

## Rice Rangers at Home

Wetland-themed activities for students and their caregivers to complete at home.



### Early Learners (K-2<sup>nd</sup>):

1. Watch the Magic School Bus episode on wetlands, called “The Magic School Bus Gets Swamped”. You can watch on:

- Daily Motion: <https://www.dailymotion.com/video/x6sle8k>
- YouTube: <https://www.youtube.com/watch?v=oi6UpCZO-q8>

What types of animals did the class find in the wetland near their town? What were some of great things the wetland did for the town? Why did the town decide to keep the wetland and build the mall somewhere else? We recommend watching with your grownup or older family member if you can – they can help you answer some of these questions!

2. Read the book “Henry the Impatient Heron” about a young great blue heron growing up in wetlands along a river. To access the book, visit [this webpage](#) and enter the password May15. You can choose to read the book on your own by clicking the blue buttons; or choose to have the book read to you by clicking the green “play” button in the bottom center of the page.

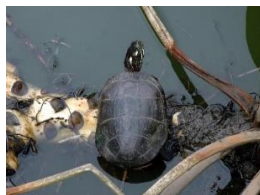
- What are some of the things Henry wanted to eat? Are they things that you would want to eat? Create a table that shows what you like to eat in one column, and what Henry likes to eat in another column. You can use words or drawings.
- Has something ever been hard for you to do? What was it? If you practiced, did you get better? Did anyone help you, or did you figure it out on your own? You can write or draw about this, or tell the story to someone who lives with you.

3. Wetlands provide a home, or [habitat](#), for all kinds of animals! Visit [this webpage](#) to explore real photos of animals that live in wetlands. Although the animals documented on this webpage live in the wetlands of North Carolina, many of them also live in the wetlands found along the Anacostia River.

- Using crayons, pencils, pens, markers, or whatever you have at home, draw your own picture of a wetland and be sure to include some of the animals on the webpage as inspiration!
- Create a wetland animal using natural materials you find outdoors; or re-use recyclable materials from home.



- If you have a printer at home, you can print out [this image](#) of a wetland and color it. If not, you can use it as inspiration for your own drawing!
- Pretend to be a wetland animal! Can you:
  - Balance on one foot like a great blue heron or great egret?
  - Leap with strong back legs like a southern leopard frog?
  - Tuck yourself inside your shell like a painted turtle?
  - Slither along the ground like a northern water snake or snap your claws shut like a crayfish?
  - Flap your wings and fly like a duck, goose, or dragonfly?



## Upper Elementary (3<sup>rd</sup> – 5<sup>th</sup>):

1. Watch the Magic School Bus episode on wetlands, called “The Magic School Bus Gets Swamped”. You can watch on Daily Motion ([click here](#)) or YouTube ([click here](#)).

- In this episode, Carlos and Janet debate whether or not a shopping mall should be built where a wetland current exists. Create a chart that shows both the pros and cons of constructing the shopping mall in place of the wetland. Who won the debate, and what did the town decide to do? Why?
- What were some of the benefits of wetlands that Carlos and the class discovered once they visited the wetland up close? Create a list of at least three benefits of wetlands.

2. One of the great things that wetlands do is filter water. Check out [this image](#) that shows how wetlands help to clean water. Then, visit [this website](#) to learn how to build your own filter with materials at home! Watch the video to understand how to build a filter and set up an experiment to see what filter materials work best. You don't have to follow the exact procedure on the website. Just have some fun! When you are building and testing your filter:

- If you don't have two-liter bottles, that's okay. Any size plastic bottle will do.
- If you don't have mesh or cheesecloth, that's okay. You can use a scrap of fabric from an old t-shirt, dish towel, etc.
- If you don't have activated charcoal, that's okay. Test other items from around your home instead like cotton balls, pieces of sponge, soil, pebbles, extra coffee filters, tissues, etc.
- If you don't have an aquarium aerator to mix up “dirty” water, that's okay. Grab a bunch of household items like coffee grounds, spices, dish soap, shampoo, baking soda, vinegar, food coloring, etc. To mix it all up, you can use a spoon or chopstick.



3. A food web is a diagram we can use to better understand the relationships between living things. Who eats who? Where does that energy go? Watch [this video](#) to learn about food webs. Next, visit [this webpage](#) to complete a wetland food web. If you have a printer at home, you can print it out, fill it in, and color it. If you don't, no worries! You can create your own version with drawings and words.

4. Another great thing about wetlands is that they provide a home, or [habitat](#), for many different kinds of plants and animals! Using materials you can find at home, create a diagram (2-D drawing) or diorama (3-D model) of a wetland habitat. Now that you've learned more about wetlands, what plants and animals will you include? This [wetland word search](#) provides some ideas! You can also use our “[Beginner's Field Guide to the Plants and Animals of the Anacostia River](#)” as inspiration when deciding which plants and animals to include!



**BONUS:** This “[Amazing Wetlands Activity Book](#)” from the Delaware Department of Natural Resources has some fun activities, mazes, and coloring pages to explore!

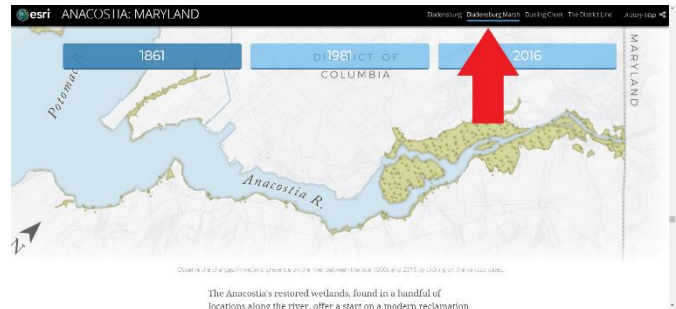
[This episode](#) of Bill Nye the Science Guy is dated in style, but still has a lot of good, relevant information about wetlands. Feel free to check it out!



## Middle and High School (6<sup>th</sup> – 12<sup>th</sup>):

1. What is a wetland, anyway? Learn more about wetlands in general on [this webpage](#) and freshwater wetlands specifically in [this video](#). Write a short paragraph that explains what a wetland is and what makes a tidal, freshwater wetland – the type of wetland found along the Anacostia River - unique!

2. The Anacostia Watershed Society is engaged in the work of restoring tidal, freshwater wetlands along the Anacostia River. Why? Wetlands along the Anacostia River have seen better days. Explore how and why wetlands have disappeared on the Anacostia by visiting this [webpage](#). You can skip ahead to see a visual representation of how the wetlands on the Anacostia have changed over time by clicking on “Bladensburg Wetlands” on the top right (see adjacent image). Visit [this webpage](#) and [this webpage](#) to learn more about what AWS is doing. We have based our work on the amazing progress happening at Patuxent River Park along the Patuxent River. Learn more about their successes by visiting [this webpage](#) and watching the video.

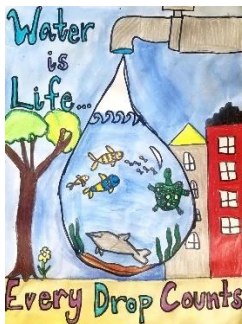


3. Wetlands provide a number of benefits, some of which you have heard about already if you’ve visited the links above. Check out the websites below, and then write a persuasive argument as to why we should preserve wetlands. Aim for at least three paragraphs.

- [This webpage](#) from the organization EarthShare provides a list of the benefits of wetlands.
- [This article](#) from Scientific American discusses why wetlands are important.
- [This handout](#) from the Environmental Protection Agency outlines the economic benefits of wetlands.
- [This webpage](#) from the National Park Service explains why wetlands are important.

4. Watch [this video](#) to learn more about food webs and how energy moves from one organism to another. Next, explore the wetland animals featured on [this webpage](#) and watch this video about [wetland wildlife](#). When you feel like you have a better understanding of the types of animals that live in wetlands, create your own version of a wetland food web using crayons, markers, pens, or other materials you have at home. Be sure to use arrows to indicate the direction that energy flows.

5. Each year, the New York City Dept. of Environmental Protection holds a “water resources” art and poetry competition. Learn more about the competition by visiting [this webpage](#), and explore some of the artwork and poetry created by students by visiting [this webpage](#) (keep in mind that the artwork was done by students of all ages). Although the Anacostia Watershed Society will not be holding a wetland art and poetry competition, please create your own wetland-themed artwork or poetry that highlights the beauty and benefits of wetlands.



## All ages

Check out the wildlife cameras that document the behavior of [osprey](#), [herons](#), and [eagles](#) in the area. These links take you to live feeds – so you can see in real time what wetland animals are doing when they are on the nest.

LEARN MORE about the Anacostia Watershed Society’s environmental education programs by visiting: <https://www.anacostiaws.org/what-we-do/education.html>