COVID-19 Resulted in Campus-wide Emissions Reductions

by Carissa Lange

The Center for Environmental Research and Education recently published Duquesne University’s 8th Greenhouse Gas Emissions Inventory (see image on right). These inventories, which are intended to provide the University with knowledge of its greenhouse gas emissions, also serve as valuable tools for creating innovative solutions to reduce carbon emissions over time. While these inventories always observe variances in campus emissions from year to year, this year’s inventory looked much different. The most probable cause? The COVID-19 pandemic.

The University’s FY20 greenhouse gas emissions equaled 41,908.44 MT eCO₂, the lowest recorded emission levels since 2012. This reduction in emissions resulted in a 15.86% decrease when comparing FY20 to FY19. A vast majority of these emissions reductions came from decreased production at the cogeneration facility and a significant reduction in study abroad travel. While a small portion of these emissions reductions may be attributed to improved campus sustainability, the vast majority of reductions are almost certainly a result of limited campus activity from the pandemic.

Due to the hybrid style learning that the University has implemented this past year, it is likely that the FY21 emissions inventory (scheduled to be published next Spring) will also report notable emissions reductions. However, it is important to remember that these emissions reductions are only temporary. In order to continually reduce the University’s carbon footprint, Duquesne must strive to achieve these emissions reductions even once the pandemic has ended.
DIVING INTO OCEAN CONSERVATION WITH THE FLORIDA AQUARIUM

By Gabriella Zuccolotto

On April 14th, the Center for Environmental Research and Education welcomed Jenny Lee of the Florida Aquarium’s Center for Conservation as their monthly EnviroBytes guest speaker. The Center for Conservation is located in Apollo Beach, Florida and is home to the Coral Conservation Center, Sea Turtle Rehabilitation Center and five pollinator gardens, as well as various research and water quality testing laboratories. Lee, a senior coral biologist and 8-year employee of the aquarium, is focused on protecting coral species that are at risk of extinction in the wild.

The Florida Reef Tract (FRT) spans 360 miles and is the third largest barrier reef in the world. Over the past 40 years, warmer and more acidic water conditions, the die off of key symbiotic species and Stony Coral Tissue Loss Disease (SCTLD) have caused a 90% decline in coral coverage. SCTLD has impacted 22 species of stony coral throughout the reef tract, often resulting in total mortality.

Conservation of this ecosystem is essential, as the reef protects the Florida coast from storm surges, flooding and beach erosion, provides shelter and breeding areas for marine life and supports the Florida economy. Lee states that, "The FRT attracts 5 million visitors annually and generates 2.4 billion in sales and income. Our economy here really relies on the reef for snorkeling, fishing and recreational diving."

Lee and the rest of the Project Coral team are working to protect affected species, increase coral reproduction rates in laboratory settings, advance coral health and restore the reef to its former beauty. As part of their rescue efforts, divers have gone into the reef, removed coral species and brought them back to the Center for Conservation for long-term care and spawning. In 2019, the Florida Aquarium achieved a conservation milestone by successfully spawning Atlantic coral in an induced spawning lab for the first time ever!

"Half of the 5 million annual visitors to Florida are unaware there is coral crisis", says Lee. Do your part to protect this beautiful ecosystem by reducing plastic waste, limiting fish consumption and wearing reef-safe sunscreen while visiting the Sunshine State.

To watch Jenny’s full presentation, contact Mary Kate Ranii (raniim@duq.edu)
DUQUESNE RECEIVES SILVER STARS RANKING FROM AASHE

For the past three years, the Center for Environmental Research and Education has completed the Sustainability Tracking, Assessment & Rating System (STARS) report—a program of the Association for the Advancement of Sustainability in Higher Education (AASHE). This report, which offers context for understanding sustainability in higher education, provides a “framework for colleges and universities to measure their sustainability performance.” The program also rewards institutions for their sustainability achievements by utilizing a rating system. Institutions can earn either a reporter designation, or a bronze, silver, gold, or platinum rating. This year, Duquesne University was rewarded the Silver Rating, after having received the Bronze Rating the previous two years. Though this achievement indicates that the University is improving campus sustainability, the University should continue to utilize this reporting tool as a means of implementing additional sustainable initiatives.

See the full report here.

NEW RAIN BARRELS INSTALLED ON ACADEMIC WALK

In Spring 2021, Facilities Management installed two 150-gallon rain barrels next to the new campus garden on Academic Walk. Funding was provided by the Wandrisco Family.

These rain barrels serve as a small step to combat stormwater runoff. Pittsburgh has a combined sewer system, meaning that both wastewater and stormwater use the same pipes. During a wet weather event, (i.e. rain) the system is overwhelmed by the amount of water and the wastewater system “backs up” leading to diluted sewage flowing into Pittsburgh Three Rivers. These events are called Combined Sewer Overflows or CSOs.

By diverting some of this stormwater, Duquesne can help relieve some of the burden on the combined sewer system during rainy days. As an added benefit, campus can use the rainwater to water the campus garden for free!

Learn more about combined sewer overflows here.

by Carissa Lange by Mary Kate Ranii

Photo courtesy of Coleman Griffin
Each year, large amounts of waste are generated during college move-in and move-out. Fortunately, there are many ways you can help reduce your environmental impact. Whether you’re officially graduating (congrats!) or you’re just heading home for the summer, check out some of the tips listed below.

**Move-in tips**
- **Purchase reusable containers:** Rather than purchasing cardboard packing boxes, considering investing in reusable containers. Though these may cost more upfront, they can be utilized for many years and will generate far less waste.
- **Use clothing/fabric to wrap fragile items:** Packing materials such as bubble wrap, Styrofoam, or even tissue paper can generate a lot of waste. Consider wrapping fragile items in clothing or blankets that you will already be taking with you.
- **Wait to purchase items until after move-in:** While it can be tempting to purchase everything in advance, consider waiting until arriving on campus. This will greatly reduce the environmental impact of shipping and will mean you have less to unpack!
- **Opt for green power and lighting options:** Your chargers, refrigerator, desk light, etc. all consume electricity when left plugged in. Considering purchasing a smart power strip and utilizing LED lightbulbs to reduce your energy consumption.

**Move-out tips**
- **Pack items in reusable containers:** Remember those reusable containers you purchased for move-in? If you have accumulated more materials and need additional containers, reach out to the campus dining halls. Chances are high that they will have leftover boxes available.
- **Recycle as many items as possible:** Sometimes, generating waste cannot be avoided. However, if you do have large amounts of paper, cardboard, plastic bottles, etc. do not dispose of them in the trash.
- **Donate unwanted items:** rather than dispose of items such as furniture, printers, laptops, or clothing, please consider donating. Duquesne recommends donating to the Salvation Army, St. Vincent de Paul, and American Veterans.
- **Donate nonperishable food:** Consider donating uneaten food to a local food bank. North Hills Food Bank and Light of Life Rescue Mission are both accepting individual donations while Greater Pittsburgh Community Food Bank is accepting items collected through food drives.

Visit Duquesne University’s sustainability website at [www.duq.edu/sustainability](http://www.duq.edu/sustainability).
There you will find University Greenhouse Gas Inventories for the last decade, as well as comprehensive sustainability reports (AASHE STARS), and the University Sustainability Plan from 2015.