



FEATURED STORIES

Students Celebrate Autumn Season at Harvest Fest 2017

Al Gore Talks Threat of Climate Change in Livestream Interview

Spotlight: As Leaves Fall, Prof. Jeffrey DaCosta Watches

OUR TEAM

This newsletter is a monthly publication by EcoPledge of Boston College.

Questions about our content? Contact us at ecopledge@gmail.com.

Newsletter Team
Christopher Russo, CSOM '19
Christopher Joseph, MCAS '19
Alex Capozziello, MCAS '21
Beatriz Kauffmann, MCAS '21

Eagle graphic courtesy of Zoe Fanning, MCAS '20

CONNECT

 /BCEcoPledge

 @bcecopledge



EcoPledge gave away pumpkins, wrote letters to Puerto Rico, and provided sustainable tips at Harvest Fest this year.



Annual Harvest Fest Draws Hundreds of Students to Celebrate Fall

Dozens of pumpkins lined O'Neill Plaza on Wednesday, Oct. 18 as a part of EcoPledge's annual Harvest Fest celebration. The event is held to commemorate the harvest and bring awareness to sustainability efforts on campus.

At the event, EcoPledge distributed free pumpkins to students and provided a station for pumpkin painting. Students took photos in the pumpkin patch and shared their creations with a special EcoPledge Snapchat filter.

EcoPledge also worked in collaboration with Congressman Joseph Kennedy's office to send letters of hope to those affected by storm damage in Puerto Rico. Students wrote to express their sym-

pathies and well-wishes. Over the course of the day, BC community members wrote more than 100 letters for Puerto Rico.

Several other groups were also featured at Harvest Fest. Members of UGBC's Environmental Caucus were in attendance to discuss issues of sustainability with students, representatives from Bike BC encouraged students to get out and bike in Boston with their free bike rental program, and faculty from the Environmental Studies Department shared information on classes and programs for interested students.

An appearance by the Office of Health Promotion was especially relevant this year, considering

EcoPledge's theme this year is Environmental Health is Human Health.

There were also several off campus organizations represented at Harvest Fest, including L.L. Bean and Guayaki. Student reps for Guayaki gave out over 800 cans of the its sustainably produced Yerba Mate tea over the course of the day.

"I would like to thank all organizations as well as students who attended this year," Kate Weingartner, co-president of EcoPledge and CSOM '18, said. "It was certainly a lot of fun. I would also like to remind students to continually educate themselves on the impact their food habits make on both the environment and their health."

EVENTS THIS MONTH

Nov. 13 Real Food will host its annual Thanksgiving dinner at 6 p.m. in the first floor lounge of 2150. All are welcome to enjoy the locally-sourced meal.

Nov. 14 The Environmental Studies Program will sponsor a talk by Bill Ritter, former governor of Colorado, on climate change, energy policy, and his new book *Powering Forward - What Everyone Should Know About America's Energy Revolution*. The event will take place at 6 p.m. at the McMullen Museum.

Nov. 16 Rob Nixon, author and professor at Princeton University, will discuss the relationship between accelerating rates of environmental change and rising rates of economic disparity at 7 p.m. in the Murray Function Room at the Yawkey Athletics Center. Nixon will specifically examine how rich and poor communities experience the impacts of climate change differently.

Gore Dubs Climate Change 'Most Serious Crisis Ever Faced' in Livestream Interview

On Thursday, Oct. 26 the Environmental Caucus hosted a screening of *The Inconvenient Sequel: Truth to Power*, the follow up documentary to *An Inconvenient Truth*. Both films highlight former vice president Al Gore's efforts to teach others about the damaging effects of climate change. Before the screening, the group watched a livestream interview with Gore.

During the interview, Gore answered several questions posed by students from universities across the country. He started off by calling the climate crisis "the most serious crisis ever faced by humanity," but said that solutions are very attainable.

Throughout the interview, Gore discussed the importance of local efforts. He said that our biggest challenge in attaining so-

lutions is "political will," something he has personally dealt with for most of his life, especially during his time in the White House.

One of the main concerns from students was the way in which the U.S. will move forward with conversations and action about climate change in an administration that does not seem interested in addressing these issues. More specifically, students were concerned with President Donald Trump's intent to pull out of the Paris Agreement, an accord within the UN to curb carbon emissions.

Gore said that he is worried about Trump's decision but is pleased with all the other countries that pledged to remain in the Paris Agreement. Cities and states

that are in the Paris Agreement will not let Trump's decision get in the way of progress, Gore said. He said that the U.S. is unable to withdraw from the agreement before next year's presidential election, since the process takes three years. This gives hope for a change in administration, he said.

Gore also emphasized the importance of both speaking up for climate change and exercising the right to vote and make choices that support environmental actions. He encouraged students to spark conversations about climate change and not let denial go unchallenged.

He also discussed the idea of implementing a carbon tax and the cap-and-trade system, which would help control pollution by providing economic incentives

for achieving reductions in the emissions of pollutants. The cap-and-trade system would be an indirect tax, and it is already implemented in countries such as China and Canada where it shows a lot of promise.

Gore's interview was also focused on proposing ways society can engage in the issue of climate change and be a solution to this global crisis, which is exactly what the documentary is about.

An Inconvenient Sequel revolves around the idea of climate change as an imminent issue, highlighting the connections between climate change and different problems the world has faced recently, such as extreme weather. It is also an examination of solutions to climate change and how Gore has fought to have them implemented.

SPOTLIGHT

Professor Jeffrey DaCosta Encourages Students to 'Leaf Peep' During the Fall Season

Every year, fall foliage brings tourists flocking to the forests of New England. In Boston, we're lucky to have these wonderful landscapes in our backyard, but to some, the autumn leaves are more than just a pretty sight. Jeffrey DaCosta, an assistant professor of biology at Boston College, instructs his students to record data about these natural processes, and the information they're collecting might have great implications down the road.

As a biologist, most of DaCosta's work and research has centered on evolutionary biology and genomic sequencing. Now in his second year at BC, DaCosta is teaching two biology courses: an advanced experience lab on evolutionary genomics, and Ecology and Evolution, a core biology course.

Students in DaCosta's Ecology and Evolution class are not limited to just what they read in the textbook. For the past two years, DaCosta's students have been studying the phenology of the trees on campus.

"Phenology is the study of the timing of biological events—whether it's mating or migrating, or, in this case, trees in the fall stopping maintenance of

chlorophyll," DaCosta said.

It's the lack of chlorophyll that brings out a tree's autumn colors, and that's what DaCosta's students are studying, though they're more concerned with the "when," rather than the "how."

Students in the class are each assigned two trees on campus. Every week, they observe their trees, take photos, and record an estimated percentage of foliage change and leaf loss.

"The idea is to develop a long term data set so we can see how these trees are changing this behavior from year to year," DaCosta said.

DaCosta expects to observe the leaves changing later each year, due to climate change.

"With climate change, we expect the length of the growing season to increase," he said. "Things are getting warmer, which means in the springtime things should be happening earlier, and in the fall the trees should be able to hang on longer."

Obviously it's not possible to detect a pattern yet, being as the project is now only in its second year, but when asked about the general difference between this fall and fall 2016, DaCosta said that peak foliage times are arriving



Red Maple (left) and Callery Pear (right) showing different stages of autumn coloring.

later this year. This phenomenon, called a phenological shift, has great implications.

"One particular worry about climate change and these shifts is that not every species in the community is responding in the same way," DaCosta said. "Species in the New England forest have a long history of interacting with each other and evolving in the presence of each other, and climate change might be kind of throwing a wrench in that."

Entire ecosystems could change, for instance, if phenologi-

cal shifts were to separate predators from their prey or flowering plants from pollinating insects.

The theatre of ecological response to climate change stretches far outside BC, but the phenomenon of phenological shifting is observable anywhere, and DaCosta is working to document it right in our backyard. Some day, the data will serve as an authentic testament to the effects of climate change on the environment. In the meantime, students will continue observing and recording the systems around them.