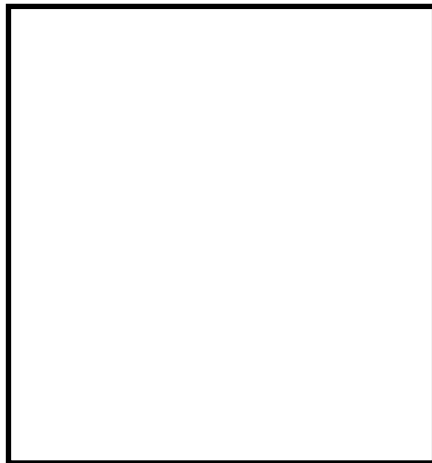


Certificate of Completion

_____ has completed
all the necessary tasks to earn the rank of Junior Ranger at
Westmoreland State Park.



Ranger Signature: _____

Date: ____ / ____ / ____



Westmoreland State Park Junior Ranger Handbook



This handbook belongs to



Getting Started



All Virginia State Parks are staffed by uniformed Park Rangers. These men and women care for our state's treasures, performing all types of jobs. As a Junior Ranger, you will contribute to the protection of Westmoreland's wildlife, fossils, and history. In this book you can complete fun activities and explore some of the natural wonders Westmoreland State Park has to offer.

Junior Ranger Checklist

Complete _____ activities.
(your age)

Each activity is rated by difficulty.

♥	Ages 5 and up
♥ ♥	Ages 8 and up
♥ ♥ ♥	Ages 10 and up

Hike one trail
Trail Hiked: _____

Attend one ranger led program
Program: _____
Ranger signature: _____

Visit the Discovery Center
Ranger signature: _____

Which trail(s) did you hike?

Name 3 reasons why people visit Westmoreland State Park.

1. _____

2. _____

3. _____

Name 3 ways you can help protect the environment at Westmoreland State Park.

1. _____

2. _____

3. _____

Name 3 fun things to do at Westmoreland State Park.

1. _____

2. _____

3. _____



Field Notes

Directions: Answer the following questions to reflect on your time at Westmoreland State Park.

Name five animals you saw during your visit.

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____



What historical facts did you learn during your visit?

Name 5 trees or plants you identified at the park.



- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____

After you have completed all of the items on the checklist, bring your handbook to the visitor center or discovery center to pick up a prize and be sworn in as a Westmoreland State Park Junior Ranger.

As a Junior Ranger, I pledge to...

- Preserve and protect our parks
- Care for Westmoreland's nature and history
- Share what I have learned about the park with others
- Obey all safety rules
- Continue to explore and discover

As you complete your Junior Ranger adventure, keep an eye out for Ranger Parker Redfox. Be sure to read his notes from scientists and specialists. If you get stuck on an activity, ask a parent, guardian, or park ranger for help.





Oyster's Favorite Things

The oyster has played an important ecological role in the Chesapeake Bay watershed for millions of years. Oysters feed on bits of food that are carried by currents. Two or three gallons of water may pass through a single oyster in an hour. The water released by oysters after they feed is cleaned of harmful toxins. This is why oysters and other shellfish are called *filter feeders*.

Directions: After reading oyster's favorite things, answer the questions about yourself.

An oyster's favorite food is tiny green algae.



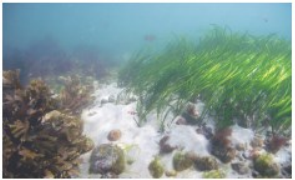
What's your favorite food?

Baby oysters like to swim, but grownup oyster like to sit still.



What's your favorite way to move?

An oyster's favorite place to live is in salt water.



Where is your favorite place?



Picture Your Future



Directions: Draw yourself in a ranger uniform. You may bring your booklet to the Discovery Center if you want your picture displayed on the wall.



Map Challenge

Directions: Use the map to answer the questions below. Find a Trail Guide for a larger picture of the map.

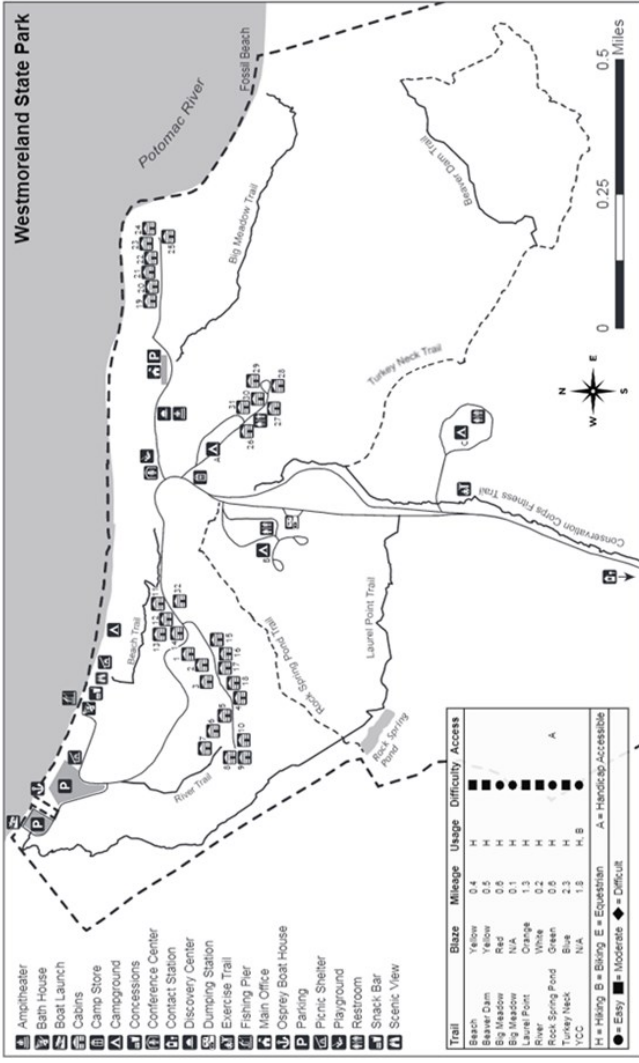
1. How many Parking lots are in the park?

2. Which trail is the longest?

3. In what direction is Rock Spring Pond from the Potomac River

4. What trail must you take to get to Fossil Beach?

5. Are there more cabins east or west of the Visitor Center/Main Office?



6. BONUS : What state are you looking at when you look across the Potomac River from WSP?

- A. Virginia
- B. Maryland
- C. Delaware

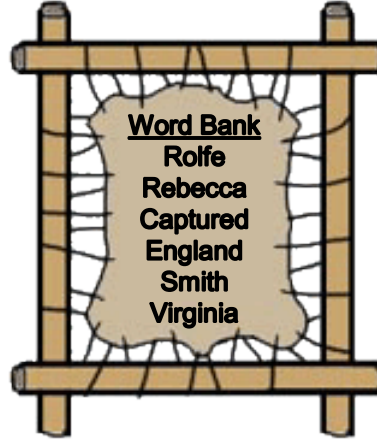
Note from a geographer:
 Don't forget to use the legend on the left and the North arrow on the bottom for help.



Pocahontas Puzzler

Directions: Use the deer hide word bank to fill in the following sentences and learn more about the real life of Pocahontas

- Pocahontas was born in 1596 in Werowocomoco, located in present-day Gloucester County, _____. That's less than an hour and a half drive from Westmoreland State Park!
- In a letter to England's Queen Anne, written in 1616, Captain John _____ claimed that Pocahontas had saved his life when she was 11 years old.
- Pocahontas was _____ during the first Anglo-Powhatan War.
- Pocahontas converted to Christianity and took the name "_____".
- On April 5, 1614, Rebecca (formerly Pocahontas) married John _____, an English tobacco exporter.
6. Rebecca (Pocahontas) Rolfe died March of 1617, at Gravesend, Kent, Kingdom of _____. She was only 21 years old.



Word Bank
 Rolfe
 Rebecca
 Captured
 England
 Smith
 Virginia





Show What You Know

Directions: After exploring the **visitor center**, fill in the blanks on the sentences below.

- ◇ The Virginia Company of England sent _____
(first name)
_____ to explore the capes and waters of the Chesapeake.
(last name)
- ◇ There are _____ turtles and _____ snakes in the Visitor Center.
(number) (number)
- ◇ There is a baleen _____ skull on display.
(animal)
- ◇ The wingspan of a Bald Eagle is _____ to _____ feet.
(number) (number)
- ◇ John James _____ was an American ornithologist,
(last name)
naturalist, and painter.
- ◇ Westmoreland State Park is within a few miles of George
_____'s Birthplace Monument and _____
(last name) (estate name)
Hall, the birthplace of Robert E. Lee.
- ◇ There is a park ranger _____ statue in the pollinator
(animal)
gardens in front of the Visitor Center.
- ◇ BONUS: There is an _____ across from the Visitor Center.
(word for a collection of bee hives)

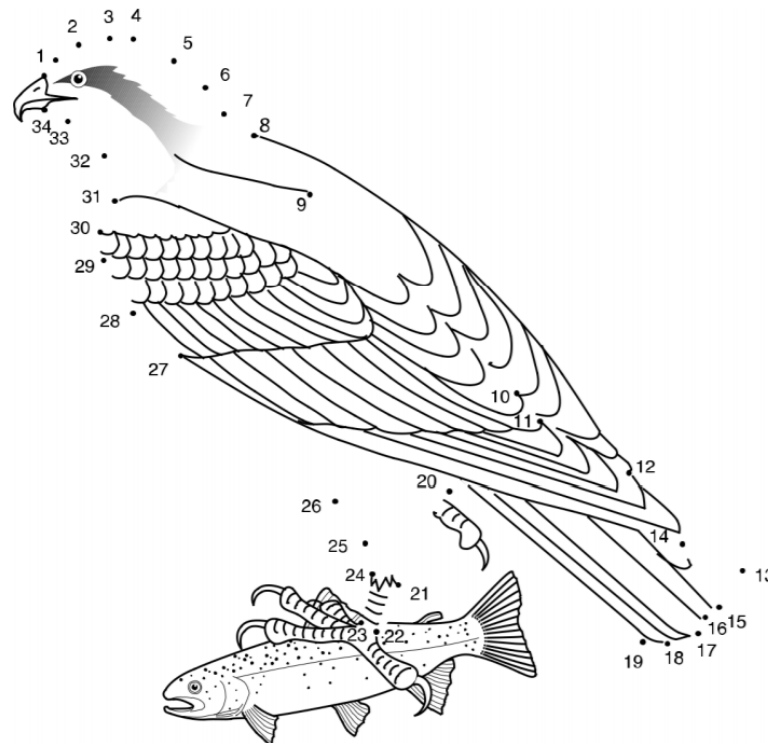


Osprey

Osprey legs are very long and have few feathers so they don't get wet when plunging feet first into water. The bottoms of their feet are covered in short spines, which helps them grip slippery fish. Each toe also has a long sharp curved "claw" called a talon. Osprey can snap their razor sharp talons around a fish in 0.2 seconds.

Osprey construct their nests at the tops of dead trees, power poles, waterway signs, and sometimes on buoys, chimneys, or other structures.

Directions: Connect the dots to discover a bird of prey with good eyesight, curved talons and a hooked beak known for catching fish.



BONUS: Where can we easily see Osprey hunting and nesting in the park?



Scavenger Hunt

Directions: Search Westmoreland State Park for these plants and animals. You must find at least 7 if you are 8 years old or younger or 10 if you are more than 8 years old.

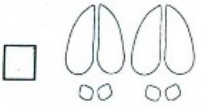
Note from a naturalist: As you explore the park, remember to follow all 7 Leave No Trace principles. Do not touch wildlife, go off trail, or disturb other park visitors.



GRASS, Longer than your fingers!



A SPIDER, But don't touch it!



DEER TRACKS, But don't step on them!



A TWIG, Bigger than your foot!



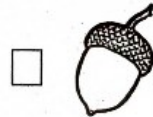
A WORM, Wiggling in the dirt!



A WHITE OAK LEAF, Hanging from a tree!



AN EAGLE, Flying over the water!



AN ACORN, Without its cap!



A SKINK, Colored blue!



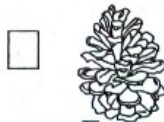
AN ANT, Running to its ant hill!



A FUNGUS, That looks like a Mushroom!



A GRASSHOPPER Hopping on a sidewalk!



A PINECONE, That has fallen down!

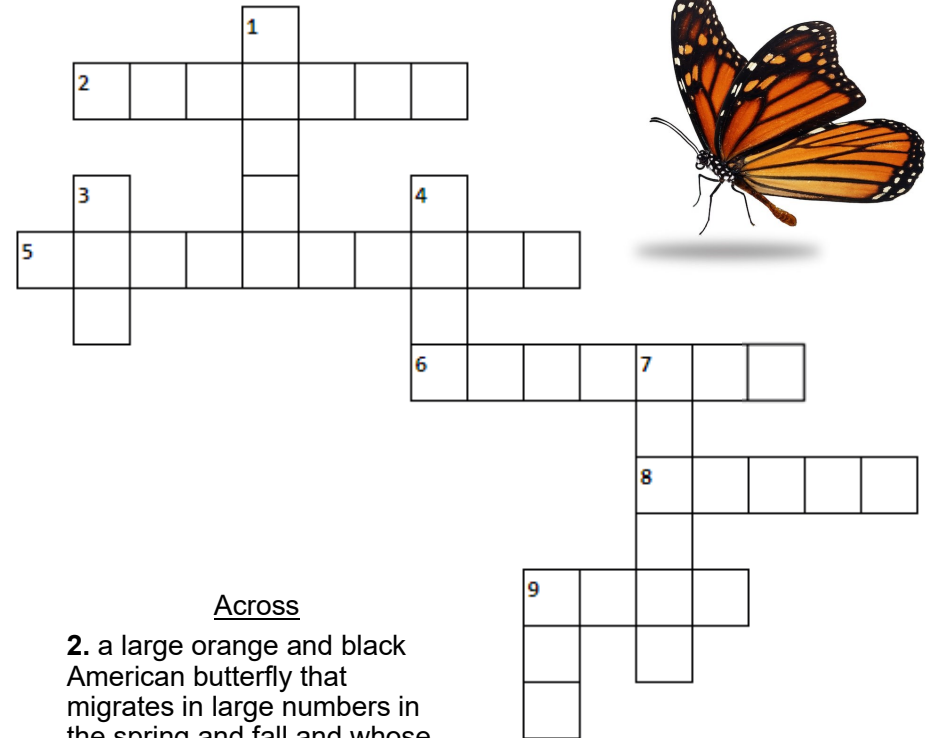


WILDFLOWERS But don't pick them!



Westmoreland's Wildlife Wordcross

Directions: Use the clues to fill in the crossword as best you can.



Across

- a large orange and black American butterfly that migrates in large numbers in the spring and fall and whose larva feeds on milkweed
- the only venomous snake in Westmoreland
- a small North American mammal that is mostly gray with a black mask, has a bushy ringed tail, is active at night, and eats a varied diet including small animals, fruits, eggs, and insects
- small lizard with smooth scales
- insects that feed on pollen and nectar and sometimes produce honey

Down

- large, day-flying, sharp-eyed bird of prey with a powerful flight that is related to the hawk
- flesh-eating mammal related to the wolf but smaller and with reddish coloring
- cloven-hoofed cud-chewing mammal
- marine animal that has a rough uneven shell made up of two hinged parts and closed by a single muscle
- night-flying mammal



Measuring

Measuring is what we do to figure out just how large or small something is. Rangers use tools like rulers, measuring tape, and GPS to measure things in nature.

Directions: Find these things from nature in the park. Use the ruler on this page to measure them and record your findings. You may use centimeters or inches, just make sure you circle which one! For the Wild Cards, pick something you find interesting to measure. No repeats, please!

A flower (please don't pick it!) _____ cm in

A small rock _____ cm in

A leaf from a tree _____ cm in

A woodchip _____ cm in

WILD CARD: _____ cm in

WILD CARD: _____ cm in

WILD CARD: _____ cm in



Camouflaged Critters

Directions: Can you find the animals hidden in this picture? If you're 8 years old or younger, find at least 7 animals. If you're older than 8 years old, find at least 10 animals. Find all 14 for an extra challenge!



snail
frog
beetle

rabbit
dragonfly
crayfish

snake
duck
songbird

a person's face
a raccoon's head
butterfly

fish
turtle

Leave No Trace

People can help protect special places like Westmoreland for future generations. The seven **Leave No Trace Principles** help visitors experience natural, wild places while protecting the plants and animals that live there.

Directions: Answer the questions as best as you can for each Leave No Trace principle.

1. Know Before You Go:

Know the rules for where you're going and what to bring with you. Where can you find the park rules listed?

3. Trash Your Trash:

Take your trash with you when you leave natural areas. What is one thing you can pack in your bag to help you remember to pack out?

5. Be Careful With Fire:

Fires at Westmoreland are only allowed in permanent, Park made fire rings. List 3 fire safety tips.

7. Be Kind To Other Visitors

Respect visitors and their experiences in nature. What is one way you can be kind to someone else at the park?

2. Choose The Right Path:

Stay on the trail while hiking to reduce damage. What do you do if your friends want to explore off the trail?

4. Leave What You Find:

Leave plants, rocks, and artifacts for others to enjoy. What is your favorite thing to see at the park?

6. Respect Wildlife:

Protect wildlife by not feeding animals and by storing food properly. What is one way to store your food properly?



CCC Time Travel

During the Great Depression in the 1930s, many people had no work. To help them, the Civilian Conservation Corps (CCC) gave young men jobs working in parks and forests. They built trails, picnic areas, campgrounds, and rock walls, planted trees, and much more! It was hard work, but it resulted in beautiful park trails, landscaping, and facilities that you can enjoy today and forever.



CCC boys earned \$30 a month. Most of their money was sent home to their families. CCC boys lived in camps of 150 to 200 people. Westmoreland was one of the first parks ever to have a CCC camp.

Directions: Imagine you needed a job to help your family during the Great Depression. If you could, would you join the CCC? Take this quiz to figure out if you would enjoy life at a CCC camp.

I like working outside.	True or False
I believe everyone should be able to enjoy nature.	True or False
I like living and working around a lot of people more than I like living and working alone.	True or False
I think sitting around all day with no job is boring.	True or False
I want to help my family buy food and pay bills.	True or False
I like learning new skills that could give me a better job.	True or False
I think dirt and bugs are cool.	True or False
I like contributing to making the world a more beautiful place.	True or False
I like sleeping in rustic cabins, even if there is no running water.	True or False



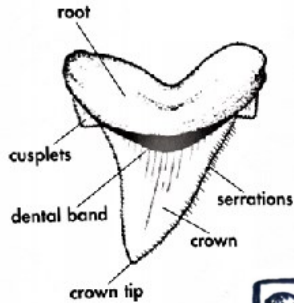
Note from a historian:
If you answered "True" more than "False," then you would probably love living in a CCC camp!



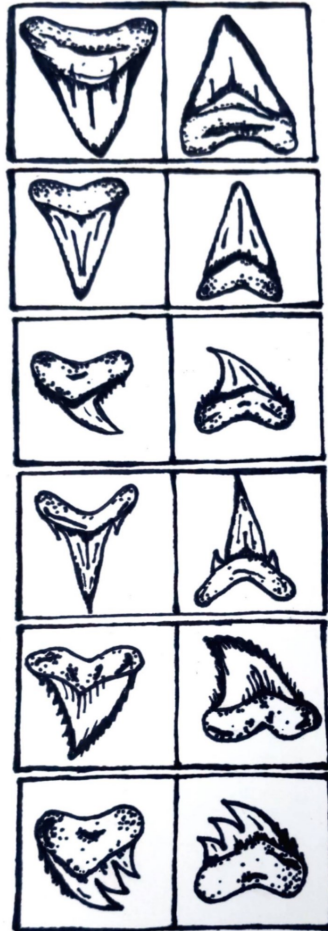
Classify a Shark Tooth Collection

Sharks have existed on earth for more than 450 million years, longer than trees! Today, there are more than 1,000 species of sharks. Here at Westmoreland State Park, fossilized sharks' teeth from dozens of species dating back 25 million years can be found on our beaches today.

Directions: Use the diagram to match the teeth to their name and description.



- A. **Cow shark**
Thick root. Very large serrations along one side of the crown with softer serrations on the other.
- B. **Bull shark**
Somewhat flat root. Small crown bends sharply to the side. Several small cusplets.
- C. **Mako shark**
V-shaped root. Smaller than the Megalodon.
- D. **Sand shark**
Thin upper and lower root. Thin, sharply pointed crown. Small, singular cusplets.
- E. **Snaggletooth shark**
V-shaped root. Heavy serrations on both sides of the crown.
- F. **Megalodon**
Thick, U-shaped root. Wide crown. Largest shark that ever lived.

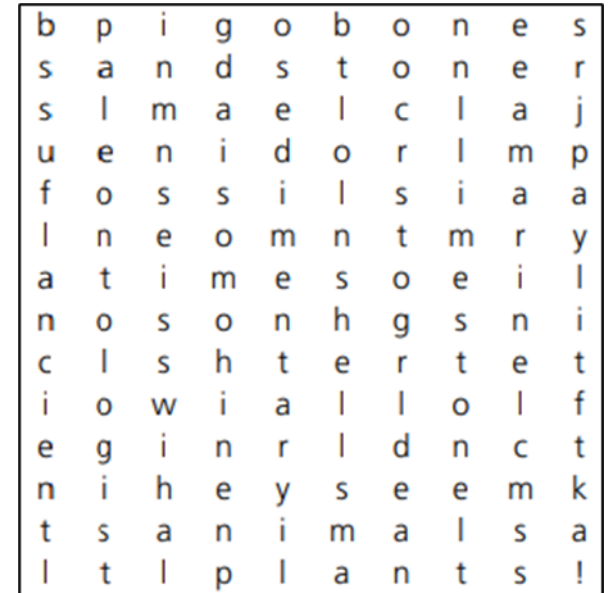


Fossil Hunters

Directions: Read the text below. Then find the underlined words in the word search. Words may go up, down, or diagonally. When you finish, write down the unused letters in order in the spaces below to reveal a hidden message!

A paleontologist uses fossils to understand the story of Earth's history. This story includes the plants and animals that once lived on Earth. Evidence of this past life is found by paleontologists within sedimentary rocks. These rocks are made of the broken pieces of other rocks called sediment that have become compacted or cemented together over time.

Sediment can be clay, sand, or gravel. Rocks can form on land or in water. An ancient beach might leave behind sand which forms into sandstone. Ocean sediments could develop into marine shale made of clay, or limestone from broken down shells. If the remains of an animal or plant, like bones or leaves, are covered by sediments, a fossil may become preserved in the rock formed from these sediments.



“ _____ ”
