

Handpicked luxury seafood



Danish aquaculture company AquaPri specializes in high quality farmed fish delicacies for global niche markets. With experience in trout farming since the 1950's and having built the world's biggest commercial size pike perch indoor RAS farm, AquaPri holds a front running position in adding innovative approaches to fish farming.

AquaPri farms rainbow trout (*Oncorhynchus mykiss*) and pike perch (*Sander lucioperca*) on its farms that are all located in Denmark. Having the whole life cycle of both species under control allows for year round planning of supply to their customers and for documenting food safety and quality aspects as well as performances related to farm management. Trout produced by the AquaPri farms are slaughtered and processed at the company's processing plant in Årø-sund in the south of Denmark and sold to markets all over the world. The pike perch is mainly packed "round" in their

facility in Vejen and sold fresh on a daily basis.

We spoke to Henning Priess, responsible for sales, marketing and business development of AquaPri. The slogan of AquaPri is "Handpicked luxury seafood". When asked how the company's actions fulfil this motto's promise, Henning Priess answered: - By always doing it better! Entrepreneurship and determination are strong heritages in our family.

Henning Priess is one of the co-owners of this family owned company. It was



AquaPri's pike perch farm is the world's biggest commercial size pike perch indoor RAS farm.

founded in 1900 by his great-grandfather who at a very young age decided to take charge of his future by establishing his own fish trading company "Priess & Co". Later, Priess & Co split into two separate companies, the canning company "Glyngøre" and Priess & Co, processing all seafood other than canned products. In 1991, the family sold Priess & Co and established the farming company "AquaPri", continuing the trout farming traditions, already established in the 1950's.

Trout

AquaPri produces more than 6.000 tons of rainbow trout per year in land based and sea cage farms. The trout are hatched and raised at AquaPri's land based farms. Technology ranges from traditional farming to recirculated

farming systems. When the trout are about two years old, most of them are transported to AquaPri's sea farms. Most are harvested as large trout in the months November-January, almost 3 years after hatching. At that time, they have typically reached a size of 3-5 kg.

- AquaPri may be a large trout farmer in Denmark, Henning Priess said. - But compared to volumes in salmon farming in our neighbouring country Norway our production volume is "peanuts". Farming salmon and sea cage farming of trout is very much alike, but we do not benefit from the same economy of scale. We face this challenge by farming high-end products for targeted markets.

- In the beginning, we focused on land

based farming of portion sized trout. Then, we started sea cage farming of large, pigmented trout. In times where trout prices decreased, we decided to concentrate our efforts and to strive for new, high quality niche markets. We asked ourselves: What kind of final product can we sell at the highest price? The answer was: The roe. All farming efforts now had the objective to produce the best possible trout roe. For instance, since the start of the 1980s, we have targeted the Japanese sujiko (salted roe sack) market. In the mid 2000's we managed to also enter the Russian market with our roe sacks.

In 2012, AquaPri decided to further refine their trout roe offerings. - Our aim was to develop unique trout "caviar" with an exquisite flavour, funding from



Henning Priess is proud to present sustainably farmed high quality pike perch.





Land based farming in outdoor RAS: Lerkenfeld trout farm, part of AquaPri.

perfect texture and a beautiful orange colour, Henning Pries told. - This was no easy process, it needs skills and it needs know-how. You need to take into account that trout roe is a living organism, variations occur constantly. It is extremely important to guarantee a stable, non-fluid consistency of the product. The eggs are handpicked to make this product a real high class product. It is packed and frozen and sold to for instance sushi restaurant chains in Denmark and as far away as China.

After harvesting the roe, the pigmented trout are sold as niche market products as well. According to Henning Pries, first class quality trout from sea cage farming are highly appreciated, especially in Finland, Japan and Russia.



Farming in sea cages: Agersø trout farm, part of AquaPri.

Pike perch

In April 2016, AquaPri inaugurated the world's biggest commercial size pike perch indoor RAS farm. Furthermore, AquaPri is the only company in the world that has developed a method to make pike perch spawn four times a year. - As a result, we are always able to supply fresh pike perch to our customers, Henning Pries said.

In 2003, AquaPri decided to embark on a farming of a second species. Trout farming in Denmark could not expand due to restricting farming quotas and prices for trout had been decreasing. Henning Pries explained: - Wild caught pike perch were sold at good prices per kg, compared to farmed trout. We knew that it was possible to farm pike perch and that they grow fast at water temperatures of above 20 °C.

The decision was taken to go for RAS farming of pike perch. Similar to their production of trout, AquaPri wanted to have full control of their pike perch's life cycle. - At first, we had brood stock from the wild in outdoor tanks spawning spontaneously, Henning Pries said. - In 2008, we hired a biologist as well as a specialist in genetics and breeding who also had hands-on experiences in fish farming. The team managed to control spawning and put a lot of efforts in larval rearing. Cannibalism is a huge challenge, especially while the pike perch are young. We eventually managed to produce pike perch fry and make them grow to harvest size.

Next step was to scale up production. AquaPri was granted 22 million DKK in the European Union for its project of building a fully recirculated indoor pike perch farm with an annual production capacity of 600 tons and construction work could start. According to Henning Pries, scaling up is no easy task: - The RAS farm was inaugurated in spring 2016 and new challenges arose that we had to overcome. But we are on track. We are convinced that over time our investment in this 70 million DKK project will prove to be a profitable asset for the company.

Food safety, sustainability and consumer concerns

- Food safety and sustainability are key



Pike perch has a high natural content of protein and Omega-3. Due to the rearing environment, AquaPri pike perch is free from parasites and comes with high food safety due to 100% control and traceability during all phases of farming and packing. Farmed pike perch is on the WWF (World Wildlife Fund) green list of sustainable seafood.

to our business, Henning Pries said. - We have implemented our own food safety programme, in accordance with the HACCP principles. Farmed fish is a sustainable food source compared to farming of other animal proteins. Sea cage farming is sustainable compared to land farming as you do not utilise CO₂, and RAS farming is known to be a sustainable technology.

Fish lovers and chefs can find AquaPri and discover its products at various gourmet food fairs. Furthermore, Henning Pries is proud of the fact that when consumers consult the Sustainable Seafood Guides issued by WWF, they will see that farmed pike perch is listed green.

After the successful ASC certification of one small land-based farm in 2016, AquaPri started certifying their largest sea farm in 2019, and in early 2021, several land-based farms are expected to be ready for certification. - We see a interest in products from ASC certified farming, on all EU markets, and especially in Germany, though basically we farm exactly as sustainably on our other farms, which are not certified. However, we must follow the requirements from the consumers on specific markets and pay the price for the certifications.

Green conversion in cage farming

Since autumn 2019, project Hav-

Tek, supported by the Danish Green Development and Demonstration Programme (GUDP) focuses on boosting the green conversion in sea cage farming of trout. AquaPri A/S was the main applicant for this project of which BioMar is a partner. The project will reveal new environmental technology solutions serving to mitigate the environmental impact of sea cage farming. One of the aims of the project is to develop high-tech feed with a better eco-efficiency (lower emission of nutrients per kg of fish produced) and that allows for modifying the sink rate of fish faeces to enable faeces collection inside the cages.

Henning Pries said: - Utilising the sea for the production of high quality animal protein is vital for reaching the 17 Sustainable Development Goals of the UN. Project Hav-Tek enables us to move onward on this way of producing animal protein, on a sustainable basis.

Farm management and feed

- Farming technology, farm management and feeds that we utilise have developed a lot and support our aims for producing first class trout, trout roe and pike perch. Our farm managers have many years of experience and they are used to having a proactive approach when we bring in new technologies. Farming parameters are closely monitored.

- If we face a tricky situation we do not hesitate to ask BioFarm for consultancy, Henning Pries ads. - The dialogue with BioFarm advisors has been valuable to us, for sea cage farming, for RAS farming and for roe production. We also have an ongoing dialogue with BioMar on the development of feeds, for both species. BioMar brings in its expertise and new findings and offer improved feed formulations. The benchmark trials carried out by BioMar are an asset that we highly appreciate as they lead to product developments that allows for better performance of the feeds. And if by the end of the day the feed price per kilo can be maintained, we are of course even happier, Henning Pries concluded, with a smile.



AquaPri has put a lot of efforts in control of spawning and in larval rearing of pike perch.