

REEF@UD Tackles Coastal Resilience at Eco Entrepreneurship Design Sprint



On October 6th and 7th, University of Delaware Horn Entrepreneurship hosted the REEF@UD Eco Entrepreneurship Design Sprint, a special event that brought together innovative minds to address the pressing issue of climate change and its impact on coastal regions. The event, titled "Shoring Up Against Climate Change: Design for Coastal Resilience," showcased the power of entrepreneurial thinking in finding sustainable solutions to protect vulnerable coastal communities.

The REEF (Ratcliffe Eco Entrepreneurship Fellows) program, offered during the spring semester, is a way for students to continue efforts towards enacting environmental change. Open to graduate students and senior undergraduates on a mission to protect the environment, REEF offers training, mentors and up to 50K in funding to build a business model for your innovation.



REEF program director Megan Pillsbury opened the night and ran through the schedule before sitting down to speak with Zach Hammaker, Senior Instructor of Landscape Architecture in the Department of Plant and Soil Sciences at UD and the Director of the Coastal Resilience Design Studio. As director of the Coastal Resilience Design Studio, Zach strives to support underrepresented communities and places affected by coastal impacts by working with partners across the state that are aligned with their core stances in efforts to support those in need. At the event, Zach discussed his ecological efforts in his roles and how he applies his entrepreneurial characteristics to the positions. He was questioned about challenges he faces, significant climate change themes in the communities, other eco efforts he is inspired by, and more.

During the Design Sprint, participants from diverse backgrounds, including students, faculty, and industry experts, came together to collaborate and brainstorm strategies for mitigating the effects of climate change on coastal areas. The event emphasized the

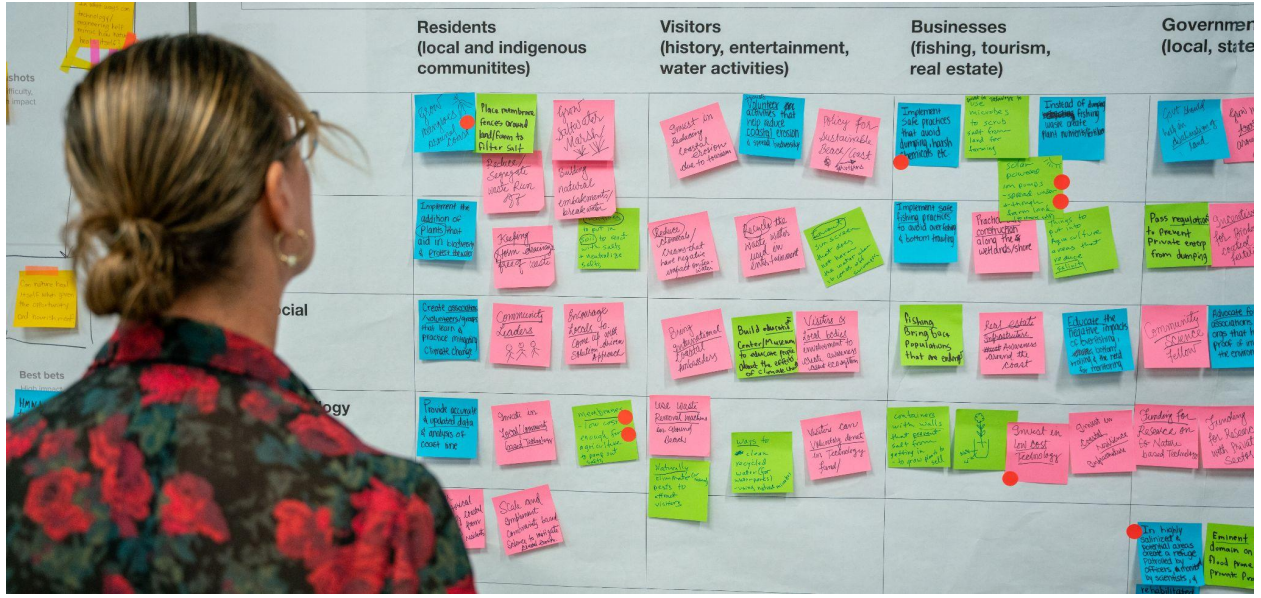
significance of eco-entrepreneurship, highlighting how innovative, environmentally conscious business practices can make a real impact on climate resilience.



The Design Sprint was based on the design thinking process introduced and led by UD faculty member and design leader Christine Fischer. This detailed, step by step process encompassed divergent and convergent thinking to perfectly balance the elements of space and possibility with direction and focus. In just seven 20-30 minute interactive steps, participants were able to nail this process down, concepting ideas to later pinpoint a crucial environmental issue and solution to develop and present.

“It’s not always a step by step process, as you make progress you start to look back. This cycle could go on for 8 hours or 8 months,” said Christine.

Participants were divided into two teams of four to collaborate in this workshop styled process. Team 1 included Narayan Kumar, Debora Massouda, Aksel Dirkzwager, and team presenter Alana Hill. Team 2 included Kaan Karatas, Samumya Agrawal, Gokul Kumar, and team presenter Delany Doran.



The seven steps started off with the “Rose, Thorn, and Bud” activity, where participants wrote on different colored sticky notes identifying strengths, problems and opportunities. Next was the “Affinity Cluster” activity, which called for finding themes and patterns among the insights written before. The teams then moved on to “Statement Starters”, where participants wrote a concise and aspirational statement for each of the prioritized challenges, eventually forming questions regarding how one might solve the challenge.



Next came the “Important Difficulty Matrix”, through which participants identified priorities based on level of importance and impact as a way to prove the value and impact of their plan. Everyone then came together to vote on which ideas they were the most interested in, then refined those ideas through a series of matrices. Team 1’s idea was centered around solar powered ion pumps spread under and through farmland to remove salt, similar to mangroves. On the other side, Team 2’s idea was focused on living labs, which are essentially big chunks of land dedicated to research and involvement. The next activity, “I like, I wish, I wonder”, was a chance for everyone to properly critique team ideas. Lastly was the “Brainstorm Concept Poster”, which was a

presentation format illustrating the main points of the selected idea.



The Design Sprint process started with strangers looking to discuss climate change and coastal resilience and later evolved to a solid and connected team coming up with impactful plans after a couple hours of brainstorming.

“It was an interesting process, the brainstorming helped us come up with a full idea. I feel we came together and discussed really well with each other,” said Delaney Doran., design sprint participant and UD PhD student.



The workshop design of the REEF@UD Eco Entrepreneurship Design Sprint served as a breeding ground for creative ideas, focusing on sustainable technologies, community engagement, and policy initiatives. Participants worked diligently to use short and long term thinking to put their heads together and develop solutions that will not only protect coastal regions from the threats of rising sea levels, storm surges, and erosion but also promote economic growth in these areas. The event highlighted the importance of interdisciplinary cooperation and the potential for entrepreneurial solutions to drive positive change in the face of our changing climate.

Team 1 pitched “Mangrove Mimicry” and Team 2 pitched “Global Living Labs” to a panel of judges with backgrounds in ecology and entrepreneurship. The judges were Tomé Salgueiro, Assistant professor of Social Innovation and Entrepreneurship, Fabrice Veron, Dean of the College of Earth, Ocean, and Environment, and Matej Hanzel, Operational and Conduct Risk Manager, BNP Paribas.

Judges were given time for questions about the pitches at the end of each presentation, and used every bit of the allotted time. After a period of deliberation that did not result in an agreed upon winner, the judges determined that each team showed strength in different judging criteria and decided to split the prize pool evenly. Not only did each participant walk away with the experience of the design sprint and \$200, everyone also received a gift card for Little Goat Coffee Roasting Co. in the amount of \$10.

In the spirit of fostering sustainable coastal resilience, the REEF@UD Eco Entrepreneurship Design Sprint demonstrated the University of Delaware's commitment to addressing climate change and its impacts. By combining innovation, environmental responsibility, and entrepreneurship, we can open the door to a new wave of ideas and initiatives aimed at securing our coasts for future generations.

About Horn Entrepreneurship

Horn Entrepreneurship serves as the creative engine for entrepreneurship education and advancement at the University of Delaware. Currently ranked among the best entrepreneurship programs in the US, Horn Entrepreneurship was built and is actively supported by successful entrepreneurs, empowering aspiring innovators as they pursue new ideas for a better world.