

Compost Research & Education Foundation (CREF)

Overall Goals of CREF

- ▲ Increase awareness and educate the public through supporting public outreach and targeted activities including updating and creating compost resources and publications.
- Developing local and national campaigns to raise public knowledge of composting and its importance to longterm sustainability.
- Foster scientific research opportunities. The Foundation's reputation for credibility and scientific rigor has led to the development of sound composting principles, processes, product end uses and analytical standards.
- Advance the stature and practice of the composting industry by offering professional development opportunities and disseminating best practices throughout the industry.



"I am so proud of our staff and our Board of Trustees for all they did to not only make sure that CREF got through the pandemic but was able to even grow current programs and add new ones.

Because of their hard work and due to all our generous supporters, both individuals and companies, CREF is in a good position to move into the next year with plans to accomplish even more."

-Ginny Black, CREF Trustee Chair



ACCOMPLISHMENTS

Compost Operations Training Courses:

After suspending the Compost Operations Training Courses (COTC) in spring of 2020 due to COVID-19, the Foundation was able to restart trainings in late summer of 2021. Beginning in August, CREF offered five trainings. Students came from across the country and internationally investing their time and money to expand their skills and knowledge on running the best compost manufacturing facility.

Trainings were held:

Lincoln, NE 36 students
Raleigh, NC 24 students
Richmond, CA 26 students
Fort Collins, CO 36 students
Santa Rosa, CA 36 students
Total 158 students



Compostable Field-Testing Program:

Established in 2016, the Compostable Field-Testing Program (CFTP), a non-profit collaboration between the CREF and BSIbio Packaging Solutions/BÉSICS® (BSIbio), is designed to field test compostable foodware. This multi-year research project focuses on "on-the-ground" field testing of compostable products at active organics processing facilities. The program enables compost manufacturers to answer their own questions about how specific products may work in their operations, and at the same time, contribute to a broader understanding throughout the industry by submitting their data to the CFTP database. In 2021/2022, the work was largely placed on hold as composting facilities' participation was hindered due to COVID-19. Spring 2022 saw a renewed interest from facilities in compostable field testing and it is anticipated that this project will be able to meet the goal of having publishable data ready by 2023.





International Compost Awareness Week 2022

The winner of the ICAW 2022 Poster Contest was Angelo Esquivel. Out of hundreds and hundreds of entries from around the world, his entry was chosen. Angelo is an artist and graphic designer from Sacramento, CA.

College Compost Research Scholarships

It was hard to just pick a few but CCREF awarded scholarships to two college students to encourage their compost research. Research scholarships are given out annually. The two winning students were:

Brooke Schmidt was a senior undergraduate student majoring in biosystems engineering with a minor in math at the University of Arizona. Her research project aimed to explore how compost can be improved through mineral additives to provide longer-lasting benefits for arid cropland farmers. She wanted to determine if compost with the mineral additions of vermiculite, zeolite, or greensand can improve the capacity of soils to store carbon, increase crop yield, and address soil health deficiencies related to farming practices. Her goal with this research was to try to discover a new solution that would increase the sustainability of arid environment agriculture.

Md Mahfuz Islam joined North Carolina State University as a Ph.D. student in the Spring semester of 2021. He earned his BS in Soil, Water and Environment and MS in Environmental Science from the University of Dhaka, Bangladesh. His research focused on managing compacted construction sites and roadside soils to improve stormwater infiltration and reduce watershed pollution, primarily through the incorporation of composts. Soil erosion and stormwater runoff in urban and suburban areas are the biggest contributors to nonpoint source water pollution. This project hoped to find if environment-friendly compost amendments incorporation might be a possible solution to alleviate soil compaction and facilitate stormwater infiltrations through the soil profile.





Research Project:

The research project <u>Return on</u> <u>Investment (ROI) Analysis of Applying Compost to Aid Product Marketing was completed and the individual factsheets were made available to the public for free on the Foundation's website:</u>

https://compostfoundation.org/Return -on-Investment.

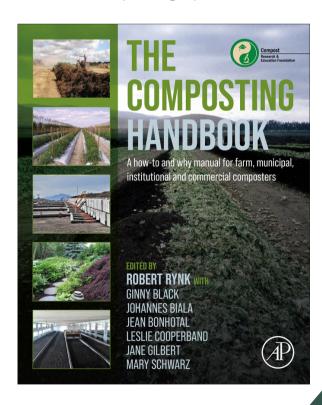
The purpose of this project was to educate specific markets on the economic benefits of applying compost, ultimately creating individual reports to provide instructions and explain the ROI for very specific compost applications. Ron Alexander, of R. Alexander Associates, did the work for this project.

Funds were also raised during the COMPOST2022 conference to start a new research project. That project will be a Review and Analysis of Compost Used in Stormwater Bioretention Systems.

Book Published:

After a number of years of hard work by so many people, particularly the lead editor, Bob Rynk, *The Composting Handbook*, was published by Elsevier in December 2021. Key features of this amazing new resource includes:

- Provides the first comprehensive resource in decades including the latest information on compost science and compost methods, with a focus on both academic and practical insights and advances.
- Written for the composting community by the composting community by a diverse group of authors with broad-ranging backgrounds, from academic scientists to compost producers and users
- 1002 pages and hundreds of full-color illustrations and photographs



"The Foundation does important, impactful work every year and I'm glad to report that we were able to adjust during the difficult times of COVID and stay the course. Yes, some programs couldn't be held in person as normal but other opportunities filled those temporary voids. Hats off to staff and everyone who worked so hard to make sure CREF's goals were reached." - Frank Franciosi, Executive Director

Board of Trustees

Chair

Ginny Black

Black Gold Consulting, LLC

April 1, 2021 - March 31, 2022

٧	ice	C	na	ır	
ı	orri	e	Ro	ssi	tei

Treasurer

Jeff Ziegenbein

Inland Empire Utilities Agency

Secretary

Britt Faucette, Ph.D. Filtrexx International

Trustees

Noura Bakr, Ph.D.

National Research Centre

Tera Lewandowski, Ph.D.

The Scotts Miracle- Gro.

Tim O'Neill

Engineered Compost Systems

Andrew Carpenter

Northern Tilth, LLC

David Weindorf, Ph.D.

Central Michigan University

(Term ended December 2021)

Charles Duprey

Naturcycle

Monica Ozores-Hampton,

Ph.D.

TerraNutri, LLC

Revenue:

Contributions	\$ 56,682
Program Revenue	273,881
Grants	58,954
Other Revenue	67,885
Interest	122

\$457,403

Expenses:

Total Revenue

Operating Expenses	\$349,497
Total Expenses	\$349,497

Revenue Less Expenses \$108,028

