

## 2016-2017 Green Team Final Report

The Center for EcoTechnology (CET) continued to administer the MassDEP Green Team program in the 2016-2017 school year. This year focused on administration of the core functions of the program and updating the alignment between Green Team Lesson Plans and the Massachusetts Comprehensive Assessment System Curriculum Frameworks. Overall, participation numbers were slightly lower than the 2015-2016 School Year, but still exceeded the 2014-2015 School Year.

### Participation Summary

The following table details participation in the Green Team program this school year compared to the last several years:

	2016-2017 School Year	Percentage Change	2015-2016 School Year	2014-2015 School Year	2013-2014 School Year	2012-2013 School Year
<b>Participating Green Teams</b>	332	9% Decrease	363	319	289	401
<b>Participating Schools</b>	300	4% Decrease	314	278	237	301
<b>Participating Students</b>	60,325	7% Decrease	64,716	64,927	59,128	91,634
<b>TRFs Submitted</b>	62	1% Decrease	66	65	79	98

Many teachers registered early in the year this school year, and until early February FY17 registrations were on track to surpass the previous year. However, there were not as many registrations late in the school year. In FY17, far fewer schools were required to register for the Green Team as a result of a Sustainable Materials Recovery Grant than the previous school year; this contributed significantly to the overall drop in total registrations. Nearly 19% of participants submitted a Teacher Response Form, which is just shy of the 20% goal.

### Outreach

A variety of outreach activities were conducted this year, including a mix of in-person tabling, presentations, electronic communications, and calls and emails with partner organizations.

Just before the start of the school year, CET emailed principals and superintendents from across the state to encourage teachers in their schools and districts to register; these emails resulted in registrations from at least 30 new teachers. CET promoted the Green Team in presentations at several events, including the annual MassDEP SWAC Meeting in October, the Greater Quabbin Food Alliance Meeting in December, a Covanta Recycling Coordinators Meeting in January, the MassRecycle R3



Conference in March, and the Massachusetts Association of Vocational Administrators Conference in June.

CET fellows helped promote the Green Team in several ways. Fellows staffed a Green Team table at the annual Massachusetts Environmental Education Society Conference in March; seven teachers registered while visiting the Green Team table. CET fellows included Green Team at general organizational tabling opportunities throughout the year, and mentioned the Green Team in recycling presentations at elementary schools in Pittsfield. Fellows also highlighted the Green Team during a Mass Appeal segment in September: "Go back to school & save the environment."

In FY17, the Green Team was also promoted through CET's media channels, including the CET Go Green Blog, EcoBytes email newsletter, and CET social media.

CET also worked with other organizations to share information about the Green Team. For instance, CET provided information to Keep Massachusetts Beautiful to promote the Green Team on their website. CET also provided two haulers, All State Waste and City Compost, with information on the Green Team that they could share with their K-12 customers.

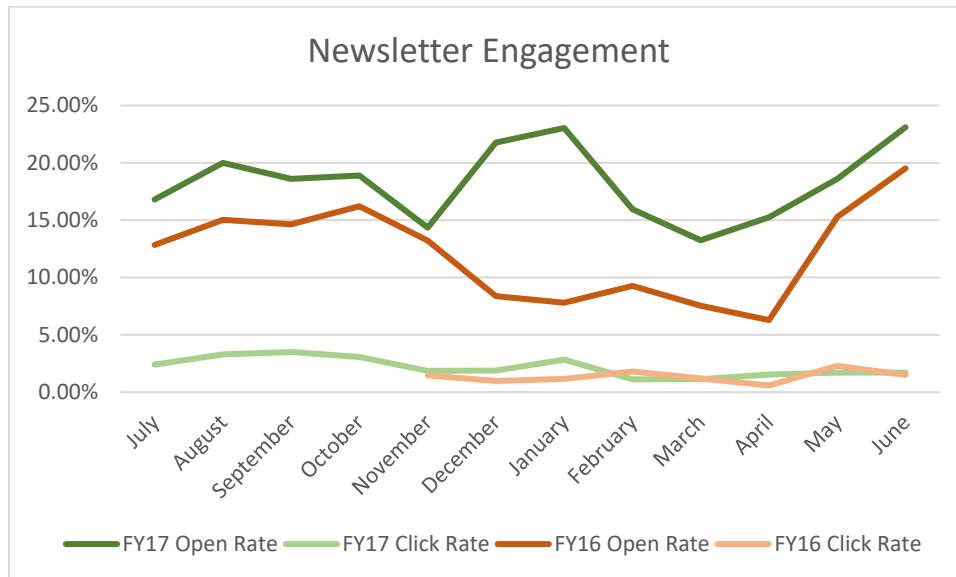
### Communication

The primary communication vehicle with Green Team teachers is the monthly electronic newsletter. Registered and previously registered Green Teams receive monthly emails containing relevant news stories, event listings, grant opportunities, competitions, and other inspirations to "green" their classrooms and schools. Monthly newsletters were sent out from July through June. The newsletter contact list had approximately 2,975 subscribers at the end of the school year.

The open rate for newsletters increased significantly in FY17 over the previous year, from 12.2% to 18.3%. On average, 566 people open the newsletter each month. In October through March, slightly different versions of the newsletter were sent to teachers that were registered for the current school year than to contacts that were not currently registered. Those newsletters sent only to registered teachers had an average open rate of 45%. Registered teachers are about three times more likely to open the newsletter than contacts that are not registered for the current school year.

Green Team Email Newsletter Metrics		
Fiscal Year	Average Open Rate	Average Click Rate
FY17	18.3%	2.2%
FY16	12.2%	1.4%

Because the old platform for the Green Team newsletter (Vertical Response) records click rates differently than MailChimp, we do not have comparable click data prior to the newsletter migration in November, 2016. For the months where we have comparable data, the click rate was higher in FY17 than FY16.



### Participation and Results

In the 2016-2017 school year, the 332 Green Team registrations represented:

- 327 Teachers
- 300 Schools
- 60,325 Students

Approximately half of the teachers that registered were new Green Team registrants, while the other half were returning teachers. All participants received a Green Team Kit containing a classroom poster, lesson plans, press release, and suggested activities. A total of 62 teachers submitted response forms indicating the Green Team activities they conducted with their students, and almost 2,600 students pledged to recycle and prevent pollution at home, at school, and in their communities. As always, these included a range of heartwarming and inspiring stories, and teachers reported that their students experienced a range of benefits from participating in the Green Team. Students are better connected to nature, see how their actions can have an impact on the environment, and share what they learn with others, both in school and at home.



## Equipment & Materials

### Recycling

MassDEP provided recycling equipment to 59 participating schools across the state to help support school waste reduction efforts. Equipment distributed included recycling set out bins, desk-side bins, wheeled totes, compost bins, and worms for vermiculture. The following chart details the distribution:

	2016-2017 School Year	2015-2016 School Year	2014-2015 School Year	2013-2014 School Year	2012-2013 School Year
<b>Schools Receiving Equipment</b>	59 (59 requests)	80 (82 requests)	74 (74 requests)	48 (50 requests)	54 (60 requests)
<b>New Programs*</b>	17	23	20	34	47
<b>Set Out Container</b>	787	625	785	636	1191
<b>Recycling Desk Side Bin</b>	345	467	255	278	6
<b>Recycling Cart</b>	73	177	202	76	113
<b>Compost Bin</b>	43	57	37	27	32
<b>Worm Vouchers</b>	16	18	9	7	NA

\*Quantity represents all new composting and recycling programs.

### Idling Reduction

In FY17, eleven schools requested and received Idling Reduction materials from the Green Team.

	2016-2017 School Year	2015-2016 School Year	2014-2015 School Year	2013-2014 School Year	2012-2013 School Year
<b>Schools Receiving IR Materials</b>	11	14	15	13	17 (18 requests)
<b>New Programs</b>	6	10	5	11	14
<b>Idle-Free Zone Sign</b>	25	50	47	41	27
<b>5 Minute Idling Limit Sign</b>	12	23	4	6	15
<b>Idle Reduction Pledge Cards</b>	1350	1450	1100	1550	500
<b>Static Sticker Windshield Decals</b>	250	1600	1150	1100	1050
<b>Bumper Stickers</b>	400	1050	700	700	750
<b>School Bus Dashboard Stickers</b>	100	300	350	750	250
<b>Palm Cards</b>	1100	2000	2600	1400	1800



Idling Reduction materials remain in high demand. In FY17, about half of request for signs and/or materials came from schools interested in bolstering existing idling reduction programs; the other half were to support new idling reduction programs.

### Awards

Green Team members were asked to submit a list of climate change, waste reduction, and clean air activities they had completed by March 31, 2017. MassDEP recognized all 62 classes that responded with award letters, Certificates of Recognition, and prizes for each student.

Of the 62 classes that submitted their Green Team activities, 18 classes representing 18 different schools were selected as grand prize recipients. The grand prizes awarded included three different assembly presentations by environmental “edu-tainers” (Jack Golden, Peter O’Malley, and Earthtunes), and gift cards to nearby garden centers for plants or school gardening supplies. Green Team prizes were also awarded to the other 44 classes that conducted activities. These other prizes included Green Team wrist bands for children and adults, Green Team pencils, Green Team bookmarks, compost activity books, key rings made from recycled tires, key rings made from corn resin, and three types of information wheels: Daily Household Management, Composting and Daily Recycler, and Household Hazardous Waste. Six of the nine planned performances were delivered in FY17, and the remaining shows are scheduled for the fall of 2017. Ten schools and one entire school district participated in the textile recovery challenge. These participants received recycled polyester wrist bands recognizing their textile recovery efforts.

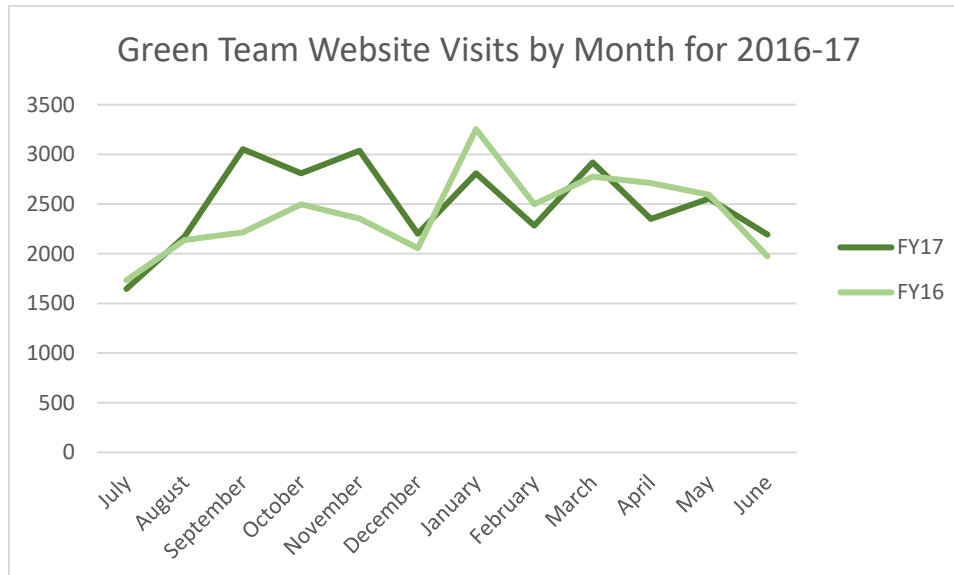
CET staff also coordinated the distribution of recycled-textile wrist bands as a Green Team prize to schools to reward participation in the textile recovery challenge.

### Website Metrics

Total sessions and users to the Green Team website increased by 8% and 10% respectively, in FY17.

#### Green Team Website Traffic FY17

	Total Sessions	Users	Page Views	Pages/ Visit	Avg. Visit Duration	% New Visits
<b>Total FY17</b>	15,944	13,271	30,028	1.88	1:25	82.84%
<b>Total FY16</b>	14,698	12,111	28,799	1.96	1:36	81.70%
<b>Total FY15</b>	12,705	10,408	25,339	1.99	1:45	81.15%
<b>Change</b>	8%	10%	4%	-4%	-11%	1%



There was a 4% increase in the total number of visits in FY17 from FY16. For most of the year, the traffic was fairly similar to last year. However, from September through November, traffic was about 25% higher than the previous year. During this period, there were about 11% more registrations than the previous year, and an extra email to the Green Team list about a compost workshop drove extra traffic to the website.

### **Program Administration**

CET staff input registrations, assembled and mailed Green Team kits to teachers, forwarded equipment requests to MassDEP for distribution, corresponded with program participants, maintained the database of participating schools, solicited and entered Teacher Response Forms, and prepared and mailed Certificates of Recognition, student prizes, and grand prizes. CET regularly updated the Green Team website, including additions to the Green Team in the Media, Green Team Spotlight, and Green Team Photo Gallery pages. In addition, CET regularly updated links throughout the website as new resources were shared through the monthly newsletter. CET created a participating schools map for the 2016-2017 school year, which will be posted to the website in early FY18. The 2016-2017 school year put an extra focus on textile recovery, encouraging schools to collect textiles through promotion in the newsletter and website, and integrating a textile recovery challenge into Teacher Response Forms and prizes.

### **Special Projects**



The special project was to align Green Team lesson plans with current Massachusetts Comprehensive Assessment System (MCAS) frameworks. CET created and updated documents aligning Green Team lesson plans with the current Massachusetts Department of Elementary & Secondary Education Curriculum Frameworks for English Language Arts, Mathematics, and Science and Technology/Engineering. These updated documents were posted to the Library & Curricula page on the Green Team website and promoted through the Green Team newsletter.

### **Green Team in the Media**

The following schools were highlighted in local media. CET requests links like these from Green Team teachers and support contacts across the state. These links are also posted to the following page:

<http://www.thegreenteam.org/testimonial/gt-in-the-media/>.

#### **- West Springfield: John R. Fausey Elementary School**

*Masslive* reported on students at Fausey Elementary School in West Springfield being honored by Massachusetts state officials for 'outstanding environmental actions'.

[http://www.masslive.com/news/index.ssf/2017/06/west\\_springfields\\_fausey\\_eleme.html](http://www.masslive.com/news/index.ssf/2017/06/west_springfields_fausey_eleme.html)

#### **- Franklin County: Greenfield High School, Federal Street School, Math & Science Academy, Bernardston Elementary School, and Hawlemont Regional School**

The *Greenfield Recorder* published an article about five Franklin County schools (Greenfield High School, Federal Street School, Math and Science Academy, Bernardston Elementary School, and Hawlemont Regional School) earning their Green Team awards and being recognized by the MassDEP.

<http://www.recorder.com/Five-Franklin-County-schools-honored-for-green-initiative-by-the-state-10755773>

#### **- Wellesley Hill: Bates Elementary School**

*Wicked Local Wellesley* reports that Bates Elementary School in Wellesley won three different awards in May. The 5th Grade recycling team, Principal Toni Jolley, and custodian Al Martignetti won third place in the Secretary's Award for Excellence in Energy and Environmental Education, as well as an Honorable Mention Award from the Green Up New England Challenge. At the 2017 Green Difference Awards, Wellesley's Food Service Director, Matt Delaney, received the Outstanding Green Community Hero award.

<http://wellesley.wickedlocal.com/news/20170530/bates-elementary-school-wins-statehouse-awards>

#### **- Rochester, Marion, and Mattapoisett: Rochester Memorial School, Sippican School, and Mattapoisett Public Schools**

The *Sippican Week* reports that the entire school district in the tri-town area (Rochester, Marion, and Mattapoisett) has pitched in to recover textiles. Recycling bins are available at every public school in the



tri-town area, and the money raised from the collected textiles will help fund teachers' requests and help bring a community connection to the schools.

<https://sippican.villagesoup.com/p/save-the-planet-save-the-school-clean-your-closet/1646283>

**- Mansfield: Qualters Middle School, Jordan Jackson School, and Robinson School**

*Wicked Local* also reports that thanks to a grant request submitted by Keep Mansfield Beautiful, the Coca-Cola Company recently awarded 18 new outdoor recycling bins to the Mansfield school system. The new bins were installed at Mansfield High School's athletic fields, track, and other strategic locations outside Qualters Middle School, Jordan Jackson School, and Robinson School.

<http://mansfield.wickedlocal.com/news/20170405/new-outdoor-bins-to-boost-recycling-at-mansfield-schools>

**- Newburyport: Nock Middle School, Molin Upper Elementary School, and Bresnahan Elementary School**

*Wicked Local* published an article about the cafeteria "Food Recovery Program" at several Newburyport Schools, including Nock Middle School, Molin Upper Elementary School, and Bresnahan Elementary School. These schools have rescued nearly 1,500 pounds of food, such as milk cartons and whole fruits, and donated it to Nourishing the North Shore.

<http://newburyport.wickedlocal.com/news/20170403/local-schools-address-hunger-food-waste-with-food-recovery-program>

**- Greenfield: Conway Grammar School**

The *Greenfield Recorder* published an article on a visit from Franklin County Solid Waste Management District to set up vermicomposting bins for Conway Grammar School. These bins, which use composting worms to break down food scraps, provide a fun activity that can be integrated into the science curriculum. Conway Grammar School is one of 31 schools in Franklin County diverting food from the trash in some major way.

<http://www.recorder.com/Worm-composting-at-Conway-Grammar-School-8997942>

**- Millbury-Sutton: Blackstone Valley High School**

The *Millbury-Sutton Chronicle* reports that students at Blackstone Valley High School have begun a recycling initiative, as part of the Trex Plastic Film Recycling Challenge. Students are competing against other area schools to collect and recycle the most plastic film, including things like grocery bags, bubble wrap, and newspaper sleeves.

<http://www.millburysutton.com/articles/bvt-advances-recycling-initiatives/>

**- Greenfield: The Discovery School at Four Corners, Federal Street School, Newton School, Greenfield Math and Science Academy, and Greenfield High School**

The *Greenfield Recorder* reports that five schools in Greenfield, (The Discovery School at Four





Corners, Federal Street School, Newton School, Greenfield Math and Science Academy, and Greenfield High School) are now diverting wasted food for composting. The five schools have reduced waste from their cafeterias and kitchens by 79 percent. Each school has a team of students that help monitor the sorting station in their cafeteria. This program was supported by a grant from the MassDEP Sustainable Materials Recovery Program.

<http://www.recorder.com/A-year-after-beginning-compost-program-Greenfield-school-cafeterias-have-reduced-monthly-trash-weight-by-five-tons-7728466.aspx>

#### **- Greenfield: The Discovery School at Four Corners**

The *Greenfield Recorder* also reported on The Discovery School at Four Corners' vermicomposting efforts, with worms provided by THE GREEN TEAM. Kate Bailey's first grade class is not only turning food scraps into valuable compost, but also learning about the processes and worms that help get this done.

<http://www.recorder.com/Working-with-worms-6227995>

#### **- Greenfield: Federal Street School**

The *Greenfield Recorder* reports that Federal Street School has become the latest school in the Greenfield School Department to begin a wasted food composting program. The school is now collecting wasted food, liquids, and paper, to be sent to nearby Martin's Farm for composting. At the end of a single day of lunch periods, the composting bins had collected 81 pounds of material, which was 91 percent of the waste from lunch!

<http://www.recorder.com/Federal-Street-School-begins-composting-6181152>

#### **- Rockport: Manchester Essex Regional High School**

*Wicked Local* Rockport reports that the Manchester Essex Regional High School (MERHS) Green Team is holding their annual compost sale fundraiser. The MERHS is selling 40-pound bags of Black Earth Compost which is created, in part, from food scraps collected from the Manchester Essex school district.

<http://rockport.wickedlocal.com/news/20161021/around-cape-ann>

#### **- Andover: Sanborn Elementary School**

The *Andover Townsman* reports that a program to eliminate wasted food at Sanborn Elementary School has expanded to all ten schools in the Andover School District. Schools in Andover are diverting food through a combination of composting food scraps and donating unopened packaged foods and whole fruits to a local food pantry. Schools in the district are incorporating environmental literacy into the curriculum, with students participating in recycling, composting, food rescue, outdoor activities, and energy saving projects.

[http://www.andovertownsman.com/news/entire-district-goes-for-zero-food-waste/article\\_44ef09a1-8b7f-5514-82c2-09a6893916e7.html?mc\\_cid=9cda85effd&mc\\_eid=97600c1c18](http://www.andovertownsman.com/news/entire-district-goes-for-zero-food-waste/article_44ef09a1-8b7f-5514-82c2-09a6893916e7.html?mc_cid=9cda85effd&mc_eid=97600c1c18)

**Attached:**



- FY17 Green Team Summary Report