

HARVARD

Campus Services

ENERGY & FACILITIES

Recycling Update

Fall 2015

DIVINITY SCHOOL AUDIT: HARVARD'S BEST EVER

This past Earth Day, Harvard Divinity School's GreenTeam audited nearly all the previous day's refuse: recycling, compost and trash. Auditors found the lowest fraction of recyclables in the trash of any Waste Audit ever performed at the University: 13%. Equally impressive, six of the compost bags and four of the recycling bags were perfectly sorted with no contaminants. The recovery rate for each commodity was 38% for single-stream recycling; 41% for compost; and 21% for municipal solid waste (i.e., residual non-compostable, non-reusable, non-compostable). Green Teamers claim their waste would have been even lower had they not hosted several dozen visitors for a conference serving box lunches. Several guests closed up and discarded their boxes with compostable food scraps and recyclable bottles inside.

HDS Green Teamer Leslie Macpherson Artinian led the Earth Day audit on the Andover Courtyard. See photo to right of Leslie holding up the one and only aluminum can they found inappropriately tossed into the trash. Though the sample did not include residential trash from the Divinity School, the 79% recovery rate shows stunning progress towards Zero Waste. Chaired by HDS Director of Operations Ralph Deflorio, the HDS Green Team set a goal last year of reducing their trash by 90% from their 2006 levels by 2020. Ten years ago, the campus buildings whose waste we studied generated 380 pounds of trash per day. This April, the same buildings generated 24 pounds, including all those box lunches. That is a reduction of almost 94%. HDS might already be at 90% reduction campus-wide. Further study is needed to confirm this. Until then, keep up the good work HDS and be grateful for your heroic Green Team!



Why has Harvard's Holy Corner had such waste reduction success? Here are a few of their practices:

- Recycling and compost receptacles in all common spaces, classrooms and most offices
- Compostable serviceware at all catered events
- Custodial Supervisor Jyoti Rana's personal dedication to recovering all recyclables, compost and reusables
- "FreeCycle Shelf" monitored and used year-round in Rockefeller Hall
- Active GreenTeam with full institutional support
- Culture of thrift and sustainable practices
- Blue battery recycling tubes campus-wide

Industrial Slowdown Tests Recycling

Worldwide reductions in manufacturing output since 2014 have cut demand for recycled commodities. Factories cannot use as many fibers, metals or resins as before, so our papers, cans and bottles are in less demand. With the economic slowdown hitting hardest outside of the US, other currencies have fallen against the US dollar. This makes our scrap commodities more expensive than those from other countries. In 2014, the value of corrugated cardboard exceeded \$75 per ton; today, it is below \$20. A ton of light ferrous metal was \$120 in September 2013; now it is \$65. The low price of energy has also cut demand for recycled goods, as there is less incentive for producers to choose energy-saving recycled feedstocks over virgin material. For instance, because the price of oil is half what it was a year ago, virgin plastic has dropped dramatically in price. Plastic recyclers have to cut their prices to compete.

This doesn't mean that it is any less important to recover our papers, boxes, bottles and cans for recycling. Processing post-consumer materials is still an important part of Massachusetts' green economy. Our state is home to over 2,000 recycling businesses that employ close to 14,000 people with a payroll approaching \$500 million annually, according to a 2009 study by the Northeast Recycling Council (NERC). Reducing climate change is another important reason to recycle: 42% of US Greenhouse gasses are caused by production of goods and food. Recycling conserves energy and raw materials that don't have to be mined or harvested from the environment.

ARE YOU RECYCLING THE RIGHT WAY?

Helps recycling:

Papers

Recycle flat
(ripped OK)

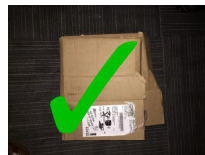


Bottles & cans Recycle empty,
with cap on



Box

Flatten



Foil

Flatten or fold,
with nothing
inside



Hurts recycling:

Don't crumple into a ball
(insufficient surface area
for machinery to capture)



Don't leave unconsumed
beverage residue inside
(liquid is a contaminant)



Don't recycle a cube or
prism (box shapes take
up too much space)



Don't crumple into a ball
(eddy current won't have
sufficient surface area to
throw foil properly)



SingleStream Recycling comes to Alewife Station

The MBTA collaborated with the City of Cambridge, MassRecycle, the Massachusetts Beverage Association and RecycleAway to install two SingleStream recycling receptacles at Alewife Station. These join the ClearStream paper receptacles at most Red Line T stations provided by the Metro newspaper. Thanks T!

<http://www.massrecycle.org/r3education/mbtapilot/aboutpilot/mbtagallery>

Keep Recyclables Clean for Efficient Separation

Given the lower commodity prices for recycling (see page 2), is there anything we can do to help? Yes! We can keep our recyclables cleaner and more transportable. Flatten boxes to show drivers that they are empty and save space in trucks. Keep papers and foil flat to allow sorting equipment to recognize and divert them. Keep contaminants out. Plastic bags are still the biggest contaminant to recycling at Casella Recycling in Charlestown, where our recycling goes for processing. Please reuse the bags, recycle them at the store or discard them as trash. Drain and wipe all visible unconsumed liquids and food residue from plates, cups and receptacles before recycling. Finally, don't be overzealous with recyclables. Check whether a commodity can be recycled before you put it in the recycling bin. The food products industry likes lightweight but non-recyclable new packaging technologies including resealable plastic pouches instead of cans, bottles or jars for tuna fish, spices and condiments, or mylar bags for frozen vegetables and pasta instead of boxes. These new packages must all be discarded as trash. Lighter weight packaging means less fuel consumed during delivery, and more efficient transportation. So don't reject food sold in non-recyclable containers, but do be more careful about recycling new packaging types you might encounter. The tetra-foil juice packs and other beverages in cartons are recyclable because they have enough paper fiber to make its recovery worthwhile.

NICE CATCH, ALEX... While parked on Prescott Street this spring, Harvard Recycling truck V-71 got an unexpected knock on the roof. The tall roof of another passing truck snagged a utility wire crossing the street and the driver drove away, pulling the utility pole and stretching but not breaking the wires. The cables and pole festooned the truck with driver Alex Gonsalves still inside. Emergency personnel did not allow Alex to leave the truck for over an hour. If our truck had not been there, the lines would probably have broken and electricity to the Prescott Street neighborhood of Cambridge would likely have been interrupted. Photo by Rob Gogan

Sharps are not recyclable or reusable

Many laboratory, clinical and residential buildings around campus have sharps collection containers for used syringes and other sharp items. Harvard Recycling is not equipped to pick up or receive this kind of bio-hazardous waste. Consult Environmental Health and Safety for more information about proper disposal of this waste stream.



ReGames Set Records at Earth Day

Harvard Recycling hosted our 2015 Recycle Games at the Science Center Plaza 4-22-15. The next Saturday, we brought the Games to the festivities at the undergraduate Environmental Action Committee's Earth Day festival at the MAC Quad.

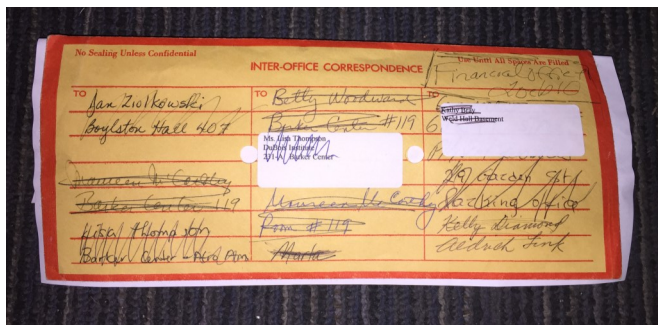
In the "Basket Bottle" event, participants have 10 tries to throw an empty Gatorade bottle through a basketball hoop from 10 feet away. The 2014 record of eight out of 10 bottles set by Patrick Xu '16 was not matched this year. Alex Hem '16 and his roommate Mark came the closest by sinking seven bottles between them.



Rob Gogan, visitors on Spring Break, and Kieran Clyne set up Earth Day 2015 Basket Bottle game.

In "Ladder Mice," as in ladder golf, contestants toss bolos to land on the rungs of a vertical ladder. To promote electronics recycling, we made bolos out of a pair of computer mice with cords tied together. Caitlyn Pang '15 scored a perfect 9 points by braiding all three bolos together and throwing with a rapid twirl at the top rung.

The "RecycleRun" was a new event this year with new records. In this event, runners run a course to pick up a magazine, a box, a bottle and a can and put them into a blue recycling basket. Ethan Baker, a visiting high school student, set the record for this event with a time of 13.45 seconds. Ben Cashin '18 dashed nearly as fast with a time of 13.67 seconds. Ben's feat is notable as he had run the Boston Marathon two days before!



Champions of ReUse

Inter-office mail envelopes conserve paper with every use. Here is a well-traveled envelope that was reused until there were no more available lines for addresses. Several current members of the Harvard community received and passed along this envelope. Thanks to reusers Professor Jan Ziolkowski of Boylston Hall, FAS; Marla King and Maureen McCarthy (twice) of Weld Hall, FAS; and Kelly Diamond of Chase Hall, HBS...The card on the left did not circulate the mail routes of Harvard like the envelope, but it has been re-used 80 times! Read more about the two brothers that took Linus's message to heart and exchanged it over 40 years.



http://www.huffingtonpost.com/entry/men-pass-birthday-card-40-years_559a992de4b0c706985a410f?ncid=fcblklnkushpmsg00000063

HARVARD'S NEW RECYCLING "BILLY GOATS"

Harvard's GreenBean reverse vending machine recovered 32,000 containers in FY 2015--more than all but one Boston area university! Our busiest month was April 2015 when the Earth Month contest brought in a nation-leading 7,000 bottles and cans. The machine, located in the Science Center basement, receives all plastic bottles and metal cans for recycling. If the container is covered under the Massachusetts Bottle Bill, the machine sends five cents to the user's PayPal account. We hope this location is convenient for depositors.

TOMRA, the company maintaining the machines, brought in new units this summer and removed the old ones. Unfortunately, the new machine will not be configured to credit the nickel deposits to user's accounts until October 15. Deposit funds went to Keep America Beautiful, a non-profit litter prevention organization. We apologize for the machine's failure to credit users' nickel deposits. Thanks for recycling your bottles and cans into nickels!

HPPM DITCHES BOTTLES & TAPS CITY H2O

Using bottled water causes avoidable harm to the environment. Water delivery trucks pollute our air, damage our roads, obstruct traffic flow and noisily disturb our academic mission. Drivers and customers both can get hurt when lifting the heavy jugs into dispensers. Here in Cambridge and Boston, we have delicious, reliable, and rigorously tested public water running through the pipes of our buildings. Why not use it? The Harvard Planning and Project Management department decided to do so last year. They have also installed a mug tree next to the water station, adapted from a re-used Harvard coat rack retrofitted by students of Occupational Instructor David Haluska of Dedham High School. Diane Gray of the HPPM GreenTeam writes the detailed account below of how she and her crew made the switch from bottled water to tap water.

"The green team members spoke individually to everyone in the office before making this switch. Comments included the need for chilled and hot water and that the dispensers be located in a convenient location. Concerns included how often the filter is cleaned."

"Our office had three Poland Spring water coolers with approximately 38 deliveries per year of 1,395 gallons of water at a cost of \$1,743. per year. We now rent two filtered tap water dispensers at a cost of \$1,200 per year. Installation was free because the locations were close to existing water pipes."



Erika Johnson shows off HPPM's water filter station. Mug tree is a repurposed Harvard coat rack with mug dowels added by Dedham High School students. Photo by Rob Gogan

"The switch to a direct plumbed filtered water system saves approximate \$543 annually, reduces greenhouse gas emissions associated with the production of plastic bottles and the transportation of bottled water, and increases space in the kitchens used by storing bottled water... Nestle, the owner of Poland Springs, is on Harvard's Strategic Purchasing Agreement list."

"Due to the central location of the water dispenser on the 5th floor, other departments on the floor can also use the chilled and hot water dispenser, reducing the need for purchasing bottled water in other departments."

Thanks Diane and HPPM for showing us how easy it is to get better water, save money, reduce traffic in Harvard Square and help the environment by using tap water. For more information about Cambridge Water Department and its drinking water quality standards, see below: <https://www.cambridgema.gov/Water/wateroperationsdivision/waterqualitystandards.aspx>

For information about Boston's MWRA water, click here:

http://www.bwsc.org/about_bwsc/systems/water/sources.asp

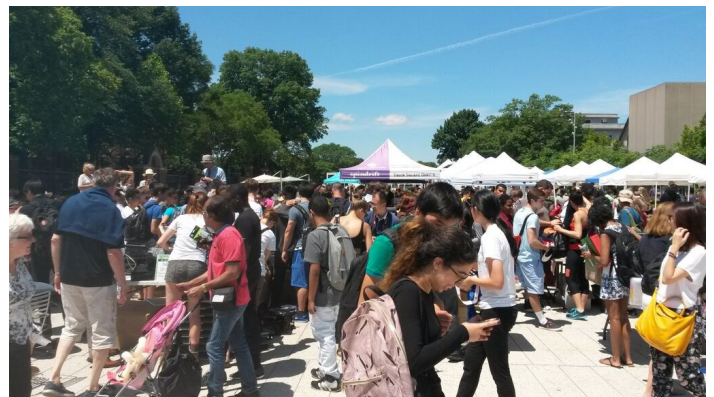
Donate and Reuse it at special Clean-out/FreeCycle events



Harvard Recycling driver Mark Westcott, assisted by Lesley staff and Harvard Habitat for Humanity volunteers Jasmine Opie collects over 1,000 pounds of furniture, supplies and equipment donated to the Stuff Sale by our neighbor, Lesley University. Photo by Mike Orr



Berley McKenna, Smith Campus Center Building Manager, cools off as she gets ready to donate contents of freezer at SCC Cleanout Day this June. Photo by Olivia Percy



Smith Campus Center Clean-out Day— Judy Blomquist, Wendy Chandler, Rebecca Wickel and Catherine Seraphin. Photo by Olivia Percy

- Hundreds of shoppers visit FreeCycle at June 30 Farmer's Market; the next one is 10-6-15. Tables were staffed by Brandon Geller, Anthony Michetti, Quentin Gilly and intern Cliff Goertemiller of the Office for Sustainability. Photo by Rob Gogan
- Harvard Surplus Distribution events continue to offer free goods at 156 Western Avenue, Allston every Thursday except Thanksgiving Day from 11 AM— 2 PM right through December. Harvard departments can come on Mondays for on-campus items.
- Longwood FreeCycle: Thursday 10-22-15, HMS Courtyard Café, 11 AM—2 PM. Hosted by Adam Meier, Office for Sustainability, Longwood Campus.
- Next Smith Campus Center FreeCycle Friday, 11-20-15, 11-2 PM. Hosted by Harvard Information Center.



PETRO-PLASTIC BAGS CONTAMINATE COMPOST

If you are recovering your organics for composting, we're glad! The Commonwealth of Massachusetts bans disposal of food scraps as of 1 January this year. Many kitchens find that bag liners keep the recycling barrels cleaner. One bag is fine, as the driver can shake out the contents and discard the bag. But when bags are placed within bags, they get too slippery to rip open and shake out. A solution to this problem is using compostable bags, for example those made by BioBag. These corn polymer bags do break down in a compost pile and don't leave chunks of film in the soil that have to be screened out. Rocky Hill Farm, the facility receiving our organic waste, warned us that if we continued to send them petro-plastic bags, they would not be able to take our organics anymore. Thanks to the many kitchens that use BioBags for organics, including Harvard University Dining Service locations at FAS buildings and residences and graduate schools at the T. H. Chan School of Public Health, the Divinity School, the Graduate School of Design, the Kennedy School, Harvard Graduate School of Education's Gutman Café managed by Tables of Content, and Restaurant Associates' catering operations at the Business School, Law School and Medical School.



HAVE YOU SEEN THESE PLAQUES?

These plaques in the photo on the left were mistakenly delivered to the Harvard Recycling & Surplus Warehouse this summer. One of our customers took it home. Then, the Harvard residence from which it came discovered the mistake and came looking for it. If you took it or you know who did, please let us know. Rob_gogan@harvard.edu

CHOOSE TO REUSE

Lug your mug.

Be a refiller, not a land-filler.

Drag your bag and tote your tote.

Before you're through, use Side 2.

Give another life to your fork, spoon and knife.

Wash and reuse hankies of cotton;

Tissues or paper towels only get rotten.



David Harris (HU Transportation Services), John Fitzgerald (Cambridge DPW), Alex Epstein (SEAS Ph.D. now working for US Dept of Transportation), Steve Mafeo (HU Transportation Services) and Kieran Clyne (Recycling & Waste Services) check out City of Cambridge's new lateral protection devices designed to reduce injuries to bicyclists & pedestrians from side collisions with trucks. Cambridge and Boston now require all vendors on City contracts to install the safety bars. Photo by Rob Gogan

City Bans Single-use Plastic Bags

The City of Cambridge will be rolling out its "Bring your Own Bag" ordinance effective 4-1-16. Under the terms of this law, all checkout bags will need to be either reusable or made of recycled paper. Retailers will need to charge 10 cents for all single-use bags. Shoppers will be able to avoid this fee by bringing their own bags. The City is holding a "Bag Fair" to show retailers compliant bag options on 10-22-15. See website below for details.

The law will apply to all retailers including grocery stores, restaurants, food trucks and farmer's markets.

For details about the law, including exemptions for certain materials and circumstances, see the City's website here:

<https://www.cambridgema.gov/theworks/ourservices/recyclingandtrash/aboutrecycling/Businesses/bringyourownbagordinance>

CAMBRIDGE CURBSIDE COMPOSTING

COMES TO ALL MONDAY LOCATIONS

The City of Cambridge starts picking up food scraps from most buildings on the Monday trash and recycling route starting 10-19-15. Last year, the City ran a pilot with 600 households to divert food scraps for composting. The average household set out over six pounds per week in their compost buckets. For this expansion, the City will provide to each household a kitchen bucket, 100 compostable bag liners and a green toter to share with other apartments.

The City needs your help to knock on doors to get the word out! Please consider helping on one of these evenings:

Tuesday, October 6

Tuesday, October 13

Wednesday, October 14

Thursday, October 15

For more information, click here:

<http://www.cambridgema.gov/TheWorks/OurServices/RecyclingAndTrash/FAQRecyclingAndRubbish/CompostingQuestions/CompostPilot.aspx>

SURPLUS WANTED — contact us for more information about these needs:

Electroporation machine and an autoclave. Harvard College student needs for project on water quality.

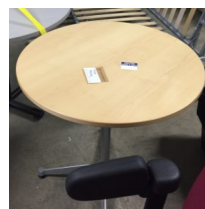
Microscope(s): preference for biological stereo microscope. Landscape Services organic maintenance program needs scopes for soil analysis.

Storage cabinets, library book shelves, upholstered chairs and loveseats. Renovations planned for undergraduate House Office; manager would rather reuse than buy new products.

Stacking Chairs—overseas charities in Haiti, Sierra Leone, Liberia, Kenya and Uganda need stacking chairs in good condition.

SURPLUS FURNITURE and other items 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. We need to allow people who work in the building to find a place to park. At 11AM 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 Campus 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.

Recent Donations: These goods were here as of 9-29-15. If you want it, come and get it!



PROTECTING CONFIDENTIALITY: 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.

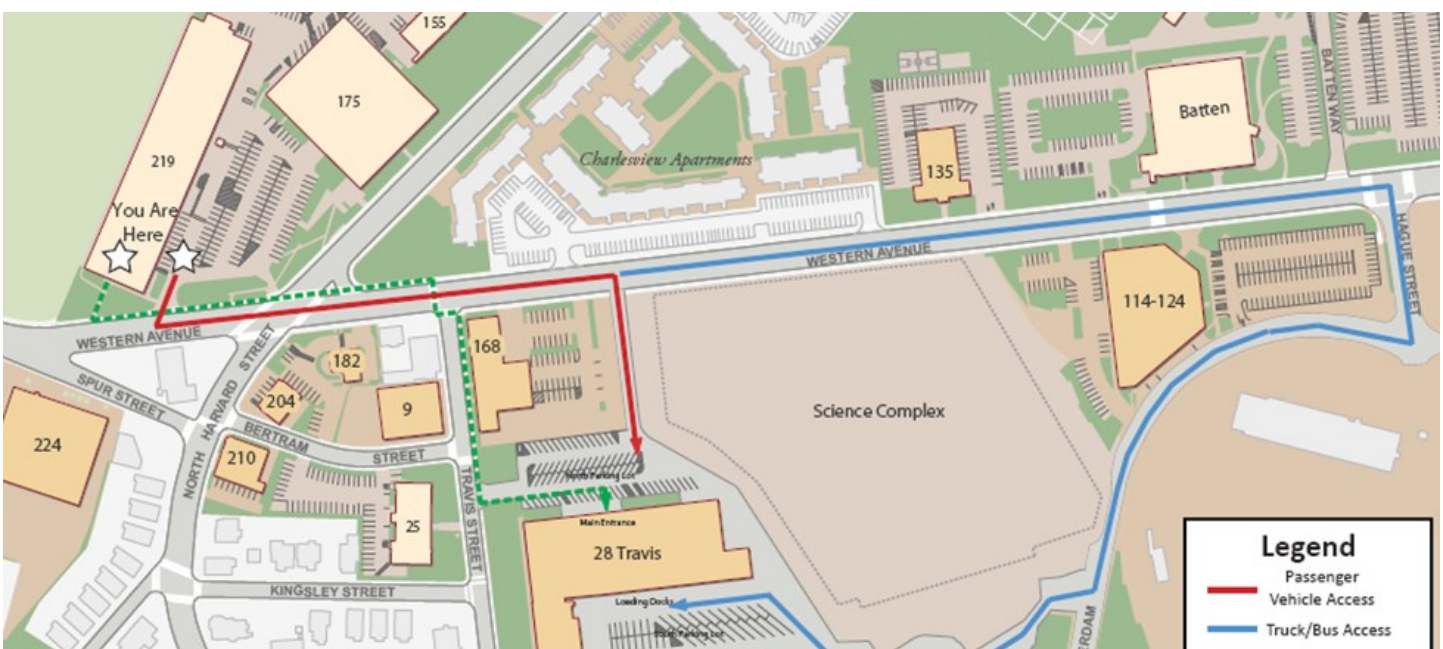
Please keep in mind that parking space limitations force us to be **STRICT ABOUT PARKING RULES**. Please respect our neighbors' need to maintain safe traffic flow around the Recycling and Surplus Center. When here for Thursday's Surplus Distribution, follow the parking monitor's direction and park only 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 below. We may be able to deliver goods to Harvard departments for a small fee.

DIRECTIONS by the T, walking, biking or driving (see next page):

By the "T" then walk-- For GPS directions use "156 Western Avenue, Allston." Legal address is 28 Travis Street.

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.



DIRECTIONS continued...

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 “Visitor” spots.

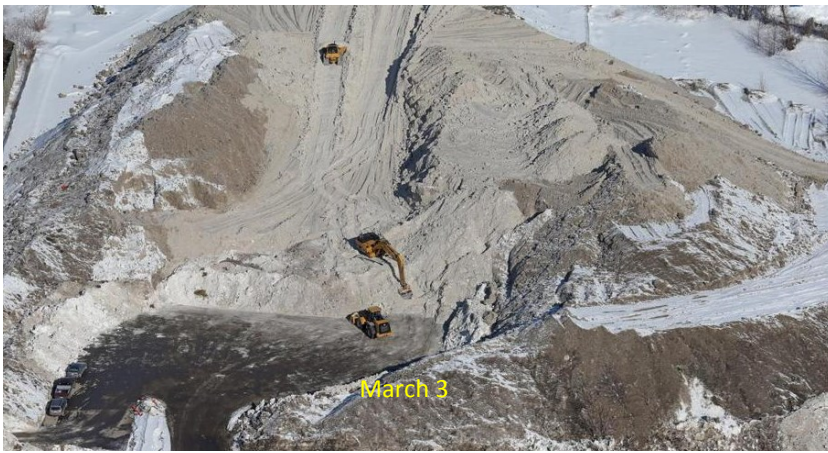
From I-93: take I-93 to Charles Circle (Cambridge/Somerville exit). Get onto Storrow Drive westbound 3 miles. Look for "Allston/Harvard Square" exit. Go right up ramp to North Harvard St. and take a left. Go four tenths of a mile, past Stadium, to first traffic light. Turn left (east) onto Western Avenue, 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 “Visitor” 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 “Visitor” 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.

“Trying to fill real but non-material needs--for identity, community, self-esteem, challenge, love, joy--with material things is to set up an unquenchable appetite for false solutions to never-satisfied longings.” --Donella Meadows



During this historic winter, over 100" of snow fell on Harvard's campus. Much of it was trucked to a "Snow Farm" off Cambridge Street in Allston, along with snow from Boston and Cambridge Public Works Departments. As of March 3, the pile stood well over 30' tall and covered a space 300' by 500'. Campus Services staff on April 20 made predictions as to how long the pile would last. See the slow melt chronicled below.



By June 10, only grit, sand and other roadside debris remains. ED BETTENCOURT of Harvard Recycling predicted melt-out by this date and so wins the 2015 Harvard Melt-out Prediction. Thanks to all other participants including Patti Andrews, Wayne Carbone, Kieran Clyne, Desi Callahan, Tony Cobuccio, Andy Culhane, Matt Civittolo, Roger Edgerly, Ed Bettencourt, Dave Costa, Rob Gogan, Alex Gonsalves, Eileen Labao, Norm Lavoie, Nelson Medeiros, Joe Rebeiro, Jeff Smith, Julio Tejada, Mark Westcott and Eric Williams. South Boston's pile lasted until 7-14-15. Jason McKay sent this amazing GoPro video of a brave skier riding down this dirty pile in April: <http://youtu.be/gohP3BHAWy4>

“Nature Watch” featured in NWF’S “The Campus Wild”

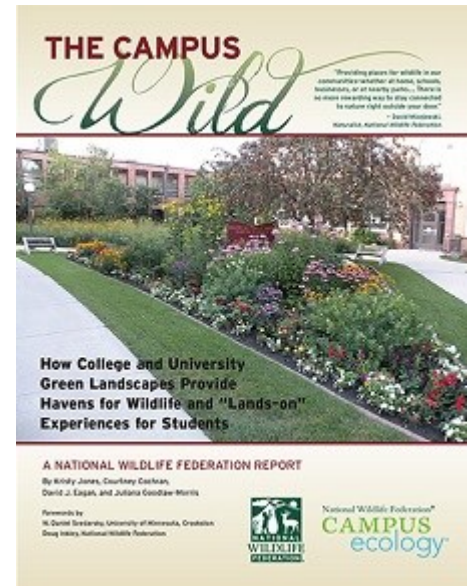
Our own Harvard Campus Nature Watch is featured prominently in a new guide published by the National Wildlife Federation this month. The guide promotes awareness, stewardship, teaching, and research about campus ecosystems. The guide also highlights the 3,500-acre Harvard Forest in Petersham, MA.

NWF naturalist David Mizejewski has advice for us lucky enough to study or work at the beautiful Harvard campus:

"Providing places for wildlife in our communities - whether at home, schools, businesses, or at nearby parks... There is no more rewarding way to stay connected to nature right outside your door."

You can download the guide from the NWF Campus Ecology website, here:

<http://www.nwf.org/Campus-Ecology/Resources/Reports/The-Campus-Wild.aspx> and find the **corresponding blog on NWF’s Wildlife Promise blog**, here: <http://blog.nwf.org/2015/09/the-campus-wild-a-new-guide-from-nwf/>



HARVARD CAMPUS NATURE WATCH

Please send us your Harvard nature sightings—flora or fauna, humble or heroic! We'll publish them in the next Update. Protecting and enhancing habitats for native species improves human health too!

APRIL

Large all-black raptor with very long, straight wings soars high over Loeb House, heading toward the School of Design, occasionally flapping. Color, wing configuration, and glide pattern confirm that the creature is a yearling BALD EAGLE.

HOUSE SPARROWS joyfully dust-bathe behind Grays Hall, interrupting their long-awaited activity only to feed on the bread spread out for them.

AMERICAN ROBIN checks the thawed ground near Robinson for food.

Three WITCH HAZELS bloom bright yellow on the Broadway side of the Fogg Museum with three patches of wine-colored blooms.

JUNCO feeds on the earthen roof of Pusey with sparrows and starlings before flying off deeper into the Yard.

High in the tower of Memorial Hall, Massachusetts Division of Fisheries and Wildlife and Harvard team up to install a nesting box for PEREGRINE FALCONS this spring. Peregrines last bred here in 1955. In the 2014 breeding season, a nesting pair laid eggs in the tower but half-submerged in a puddle, they never hatched. See Harvard Gazette article here:

[http://news.harvard.edu/gazette/story/2015/04/a-home-fit-for-a-king/?utm_source=SilverpopMailing&utm_medium=email&utm_campaign=05.01.2015.a%20\(1\)](http://news.harvard.edu/gazette/story/2015/04/a-home-fit-for-a-king/?utm_source=SilverpopMailing&utm_medium=email&utm_campaign=05.01.2015.a%20(1))

Harvard Campus Nature Watch, continued from Page 13

MAY

Charles River teems with millions of ALEWIVES spiraling up its tame flow. Round, silver-sided males flash their bright sides as they jockey in pursuit of a mate. Each female will lay over 100,000 eggs in the middle of the gentle current.

Two BLUE JAYS scream and harass a RED-TAILED HAWK that eventually flies up and out of the top of Memorial Hall.

Female TURKEY feeds behind the Faculty Club where she jumps up to grab something inside a budding blossom of a crab apple, if not the blossom itself [insect larva feeding on the petals?].

Two GRACKLES spend much time between Wadsworth and Grays. VEERY nervously lingers in the Loeb House flower garden, not letting human observer get too close.

PINE WARBLER trills atop WHITE PINE near 5 Bryant Street.

Hungry flock of GOLDFINCHES pecks at treetop WHITE OAK blossoms high above grounds of AAAS.

On banked earth between Glasshouse and Cyclotron near Divinity Ave, QUAKING ASPEN trees bloom with cottony seeds, sending floating fluff past the waning gibbous moon... MOCKINGBIRD perches and chirps a cardinal's territorial call on the twin crests of a BALSAM FIR. Meanwhile, another mocker [the mate?] plucks a dried red berry from last year's dessicated crop in the shrubbery below.

GREAT BLUE HERON glides down above the Charles and gracefully turns to starboard, landing on the left bank near Peabody Terrace where leafless saplings hug the shore. Heron wades up to its breast feathers and plunges its beak underwater, emerging with an 8" PERCH. Swallowing the fish with rhythmic thrusts of its head, the heron manages to get it down its long throat.

Meanwhile, a lone CANADA GOOSE swims towards the heron, slowly lowering its head closer to the water as it accelerates. About 10 yards from the heron, the goose starts flapping its wings and running at the heron, honking aggressively [defending unseen nest nearby?]. The heron leans into the wind and takes off with slow, powerful sweeps and lands again about 100 yards downstream in front of 10 Akron Street to resume fishing.

Dessicated YELLOW PERCH dries on the grass near 46 Blackstone Street [perhaps dropped by a startled heron before getting the chance to swallow it?].

At morning Commencement exercises in response to loud sounds a YELLOW-BACKED WARBLER desperately flies out calling loudly from a tree in Tercentary Theatre toward the roof of Pusey Library. Several TIGER SWALLOWTAIL butterflies brighten the festive scene with their yellow and black regalia.



RIVER PERCH, perhaps dropped by great blue heron fleeing territorial Canada geese, dries out on border of park opposite 46 Blackstone Street. Photo by Rob Gogan

HARVARD CAMPUS NATURE WATCH, continued from Page 14

MAY (continued)

Across from JFK park, a pair of CANADA GEESE adults gathers a huge flock of 16 [foster?] goslings of different sizes in the narrow strip of grass between the left bank of the Charles's asphalt path and Memorial Drive. Timing traffic light cycles, the adults take advantage of a red light to venture onto Memorial Drive with the goslings following as quickly as their little legs allow. The flock scrambles across the Drive and nearly all are across when the westbound lane traffic gets the green light. The last three goslings run and flap their unfledged wings instinctively to hop up over the 6" granite curb and all but the littlest make it to waddle into safe green pastures fresh with the night's rain and begin to graze, ripping off sprouting young grass. But the smallest gosling cannot make it over the curb and leaps repeatedly with less success each time, tiring with the effort, only inches away from speeding cars. A roaring bright yellow school bus approaches. Perhaps the gosling is startled by the noise or bright color; perhaps it sees the higher clearance and thinks it can go underneath it to safety--alas, the bird runs away from the curb and is struck by the bus's tire. Lamed, the gosling lingers a few moments trying to get up before a car ends its short life. Meanwhile, the other 15 vigorously graze on, oblivious to the loss of their youngest flockmate.

JUNE

Three weeks after this tragedy, the goslings have grown both in size and number and show no yellow juvenile feathers anymore. The adolescent flock now numbers 21 with only [the same?] two adults standing guard.

On two separate days a PEREGRINE FALCON sits atop the Memorial Church spire scanning the Plaza and Harvard Yard.

White MAGNOLIAS on the entrance side of Wadsworth are in full bloom while the regular Magnolias are in "mangy" form.

In the big WHITE OAK tree in front of Loeb House a tiny BROWN CREEPER climbs up the tree foraging for tiny insects then flies down somewhat removed from the other straight line up as it explores several thick branches. When it comes down again, a GRAY SQUIRREL frightens it into the soon-to-be flowering CRABAPPLE tree by the fence.

A SONG SPARROW runs from under bushes near the fence to the bushes by Loeb House.

Female TURKEY moves to the bushes by the steps of Houghton library, near a pink AZALEA bush and white Magnolia in bloom in front of Loeb House.

Female Turkey majestically crosses Quincy Street from the Carpenter Center, strolling past the Yard fence looking to enter, starts to turn back but then realizes the gate to Loeb House is a bit farther and so she successfully enters the Yard with the Landscape workers looking in admiration.

Male ROBIN was happily feeds on insects or worms in the soil upturned by the grounds workers in front of Loeb House.

On the roof of Pusey, an alert Robin seemed to be keeping watch on two foraging Song Sparrows who then fly to the branches of the crabapples facing the side of Widener.

Pair of Blue Jays swoop and cry around adult Red-tailed Hawk, finally convincing it to find its morning meal elsewhere, at 79 Garden Street.

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HARVARD CAMPUS NATURE WATCH, continued from Page 15

JULY

Female TURKEY climbs the stairs from the side of Loeb House and strolls through the blooming flower garden in the front. RED-TAILED HAWK flies from Smith Center to the Yard, and CHIMNEY SWIFTS chatter shrilly as they fly from the Knafel Building to CGIS-South.

Four EASTERN COTTONTAIL RABBITS graze in the early evening in front of Loeb House; adult seems to feed something to a tiny rabbit and two others of varying young age browse among the clover thriving in the herbicide-free landscape.



Alert EASTERN COTTONTAIL RABBIT prepares to leave English Ivy cover to forage the abundant herbage of the Business School near Cotting House. A gang of B-School Bunny Boosters share photos like this one on Instagram: #bunniesofHBS... Thanks to Micaela Brody, Ashley Finethy and the other members of the HBS Digital Marketing team! Photo by Micaela Brody

AUGUST

SNOWY EGRET pumps its wings vigorously to clear the construction equipment on the Larz Anderson Bridge. Having gained sufficient altitude, the egret glides downstream and perches on a rock on the right bank near McArthur Hall. It extends to its full height and gazes back downstream from where it had flown, keeping head and body still for several seconds.

SEPTEMBER

At Harvard convocation, red-tailed hawk perches atop Memorial Church steeple as Harvard's Class of 2019, President Drew Faust and FAS Dean Michael Smith processed in to Tercentenary Theater.

Thanks to Campus Nature Watchers Kate Brick, Micaela Brody, Ashley Finethy, Sonia Ketchian, Karsten Hartel, Cathy McCormick, and Rich Pollack!

“WANDER URBAN WILDS” APP RELEASED

Share your public park nature watching on your smart phone! Record a cicada, photograph a fungus, write a note about a tree and post on the Wander Urban Wilds website! This is a brand new project begun by Emerson College Professor Paul Turano. When you visit a park, you see your personal tree acquire a new leaf. The application goes live whenever you enter public park spaces including Harvard Yard, Cambridge Common and Boston parks.

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