THE SUSTAINABILITY SCOOP

February 2013

Food for Thought: How UCSB's Compost Program is Reducing Campus Waste

By: Sarah Siedschlag

The year 2020, by when UCSB has pledged to divert all of its waste from landfills, is fast approaching. As the deadline nears, the campus is focusing extra attention on some of its largest sources of waste and is developing solutions to process them responsibly. Composting in particular is taking on a more central role in campus waste management and has increased dramatically this year due to the introduction of the University Center's (UCen) food waste program. Currently, the campus commercially composts over 100 tons of food scraps every month, or about 14% of the total waste produced by the campus as a whole.

The first large-scale composting at UCSB began at the De La Guerra Dining Commons in the fall of 2009. All food waste was collected and sent to a commercial composting facility in Santa Maria, which due to its large capacity and specialized practices, is able to accept materials like meat and dairy (normally forbidden in home compost systems). By 2012, the program had expanded to include the other three dining commons and served as an excellent example of what the campus could achieve.

In 2011, a group of students organized the Compost Pilot Project with the goal of increasing composting on campus. Led by Phil Jankoski (Class of 2012) and funded by a grant from The Green Initiative Fund (TGIF), the group helped install six compost bins on campus that students, staff and faculty could use to discard leftover food. Students from Associated Students (AS) Recycling emptied these bins into the dining commons compost compactors, contributing a total of about two tons in the first year. The group also worked to increase student awareness and advocate for increased composting and the use of compostable products in UCen eateries.

The momentum around composting built throughout the 2011-12 school year. Phil Jankoski worked with student Elan Frantz to secure additional TGIF funding to install compost BigBellies, solar compacting units, alongside the recycling and landfill BigBellies that were already planned for the campus' highest traffic areas. The UCen also prepared to launch a full-scale compost program at its main eateries. The program went live at the beginning of the 2012-13 school year when MarBorg added one or more food waste dumpsters at the UCen, Coral Tree Café, Courtyard Café, and the Arbor, and staff at each outlet were trained in the new procedures.



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Reports show that the campus' compost pickup has increased from over 50 tons per month from the dining commons alone to over 100 tons per month now that the UCen is being included.

UCSB's large-scale composting efforts have come a long way, but there is still so much more that can be done. The UCen is planning on phasing in compostable productsforks, plates, and other containers-so that eventually everything purchased at UCen outlets can go into the compost bin together. The Zero Waste Committee is also hoping to implement a paper towel composting pilot project to reduce restroom waste. There are several onsite compost projects across campus, such as the worm bins maintained at Bren Hall, Ellison Hall, and the Eucalyptus Grove and the compost piles at Family Housing and the community gardens. Facilities Management also composts coffee grounds from coffee carts and eateries by adding them directly to the landscaping. Because these programs are all done on-site, they reduce the expense associated with a commercial composter, while still adding several additional tons of composted material to the campus total. UCSB's composting program shows how much can be accomplished when students and staff collaborate and how zero waste is becoming that much more achievable of a goal.□





Repurposing Waste into Sustainable Works of Art: A Reincarnation of Buildings and Bicycles

By: Karen Housel

Once widely used and appreciated, the YWCA building in Pasadena's town center has been vacant for decades. Interested in bringing the beautiful building back into the public consciousness, Jane Mulfinger created an artwork that incorporates old and new technologies to bring attention to the structure.

Built by American architect Julia Morgan in 1921, the Pasadena YWCA has been left to decay. Julia Morgan, best known for her work on Hearst Castle, built the YWCA building so women would have a place to become educated and empowered. Mulfinger's temporary installation, "Autonomy Is No Longer Possible or Interesting," uses Craigslisted exercise bicycles to power a specially designed LED lighted chandelier hung in the center of the building. Visitors who exercise on the bicycles generate the LED chandelier which shines through the building, illuminating the heart of the structure. As an encourager of recycling and reusing materials, Mulfinger repurposes meaningless objects into functional pieces. Her project helps use everyday items, such as exercise bicycles, to spark attention to the YWCA building to help remember the history of the building and encourage people to give function to the area

Like in nature, everything, including waste, has a purpose. Mulfinger's eye for aesthetic shapes and colors, in addition to her environmental awareness, allows her to take objects, materials, and structures that once did not have a purpose and draw attention towards them. Her efforts in transforming waste into works of art demonstrate an appeal in the beauty and versatile possibilities of repurposing.

Mulfinger chose to do her work at the YWCA building, because she finds a certain beauty to things that carry the patina of time passing. "The bones of the place were beautifully designed," Mulfinger explained. "This building should be sustained; it would be a huge waste for the existing building not to be utilized."

When questioned on her thoughts about repurposing and recycling materials in her work, Mulfinger described her motive, "A lot of the work that I build utilizes things that have been discarded—I hope my work utilizes the history of objects to remember our histories and to keep them in context while producing new things."



Mulfinger further explains that art and sustainability can go hand in hand, and art is an excellent outlet for sustainable awareness.

The UCSB Sustainability Program appreciates Mulfinger's ability to bring beauty to lost and forgotten buildings. Her ability to, both literally and figuratively, "bring to light" the YWCA building in such an artistic manner is both inspiring and respected.□



Zero Waste Weekend in Soccer Heaven

By: Matt O'Carroll

Last October was a monumental month for UCSB, as it strives to be a zero waste institution by 2020. UCSB upgraded its waste infrastructure at Harder Stadium and hosted its first zero waste athletic events. Zero Waste Weekend at Harder Stadium took place from October 26th through 28th, 2012 and included two Men's Soccer games and one Women's Soccer game.

Harder Stadium first went through a waste infrastructure overhaul. The old, ineffective, and unattractive waste infrastructure, which consisted of unlabeled waste receptacles, was removed and replaced with MarBorg rolling carts. The commingled, compost, and landfill carts are color coordinated respective to their waste stream, and MarBorg donated 45 bins in total.

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Fifteen sets of the landfill and commingled carts were equipped with signage and were strategically paired throughout the stadium. The response to the infrastructure upgrade was phenomenal. A waste audit conducted by A.S. Recycling showed that attendees were recycling at Harder Stadium at rates never seen before the waste infrastructure upgrade.

Zero Waste Weekend at Harder Stadium saw the landfill carts replaced with food scraps/compost carts, and everything distributed within the stadium was either recyclable or compostable. The Housing and Residential Services (H&RS) Concessions staff did a phenomenal job making adjustments to their menu and serving special items that were in compostable or recyclable containers, such as root beer floats. A.S. Recycling and Coastal Fund tabled booths to educate attendees about waste management and coastal pollution prevention, and ICA did a fantastic job publicizing the event and producing a Zero Waste Weekend video that was displayed on the video board throughout the weekend. The success of Zero Waste Weekend was displayed by the attendees' positive reception to the waste infrastructure changes and culminated with the results of A.S. Recycling's final waste audit. The waste diversion rate from Sunday's final game was 95.1%. This diversion rate is one of the highest ever recorded for a collegiate athletic event and a testament to all the hard work and collaboration from various departments across Campus. UCSB plans to build upon this success and open Harder Stadium for the 2013-14 soccer season as a zero waste athletic facility.

This event would not have been possible without funding from UCSB's "The Green Initiative Fund" (TGIF) and the hard work put in by ICA's Hazel Ando. A big thanks also goes out to ICA, Facilities Management, Associated Students Recycling, Housing & Residential Services Dining, and the Coastal Fund for making this event a success.□





ES Lecture Series

During Winter Quarter the Environmental Studies Program is hosting a special series of talks by distinguished visiting environmental scholars. All ES and UCSB students, staff and faculty are welcome to attend any of the lectures.

All talks are FREE, from **12:00 to 1:00 PM in Bren Hall 4016**, and followed by refreshments and Q&A with the speaker.

<u>Friday, February 15</u> - "Spirituality After Darwin: 'Dark Green' Nature Religion as a New, Global Religious Movement" by BRON TAYLOR, Department of Religion, University of Florida

Thursday, February 26 - T.B.A.

by PATRICK BOND, School of Built Environment and Development Studies, University of KwaZulu-Natal, Durban

R3C - The Refuse and Recycle Research Center

By: Karen Housel

The Refuse and Recycling Research Center (R3C) is a new center started by Matt O'Carroll, a graduate student studying at the Bren School of Environmental Science & Management. The goal of the Center is to help the University find ways to better manage campus waste by collecting data through campus research. The research is aimed to better understand the dynamics of campus waste disposal and distribution which can clarify some ambiguities on why recycling processes are not always 100% effective. O'Carroll launched this center because he realized that there are a lot of programs that involve waste management, but not one that focuses on waste research. "I thought it would be a great idea to get the students involved and look at emerging technology," he explained in a recent interview.

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Action today for tomorrow

Projects of the center include looking into the possibility of having an aerobic in-vessel composting system on campus. Erin Gall, an undergrad intern working beside O'Carroll, explains the need for an improved composting system, "Right now we are sending our compostables about 76 miles north of the campus, which expels a significant amount of greenhouse gases." Since the Refuse & Recycling Center is aiming to make UCSB a zero-waste institution by 2020, Gall and O'Carroll hope to stop unnecessary importing and exporting of waste to and from campus. "It's important to divert waste properly," Gall explained.

In addition, the R3C is working on implementing a scale system to weigh the trash and recyclables on campus. The scales, which are connected to the fork-lifts on garbage trucks, can be used to weigh the amount of waste as it is lifted into to the body of the truck. By collecting this data, O'Carroll is planning to utilize it to implement better waste management practices. Data gathered from the garbage scales may provide a better understanding about why some buildings and their occupants generate more waste or recycle more than others.

O'Carroll believes incorporating sustainability into his lifestyle is important for both the health of the environment and personal health, "If you start recycling or riding your bike more, you will be more likely to make other sustainable changes in your life. There's a fine balance between your actions: one leads to the other."

Currently O'Carroll is writing his Master's thesis at the Bren School and is working with five other students to produce the UCSB Water Action Plan. O'Carroll and Erin Gall are working through the pilot stages of their Center, and are optimistic to implement sustainable change on campus.

Gall's research for the R3C is part of her work as a Chancellor's Sustainability Intern (CSI). She is continuing to work with O'Carroll on local projects to reduce fossil fuel emissions on current waste distribution practices and is collecting data to support future projects. The UCSB Sustainability Program is supportive of the efforts of the R3C team, and is excited at the prospect that the next generations of UCSB students will work in an environment that is nearly completely sustainable.□





Buried Toxins Resurfacing

By: Rachel Scarlett

"PCBs are probable human carcinogens...PCBs cause developmental effects during pregnancy...PCBs disrupt hormone function...PCBs could cause cancer." Polychlorinated biphenyl phosphate (PCB) is dumped into me.

In 1982, poor, rural, and BLACK dominated Warren County, North Carolina was transformed into a dumping ground for PCB. The Ward PCB Transformer Company and the EPA decided that Warren County was the "best available site" for the PCB landfill, and planned to bury 60,000 tons of PCB contaminated soils into Warren County; the company decided to bury 60,000 tons of PCB into the Warren County citizens. This turned into the site of one of the first cases of environmental justice in the United States.

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Maybe it was just "roll of the dice" that The Ward PCB Transformer Company chose Warren County as their dumping site. Regardless, it cost North Carolina \$18 million to detoxify Warren County.

This event sparked many investigations of toxic waste dumpsites, and it was found that toxic waste sites correlate with African-American communities. Toxic waste is dumped onto us.

As we move past the Warren County Protests, we still see that environmental burdens are predominantly placed in communities of color. Our society cannot sweep their imperfections, and waste under poor Black communities—at least not without the victim's cries. The toxins may be buried deep, but the effects show daily in the health and wellness of the citizens of these communities. Warren County serves as an example to us all that we all have the right to a toxin-free environment, and together we have the power to detoxify it.

Here at UCSB, the Environmental Affairs Board (EAB) is looking to educate students on these issues. Environmental Justice serves as a necessary bridge between social justice and environmental activism.

We are looking to open our peers' minds to the importance of knowing, and preserving one's environment. We are coming to a point in U.S. history where speaking the words "climate change" does not make you a radical, "tree-hugging," environmentalist. Preserving the environment is universal. In Warren County, the protest did not start because the county was full of environmental activists; the rally started because the Warren County citizens cared about the health and well-being of their community. In these changing times, students must be educated and equipped to fight for justice in their environment. Whether it is a simple vote on policy, or promoting clean energy in our daily lives, we control the future of our environment. It is of urgent importance that students of color preserve their environment, because to this day, environmental burdens rest primarily on our shoulders. No one can defend our environment like we can.

This month, I am traveling to the University of California, San Diego for the Afrikan Black Coalition to put on a workshop called, "It's not Just an Environment. It's a Just Environment". This workshop will educate Black UC students about the privatization of water, toxins in our environment, and the food injustices in our communities. I am actively looking for ways to promote environmental justice, such as building gardens to promote health, or writing to congressmen about the toxins in communities of color.

Furthermore, EAB is looking for students, who are dedicated to promoting environmental justice, to work with us this year, or possibly become the Environmental Justice Chair in fall 2013.□

Rachel Scarlett currently serves as the Environmental Justice Chair for EAB.



