ _ _ _

Sense the Forest

As you take a walk outside in a quiet area, close your eyes.
What do you hear? What do you smell? Now open your eyes.
What do you see? What might there be?

Record your findings below:

What I hear:

What I smell:

What I see:

Wonderful Wildlife

Exploring a local park or trail is a great way to find evidence of critters. Even if you don't see any, you might be able to see where they have been. Finding animal tracks and scat is a great way to find out who's been in the area recently.



Animal tracks in mud

Take a closer look. What size is the track? Any claw marks? What does the shape tell you? If looking at scat (droppings), can you see any remnants of the last meal such as a bone, feather, or plant material? All of these questions will help you find out what creature was there before you.

Of course, you may get lucky and see the critter for yourself! Just remember, that wildlife are wild. Taking pictures is a great way to capture

the moment without disturbing the animal. The critters or clues you find may depend on the time of year. Here at the park, you are more likely to spot white-tailed deer in the winter, while in the spring and summer, you'll catch a glimpse of more rabbits and turkeys. Raccoons, possums, and owls are harder to find because they are nocturnal, meaning they are active at night.



A pair of spotted salamanders found at the park

Eye –Spy Tracks!

Record which animal matches the tracks using the words below. If you need a hint, a tracks field guide will surely help! The animal matching the circled clue is **Quest Clue #3**! All of these animals can be found at Staunton River Battlefield State Park. Are they in your area too?



A masked mammal



A bushy-tailed tree climber



A secretive feline



You can smell me from a mile away



A construction expert



Runs with leaps and bounds



Howls and barks in the night



Appears in red and gray varieties



Carries babies in a pouch

skunk

raccoon

fox

beaver

possum

deer

bobcat

squirrel

coyote

Draw Your Own Forest Scene

Look out into nature—the water, plants, and wildlife are all key components to natural ecosystems. Forest and backyard habitats can be home to many species, some large and others microscopic in size. Draw your own nature scene below—remember those sights, smells, and sounds!



Quest Clue Log

WRITE YOUR QUEST CLUE HERE:

WRITE YOUR QUEST CLUE HERE:

WRITE YOUR QUEST CLUE HERE:



Great job! You are a **Ranger Quest** master! Email your **Quest Clues** to srbattle@dcr.virginia.gov to get your **Staunton River Battlefield Park Ranger Patch!**

Glossary

Camouflage	When an animal uses coloration to make them harder to see or to disguise themselves as something else
Colonizer	A person who establishes themselves in a particular area
Ecosystem	A biological community of interacting organisms such as plants and animals and their physical environment
Herbivore	An animal that only eats plant material such as grasses, leaves, fruits, and stems
Larval	The juvenile stage of a bug or insect before they turn into adults
Pollutant	A substance that is introduced into the environment and causes negative effects
Raptor	Also called a bird of prey, a raptor is a type of bird that primarily hunts other animals for food
Sediment	Natural materials such as rocks and minerals that are broken down and settle in one area
Waterfowl	Birds that are adapted to swimming, floating, and for some, diving into shallow water