BAC YARD: REDUCING CAMPUS ORGANIC WASTE AT SACRAMENTO STATE

FOCUS ON EFFICIENCY

A partnership between students, faculty and staff, Sacramento State's Bioconversion and Agricultural Collaborative (BAC) Yard is a living laboratory reducing waste and greenhouse gas emissions with composting and sustainable agricultural methods. The BAC Yard serves as a learning environment for the students and the local community.

Sacramento State students developed a garden to provide fellow students with the nourishment needed to pursue their educational goals, have full bellies and fewer worries. The project is part of a solution to combat food scarcity, which can be a hindrance for some students lacking the financial resources to dependably afford meals. Building upon campus programs already in place that meet students' basic needs, the garden is a next-level solution to ensure healthy eating options for all Sacramento State students.

Each year, more than 450 tons of campus food and green waste is collected daily and turned into nutrient-rich compost right on campus, and most of the work is done by students. This food and green waste – which would otherwise be sent to a landfill – is used to help grow food for our students in the garden located at the Bioconversion and Agricultural Collaborative (BAC) Yard.

Participants learn how to close the loop: They turn campus organic waste into compost, use that compost to grow produce, and recycle the unused produce back into compost, thus completing the cycle.

The BAC Yard is a true hands-on learning environment. Awarded the 2016 CSU Campus-as-a-Living-Lab grant, the BAC Yard was created as a way to reduce campus organic waste and greenhouse gas emissions. Since then, the BAC Yard keeps expanding, and allows students to learn about sustainability in a hands-on setting. The garden also enhances the physical campus, creates efficiency in campus waste management practices and fosters a sense of purpose in working toward social equity by growing food to feed fellow students.

Sacramento State won the 2018 Best Practice Award in the social equity category at the California Higher Education Sustainability Conference (CHESC) for this ongoing, collaborative and multi-partner project. Students also presented as an award winner at the 2018 CHESC conference.

MILESTONES

Spring 2016
- The BAC Yard launched

Spring 2018
- Addition of three new beehives that produce honey for the campus.
- K-12 kids are taught about bees; campus students learn about beekeeping.

Fall 2018
- An aquaponics system is built to increase produce production.

Spring 2019
- Students build a wind turbine to help power the aquaponics system.

QUANTIFICATION AND RESULTS

The BAC Yard diverts more than 450 tons of food and green waste from landfills each year and turns that into compost.

The campus saves more than $5,000 annually in reduced hauling fees and compost that no longer needs to be purchased.

IMPACT AND BENEFITS

There is an increased interest among students to be involved in internships and volunteering, which provides students a hands-on opportunity to learn about applied sustainability in action.

Students are completing academic internships for credit at the BAC Yard.

There is a growing number of BAC Yard tour requests, including K-12 school groups. Since the beginning of the 2018 calendar year, more than 1,700 children and adults have toured the BAC Yard and experienced sustainability education from the site's projects and practices.

LESSONS LEARNED

1. The BAC Yard wasn't easy to build. It wasn't expensive, but it took a great deal of sweat equity. The success of the BAC Yard today is directly attributed to the countless hours staff and students spent building the BAC Yard with their own hands from the ground up. Processes and decisions were learned along the way.

2. Every portion of these efforts is replicable in that none require specialized technology or knowledge and can be implemented at any campus for little to no cost.

PROJECT TEAM

Joey Martinez
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Ryan Todd
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Associated Students Inc. and countless students

FURTHER REFERENCE

BAC Yard website:
https://www.csus.edu/aba/sustainability/bacyard.html


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