Hello, boys and girls. We park naturalists are glad you're interested in "Discovering Your Parks". You are in for an exciting and interesting experience these next five weeks. If you attend all three meetings and trips with the naturalists, complete this Scrapbook, and hand it in to the naturalists after the last meeting, you will receive a Junior Naturalist Award.

Be sure to listen carefully to the naturalists, because they will tell you information which will help complete this scrapbook.

You will also be required to take two field trips on your own, without a naturalist leader. You will find the instructions for these two trips in this scrapbook. So put on your coats and rubbers and let's start "Discovering Your Parks!"
Who wears the green uniform? Your leaders for this program are the Park Rangers of the National Park Service. They are one group among the thousands of people who work for the Department of the Interior, the Nation's principal conservation agency.

As National Park Rangers, they are the guardians of our country's priceless scenic and historic heritage - the areas administered by the National Park Service. From Yellowstone National Park in Wyoming, to Katmai National Monument in Alaska, to the Lincoln Memorial right here in Washington - National Park Service areas reach "...from sea to shining sea."

The National Park Service areas are YOURS, to protect and to enjoy now and in the future.

What about the parks in Washington? They are cared for by a unit of the National Park Service, the National Capital Region. It is in these areas where you will be "Discovering Your Parks."
NO PARKS !??!

WHAT WOULD WASHINGTON BE LIKE WITHOUT PARKS?

Well, what would it be like? Where would you play baseball, have a picnic, sit under a tree and listen to the birds sing, roast weinies, hike in the woods, or discover some wildflowers?

Can you imagine the Nature Center without Rock Creek Park, the Jefferson Memorial without the Tidal Basin, or the Washington Monument without the Mall?

THIS IS WHAT WASHINGTON WOULD BE LIKE WITHOUT PARKS!

But we're lucky - we have hundreds of parks here. Where are they? Who takes care of them? What can you see and do in them? And what kind of plants and animals can you see there?
WHAT ARE PARKS?

PARKS = GREEN SPACES + PEOPLE

Let's see what a park is made of ... Green Spaces plus People. What is a Green Space? If we put one together, we will find out. We'll need:

- Some empty space: with air above and soil and rocks below.

- Some water: a stream or river, pond, pool or fountain, and rain.

- Plants: trees, shrubs, flowers, grass, and the like.

- Wildlife: birds, insects, mammals, and other animals.

There is one best way to put together a Green Space, just as there is one best way to put together a machine or a cake. We will use a triangle and call it The Green Spaces Triangle. Why use a triangle? Because a triangle has three sides, leaning and depending on each other, just like the three symbols above depend on each other. In this program, we will discover just how and why this is true.
How will we learn about the parks and the Green Spaces Triangle?

Take notes carefully on the paper provided by the naturalists. A naturalist always takes notes on the things he observes. He keeps the original notes and doesn't copy them over.

Put down the information below at the top of each sheet.

Your Name ________________________
Date ________________ Time ________________
Weather ______________________________________
Locality ______________________________________
Naturalist Leader ____________________________

NOTES

Use the rest of the sheet for notes on the walks you take. Write only on one side of each sheet. Keep your notes and paste them in the proper place in the back of your scrapbook.
"On-your-own" Trips

A naturalist should be able to take field trips on his own, using his own ability and brains to make observations on the area he is exploring. These "on-your-own" trips are designed to teach you to observe and to acquaint you with other National Capital Parks. There are three "on-your-own" trips included in this scrapbook. CHOOSE TWO of these and visit the areas assigned sometime before the time the scrapbook must be turned in. Complete the questions and projects on each trip you choose.
KENILWORTH AQUATIC GARDENS

Kenilworth Aquatic Gardens is open 8:00 a.m. until sundown, seven days a week. To reach Kenilworth Aquatic Gardens by auto, follow Kenilworth Avenue northbound to Quarles Street exit, bear right, turn left at first intersection and cross Eastern Avenue overpass, turn left to Douglas Street, then right on Douglas Street to parking area and office. Bus passengers reach the gardens by taking route U-2, alighting at Kenilworth Avenue and Folk Street NE., using the pedestrian overpass, and walking west on Douglas Street to parking area and office.
Water is important at Kenilworth Aquatic Gardens, both in the artificial lily ponds and the marsh and swamp around the edges of the ponds. The water here comes from the ___________ River which flows past the Gardens.

Do you see any evidence of pollution in the River? _____.
Evidences that man has been there? ____.
What evidences do you see? ________________________.

Do you see any evidences or clues of erosion in this park? What are they? ________________________
______________________.

What is the color of the River? ____________.
What was the color of the River when the Indians lived here? ______________. Why? ________________
___________________________.

In swamps and marshes, the soil is a little different than in a forest. It still needs the same basic ingredients as forest soil. But at Kenilworth, sand and soil is often carried into shallow water by the river. In the shallow water, this sand and soil sinks to the bottom and makes the water even shallower.

Marsh plants such as the cattail, rushes, and sedges, grow in this deposited soil. As they sprout, grow, and die, these plants add their material to the soil and it becomes richer.

Kenilworth Aquatic Gardens is an unusual area in National Capital Region.

Why do people visit the Gardens?

This park would not exist were it not for water.
Some plants are able to live right in the water, with their roots in the soil under the water. At Kenilworth, you can see many of these plants. Below are pictures of both land and water plants. Circle with a blue crayon or pencil, the plants you see which are growing right in or next to the water at Kenilworth.

**White Oak**

**Cattails**

**Spring Beauty**

**Sycamore**

**Virginia Pine**

**Arrow Arum**

**River Birch**

**Red Maple**
In Rock Creek Park, you are learning about plants that make up a forest. At Montrose Park in Georgetown, R Street and Avon Place, NW., you can see plants that have been planted by man, not by nature. Man controls nature in this kind of ornamental park. If you have chosen Montrose Park as one of the two park areas to visit, then complete this worksheet.

-Cutting the grass and trimming shrubs are just two ways man uses to control nature in this kind of park. List three more ways: ________________________________

______________________________

______________________________

-An ornamental park has many kinds of plants not native to the United States -- trees, shrubs, flowers, and lawns of grass. Can you find any plants here which are native to the United States? Name four: ____________________

______________________________

______________________________

______________________________

CAN YOU FIND THESE EXOTIC PLANTS IN MONTROSE PARK?

GINKGO - TREE
CHINA

AZALEA - SHRUB
ASIA

HORSECHESTNUT - TREE
SOUTHERN ASIA
ANIMALS OF MONTROSE

Do you see any wild animals in the Park?

Observe a bird, squirrel, or other wildlife for 5 - 10 minutes and note down the following:
- the animal's actions (whether it walks, runs, jumps, flies, hops, what it does while you watch it.
- the time and date you observe it.
- the weather at the time you see it.
- a description of the animal (size, shape, and color)

PASTE THE TOP CORNER OF YOUR NOTES TO THE BACK OF THIS PAGE...

These are the kind of notes professional naturalists take. Paste in your original notes.

Notice the uses which are being made of the park by people. Write down five uses you see on your visit:

__________________________________________
__________________________________________
__________________________________________

Page 12
For this trip, you may choose any one National Capital Region Park convenient for you to visit. It can be an ornamental park, a forest park, or a parkway. It may be in the District of Columbia or adjacent Maryland or Virginia, but it MUST BE a National Capital Park. Complete the following sheet on this park area.

- NAME OF NATIONAL CAPITAL PARK AREA ____________________________

- LOCATION OF AREA ____________________________________________

- WHAT ARE THE MAIN FEATURES OF THIS AREA?

- WHAT CAN PEOPLE DO THERE?

- NAME FIVE TREES OR OTHER PLANTS YOU FIND THERE.

- MAKE A WILDLIFE OBSERVATION AND NOTE DOWN THE SAME INFORMATION ASKED FOR IN THE MONTROSE PARK TRIP WILDLIFE OBSERVATION. PASTE YOUR NOTES ON THE BACK OF THIS PAGE.
LET'S START BUILDING THE GREEN SPACES TRIANGLE.

The symbol above stands for SPACE - with soil and water.

First, we'll take up *Water*

All living things need water to survive.

What happens when you forget to water the garden or house plants?

In nature, how do plants and animals get water? If you follow the instructions on the next page, you can see what happens to water that falls as rain on Washington.

**water and parks**

Water is important in your parks:

- as rain, to give water to plants and animals.
- as streams, lakes, and ponds, providing homes for many kinds of plants and animals.
- as pools, cascades, and fountains made by man, to beautify your parks.

Put together the project on page 15 to see more ways in which water is important in your parks.
"WATER"

Instruction Sheet

Cut out this circle along the heavy black line. Also cut out the little rectangles under each bit of writing, to make windows in the circle. Make a hole in the black dot in the center, with a pin.

Make a hole in the black dot in the center of sheet 2. Place the smaller circle over the one in sheet 2 and join them together with the paper fastener provided, so that the circle above moves 'round and 'round on sheet 2. Now you see what happens to water that falls on your Capital.

WHEN YOU COMPLETE THIS PROJECT, TEAR OUT THIS PAGE.
WATER AND YOUR PARKS

Water plays an important part in your National Capital Parks. Can you identify the parks shown in the pictures below? Water is important to each park because:

IN THIS PARK, WATER HAD AN IMPORTANT PLACE IN THE HISTORIC DEVELOPMENT OF OUR COUNTRY.

THIS IS ____________________.

WE CAN LEARN HOW WATER AFFECTS THE LIFE THAT LIVES IN IT, IN THIS PARK.

THIS IS: ____________________.

WE CAN STUDY HOW WATER CARVES THE ROCKS IN THIS PARK OUTSIDE OF WASHINGTON.

WHERE IS THIS?

WATER ALSO MAKES A PARK MORE BEAUTIFUL. RUNNING WATER WILL CATCH YOUR EYE AND IS PLEASANT TO LISTEN TO.

WHERE IS THIS?

A REFLECTION IN WATER ADDS INTEREST TO A MEMORIAL. WHERE IS THIS?

Sheet 2
Let's make some soil!

What are the ingredients? What is soil made of?

Now that we have these ingredients, we want to mix them the same way nature would.

- First, the ______ must be broken down into small pieces. This is done by water in two ways:

- Plants help break the ______ into smaller pieces, too. How? ____________________________

- To make the soil richer, add some dead _______

AND ________.

- To mix this all together, add some live animals.

What would you suggest? __________, __________.
In which park would soil be more likely to form? This is why we try to keep many of your parks in as natural a condition as possible and do not remove dead trees and other plants from the woods.
- Water wears away rock and soil. This process is called ____________.

- Sometimes water will move soil away from one place and leave it in another. This is called ____________.

- In your parks, a certain amount of either of the above is normal, but too much is bad. What happens when plants are removed from a hillside and the soil is exposed? _________________. Is this good? _____.
  Why do we plant trees or grass on bare soil in your parks? ________________________________.

- Water carves our landscape. When water runs downhill, it carries with it bits and particles of ______. These wear away the ground and carve valleys.

- In a forest, the dead leaves, trees, branches and smaller plants lie over the soil. This layer is called _____. It protects the soil. How? ____________________
  ________________. It also acts like a sponge and soaks up rainwater.

- Soil needs water in order for plants to grow in it.
  When dead leaves and plants lie over the soil, the soil stays wet and moist. If this layer is destroyed, what happens? ____________________.
HERE IS THE "GREEN" OF THE GREEN SPACES TRIANGLE.

Now that we have soil and water in our space, we can add

**Plants**

We have seen that plants must have soil and water to live. But green plants must have more than that, to survive.

A green plant can make its own food. The leaves contain __________, which makes the green color.

The leaf is like a factory; it makes food for the plant. But like a factory, it needs raw materials, water and a gas, carbon dioxide, from the air. To "get the wheels turning", the leaf must have this green stuff and also get __________ from the sun.

Now let's see how plants live together in the forest.
THE TREE

A GREEN PLANT

A tree needs _______ to survive.

This part of the tree is called _________.
What do the leaves do for the tree?

This part of the tree is called _________.
What is its function?

What must the soil contain, for a tree to grow well in it?

These are called ________.
What do they do for the tree?

Page 21
WHY DO WE CALL IT A FOREST COMMUNITY?

A human community is made up of people living together, in homes, offices, stores, schools, etc. A forest community is made of plants living together - trees, shrubs, smaller plants, dead leaves, logs, and other plant materials. Each of these is a part of the community.

In some kinds of parks, we try to keep a forest community the same as nature would. In these parks, we can study the forest community as we are doing in Rock Creek Park.

Other National Capital Parks do not have forests, but contain plants which man has planted and trees and shrubs which are not found in the United States naturally. This kind of plant is called an __________.

In these parks, the plants living together do not form a natural community of plants, because they have been placed there by man and are closely cared for, by him.
On the next page (sheet 1) is a picture of the forest in Rock Creek Park. Many of the plants shown were used by the Indians and pioneers or have some other relationship to man. Below is a list of the uses to which these plants were put.

1. Cut out the "uses" along the heavy black lines.
2. Paste them in the correct boxes which are outlined by a thin black line on sheet 2. One has been done for you.
3. Cut carefully along the heavy black lines around the three sides of each picture on sheet 1.
4. Fold on the dotted lines so that the small pictures make little windows with a "hinge" at the top.
5. Put dabs of glue in the circles on sheet 2.
6. Paste sheet 2 to the back of sheet 1 so that when you lift the flaps on sheet 1, you can read about the use of each plant through the window.

When you have completed this project, tear this page out of your booklet.
Man has affected the forest in many ways. He has used many of the plants for food, shelter, and other purposes. Sometimes he has introduced new plants, with disastrous results!

In Rock Creek Park, we can find many plants that man has used for different purposes or has introduced into the forest. Man can also use the whole forest - for his enjoyment!

By lifting the flaps with the pictures on them, you can discover the uses of each plant and of the whole forest.
INDIANS MADE CORD FROM THE BARK.

RED MAPLE

VIRGINIA PINE

YELLOW-POPLAR

DOGWOOD

JAPANESE HONEYSUCKLE

THE WHOLE FOREST
Wildlife

Many kinds of animals live in your parks here in Washington. Every animal has a place where it seems to live "best." This is called its habitat. What kinds of animals would you see in a forest habitat such as Rock Creek Park?

To these animals, the forest is home. They use the trees, shrubs, forest floor, old logs, and soil as places to live. Each animal prefers certain parts of the forest; for instance, a raccoon prefers a hole high in a tree as a place to sleep and rest.

We don't often see wildlife in the parks because wild animals are shy of people. How can we tell they are there, then? If you are a good wildlife detective, you can see clues in the parks that tell you animals have been there before you. For example, a mole leaves a long mound in the ground as it burrows through the soil.
"ROCK CREEK PARK ANIMAL PUZZLE"

Instruction Sheet

On the next page is a scene in Rock Creek Park. Several animals have visited this scene and have left clues behind. How many of these clues can you find?

Circle the clues with a pencil mark. Remember, people are animals, too!

There are also several animal homes in the picture. Below are some pictures of animals that live in these homes. Cut out the animals along the heavy black lines and paste them next to their right homes.

When you have completed this exercise, tear out this sheet.
A ROCK CREEK ANIMAL PUZZLE
To understand what happens between plants, herbivores, and carnivores:

1. Cut slits in Sheet 2 along the heavy black lines marked slots A, B, and C.
2. Cut out the triangle below along the heavy black lines.
3. Place this triangle behind the larger triangle on Sheet 2.

4. Insert tab A (fox picture) through slot A so that it covers the triangle with the words "Take Away Carnivores".
5. Put tab B through slot B and tab C through slot C.

Fold the pictures on the dotted lines.

Now you can see what happens in the natural world between these three factors.

WHEN YOU HAVE COMPLETED THIS PROJECT, TEAR OUT THIS PAGE.
Plants and animals are important to each other. Many animals eat plants. These animals are called _________.

Another group of animals eat other animals. They are called ___________. They both depend on plants to survive.

By lifting up any one of the pictures below, you can discover what happens when this relationship is broken.

What might "take away" the carnivores, or cause them to be destroyed? Name two things you think of: ___________, ___________.

What could destroy the plants? ___________, ___________.

Sheet 2
"WHAT HAPPENS?"

Instruction Sheet

To put together this project:

1. Cut out the triangle below along the heavy black lines.
2. Fold along the dotted lines.
3. Cut slots A, B, and C along the heavy black lines on Sheet 2.
4. Place the cut-out triangle behind Sheet 2.
5. Put tab A through slot A, tab B through slot B, and tab C through slot C.
6. The pictures should now cover the writing on the larger triangle.

WHEN YOU HAVE COMPLETED THIS PROJECT, TEAR OUT THIS PAGE.

(Peace 27)
Now we have completed the GREEN SPACES TRIANGLE.

WHAT HAPPENS if we take away any part of this triangle?

If you take away any of the three elements to this triangle by bending back any of the pictures above, you can read what will happen to the other two.
TO MAKE A GREEN SPACE A PARK, WE MUST ADD

**people!**

At last! We have a park!

We need people to use the park and people to protect it.

**use**

By this time, you are aware that there are many kinds of parks. Each park was established for a different purpose — to protect different things and to be used for different purposes by people. Good park use depends on using a park for the right purposes.

**protect**

The people who work in the National Capital Parks are important. There are many such people who work in this headquarters building in East Potomac Park. You may see others right out in the parks themselves. It is the job of all these people to protect the parks, so that you may enjoy them.
"USING YOUR PARKS"

Instruction Sheet

Here are several people enjoying their National Capital Parks. On the next two pages are two types of parks. Right now, no one is using them. Cut out the figures below and paste them in the park where their activity would be proper. One has been done for you.

WHEN YOU COMPLETE THIS PROJECT, TEAR OUT THIS PAGE. (Page 29-30)
THE "FOREST PARK" - NATIONAL CAPITAL REGION

These are proper activities for this kind of National Capital Park. They are also proper for many of your National Park Service areas throughout the country.

These activities help you enjoy the forest.
These are proper activities for this kind of National Capital Park. Would they be suitable for the forest park? This is why we have different kinds of parks for different kinds of use, in Washington.
Have you seen any examples of these good and poor uses yourself on your trips in the National Capital Parks?
On the next two pages are some pictures. On Sheet 1 is a scene of Rock Creek Park. The picture is empty now, but you can make a picture which will show you both good and poor park use of this scene.

Cut out the rectangle on Sheet 2 along the heavy black lines. On sheet 1, cut along the heavy black lines, also. When you have cut out the rectangle on Sheet 2, place it behind Sheet 1. Put tab A through slot A, tab B through slot B, tab C through slot C, and tab D through slot D. The shaded area of Sheet 2 should be behind Sheet 1.

Now you have a movable picture. If you pull tabs A and B to the left, you can see examples of poor park use. If you pull tabs C and D to the right, you can see examples of good park use.
On the next page are three kinds of park workers who protect and help the parks. They want to tell you something, but you must help. Cut out the three "speeches" below and match them with the correct figures on the next page. Then cut out the names of the three park workers and paste them under the correct picture.

My job is to keep peace and order in the parks, protect park users from accident or injury, and protect the parks from those who might damage them.

I help keep the park areas in good condition - part of my job is to plant new trees and flowers, cut grass, rake leaves, and maintain the parks as pleasant places to visit.

I make your visit more enjoyable by taking you on walks and giving you talks on nature and history in the parks.

PARK NATURALISTS AND HISTORIANS
MAINTENANCE
UNITED STATES PARK POLICE

WHEN YOU COMPLETE THIS PROJECT, TEAR OUT THIS PAGE.
WE HELP YOU IN YOUR PARKS

THE PARK VISITOR

Page 32
OUR GREEN SPACES

THE TWO MAPS OF WASHINGTON HAVE MANY PARK AREAS WHICH ARE OUTLINED BY DOTTED LINES. THE GREEN PAGE CONTAINS THE PARKS WHICH ARE OUTLINED.

CUT OUT THE GREEN PARKS AND PASTE ON THE MAPS IN THE CORRECT PLACES. THEN CUT OUT THE NAME OF EACH PARK (BELOW) AND PASTE IT ON OR NEAR THE PARK YOU HAVE PASTED ON THE MAP.

ROCK CREEK PARK
GLOVER-ARCHBOLD PARKWAY
BATTERY KEMBLE
DUMBARTON OAKS AND MONTROSE PARKS
FORT TOTTEN PARK
EAST POTOMAC PARK
WEST POTOMAC PARK
MERIDIAN HILL PARK
FORT MAHAN PARK
OXON RUN PARKWAY

LAFAYETTE PARK
THE MALL AND PRESIDENT'S PARK
FORT DUPONT PARK
FORT STANTON PARK
ROCK CREEK AND POTOMAC PARKWAY
C & O CANAL
LINCOLN PARK
ANACOSTIA PARK
THEODORE ROOSEVELT ISLAND

WHEN YOU HAVE COMPLETED THIS PROJECT, TEAR OUT THIS PAGE.

(Page 33-34)
WHEN YOU COMPLETE THIS PROJECT, TEAR OUT THIS PAGE.

(Page 33-34)
Our Green Spaces

NORTHWEST AND SOUTHWEST WASHINGTON DISTRICT OF COLUMBIA
Our Green Spaces

NORTHEAST AND SOUTHEAST WASHINGTON DISTRICT OF COLUMBIA
What else do your parks contain, besides forest parks? On the next page you will see labelled pictures of areas in National Capital Region other than wooded parks. Next to each picture is a blank space outlined by dotted lines. Below are descriptions of what these parks contain or preserve. Cut out these descriptions along the heavy black line and paste each description in its correct place next to the right picture. The first one is done for you.
The National Capital Parks provide green spaces for the people of Washington and the Nation. We have seen that these green spaces vary from forest parks to ornamental parks. They also -
Paste the top ½ inch of each page of notes you take on the three naturalist hikes, on the shaded place above. You may put the pages on top of one another.
"Happy Trails"

We park naturalists have enjoyed "Discovering Your Parks" with you.
We hope you have gained much knowledge from your visits to National Capital Parks. We hope you visit them all and visit them often.

If you're interested in joining us again, then come on some of the activities we list in our "Outdoor Program 1964". We will be glad to give you a copy of this program. So, until we meet again, "Happy Trails."
ATTENDANCE SHEET

After each trip with the naturalist, you will get an attendance card. Cut out the triangle on the card and paste it in one of the blank triangles below.

AFTER AWARDS NIGHT, cut the large triangle above on the heavy black lines. Fold on all the dotted lines. Fold the triangles with the pictures on the outside. Paste flaps A and "a" together, B and "b" together, and C and "c" together.

Now you should have a pyramid, with all the things that make up a park - green spaces, with space, plants, and wildlife, and people to use and protect the park.
Created in 1849, the Department of the Interior—America’s Department of Natural Resources—is concerned with the management, conservation, and development of the Nation’s water, wildlife, mineral, forest, and park and recreational resources. It also has major responsibilities for Indian and Territorial affairs.

As the Nation’s principal conservation agency, the Department works to assure that nonrenewable resources are developed and used wisely, that park and recreational resources are conserved for the future, and that renewable resources make their full contribution to the progress, prosperity, and security of the United States—now and in the future.