

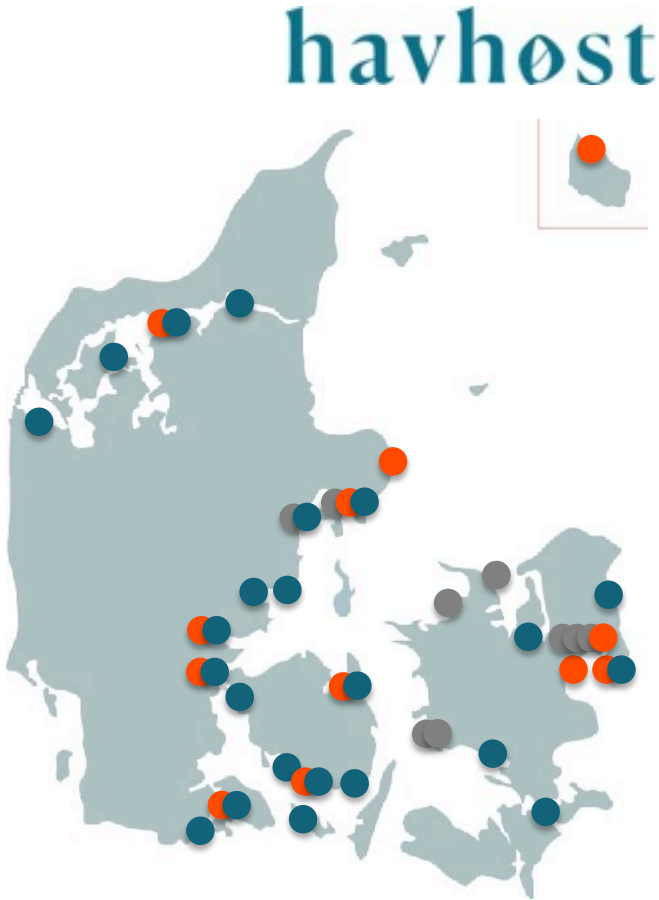
# Regenerative aquaculture as a bioremediation & social innovation tool

Manifesto for regenerative ocean farming v. 0.9

THEME:

# Havhøst and the regenerative movement

Joachim Hjerl / Havhøst – Ocean Harvest



# The manifesto

Joachim Hjerl / Havhøst – Ocean Harvest

The why  
and how



# The manifesto

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## Background



Extensive human pressure, such as discharge of nutrients, destroyed habitats, ocean acidification and overexploitation of wild fish stocks have been going on for way too long.

The future calls for marine food production that goes hand in hand with active restoration of the adversely affected ocean ecosystems.

We are well past the point where doing as little damage as possible is sufficient. The very logic of marine food production needs to be reversed. Negative impact is no longer acceptable. Zero impact is insufficient.

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## Our vision for the future of marine food production



We are blue community gardens, marine entrepreneurs, local businesses, universities, fishermen and stakeholder organisations with a common guiding ideal and a unifying vision for the future, where at all times, through our primary production at sea, we give more back to marine nature than we take.

**With this in mind, we have formulated eight shared transformative principles for the future regenerative cultivation and harvesting of marine crops.**

The principles adhere to the UN sustainable development goals, meaning that any regenerative cultivation initiative needs to balance considerations towards environmental and social sustainability in a context of a sound and healthy economy.

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Our definition of regenerative ocean farming



**We understand regenerative ocean farming as the cultivation of edible marine species in such a way that the farming in itself has an overall net positive impact on the surrounding marine ecosystems.**

# The manifesto

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The eight transformative principles for regenerative marine cultivation and harvesting:



## 1. We produce food

Our crops can be utilised for various purposes, but we have given ourselves the primary task of combining marine food production with active regeneration of the marine environment. While cultivating our crops we offer various ecosystem services, such as nutrient absorption, sequestration of carbon dioxide, and other forms of mitigation against human-induced environmental harm, but to us these services are always directly linked to the cultivation of food.

## 1. We produce food

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## **2. We cultivate on the ecosystems' own terms**

Our crops feed solely on the existing resources that are naturally found in the places where we grow our crops. We refrain from using fertilisers, medications, or any artificial methods of weed or pest control. We add nothing to the marine environment besides the cultivation equipment needed for our crops to grow, and we exclusively cultivate species that are native to the local environment.

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**2. We cultivate on the ecosystems' own terms**

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### **3. We do multi-trophic cultivation**

We aim to simultaneously cultivate a number of different species that mutually benefit each other. By embracing multi-trophic cultivation as an ideal, we seek to counteract monoculture and actively contribute to fostering a healthy ocean with rich biological diversity. Our approach emphasises the interconnectedness of different species and trophic levels to create more sustainable and resilient marine ecosystems.

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## 4. We counteract climate change

Our cultivation contributes to reducing the carbon footprint from food production. We actively communicate the benefits of our farmed crops as climate positive alternative food sources that can replace less climate-smart foods on our dinner tables and thus contribute to the necessary transformation towards more sustainable food systems.

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## 5. We create robust business models

We combine, where possible, our regenerative cultivation with other income-generating activities such as coastal fishing, processing, dissemination, education and sustainable tourism. This approach gives us as primary producers more robust business models while at the same time increasing local value creation and helping to secure local employment and the future of the coastal communities we are part of.

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## **6. We take active part in our communities**

We emphasise being firmly rooted in the communities surrounding our cultivation. We aim for the largest possible local market for our produce and we strive to collaborate with, learn from and contribute to the building of knowledge among local residents, businesses, schools and visitors. We actively engage with our communities and promote ocean literacy and regenerative thinking in areas where it has not yet gained widespread acceptance.

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## **7. We scale out rather than scale up**

We evolve by scaling out instead of up. Out of consideration for the marine environment and due to our ambition to ensure local value creation, we work towards the establishment of many smaller cultivation sites, avoiding large scale cultivation and the risk of negative impact on the marine environment this may entail.

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## **8. We rely on knowledge**

Our understanding of the marine environment and its resources is based on knowledge and scientific approaches to knowledge gathering and decision-making. We therefore happily collaborate with knowledge institutions that can help us monitor the marine environment, continuously adjust our course and make the right choices. We are always happy to generously share our insights so that the regenerative approach can spread further in our local communities and in the wider world we are part of and want to be role models for.

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## **8. We rely on knowledge**

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## Founding consignors:

Havhøst - Ocean Harvest, Denmark

Aktion Österbotten, Finland

Centre for Sea & Society, Göteborgs Universitet, Sweden

Under Ytan, Åland

Nemo Seafarms, Åland

Marinreparatørene, Norway

Kivik Tång, Sweden

Kerteminde Maritime Have, Denmark

Skovshoved Havhave, Denmark

Stigjordens Andelsodlingar, Sweden

Koastal, Sweden

Helsingborgs Havskoloni, Sweden

# havhøst



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The what now