August 2013

1. **Composting @ CA?** When CA opened its doors Wednesday, August 14th, there was something new going on in the Dining Hall; “how we dispose of our food scraps”. Over the summer, we worked diligently on putting together 2 collection sites for compostables (food scraps and napkins), trash and recyclables. One inside our newly redesigned Dining Hall and one outside the Dining Hall. Have you wondered why CA decided to start collecting compostables? Many of the students did. This video produced by Robert (2014) helps tell the story.

2. **CA’s largest sustainable initiative to date** The newly renovated dining hall isn't the only new event unveiled this school year. CA also has introduced its latest sustainability initiative “collecting dining hall waste for composting off campus”. - See more at: [http://www.caryacademy.org/cf_news/view.cfm?newsid=1730#sthash.pJZNny8N.dpuf](http://www.caryacademy.org/cf_news/view.cfm?newsid=1730#sthash.pJZNny8N.dpuf)

3. **Gordon’s Composting Conundrum** Gordon learns that Cary Academy is doing things differently during US lunch. His friend show’s him the way in this video produced by Robert (2014).

September 2013

1. **Sustainability Speaker – Sept. 10th** David Chameides (Sustainable Dave) [http://www.caryacademy.org/page.cfm?p=7101&newsid=1732](http://www.caryacademy.org/page.cfm?p=7101&newsid=1732)

2. The **sixth-grade team** hosted a team-wide community building event on the morning of Sept. 13. The students created planters for seeds as a companion activity to its Charger Trails community read, Seedfolks. - See more at: [http://www.caryacademy.org/cf_news/view.cfm?newsid=1735#sthash.0Cmt8saB.dpuf](http://www.caryacademy.org/cf_news/view.cfm?newsid=1735#sthash.0Cmt8saB.dpuf)

October 2013

1. **Farmer’s Market comes to CA** On Oct. 16, as part of World Food Day and Ubuntu, the school held a farmer’s market on the green between the Fitness Center and the SEA. See more: [http://discovery.caryacademy.org/ca-green/2013/10/farmer%e2%80%99s-market-comes-to-ca/](http://discovery.caryacademy.org/ca-green/2013/10/farmer%e2%80%99s-market-comes-to-ca/)

December 2013

1. **US Advanced Environmental Science students create mini documentaries** The following Animoto videos were designed by Ms. Maloy’s advanced environmental science students to introduce the documentary they would make looking at the themes of population, biodiversity and sustainability. The students watched 3 videos an E2 video, America’s Lost Landscape and the original cartoon version of the Lorax. After deciding on the common themes of these videos, each student took some aspect(s) of the common themes to create an introduction to what their documentary would be about. See videos here: [http://discovery.caryacademy.org/ca-green/2013/12/us-advanced-environmental-science-students-create-mini-documentaries/](http://discovery.caryacademy.org/ca-green/2013/12/us-advanced-environmental-science-students-create-mini-documentaries/)

2. **Placed light sensors in all restrooms.**

3. **Installed 3 water bottle fillers**: 1 US, 1 SEA, 1 FC
4. **US Spirit Week**
   a. In the Water Bottle Count for today, both the Juniors and the Seniors had 76% participation, followed by the Sophomores with 37%, and the Freshmen with 28%.
      i. The overall averaged standings are
         1. 1st place—Seniors with 80% participation
         2. 2nd place—Juniors with 62% participation
         3. 3rd place—Freshmen with 32% participation
         4. 4th place—Sophomores with 25% participation

**January 2014**

1. **Reduced Composting = Reduced Hunger. How CA can help.** During the 1st Trimester of school, Cary Academy collected a total weight of 20,170 pounds of compostable items which included; edible food (leftovers on peoples plates and foods that we are unable to serve during future lunches), food disposed of during its preparation (non-edible food scraps) and compostable paper products (napkins, plates, bowls, pizza boxes, etc...). THE EDIBLE FOOD PORTION OF THAT WEIGHT WAS APPROXIMATELY 12,102 POUNDS. THAT FOOD COULD HAVE FED 2,420 INDIVIDUALS FOR A DAY OR 66 PEOPLE FOR A YEAR.

2. **Key Club and NHS Present: ‘Clean Out Your Closets’ and Your Bookshelves!** In addition to Key Club’s 9th annual ‘Clean Out Your Closet’ collection, NHS gathered children’s books (ages 0-18) for Book Harvest, a non-profit organization bringing books to students from low-income families throughout the triangle. These donations will benefit a host of local non-profit organizations including: Haven House and Interact of Wake County, Back Pack Buddies and Book Harvest of Durham.

3. **Plastic Bottles as Art** Visiting artist Bryant Holsenbeck of Durham is working this week with the Upper School’s Art and Design classes, helping them turn discarded plastic bottles into art. See more: [http://www.caryacademy.org/page.cfm?p=7101&newsid=1829](http://www.caryacademy.org/page.cfm?p=7101&newsid=1829)

**March 2014**

1. **CA Green, WECAN Host Event** On March 27 the CA community attended a Dinner & Documentary event hosted by the Women Employees of Cary Academy Network (WECAN) affinity group and CA Green. After the documentary, Rachel Carson’s Silent Spring, a panel discussion followed that included CA’s Heidi Maloy, US environmental science teacher, CA alum Rachel Gonsalves, Sustainability Consultant Colleen Kramer and geologist Candy Elliott. This is the first event Cary Academy collected compostable items (even the utensils were made of compostable wood).

**April 2014**

1. **CA Garden**—CA now has a garden. It’s located on the right side of the SEA building. Students from the BETA club and Ms. Maloy’s Enviro class prepared the garden for planting by building raised bed frames and mulched with grass clippings. The Enviro classes filled the frame with soil, grew the seeding veggies and flowers and planted them. Vegetables that were planted: Lettuces, green beans, snap peas, zucchini, cucumbers, artichoke, spinach, arugula, parsley, sunflowers, acorn squash, carrots, onions and peppers. Support flowers: Blanket flower, Queen Anne’s lace, marigolds and clover. See pictures of the building and as the garden grows [here](http://www.caryacademy.org/page.cfm?p=7101&newsid=1992).

2. **What’s the Scoop on Electric Vehicles (EVs)?** Many of you have probably noticed that CA installed a vehicle charging station at the beginning of the school year. This has brought up questions on how EV’s AFFECT OUR ENVIRONMENT. The following resources have been pulled together to hopefully help answer some of your questions. Read more [here](http://www.caryacademy.org/page.cfm?p=7101&newsid=1990).

**June/July 2014**

1. **Donated computers helping Mexican orphanage**-Cary Academy has donated seven old laptop computers to the Ciudad de Ángeles orphanage in Mexico. See more: [http://www.caryacademy.org/page.cfm?p=7101&newsid=1992](http://www.caryacademy.org/page.cfm?p=7101&newsid=1992)

2. **Old computers going to Haiti**- Cary Academy is donating its 8-year-old HP tablets to the Hope for Haiti Foundation (HFHF). The foundation will take the nearly 300 tablets to two schools in the small town of Zorangé, in southwestern Haiti. This will extend the lives of the computers that otherwise would be recycled. CA is getting new computers for the coming school year. See more: [http://www.caryacademy.org/page.cfm?p=7101&newsid=1990](http://www.caryacademy.org/page.cfm?p=7101&newsid=1990)
2013-2014 Annual Stats

Disposal by Type

- Energy use on campus increased in 2013-2014 compared to 2012-2013.

This increase equals annual greenhouse gas emissions from this many Passenger cars for a year* (From http://www.epa.gov/cleanenergy/energy-resources/calculator.html)

Electricity - Kwh: 57,511 = 8.3
Natural Gas - Therms: 5,508 = 6.1

Printing/Copying

- Paper Usage on campus decreased by 42,418 sheets of paper or 14 cartons of 8 ½ x 11 copy paper. Saving approximately 8 Trees* (From http://c.environmentalpaper.org/home)
3. Service Learning:
      i. Planted 3,000 ivy plants to help prevent erosion near tennis courts, field 1 and field 2.
   b. Repurposed (donated to organizations/schools)
      i. Desks, chairs – Hispanic
      ii. MS Science Books
      iii. Tablet Computer bags

2. GreenCup Recycle Challenge (Oct. 1-26)
   a. Results: [http://www.greencupchallenge.net/recyclechallenge/results.html](http://www.greencupchallenge.net/recyclechallenge/results.html)

<table>
<thead>
<tr>
<th>School Year</th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
<th>Average</th>
<th>Bonus Points</th>
<th>Grand Total</th>
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<td>77</td>
<td>74</td>
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<td>76</td>
<td>82</td>
<td>72</td>
<td>73</td>
<td>0</td>
<td>73</td>
</tr>
</tbody>
</table>

3. MS It’s Not Easy Being Green
   a. Printing margin reduction proposed to MS Faculty.
      i. MS had a “Margin Day” where they reset margins on student’s computers. Faculty that requires students to print with 1” margins must ask them to do so.
      ii. MS club Presented idea at the January 30th US Faculty Meeting.
      iii. Working on method of presentation to Staff.


5. Replacing lighting in Quad with LED – In Progress.

6. US submitted Garden Proposal. (Fall and Spring crops, begonias planted for summer):
   a. Viewed by CA Green Committee, Heather Clarkson and Jess Garcia.
      i. Proposed Location: next to SEA building on right side as you’re facing from US lot
      ii. Submitted for a PTAA grant.
         1. Supporters: Head of US, CA Green Committee, SGLI – Nutrition and Healthy eating (involve everyone space – Sheila R. – wants to do a Foodie club) and Service Learning.
            a. SGLI already working with Reedy Creek to create a garden (approved).
7. **Subcommittees in place to research:**
   a. Environmental Sustainability Speaker Series for 2013-2014 (Subject: Changing Behaviors)
   b. Chemical Use on campus:
      i. CA Green Committee Parents MS - Bill Trent/President Bottom Line Technologies Inc. EnviroClean Solutions and US-Elaine Hubbal/EPA to speak with Jess, Jackie and Jimmy.
         1. Evaluate or learn what chemicals are currently being used for facility maintenance (inside and out) general cleaning (janitorial) and chemicals being used for carpet cleaning.
            a. All affect Indoor Air Quality (IAQ).
               i. IAQ is a substantial piece to the U.S. Department of Education - **Green Ribbon Schools** application/framework – CA would need to focus on this if we want to submit an application in the future.
         2. From an education perspective, consumer products would also be of interest. So, for teen in particular that would include personal care products (fragrances, antibacterial soaps etc.).

8. **GreenCup Energy Challenge (Jan. 16 – Feb. 13)**
   a. Entire Campus
      i. Paperless Week/Print Only When Necessary
   b. Administration Building
      i. Reduced overall use of lighting by 68%
   c. MS It’s Not Easy Being Green
      i. Reduced overall use of lighting by 50%
         ii. **No Idling** campaign and **Carpool day**
   d. US CA Green Club –
      i. Produced a PSA mini-series
         1. First [link](http://www.youtube.com/watch?v=S3IUJ8amzQs&feature=youtu.be)
         2. Second [link](http://www.youtube.com/watch?v=LQtJFZ3hQlc&feature=youtu.be)
         3. Third [link](http://www.youtube.com/watch?v=dxnL3d7y6os&feature=youtu.be)

9. **US Advanced Environmental Class – Food Miles.** A year-long of local eating project on sourcing local food for each month with recipes for a vegetarian day, an omnivore day and a say of their own choosing which will be on the class blog.

10. **Key Club – Clean Out Your Closets** Clothing and small household items will be donated to the Haven House of Wake County; cell phones to Interact of Wake County; textbooks and books to The Boys and Girls Home of Lake Waccamaw, NC. Backpacks for all ages are needed for our Back Pack Buddies program.

11. **Green Hero’s Display**

12. **Article: CA Green Release Carbon Footprint in this issue of the Campitor.** [link](http://discovery.caryacademy.org/the-campitor/files/2013/05/Final-Campitor-May-2013.pdf)

13. **US Advanced Environmental Class – CA’s Carbon Footprint 2012-2013** The objective of this lab was to produce an estimate of Cary Academy’s annual carbon footprint and compare it to last year’s carbon footprint. See [details](http://discovery.caryacademy.org/the-campitor/files/2013/05/Final-Campitor-May-2013.pdf).
14. **Repurposed** (donated to organizations/schools) - Tablet Computer bags

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**2011-12 SUSTAINABILITY ACCOMPLISHMENTS**

VISIT THE CARY ACADEMY DISCOVERY BLOG

1. **Energy Savings Report:**
   - During the 2011-2012 school year CA reduced its overall use of energy by reducing its:
   - Electric use by 519,771 kWh and Natural Gas use by 38,595 Therms which equates to saving:
     - Annual greenhouse gas emissions from 108 passenger vehicles and CO₂ emissions from 1,283 barrels of oil consumed.
     - Approximately $65,000.
   - The following contributed to this savings:
     - 18 classroom printers were removed and replaced with 5 energy saving Multifunctional Printing Devices.
     - Energy efficient lighting was installed in the Fitness Center and Gyms.
     - CA Green “Be Green” Light switch labels were put in place.
     - CA upgraded a gas boiler with all new controls and internal and external components. This boiler is so efficient that it will maintain the set header temperature alone, thus allowing the other four boilers to be taken off line until cold spells. A second boiler is also scheduled for an upgrade.

2. Campitor brings CA Community information on Eco-Friendly Holidays.

3. Student Builds Landfill/Recycling Containers for CA.

4. **GreenCup Energy Challenge (GCEC): January 18 – February 17**
   - CA placed 2nd in the 2012 Green Cup Energy Challenge reducing our electric use by approximately 7,088 kWh during the one month challenge. This equates to saving:
     - CO₂ emissions from 204 propane cylinders used for home barbecues and 548 gallons of gasoline consumed.
     - Mentioned in Huffington Post.

5. **Student Global Leadership Institute Members (SGLI):**
   - NHS Lecture Series: Inequality in Green Energy Solutions - January 24th, National Honors Society and the Student Global Leadership Institute hosted the second lecture of the NHS Lecture Series on Inequality. Ms. Jada Monica Drew and Mr. Karl Brustmeyer will be speaking about finding green energy solutions for underprivileged communities and encouraging minority participation in local green industries.
6. MS Arts Alive Club Creates Corkboards by Recycling.

7. Adv. Environmental Science Lab Group Calculates CA’s Carbon Footprint
   - Three intrepid advanced environmental science students took it upon themselves to calculate the carbon emissions of Cary Academy for 2011. Their findings include calculations, suggestions and interviews with key community members in looking at what we do well and where we could improve. Please check out the findings and fascinating tidbits, Juniors Elaine L. and Kalee C. and Senior Jacob W. discovered in completing this work.

8. CA Green Committee submitted its Disposal Program Proposal to Head of Schools for review/discussion.

9. GreenCup Recycle Challenge (GCRC) participated for first time:
   - Earning a respectable 73 points placing us in the Environmental Stewards Category. During the challenge CA:
     - Disposed of 5,520 pounds of waste (landfill 4,400 pounds and recycling 1,120 pounds). Recycling resulted in a 20% diversion rate from landfill.

10. Project ReRunway
    - Project RE Runway, a fashion show featuring costumes made out of recyclable materials by US and MS students and modeled by the dance students, impressed at its first performance April 26 in the theater. Each model walked out to recorded music provided by the band students. More on this show.

11. Additional Faculty began using Aus Pen Eco-Friendly Dry-Erase Markers.

12. Upper School C.A. Green Club will be hosting a showing of the documentary Living Downstream!
    - It tells the story of Sandra Steingraber, a renowned ecologist and cancer survivor. The film presents her realization that the link between toxic chemicals and rising rates of cancer are almost certainly linked, and what to do about it. Also, a representative from the organization Toxic Free NC was present to answer questions and talk to us a bit about the film.

13. CA Green Mural (Art Club) - The Go Green Mural was created by the Art Club and Commissioned by CA Green.
    - The project has been going for 1.5 years and has a lot to offer (see its creation in action). Going green is, of course, the theme and there are a host of different things going on in the picture. The picture promotes read more...

14. Textbooks - Buyback program and families purchasing used and Ebooks.

15. Printing - Since going to a digital-only brochure in 2010, Summer Quest has saved 228,000 sheets of paper or two trees worth of paper.

**2010-11 SUSTAINABILITY ACCOMPLISHMENTS**
Green Theme/Trimester 1: FOOD

Month: September/October/November

Audit Objectives Addressed: Bring awareness to community regarding Food Choices: Local, Organic, etc...

1. Heidi Maloy is a Green Educator of the Year
   - U.S. Green Building Council (USGBC), NC Raleigh Chapter’s Save it Forward Awards.

2. Chef Sam- Dining Services sustainability efforts:
   - Local Food Sources- We are getting a number of products from North Carolina. We have one supplier who supplies nothing but organic produce. We have another new company that provides local produce. Neomonde bakery in Morrisville supplies our bread products.
     - Labeling food if purchased locally and/or organic.
   - Recycling-Previously, we were only able to recycle cardboard. Now have a comingled dumpster that allows us to recycle almost all non-food trash produced in the kitchen.
   - Fresh Herbs- We have an herb garden growing in pots at the front of the dining hall. These herbs are being used in a variety of dishes being served at lunch.

3. Artwork for napkin holders in dining hall carrying messages regarding Food Choices.


5. Selected CA Green brand logo. Placed on MyCA page and CA Green webpages and CA Green Discovery Blog.

6. RJ Pellicciotta, Daniel Smith, Alicia Jarwala, Andrew Tie, and Miriam Rosen went to the Leadership Institute at Punahou School in Hawaii this summer.
   The Institute focused on water conservation and protection. Each school was charged with going back to their school and leading a project that focused on this area. The group has a number of ideas that it wants to partner with CA Green to implement/execute
   - Installing water-saving devices on campus toilets
     - We are still looking into this. The logistics have been the toughest part.
   - Selling branded reusable bottles during water week
     - sold all 60 Vapur bottles http://vapur.us/
- Asking community members to take an online pledge to reduce water use
  - Completed
- Bringing in a speaker on water issues
  - We brought in Peter Sawyer from the Pulitzer center on crisis reporting. Peter spoke about water insecurity in Africa, sanitation crises abroad, and domestic overconsumption of water.
  - Providing funding to a water-related charity through water savings from toilets and proceeds from bottle sales.
    - The money from the sale of bottles went to The Water Project, a charity that builds and maintains wells in developing nations.

7. Kris and Heidi presented CA Green “The Story” at the Green Schools National Conference.

8. View the US Art Club creating the CAGreen Mural here (the mural is scheduled to be complete Nov. 2011)

9. Sophie Robison was invited to attend World Food Prize Global Youth Institute; Heidi Maloy invited to go with her as mentor.

10. Implemented Green Days in Dining Hall:
    - Educate our school community and promote the health and environmental benefits of eating local and/or organic foods, and incorporating more plant-based meals into our food choices.

11. Made sustainable food announcements via PSA: 600 seconds and CAST News and published stories on CA Green Discovery Blog.

12. Pacific Trash Gyre (garbage patch) - Serena Advani
    - Educate our school community and promote the health and environmental benefits of eating local and/or organic foods, and incorporating more plant-based meals into our food choices.
    - Raise awareness:
      - Documentary Club
      - Fund Raiser – Glow Stick Dance
        - Collected all glow sticks and brought to hazardous waste fill.

| Green Theme/Trimester 2:               | HOME (includes Green Cup Challenge) |
Month: December/ January/ February

Audit Objectives Addressed: Bring awareness to community regarding sustainable options for home. Reducing the use of electricity on campus.

1. Changed Vending machine in Fitness Center and SEA to a more efficient model and healthy (includes organic) options.

2. PTAA sends evite for Auction instead of printed invite.

3. Cary Academy sends ecard instead of printed card.

4. Installed revolving door in Library.
   - Energy efficient, helps regulate the temperature and humidity and also reduces the infiltration of dust and dirt.

5. GreenCup Challenge activities: Jan. 24-Feb. 18. (Communications Weekly via 600 Seconds, CAST News and CAGreen Email)
   - Each week has its own theme:
     - 1st Week (Jan. 24-28): Lights Out/Reduced Lighting/Use of Sunlight
       Results: Dropped our electricity use by 7% when compared to what we did on average last year for this time period
     - 2nd Week (Jan. 31-Feb. 4): Printing/Copying Less
       Results: Energy use was up last week not only erasing our drop from Week 1, but we used even more energy than we did over this week last year.
     - 3rd Week (Feb. 7-11): Dining Hall Energy Reduction & Printing/Copying Less Continued
     - 4th Week (Feb. 14-18): Overall Contest Week/Carpool Day [Different Days for Middle School/Upper School]
       The idea behind the last week is to have three members from the Leadership Team walk through each of the buildings taking notes regarding how many lights are on in rooms during random times throughout the day and week to see which building has the least amount of lights on. The winning building receives a dress down day. Rooms will be checked twice a day each day during the week.
       On Carpool Day, people who carpool will receive a treat for their efforts to reduce the use of energy in getting to school and home. The Upper School Carpool Day is Feb. 15; the Middle School Carpool Day is Feb. 16.
       Results: The building that was able to use the least lighting last week was the Admin building. The final rankings were Admin first with a score of 1.81, US second with 1.24 followed by MS with a score of 1.06. Congratulations to the Administration building occupants that curbed their use of lighting as they have earned a dress down day.
   - GCC Overall Results:
     - We ended the green cup challenge by dropping our overall energy use as compared to last year by 0.79%. This may sound like a small amount but compared with 2 years ago when we also had a major US/MS musical during the competition we were able to drop our energy use a full 10.5%. That is a huge accomplishment. Though we were not first in the Carolinas, we again were neck and neck with GDS (1.81% drop) and might have even vied for first in competition with CCDS and Ravenscroft (10.64 and 10.46 % drops). We want to keep up the more efficient energy use we have developed over this last 4 weeks going; so remember turn off things when not in use or necessary. Look for reminder stickers on light switches to begin showing up soon.
     - Copying and printing decreased 17.5% during the month long Green Cup Challenge.
Games created by the ADV Environmental science students:

- The Jeopardy Game: [http://jeopardylabs.com/play/enter-title27255](http://jeopardylabs.com/play/enter-title27255) (Created by Preston Daniels and Lauren Kalin)
- Energy Home game - [http://greenenergyplanet.net/](http://greenenergyplanet.net/) (Created by Ian Fincham, Zac Wilson and Nick Schumann)

6. Made sustainable food announcements via PSA: 600 seconds and CAST News and published stories on CA Green Discovery Blog.

7. Green-house gas emissions analysis completed by the US students.

8. Artwork created for dining hall napkin holders

9. Continue to replace light bulbs, appliances and equipment with energy star rated items as needed (Facilities/IS)

<table>
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<tr>
<th>Green Theme/Trimester 3:</th>
<th>GREEN IQ (includes an Earth Day event)</th>
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<tbody>
<tr>
<td>Month:</td>
<td>March/April/May</td>
</tr>
<tr>
<td>Audit Objectives Addressed:</td>
<td>Bring awareness to community regarding sustainable options</td>
</tr>
</tbody>
</table>

1. Light switch labels “Be Bright. Turn off the light” placed on all light switches.

2. Earth Day activities

   What is your Green IQ quizzes each day on 600 seconds and CAST news, also sent out via email to employees and posted to the CAGreen blog for the entire school community to do. Videos by Kristen Blau and Katie Lipscomb began and ended the week. Additional quiz questions were put on in the napkin holders in the dining hall to spur lunch time conversations. The answers were taped on the bottom of the dispenser. Dining services called student and employee attention to the waste of resources in the dining hall by stacking the number of plates that have been lost this year by not being returned to the dining and translating the dollar amount into the amount of favorite food lunches that could have been served if this had not occurred.

3. Overall copying/printing/paper usage decreased by approximately 15% this school year compared to the 2009-2010 school year.

Other Things Going On:

1. CAGreen Endorsed Products/Services/Events (Campus Store, etc....)
2. Create artwork (brand with green checkmark) to be placed on sustainable items in Campus Store, Website, and Posters for events, etc....
3. Discussion with SAS, and other suppliers, regarding possibility of installing Solar panels on campus. Possible locations: SEA rooftop, cover parking lot structure.
4. Developing proposal for a standardized waste/recycling collection plan on campus.
5. Facilities investigating replacement of 4 bulb with 2 bulb ballasts in fluorescent lights.