

Phenomenal Seasonal Phenomena

By Jorge Bogantes Montero, Program Specialist: Natural Resources

Wintertime may seem a sleepy time of year for wildlife in the Anacostia River watershed, but thanks to decades of the Anacostia Watershed Society's work to restore important habitat around us, we see a lot of activity in the colder months. Whether it's because we live at their wintering grounds or because they are starting to prepare for the spring, many varieties of species show us unique aspects of their lives in the early months of the year.

There are over a dozen species of ducks and other water birds that spend the winter in the watershed, visiting us from the north to escape harsher temperatures. The eye-catching Common loon, typically associated with northern latitudes like the Maine wilderness, can be seen sporadically wintering in DC waters. Other visitors with very attractive plumages that we see commonly this time of year are buffleheads, northern shovelers, and hooded mergansers. Northern shovelers are particularly loveable with their spoon-shaped bill adapted for scooping and filtering tiny crustaceans and seeds from the water.

In January, male white-tailed deer start experiencing hormonal changes that make them lose their antlers. This is a sure sign that the long and strenuous breeding season has finally come to an end, and it's time for them to focus on survival for the rest of the winter.

As sunlight hours continue increasing day by day in February, biological clocks tick away in the woods and wetlands of the watershed. With the first thunderstorms in February, amphibians rush to seasonal pools, with wood frogs and mole salamanders being the first ones to get to their breeding grounds. These salamanders assemble in seasonal pools in what is known as a salamander congress.

At the same time, in the non-tidal wetlands of the watershed, some odd flowers start budding from the mud, and even the ice and the snow. These blossoms are from skunk cabbages, one of the very few plant species capable of producing heat through cellular respiration to melt their way through the icy soils.

This time of year, if you live near the woods you may also hear some pretty strange noises at night, some so disturbing you may think a crime scene is unfolding outdoors. Chances are, it's the red foxes seeking mates in the peak of their breeding season.

Are you interested in taking a deep dive into the natural world of the Anacostia Watershed? Consider becoming a Maryland Master Naturalist, and read more about the program on page 7.



Photos, from top: The first thunderstorms of late winter mean the onset of breeding season for spotted salamanders; Skunk cabbage flowers emerging in winter; A pair of northern shovelers dabbles at a pond near the Anacostia River.

President's Corner

by Jim Foster, President

Happy New Year! This year marks a new decade – a decade when the Anacostia River returns to being swimmable and fishable, thanks to you.



For the past three decades, the Anacostia Watershed Society has been raising awareness of the river and the communities of the watershed, building on the great work of our founder Robert Boone and my predecessor Jim Connolly. Now that the Anacostia River is home to the World Series Champions, it's all about baseball – Robert and Jim were our starting pitchers and I get the honor of being the closer!

Thanks to the great AWS staff and Board for a year of hard work and wisdom. I'd like to express my gratitude to former Vice Chair Allan Platt and Secretary Greer Goldman, who contributed a combined total of 18 years of board service! *And thanks to you all for advocating for the river, volunteering your time, and donating to support our work!* Again and again, as we took folks out on our boat tours, we saw jaws drop and heard "I had no idea!" That's what keeps us going.

And even on the very hardest issue we still have to resolve – contaminated sediments – we've seen major progress this year. The various government agencies, corporate interests, and advocacy groups have agreed on a framework for moving forward together. You can read more about where we are on page 3. We've identified immediate action we can take at known hot spots, continue to do landside remediation at the main sites, and monitor the health of the fish to measure our progress.

Further good news is that the Chesapeake Bay Program has been funded at \$85 MM thanks to efforts of our Choose Clean Water Coalition partners! This important program helps pay for projects to reduce nutrients and sediments in many places in the Chesapeake watershed, including in the Anacostia River.

As we look forward to the next decade of success, I'm proud to be a small part of this amazing collection of people working together! Onward!

For the River,





Anacostia Watershed Society

AWS is a nonprofit organization whose mission is to protect and restore the Anacostia River by bringing partners and communities together to achieve a clean and safe Anacostia River for the benefit of all living in its watershed and for future generations.

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Chemical Cleanup: The Final Step to a Fishable and Swimmable Anacostia

By Jim Foster and Emily Conrad, Director of Development



The Anacostia River's health continues to improve, supporting rebounding populations of bald eagles, shad fish, river otters, and freshwater mussels. In the last decade, significant progress has been made to reduce stormwater runoff, bacteria from combined sewer overflows, and trash, like plastic bags and Styrofoam, from entering the river. However, the hardest work to clean up toxic contamination from decades past is still ahead of us.

Like most urban rivers, the Anacostia has a long history of industrial and agricultural uses, which has resulted in chemical contamination. Since 2014, the District Department of Energy and Environment (DOEE) has been coordinating the Anacostia River Sediment Project to determine the levels of contaminants in the river that pose risks to humans and wildlife and

develop a cleanup plan to remediate them. The contaminants of concern include polychlorinated biphenyls (commonly known as PCBs), polycylic aromatic hydrocarbons (commonly known as PAHs), dioxins, and pesticides. The sites on the river that have the highest level of chemical contamination are the Washington Navy Yard, the former site of the Washington Gas & Light station, the Pepco Benning Service Center, the Kenilworth Park Landfill site, and Poplar Point.

In December 2019, DOEE released the proposed plan for cleaning up toxic contamination in eleven "early action areas" within the main stem of the Anacostia River, Kingman Lake, and the Washington Channel. You can view the plan online at anacostiasedimentproject.com and submit comments until March 2, 2020.

Saturday April 25, 2020 9AM-12PM

Restore the Anacostia
River, help stop pollution,
and celebrate the 50th
Anniversary of the day for
the environment
at the DC-area's largest
Earth Day Cleanup!

Volunteer Registration opens March 2



#AWSEarthDay

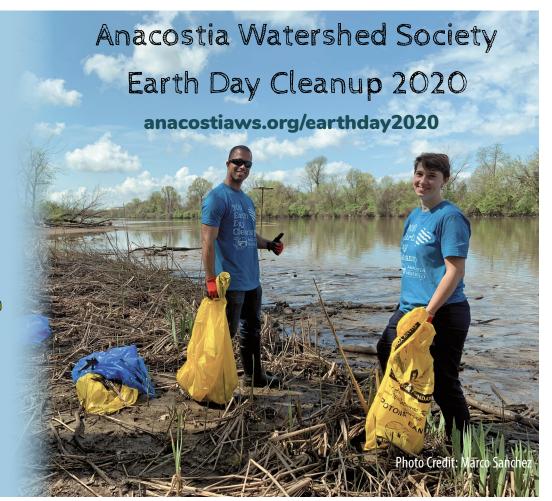


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7

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From Pick-up to Policy: AWS's Trash Solutions By Robinne Gray, Gift Officer

Most of us try to spend as little time as possible dealing with trash – we take out the weekly garbage, and perhaps help pick up trash at community cleanups. Yet several times a year, intrepid volunteers get up close and personal with piles of garbage retrieved from trash traps on the Anacostia River. They are performing an important service by sorting every piece of detritus into categories and then recording by weight, volume, and count. The data they collect is used to track changes in the type and volume of trash over time, and most importantly to formulate and advocate for smart policy proposals to reduce trash in local waterways.

The trash sorting process can be eye-opening. Amid the twigs, fallen leaves and algae are the remnants of convenience and disposability, from the "vices" of beer cans and cigarette packs to the purported "healthfulness" of bottled water. Sorting trash from the river is a kind of crash course in the underbelly of consumerism: foil juice packs and snack bags, plastic straws, plastic utensils and condiment packets, styrofoam plates and fast-food bags.

Most trash in the Anacostia River doesn't get there by people tossing it

in directly; typically, trash from the land is washed in by rain or blown in by wind. Some is stray garbage that inadvertently becomes litter when it escapes from garbage trucks or unsealed trash cans. And some is the very

definition of litter, thrown from car windows, left behind on the riverbank, or illegally dumped in the woods.

There is some good news. Gone are the days when trash floating on the Anacostia River was "so thick you could practically walk across on it" as some local residents have recalled. On a good day – and there are many such days! - we can count on one hand the pieces of trash we see floating on the river. Other days, typically after a



Nash Run Trash Trap after a storm in May, 2014

rainfall, trash makes its way into the river directly and via the storm drain system. Much of it will remain in the river, sinking to the bottom or washing back up on shore. The rest will slosh back and forth for weeks with the tide until it eventually floats downstream to the Potomac River and the Chesapeake Bay.

The Anacostia River is one of only

Strategies for Change: Removal and Reduction

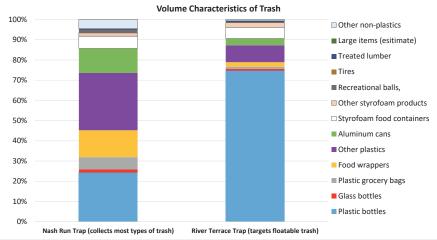
two rivers nationwide to be held to a standard of trash reduction or "trash diet," formally known as a TMDL (Total Maximum Daily Load). Ever since our founding 30 years ago, the Anacostia Watershed Society has been working to address the river's trash problem in two main ways: removing trash from the river, and working to reduce the amount coming into the river.

In the early days, we pulled the largest items out of the river: appliances, cars, and thousands of tires. These days, we rarely find washing machines or autos, but smaller items such as plastic bottles and chip bags have become much more common. The underground Anacostia River Tunnel, part of DC Water's Clean Rivers Project, has been



Volunteers sort trash and debris at Nash Run in December, 2019





Masaya explaining trash reduction efforts; closeup of updated graph from Jan 2020

capturing much of the trash - 3200 tons so far - from storm drains since it opened in 2018. Every April, hundreds of community volunteers converge on the Anacostia and its tributaries to pick up trash during AWS's watershed-wide Earth Day Cleanup.

And throughout the year, trash traps placed strategically along the river quietly collect trash from streams and outfalls. Masaya Maeda is AWS's Water Quality Specialist and longest-term staff member, and for over a decade he has been rigorously categorizing and reporting what our traps have collected. He even created a unique, angled model of trash trap. Commercial trap designs typically skim off only trash floating on the water, but most river trash isn't visible from the river's surface. Masaya's economical design uses the flow of the river to capture trash suspended in the water or

bumping along the bottom. That way, he and the volunteers get a more complete picture that includes floating and non-floating trash. Plastic bottles, those common eyesores, are only third in the count of the trash categories found. Number two is food wrappers. And number one? "Other plastic" – things like straws, bottle caps, cellophane, and plastic packaging. But thanks to Masaya and our volunteers, some items aren't as common as they once were.

It's one thing to pull trash out of the river, and another to keep it from entering in the first place. Clean-ups are straightforward and immediate, but changing individual behavior and societal practices means playing a long game. AWS's years of consistent, methodical data collection have helped to bring about and reinforce effective trash-reduction policies in the three

political jurisdictions that the Anacostia touches:

- A five-cent plastic bag fee has been adopted in both the District of Columbia and Montgomery County. (A statewide plastic bag ban has been proposed in the state of Maryland).
- The use of styrofoam takeout containers is now banned in all three jurisdictions: DC, Prince George's County, and Montgomery County.
- Most recently, the District put a plastic straw ban in place, and a similar bill has been put forward in Prince George's County.

Future Directions

What's on the horizon for AWS's trash reduction work? Plastic bottle and other beverage container waste is a top concern. Working with our community partners, AWS is advocating for a bottle-deposit bill across the jursidictions that would offer consumers a cash incentive to return their bottles to appropriate facilities. Ten states in the U.S. now have some form of bottle bill in place. Microplastics are an emerging concern, and we are in the process of having a sample of our freshwater mussels tested to see whether or how they filter these microscopic bits of broken-down plastic.

Volunteer with Masaya to experience this work first hand! Learn more on our calendar at anacostiaws.org/ calendar



Beaver swims the Anacostia River; Photo credit: Krista Schlyer

Choosing the Course of the Saturday Environmental Academy By Catherine Estes, Program Director of the Saturday Environmental Academy

The Saturday Environmental Academy (SEA) has a unique theme each academic year that connects all of our field trips and activities together for our middle schoolers. Ever wonder how we choose them? Themes are chosen based on many factors. We consider what students have focused on in recent years (since several students return from semester to semester), what issues are most prevalent in the news, what themes may not be covered as in depth in their schools. At the end of each semester, we also ask students for their suggestions for future field trips and activities. All of these factors influence our final choice....which this academic year is... "Climate Change: Impacts and Solutions in the Anacostia Watershed!"

This past fall, SEA students engaged in this theme with eight weeks of activities, including:

- Visiting Eastern Market to make the connection between food choices and climate change. Students interviewed farmers about where and how they grow their food, how far they travel to get to the markets, what sources of energy they use, etc. Students also loved that they got to purchase some healthy treats and share them with the group.
- Building on our market trip with a garden workday at the Farm at Kelly Miller. Students had a blast planting, weeding, watering, and mulching as they deepened their understanding of the connections among land use, stormwater retention, watershed protection, and climate change.
- Helping AWS with meadow restoration work at the confluence of the Anacostia River. Students learned about the importance of meadow habitat to pollinators (who are greatly impacted by climate change) and worked to remove invasive species, plant native seeds, and create houses for Mason Bees.



Maryland Master Naturalists: Bringing Nature to You, All Year Long Now

By Maddie Koenig, Senior Environmental Educator

Two years ago, we were excited to be able to offer the first Maryland Master Naturalist training in Prince George's County! A state-wide program run through the University of Maryland's Extension Office, the training educates and prepares interested individuals in becoming advocates for natural resources in the state of Maryland.

Now that two years have passed, we have seen our first cohort of individuals become officially certified Maryland Master Naturalists! This means they have completed sixty hours of training and forty hours of volunteer service at AWS. We've also seen our second cohort complete their training and are excited to see what they will help us accomplish in the coming year.

All together, these dedicated individuals have contributed more than 1,100 hours of volunteer service to AWS, assisting with everything from constructing baskets for mussel restoration to creating engaging materials for community festivals; from helping manage second graders on field trips, to assisting with water quality monitoring.

The hard work of these individuals cannot be underestimated!

Going forward, we will be making a key change to the structure of our program. Instead of offering the sixty hour training portion of the program on Saturdays each summer, we'll be offering this portion of the program on one Saturday each month for the duration of a year.

We are hopeful that this change will allow for a greater diversity of individuals to participate, as we know it can be tough to commit to every Saturday during the summer months. We are also hopeful that this change will help participants gain a better

monthly for a year.



Submit applications February 1st - March 31st via email to

6204 ext. 112.

mkoenig@anacostiaws.org.

understanding of the depth and
breadth of work we do throughout the

year; better preparing them for their

forty hours of volunteer service.

Our next training will run from June
2020 – May 2021. If you are interested,
please contact Maddie Koenig at
mkoenig@anacostiaws.org or 301-699-

Making a Difference, One Capstone Project at a Time in WSA

By Reyna Askew, Manager of Community-based Restoration

It takes a village to raise a child, and it takes an army of Master Stewards to protect and restore the natural ecosystems in and around the Anacostia River.

Focusing on stormwater management and pollution prevention in 8 class sessions, participants learn about the threats to water quality and wildlife in the Anacostia River, and then learn strategies to protect them such as installing green infrastructure BMPs (best management practices) including rain gardens, bioretention swales, bayscaping, and more. Participants are equipped with the tools to take action in their communities. Upon completion of the course, they take part in capstone projects to enhance their learning and address stormwater issues locally.

This year, our Master Watershed Stewards developed creative and innovative projects to impact their communities and the Anacostia Watershed.

Watershed Steward, David Corsar, used art as his theme to fight pollution. David worked with a local artist, Evan Johnson, and the DC Family and Youth Initiative to install 3 storm drain murals in the Anacostia neighborhood in southeast Washington, DC. David worked with the artist to provide designs and guidance of the project and coordinated with DC Family and Youth Initiative to include youth from their programs in the painting day. Even though rain threatened to thwart this event, our enterprising watershed steward was able to use the inclement weather as a teaching moment by painting rain barrels and teaching youth about the importance of stormwater management.



Master Steward David Corsar with his student helpers

Read more about the 2019 capstone projects on our blog at: anacostiaws. org/blog/capstone-review-2019

If you're interested in joining the Spring 2020 Watershed Stewards Academy classes, you can email Reyna Askew at raskew@anacostiaws.org.

Learn more at anacostiaws.org/wsa



Anacostia Watershed Society

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What's next in the 2020s? The 11th Street Bridge Park!



As we move into this next decade, we envision greeting a swimmable and fishable Anacostia River from the 11th Street Bridge Park! The Anacostia Watershed Society is moving forward with our partners to design the Environmental Education Center, and its programming! Stay tuned for more news about this project slated to open in 2023.