



WINTER
2015

CRANBROOK



CRANBROOK EDUCATIONAL COMMUNITY

SUSTAINABILITY AT CRANBROOK...AND BEYOND

WE THINK! WE LEARN! WE WORK! WE PLAY! WE GIVE!

SUSTAINABILITY



...that Cranbrook has an Electric Vehicle Charging Station located on the upper level of the Cranbrook Institute of Science parking deck supporting environmental and educational purposes?



Photo: Maxine Frankel, Cranbrook Board of Trustees Member & Chair Academy of Art Board of Governors Chair, supported and promoted the use of electric “green” vehicles during the Academy STUDIO Fundraiser Event. Electric vehicles are referred to as “green” or environmentally friendly vehicles because they produce less harmful impacts to the environment than comparable conventional internal combustion engine vehicles running on gasoline or diesel, or one that use certain alternative fuels.

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OUR 2015 MISSION/DEFINITION

Our Mission: Stewardship for our people, conserving our planet, caring for our campus

Our Definition: At Cranbrook sustainability is the creation of experiences and services (including education) using processes and systems that are:

- ◆ Non-polluting
- ◆ Conserving of energy and natural resources
- ◆ Economically efficient
- ◆ Safe and healthful for workers, communities, and consumers
- ◆ Socially and creatively rewarding for all working people

Our 2015 Goals

- Reduction in campus-wide energy consumption by 10%
- Increase Campus Recycling rate by 20%
- Reduction in the use of commercial high-nitrate fertilizers on the CEC landscape by 50%
- Consideration of sustainable hardscape products, i.e., parking lots, even at a higher cost than non-sustainable alternatives.
- Reduction of food waste at Cranbrook/Kingswood dining halls by 30%
- Eliminate plastic water bottles campus-wide in favor of refillable containers

Rod Spearin, COO Voice & Vision

Our Strategic Goals & Progress Reports

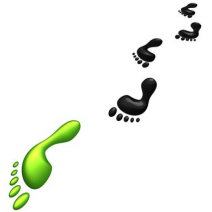


2015-17: TAKING NEXT STEPS

Our 2014 Year in Review Scorecard Report provides a glimpse of the community-wide efforts and progress toward our strategic goals for a sustainable community. We are taking a few moments to celebrate the milestones, progress and community-wide momentum that is building, we have much more to do!

Where Do We Go From Here?

- Conduct Engagement Meetings with Community-wide Stakeholders to share the vision, mission and strategic goals.
- Complete Divisional Baseline Inventory- What are they doing now? What do they have planned for the future?
- Review and request Sustainability ideas and input on Community-wide Areas of Focus
- Re-Introduce/Expand and Engage Sustainability Green Team Members into four (4) Areas of Focus
- (1) Strategic/Steering
- (2) Physical Plant
- (3) Learning, Community Involvement & Awareness
- (4) Green Team Liaisons/Captains (Sustainability Project Initiatives)
- Compile campus-wide Baseline Inventory findings and incorporate into the “appropriate Areas of Focus
- Revisit Goals
- Refine/Update 2015-17 Taking Next Steps *Sustainability at Cranbrook & Beyond* Program
- Implementation, Communication, Teamwork!!



How Can You Help? Connect with Your Green Team Member—Get Involved!

Introducing Our 2015 Green Team Members

GREEN TEAM STEERING COMMITTEE

- Dom DiMarco
- Rod Spearin
- Arlyce Seibert
- Christopher Scoates
- Mike Stafford



LEARNING, COMMUNITY INVOLVEMENT & AWARENESS

- | | |
|----------------------|---|
| • Rod Spearin | • Sarah Westerman |
| • Norma Jean Evans | • Julie Montgomery |
| • Lisa Appel | • Judy Lindstrom |
| • Suzanne Tennet | • Rob Mies |
| • Trish Hourigan | • Allison Mitchell |
| • Marjorie Olt-Mertz | • Kimberly Sinclair |
| • Cindy McGee | • Steve Pagnani |
| • Rita Norkiewicz | • Special Green Team Captain & Liaison: |

*Rob Meis, Bio Blitz 2015

PHYSICAL PLANT GREEN TEAM

- Rod Spearin,
- Norma Jean Evans
- Dan Williams
- Gene Hunt
- Kevin Mill
- Jean Claude Azar

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

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Chief Operating Officer

Norma Jean Evans, Editor/Publisher
Director, Sustainability & Business Services

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*“It is ours now, and we are all so glad... It is to be called Cranbrook.”
Diary of Ellen Scripps Booth, 1904*

WE LEARN!

Cranbrook Kingswood Boys’ & Girls’ Middle Schools Ecosystem Challenge Day

In September, the sixth graders at both Boys’ and Girls’ Middle Schools had an opportunity to explore the ecosystems found on Cranbrook campus. The students rotated through a series of stations that included taking water samples of the Rouge River, The Oriental Gardens, Bog Gardens and the Deciduous forest. The day concluded with the study of the macro invertebrate life found in the samples.



Upper School students interested in the Environmental Club (LITE - Leaders in the Environment) should contact **Clara Munkarah** at cmunkrah16@cranbrook.edu.

We would love to have you join us.



WE THINK! WE LEARN!

Edible Plants Small Worm Bin Composting Design & Project

by Emily Poor
Cranbrook Academy of Art

According to the US Composting Council, organic materials make up about 2/3 of landfills. Composting recycles food and paper scraps into a useful soil fertilizer, and reduces the amount being thrown away.

Compost is made of two types of material: nitrogen-rich (fruits, vegetables, coffee grounds, tea bags, egg shells) & carbon-rich (leaves, yard trimmings, paper, cardboard, paper towels). These decompose over time and turn into organic fertilizer.

This semester, I have been researching how to construct both large and small compost bins. Several methods allow quick and easy decomposition without odors. The Print Media department at Cranbrook Academy of Art has been collecting food scraps from the kitchen.

I constructed small wooden bins, which are filled with moist paper bedding and Eisenia Fetida (red wiggler) worms. The worms eat the food scraps and naturally recycle it into fertilizer. This will then be used to grow edible plants in the spring.

We will keep you updated on Emily's project!



Upcoming Events

Cranbrook Academy of Art 3rd Annual Materials Exchange and Donation Event

The Academy of Art will host its **3rd annual Materials Exchange and Donation** in early **May 2015**. Each year during dorm and studio clean-out, Academy artists and designers donate usable leftover materials, art supplies, tools, and more to a central space. Students and other members of the community are invited to exchange their materials for ones that are needed and “shop” for items of interest, and all leftover materials are donated to community organizations who promote the arts in Metro Detroit.



Past recipients of our donations have included: 555 Gallery, Matrix Theatre Co, Children's Hospital, Art Corps Detroit, A Host of People, and a local animal shelter. Beginning in February, we will be looking for volunteers to help with the two-day event – please email Sarah at swesterman@cranbrook.edu if you are interested in becoming involved.





Upcoming Events



Exhibitions



Cranbrook Institute of Science will be hosting an exhibit on **plastic pollution** in early 2015, see below. This exhibit presents an opportunity to advance sustainability on the Cranbrook campus. Visit our website for more details: <http://www.cranbrookfreshwaterforum.org/events.html>

There is an opportunity for the Cranbrook Schools and Academy of Art to be involved, ideas listed below. For example, we could display artwork made of plastic materials or screen a video produced by students at our special event on March 6, 2015.

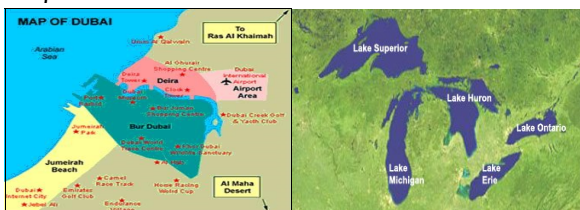
These resources can begin the conversation! New ideas welcome!

Plastic Waters: From the Great Lakes to the Oceans

February 9 - March 16, 2015

Cranbrook Institute of Science Main Lobby

From the deserts of Dubai to the Great Lakes, a unique collection of artifacts tells the whole story of our plasticized world.



**PLASTIC POLLUTION EXHIBIT
HOW CAN YOU CAN GET INVOLVED?
OPTIONS TO CONSIDER**

“Bag It” Film – Host a screening for schools of the film to kick-off a plastic recycling reduction effort.” Try to go a day without using plastic” Could be in the CIS Auditorium or video shared in individual classrooms.

<http://www.bagitmovie.com/index.html>

http://www.bagitmovie.com/for_educators.html

Curriculum Guide:
http://www.bagitmovie.com/downloads/EducationPacket_7.pdf

Jason Learning - <https://www.jason.org/contest/2014-2015-plastic-film-recycling-contest>

National K-12 contest that involves poster or presentation campaign to reduce plastic film.

5 Gyres Institute Waste Free Schools Contest:
http://5gyres.org/how_to_get_involved/projects/waste_free_schools_contest/

2015 CIS LECTURE
Plastic Waters: Our Local Connection To This Global Problem.
Friday, March 6, 2015 from 6:30-9:00 PM at CIS

6:30 pm Reception

7-8:00 pm Forum: What's being done to clean-up waterways locally? To include brief presentations by [Friends of the Rouge](#), [Clinton River Watershed Council](#), [Friends of the Detroit River](#) and [Alliance for the Great Lakes](#)

8-9:00 pm Lecture: An Ecological Perspective on Microplastics in the Great Lakes - Jennifer Daley, Researcher with University of Michigan School of Natural Resources and the Environment

There will be an opportunity to view the exhibit before and after the lecture.

For additional information, please contact:
Lisa Appel
Watershed Education Coordinator, CIS
at lappel@cranbrook.edu,
<http://www.cranbrookfreshwaterforum.org/> or
call 248-645-3223.





Upcoming Events

Cranbrook and The Nature Conservancy Present Science Talks Lecture Series 2015

Back by popular demand, Cranbrook Institute of Science and The Nature Conservancy are partnering again to present four lectures at the Institute of Science from February through May 2015. Nature Conservancy scientists will discuss a wide range of topics related to the Great Lakes Region including its rivers, algae blooms on Lake Erie, and Michigan's unique sand dunes. Join us on one of the following dates:

February 19, 2015: *Restoring Broken Waterways*

Freshwater Ecologist **Mary Khoury** will explain what "connectivity" means to river systems in the Great Lakes and why it's so important to the health of our rivers and the creatures that live in them.

March 12, 2015: *How and Why Algae Happens*

Western Lake Erie Basin Project Director **Carrie Vollmer-Sanders** will give an overview of the factors that lead to toxic algal blooms in Lake Erie and what we can do to prevent future outbreaks.

April 16, 2015: *Exploring Amazing Places*

Hear Conservation Director **Dr. Patrick Doran** talk about the best wild places in Michigan and the Great Lakes and what we can do to protect them for the future.

May 7, 2015: *Protecting Great Lakes Dunes*

Learn how Eastern Lake Michigan Project Manager **Shaun Howard** and his crew are working with partners to restore, manage and protect the world's largest freshwater dune system.

Tickets are \$10 for members of the Institute of Science and The Nature Conservancy, and \$12 per lecture for the general public. To register or for more information, visit <http://science.cranbrook.edu/> or The Nature Conservancy web site at <http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/michigan/events/cranbrook-series.xml>



Cranbrook Launches BioBlitz 2015

The Cranbrook Educational Community will host **BioBlitz 2015 on August 7 and 8**. The Cranbrook BioBlitz is a two-day event that will gather hundreds of volunteer scientists, students and community members to measure and highlight the biodiversity of Cranbrook's unique habitat in the heart of the urban Detroit area. This family-friendly event will be a public celebration of the biodiversity in Southeast Michigan and will feature hands-on science and nature exhibits, photography workshops, food, art and entertainment. Our BioBlitz 2015 Green Team Captain & Liaison is **Rob Meis**. For additional information, visit <http://science.cranbrook.edu/> or call 248 645.3210.



EARTH DAY CELEBRATES 45 YEARS

On April 22, Earth Day will celebrate its 45th anniversary! This will be an exciting year in environmental history. What will YOU do to take the lead?

More information to come in the Spring Edition of the Sustainability at Cranbrook newsletter!





WE THINK! WE GIVE! WE LEARN!



Did You Know?



**Cranbrook House & Gardens Volunteers
We All Greatly Appreciate Each of You &
Your Service to Cranbrook!
Going Green Since 1975!!**

Each year, we are all aware of the **Cranbrook House & Gardens Annual Spring Plant Sale**. Did you know...

- ◆ the Volunteers pot, grow and sell more than 2,000 plants during the annual spring plant sale.
- ◆ Cranbrook House & Gardens Volunteers have been rescuing and saving at-risk bloom and plants native to Michigan's unique ecosystem since 1975?
- ◆ Cranbrook House & Garden Volunteers native plant rescue group help make it possible for us to maintain the beautiful landscape that Cranbrook is known for around the world?
- ◆ Cranbrook House & Gardens Volunteers give over 16,000 volunteer hours annually from working in the gardens and greenhouse to leading docent tours and planning special events.

Sustainability at Cranbrook & Beyond!



Save the Date!

**Cranbrook House & Gardens
2015 Annual Spring Plant Sale**

May 12, 2015 from 10 am to 7 pm

May 13, 2015 from 10 am to 2 pm

Location: Cranbrook House & Gardens Greenhouse

380 Lone Pine Road

Bloomfield Hills, Michigan 48304

For Additional Information: Call (248) 645-3149



WE WORK! WE PLAY! SUSTAINABILITY!

Human Resources Presents *Cranbrook Healthy Choices for a Healthy Community*



Register before January 15, 2014

New Yoga Sessions—January 20– May 21, 2014

New Zumba Fitness Sessions: January 21– May 20, 2014

Weight Watchers at Work: January 21- April 22, 2015

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

Exercising for a healthier and sustainable you!





SUSTAINABILITY AT CRANBROOK & BEYOND

PHYSICAL PLANT NEWS



“It is ours now, and we are all so glad... It is to be called Cranbrook.”
Diary of Ellen Scripps Booth, 1904

LANDSCAPE DEPARTMENT NEW WELL PROJECT

Water is becoming an increasingly expensive--and even scarce--commodity for landscape maintenance.

This Fall, **Kevin Mill** (Landscape Superintendent) led a project completed by a contractor to install a well near Cranbrook’s front entrance. The well was installed to provide a source of irrigation for the many plants and trees on our campus. Unlike city water, well water is direct ground water that does not undergo any chemical filtering before it’s consumed.

The advantages of using well water include: Lower cost vs. city tap water (reduces monthly cost); Using well water is more eco-friendly; and using well water decreases both chemical and industrial pollution created by big plants during the filtration process.



...about the recent purchase of a **Ventrac 4500Z** tractor by the Physical Plant Landscape Department is also fuel efficient? The multi-purpose vehicle, used primarily for snow/leaf removal, has an engine that is Bi-Fuel ready and capable of running on gas or propane. Using propane offers a “green” engine option for fuel savings and cleaner burning emissions that reduce Cranbrook’s carbon footprint and saves money. The benefits of propane also include a longer engine life and a cleaner exhaust. In addition, 97% of propane used in the U.S. is produced in North America. Look for the Ventrac 4500Z to make its debut this winter during snow removal season!



...the **Gordon Science Greenhouse** located on the Cranbrook Upper School Campus is used by the Landscape team to propagate (to multiply by any process of natural reproduction, as organisms) plants. Currently, it is being used to propagate a groundcover called pachysandra that will eventually be planted around the Cranbrook Dining Hall. The team has also retrieved cuttings from existing plants on campus to generate more than 40 flats of plants. At a retail cost of 35.00 a flat from a nursery, the team realized \$1,400 in savings!

The Landscape team also takes cuttings from existing Cranbrook trees and starts seedlings for white cedar, willow and red bud trees that will be used along the stretch of the Rouge River that flows through campus. The greenhouse has also been used to propagate plants that can be used as replacement plants in various locations; to preserve plants during the winters that wouldn't survive otherwise and to heal plantings that need special attention. These are just a few ways that the Landscape Department practices Sustainability and embraces the Green Initiative!

LEARNING, COMMUNITY INVOLVEMENT & AWARENESS SUSTAINING & CHANGING LIVES! COMMUNITIES BEYOND OUR BORDERS!



Cranbrook Institute of Science sustainability-focused education programs (Freshwater Forum, Nature Conservancy and Water Education Programs) including CIS Earth Week 2014 reached over 3,000 kids in the Saginaw Bay Region last year with the support of CMS Energy Foundation.

HORIZONS UPWARD BOUND PARTNERSHIP WITH ORCHARDS CHILDRENS SERVICES

In 2014, Horizons-Upward Bound (HUB) and Orchards Children's Services (OCS) formed a partnership after having both been supported by the National Recreation Foundation, which facilitated the relationship. Our purpose for partnering is to offer joint programming, serve more clients by reaching deeper into our target areas and leverage our complementary strengths and assets.

In the summer of 2014, OCS clients volunteered alongside Horizons-Upward Bound students in the HUB Community Garden located on Faculty Way. Together, they planted, weeded and harvested vegetables that were donated to OCS families and the Baldwin Center in Pontiac, MI.



Both organizations believe strongly in the power of education and are in the business of breaking down barriers and fostering upward mobility for underserved youth. Our successful collaboration serves as a model for organizations with limited resources that seek to broaden and increase the number of clients served by showing them how it can be done by collaborating with each other.

Sustainability On The Go! Norma Jean Evans (Director of Sustainability and Business Services) serves as A Member and Co-Chair of the Rotary Club of Birmingham Literacy Program.. She assisted the Rotary Club in the development and successful launch of the "The Better You Read! The Better Your Life! Guided Reader Co-Ed Program (Grades 1-2) and Girls' Literacy Club (Grades 4-5) at Owen Elementary School (Pontiac School District). The Literacy Program is focused on helping to improve the reading levels for kids, while helping them to understand the better they read leads to a more sustainable lives.





WE THINK! WE LEARN! WE WORK! WE PLAY! WE GIVE!
 2014 SCORECARD — YEAR IN REVIEW



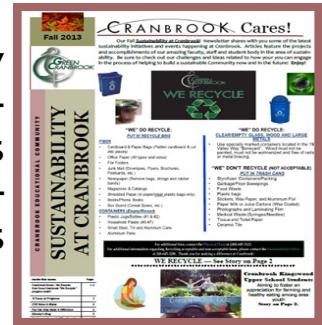
OUR 2014 COMMUNITY-WIDE ACCOMPLISHMENTS/HIGHLIGHTS

Leaders in the Environment (LITE) Club– CK Senior Claire Erwin, named Detroit Free Press Michigan Green Leader (started the CK Bee-keeping Club, co-created a garden in a wooden trailer and designed an educational curriculum for metro Detroit youngsters to learn about saving money by growing their own healthy foods.



LED lighting installed in CIS Mineral Gallery, CAA Studios/Workshops, Wallace Ice Arena and Tennis Court parking lots – energy draw reduction of over 160 watts.

Sustainability Newsletter to increase awareness and encourage participation across the community.



Leaders in the Environment (LITE) Club - CK Senior appointed to State of Michigan's Department of Natural Resources Youth Board.

Dining hall food waste awareness “plate scrape” with Chartwells. Allison Mitchell (Chartwells) and Norma Jean Evans (Director, Sustainability and Business Services) participate in the inaugural event.



BROOKSIDE SCHOOL'S HENRY BOOTH CLEANUP DAY



- Keppel and Kingswood Gym boiler makeover – energy efficiency rating increase of 16%
- Keppel Gym, PAC, and Gordon Science hot water heater project – energy efficiency rating increase of 18%



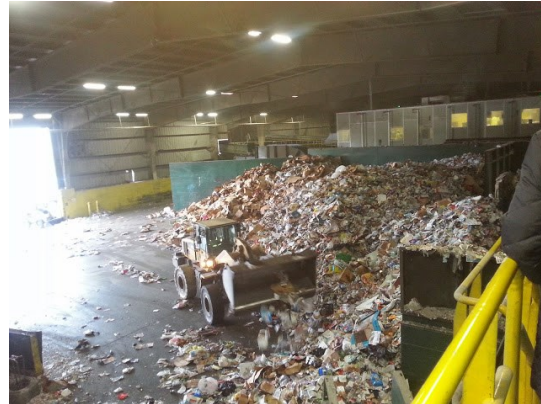
Michigan Green Schools “Emerald” Status for Cranbrook Kingswood Upper School and Brookside



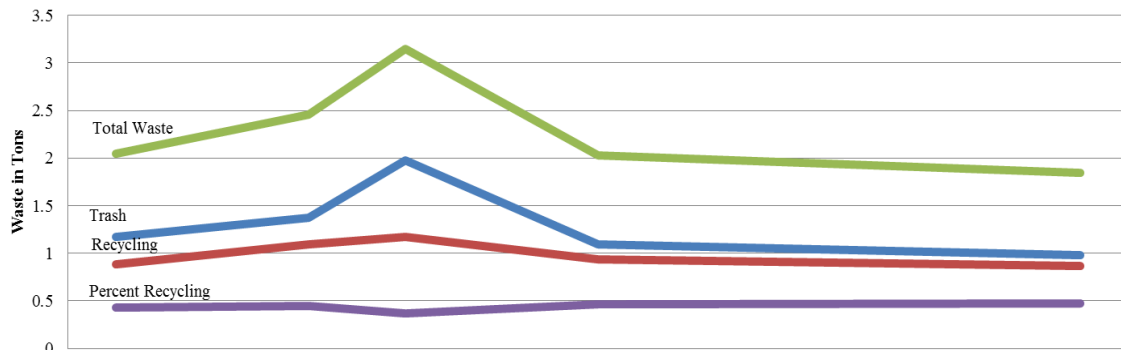
**WE THINK! WE LEARN! WE WORK! WE PLAY! WE GIVE!
2014 SCORECARD — YEAR IN REVIEW**

OUR 2014 COMMUNITY-WIDE ACCOMPLISHMENTS/PROGRAM HIGHLIGHTS

2014 Recycling Accomplishment: Increased Campus Recycling Rate to 40%. For the last Academic Year, we averaged a Recycling Rate of 42%. Also, worked with our existing Waste Management//Recycling Service Provider & Cranbrook Schools Environmental LITE Club Leaders to complete evaluation of waste and recycling consumption and recycling processes on and off campus. Strategically and visibly placed clearly marked recycling bins throughout campus (interior/exterior) to increase awareness and participation.



2014 Runco Waste Audit Analysis



- Developed metric (Waste Audit Analysis) to improve recycling credibility and measure progress.



2014 Water Conservation Accomplishment:
Completed our first new Well installation at the Woodward Entrance for irrigation.

WE THINK! WE LEARN! WE WORK! WE PLAY! WE GIVE!

**From The Desk of
Dom DiMarco
*Cranbrook's Sustainable Future***

Cranbrook Sustainability Champions! Our mission, which you have all accepted and continue to demonstrate, is to work together to:

- *Continue progress on strategic goals of sustainability*
- *Restore facilities in responsible manner*
- *Continue to make great progress on making our campus look terrific*
- *Never allow our facilities to deteriorate again*
- *Encourage all of our constituents to continue to commit to Cranbrook's long-term sustainability*
- *Commit to the spirit of sharing the best of Cranbrook to a broader audience through outreach*

As I recently shared in my Living Legacy Update, the responsible use of resources of all types is critical to our survival and success. From how we use energy, water, and the environment, to the efficiency of our facilities, business practices, and people, we commit to the well-being of future generations through our actions and behaviors.

Dominic DiMarco

President, Cranbrook Educational Community

***Sustainability at Cranbrook and Beyond
We Think! We Work! We Live! We Play! We Give!***



SUSTAINABILITY AT CRANBROOK & BEYOND

SUSTAINABLE LIVING AT CRANBROOK & BEYOND

WE THINK! WE LEARN! WE WORK! WE PLAY! WE GIVE!

Director's Blog: Sustainable YOU

Sustainability at Cranbrook and beyond is getting contagious! *We Think! We Learn! We Work! We Play! We Give! Sustainability at Cranbrook and Beyond.* In this edition, we have taken a look at sustainability champions within the community (i.e., president, faculty, staff, students, volunteers, donors and members, just to name a few). In our diverse community, we are all choosing to unify and work together to promote and support the vision of Cranbrook being a sustainable community.

I recently attended the Cranbrook Living Legacy Society Event hosted by President Dom DiMarco. During his report, he shared some of the accomplishments highlighted in the 2014 Score Card-Year in Review section of this edition. In addition, he shared visionary points for Cranbrook Sustainable Future.

As I spoke with some of the people in the room, I was most intrigued by the shared passion and support of the vision of sustaining the heritage of Cranbrook through planned giving. The event provided them an understanding of Cranbrook's sustainability vision, its progress and commitment to a sustainable community. We greatly appreciate the Living Legacy Society donors and the gifts being made to Cranbrook. We also recognize the additional *priceless* sustainable gifts and significant contributions being made behind the scenes. Such as,

- 1) Helping improve business efficiency and reducing paper– Use of the new Ulti-Pro Payroll System (i.e, Direct Deposit, Electronic W-2, W-4, CTO, Time Sheets, On-line Benefit Enrollment, etc.)
- 2) Recycling -Doubled our goal of 20% year as result of your participation
- 3) Attending Human Resources Wellness & Financial Programs resulting in a more healthier and sustainable you
- 4) Supporting the installation of new Point of Sale System at Cranbrook Institute of Science (CIS)/Cranbrook Art Museum
- 5)Helping schools and community organizations through outreach or by volunteering and donating repurposed art materials during the Cranbrook Academy of Art (CAA) Materials Exchange and Donation Program.
- 6) Utilizing sustainable products in the physical plant and capital projects.
- 7) Giving toward the Annual Fund
- 8) *Insert Your Contribution Here*

Which, by the way, all contribute significantly to the overall mission and goals of our sustainable community. As we continue on the journey, remember “you are a Sustainability Champion,” making a difference toward Cranbrook legacy in front of and behind the scenes and beyond. Thank you for your continued contributions to Cranbrook Sustainability!

Let's Go! Green Cranbrook!
Best, Norma Jean Evans



SUSTAINABILITY CHAMPIONS CHALLENGE

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

Get Involved Today.



WE GIVE! SUSTAINABILITY!

Cranbrook Legacy Society

Sustaining the Cranbrook Heritage! Learn how you can help!
Contact Susan Learman, Planned Giving at (248) 645-3215 or
email: slearman@cranbrook.edu

