Seaweed Design as Social Practice: Towards Regenerative Marine Industries

Workshop: 24 February-10 March 2019 Kristineberg marine research station, Sweden
Symposium: Date to be decided
Exhibition: August-September 2019 Berlin Kunstgewerbungmuseum

Seafarm is an interdisciplinary research project, growing and using macroalgae for a variety of applications, studying their ecological sustainability and commercial viability. We will spend two weeks on site learning about the Seafarms located at the Swedish Atlantic coast in Tjärnö and Kristineberg, and continue the work off-site for four weeks. We will link macroalgae and the materials derived from it to the local community of fishermen, craftsmen, chefs and teachers. We will imagine a future city where seaweed plays an important role.

Seaweed is a versatile material offering applications from bioplastics and textiles to food and biofuel. Our approach is transdisciplinary and integrates the existing knowledge of Seafarm's ecosystemic impacts to create a Regenerative Industry. Macroalgae farming can contribute both to restoration of the marine environment and to establishing sustainable livelihoods for coastal communities. The course offers an opportunity for students from multiple disciplines to work together to study and develop new products, services and businesses based on seaweed farming. Collaboration with experts and locals enables creating scientifically sound proposals that improve the community.

What can we make from seaweed? Will there be a new local cuisine, local delicacies? Could seaweed be used as architectural material? What kinds of new building typologies are needed for seaweed farming and processing? Would there be family farms, or industrial farming? Does seaweed industry require new urban (marine) infrastructure? How could seaweed industry benefit from local industries and skills? Can we imagine new business models, benefiting the ecosystem and the community?

The course is a collaboration between the School of Arts, Design and Architecture, Aalto University, Helsinki and Department for Sustainable Development Environmental Science and Engineering (SEED) the Royal Institute of Technology, KTH Stockholm
The course is run by Professor Fredrik Gröndahl (KTH Stockholm), Professor Julia Lohmann (Aalto University) and Dr. Pirjo Haikola (Aalto University)

Image: Objects and samples made from seaweed, Exhibition by Prof. Julia Lohmann, Wolfsburg, Germany