

Recycling Update Spring 2018

Truck Sideguards Protect Cyclists and Walkers

Harvard Recycling installed sideguards on all our trucks this spring to make our roads and pathways safer for bicyclists and pedestrians on and around Harvard's campus. Lateral protection bars span the open space between the pavement, the truck's cargo deck, the front wheels and the rear wheels. The US Department of Transportation recommends installing the bars on all trucks with greater than 14" open span below the cargo deck. Harvard's Mail and Shuttle Services are in the process of installing the guards on all their trucks with large open spans. The Cities of Cambridge and Boston now have set up the bars on all their trucks and require them to be on contractor trucks working for those Cities. Installing the guards is already common practice in Europe and Asia. Harvard Recycling also requires them on all contractor trucks dedicated to Harvard's campus. See Republic truck with sideguards below.

While installing the guards, we thought of the late Marcia Deihl, an early friend of Harvard Recycling. Marcia died in March 2015 when her bicycle was hit by a truck on Putnam Avenue's snow-narrowed lanes. We hope Marcia's many friends and family will draw some comfort from knowing that bikers following in Marcia's path will be a little safer now!



Yellow sideguards prevent bikers and pedestrians from falling under the rear wheels of a turning truck. See the guards installed on Republic's truck dedicated to picking up mixed recycling from Harvard's Allston and Cambridge campuses. Republic has committed to installing one set of sideguards per month until the entire Boston fleet is converted.

trucks/0waLD5UM9MRDfsFCmDBjCI/story.html

Thanks to the many University stakeholders who played a role in making this happen, including COLIN DURRANT and DAVID HAVELICK of the Office for Sustainability; DAVE HARRIS and STEVE MAFFEO of Fleet Management; BETSY SHORTELL and KEN TOY of Mail Services; JOHN NOLAN and JOHN PELLETIER from Transportation Services; MIKE CONNER of Campus Services; and WAYNE CARBONE of Facilities Maintenance Operations. Special thanks to Alexander Epstein, Ph.D. (Harvard SEAS, 2012), of the Volpe Center of the US DOT for his leadership and science based support of this initiative.

See the article that appeared in the Harvard Gazette about the campus-wide sideguard installation efforts https://news.harvard.edu/gazette/story/2018/02/side-guard-installation-underway-on-harvards-large-trucks/

The Boston Globe also carried the story:

https://www.bostonglobe.com/metro/2018/02/21/harvard-east-coast-first-install-side-guards-its-







Harvard's Fixit Clinic Builds Reuse Culture

Next Clinic Saturday, 4-28-18, Honan Allston BPLibrary

Cabot Science Library and Harvard Recycling co-hosted over 20 Fixit Clinic coaches to help members of the Harvard community learn how to repair clothing, appliances, furniture, and audio equipment at the first-ever Fixit Clinic at Harvard University February 13, 2018. M.I.T. has hosted the clinics since 2011, and this year Harvard Recycling sponsored Clinics at the Honan-Allston Public Library and Brighton's Presentation School Foundation Community Center. We hope to run another Clinic at the Cabot next Fall.

Clothing repairs included patches, zipper fixes, a zipper installation, and a re-glued shoe buckle. Electrical fixes included several lamps, a flashlight and an electric toothbrush. We rescued many other items, yielding an overall repair average of about 50% with another 25% needing a part which the owner planned to get later.

We were lucky to have the presence of Peter Mui, an MIT alum now living in Berkeley CA, founder of Fixit Clinics http://fixitclinic.blogspot.com/. Peter came from California to spread his inspirational "We-can-fix-this!" gospel at Harvard. He also exhorts producers to design for durability and repairability. In Peter's words, "A Fixit Clinic is a party for fixers and the public can crash it." WGBH aired this video from M.I.T. last year.

Deep thanks to our Cabot Science Library hosts SUE BERSTLER, AMY van EPPS, ROBYN ROSENBERG, RON LACEY and others. Thanks also to ROB HART of the Physics Teaching Lab who brought his amazing caddy crammed with useful and exotic tools and hardware up from his first floor lab. Special thanks also to illustrious coaches who lugged their tools and hardware to Harvard, including Jerusha Achterberg, Stuart Cody, John Pelletier, Ray Pfau, Brian Saper, and Joe Wooters! Read more about such skill-building do-it-yourself events, and check out this article about Fixit Clinic's close cousins, Repair Cafés, here.



















Zero Waste Cambridge News

The City of Cambridge launched its Curbside Compost initiative April 2, 2018 to provide city-wide collection of food scraps in all buildings with 12 and fewer units. The Department of Public Works collects the scraps on two of its side-guard-protected packer trucks, staffed by City workers. On the first full day of collection the week after tote delivery to all households, the trucks picked up over 10,000 pounds of food scraps and delivered them to Save That Stuff's CORe facility in Charlestown. "Composting helps produce clean energy and fertilizer," says ZW's brochure. "Together, we can reduce trash in landfills by 40%."

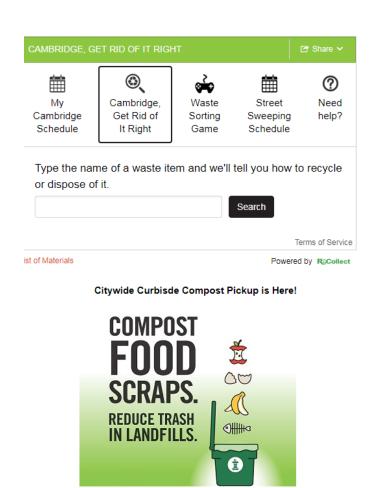
The City is grateful to Harvard Director of Government and Community Relations Thomas J. Lucey for lending space on Harvard-owned land in Allston to use as a staging and assembly area for trucks and trailers delivering over 10,000 new compost totes and counter-top buckets. Thanks Tom!

ZeroWaste Cambridge also launched its app this month. The app tells residents how to safely recycle or discard bulky items, what pickups occur on what days, Drop-Off Center hours, the Waste Sorting Game and more. Download from iTunes or Android. Number one bulky item request by far, according to Recycling Director Michael Orr, is mattresses.

Martha Henry, a Cambridge resident and Executive Director of the Harvard AIDS Institute, wrote a fabulous history of composting in Cambridge for the "Cambridge Day" website. Read details here.

Cosmetics Drive helps YWCA

For over 15 years, Harvard Recycling, the Office for Sustainability's REP program, and Green Teams across the University have donated surplus cosmetics in February to the Cambridge Family Shelter of the YWCA. Thanks to all participants for brightening the Valentine's Day for the 100 homeless women and their families with over 1,000 tons of cosmetics Delicia Charles of the YWCA wanted us to send you her thanks: "The ladies and myself would like to stress our gratitude for the donations given to the YWCA. It was such a pleasure seeing them receive the gifts so well."



Cleaning up our Recycling Stream

Contaminanted Load #1:

Food & plastic film, 2-21-18



Contaminated load #2: Food and black trash bags, Sept 2017



Contaminated load #3: Clothing, Dec 2017



Contaminated load #4: Lab plastics & film



Due to changes in world markets, we have to keep our recycling cleaner. We can still mix the same papers, boxes and containers for mixed recycling at Casella Recycling in Charlestown, but we will need to work harder to prevent contamination. See photos of Harvard loads rejected because of (from the top) food, plastic film, clothing and laboratory plastic ware. Listed below is what we can take for recycling and what we have to discard as trash:

DO Recycle:

- --Boxes (empty, no foam, no plastic bags, no food residue, no bubble wrap)
- --Papers (mail, magazines, books, photocopies, newspapers)
- -- Cans and bottles (empty, with caps and pull-tabs left on)

Trash these items. NONE should go into recycling:

X--No Foam

X--No Plastic Bags or Film

X--No black or opaque blue plastic bags

X--No Sanitary products

X--No Cups

X--No Food (compost where possible)

X--No Paper towels (compost where possible)

X--No Electronics (recycle with your building's e-waste)

In one week in September, two compactors from Harvard, two from MIT, one from Tufts and all hospital recycling loads were rejected at Casella and their contents discarded and charged a disposal fee. The reason for the tighter specifications is that China's government is banning imports of mixed commodities. The "National Sword" campaign forbids mixed paper or mixed plastic from entering the country. Since Chinese recyclers buy about half the recyclables exported from Boston, this has put pressure on recycling facilities like Casella to spend more time and money on better sorting. At the same time, our state recycling laws and Harvard's commitment to sustainability require us to keep on diverting as much as we can for recycling and composting.

We currently pay \$0 per ton for our recycling and \$84 for trash. If we fail to keep our recycling clean enough, we will be charged the trash rate to dispose of it and we will need to pass the cost along to your building. We are sorry to have to present you with this new, unbudgeted expense. Also, you may notice recycling drivers leaving your recyclables on the street if they contain trash items listed above. Drivers cannot risk taking these items onto their trucks and having Casella reject the entire load. But if we work together to sort our recyclables as above, we can continue to serve you without extra charge or interruption.

Remember also to reduce, reuse, repair, share, swap and otherwise tend carefully to all your material resources so that they don't need to be discarded at all. There is no cost to that and considerable potential savings!

Thanks for your help as we navigate these changing world recycling currents.

Recycle with SingleStream

- Boxes (please flatten)
- Papers (printed—no towels or tissues)
- All cans (empty)
- All bottles (empty beverage and cleaner bottles), caps on
- Clean food containers without visible food or beverage waste
- Books (rip off and discard hard covers)

Discard as Trash

- Paper towels, napkins and tissues (compost where possible)
- Plastic bags (return to participating grocery stores for recycling into plastic lumber)
- Foam packing
- Food service straws, flatware, condiments packs
- All paper and foam coffee cups (lids recyclable)
- Food or drink-spoiled papers

None of these common lab plastics please:







Recent changes in world markets for recyclable products mentioned above now prevent us from accepting labware plastics with SingleStream Recycling, and we can be fined if labware plastics are included. This includes all pipette tip boxes, lab plastic bottles and all the other plastics shown in the photos above. Please discard these items as trash.

We want you to continue recycling all cardboard boxes, publications, and printed papers in the labs.

Clean, dry food and beverage containers are still recyclable. Along with paper products, this represents 90% of the recyclable products used in the lab buildings. This change does not affect recycling these items in computer labs or common spaces. This only affects areas where food and drinks are NOT allowed. Some recycling bins may be removed from the labs. They will be returned when a solution allows for recycling labware in the lab spaces again.

We hope to be able to send you news of better recycling markets soon. In the meantime, thank you for taking these measures to make sure that non-labware recycling continues on our campus vigorously.

Box Recycling Breaks Records

As on-line shopping continues to grow on campus, corrugated cardboard boxes are taking up more and more room in our recycling bins. Please flatten your boxes! Great news is that world demand for corrugated cardboard, unlike other recyclables, is stronger than ever right now. Our Resource Efficiency Program put together a box recycling video, accompanied by pop songs that feature the word "Break" in the title. Watch REPs Jack Smith, Naomi Asimov (pictured), Yuki Zbytovsky, Beverly Ge and Kalena Wang show you five easy and inspiring ways to break down your boxes. Then Dean Rakesh Khurana has a "transformative experience" by breaking down an Amazon box for recycling!



New Harvard Recycling Packer Trucks

With the proliferation of corrugated boxes, Harvard Recycling's old 10-yard recycling trucks filled up quickly, usually with just under 2,000 pounds of recyclables. Loading the boxes was often labor intensive, as the bulky un-flattened boxes would not settle into the hopper, requiring frequent tamping, stomping and poking while waiting for the hopper blade to engage and crush the boxes. Back in 2004, a driver had his arm crushed (fortunately without broken bones or more permanent damage) when trying to compact this bulky material. With the help of Dave Harris and Steve Maffeo of Transportation Services, we were able to specify and lease three new 20-cubic-yard compactor trucks. See V-150 as shown in the Boston Globe this winter in the photo below left. Notice also the sideguards installed to keep bike riders and pedestrians safer. Below right, Nelson Medeiros with his new Kenworth packer with New Way "Cobra" body.





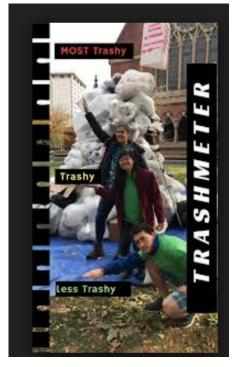
Waste Audits Show Room for Improvement

Waste audits this year at the College, the Law School, the Business School, Radcliffe, the School of Education and the Divinity School showed significant improvement in diverting recyclables from the trash. The Divinity School's trash had the fewest recyclables on campus. Only 11% of the trash discarded there could have been recycled. For the first time this year, we also audited recycling and composting. On this measure, the results weren't so good. The College had

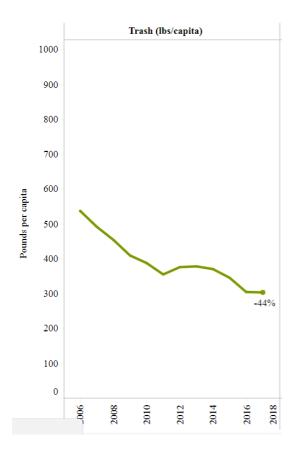
the cleanest recyclables on campus with 76% of the items being acceptable. This also means, unfortunately, that 24% of the refuse should not have been included with recycling. The cleanest compost on campus was turned in by the Business School: 99% of its "Compost" refuse met composting specifications, closely followed by the Law School with 98% compost compliance. These results showed that our most urgent task is to keep our recyclables cleaner. In our experience, here are some reasons people throw trash into the recycling:

- Inconvenient receptacles. Solution: make compost, recycle and trash receptacles equally convenient.
- Ignorance of recycling or composting rules. Solution: Give frequent, clear, locally-specific training about how to recycle and compost.
- No signage or poorly displayed signage. Solution: Place identifying labels on all sides of receptacles and add eye-level signage.
- Signs are illegible. Solution: Attach 3-D examples or photos of appropriate items onto signs above bins.
- Bin crowding obscures signs. Solution: Place restrictor lids on recycling bins (e.g. "Saturn" lids) and use color codes—green compost, blue recycling, black trash.
- Special events require moving refuse stations away from existing wall signage. Solution: use bins with built-on eye-level signs.
- Recycling looks improvised, with unusual receptacles. Solution:
 Make all bins the same style and put your Harvard department logo on them so users can see that Harvard expects and requires members of the campus community to recycle properly.

Taking these steps may not be cheap, quick or easy, but we will need to improve our game if we are to meet our goal of 50% per capita trash reduction from 2006 levels by 2020, our official goal. These measures may seem like a nuisance, but experience has proven that enacting them will break down barriers to recycling and composting. Thanks for helping members of your corner of the Harvard campus community recycle, compost and trash correctly!



Students at this fall's Mount
Trashmore show just how
"Trashy" they are on the SnapChat "Trashometer." Several
hundred students downloaded
the special SnapChat Filter
thanks to the Office for Sustainability's support.



Progress towards Sustainability Plan's Waste Reduction Goal

We are happy to report that Harvard's per capita waste has fallen dramatically since 2006. We are approaching our Sustainability Plan goal of 50% per capita waste reduction by 2020. As of 2017, our per capita trash was down by 44%, so we still have a way to go. See the excellent chart provided by Caroleen Veerly of the Office for Sustainability at left. View another chart here: https://public.tableau.com/views/Waste_6/

Sheet5?:embed=y&:display_count=yes&:showVizHome=no

The average full-time equivalent member of the Harvard community generated 302 pounds of trash last year. This compares with the Massachusetts average of 1,619 tons (2015). Please reduce, reuse, recycle, compost, repair, refurbish, share and rent furniture, supplies and equipment to help us reach our Sustainability Goals!

3-D Printing Generates New PLA Plastic Waste Stream

With the proliferation of 3D printers on campus, there will be more and more waste PLA from rejected print-outs. Engineering and Applied Science major Robert Anderson '19 is recycling the SEAS print-out waste in a Filobot device funded by a 2017 grant from the Office for Sustainability. The Graduate School of Design has seen over 60 of the printers pop up in "the trays" of Gund Hall. Rachel Vroman, manager of the Digital Fabrication Laboratory, has set up a box to receive 3D printer scraps there, provided by a company called RePLAy3D. Do you know of any other 3D printers at Harvard from which we can start collecting PLA scraps? Please email us.



ED SCHOOL "IN SIGHT, IN MIND"

AUDIT shows 94% clean compost... and opportunities for further composting still being discarded in the trash and recycling. Auditors Shanti Scutt-Norman and Josie Davis join Harvard Recycling's Rob Gogan on the Gutman Library lawn at Earth Day.

IN ONE YEAR:

If you recycle, you save this much from trash:

Cardboard boxes: average of 52 lbs/year

Papers, junk mail: average of 110 lbs/year

Cans & bottles: average of 75 lbs/year

E-waste: average of 50 lbs/year.

Recycling adds up if you do it every day so that POUNDS saved leads to TONS diverted from incinerators and landfills. Thanks for your daily efforts!



Gorgeous new OUTDOOR REFUSE STATION on the south side of Aldrich Hall makes diversion to composting and recycling as easy as trash disposal. Scores of the new units have been installed across the Business School's Allston campus. All bins have the identical configuration, colors and refuse order. Clear signage on the tops of the bins instructs generators how to sort discards. All bins are emptied nightly so pests won't be attracted. There are also triple bins in the same sequence indoors. It's no coincidence that HBS's diversion rate is approaching 80%!

Harvard Beats Ivies

—But not Stanford

Harvard finished at the top of the Ivies in this year's national RecycleMania competition, which spanned February and March, just ahead of Cornell in the "Diversion" category. However, we trailed Stanford by less than a tenth of a percent. Harvard also ruled in the "Per Capita Classic" category with over 20 pounds recovered per FTE over the eight-week competition. But Stanford beat us here too, this time by a wide margin of almost 10 pounds.

Among Massachusetts schools, Boston College recovered over 30 pounds per capita to win the PCC category. Harvard was well ahead of UMass Amherst (11 lbs).

In the "Total Recycling" category (formerly known as the Gorilla Prize), Harvard was third in the nation, behind only Rutgers (1) and Stanford, again. If each member of the Harvard community had recycled only two more boxes over the months of February and March, we would have beaten the Cardinals.

In the most important competition, though, Harvard won top glories over the Harvard of the West in the per capita "Waste Minimization," generating only 72 pounds of trash compared to 118. Cornell won top Ivy honors here by discarding only 60 pounds per person. So next year, let's put the CRIMSON ahead of both the Cardinals and the Carnelians!



Harvard Shifts from Composting to

Digesting Food Scraps into Energy





had enough processing space to make compost. The finished compost helped improve local soils for horticulture and agriculture. Our first vendor, Herb's Disposal, had to take the compost as far away as Maine some days. When Harvard Business School was ready to expand composting to all dining areas in 2005, Harvard became the first compost customer of Save That Stuff. STS still had to haul the refuse a long way to Hamilton, MA, about a 90 minute round trip.

This January, Harvard started sending its organics to the new CORe facility in Charlestown, a stunning innovation STS has launched this year in partnership with Waste Management. The CORe facility, only three miles from campus, allows waste haulers from all across the Boston area to dump food scraps for pulping and screening. The food slurry is blended and liquefied to the consistency of a thick milkshake with about 15% solid food scraps. From Charlestown, tanker trucks pump the slurry onboard for transportation to the Greater Lawrence Sanitary District in Andover, a waste water treatment plant, for digestion in closed tanks into biogas.

The biogas is chemically similar to natural gas. GLSD burns the biogas to power generators for electricity to run their plant. Starting this summer, GLSD will open a Combined Heat and Power plant, which will replace most if not all the fossil fuels now used to make heat and power to run daily waste water treatment operations. GLSD is glad to receive the food scrap slurry because water efficient toilets and appliances have been shrinking the volume of waste water its customers generate. The food scraps help GLSD make full use of their digestion tanks. After digestion, the fibers and other residues get rolled into fertilizer pellets for application to orchards and pasture lands.

Save That Stuff is helping Harvard stay on the cutting edge of the most sustainable way to manage food wastes. Starting April 3, the City of Cambridge is also sending its food scraps to STS (see article elsewhere). We are proud to send almost 3,000 tons of Harvard's green waste to an end disposal site that will not only prevent release of methane by keeping it out of the landfill, but will also generate biogas to displace a large amount of fossil fuels.

Read this article with photos (and soon, a video) by Resource Efficiency Program REP Amy Li '20: [https://green.harvard.edu/news/new-life-harvards-compost]

HARVARD SURPLUS BENEFITS NON-PROFITS #1:

Klarman Hall, the new Convening Center finishing construction at Harvard Business School, required the demolition of Burden Hall to make space. Thanks to Reed Bergwall and Jennifer Wrynn, Capital Project Managers, Harvard Business School recovered all the folding seats and tablets from Burden Hall Auditorium for reuse in Uganda. See story and photo of Wilber below from the HBS "Newsroom" website:

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7 FEB 2018 by CHRISTIAN CAMEROTA Harvard Business School's auditorium of more than 50 years, Burden Hall, closed in 2017 to make way for the School's new Klarman Hall convening center, which will open next fall. But Burden's closure on campus marks a new beginning for another structure some 7,000 miles away.



The story starts with Wilberforce Kateregga, who emigrated from his small hometown in the Mukono district of Uganda to Waltham, Mass., in 1999. While Kateregga loved and found success in the US, he kept his hometown in mind and close to his heart as well.

"I come from a rural and remote area in Uganda, and I grew up in a poor environment," Kateregga said. "When I came to this country, I felt so blessed. So I decided to become a blessing to my community in Uganda. I have a vision and a dream to help other people who can't help themselves."

In 2006, Kateregga started in on that dream by founding Waltham College, a day and boarding school in Mukono (but named after his new hometown in the US) for needy children and orphans who can't afford public school fees. What began with 50 students six years ago has since grown to serve about 200 high school-aged Ugandan youths.

"In Uganda, we have free primary education up to seventh grade," Kateregga explained. "But a free high school is not as common. I used to walk 10 miles every day just to go to mine. And many people in my area of the country have died of AIDS and left orphans who can't [provide for themselves]. So, I saw the need in my area and decided to start a high school so those children could have a chance."

Because of the school's success to date, it is constantly expanding. The latest expansion will include the addition of an auditorium to host seminars, conferences, movies, and even theater productions. There was just one problem: finding somewhere for everyone to sit. Fortunately, Kateregga's network in the US and a connection to Harvard offered him an excellent solution.





Waltham College students above; furniture and computers once donated by Harvard below.

"A while ago, I heard about the recycling department of Harvard University and a wonderful man named Rob Gogan," Kateregga said. "I told him about Waltham College, and he was interested and offered to help. He told us. 'If you need things, we can give them to you.' It started with mattresses, furniture, and computers. Most of the things we have in our school are from Harvard University." Now those things will include 755 chairs from Burden Hall, which Kateregga and a friend spent several days packing into a 40-foot shipping container like pieces into a puzzle. Along with additional lighting and tables from Burden Hall, the chairs will travel by boat for two to three months across the Atlantic Ocean to Mombasa in Kenya and from there by land to their new home in Uganda. In total, Kateregga's organization will be shipping 30,000 pounds of materials more than 7,000 miles. Despite the logistics that entails, Kateregga said, it is well worth the effort.

"I want to thank Harvard University and Mr. Rob Gogan for being so generous," Kateregga said. "It's such a blessing to have this connection. I think our place is going to look great, and the students are all so excited. They know where everything is coming from."

See a <u>time-lapse video</u> of the deconstruction of the auditorium seats and Wilber describing how the seats will be reused.

Semi-New Computers Well-Stocked with Bargains

<u>Semi-New Computers</u> received an abundance of Harvard surplus laptop and desktop computers in March 2018. Founded by students in 2004, SNC has provide computers to hundreds of Harvard employees, neighbors and charities including Waltham College. SNC provides brand new hard drives and batteries with their products. Visit their sales kiosk at the Harvard Surplus Warehouse in Allston on Mondays and Thursdays from 10 AM until 2 PM. You can also call Charlie or Marlene at 617-721-5549. "Control-Click" on the link above to see their website.

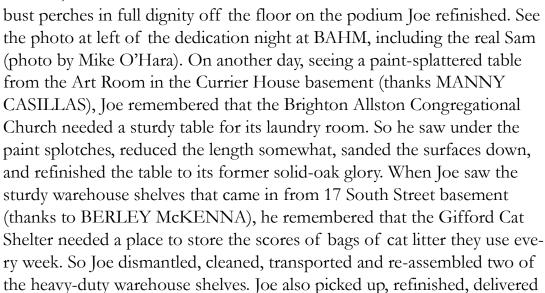
Harvard Surplus Benefits Non-Profits #2

Sometimes the goods donated to Harvard Recycling need refurbishing, refinishing

and re-assembly. One of our frequent guests at Harvard Surplus Distribution on Thursdays is Brighton resident Joe Wooters (see Joe at our October Cambridge Fixit Clinic, right). Using his extensive tools, expertise and networks, Joe has transformed hundreds of Harvard surplus file cabinets, tables, desks and other goods for the benefit of local charities. Joe has also helped dozens of visitors at our Fixit Clinics repair lamps, furniture and other goods.

When Harvard University Art Museums brought us a surplus podium (thanks PETE ATKINSON and JIM MOISSON of HUAM), Joe immediately thought of the Brighton-Allston Historical Museum and their large bust of Boston Poet Laureate Sam

Cornish, which sat on the floor. Now Sam's



and installed all the furniture in the Gifford's office in the photo below (photo by Joe Wooters). Thanks Joe! You're a skillful saver of museim display props, furniture, appliances... and people!





The Shirt off your Back

By Amanda O'Leary

Reprinted from "The Tribe" April 2018 LABBB Collaborative Newsletter

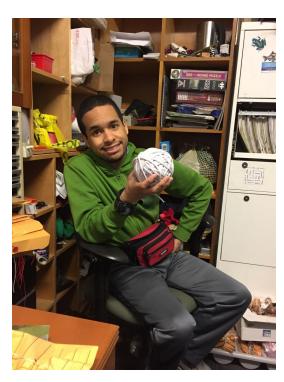


Fun and exciting opportunities continue to be happening for LABBB's Transition Department. After the holiday break, one of our community partners, Rob Gogan, Harvard University's Recycling and Waste Services Manager, spoke to our Site Instructor, Gianna Carrabino, about a possible project. Rob had a surplus of uniforms, particularly tee shirts, and wanted to find a way to "upcycle" them. Harvard logos must be cut off before they are allowed to leave the building. This renders them unusable, except as rags. Rob knew of some organizations, such as local food pantries and senior centers, that welcomed reusable bags and he has held several bag drives for Cambridge

since the ban on plastic bags began. Gianna was able to find some tutorials online on turning old tee shirts into reusable bags, and with that, a plan was born - "The Shirt Off Your Back" bags! Thank you, Tim Callahan, for the creative project name!!!! Our hope is that with more and more towns banning plastic bags, the need for these will grow locally.

The process to turn shirts into bags is one that can involve different types of learners. The shirts will need to be washed, cut, sewn, wrapped, labeled, and delivered. The skills needed to perform these tasks can involve a variety of students. A number of local senior centers and food pantries are interested in having the bags to give out to their clients and consumers. Our students who participate in Habitat for Humanity at Harvard will focus on the cutting, while some of our TRAC students will focus on the assembly and delivery of the bags. This endeavor is another wonderful opportunity for our students to make connections in our local communities.

JONATHAN RAMOS of LABBB shows Harvard T-shirts cut down for processing into shopping bags above (photo by Gianna Carrabino); right, Jonathan shows ball of T-shirt yarn salvaged from scrapped sleeves. Thanks Jonathan & crew for coming to Harvard to help us repurpose and recycle so many materials!



SURPLUS AVAILABLE

We have an ever-changing inventory of furniture, supplies and equipment from many buildings across the University. We distribute an average of five tons of goods per week. Come down any Thursday from 11-2 to see what we have available. Harvard departments and non-profit organizations can come get first dibs on Mondays from 11-2 (including Memorial Day). **Please note that we will be closed Thursday, 5-24-18, Harvard Commencement Day.**

Goods are available at our Recycling and Surplus Center in Allston every Thursday at 156 Western Avenue from 11 AM – 2 PM. We are open until 2 PM but for best selection you need to come at or shortly before 11 AM, but not before 10 AM. At that time you may sign up for an appointment to "shop" in the warehouse. Harvard departments and non-profits may come on Mondays from 11-2. If donating furniture, please instruct your movers to contact us 24 hours before delivery < rob_gogan@harvard.edu > so that we can receive and display everything safely. We can take material only from Harvard buildings which use FMO Recycling & Waste Services, and we can never receive any trash or hazardous waste. Movers must unload items one at a time so we can photograph and inventory the goods. All loose items must be placed on shelves or in hampers available here.

When donating file cabinets and desks, please unlock, open up and clean out all drawers. We cannot receive any furniture with unknown contents. Likewise, please make sure all computers, smart phones and other electronic devices are purged of any confidential information. Harvard Recycling does not shred or otherwise destroy any confidential materials we pick up or that are delivered to the recycling and surplus center. Thus it is the responsibility of the donor or recycler to make proper arrangements to protect confidential information. Please call us if you need extra recycling barrels or more pickups when cleaning out offices and furniture. Also, please ask us for contact information for confidential destruction vendors serving the campus. Our preferred vendor is DataShredder at 1-800-622-1808.

Please keep in mind that parking space limitations force us to be STRICT ABOUT PARKING RULES. Please respect our neighbors' need to maintain safe traffic flow around the Recycling and Surplus Center. When here for Thursday's Surplus Distribution, follow the parking monitor's direction and park only in designated areas. You may also park in the free spaces in the streets adjacent to the property. If you are interested in seeing any of the items now available, come to our Recycling and Surplus Center at 156 Western Avenue, Allston. For directions, see map and text on next page. We may be able to deliver goods to Harvard departments for a small fee.

DIRECTIONS TO HARVARD SURPLUS DISTRIBUTION, (continued)

By the "T" then walk-- For GPS directions use "156 Western Avenue, Allston." Take the Red Line to "Harvard" station up double escalators to main exit. Walk south on JFK St across Charles River, where road becomes N. Harvard Street. Walk past Harvard Stadium on right to first traffic light at Western Avenue. Turn left (east) onto Western, then walk one tenth of a mile past Flint Cleaners and Swiss Bakers. Just after the SwissBakers parking area is the driveway to 28 Travis.

By the "T" then bus: Leave Harvard Station by "Church St." exit. Walk north one block on Mass. Ave. (opposite traffic flow) across Garden St. to Dawes Island bus stop. Take either Bus 66 or Bus 86 and tell driver you want to get off at Western Ave. in Allston. Sit on right side of bus and look for Harvard Stadium on right. Turn left (east) onto Western, then walk one tenth of a mile past Flint Cleaners and Swiss Bakers. Just after the SwissBakers parking area is the driveway to 28 Travis.

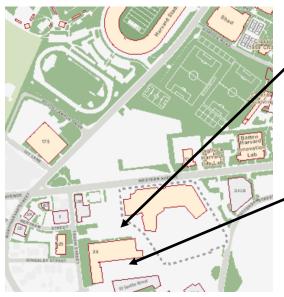
By car—For GPS directions use "156 Western Avenue, Allston." From I-90: take I-90 east (Mass. Pike) to exit 18, "Allston - Cambridge." Bear left after toll booth towards Allston, onto Cambridge Street. Take Cambridge Street to second light approx. one quarter mile to gas station on right. Go right just past gas station onto North Harvard Street. Take North Harvard Street one quarter mile to traffic light at intersection with Western Avenue. Turn right (east) onto Western, then go one tenth of a mile past Flint Cleaners and Swiss Bakers. Just after the SwissBakers parking area is the driveway to 28 Travis. Park in one of the striped spots.

From I-93: take I-93 to Charles Circle (Cambridge/Somerville exit). Get onto Storrow Drive westbound 3 miles. Look for "Allston/Harvard Square" exit. Go right up ramp to North Harvard St. and take a left. Go four tenths of a mile, past Stadium, to first traffic light. Turn left (east) onto Western Avenue, then go one tenth of a mile past Flint Cleaners and Swiss Bakers. Just after the SwissBakers parking area is the driveway to 28 Travis on the right. Park in one of the striped spots.

From Route 2/ Soldiers Field Road: get onto Soldiers Field Road. Go past athletic fields to exit sign: "Allston/ Harvard Square." Take right at top of ramp onto North Harvard Street. Go four tenths of a mile, past Stadium, to first traffic light. Turn left (east) onto Western Avenue, then go one tenth of a mile past Flint Cleaners and Swiss Bakers. Just after the SwissBakers parking area is the driveway to 28 Travis on the right. Park in one of the striped spots.

DIRECTIONS to HARVARD SURPLUS DISTRIBUTION, (continued)

All delivery trucks—For GPS directions use "114 Western Avenue, Allston." Follow above directions for "By Car." Go to intersection of Western Ave and N. Harvard St, Allston and turn EAST on Western Avenue. Go .3 mi and turn RIGHT at the light onto Hague St opposite Harvard Business School. Bear RIGHT at dead end onto Rotterdam St. Go three tenths of a mile to driveway to 28 Travis. Follow signs past wooden fences to large white building. Go to Loading Dock D (first on right), Harvard Recycling and Surplus.



Harvard Surplus Distribution

Located at 156 Western Avenue entrance to 28 Travis Street

Open to the Public Thursdays, 11-2

Open to Harvard Departments & Non-profits Mondays, 11-2

Deliveries to Loading Dock "D," South side of building, weekdays 8-2



Harvard Surplus supplies Maine Halloween Costumes

Harvard FreeCycle Volunteer Extraordinaire Nancy Bjornson sent us this photo of her friends in Maine dressed up in costumes picked up at Harvard Surplus. Maybe the penguin is a future resident of Quincy House!

PLEASE TELL US if you can donate these items:

- 1. A Cambridge resident and Harvard Surplus volunteer who has welcomed thousands of visitors to our warehouse, is looking for a DIGITAL CAMERA. Does anyone have a working digital camera they could send to one of our best volunteers?
- 2. Please also let us know if you have any LAB EQUIP-MENT. We have schools and research organizations both locally and in Africa that need bench-top instruments.
- 3. Many non-profits are looking for clean BEDS AND MATTRESSES. We can receive any from Harvard buildings.

CAMPUS NATURE WATCH

Smelled but unseen, a SKUNK marks its territory on JFK Street at the busy intersection with Brattle Street in Harvard Square.



A [breeding?]pair of PEREGRINE FALCONS perches on the golden top of Memorial Chapel with their backs to Widener, scanning for prey, although the one on the left keeps turning his heard to check out the people.

At left, two week old CANADA GOOSE chicks, yellow with down, squabble and peck each other vigorously, then immediately settle down to graze on the grass wing-by-wing, as parent stands watch at full attention.

A WOODPECKER "whinnies" at the side of Widener.

BALD EAGLE soars over the Charles upstream from Newell Boathouse.

Flock of ten WILD TURKEYS ambles across the Harvard University Press driveway at 79 Garden Street each morning around 7:30 and afternoons at 3:45; the following week, a lone tom turkey comes to front entrance and pecks repeatedly on plate glass window at his reflection as if knocking to be let inside...Female WILD TURKEY feeds peacefully near the west side of Wadsworth House...[the same?] turkey strolls through Dudley Gate towards Massachusetts Avenue and pauses with waiting pedestrians while vehicles drive through the green light; when walking light comes on and traffic stops, turkey resumes walk across the street to Smith Campus Center.

Pair of RED-TAILED HAWKS tag-teams atop steel beams of Paulsen School of Engineering and Applied Science building in Allston; one soars in broad spirals while the other watches. Then the flyer lands on the same beam, launching the flight of the observer... another pair of red-taileds tangle on low branch next to First Parish Church cemetery across from Johnston Gate;

one flies across to equally low branch on the other side of the ancient plot, and the two stare at each other in the light rain. See photo at right.

Pair of TUFTED TITMICE takes up residence in SECKEL PEAR tree next to Harvard Magazine between Ware and Prospect Streets.

Five SWANS, alternately glide majestically and dip deep, pointing their tails high, browsing the aquatic vegetation near the Newell Boathouse along the Charles's southern shore.

WITCH HAZEL spreads its welcome blossoms over stubborn March snow near Mallinckrodt, Quincy House, the Harvard Kennedy School and Rock Hall at the Business School.

Aging CHERRY TREE near 29 Garden Street still shows a few buds for this year's growth, but thousands of fungi sprout from the south side of the trunk.

When large diseased cherry tree near the entrance to the Harvard Museums of Natural History had to be cut down, Resource Efficiency Program REP Jack Smith of Adams House wanted to save it. Jack is a woodworker, and he soon got a special commission from the Office for Sustainability to make something special in



honor of President Drew Faust's many environmental improvements to our campus during her tenure. Jack used a burl from the tree to turn a magnificent wooden bowl, inscribed on its bot-



tom with an antebellum southern US motif in honor of Drew's history scholarship. Thanks Jack and Drew! Your legacy, and that lovely cherry tree, will live on.

Thanks to Campus Nature Watchers Dan Boyle, Kate Brick, Joel Dashnaw, Sarah Kariko, Sonia Ketchian and Jean Martin!

"What is the use of a house if you haven't got a tolerable planet to put it on?" —Henry David Thoreau,