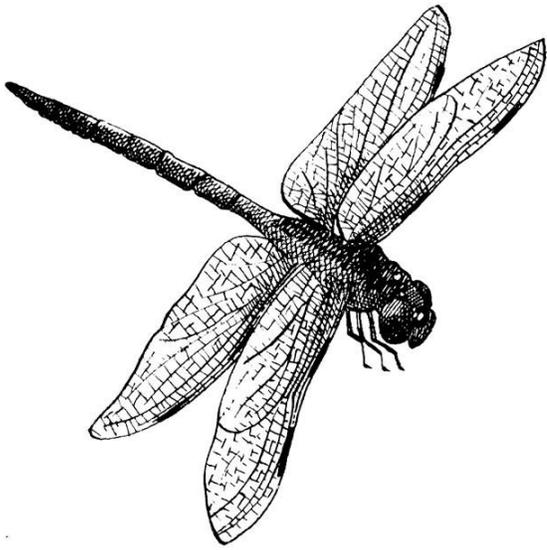


# Kenilworth Aquatic Gardens

National Park Service  
U.S. Department of the Interior



## Junior Ranger Activity Book

Name: \_\_\_\_\_ Age: \_\_\_\_\_

Welcome to the Kenilworth Aquatic Gardens Junior Ranger Program. The park is one of nearly 400 National Parks in the United States. National Parks are special places set aside by the American people to share our story with the world. Kenilworth Aquatic Gardens is a park where you can see the history of how we have used rivers and wetlands. As a Junior Ranger it is your job to:

- 1) Explore the park and its resources.
- 2) Learn everything you can about the park through the Junior Ranger activities and your own explorations.
- 3) Protect the park by sharing what you learn with others and treating the park with respect.

Safety is always important. Stay on the path. Avoid poison ivy. If you're not sure what a plant is, leave it alone.

Wild animals live in the park. Never try to approach, touch, feed or throw things at them. This is their home.

Complete the activities in the book and take your book to the visitor center for your Junior Ranger badge. Or you can mail it to Junior Ranger Program, Kenilworth Aquatic Gardens, 1900 Anacostia Dr. SE, Washington, DC 20020.

Kenilworth Aquatic Gardens is part of the National Park System. Every National Park preserves something special. Sometimes it's a natural place like the Grand Canyon or Assateague Island National Seashore. Some parks preserve a historical site like Fredrick Douglas House or Manassas National Battlefield. Some parks, like Yellowstone protect several different things.

Kenilworth Aquatic Gardens is the only park in the National Park System set up to preserve cultivated aquatic plants. A cultivated aquatic plant is a plant people grow in water. The park is also special because you can learn about how people have treated wetlands from times before European settlers came here up to the present day. Today, we know wetlands are super important.

A wetland is a place with regular flooding at least part of the year. Our wetland is tidal fresh water . Tidal means that the water get higher or lower throughout the day, just like the ocean at the beach. Freshwater means there is no salt in the water (different from the ocean, which is salty). A marsh is a wetland with lots of plants, especially grasses like cattails and wild rice. A swamp has trees.

Do you have a park near your home?

Describe that place or park and share why it is important to you.

Find out who takes care of the park (the National Park Service, the state, the county, or a private group).

What special things does your park protect?

What do you think would happen if the park wasn't protected?

# Explore your park

**Safety**  
**Hobby Space**  
**Scavenger Hunt**  
**Park Map**

# Find out more

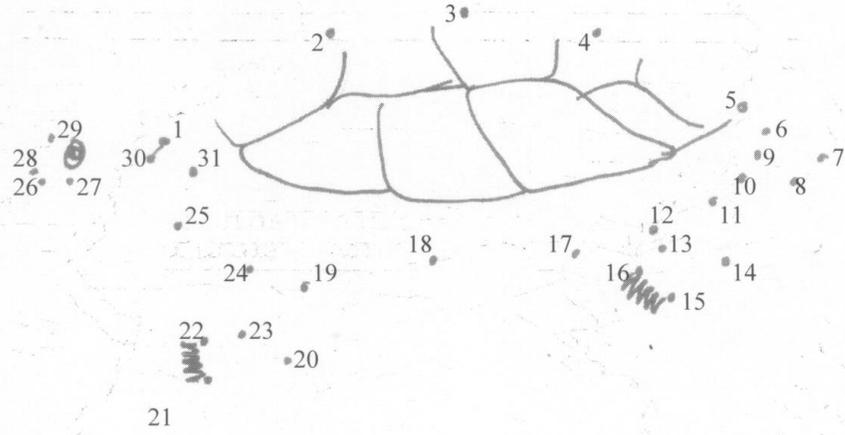
**Maze**  
**Wetland or Not?**  
**Time line**  
**Invasives**

# Protect

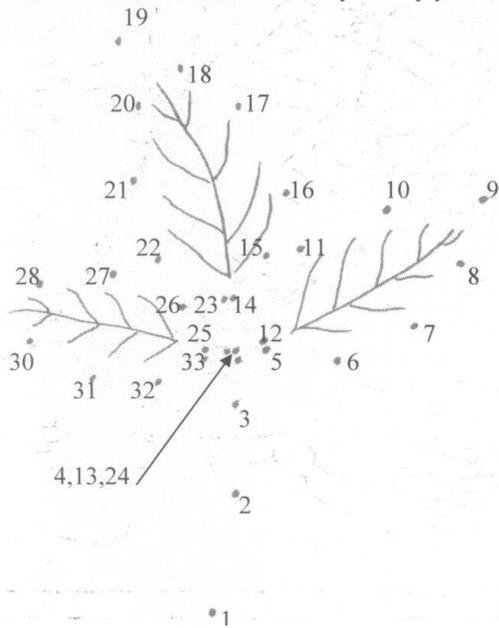
**Watersheds**  
**Restoration**  
**Pledge**

**Learn where danger to yourself and the park lurks.**

Throwing rocks in the ponds may kill wildlife you came to see. Connect the dots to see who lives at the bottom of ponds.



The second dot-to-dot will show you why you should stay on the paths. Leaves of three, let it be!



## Dream Hobby Space

In the 1880s Walter Shaw built the ponds that are now Kenilworth Aquatic Gardens. He started the gardens with wild water lilies from Maine, where he lived before coming to Washington, D.C. As the water lilies grew in number, Walter Shaw made more ponds. He built mud walls called dikes in the wetlands to keep the water inside when the tide went out in the marsh.

Do you have a hobby you wish you had lots of space for? If you had a lot of space of your own, would you change the space so you could practice your hobby? When Walter Shaw built his ponds, he took out plants that were living in the wetlands to make a beautiful garden that thousands of people come to visit every year.

Share your ideas about your hobby and the kind of space you might like for it with another person (maybe a parent, friend, or park ranger). Think about how changes you make might affect the plants and animals already living there, both in good ways and in bad ways. What changes could you make to your hobby space to make it special so people might like to save the space for years to come?

A large, empty rectangular box with a thin black border, intended for students to write their responses to the questions above.

# Scavenger Hunt

See if you can find at least 8 of these things in the park. Write the number on the map in the place where you find it. Some things can be found in more than one place in the park.

1. a view of the Anacostia River
2. beaver dam (this will look like a wall of sticks and branches holding back water)
3. a pond with lotuses (in summer)
4. a pond with water lilies (in summer)
5. a pond with native aquatic plants
6. U.S. flag
7. reconstructed marsh
8. historic marsh
9. National Park Service arrowhead symbol
10. poison ivy
11. small bridge (built by people over a water channel)
12. animal scat (droppings) or animal foot prints, Do you know what left them?
13. a boardwalk bench, sit down and quietly enjoy the view. Animals are more likely to come out of hiding places if they think there are no people around.



Water lily



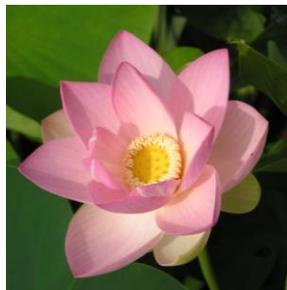
Cat tail  
(native plant)



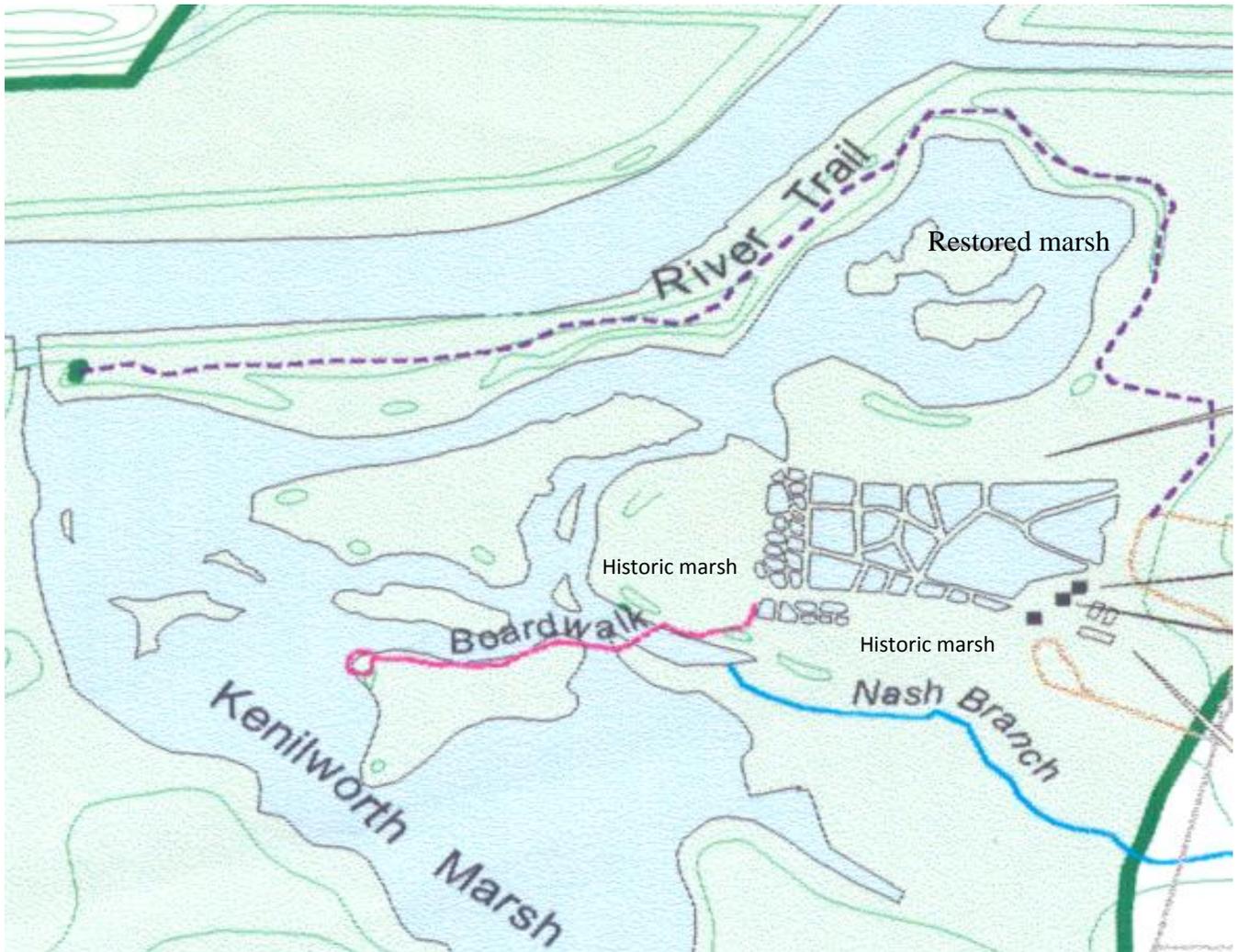
Park Service  
Arrowhead



Poison Ivy

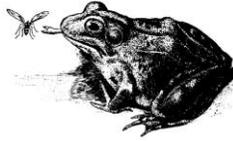


Lotus

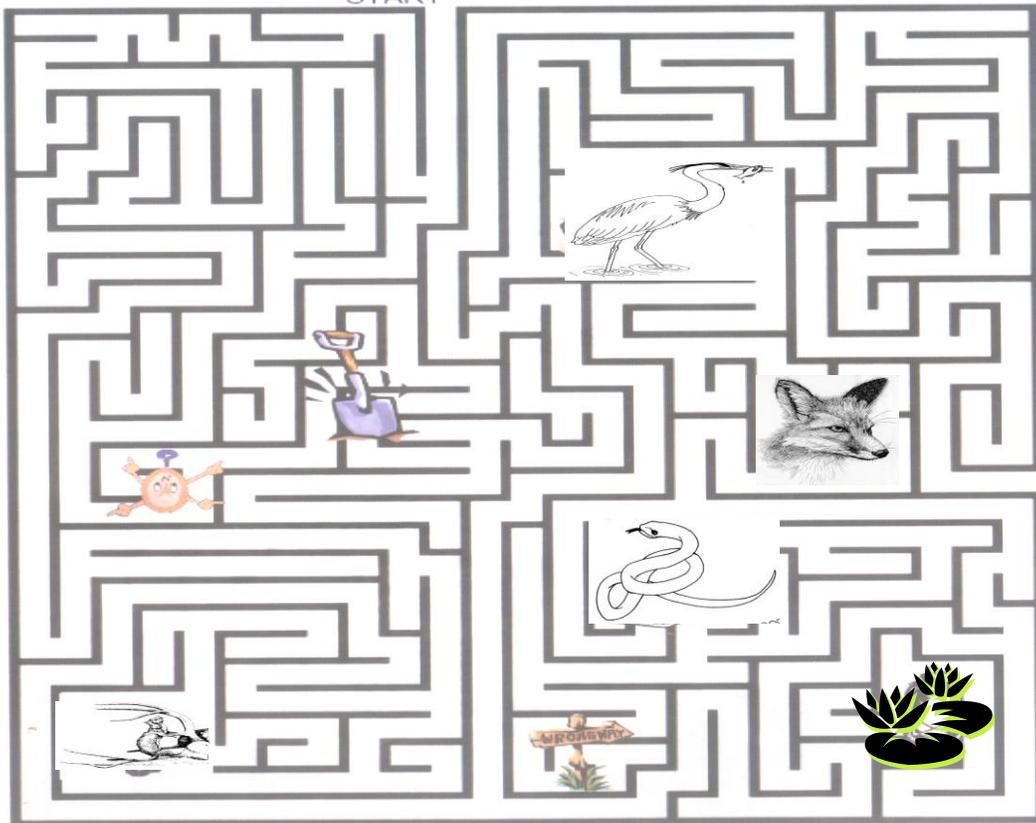


## Frog Maze

You can often see and hear frogs during the spring and summer at Kenilworth Aquatic Gardens. They are important because they eat insects like mosquitoes and flies and tell us what is happening in the water. Frogs also provide food for other animals like herons and snakes. Help the frog find his mosquito dinner without becoming dinner himself.



START



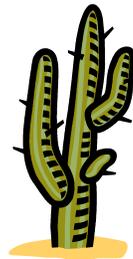
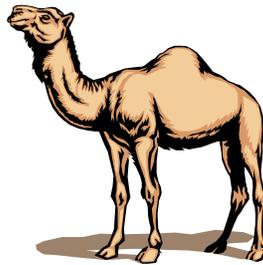
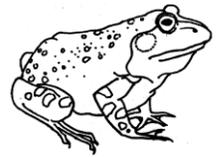
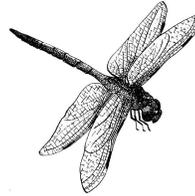
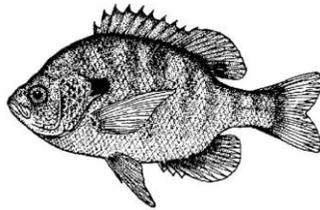
FINISH



## Who Lives in the Wetlands?

All living things need water to survive. Some living things need to live in water or very close to water. Some animals and plants can live further away from water. Living things may have adaptations (special body parts to help them survive) for life in water. Animals might have webbed feet or gills. Plants could have tall stalks to help them stay out of the water, waxy leaves to shed extra water, or special roots and stems to help the plant get air when the roots are covered by water.

Walk around the gardens and marshes and look at the plants and animals. Circle the plants and animals that are found in wetlands like Kenilworth Aquatic Garden.



## Alien Invasives

Many of the plants and animals that live at Kenilworth Aquatic Gardens have always lived here. Sometimes, plants and animals are moved to different places from far away. Sometimes this is done on purpose; sometimes by accident. When a living thing moves into a new area and grows in number faster than what is already there, it is called an alien invasive. A few of the plants and animals at Kenilworth Aquatic Gardens are invasives. Read the descriptions and fill in the blanks with the names from the box below.

Although I'm very pretty, do not be deceived.  
I've escaped from peoples gardens, and spread around my seeds.  
Wildlife likes variety, but when I move to town,  
My purple flowers will shortly be the only thing around.  
I am \_\_\_\_\_.

Even though I'm supposed to be here when I'm passing through,  
Humans have taught my ancestors that staying around's the thing to do.  
When migrating flocks visit, they're shortly on their way,  
But when we stay all year, we chase ducks and others away.  
I am \_\_\_\_\_.

Originally I'm from Asia, where I'm a tasty treat.  
But in the water here, I'm the one who eats.  
I'm named for my slithery looks, as I swim around the water.  
But all fish and frogs beware, because I'll be saying "got her!"  
I am \_\_\_\_\_.

My name means super speedy, because I grow so quick.  
If you try to grab me, my spines will give you a prick.  
My vines will spread all over, blocking all other plants' light.  
When birds carry my seeds around, I'll spring up over night.  
I am \_\_\_\_\_.

### Potential Answers

Mile-a-Minute  
Canada Geese  
Purple Loosestrife  
Snakehead Fish

## Aquatic Garden Timeline

For thousands of years, humans have used what is now Kenilworth Aquatic Gardens. Put the timeline in chronological order (arrange from what happened first to what happened last). Write the letter of each event on the correct date on the timeline. You may need to look at the displays and park brochure in the Visitor Center to help you.

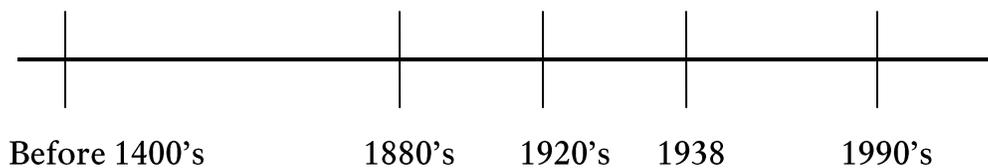
A) – The U.S. Army Corps of Engineers dredged (dug soil out of) much of the wetlands around the ponds. They did this to try to stop mosquitoes and to make swimming holes and playing fields. Instead they created mud flats.

B) – Walter Shaw began growing water lilies from his home in Maine in an old ice pond. His hobby grew and he made more ponds.

C) – The Federal Government purchased the land from the Shaw family and turned it into a National Park.

D) – The National Park Service reconstructed much of the wetlands surrounding the ponds, restoring habitat for many native plants and animals.

E) – Algonquins found all the food and supplies they needed to survive for thousands of years.



## Watershed Wonders

A watershed is land where all rain or snow melt runs into a body of water like a stream or lake or bay. Kenilworth Aquatic Gardens is in the watershed for the Chesapeake Bay, the Potomac River, and the Anacostia River. A drop of water that falls in the park will flow into the marshes and out to the Anacostia River. The Anacostia River empties into the Potomac River. The Potomac River flows into the Chesapeake Bay. All water flows into the ocean.

The map on the next page is a map of the Chesapeake Bay watershed. Look at where Kenilworth Aquatic Gardens is located on the map. Do you live in the Chesapeake Bay watershed as well? If not, do you know the name of the watershed you live in?

What it means to live in a watershed? How do your actions affect the other plants, animals or people living in the watershed? Using the space below, name 3 good things you can do to help keep the watershed clean. Name 3 things people might do that would hurt the Chesapeake Bay and the people, plants, and animals that depend on the Chesapeake Bay. What are 3 things wetlands do to keep the environment healthy (you might find this answer in another activity in this book)?

What good things can you do?

- 1.
- 2.
- 3.

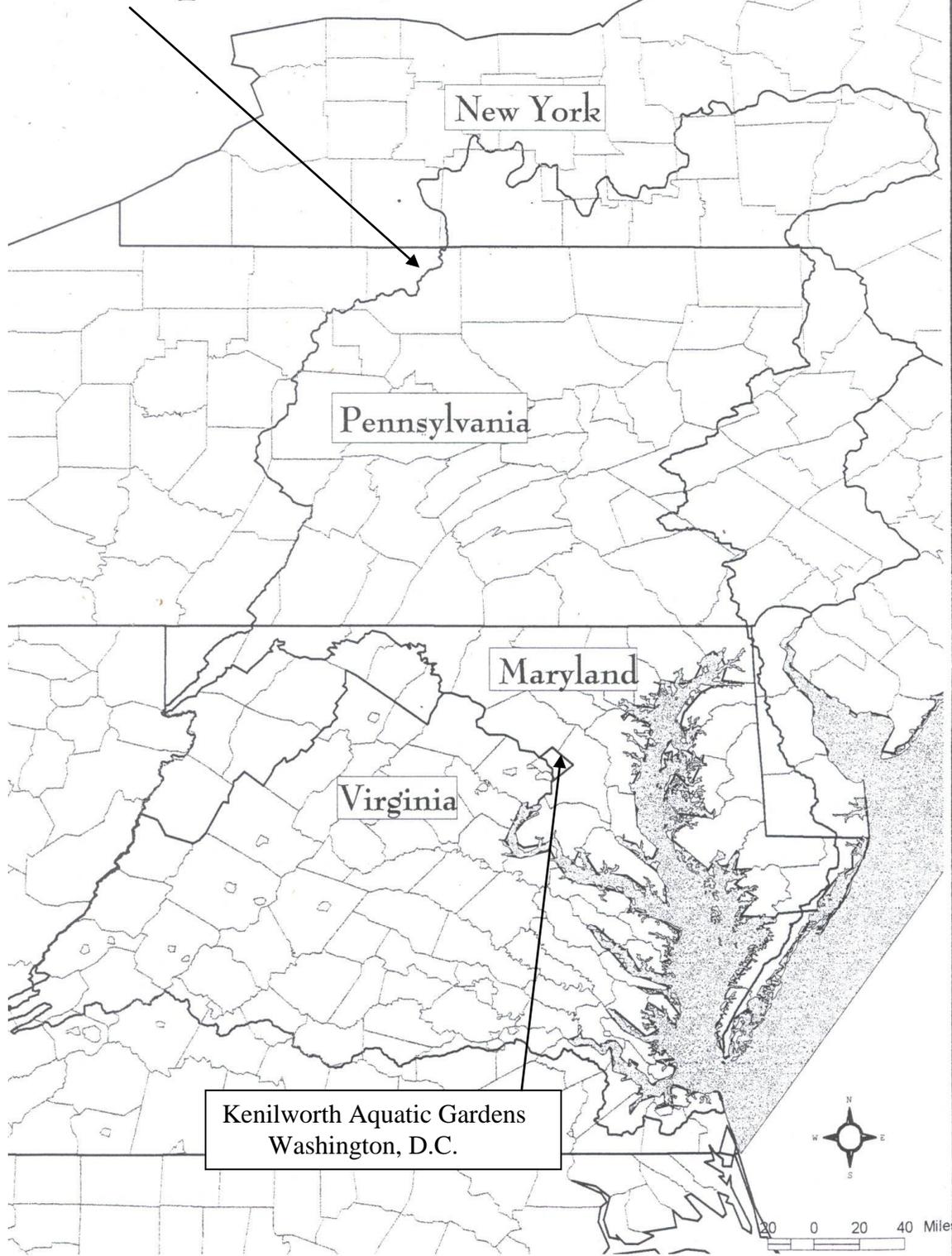
What harmful things do people sometimes do?

- 1.
- 2.
- 3.

What are 3 important things wetlands do for the environment?

- 1.
- 2.
- 3.

# Chesapeake Bay Watershed



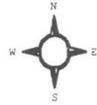
New York

Pennsylvania

Maryland

Virginia

Kenilworth Aquatic Gardens  
Washington, D.C.



0 20 40 Miles

## Restore the Wetlands

Walk out to the end of the boardwalk to look at the wetlands. In the 1920's a group that does work for the American people, called the Army Corps of Engineers, dug out these wetlands. The plan was to speed water flow in the Anacostia River, stop mosquitoes from living there, and make a place to swim and fields for sports.

Today we know wetland plants help clean polluted water, and stop dirt from going from the land to the water. Wetlands are habitat for animals (including people). Wetlands absorb flood so homes and businesses near rivers are less likely to be damaged. Also, Wetlands store water needed by plants, people, and animals when there are droughts and the land gets very dry.

Because wetlands are so important, in 1991 the National Park Service rebuilt a small part of wetlands surrounding Kenilworth Aquatic Gardens. Using the wetlands around you at the end of the boardwalk as your guide, draw a picture of the plants that make up a healthy wetland. The following examples of wetland plants common in this area will help you with your drawing. Different plants like to be on low land in the water, or on high land with drier roots. Make sure your plants will be happy with their water level.



Nuphar – low land level plant (likes deeper water)



Trees – high land level (likes dry roots)



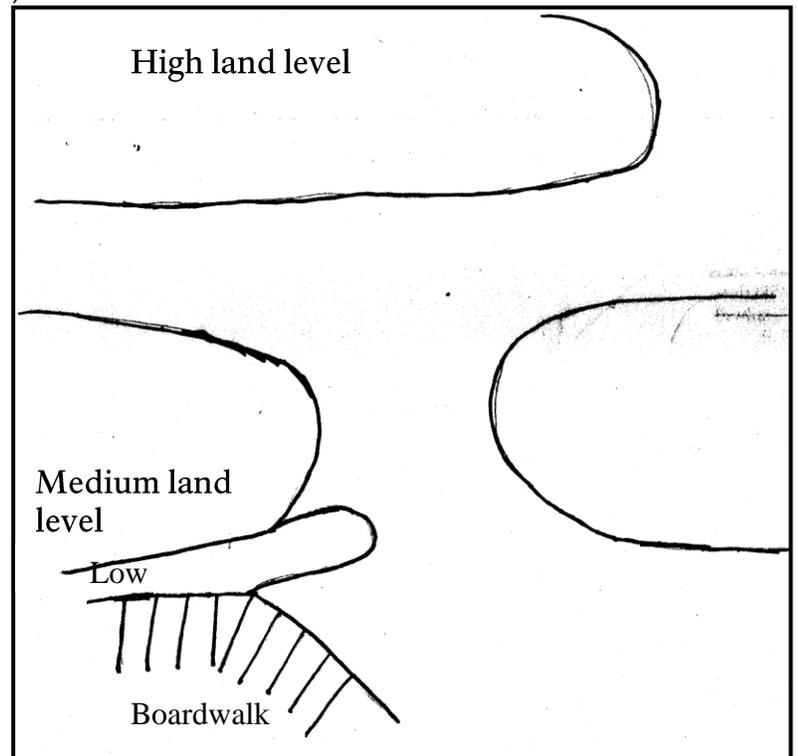
Pickerel – medium to low land level



Cattails – medium to low land level  
Low land level



Wild rice – medium to low land level



Congratulations!

When you are finished with all the activities take your Junior Ranger activity book to the visitor center and find a Park Ranger. Say the Junior Ranger pledge and collect your badge.

**Junior Ranger Pledge**

I promise to explore the wonders of Kenilworth Aquatic Gardens and all the National Parks and nature around me; to learn the importance of every living thing; to live every day as Earth's best friend; and to help others do the same.

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Junior Ranger's Signature      Date

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Park Ranger's Signature      Date

Great Job! Have fun continuing your explorations of this park and others across the county.