Lowell Leaders in Stewardship: 2013—2019

Fall 2013—Spring 2014

Robinson Middle School 2013-2014
In the fall, Robinson Middle School practiced key scientific skills every week by measuring temperature and observing leaf color change and leaf drop on two sugar maple trees. This data was collected and utilized in part of a larger Harvard Forest study. Students also explored the school yard habitats, discovered what an animal needs to survive in its habitat, and investigated how native animals survive winter. Students participated in stewardship projects to improve the schoolyard habitats, including trash pickups and planting annual bulbs in the rain garden. We also hosted a special guest visitor from Verril Farm in Concord to talk about local food issues, and students had the chance to sample local sweet potatoes, carrots and candied apples!

Lowell High School Freshman Academy 2013-2014
In our third year with the Compass program, students at Lowell High’s Freshman Academy participated in a service-learning project raising two snapping turtles. Students received two turtles in the fall and under their care, the turtles (Beyonce and Squirtle) underwent their most vulnerable stages of development in a protected environment. Students learned to care for the turtles, to observe behavior, and monitor growth, and had the chance to share their work at the Brush Art Gallery’s ‘In Cold Blood Exhibit’. In the spring, the turtles were released to their native habitat with an extra fighting chance to survive in the wild.

The group also identified a need to implement bottles & cans recycling in the school. Students met with city’s recycling coordinator to learn about the city's new single stream recycling program and where our trash goes. Students used their knowledge to create an educational campaign for staff & students, and held a recycling box design contest. They routinely manage the recycling program throughout the school and are incredibly proud of the work they’ve accomplished! In between these projects, students explored the connections between the school and the community, improved the habitats found near the school, and become well spoken advocates for the important natural resources in Lowell.

Shaughnessy Elementary School 2013-2014
At the Shaughnessy Elementary School students explored habitats within their school grounds, learning to look for clues of animal activity (tracks, scat, and getting food). Visits from a screech owl, a corn snake, a skunk, a Canadian goose, and chickens prompted students to consider the differences between domestic and wild animals, as well as native and invasive species. As part of a
citizen science project, students made winter bird feeders to take home or put in the school grounds. A week later the children shared what visitors that came to their feeders - a list which included robins, sparrows, blue jays and cardinals!
Stoklosa Middle School 2013-2014
Students at the Stoklosa Middle School spent time learning, sharing, and thinking about where we live and how our connections to the world help shape the environment around us. Youth explored what makes up a habitat and what all life (including humans) need to survive – shelter, food, and water. Students considered questions such as: How do both humans and our native wildlife meet our survival needs? How does our need for resources affect an animal’s own habitat and resources? How have rivers helped shape the growth of Lowell as a city?

Students have gained confidence in studying nature and science, and over the course of the term their curiosity about the world around them increased immeasurably. Students used journals to record observations, ask questions and write down thoughts and ideas—all of which contribute to ongoing citizen science projects. This exercise improved their data collection, scientific and nature discovery, and observation skills.

Summer 2014
Shaughnessy Elementary School - Summer 2014
Students at the Shaughnessy Elementary School explored wetland ecosystems for their service learning project. Business leaders, city staff, UMass Lowell professors, and community activists visited students in the classroom and in the field to explore the habitats found at East Pond, and to learn about the community issues in the neighborhood. Students chose to raise awareness of the pond and its important ecological value—and had the opportunity to present their findings to the City Council. See photos of the event here.

Read more about their work on the SuAsCo River School blog.

Greenhalge Elementary School - Summer 2014
Like students at the Shaughnessy Elementary School, Greenhalge students also had the opportunity to participate in a service-learning project over the course of the summer. Students at Greenhalge explored the green space around their school and learned about the trees in the neighborhood. After doing a “BioBlitz” at the school to find out what species live in their schoolyard, they went to Beaver Brook and the Merrimack River to explore the more expansive green spaces and make comparisons between the different habitats.

Learn more about their work on the SuAsCo River Schools blog.

Summer Compass Program 2014 - Lowell High School
Rising 9th graders at the Summer Compass Program at Lowell High School learned about habitats, wildlife, stewardship, and homesteading through hands-on activities and experiments. One highlight of the program was learning about the importance of trees in our communities. Students met an American kestrel and screech owl and discussed the significance of trees for their habitats. In addition, students explored the many benefits of trees including shade, stabilizing soil on river banks, and their role in the carbon cycle and climate change mitigation. Students celebrated what they learned over the summer by planting a red maple tree to replace a tree in the school alley that had died. In the fall, the tree will be utilized as a teaching tool to study phenology.

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Spindle City Corps - Summer 2014
Spindle City Corps is a summer youth program hosted in partnership with the Lowell National Historical Park and Community Teamwork, Inc. to provide the city’s youth with an opportunity to give back to their community. We have the opportunity to work with Spindle City Corps members every summer to explore the diverse habitats and wildlife around the city, and to design, facilitate, and implement a stewardship project.

This summer, students examined water quality in four separate locations. Youth conducted several tests (including dissolved oxygen, ph, phosphate, nitrate), and identified macroinvertebrates to help determine the water quality. Their results were shared on the RiverSchools blog here. They helped improve our water quality with a clean-up—they removed an abandoned row boat from the river!

Spindle City Corps members also helped conduct a survey on the American eel population in partnership with the US Fish & Wildlife Service. The youth pictured are checking the "eel-avatars".

Fall 2014– Winter 2015
Shaughnessy Elementary School - Fall 2014 & Winter 2015
Students at the Shaughnessy Elementary School, grades 1-4, explored the natural wonders of Lowell, spending time outdoors to get a breath of fresh air and check out habitats in the school yard. Utilizing journaling and sketching, students documented their keen observations of local flora and fauna, and learned what it takes to be a scientist. They also had wildlife visitors from Mass Audubon’s Drumlin Farm including an American kestrel, Broad-winged hawk, Virginia opossum, Wood turtle, and Corn snake. Wildlife visits give students an opportunity to discuss how wildlife prepares for and survive winter through the process of migration, hibernation, and staying active.

Morey Elementary School - Fall 2014 & Winter 2015
At the C.W. Morey Elementary School, third & fourth graders dove into the wonderful ecological attributes the New England area has to offer. Students visited with a number of wildlife such as a Cedar Waxwing and Canada goose to get a better understanding of animal adaptations, habitat needs, and physical characteristics of different species. Through hands-on activities students also learned about weather and climate, animal and plant survival techniques during winter, healthy soil, and how to identify clues left behind by animals in the form of tracks and scat.

Summer 2015
Spindle City Corps- Summer 2015
Six Spindle City Corps (SCC) students completed multiple service learning projects at Hawk Valley Farm one very hot week in early August. One project involved removing invasive plants from the native walnut trees, which was necessary to maintain the health and aesthetic of the trees. Other, more creative projects, were developed by the students to improve visitor experiences, and to provide the students with fun and original projects that they could point to proudly and say, “I helped make that.” Youth engaged in an involved planning process over multiple visits, discussing the feasibility of their project ideas, considering the owner's priorities, and developing a supplies list and budget. Overgrown, immoveable stumps became a safe play area for children. Slices of tree trunks created a clear path through the farm, while smaller tree stumps were placed along the trails for seating. (continued)
The youth designed a simple bench design from the logs of recently felled invasive trees, and Dave Melanson, a volunteer with a generous nature and a knack for wielding a chainsaw, brought their idea to life. Students put together a new birdhouse as well, an item the students added as a way to encourage the continuation of song birds making the farm their home. Lastly, a child-friendly sign with accompanying signpost was created along with a fun summer scavenger hunt to encourage full exploration of the property. The SCC students attached an information box to the signpost for Hawk Valley Farm brochures and for storing copies of the scavenger hunt.  

**PROGRAM SUMMARY & PHOTOS**

**Fall 2015**

**McAuliffe Elementary- Fall 2015**  
Third- and fourth- graders from the McAuliffe Elementary School enjoyed activities and games that highlight the natural wonders of New England, and helped to develop their science inquiry skills. Students got to meet some mice, a painted turtle, a groundhog, and a screech owl from Mass Audubon’s Drumlin Farm. By observing these animals, students explored topics such as predator/prey relationships, winter survival, habitat components, and more. Students also had the opportunity to enjoy nature-themed children’s literature and tried their hand at writing their own stories about some of their wild guests.

**Shaughnessy Elementary- Fall 2015**  
Fourth- grade students from Shaughnessy Elementary School worked hard on an exciting service-learning project: creating a tree identification field guide for the area around their school. After researching the art of the field guide and other relevant information, students used iPads to photograph features of each tree. Working with each other, the students became empowered to make their own decisions about the information presented, the layout of their guide, and what the final version will look like. In between their dedicated work on their field guide, the students participated in fun activities and games such as “environmental change charades”, autumn leaf relay races, and scavenger hunts.

**Robinson Middle School- Fall 2015**  
Fifth- and sixth- graders at Robinson explored habitats this fall, from the different kinds of habitats around in New England to the habitats right around their school. The students began their year by setting up a habitat for mice from Mass Audubon’s Drumlin Farm, making sure to provide plenty of food, space, water and shelter. As we tracked the color change and leaf drop on a silver maple tree outside the school (planted by previous students), we talked about the ways in which trees also serve as a habitat. Our students particularly enjoyed a fall scavenger hunt around their school. In honor of “Food Week” in October, Guida Ponte from Verril Farm in Concord visited to talk about local food, bringing some delicious local snacks including mac and cheese with some local veggies. To continue our habitat investigation, we looked at “Who Polluted the Merrimack River?” in a role-play activity to discover how humans impact wetlands. Students also got to meet a kestrel, baby snapping turtles, a groundhog and a great-horned owl, and learned about ways to care for our local habitats with eco-friendly behaviors like composting.
**Compass Program at Freshman Academy- Fall 2015**

Students began the year by doing what they do best: land stewardship. The students raked leaves and picked up trash in the alleyway next to Freshman Academy, an area that Compass students traditionally care for to encourage school pride. The students love exploring their city, so in the mild fall weather, we were able to walk down to the Concord River Greenway to learn about water quality and even do some testing. We continued to discuss local watersheds throughout the fall, engaging in our ever-popular “Who Polluted the Merrimack River?” activity to look at the ways in which we impact our watershed. This prompted a walk to the CVS downtown to take a closer look at what’s really in the hygiene products we use every day, and how the ingredients might impact the environment.

Along with other groups in the Compass program, our students brainstormed ideas for the Compass application to UML’s “Giverhawks Grant,” funding which our students used to mentor younger students. The students also regularly volunteered at the local monthly food pantry at the Rogers School, serving as a bright and friendly presence as they distribute food. Of course, students also visited with animals from Drumlin Farm including a spotted turtle and a ground hog.

**Teens Representing Environmental Excellency & Stewardship - Fall 2015**

This fall, our Teens Representing Environmental Excellency and Stewardship group (TREES) was busy with a grant application for the Amplify Youth Voices program from the Massachusetts Cultural Council. When after-school educators Carolyn (LP&CT) and Sally (Mass Audubon’s Drumlin Farm) told the group about the funding opportunity for a project that would positively impact their community, the students didn’t hesitate to start the application—with little guidance from Carolyn and Sally. The group drew upon their personal experiences with “Environmental Adventures” to identify a need in their community: they decided that not enough people in Lowell were aware of the urban parks and green spaces that they have been able to explore. The students began their plans for an event in Lucy Larcom Park on Saturday, April 23—during the city-wide Earth Day celebration—to inform families about a different park in each of Lowell’s neighborhoods, accompanied by environmentally-themed activities for children. After completing the written application and a video narrative of their plans, the students were one of twelve groups to receive funding.

TREES Students: Andy Un, Amanda Chim, Sarah Silva, Brian Holmberg, Unga Emedi, Rithany Kheam, Angeline Castillo, John Rodriguez, Donald Hou, Andre Ragel, and Edwin Chamba

**Winter/Spring 2016**

**Shaughnessy Elementary- Winter/Spring 2016**

Fourth-graders at Shaughnessy proved to be quite ambitious as they continued to work on their tree field-guide that they began in the fall. After wrapping up their research on the tree species in their school yard and the features of a field guide, students began to write and design their pages. (continued)
In between their hard work on the field guide, students began yet another project as they wanted to try their hand at teaching. They practiced their public speaking skills, and learned more about mouse habitats in preparation for a presentation on mice to their families, teachers and peers. As the year came to a close, the students were able to proudly bring a copy of their field guide home with them to remember all that they learned this year (we have a copy here at the LP&CT office—let us know if you want to check out their impressive work!).

**Greenhalge Elementary- Winter/Spring 2016**

These second-grade scientists began their program by brainstorming what animals they’ve seen in their neighborhoods, and then went out to prove their hypotheses by searching for evidence of wildlife. By observing animal tracks, students made inferences about the animals that live in their schoolyard, and how they’re surviving through the cold of winter with different adaptations.

Spring brought new opportunities as students explored maple sugaring, tree identification, pollination and soil composition as their schoolyard began to sprout new growth. They even got to play with wool as they learned about sheep shearing that happens at Drumlin Farm every spring!

Students got to meet many local animals form Drumlin Farm, including a turtle, a kestrel, mice, a corn snake, and a rabbit, and thought about how these animals relate to each other within a food web. By the end of the program, our students were experts on the wildlife surrounding their school, and in key scientific skills such as observing and inferencing that we work to foster in all of our students.

**Robinson Middle- Winter/Spring 2016**

Fifth- and sixth-graders at Robinson took the reins this winter as they designed an experiment to answer a simple question posed by a student: what would happen if you gave a plant other liquids besides water? A small rye grass plant was assigned to each student, along with a different substance, whether it was lemon juice, laundry detergent, brewed coffee or food coloring. After a few weeks, we made observations about the health of each plant and had a lively discussion as to why each plant reacted the way it did. Students loved getting the chance to actively pursue their own questions—many reflected that this was their favorite activity during our year together!

In addition to such scientific inquiry, students explored the habitat surrounding Robinson School. Whether they searched for animal tracks in the cold January snow, looked for trees budding out in the spring, or caught insects in June, there was always something exciting to see. Students also continued to collect data on a red maple tree planted by students in 2008, data that is submitted to the Harvard Forest Society for a phenology study.

**Bartlett Community School - Winter/Spring 2016**

Our youngest scientists at the Bartlett school studied seasonal changes for the 2nd half of their school year. Like any good scientists, these first & second-graders regularly recorded their thoughts and observations in the nature journals that they made from recycled materials. From weekly temperature recordings to reflections on mice habitats, these students kept careful track of their time together. They learned that some animals hibernate or brumate to survive New England winters, such as snakes—they even got to meet a corn snake. After learning how birds migrate during New England’s harsh winters, students welcomed them back by creating “bird nest helpers”: wrapping pine cones with yarn, moss, wool, & more to help insulate their nests.
McAuliffe Elementary- Winter/Spring 2016
Habitat: what is it? First- and second-graders at McAuliffe contemplated this question on the first day of our winter session. They started their habitat exploration with a visit from Drumlin Farm’s mice, identifying the food, water, shelter, and space these animals need to survive. Students met many other animals that have habitats in Lowell, such as owls, ducks, turtles, and rabbits—and even some animals who are not native to Lowell, like the corn snake. By the end of the program, students were able to create a food web of local animals, showing that they understand the complex relationships in our ecosystems!

TREES Lowell High School- Winter/Spring 2016
TREES students continued promoting Lowell’s parks through their “Save the Earth, Visit a Park!” project, funded through Mass Cultural Council’s Amplify YouthVoice grant program (see “Fall 2015” for more).

These eleventh- and twelfth-graders chose to use most of their funding to create and print a brochure featuring their favorite parks from each of Lowell’s neighborhoods, which they distributed at the library, local businesses, and community events such as Lowell’s Earth Day celebration and Downtown Lowell’s First Thursdays (view their brochure here). These events featured environmentally-themed games, crafts, and even some community gardening at Mack Plaza—all led by these teens.

Compass Program at Freshman Academy- Winter/Spring 2016
Ninth- and tenth-graders started 2016 with their first big project: designing a float for Lowell’s Earth Day parade. Featuring a dogwood tree decorated with birds to represent the Trust and a farm scene to represent Mass Audubon, the students designed their display to represent the organizations they work with as they learn about and serve their local environment.

Next, students created lessons and activities for students at Moody Elementary for Compass’s Community Day. Students designed a recycling relay race and a “habitat tic-tac-toe” game to play with these elementary students. They also prepared an interactive presentation on our local pond water and its creatures.

Finally, students participated in a state-wide game of “telephone” through Mass Cultural Council’s “ConSSENSes” project by interpreting a group of student-created paintings with their sense of smell—what does each painting smell like to them? Using their creative thinking, sensory perception, and observation abilities, students practiced key STEM skills that we foster through our programming. The whole project—including our students’ creations—was on display at the State House during the first week of June.

Students continued to volunteer at the Roger’s School Food Bank, test the water quality of the Concord River, and visit with local wildlife throughout the year, all of which have become staples of our programming at Freshman Academy.
Freshman Academy Compass: Tomatoes, Potatoes and Tornadoes (Summer 2016)
Last summer, incoming ninth-graders tackled one of our most pressing problems: how can we fight climate change through the food that we eat?

After exploring the complexities of our food systems and how they impact the environment around us, our students began wondering about the food available to them at school. A conversation about Aramark's farm-to-school program in the Lowell Public Schools inspired the students to create a video about the local food they eat at lunch every day. By letting their peers and community know about this program, our students hope to spread awareness of the difference that eating locally can make for our environment, and inspire more support for the farm-to-school program.

In partnership with the Lowell Public Schools and Mass Audubon's Drumlin Farm Wildlife Sanctuary, this program is generously funded by the Massachusett’s Department of Elementary and Secondary ASOST-Q Grant Program. In addition to the service-learning project developed and completed by students, this program will result in a new curriculum on climate change and food access that educators across the country. Check out the YouTube channel and video created by the students.

Bartlett Community School (Summer 2016)
"I didn't know chickens had ears!" - an excited Bartlett student

Students at the Bartlett Community School enjoyed meeting local animals last summer. From chickens to blue jays to snapping turtles, students learned about animals that call Lowell home while learning about the components of a healthy habitat and how animals adapt to the environment around them.

Spindle City Corps (Summer 2016)
Last summer, six youth from Spindle City Corps spruced up the Lawrence Street end of the Concord River Greenway. After vigorously removing nineteen bags of invasive plants from the edge of the trail and adding some mulch, these teens made the bike rack much more accessible. They also designed, painted, and installed a “Welcome” sign, including the Greenway logo, to invite community members to enjoy the trail. In hopes of encouraging responsible use of the Greenway, they included an ever-important reminder on their sign to “please carry out what you carry in.”

“When I’m older, I’ll be able to come back and see this sign here,” said one excited young woman as she reflected on the group’s impact.

Spindle City Corps is an award-winning program run through the Lowell National Historical Park and Community Teamwork, Inc., in which young people complete service projects throughout the city. The Lowell Parks & Conservation Trust, in partnership with Mass Audubon Drumlin Farm Wildlife Sanctuary, has the wonderful opportunity to work with a portion of this group every summer on an environmental project designed by the students. Thank you, Spindle City Corps!
Freshman Academy Compass: *Environmental Adventures 2016-2017*

This program for ninth-graders has focused on human impacts on water quality. Students visited our rivers and conducted experiments using a new watershed model (Enviroscape). For their student-designed service learning project they are developing a rain garden to reduce stormwater runoff in the alleyway next to the Freshman Academy in downtown Lowell.

The students met with Congresswoman Niki Tsongas and Head of School Brian Martin to get permission for the project and bravely ask for funding. After submitting detailed design plans and a budget, the students received full funding for their project.

TREES at Lowell High School (2016-2017)

TREES, *Teens Representing Environmental Excellency and Stewardship*, has taken on many impactful stewardship projects over the past few years.

These highschool upperclassmen have implemented a recycling program and offered programming for local families about Lowell’s green spaces. This year, they hosted the *Lowell Youth Environmental Conference* in March 2017, the first gathering of other high school environmental clubs in the Merrimack River Watershed.  

The students developed a mission statement to explain their goals: "Our mission is to raise awareness of the environmental issues across the diverse communities that make up the Merrimack River Watershed in Massachusetts. We hope to increase communication between students in these communities, and to share ideas on how we can protect our shared environment by bringing these communities together at the Lowell Youth Environmental Conference."

McAuliffe (Fall 2016)

McAuliffe first- and second-graders learned all about adaptations this fall, from how trees adapt to the changing temperatures to how animals prepare for winter in Lowell. To explore these topics, the students also enjoyed visiting with a rabbit, "walking stick" insects, a Call Duck, and a groundhog.

Greenhalge (Fall 2016)

First- and second-graders at Greenhalge Elementary had some fall-themed fun to start out their school-year with LLIS. They practiced their observation skills at school and at home noting what animals they saw outside every week. Students learned how different animals cope with the changing seasons with visits from live animals including a pigeon, American Kestrel, Cedar Waxwing, and a box turtle.  

They also enjoyed experimenting with pumpkins and pumpkin seeds on Halloween, and practicing important STEM skills such as hypothesizing, experimenting, and drawing conclusions.
Spindle City Corps (Summer 2017)

Last summer, youth from Spindle City Corps spruced up Jollene Dubner park along the Concord River Greenway. As one of the first board members of the Trust, Jollene Dubner was passionate about creating public access to the Concord River. With the creation of Jollene Dubner Park in 2000, Jollene’s vision finally came into fruition—and is now a part of the Concord River Greenway. A wonderful group of young people from Spindle City Corps spent last week clearing invasive plants so that a view of the river can be better enjoyed from Jollene Dubner Park. We’re SO proud of how hard they worked to make this spot even more beautiful—and inspired by their passion for helping their community.

Spindle City Corps is an award-winning program run through the Lowell National Historical Park and Community Teamwork, Inc. in which young people complete service projects throughout the city. The Lowell Parks & Conservation Trust, in partnership with Mass Audubon Drumlin Farm Wildlife Sanctuary, has the wonderful opportunity to work with a portion of this group every summer on an environmental project designed by the students. Thank you, Spindle City Corps!

Summer 2017 Programming

This past summer students at the Bartlett, McAuliffe, Lincoln and Greenhalge Elementary schools had the chance to get up and personal with wildlife that can be found right here in Lowell! Our students learned about the animals that call Lowell home while discovering the components of a healthy habitat and how animals adapt to the environment around them. By introducing local wildlife to our students, we hope that they will become stewards of their habitats—the environment that we share with these animals every

Freshman Academy Compass: Environmental Adventures (2017-2018)

This program for ninth-graders has focused on human impacts on water quality. Students visited our rivers and conducted experiments using a new watershed model (Enviroscape). Students also continued to be involved with the recycling program at Freshmen Academy and volunteer at the STEM Academy food pantry.

For their student-designed service learning project they developed a rain garden to reduce stormwater runoff in the alleyway next to the Freshman Academy in downtown Lowell. Using recycled materials as flower boxes and purposely choosing to plant native flowers to attract pollinators, the students hope that this rain garden will serve as a small, peaceful retreat for fellow students and pollinators alike.
TREES at Lowell High School (2017-2018)
TREES, Teens Representing Environmental Excellence and Stewardship, has taken on many impactful stewardship projects over the past few years. Inspired by the success of last year’s first-ever Lowell environmental youth conference, our oldest Lowell Leaders in Stewardship students brought together groups from within Lowell and throughout the Merrimack River watershed, including Concord-Carlisle High School, Chelmsford High School, YWCA Lowell, OffBeet Compost, and the Assabet River National Wildlife Refuge.

The theme of the conference the students chose this year was Taking Action: Thinking Globally; Acting Locally. The conference featured workshops and interactive “table talks” where students where able to explore different ways that they can act in their everyday lives to have a positive impact on their communities.

Greenhalge (2017 – 2018)
First- and second-graders at Greenhalge Elementary had some fall-themed fun to start out their school-year with LLIS. They practiced their observation skills at school and at home noting what animals they saw outside every week. Our students learned how to identify the different trees in their schoolyard and discovered how valuable trees are to animals and to us! Greenhalge students also explored in what ways they see science imitate nature.

McAuliffe (2017 -2018)
McAuliffe first- and second-graders learned all about how to be curious of the natural world around them. Using their five senses, students explored from the ground up. Discovering that earthworms have five hearts and that bats are the only mammals that can fly!

They sharpened their botany skills by learning about local plants and having in-depth discussions about the functions of various plant parts.
Shaughnessy (2017 – 2018)
Third- and fourth- graders at Shauhgnessy were citizen scientists, monitoring the leaves of a maple tree throughout the fall and spring season. Students then reported their leaf data to the Harvard Schoolyard Forrest Study, a long-term study looking at how the changes in temperature are affecting our trees.

Through activities, exploring their schoolyard, and visiting with local wild-life such as the painted turtle, a Canadian goose, and a rabbit, students had fun learning about the rich natural resources right in their city.

Lowell Leaders in Stewardship 2018-2019
This spring and summer, Lowell Leaders in Stewardship students have looked for nature everywhere. Students of all ages have discovered that even in a city, nature is all around them. By tuning into their 5 senses, students have formed connections with nature, which inspired stewardship in them. By appreciating the little wonders of nature, and learning how we are connected, students became land stewards and citizen scientists.

McAvinnue students learned what stewardship was and cleaned their school, park and playground of trash, yard waste, and recyclables.

Lincoln Elementary School students learned about how different species move and imagined they were a variety of local species by hopping, galloping, and soaring through their school.
Bartlett Community Partnership School students challenged their observation skills and creativity searching high and low for camouflaged animals, and then designing their own species.

Greenhalge students practiced fine-tuned observation skills by completing nature scavenger hunts in their school-yard.

Murkland soared through summer by imagining they had beaks of local birds, and discussed the adaptations and advantages for each beak type and food source.
**McAuliffe Elementary School** studied Lowell habitats from the ground up looking at the ecosystems underground all the way up to the canopies.

**Stoklosa** observed the habitat of their local garden by identifying garden pests and helpers, and cooking with food from garden to table.

**Lowell High School** met with Flint water crisis activist Gina Luster, and other local officials to discuss food and water quality for all, as well as projects they could complete locally to assist in this mission.

**Spindle City Corps Summer 2019** got familiar with the green spaces in Lowell, and developed a habitat improvement project for bees, bats, and birds at Hawk Valley Farm.

**Sullivan** students practiced reading maps and located and discussed the green spaces near their homes on a map of Lowell.

**Robinson** students explored the magic of compost and how vital this habitat is to the forest floor, even in Lowell.

**Shaughnessy** students learned about the rivers in Lowell, how important they are to us and the wildlife that surrounds it.