

THE GSI'S COMMITMENT TO SUSTAINABLE FISH FEED

Feed ingredients play an important role in the efficiency of salmon farming. It provides the salmon with all the protein and essential nutrients required for optimal health and growth, making farmed salmon a healthy dietary choice!

OUR CHALLENGE

Establish new approaches to efficiently farm salmon by providing fish the nutrients they need to be healthy, without putting further pressure on wild fish stocks or natural resources for feed.

WHAT THE GSI IS DOING

Since GSI launched, we have been dedicated to improving the sustainability of fish feed, and together with our associate feed members we have supported a number of successful initiatives:

1 Finding alternative sources of omega-3 fatty acids

- In 2015, we launched a global tender to identify commercially viable non-marine alternative sources of omega-3 fatty acids
- Before we started this process, an in-depth mapping activity to gain clarity on the current situation on the feed marketplace was conducted
- Once the tender was live, we received a number of impressive responses, and invited six proposals to present their innovative solutions to GSI representatives in Brussels
- Solutions presented included photosynthetic algae, Genetically Modified Organism (GMO) crop, algae-photobioreactor technology, heterotrophic algae (non-GMO) and GMO EPA yeast
- The tender has made an undefinable impact on the feed industry, and it is responsible for prompting accelerated efforts and innovation that has ultimately led to more non-marine alternatives available within the market
- Industry feed companies are now working with multiple providers, incorporating these fish-free ingredients into industry feeds

“GSI’s ‘Novel Oils for Salmon Aquaculture Feed’ tender has provided us with invaluable insights and distinct solutions to support the sustainability of the salmon industry. Without this proactive approach, we’d be years behind where we are today.”

Carlos Diaz, CEO, BioMar Group



2 Improving the efficiency of farming salmon

- Our work with feed companies has supported the dramatic reduction in the feed conversion ratio (FCR) of farmed salmon over the last 2 decades. This means fewer resources are now required to grow farmed salmon – resulting in it being one of the most efficient animal proteins available

4 Optimizing use of fish by-products

- We initiated a project with the University Of Stirling and the the IFFO (The Marine Ingredients Organisation) to map the availability of fisheries by-products (fish parts not sold for human consumption, or caught but not sold) to determine if these resources could be collected and redirected instead of going to waste
- This map was provided to the Food and Agriculture Organization (FAO) of the United Nations (UN) as part of their zero waste campaign, so that they could use the global network to improve utilization of these resources

3 Reducing the amount of marine ingredients in fish food

- Ongoing innovations in salmon aquaculture over the past 20 years, has reduced the amount of fish meal used from 65% to 18%, and fish oil from 24% to 11%
- Through GSI's innovative and collaborative approaches, we have played an instrumental role in these reductions and driving efficiencies in feed

5 Ensuring responsible sourcing of feed ingredients

- Whether from ocean or land, we work closely with our feed associates to ensure all ingredients in our feed come from responsible sources
- GSI has supported the development of the Aquaculture Stewardship Council (ASC) feed standard as an important development in ensuring transparent and traceable resources

“One of the biggest innovations to have taken place in salmon farming in the past decade is the significant reduction in the use of wild fish as part of the farmed fish's diet. Through innovation and improvements in feeding techniques, we have not only been able to reduce the amount of marine resources needed, but also been able to identify new novel resources to replace the marine oils we required before.”

Tor Eirik Homme, Director Feed and Nutrition at Grieg Seafood ASA

THE FUTURE FOR FISH FEED

This has been one of the biggest challenges facing our industry, and as a young industry there have already been significant developments, however it is important we continue to prioritize the long-term sustainability of our feed resources and find further improvements to balance greater efficiencies with more sustainable production.

For more information please visit:

