# ENVIRONMENTAL LITERACY SNAPSHOT

#### **2017-19 HIGHLIGHTS**

- Several programs started in 2013 and continue today: recycling, camping, DCPS Science Cornerstones, energy audits, and the 1-minute climate change film project.
- Fifth grade students are part of the green team, called Recycle Ninjas. Besides collecting materials from the blue recycling bins twice a week, they are also in charge of sharing with teachers and students the importance of recycling. Fifth graders are also zoo keepers, serving every day as caretakers of the school's pets: tarantulas, gerbils, millipedes, frogs, toads. Besides their love for animals, they show great respect to every living animal.
- Third grade students received an EcoRise Student
  Innovation grant to improve indoor air quality by creating
  environmentally friendly cleaning supplies. Students are
  sharing information with parents, other students, and
  the community about being responsible using cleaning
  supplies that do not harm the environment.
- Overall, teachers are more comfortable guiding science projects and lessons in their own classrooms.

### **ABOUT THE SCHOOL**

Bruce-Monroe Elementary School @ Park View is located in Ward 1, with a student population of 59 percent English learners and 100 percent economically disadvantaged. The school follows a dual language program that successfully promotes bilingualism, bi-literacy, and biculturalism. The school teaches science lessons in English and Spanish, and teachers attend the National Science Teachers Association annual conferences and participate in events, such as EcoRise audits and DCPS SciCon.

Bruce-Monroe Elementary partnered with the Department of Energy and Environment to become a RiverSmart School. After a year of construction, the school's outdoor space includes permeable parking, bio-retention ponds, rain barrels, and school signage sharing this news to the whole community. The school also partners with the organization Out Teach to host planning events with school faculty, students and administration to inform the design and construction of our amazing outdoor classroom.

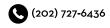




Finally, science is all hands-on and students are being educated in real-life environmental issues. Way to go!"

Elizabeth Quevedo, science specialist, Bruce-Monroe
 Elementary School













#### **ENVIRONMENTAL LITERACY PROGRAM**

The progression of the environmental literacy at Bruce-Monroe Elementary begins with exposure to its local habitat and visiting the Washington Youth Garden, which helps students develop a sense of where they are, where they live, and what the region provides. Second grade students learn about the cycle of trash through Garbology lessons, and third grade includes intense work with ecosystems, habitats and climate change. Fourth graders study soil and visit the Anacostia River. Fifth graders go on a camping trip to Prince William Forest Park with NatureBridge, where students observe a healthy ecosystem and learn about the impact of pollution on the watershed. Students then participate in a project that cleans and sorts trash captured by a trap on an Anacostia River tributary. Students are also part of the shad program, which includes a restoration of this native fish to the Anacostia River. Finally, fifth grade students participate in the project Clean Air, Tree by Tree, where they observe the importance of trees to air quality, conduct a tree health assessment, and make projections of the tree benefits using the program I-Tree. In the end, Bruce-Monroe Elementary students understand the interactions between the Earth's spheres and the human impact in our world.

### **NEXT STEPS**

As a school, Bruce-Monroe Elementary plans to continue current programming and look for more partnership opportunities. Teachers are more connected to science and understand the importance of promoting environmental literacy among students. The school plans to create lesson plans that align to Next Generation Science Standards and Common Core State Standards in a more organic way. The school's main concern is money for transportation, since all trips are currently sponsored by partners.

## **LESSONS LEARNED**

- It takes time to feel comfortable teaching science without a curriculum, but it is delightful to see students discovering the world through science.
- Creating a green team that includes parents, community representatives, at least one teacher per grade level, student government, and administration has been very beneficial for the implementation of science content through environmental literacy.

