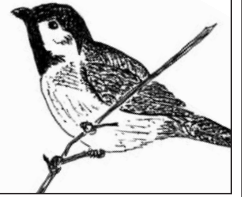




Fiddleheads and Feathers



The Newsletter of the Melinda Gray Ardia Environmental Foundation, Ltd.

Fall 2009

Greetings and Happy Holidays!

It has been a good year for the MGAEF. I am happy to report that we were able to support all our programs, including funding four environmental curriculum grants. In addition, we are approaching the Buffalo city schools about a partnership to send middle school students to DEC environmental camps. Given the strong trend for kids to have less exposure to nature (see the excellent recent book *Last Child in the Woods*), inner city students need these environmental experiences more than anyone.

The Board of Directors had the wonderful opportunity to meet at Newark Middle School this year and the teachers there unveiled their Memorial Seedling program to us. This very inspiring program provides free native tree seedlings to students and staff. We were honored to hear that the program is dedicated to Melinda and touched by the commitment of all the Newark teachers. We also met with recent Newark awardees, Maria DiRenzo and Sapphire Aldrich, who attended summer environmental programs. Seeing their photos and hearing about the effects of the program continues to invigorate and inspire us in our work with the MGAEF.

We realize you get many worthy requests for donations, but please consider us when you make your charitable donations this year. Our funds go to directly benefit many projects both close to home in Clarence, Newark and Onondaga County, as well as worldwide. We thank you for your support and wish you the best in the upcoming holiday season.

Daniel Ardia, President

Students in Outdoor Classrooms

In summer of 2009, MGAEF again sent four high school students to attend Cranberry Lake Field Studies, and four middle school students to attend DEC Camp Rushford.

Clare Sweeney from Clarence High School wrote "I cannot thank you enough for the chance you gave me this summer to attend the week-long research program at Cranberry Lake... I was pretty certain that research was what I wanted to do with my life. After the week was over, I went home relieved, knowing that I still feel that research was what I was meant to do... I got to hike and challenge myself and research in a beautiful place. I don't think I have ever been so dirty or worked so hard before in my life, but it was all worth it for the experience I gained and everything I learned. I miss Cranberry Lake right now, and I wish to return someday, but as a true researcher rather than a student. I wanted you to know that what you do makes a difference and that I am more grateful than I can tell you for sponsoring my stay there."

Maria DiRenzo, a middle school student from Newark, said Camp Rushford was a life changing experience she will never forget: "I never thought I would enjoy learning how to hike properly, but I admit that it was quite fun, until we had the ten mile hike to the bog... I learned so many useful skills at camp,

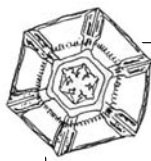


Destiny Baker and Maria DiRenzo, Newark Middle School students

as well as a better understanding for how tough animals had it... Thank you so much for sending me to this camp."

In the photo above, Maria DiRenzo and Destiny Baker display a plaque commemorating hundreds of seedlings planted as part of the newly-launched Melinda Gray Ardia Memorial Seedling Program: students receive DEC seedlings and take them into their schoolyards, back yards, and community to replenish the tree population and provide shelter for animals. Many thanks to two extraordinary Newark teachers for making this possible: Kim Saducci and Alanna Callahan. **To receive seedlings to plant in your community, please go to www.dec.ny.gov/press/51455.html.**





From Africa to Louisiana: MGAEF funds four environmental curriculum grants for 2009

Each year, the number and quality of the proposals we receive both inspires and discourages us. We're inspired because they reflect the dedication, creativity, and energy of committed educators worldwide. However, because support to develop and implement environmental curricula is so limited, we're discouraged that teachers must invest so much time in grant writing. We look forward to the day when every school district has the funds to support such worthy projects. In the meantime, the MGAEF will continue to support as many projects as we can. For 2009, we've selected four projects for support, spanning a range of approaches.

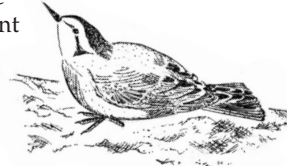
We continue our international focus through the **Africana Community Rehabilitation Organization (ACRO)**, which received support for an innovative proposal to limit illegal fishing and alleviate poverty and malnutrition in the Ulanga district in Tanzania. ACRO's main purpose is to educate youths 14 - 16 years old on the importance of environmental conservation and the need to participate in conserving the fish and river ecosystem. It will involve both practical and theoretical training on ecosystem awareness based on local/traditional knowledge and scientific knowledge to address the problem. It is expected that more than 4000 people will be affected, giving our limited funds a stronger impact!

In **Urban Umbrella Underfoot**, students in San Antonio, TX, will survey the microbial communities in the soil surrounding tree roots growing on campus and in adjoining city neighborhoods. Students will correlate that data with tree health to determine optimum landscape management practices. The goals of the project are to excite students about obtaining valid environmental data, to test scientific hypotheses about landscape management practices and tree health, and to empower students to translate that excitement into positive environmental practices within the school community and the surrounding city neighborhood. This is a very strong approach: scientific investigation by students coupled with powerful community outreach - we are excited to be able to make this project happen.

One of our most innovative proposals, **In Search of Pollution**, is a cutting-edge field and laboratory-based project in Iberia, Louisiana. From agriculture to waste water treatment, the impact that humans can have on their environment is immense. By tracking pollution, students will be able to see the effects that their community has on other communities. Students will collect river water and screen for parasites using DNA fingerprinting. This project will give students a quantifiable way to identify with their environment and realize the gravity our decisions have on current and future generations.

Additionally, this project will provide students with their first real opportunity to conduct meaningful science investigations. Allowing students to become scientists can inspire them to pursue further science in college, in a way that no lecture could accomplish.

Lastly, our own experiences as educators and scientists have convinced us that teacher training is a powerful way to advance environmental and science education. We are excited this year to be able to support teacher training. **The Teaching Ecology Collaborative**, run by the North Carolina Arboretum, uses an innovative skills and network building approach to: (1) increase ability and comfort of teachers to teach in the outdoors and connect all disciplines using ecological principles, (2) improve access to Environmental Education benefits for underserved students and teachers, and (3) build a collaborative network of skilled and engaged educators. MGAEF funds will support four free teacher workshops at rural Western North Carolina schools. The science of ecology and the local environment will be the classroom as teachers gain comfort in outdoor teaching. The NC Arboretum believes this innovative approach trains teachers to connect disciplines and become confident and comfortable outdoor educators.



Clarence students learn to be good stewards of the earth

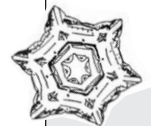
Reprinted with permission from Clarence Central Schools

Students from Ledgeview Elementary School in Clarence, NY recently engaged in a daylong educational program focused on the earth, the environment, and the culmination of their two-year green initiative. The highlight of the day was an opportunity to observe the flora and fauna at the Clarence Nature Center. Teacher Sharon Szeplowski, one of the organizers, said the hikes were carefully planned to provide a memorable experience for the students and to build on the eco-friendly lessons learned over the last two years. "We are fortunate to have a resource such as the Nature Center right in our own community," said Szeplowski. Nature center coordinator Jim Marshall and retired high school biology teacher Ken Schnobrich provided lesson plans and training for the tour guides.



Ledgeview teacher Susan Bouchane explains to first graders that the unique shape, number and pattern of leaves can help identify a plant.

Students were instructed in trail etiquette, observation techniques using all five senses, and respect for nature. MGAEF supported development of the Nature Center, including trail blazing, trail markings, educational center, and curriculum development.



Quick updates from the field

Outdoor classroom supported by the MGAEF takes form. In 2008, we supported the development of an outdoor classroom in Chestatee High School in Gainesville, Georgia. The students broke ground in October 2008,

Jen Gilbert said "It won't make science so boring. It'll make you want to come to class because you get to sit outside and don't have to sit at a desk all day. It'll make class a lot more fun."



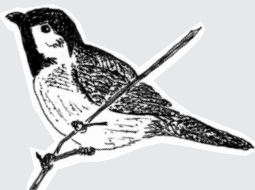
Chestatee High School students erect frame for outdoor classroom.

Turtle conservation study underway: From another 2008 recipient, Eric Lane at the Canaan Mountain School in NW, we received an update. Eric, who calls himself Turtle Project Coordinator and Chief

Turtologist says: "We officially started our turtle study last week, setting our first traps in the lake and baiting them. It was slow going at first, but we caught our first turtles today for mark and release, and the students are all very excited to see some cool living things from the lake they swim in.

Already students are stopping by the classroom to take a look. With the grant money, we were able to purchase two turtle traps, and a Vernier lab quest to use in the field with temperature, pH, and conductivity probes to begin water quality studies, and various other supplies needed to conduct the study. Thank you for your generous support. We've broken ground on what we hope to be a big project that will have a great deal of impact for many years to come, with students doing real science in their own back yard!"

Bird garden blooming!: In 2007, we provided support to Dana Crellin in Oakland, MD to allow her to bring her vision of a bird attractant garden to fruition. She envisioned her students designing and building the garden as a resource for her teaching and as inspiration for the students. It is completed and the students are already enjoying it. The MGAEF provided support for developing and printing a guide, which is shown on right.



Bird Attractant Garden

- Low bush Blueberry
- Black-eyed Susan
- Butterfly Weed
- Sunflower
- Viburnum Shrub
- Elderberry

Common Milkweed- It has two opposite big egg like leaves. It has a flower that is pink and is a star that has white trim. It can grow to be 3 to 6 feet tall. It provides seeds for the birds.

Cardinal Flower- This flower's brilliant fiery red flowers on dense spikes grow up to 4 feet tall to make this one of the showiest wildflowers. The tubular cardinal red flowers, last 4 to 6 weeks and are a favorite with hummingbirds and Sulphur butterflies.

Fireweed- These leaves are long and skinny. It has opposite leaves. The flowers have 4 big petals. The color is pinkish purple. They will grow 2- 6 feet tall and 2 inches wide. Living things will eat the seeds.

New England Aster- It has two opposite football like leaves. It has a flower that is a star. It is purple and yellow. It can grow to be 2 to 6 feet tall. It provides seeds.

Calico Aster- It has white star-like flowers with pink or yellow center discs and alternate leaves. Leaves are toothed, long, and narrow. It grows 1-4 feet tall; benefits larva and provides seed for birds.

Bee Balm- It has leaves that are shaped like teardrops and are opposite. Its shape is a showy red flowers in large heads of about 20 to 50 at the top of a branching stem. It grows up to 4 feet tall. It has nectar for butterflies and hummingbirds.

Virginia Bluebells- It grows 1-2 ft tall. It flowers in spring. Flowers are a blue bell shape and leaves are a teardrop shape; leaves. The leaves alternate and provide nectar for hummingbirds and attracts butterflies.

Black-Eyed Susan- The state flower of Maryland. The characteristic brown, domed center is surrounded by bright yellow ray florets. Thrives in most soils in full sun. It can grow to 2-3 feet. It blooms June-August.

Lowries Aster- It has blue, clustered, star-like flowers and toothed, teardrop shaped leaves. It grows up to 4 feet tall and benefits larva and provides seeds for birds.

Maple Leaf Viburnum- It has white clustered flowers. It provides berries for birds. It may reach 6 feet tall. It has showy, green leaves, that are toothed. The maple like leaves are opposite each other.

Sunflower- It has tooth heart leaves that alternate. It is a large round head with yellow petals. It grows to 8 to 12 feet tall. It provides seeds for birds.

Low Bush Blueberry- It has leaves shaped like spears that are opposite. The flowers are white and pink and are shaped like jugs. It is 6 feet to 2 feet tall. It provides berries.

Teaberry- This plant grows about 6 in. tall but it is actually a shrub. It has dark green spoon shaped leaves. It will bloom white flowers in the spring. Its seeds will begin growing in the summer. Another name for the teaberry is wintergreen. The berry color is red and they are edible.

Elderberry- It has two opposite pinnately compound leaves. It has a flower that is a circle and it is white. It can be 12 feet tall. It has a big cluster of dark purple berries.

Wild Columbine- It grows 10 inches * to 2 feet in length. The red flowers look like crowns. The leaves have lots of lobes. They provide nectar for hummingbirds.

Butterfly Weed- These leaves are long and skinny. It has opposite leaves. That means they are across from each other. The flower is shaped like a snowball. They are orange flowers. It gets 2 - 3 feet tall. It gives nectar to birds and other biotic things.

have already finished the structure and are now working on the landscaping. In a recent newspaper article, teacher Nick Scheman said the students "have a higher level of consciousness" when they are in the woods, and sophomore

Update from the Native Village of Eyak, Alaska

We would love to share the excitement of a teacher's feedback, after receiving an environmental curriculum grant from us last year. Please enjoy the letter and photos below! The last line says it all... and we are very grateful to our donors for your support.



110 Nicholoff Way
P.O. Box 1388
Cordova, Alaska 99574-1388
Ph (907) 424-7738 * Fax (907) 424-7739



10,000 years in our Traditional Homeland, Prince William Sound, the Copper River Delta, & the Gulf of Alaska

June 29, 2009

Melinda Gray Ardia Environmental Foundation
PO Box 621
Skaneateles, NY 13152

Dear Dan,

It is with great pleasure that I present you with the materials from our Environmental Education Program. After informing the High School of your award, the Program was met with such enthusiasm that it seemed to take on a life of its own. The students were eager to meet the criteria that I had set forth in the guidelines, yet at the same time, they wanted to put their youthful and adventurous spin on it. What surmounted from a winter full of planning with the faculty and students was a five-day environmental education field trip to a remote island in the Gulf of Alaska. Because the science teachers were having a tough time getting students involved in the science club and science fair, the trip was offered as a reward for those students that participated in the aforementioned activities. I have included a short story detailing the events of the trip along with the colorful photos. In addition, the following link, <http://www.kayakisland.org/KayakIsland.mov> will take you to a video that was created by the science teacher, Adam Lowe, with the help of his students.

I take great pride in saying that because of the grant awarded to us by the Melinda Gray Ardia Environmental Foundation, our Environmental Education Program has expanded to reach out to students of all ages. At the completion of the Kayak Island trip I was so impressed with one of the students that I hired her as my summer intern. Through this position she has blossomed into an environmental educator herself, teaching the younger generation about the importance of our surrounding environment. Working with our youth program coordinator, we have trips planned all summer long that take the youth to view the glaciers and discuss global warming, involve kids in activities that address littering and recycling, get them excited about biking as a form of alternative transportation, teach them about renewable energy, and just get them outside and exploring in general.

I hope you receive the program materials with as much enthusiasm as we had in creating them. Please feel free to request additional information or electronic copies of any of the pictures. We truly appreciate your support in helping to develop our environmental education program. With assistance from your foundation, we are making a difference in the lives of our youth and inspiring a new generation of environmental stewards.

Sincerely,

Autumn Bryson
Environmental Coordinator
Native Village of Eyak

