

Duke Carbon Offsets Initiative

2021 Annual Report



About DCOI

In 2007, Duke University set a target of achieving climate neutrality by 2024. Even after being aggressive with reducing emissions on campus, Duke is expected to have to offset up to 85,000 metric tons per year of carbon dioxide in 2024. The Duke Carbon Offsets Initiative (DCOI) was created to help Duke University reach its climate neutrality goal through project development and implementing the strategy that the university will use to evaluate and purchase the offsets it needs. DCOI also focuses on creating educational opportunities while serving as a leader in the discussion around higher education offset use.

Strategy & Leadership

- **Carbon offset evaluation and procurement strategy** - Began development of the University's carbon offset evaluation and procurement strategy that will be used to obtain the carbon offsets required to meet Duke's ambitious 2024 carbon neutrality goal. The office created and piloted an RFP process, and has hired experts from Ruby Canyon to consult on the creation of a formal evaluation tool.
- **Offset Advisory Committee** - Formed offset advisory committee comprised of alumni, faculty and staff. This group will help DCOI build the formal evaluation tool used to assess offsets the University may consider for purchase. They will also help DCOI make final purchasing decisions for the offsets used towards the 2024 neutrality goal.
- **Higher Education Offset Collaboration** - Created and hosted the Ivy+/Listening Post carbon offsets group. This recurring collaboration call is focused on educating and sharing resources around carbon offsets. Through this work, DCOI connects sustainability leaders from the Ivy+ peer university network with expert speakers, and has created a forum for these leaders to collaborate.



4,014
offsets verified
from Loyd Ray
Farm project



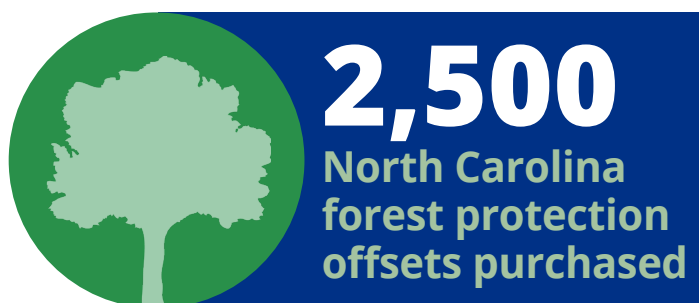
Cattle seen on Bass Connections class trip to the Williamson Preserve



Collaborated with
19 different
institutions
on Ivy+ peer
University network

- **Peer Verification of Swine-Waste-to-Energy Offsets** - Through the Offset Network platform developed at DCOI, the office partnered with a faculty and staff verification team from SUNY Albany to conduct the peer verification of the Loyd Ray Farm swine-waste-to-energy project. The verification resulted in the generation of over 4,000 offsets that Duke will use towards its carbon neutrality goal.
- **Local Offset Feasibility Assessment** - Purchased 2,500 offsets from Green Assets, a North Carolina based carbon offset project developer. The project involved protecting forested land in Carteret County, NC from being cleared for agricultural use by placing it under a conservation easement.

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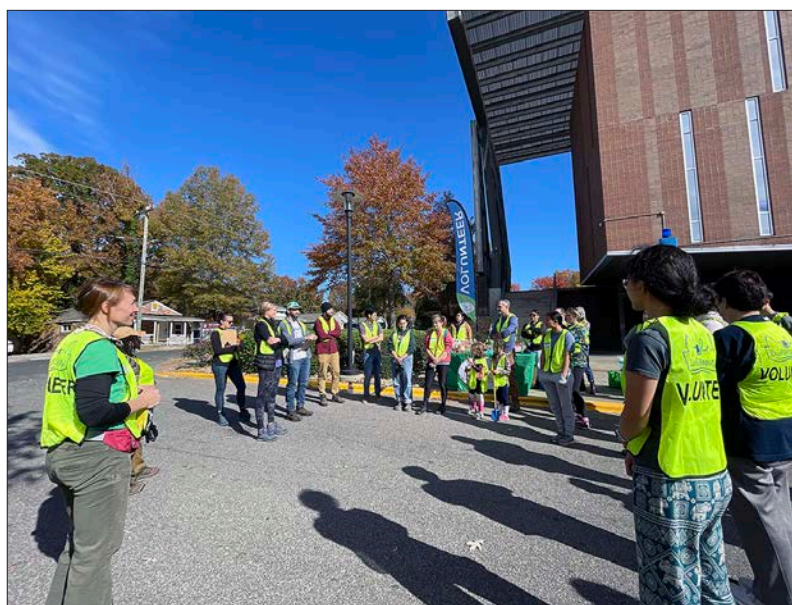
Projects to Highlight

- **Regenerative Grazing to Mitigate Climate Change Bass Connections** - DCOI, along with faculty from the Duke Environmental Law and Policy Clinic, led the third and final year of a Bass Connections class focused on generating policy recommendations for the state of North Carolina and creating educational materials to further the development of regenerative grazing carbon offset projects.



Bass Connections students visit Williamson Preserve to study rotational grazing.

- **Exploring residential energy efficiency** - DCOI began designing residential energy efficiency projects in partnership with North and South Carolina electric cooperatives. The projects focus on helping additional residents qualify for energy efficiency funding and are targeted at individuals who may experience energy poverty.
- **Urban forestry and health collaboration with Duke medical students** - Duke University Medical School students identified areas in Durham where cardiovascular outcomes could be improved by increased canopy cover. DCOI donated trees and joined community partners including Keep Durham Beautiful to put on a tree planting event.



Nov. 14, 2021 - Volunteers preparing to plant trees near NCCU as part of DCOI & Duke Medical students urban forestry collaboration.

- **Researching Madagascar carbon offset potential with the Duke Lemur Center** - Nicholas School of the Environment students are studying the potential for afforestation in the SAVA region of Madagascar through a Master's Project, in coordination with the Duke Lemur Center. The results of this project will help DCOI determine if a carbon offset project is feasible in the region.

Presentations

- **Second Nature's Climate Action Pursuit Conference** - DCOI presented with David Vandermaast of Elon University. The session titled 'Offset Network: Carbon Offsets Done Differently Through Campus Driven Projects. Developing University-Initiated Offsets and Using Peer Verification'.
- **Educating Duke Undergraduates** - DCOI served as a guest speaker for the undergraduate class 'Sustainability Theory and Practice'. DCOI staff introduced the students to carbon offsets and provided detail on Duke's approach to using them responsibly.
- **Southeast Sustainability Network Directors' Summit** - DCOI presented to attendees from colleges and universities in the southeast, sharing various projects DCOI has developed, approaches to project verification, and how DCOI thinks about offsets from an institutional standpoint.



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Offsets Initiative**
DUKE UNIVERSITY

For more information, visit
sustainability.duke.edu/offsets