

CRANBROOK

CRANBROOK EDUCATIONAL COMMUNITY

SUSTAINABILITY AT CRANBROOK ..AND BEYOND













NEXT GENERATION MAKING THE DIFFERENCE!





At Brookside in the **Busy Bees Environmental Club**, many students are making a difference by building habitats, creating websites, making videos, and sharing their love of the earth. The Busy Bees Environmental Club is open to 3rd and 5th grade students. The goal of this club is to develop ecological awareness and social responsibility for their environment.— See Page 2

CRANBROOK SCHOOL ENVIRONMENTAL SCIENCE CLASS, 2016

Inside this issue: Learning & Awareness: 1-10 Brookside Busy Bees Schools Horizons Upward Bound Green Awards Student Perspectives Miles Walk Art Academy Material Exchange House and Gardens Physical Plant Human Resources Community Outreach 11-12 Institute of Science Flint Water Drive Interview with President DiMarco 13 Director's Blog

Inside this special edition of the Sustainability at Cranbrook & Beyond, we invite you to see **through the lens** of Cranbrook's next generation. Cranbrook students, pre-k –12 and Cranbrook Academy of Art graduate students are **MAKING THE DIF-FERENCE** at Cranbrook and beyond. Our students are not only learning about sustainability, they are identifying environmental problems, solutions and taking action.

at: https://www.youtube.com/channel/UCKnzlmupUSiAdTwL4iOF1sw



The Brookside Lower School and Cranbrook Upper School Michigan Green School REPEAT Awards are local and state recognition of the extraordinary education, creativity and innovative learning encouraged and prized at Cranbrook.

We also engaged the students of Ms. Audrey Armoudlian's Environmental Science Class, 2016 to research and write newsletter articles for this edition from their lens. Special **thanks** to Ms. Audrey Armoudlian and the following student authors who contributed to this newsletter: Zuzia Belska, Garrett Faulkner, Hattie Garrat, Kyle Ghesquiere, Kyle Gierman, Jake Hammond, Shakira Khanam, Didi Ikeji, Joe Sasson and Konrad Wege. In addition to writing articles, the students created videos of their articles. You can check out the student videos







Brookside Busy Bees Environmental Club Students: Identifying Environmental Problems & Exploring Actionable Solutions

Brookside students were asked about some environmental problems that they know about and would like to solve. These are some of their responses:

Tyler – People are chopping down trees which is destroying forests.

Mya – Many people cut down trees but they don't know what change they are making. Trees help absorb water so there won't be as many floods.

Hayden – Litter is dangerous to animals; small animals can climb into something and get stuck and die.

Milani – People are using land which could be habitats for animals.

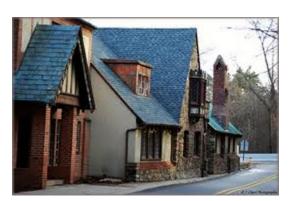
Quinn – Penguins and other creatures are going to be harmed by garbage.

Ariba – Ocean beaches often get littered with tons of trash such as plastic bags and bottles. It can kill animals.

Luke - Not to pollute the waters at all with chemicals

Cooper – Too many factories/ nuclear power plants dump pollution into the water. At some point, all of that polluted water will evaporate into the air.











2016 Brookside School
Environmental Bee Club
Students
Next Generation:
Making The Difference





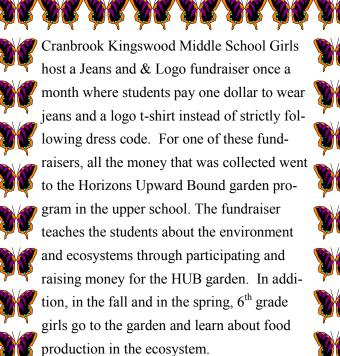


BROOKSIDE ANNUAL HENRY BOOTH CLEAN-UP DAY

Every year, Brookside celebrates the annual "Henry Booth clean-up day." Provided with rubber and latex gloves, the students of Brookside help clean up their school. Henry Booth Memorial Clean-Up Day is a yearly event that is named in honor of Henry Booth, son of Cranbrook founders George and Ellen Booth. This day usually corresponds with Earth Day. When walking from Thornlea to Christ Church every Sunday for services, he would pick up all the trash he saw on the way. Upon arriving at the church, a person with a special trash bag would be waiting for him. The pictures below show the teachers helping guide their students to find trash on the ground and place it in clear recycling bags and black trash bags. Traveling around the campus to places like Kingswood, Henry Booth cleanup day was a success this year as always.



CRANBROOK KINGSWOOD GIRLS' MIDDLE SCHOOL & HORIZON UPWARD BOUND











HUB Garden





SUSTAINABILITY AT CRANBROOK & BEYOND

LEARNING, COMMUNITY INVOLVEMENT & AWARENESS

NEXT GENERATION MAKING THE DIFFERENCE!



Kingswood Café: "Simply Puur"

Students and faculty long await the opening of the Kingswood Café. The café is scheduled to open in May and will have many features that definitely make the wait worthwhile. The café brings many new exciting concepts to campus. The hope is that it will be a great alternative to leaving campus and picking up a smoothie or coffee drink. Chartwell's model behind the café is a concept coined "Simply Puur." As a location for students to gather, grab a coffee or a snack, the Café will feature "clean" food only. All food is sourced from responsible ingredients using these simple guidelines: GMO free, no artificial flavors or colors, and no unnecessary additives. Products will be locally sourced when possible including the use of Great Lakes Coffee. The café has made these decisions in an effort be more environmentally friendly. It is sure to be one of the cleanest food sources in our area and a more environmentally beneficial option than leaving campus for a meal.





Cranbrook Kingswood Boys' Middle School – REPURPOSE!

The Boys' Middle School has taken steps toward a cleaner future along with incorporating its' young



students. The Middle School has repurposed old furniture as a means to save money, stimulate

creative minds, and help create a new Makerspace. The inspiration was not necessarily extravagant, but the Middle school needed a way to update their space while both saving the environment and their wallets. With the repurposing of furniture such as tables, chairs, and couches, the Boys' Middle School is now renovated for a new Makerspace.

The renovations will now be put to full use. Now the middle schoolers will be able to hold class presentations there, the Mother's Council will have meetings, drama classes will be held there, all in an attempt to repurpose the room while getting students as young as ten involved. These kids helped in dramatic ways; they learned how to put castors onto furniture, how to sand down tables, and how to change surfaces for new purposes, such as using whiteboard paint on tables to provide a writing surface. These changes not only helped to save the environment, but helped to plant seeds in kids' minds about the importance of reusing.





MICHIGAN GREEN SCHOOLS AWARD BROOKSIDE LOWER & CRANBROOK UPPER SCHOOL REPEAT!!

Michigan Green Schools is a non-profit organization that is committed to assisting all private and public Michigan schools. Green schools teach educational stewardship to students, demand good ecological practices, and strive to achieve environmental goals which include protecting the air, land, water and animals. In order to obtain the Evergreen School award, 20 total activities must be completed. At least two activities from each of these three categories, Reduce/Reuse/ Recycle, energy, and environmental protection, must be completed. Cranbrook Schools Brookside once again is designated an official Green School of Michigan. One of the activities that Brookside completed was the Busy Bees Club which developed ecological awareness and responsibility for the environment.



Pictured: Trish Hourigan (Green Team Member) and Julie Schulze, Brookside School Faculty Members & Environmental Club Leaders



Cranbrook Upper Schools has received the prestigious Green School Certification from the State of Michigan for the 2015-2016 School year. The award is presented to schools that show a commitment to sustaining and bettering the environment. Cranbrook has received the award numerous times before and its renewal displays the schools dedicated commitment. In order to receive the honor of Green School Certification, the educational institution has to fulfil 10 activities, at least two from each of the four categories: Reduce/Reuse/Recycle, Energy, Environmental Protection and Miscellaneous. Believe it or not... Cranbrook does a lot! Have you noticed the recycle bins in the corridors? Yes, this is one of the things the school does to help the environment. What about the tasty dining hall food? It supports local Detroit based company out of the Eastern Market! The meat is antibiotics free and the fruits and vegetables are free of pesticides! Cranbrook also saves energy by using LED lights. That's not the end of the list, Our bus drivers use governor chips that save gas so we pollute less. We are even more ecological, because we walk from Cranbrook to Kingswood! The recent campus clean-up day is also a green initiative unique to our school. Cranbrook is also involved in the Michigan Garden Project - the HUB (Horizons Upward Bound) garden. Our environmental club is very active; the students organize trips, help the endangered species and much more. The beautiful natural scenery of our campus matches the school's ecofriendly policies and its green awareness.



A CK Student Leader Perspective

Sustainability is important because....

Sustainability is important because it provides a basis for protecting our environment in order to ensure future generations will be able to thrive. The use of fossil fuels and abundance of pollution is skyrocketing in our increasingly affluent nation. We are concerned with sustainability not only for the benefit of Earth's future, but because Cranbrook is a school that strives to "Aim High". By finding new ways to bring sustainability into the Cranbrook Educational Community, we are pioneers for not only the green movement in our immediate vicinity, but for Earth as a whole.

As leaders in education, Cranbrook has implemented new ways for students, faculty and staff to become involved in progressing towards an ecofriendly school. We have implemented water saving technologies and funds; in 2015 Cranbrook installed Bubblers that allow everyone to efficiently refill water bottles, and tally how many bottles we have saved from putting into landfills. These programs and many others are growing steadily within the Cranbrook Educational Community and beyond.

Waste Not Want Not

Up to 40% of food goes wasted in the United States today, yet 49 million Americans lack a sufficient amount of food. This is not only a waste because we could be feeding millions of hungry people with the food we waste but it harms the world economically and environmentally. It is expensive to waste almost half of the food we make every day. The cost to produce, store, and recycle so much wasted food is so high and it all could be avoided. The American consumers throw away 165 billion dollars' worth of food every year. The average American family of four wastes \$2,225 every year by wasting food. It is also environmentally taxing. As all this wasted food rots in landfills it creates methane, a greenhouse gas about 25 times more damaging to the atmosphere than carbon dioxide. Wasted food is the single largest contributor to methane emissions.

Points:

- Up to 40% of food goes wasted in the United States today
- 49 million Americans lack a sufficient amount of food.
- The American consumers throw away 165 billion dollars' worth of food every year
- The average American family of four wastes \$2,225 every year by wasting food
- As all this wasted food rots in landfills it creates methane, a greenhouse gas about 25 times more damaging to the atmosphere than carbon dioxide.
- Wasted food is the single largest contributor to methane emissions.



Laidman, Jenny. "Waste Not, Want Not." Kent State University. Melissa Olson, 2 Mar. 2016. Web. 19 May 2016.



PAPER TOWELS

After some time, Cranbrook started wondering about potential cost savings, in addition to the contribution to sustainability. Cranbrook House-keeping came up with a few, and using some conservative assumptions below, came up with the following estimates:

- 2,000 Cranbrook-only people on campus every day of the Schools calendar (including students, faculty, staff)
- 3 average hand-washings per day per person
- 6,000 sheets potentially saved daily if each person used just one fewer sheet per washing.

It is estimated CEC is currently spending about \$16,000/year on paper towels. What if we could cut the usage in half? That would be a significant environmental impact. Even if we cut by a quarter, it would be a \$4,000 savings.

There are benefits of going green and Cranbrook students would love to know how to preserve our planet!







Cranbrook Kingswood Upper School LITE Club

Senior Clara Munkarah is the president and four-year member of the Leaders in the Environment (LITE) club. The club facilitates many environmental efforts to help the school become a true green school. Some activities students participate in include: walking between the beautiful campuses, advisory groups participating in the yearly clean up and invasive species removal, and serving pesticide and antibiotic free produce and meat in the dining halls. We would like to thank Clara for being a champion leader and the members of the LITE club for all their work and leadership at school.

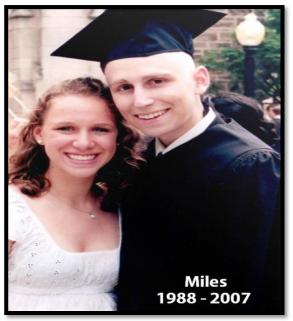
Upper Upper School students interested in the Environmental Club (LITE - Leaders in the Environment) should contact stennent@cranbrook.edu. We would love to have you join us.



Photo: Clara Munkarah

Cranbrook Upper School: Walk for Purpose

Miles Levin was a 2007 Cranbrook graduate who unfortunately passed away due to a rare cancer disease called, alveolar rhabdomyosarcoma. He was almost 19 years old. Although he had this disease, he began to make the most of it by creating a blog to show people how to get through a life struggle as big as his own. Each year in April, faculty and students celebrate Miles and his astonishing life with the Miles for Miles event. On this day students are encouraged to walk between campuses and not take the bus, in commemoration of Miles. Various fund raisers are held in conjunction with this event.



Miles seen at his graduation from Cranbrook Kingswood with his sister. Nina.





Transportation, in the form of commuting and navigating around campus throughout the day, has impacts in the form of air pollution, green house gases (GHGs), and land use. Sustainable transportation options are established with the goal of reducing the environmental and financial impact of an organization's transportation needs while enhancing the quality of life.

We applaud our Upper School students for organizing and participating in the Miles Event and embracing this sustainable transportation choice. We will continue to explore sustainable transportation options at Cranbrook.

Sustainable Tip: Staples Delivery trucks frequently drive on campus delivering door to door orders under \$25.00. What if departments checked supply cabinets and increased their minimum orders to \$50.00? Embracing these sustainable practices would help reduce the environmental impact and potentially reduce the cost of office supplies.











Cranbrook Academy of Art Materials Exchange

Why dispose if you can give your things a second life?

Never doubt that a small group of thoughtfully committed citizens can change the world. Indeed, it's the only thing that ever has.
-- Margaret Mead

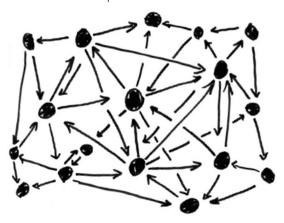
Emily Poor, 2016 graduate of Cranbrook Art Academy, conducted an excellent project about composting. This demonstration was a great success for the Cranbrook Educational Community. Various students, staff, and facul-



ty came to the HUB garden to learn about composting and other energy efficient means of dealing with pollution. It was effective in teaching how to create our very own composting bin. This useful life tool helps provide a sustainable mindset regarding the trash we accumulate. Composting is a very efficient means of dealing with organic trash and therefore this project taught students a valuable lesson outside the classroom. Emily worked alongside the dining halls and numerous faculty throughout her years at Cranbrook in an effort to create a more sustainable campus. This composting event was Emily's final contribution to the Cranbrook Community. The Cranbrook Educational Community would like to extend a special thank you to Emily, for everything she has done throughout her years here.

Cranbrook Academy of Art

MATERIALS EXCHANGE



Continuing a tradition of advancing Cranbrook's sustainability mission, Cranbrook Academy of Art students took the extra effort to pull together another successful Materials Exchange and Donation program for 2016. On May 16 & 17, as the Academy academic year ended, Academy students of the Studio Council consolidated usable art materials, household items and clothing, making them available to each other, the Cranbrook Educational Community at large, and a group of regional non-profits (Friendship Circle, Art Experience, Hatch: A Hamtramck Art Collective, Salvation Army, Cranbrook Summer Art Institute, Arts & Scraps). A large volume of items each year find new life and stay out of the dumpsters. The exchange has been held in the conference room and a garage on Academy Way, where many of the larger items have been put, including a bouncy horse. As Julie Montgomery, the Budget and Facilities Support Assistant, states "We're not sure why an Academy student had a bouncy horse, but you never know what avenue art might take you down." How cool is this? Art students' ecological giveaway. Advancing the CEC mission of sustainability by taking art students' old videos, CDs, clothes or a bouncy horse!









CRANBROOK HOUSE & GARDENS MAKING THE DIFFERENCE!

Cranbrook House & Gardens 2016 Annual Spring Plant Sale

This Spring marked the 44th annual spring plant sale, hosted by Cranbrook House and Gardens. The sale took place on May 10 and 11th, and was considered to be a great success. The proceeds of



the spring plant sale will go towards the preservation of the Cranbrook campus, particularly the Booth residence, a National Historical Landmark in Bloomfield Hills. This year's plant sale included a variety of different plants including native plants and wildflowers.

CRANBROOK EDUCATIONAL COMMUNITY MAKING A DIFFERENCE ENCOURAGING EMPLOYEES TO LIVE SUSTAINABLE LIVES



Human Resources continues to promote and present Cranbrook Healthy Choices for a Healthy Community.







New Summer & Fall Sessions Coming soon!

Questions: Contact: Bryan Opalko at x 7735 or email: healthy choices@cranbrook.edu

Exercising for a healthier and sustainable you!



Think Green

MAKING THE DIFFERENCE CRANBROOK FACULTY, STAFF & STUDENTS WORKING & COMING TOGETHER FOR THE CAUSE

Garlic Mustard Pull



The garlic mustard pull and the trash pickup was a huge success as students on the Kingswood campus filled 95 bags of trash and garlic mustard from Snake Valley. The students on Cranbrook campus came in with 184 bags from parts of CIS, the 550 parking lot, Orchard Ridge Road, around the Ice Arena and Faculty Way. This ended up with a grand total of 279 bags combined from the two campuses. The Landscape department has shared their thanks for all the effort given by both faculty and the students.





Cranbrook Contributes to Local Health!

The Cranbrook Educational Community continues to contribute to the local health in southeast Michigan by working with the American Heart Association. This year we participated in the Metro Detroit Heart Walk. on Saturday, May 14th in Detroit! It was a family event with three different routes ranging from 1 to 3 miles. Look for additional opportunities from the CK educational community to promote local health in the future!



The Sustainability at Cranbrook Newsletter is published for Cranbrook Educational Community.

Rod SpearinNorma Jean Evans, Editor/PublisherChief Operating OfficerDirector, Sustainability & Business Services

Wendy DeLaRosa and Norma Jean Evans Design Editors

Steve Pagnani & Ms. Audrey Armoudlian's Environmental Science Class Contributing Writers









MAKING THE DIFFERENCE! FOR THE NEXT GENERATION









Cranbrook Green Team Welcomes Michele Arquette-Palermo!

In December of 2015, Michele Arquette-Palermo returned to CIS as the Head of the Freshwater Forum. Michele worked at the Institute in a variety of positions from 1999-2008, however she remained an active volunteer since that time and collaborated with CIS on many projects as the Program Director at the Clinton River Watershed Council.

Michele is a Northern Michigan University graduate with a background in Ecology, Aquatic Biology and specializes in water quality assessments. She is also a recent graduate of Walden University with a MS in Non-profit Management and Leadership.

As the Head of the Freshwater Forum, Michele will oversee all aspects of the Forum's activities including fund development, grant writing, educational programs, teacher professional development, exhibitions, and research and stakeholder engagement.

In 2014, Michele was recognized by the Michigan Alliance for Environmental and Outdoor Education for excellence in her field and in 2013 awarded the Michigan Water Environment Association Educational Professional of the Year award and was Chevy Green Educator of the year in 2012.



Cranbrook Institute of Science Goes Green During Spring Break: Compost and Lampreys and Snake.

Cranbrook Institute of Science presented their "Rite of Spring" April 4th through the 8th. More than 2500 visitors celebrated Spring Break at CIS and learned to be better stewards of the environment. There were hands-on activities, lectures and the chance to meet with environmental experts offered opportunities to learn how to live a greener life. "Rites of Spring' was a celebration of Earth Day and our environment," said Michele Arquette-Palermo, head of the Freshwater Forum at the Institute of Science. 'The event also gave us the chance to connect people with the resources and organizations they can use to be more earth friendly." Some fun activities included recycled art projects, Trash Trivia, and Water Jeopardy.





An Interview with President Dom DiMarco on Sustainability at Cranbrook

By Norma Jean Evans

I had an opportunity to schedule an interview with President Dom DiMarco to converse about sustainability at Cranbrook. Prior to the interview, I read and embraced the vision, mission and core values for sustainability at Cranbrook. Also, while attending group meetings or public presentations, I listened as President Di-Marco was leading and inspiring us all to embrace the vision of a sustainable community.

I am always impressed with President DiMarco *leading*, *inspiring and exemplifying* sustainable practices. Therefore, the focus of our interview was to see sustainability through the lens of the President and have him answer the question: Is the President *implementing* sustainable practices?

After the interview, I concluded our President, Trustees, Governors and Leadership Team members are not only thinking about sustainability, they are taking action. President DiMarco beamed as he shared the strategic theme, visions, goals and lists of accomplishments and works in progress at every Program area. Most notable, every division and department is *making the difference* and sustainable practices are becoming the standard.

President DiMarco commended the members of the

Green Team, students, faculty and staff for the initiatives that have been completed and are underway. He shared suggestions for the 4 Sustainability Pillars of Focus such as: looking at landscape in a sustainable way; business practice improvement; water conservation, etc. And, he stated "we also share a responsibility to be sustainable beyond our borders."

Again, I was very impressed with the President yet, I still wanted to find out how he is implementing sustainable practices. The President, his department and members of the Board were very instrumental in implementing Board Effect software to help reduce paper, drive efficiency, effectiveness and engagement among Trustees, Governors, Executives and Administrators and the Bring Your Own Device (B.Y.O.D.). These initiatives resulted in a significant reduction in paper use and cost. The President also accepted and is participating in the 3 Year Challenge to help eliminate water bottles on campus by installing a water cooler and using recyclable glasses in his office.

Indeed, President Dom DiMarco, is leading, inspiring, exemplifying and implementing sustainable practices in the Community and beyond.

"You can't improve what you can't measure."

President Dom DiMarco



Cranbrook Vision Statement

Cranbrook is a diverse, sustainable community where education is prized, the human spirit is nurtured, and innovation and creativity are valued. Cranbrook challenges minds and transforms lives.

To view Cranbrook 's full Strategic Plan visit: http://digital.turn-page.com/t/76311-cranbrook-strategic-plan

Cranbrook Mission

Statement

The Cranbrook Educational Community provides extraordinary education, encourages creativity and innovation, and values learners of all ages and backgrounds. Cranbrook develops people who will live with purpose and integrity, create with passion, explore with curiosity, and strive for excellence.



CRANBROOK MAKING THE DIFFERENCE BEYOND OUR BORDERS!

In April 2014 Flint switched its drinking water source from Detroit Water and Sewerage water coming from Lake Huron and the Detroit River, to the Flint River. After officials failed to treat the water properly, the water became contaminated with lead. This lead contaminated water has been consumed by between 6,000 and 12,000 children, which can potentially cause serious health issues. After hearing about this problem in Flint, Cranbrook Schools students led a faculty, staff, parents and volunteer fundraiser to donate bottled water to the city of Flint. The Cranbrook Flint Water Drive has received over 15,000 bottles of water to be donated to families in Flint.







Director's Blog: Sustainable YOU

Cranbrook: Making the Difference!

Greetings Everyone!

This e-newsletter invites you to look through the lens, focus, and zoom in on the initiatives of generations working toward excellence and sustainability at Cranbrook. From pre-k through 12, graduate students, employees and volunteers, our Cranbrook community is fully engaged! As we gaze through the lens, we see commitment, innovation, collaboration and creativity. Our panoramic view shows an entire community working together, making unique and valuable contributions to attain the Cranbrook vision.

In order to see sustainability through the lens of Cranbrook leadership, I met with President Dom DiMarco. He shared the Cranbrook Vision: *Cranbrook is a diverse, sustainable community where education is prized, the human spirit is nurtured, and innovation and creativity are valued. Cranbrook challenges minds and transforms lives.*

And, he enlightened me on how sustainability is woven throughout the vision, mission, strategic themes and fabric of our Community. Sustainability at Cranbrook is not just focused on *making a difference*; which is singular. Instead, Cranbrook's focus is on *making the difference*, resulting in transformation.

Thank you for making the difference!

Best,

Norma Jean Evans



SUSTAINABILITY CHAMPIONS CHALLENGE

Tell us how **you** are making the difference as you think, learn, work, play, and give towards a sustainable Cranbrook and beyond.

Get Involved Today.
Email: sustainability@cranbrook.edu.

