



Environmental education through action

KIDS for the BAY



Newsletter SPRING 2016

www.kidsforthebay.org

A Project of Earth Island Institute

Restoring Strawberry Creek with UC Berkeley

"My favorite part of KIDS for the BAY is how you make science fun!"

Miykha and her fellow students from Berkeley Arts Magnet and Rosa Parks Elementary Schools had a lot of fun investigating and restoring Strawberry Creek with KIDS for the BAY, UC Berkeley Student Interns, and the UC Berkeley Strawberry Creek Restoration Project.

The third graders first became stewards for their local environment during their clean-up projects. They were very proud of their efforts to clean up garbage from their school campuses and from Strawberry Creek. Some students took their efforts a step further by creating informational posters about reducing litter to share with their first grade buddies. Alvin and Salma drew a dolphin with plastic garbage around its neck. Alvin explained, "This poster might convince a first grader to never drop plastic on the ground."

In their creek restoration-engineering lesson, students created mini-creeks with water and sand and investigated how factors such as concrete channels and creek-side plants affect erosion. After the activity, students recommended weeding out invasive English ivy, which has shallow roots that do not hold the soil in place, and planting native plants, such as red flowering currants, to control erosion along the banks of Strawberry Creek.

Students were excited to meet their red flowering currant plants in the fall, transplant them into larger pots,



"By incorporating students into campus restoration efforts, we are increasing the number of plants we are able to plant and the amount of trash we can pick up. Seeing school students improve the health of their local ecosystems has been a highlight of my time at UC Berkeley!"

— Dylan Chapple, UC Berkeley PhD Candidate

and care for them in their classrooms until it was time to plant them beside Strawberry Creek. Luna whispered encouragingly to her plant, "See

you in a little while when we go to Strawberry Creek together!"

Continued on page 2

During the Strawberry Creek Watershed Action Program, students:



Cleaned up **154** gallons of trash in Berkeley



Planted **60** red flowering currant plants



Pulled out **10** wheelbarrows full of invasive English Ivy

Program Highlights

Continued from page 1

In January, the elementary school students helped restore Strawberry Creek on UC Berkeley's campus. This Environmental Action Project had four stations: planting the red flowering currant plants, weeding out invasive English ivy to make more space for native plants to grow, painting colorful signs to mark the planting projects, and cleaning up trash around the creek.

Students and teachers are now looking forward to their spring Field Trips, when they will return to Strawberry Creek to check on the progress of their plants and engage in hands-on science activities, including studying aquatic invertebrates and water quality testing.

This unique partnership between KIDS for the BAY, UC Berkeley, and local Berkeley schools was partly funded by the UC Berkeley Chancellor's Community Partnership Fund and the East Bay Community Foundation Meyer's Fund.



"I'm proud that Gemma and I picked up 171 pieces of trash, because that is 171 fewer pieces of trash in the San Francisco Bay watershed, our home."

— Charlie, Third Grade Student, Berkeley Arts Magnet School



Reducing Carbon Footprints



"I love science, I want to be a scientist my whole life!"

— Elmer, Third Grade Student, Community United Elementary School, Oakland

Oceans absorb one-fourth of human-released carbon dioxide each year. In their Environmental Action Project, Ms. Ahn Nguyen Delos Reyes' third grade class at Community United Elementary School in Oakland used scientific equipment to discover how water becomes more acidic when it absorbs carbon dioxide. With an Erlenmeyer flask, a straw, bromothymol blue, and water, students blew carbon dioxide into their solutions and observed the solution changing. Ethan said, "Look, the water is changing colors from blue to green!" Erika answered, "The water is changing when we blow air into it." Rodolfo explained, "The carbon dioxide is going into the water, so it changes colors. It's changing colors because it's more acidic."

KIDS for the BAY student scientists tested the extent that egg shells dissolve in various acidic solutions, compared to tap water, a neutral solution. They made the connection that if the ocean becomes more acidic, organisms such as clams and other shellfish, with shells made out of calcium carbonate just like egg shells, may be in danger. "I think the acidic water would be bad for them," said Saleh. To help reduce their carbon footprint, students volunteered to be energy conservation monitors in their classroom. Gary shared, "I'm excited to be door monitor because I'll make sure that heat doesn't escape through the open door and get wasted!"

Program Highlights

Turning Trash into Treasure!

"I've never been so creative in my life!" exclaimed Spencer, a third grade student from Henry Haight Elementary School in Alameda. After learning about the Four R's (Reduce, Reuse, Recycle, and Rot) in the Watershed Rangers Program, each student brought in bags of trash from home to turn into art for their Action Project. Students were excited to transform their aluminum cans and plastic take-out containers into animals such as jellyfish, turtles, and fish. After the students shared their creations with one another, Bailey said, "I feel so inspired to make things out of trash! Everything everyone made turned out so great. This has been my favorite art project!"



"I made a hammerhead shark, because I've always wanted to touch one and now I can!"

— Andre, Third Grade Student, Henry Haight Elementary School, Alameda

Exploring an Ocean Beach

Third graders from Cox Academy Elementary School were so excited to take off their shoes at Muir Beach and feel the sand and the waves between their toes! Along the rocky shoreline, students discovered blue mussels, barnacles, limpets, chitons, anemones, and shore crabs. Students gently touched the giant green anemones and were fascinated to feel their sticky tentacles. Later, the students experienced beautiful views of the Pacific Ocean, built sand castles, and discovered beach hoppers in the sand.

After the Field Trip, third grade teacher Caitlin Dobson said, "My students see things and immediately connect it to what we have learned in the Watershed Action Program. They are thinking about what has been learned and applying it. This has been such a special part of our curriculum."



Be an Environmentalist!

Recycle and Reuse Electronic Devices

Many of us have old cell phones lying around the house that we don't know what to do with! Cell phones contain important natural resources, including precious metals. Every year, Americans throw out cell phones that contain over \$60 million in gold and silver.

Luckily, cell phones can be recycled! For every million cell phones recycled, 35,274 pounds of copper, 772 pounds of silver, and 75 pounds of gold can be recovered. Below are some local options for recycling electronic waste:

- Universal Waste Management in East Oakland
- El Cerrito Recycling Center in El Cerrito
- Direct Resource Management in San Leandro

Another option is to donate your old cell phones so that they can be reused! Many AT&T, Sprint, and Verizon stores accept old cell phones that they then donate to non-profits. You can also donate phones directly to a non-profit, such as Cell Phones for Soldiers, which has three drop-off locations in Oakland and one location in Berkeley.



Photo credit: www.mobirecycle.com

Let's get outside!

Join KIDS for the BAY for a fun-filled summer of hands-on science and nature exploration in the outdoors.

KIDS for the BAY campers will learn how every living thing is interconnected and become Inspired Environmentalists!

Summer Camp 2016

Register today!



KIDS for the BAY Adventurers ages 5 - 7 will:

- Explore bay shorelines
- Discover purple ochre sea stars
- Meet local wildlife
- Delve into dinosaurs
- Investigate aquatic invertebrates
- Help restore Strawberry Creek
- Enjoy belly biology

KIDS for the BAY Explorers ages 8 - 10 will:

- Go kayaking on the bay
- Enjoy an overnight camping trip
- Visit the Aquarium of the Bay
- Take a ferryboat ride to Angel Island
- Study bay plankton using field microscopes
- Explore an ocean beach
- Test creek water quality

New for 2016

KIDS for the BAY Leaders in Training (LITs) ages 11 - 14 will:

- Enjoy outdoor science adventures
- Learn leadership skills by helping and teaching younger campers

Special discounts available for LITs selected for this program.

Visit our website at www.kidsforthebay.org/camp to choose from **seven exciting Summer Camp themes**

Day Camps run Monday through Friday from 9am – 4pm, with flexible drop-off from 8:30am – 9am.

Nature Club After-Care is available from 4–5:30pm daily.

All camp drop-off and pick-up locations are in the Berkeley area.

Combined discounts and scholarship spaces are available.



*"By far **the best camp of the summer** for both of our boys! **Great experiences, great camp leaders, lots of learning** — just awesome all the way around! We were amazed at how much the kids learned and experienced every single day!"*

» LESLEY ELLE BRANDT,
SUMMER CAMP MOM 2015

REGISTER NOW! www.kidsforthebay.org/camp



Find us on

Facebook www.facebook.com/KIDSfortheBAY