

Recycling Update Spring 2017

Adapting to the Strike

During the Harvard University Dining Services strike last October, kitchens on campus were not able to staff their dishrooms adequately. This meant that the Dining Halls could not use their washable plates, glasses and silverware. All ware had to be single-use, which caused an enormous increase in refuse collection needs. Most kitchens were able to continue to keep back-of-the-house food scrap prep waste clean enough for composting as well as the Somat pulped food waste. This organics stream was clean enough to compost after the third day of the strike.

Unfortunately, the plates, cups and flatware from the dining serveries was too contaminated for either recycling or composting, with few exceptions. Managers, volunteers and temporary workers were unaware of or unable to meet our specifications (e.g., no gloves in the compost and no food in the recycling). This caused 50% more refuse than normal, and because it was a mix of organics and petro-plastic, we had to discard all servery trash as municipal solid waste. This added about 5,000 pounds to our daily trash. All told, our October 2016 trash was about 50 tons higher than in October 2015. Several House residents bravely rolled up their sleeves and manually sorted compostable and recyclable serviceware. But since nearly all bagged refuse was contaminated, the refuse drivers discarded it all as municipal solid waste.

Fortunately, this increased waste did not last beyond November when the strike was settled and



The Green '20 "Safe, Free, and Green" Tap Water Campaign enlists students, faculty and staff to promote drinking Cambridge tap water. See videos, photos, and survey results here: https://green.harvard.edu/campaign/safe-free-and-green-tap-water-campaign

the HUDS dishroom workers went back to work. December's trash total was back down below 2015 levels. The strike made us appreciate all the more the good services of our HUDS dining staff not only to recover all those food scraps for composting but also to wash all that china, glassware and silverware. Preventing the purchase and disposal of truckloads of single-service ware each day is a mission full of environmental grace. Thanks HUDS workers for your essential help in recycling and composting!

Last but not least, thanks to Harvard and Republic management staff, especially Kieran Clyne, who picked up many locations himself to enable the kitchens to stay open.

Harvard-Yale 2016

Harvard hosted Yale at "The Game" this year. We set up over 200 temporary recycling stations around the Stadium concourse, at the House and Alumni tailgate parties, at the HUDS tailgate at the Beren Tennis Center, and around the grounds. Brandon Geller and REP alum Alauna Sessoms-Hall covered dozens of tailgate sites, lining ClearStreams and making it easier for the 30,000 plus visitors to recycle or compost properly. Thanks Brandon and Alauna for making the Crimson green!

Breast Milk, Food Scraps and a "Perfect" Trash Bag

This fall's Waste Audit season showed some fascinating results. First, the Radcliffe Institute trash sample yielded a several small bags of expressed breast milk—first time we've seen that. Perhaps the bags were thawed for a child who didn't consume it. Once thawed, it might have spoiled, requiring disposal. Waste Audits are full of similar speculations about the "Trash Stories" told by the discards. We also learned that undergraduate residents are still the most wasteful population on campus, with 33% of their dorm trash recyclable. In contrast, recyclables comprised only 21% of Law School dorm trash. Compostables continue to make up about half of all campus refuse, even in buildings with good compost recovery infrastructure. Most items in this category are leftover food, coffee grounds, compostable serviceware and paper towels. The most significant discovery this year was the first "perfect" trash bag in over 1,000 bags audited since 1993. This means that not one gram of its contents could have been reused, recycled or composted. Medical School custodians collected the bag on 12-16-16 from Warren Alpert Conference Room 436-04. The bag was among the sample collected for HMS's first-ever Waste Audit, led by Longwood Sustainability Manager Adam Meier. Thanks to all participants for helping advance our trashy research! Besides FAS Undergrad Residences, the Law School, Radcliffe Institute and the Medical School, other auditing buildings of the University 28 Travis St, 114 Western Ave, 90 Mt Auburn, and 14 Story.



Above: Harvard Medical School's first Waste Audit, December 2016, where we discovered the perfect trash bag. Right: Auditors of 14 Story Street trash model their Tyvek onesies. Left to right: Julia Martyn-Shah, Advanced Leadership Institute; Rob Gogan, Harvard Recycling; Rachel Mingea, ALI; Amy Tighe, Episcopal Divinity School, Recycling Intern 2016.





2017 Valentine's Cosmetics Drive brings Smiles to Homeless Women

For the 19th straight year, women of Harvard helped their neighbors by donating to the Harvard Cosmetics Drive. Fighting their way through four February snowstorms, Harvard Recycling picked up almost 1,200 pounds of cosmetics and toiletries from 33 locations across campus. Students from the Undergraduate REP program along with volunteers from Harvard Extension helped sort and stage the goods for delivery to the Cambridge Family Shelter of the YWCA. Kristina Keating of the Shelter mobilized her team to post Valentine's hearts and ribbons all over the Tanner Residence Common Room and serve cake. Over 100 residents got gift bags full of nail polish, feminine hygiene products, hair treatments, tooth brushes and more. "Everyone had such a good time and we all cannot say thank you enough! Please let everyone involved know that there were many smiles and the women loved the items. It has become an event

that they look forward to time and time again. "See photos from the Shelter's party below. Thanks to all who sorted, collected and donated!



Above: Harvard volunteers sort through the Valentine's goods for the Cambridge Family Shelter. Left to right: Sarah Anne Stinnett, Division of Continuing Education Green Team; Colleen Kwedor, Division of Continuing Education Green Team; Kelsey Grab, Resource Efficiency Coordinator; Kalena Wang, FAS Resource Efficiency Program; Isabelle Desisto, Resource Efficiency Program; Forrest Lewis, Co-Captain, Resource Efficiency Program. Right: Scenes from the Valentine's Party at Cambridge Family Shelter.

Valentine's Cosmetics Drive Report 2017 Donation Champions

	<u> </u>	/eight	
<u>Rank</u>	<u>(kg)</u>		<u>Donor</u>
	1	156	Harvard Business School
	2	98	Harvard Alumni Affairs & Development
	3	91	Campus Services (46 Blackstone, 28 Travis etc.)
	4	81	Harvard Kennedy School
	5	69	Harvard Smithsonian Center for Astrophysics
	6	26	Student Houses & Dorms Leader: GSAS Dorm Perkins







Tidy, pest-proof and accessible

Peabody Terrace houses almost 1,500 Harvard affiliates, mostly graduate students and their families. They generate over 1,000 pounds of trash and 300 pounds of recyclables daily. Prior to August 2016, outdoor dumpsters held much of the complex's trash and recycling. Wind, weather and vermin often dispersed the refuse all over the property. Property Management spent several hours each week picking up debris that blew all around the area. The abundant food tidbits attracted rodents who were reluctant to leave.

Over the summer of 2015, Pam Cornell, Area Manager for Peabody Terrace, called for a new plan. Pam called together a design charrette team of Justin Caron and Lee Phelps of Northstar Project & Real Estate Services, Rich Pollack of Harvard Environmental Health and Safety, plus representatives from Maguire Equipment, Republic Services and Harvard Recycling. Mike O'Connor and Ryan Stanhope of the Peabody Terrace Management Office team emphasized how much bulky cardboard shipping boxes and packing materials were fluffing up both trash and recycling. The residents' increasing on-line shopping was changing the waste stream. The new plan the team came up with provided a dual-chamber self-contained compactor with one side for recycling and the other side for trash. This would secure the refuse inside a rodent-proof chamber when the doors were closed; compact both trash and recycling (including all those boxes); reduce truck traffic by requiring 50% fewer pickups of the compacted refuse; and provide better accessibility for residents.

The unit and the fence screening it were custom-built and installed in August 2016 in time for the start of the academic year. With a customized feeder hopper and a recessed concrete pad below grade level, the resident's loading height is 9 inches lower than before. Thanks for the upgrade, Pam, Mike, Ryan, Justin, & Lee!









BEFORE and AFTER:

With the non-compacting containers at Peabody Terrace, refuse often spilled onto the ground, attracting rodents and requiring frequent litter pickups, even with daily trash and recycling collection. Photo by Rich Pollack

The lower loading height and compacting capabilities of the new set-up keeps recycling & trash tidy, with only one noisy truck pickup per week. Photo by Rob Gogan

New Compactors Also Clean Up Robinson Gate, Dunster-Mather Kitchen

Two other corners of campus also got enhanced refuse receptacles. The trash compactor at Robinson Gate of Harvard Yard had rust holes on the underside of the otherwise-intact machine, which allowed rodents access to the food scraps in the trash. Rod Kreimeyer of Best Pest and Richard Pollack of Harvard's Environmental Health and Safety Department proved that rodents were getting in. Their overnight videos, taken with motion-sensitive cameras, showed mice, rats and a feral cat drawn to the food. A new compactor, sound on all sides, helped lead to a dramatic reduction in rodent (and feline) sightings ever since installation in December. Thanks to Maureen McCarthy, Anthony Pacillo of FAS, Rich Pollack of EH & S, Tom Maguire of Maguire Equipment, and Rod Kreimeyer of Best Pest for this solution.

House Renewal leads to Dumpster Renewal

Managers of the renovated Dunster House undergraduate residence did not want to go back to putting their trash out on Cowperthwaite Street at the front of the House as they had done prior to 2013. This showpiece of the House Renewal project deserved a rubbish-free entrance all hours of the day. The best alternative pickup location was the Dunster Mather Kitchen loading dock. But the increased trash loaded up the containers too quickly and spilled over, attracting vermin. So we installed a new pest-proof self-contained 10-yard trash compactor there that only needs pickup once per week. Residents of Dunster and Mather Houses, plus neighbors nearby on Flagg Street, only have to put up with one morning a week of truck noise instead of six. Thanks to Brandon Fernald, Maureen Russ, Donn Leonard, Rich Pollack, Maguire Equipment and Republic Services for your help in designing this solution.



Members of the Harvard community love on-line shopping! Corrugated boxes in the recycling (often not flattened) and bulky foam and bubble-wrap are filling our containers fast. Meanwhile, much of what Amazon and other retailers deliver eventually needs to be discarded, compounding our trash problems. This winter, Amazon announced a new program to reduce these waste problems and help the needy at the same time. Amazon customers load up clothing, shoes, and other household goods into boxes, print out a shipping label from the Give Back Box website http://givebackbox.com/amazon, and drop it off at a designated UPS pickup site. There is no cost to the donor or the receiving charity. UPS then delivers the goods to Goodwill Industries or other organizations nearby. From there, the products go to thrift stores in Greater Boston. We are grateful to Amazon and Give Back Box for taking responsibility for these materials. For more information, click here:

http://givebackbox.com/faq

On-line shopping boxes overwhelm Harvard recycling totes at the Graduate School of Design, Thayer and Perkins student residences. If students reused more boxes for packing up their goods to go home, or used the Give Back Box program through UPS, this would conserve truck fuel and space in receptacles.







Caught Green-Handed

Jon Hamilton '20 stopped by to chat with his friend, Resource Efficiency Program REP Camille Desisto at this Fall's Mount Trashmore event. Pausing before heading in to Annenberg for lunch, Jon was toting the best collection of reusable ware we have ever seen an undergraduate carry. Jon's thrift was well-timed: the HUDS strike prevented washing the usual china, glass and steel ware, so Dining Services was serving everything on single-use ware. In gratitude, we sent him a gift of three organic cotton hankies so he won't need a paper napkin next time. Thanks Jon!

Do you know of a member of the Harvard community that excels in resource thrift? Please tell us about it and send in a photo. You or your colleague could be Caught Green Handed in the next Harvard Recycling Update!





Earth Day Pledges

Join your colleagues who signed up last year to make a difference by toting reusables instead of single-use cups, serviceware and bags. Make a pledge of your own this year! At last year's Harvard Alumni Affairs & Development, these attendees made the following pledges. They kept their promises.—we checked on them! Thanks, Reuse Heroes of HAA & D!

SARAH WEGNER pledged to carry a cloth handkerchief instead of using paper napkins.

CHRISTINA LEBLANC pledged to carry a reusable shopping bag instead of taking paper or plastic bags.

PATTY SCANLAN pledged to carry a reusable knife, fork and spoon.

KIM SALLEY pledged to carry a cloth handkerchief.

DIERDRE W. MARTINO pledged to carry a cloth handkerchief.

SARA MORGAN pledged to carry a cloth handkerchief.

ANDREA PETERSON pledged to carry a reusable shopping bag.

BETSY DEVLIN pledged to carry a cloth handkerchief.

By far the most effective pledge, which he says he has kept all his adult life, is Reuse Champion WALLY BENNETT'S to carry a cloth handkerchief, reusable shopping bag, AND reusable knife, fork and spoon.

LUG YOUR MUG, Part 2

Single-use cups are convenient, but they are not sustainable. This summer, Casella Recycling started refusing paper hot-cups for recycling. We now must discard these as trash. China's "Green Fence" policy tightened specifications allowing import of recyclable post-consumer paper. The Green Fence excludes plastic-lined paper cups like Starbucks cups and the ones Dunkin Donuts uses in Cambridge. Foam is no better: a 14-ounce expanded polystyrene foam cup is not recyclable either. In addition, it contains 10 grams of PS. While light-weight, inert, and stable, PS is made from the styrene monomer, which exposes factory workers to a suspected carcinogen. This is the main reason why the Cambridge City Council banned PS from single-use beverage containers in 2016. Harvard University Dining Service retail operations and Brain Break overnight snack stations in student residences use compostable paper cups such as the "EcoTainer" 14-ounce cup. These aren't recyclable either, but they are compostable. Recovering these cups for composting diverts the paper fibers, liquid residues and bio-plastic liner from disposal,

Aldís with her "PLAN" aluminum cup

but the windrow decomposition process releases volatile organic compounds and some methane from the inner pockets into the atmosphere. The cups' paper fibers and bioplastics don't add much value to the organics we send out for composting. The farmer wants food scraps, which the cups don't usually contain. Plus single -use post-consumer compostables often get contaminated with petro-plastic bottles and metal cans. Reusables mitigate all these impacts by keeping the container in active use.

Manufacturing and ultimate disposal of reusable beverage containers has impacts too, of course. They need to be used multiple times to be better than single-use options. Tufts economist Frank Ackerman in "Why We Recycle" suggests that the best quick-and-dirty metric for comparing environmental impacts of a non-toxic consumer product is its weight. The chart below lists the relative environmental impacts of several container options, plus the "break even point" beyond which reusables are better than single-use.Last summer's Update

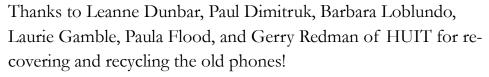
told the amazing success story of the Law School's reusable mug program. The powerful incentive of free morning coffee, begun by former Dean, current Supreme Court Justice Elena Kagan, was available only to those who brought their own mugs because HLS puts out no single-use cups! In this issue, we feature a favorite reusable cup from beyond campus.

Aldís Elfarsdóttir '18, Captain for the undergraduate Resource Efficiency Program, has a favorite reusable. Aldís uses an aluminum cup she got while working for the Post-Landfill Action Network last summer. She said all the PLANners tote their cups everywhere. Aldis's cup got a work-out in October during the Dining Services strike. See article on page 1.

What does your favorite reusable mug look like? We'd like to know why it works for you. Perhaps we can expand the number of mug-luggers on campus. Please send us a "mug shot" and we will publish it in the next Recycling Update!

Harvard Recycles 25,000 Land-line Phones

As Harvard University Information Technology switches from landline phones to voice over internet protocol (VoIP), tens of thousands of landline phones in perfect working condition will be replaced. Harvard Recycling is working with HUIT to retrieve the phones and make them available for reuse. In the month of October alone, we picked up 990 phones. At least 1,000 phones have gone to Belize and many local non-profits have taken hundreds more. We recycle the handsets, cords and other unwanted parts with computers and other e-waste to recover the metals and plastics through our contract with Complete Recycling Solutions.





Hot cup Impacts: One Year's Daily Use

	Purchase	Disposal	Ackerman	Recyclable with	Number of reuses	Special
	price	price	score	mixed recycling?	to beat paper cup	concerns
Steel	\$5	\$0.03	271	Yes	14	Marine plastic debris from lid & O-ring
Reusable plastic	\$1	\$0.01	99	Yes	5	Chemical residues (e.g., phthalates); marine plastic debris
Ceramic	\$1	\$0.03	399	No	20	Mining impacts from glazes
Compostable paper w/ bio-plastic liner	\$81	\$1.40	7000	No*	NA	Methane, VOC releases from open windrows
						Methane releases from landfills;
Paper with petro- plastic liner	\$68	\$2.18	7000	No*	NA	marine plastic debris if littered
Expanded poly- styrene foam	\$18	\$0.70	2500	No**	NA	Marine plastic debris from liner if littered

^{*}New specifications starting in Summer 2016 banned paper hot cups from Casella Recycling; PS #6 or PP #5 labeled lids, plus cardboard insulation sleeves, are recyclable with SingleStream.

^{**}Lids are recyclable with SingleStream.



Cleaning up our Organics...

We need your help cleaning up our act: both with compost, and recycling. These troubling photos taken at Harvard tell a sad story.

First, there are too many contaminants for Rocky Hill to accept the compost bags as they are. Right now about 35% of the bags contain contaminants like cans, gloves, bottles, window cleaner bottles, and petro plastic items. This rejection rate is too high. These must not be visible and must not represent over 5% by weight of the load. The bag in the photo above came from a Harvard residence. Recyclable cans got tossed into compost, spoiling both soil and the most important-to-recycle commodity.

Second, bags need to stay below the tops of the containers. If not, they will overflow and spill and create an unnecessarily long and expensive pick-up process.

Thanks for your help in composting cleanly and tidily!



Recyclable corrugated cardboard fills a trash container with non-recyclables on the bottom. Emptying this dumpster puts Harvard (and its trash hauler) in violation of the Massachusetts Waste Bans. Please keep us legal and sustainable by putting recyclables like cardboard into the right blue recycling bin!

...and Recycling Right

Harvard used to be good at recycling. In 2007, the American Forest & Paper Association presented Harvard with its annual award for the best Campus Recycling program in the nation. The EPA, MassRecycle, and RecycleMania all favored our fair campus with many awards. But this year, especially since Spring Break, many of us have forgotten how to recycle. Our trash drivers are finding abundant recyclables in the trash, especially cardboard boxes, and trash in the recyclables. See photo below for evidence.

Here in a nutshell is how we want you to sort your refuse:

SingleStream Recycling (also known as "Mixed Recycling"

Cardboard boxes—thanks for flattening

Printed papers—thanks for keeping out food & drink

Bottles—thanks for emptying & re-capping

Cans—thanks for draining and redeeming for 5¢ when possible

Rigid plastics marked with recycling symbol—no others

Trash

All foam

Hot drink cups

All film plastic (except clear- or blue-bagged recyclables) Single-serve condiments (e.g., ketchup packets, coffee creamers)

Straws (unless BPI-certified compostable)

All personal hygiene materials

All non-compostable serviceware

All other materials not recyclable or compostable

Compost

Food scraps, coffee grounds, tea— this is all the farmer really wants

Leaves, plants, landscape trimmings

Potting soil

BPI-certified compostable serviceware

Paper napkins & food prep paper towels

Thanks for recycling right!

Harvard College Library Races towards Zero Waste

Harvard Recycling's aspirational goal is to waste nothing by preventing, reducing, reusing or recycling all refuse. The official Harvard Sustainability Plan sets the goal of reducing per capita waste by 50% from 2006 levels by 2020. In 2006, our annual per capita trash was 420 pounds, so our goal for 2020 is to produce 210 pounds per person. While this is a useful metric for the campus as a whole, some sectors of the University have a hard time with this. Across many campuses, a waste-per-square-foot ratio is a handier measurement statistic for libraries, student unions, classrooms and offices. This is how RecycleMania's "Race to Zero Waste" was born.

In last year's dry run for the pre-competition pilot, Associate Director of FAS Library Facilities Andy Laplume pledged to expand recycling as much as possible. He was in the middle of a large retrofit of library lighting to replace fluorescent lamps with LED technology, and he sent us over 1,000 pounds of used lamps, ballasts and light fixtures. He also cleaned out obsolete audio and visual equipment, facilitated and supported a project to de-accession duplicate copies of library materials, and emptied many storage closets of old clutter. Custodial Manager Marco Detoledo helped participate in a Waste Audit, required by the competition, to determine missed opportunities for recycling or composting. See Marco photographed with Harvard Recycling's Kieran Clyne. Paper towels from the rest rooms were the most voluminous component of the library's trash. At the Weissman Preservation Center at 90 Mt Auburn Street, the Library had successfully inaugurated collection of rest room paper towels. So Marco suggested paper towel composting at Lamont. The popular Lamont Café already composted its coffee grounds and the towel composting would be a good complement to this waste stream, wicking up excess moisture from the grounds. Marco and Andy hope to expand paper towel composting to most libraries soon.

All this work paid off with a diversion rate of 64% for a fourth-place finish in the first "Race to Zero Waste" competition. There was only one other research library in the competition this year, Clemson University. Harvard beat Clemson 64-53 in this category, and in the important waste-per-square-foot division, Harvard had less than half the waste of Clemson. See full results of the competition here: http://recyclemaniacs.org/rtzw_results

Good job, Marco, Andy, 90 Mt Auburn Green Team and patrons of Widener, Lamont and Pusey Libraries! Let's hope for an even better finish next year.

2017 RecycleMania "Race to Zero Waste"

College / University	Rank	Diversion	Type of Building
University of California Irvine	1	97%	Dining
Aquinas College	2	89%	Library
Agnes Scott College	3	70%	Library
Harvard University	4	64%	Library
Johns Hopkins University	5	60%	Classrooms/offices
Pacific Lutheran University	6	53%	Classrooms/offices
Clemson University	7	53%	Library
Union College	8	25%	Residential
Brigham Young University	9	24%	Student Union
University of Houston	10	12%	Student Union



Library Waste Auditors Marco Detoledo of Widener and Kieran Clyne of Harvard Recycling

SURPLUS AVAILABLE

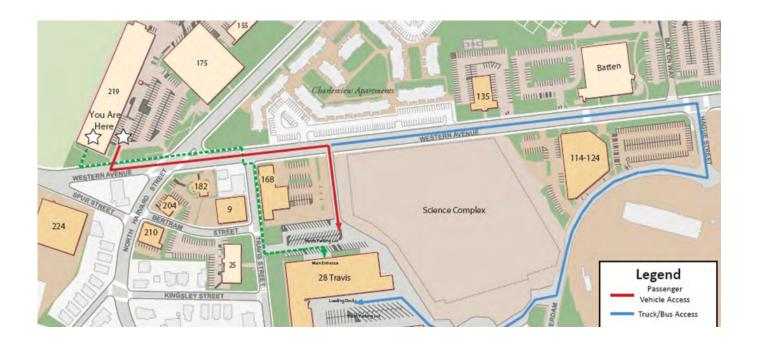
We have an ever-changing inventory of furniture, supplies and equipment from many buildings across the University. We distribute an average of five tons of goods per week. Come down any Thursday from 11-2 to see what we have available. Harvard departments and non-profit organizations can come get first dibs on Mondays from 11-2 (including Memorial Day). Please note that we will be closed Thursday, 5-25-17, 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 PARK-ING 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.

See directions on the next page.



DIRECTIONS TO HARVARD SURPLUS DISTRIBUTION

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.

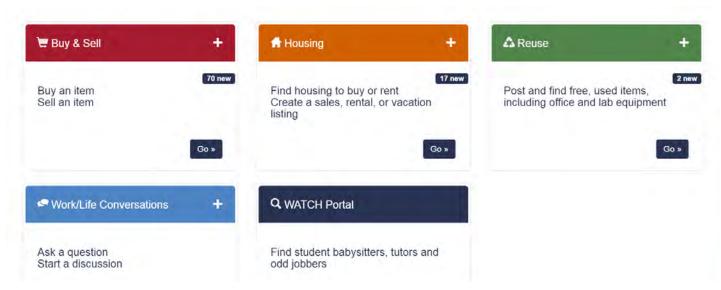
Directions to Harvard Surplus (continued from previous page)

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. Directions to Harvard Surplus Distribution (continued):

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.

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 C (first on right), Harvard Recycling and Surplus.



New HARVie "Reuse" Classified Page

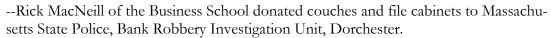
A collaboration between Harvard Planning and Program Management, the Office for Sustainability, Environmental Health and Safety, and Harvard Recycling this winter produced a new portal on the HARVie Classifieds page. The Reuse portal allows Harvard staff and faculty to post and peruse many free products and services including furniture (sofas, chairs, tables), appliances (refrigerator, washing machine), office equipment, art supplies, clothing and more. Check it out at this website: https://harviesclassifieds.harvard.edu/Reuse/List

Reusing Harvard's Surplus

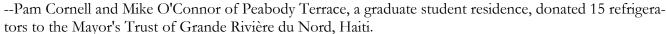
For the second time, Nurse Practitioner Seray Cuthbertson, licensed Nurse Practitioner trained at UMass Boston, offered physical examinations and distributed medical supplies mostly donated by Harvard to her native country of Sierra Leone, West Africa. See photos and videos from Seray's Facebook page here.

Seray's volunteers are pictured wearing medical scrubs donated by Mary Corrigan of Harvard Environmental Health and Safety. Seray's crew also used blood pressure monitors and weighing balance scales donated by Scott Alegria of University Health Services. Thanks Harvard donors! Our first priority for all the surplus we receive is to distribute it on campus to others Harvard departments. But when no

Harvard takers come forward, we are deeply gratified to know that groups like Seray's can benefit. Here are some of the other donors and beneficiaries from recent months:



--Chris McNeill and Elson Callejas of Harvard Science Center donated 70 tablet chairs to the Rift Valley Provincial Hospital of Nakaru, Kenya.



- --Igor Baldyga of Leverett Dining Hall donated storage racks, coffee Cambro containers, a cheese slicing machine, and single-serving teapots to the Open Table of Concord, MA.
- --Ed Salerno of Eliot-Kirkland House Dining donated three outdoor stainless steel True Refrigeration culinary work and serving stations, a Steelar steam cooker, and 500 obsolete 10-inch Syracuse china plates to the Divine Sisters of Mercy of Port Au Prince, Haiti.
- —Allison Berger of the Memorial Church donated 14 Harvard benches from the old Choir, upholstered chairs and couches, and an antique carved oak table to five Harvard departments and an undergraduate residence.
- —John Arciprete and Russell Keyes of Harvard Law School donated a truckload of obsolete logo-branded T -shirts, mugs, notebooks and other supplies to Waltham College of Mukono, Uganda.
- --Bob Sammonds of Lowell House undergraduate residence, along with Hunt Kingsman of the House Renewal Project, donated easels, canvases, painting supplies, photography equipment, bookshelves and other goods to the Community Church of Boston.
- —Scott Waite, Marco Detoledo and Andy Laplume of Harvard College Libraries donated 20 lockers to the USS Constitution Marines so that they could store their uniforms and accessories at the Constitution Museum in Charlestown, MA.



—Todd Rutledge of Harvard Athletics donated fitness equipment, basketballs, chairs and tables to the Tremont School of Lexington MA and the Cambridge Community Center.

Other beneficiaries included Brighton-Allston Historical Society, North American Indian Center of Boston, American Friends Service Committee, Worship Tabernacle Inc., Hawthorne Youth and Community Center, Bessie Tartt Wilson Initiative for Children, Ray Of Hope Children's Services, Aminas Community Center, Angels Child Care Center, and Promise Worship Center.





FreeCycles Thrive Campus-Wide

FreeCycles are flourishing all across Harvard. The events empower us to restore useful but unwanted items to functional service by others. FreeCycles build community as well. Participants share stories about the past or potential lives of the goods on display. Donors unburden themselves of clutter and feel the gratification of seeing a recipient joyfully seize the once-idle goods. A few of the ongoing regular FreeCycles on campus that we know of include the FAS Green Program's Earth Day and June events on the Science Center Plaza; the Harvard Kennedy School's Green Team FreeCycles at Littauer; the Harvard Divinity School's swaps at Rockefeller—augmented by their year-round "Take-it-or-leave-it" shelf; Radcliffe Institute's events at Agassiz; the REPs' spring Clothing Swaps plus their permanent Swap Shelves in the undergraduate Houses and dorms; and Harvard Medical School and the Harvard T. H. Chan School of Public Health's bi-annual events. Most popular items include books; kitchen supplies such as pots and pans, silverware, plates, crockery, coffeemakers and glassware; office equipment and supplies, small furniture, CDs and DVDs, clothing, toys, unopened cosmetics, non-perishable food, linens, tools, and electronic equipment. To protect confidentiality, please remind donors to get permission from their local Information Technology contacts before sending out any electronics with memory such as computer CPU's, phones, tablets and others.

By prior arrangement, Harvard Recycling can deliver a "seed supply" an hour prior to scheduled time plus tables and empty hampers. We can take away all unclaimed leftovers, including broken or scrapped electronics, batteries and mercury-containing fluorescent lamps. For more information please email Rob Gogan@harvard.edu.

Tips for success:

- --Publicize well in advance to give donors a chance to inventory, stage their goods, and arrange for vehicles. It helps to follow a predictable rhythm, such as "every other month on the first Friday of the month at lunch time."
- --Get lots of tables. Try for space to accommodate a six-foot folding conference table for every 50 people in your building. Arrange the goods in an orderly way: if possible, get hold of a library book cart, rolling garment rack with coat hangers, or bookshelves. Staging a FreeCycle is like building a campfire. For a fire, you need fuel, air, and a spark. For a FreeCycle, you need treasures to share, space to display them, and interested shoppers.
- --Recruit volunteers. You will need people to set up tables, receive donations, display the goods in a coherent and appealing manner, and tidy up afterwards. Be prepared to provide lunch, parking, and restroom access.

--Drum up donations. Many offices have useful things stuffed into closets and drawers, attics or even rented stor-



University Place at 124 Mt Auburn Street FreeCycle participants from Campus Services and the Harvard Kennedy School of Government share thousands of goods every other month.

age facilities. If the goods were bought with restricted -use grants, get permission from the Office for Sponsored Research, your department administrator or other authority. Members of the Harvard community may also have abundant reusable goods at home, especially if they have young children who have outgrown clothing, toys, games or books. If you have advertised well, you should be getting abundant donations in advance. If your venue is tolerant of storing goods for a day or two before the event, that may help some donors, but beware of attracting early-birds who rummage through goods and snatch them up before the official FreeCycle begins.

--Decide how open you want to be to other departments, the public, re-sellers, and greedy or needy shoppers who take every good item as soon as it is set out. You may want to limit shoppers to members of your own department or building. On the other hand, you might be thrilled to see all the junk and clutter go away and you don't care who takes it!

In Case You Missed It.

WGBH Radio visited Harvard Recycling and Surplus Distribution on a Thursday in November. Reporter Gabrielle Emanuel interviewed shoppers, volunteers and Rob Gogan, and told the story of how we di-



vert over 20,000 pounds of the University's unwanted surplus furniture, supplies and equipment to non-profit organizations and needy individuals each week. The story first aired on Black Friday, the day after Thanksgiving. The narrator presented the story event as Harvard's sustainable alternative to the resource carnage of the biggest retail shopping day of the year. Click here for the story:

http://news.wgbh.org/2016/11/24/local-news/harvards-black-friday-its-every-thursday-and-always-good-deal

This March, the "Chronicle" feature of WCVB also re-broadcasted a show first aired in November 2015. Thanks to Mike Connor, Director of Strategic Planning & Communications for Campus Services, for his help with both stories. Click here to watch Chronicle:



http://www.wcvb.com/article/bargains-harvard-hand-me-downs/8076339

Campus Landscape Services Now Use Battery-Powered Equipment

By Harshita Gupta

Reprinted from The Crimson, 3-28-17. As part of Landscape Services, Harvard Recycling is proud that our grounds will be quieter and the air cleaner. The batteries are rechargeable nickel-cadmium or lithium-ion. Once they don't hold a charge, we will recycle them.

Landscape Services, a unit of Harvard Campus Services, is replacing their traditional, fuel-powered landscaping equipment with battery-powered counterparts in an attempt to reduce noise and air pollution.

Landscape Services installed new leaf blowers, grass trimmers, and tree pruners following a pilot program that tested electric leaf blowers in the Science Center Plaza last year. Workers reported that the battery-powered versions performed just as effectively as gasoline-powered ones.

Landscape Services Manager Wayne P. Carbone said quieter, gasoline-powered leaf blowers were adopted ten years ago in response to a 2007 Cambridge ordinance requiring lower decibel levels in leaf blowers. The new leaf blowers are not only quieter than the old leaf blowers, but also emit no air pollution. "We wanted to go one step further and see if we could start working on not only reducing the decibels on our blowers and small engine equipment, but also [reducing] emissions—which would be advantageous to the community, the environment, the University, and the operators of the equipment," Carbone said.

The leaf blowers are part of Harvard's larger Organic Landscaping Initiative, which has replaced chemical-free fertilizers, and introduced composting and organic fertilizers over the last ten years.

"Our organics program is one of the leaders in the country, and this is just an expansion of that," Carbone said. "We've eliminated all chemical use on campus, all synthetic fertilizers; it's been a pretty successful program. As always, we're always looking for green products."

Carbone said his long-term goals as Manager of Landscaping Services are sustainability-driven and that Harvard can set a precedent with its landscaping practices.

"I think they're positive changes. I'm glad that Harvard is giving us the opportunity to expand these programs, and my goal is to reduce or eliminate all small combustible engines in the future," he said. "If we can do that and prove that it can be done in a university setting, then hopefully others will take on the challenge."

After evaluating the success of the Yard program, Carbone said Landscape Services could expand the battery-powered equipment to all undergraduate residential areas, and potentially academic areas after that.

CAMPUS NATURE WATCH

Correction

The photo of the robin perched on bicycle handlebars in our Summer 2016 issue was taken by An Sokolovska.

February: BALD EAGLE spreads its majestic wings to fly over Weeks Footbridge at low altitude, then perches on a riverside tree before resuming migration. Photos by Dan Blair

January: COMMON MERGANSER trio swims in the middle of the Charles, two males and a female, keeping their distance from a flock of Canada geese and mallards in front of the Weld Boat House. [The same?] group swims under the Western Avenue Bridge near 46 Blackstone Street a few days later.

July: WILD TURKEY family trots across Harvard University Press parking lot, two parents bookending two chicks... another wild turkey politely strolls along the sidewalk in front of Ann Taylor in Harvard Square... less urbane turkey ambles into the intersection between JFK and Mt Auburn Streets, blocking traffic for most of a light cycle. Drivers honk and rev their engines, but it has no effect on the turkey, who eventually strolls back to the Mt Auburn sidewalk... October: On Massachusetts Avenue next to Gannett House, cars and buses swerve to avoid a dark heap looking exactly the size and shape of a bag of trash in the south-



bound lane. When traffic light cycle stills all vehicles, the heap is revealed to be a wild turkey, who stands up and crosses the street to graze the shaded greens of the Law School. Photos by Scarlett Wilkes (Press) and Kris Locke Ann Taylor











September. After a hot, dry summer, quenching rains call forth abundant mushrooms in front of Kirkland House's Smith Hall.



September: The Rat Patrol: RED-TAILED HAWK stands on duty on Dunster Street near Malkin Athletics Center...another red-tailed hawk clutches its prize near 135 Western Avenue... January: red-tailed perches in tree by the Charles opposite JFK Park by Larz Anderson Bridge construction site and repeatedly swoops down close to the river banks to hunt unsuccessfully; eventually, the hawk flies under the bridge's northern arch close to the water. Photos by Rich Pollack and Nelson Medeiros



FUNGI, LICHENS & MOSS thrive on Linden Tree near 210 Longwood Avenue in Boston...NORWAY MAPLE shelters "hobbit hole" at its base near Gund Hall.

Thanks to Campus Nature Watchers Dan Blair, Katherine Brick, Sonia Ketchian, Kris Locke, Nelson Medeiros, Rich Pollack, and Scarlett Wilkes!







April Yard Notes:
DOWNY WOODPECK-ER hops around a
WHITE OAK tree trunk
opposite the Fogg in the
Sever Quadrangle before
showing himself climbing
up a branch and finally
flying across to a large
tree at Sever. Soon a second woodpecker calls
from the first tree and
flew across to join the
other one.

Little WHITE STAR MAGNOLIA bush at the side of Wadsworth blooms sparsely in raw April northeaster.

> Loeb House walkway boasts DAFFODILS, TULIPS and HYA-CINTHS.

"Amidst the noise and the fumes and the elbowing crowds, there is some small reassurance in the moss between the cracks." Robin Walll Kimmerer, "Gathering Moss"