

# Sea Lice 2012

## State Secretary Kristine Gramstads speech - 9th International Sea Lice Conference Bergen, 21 May 2012

Ladies and gentlemen,

You are here today to discuss a celebrity in Norway. Despite the fact that the average Norwegian know quite little about salmon farming they have almost all heard about the sea lice. So how did this little creature end up in the limelight? Well, it may be small. But as you all know, in high numbers it may represent challenges. In 2010, the Norwegian government, due to high sea lice levels in fish farms, decided to stop a notified 5% growth in the production capacity of our salmon industry in most areas along the coast. Hence, sea lice have now also caught the attention of stockbrokers.

The Norwegian aquaculture industry is a relatively young industry which has evolved during the past 40 years. There has been a continuous growth in production since 1980, and last year the Norwegian production of farmed Atlantic salmon reached 1 million tons. The value of the Norwegian aquaculture production exceeds the value from the fisheries sector and export revenues from farmed salmon and trout amount to 60% of total exports of seafood from Norway.

For me the development of the salmon farming industry represents one of Norway's greatest success stories. It is the Government's objective that the Norwegian aquaculture industry should continue to grow. However, further growth can only take place within the limits of environmental sustainability. This is why we stopped the increase in production capacity in 2010 and this is why the sea lice situation will be a central factor when we evaluate the possibility for growth this year. The driving force for achieving environmental sustainability should be the industry itself, but for me it means strong commitments to governance, research and development.

The regulation of sea lice in Norwegian fish farms has become significantly stricter over the recent years. The numbers of lice per farmed fish is being kept rather low and do not represent a health or welfare problem for farmed fish. However given the amount of farmed fish in Norwegian fjords and thereby the high number of hosts for sea lice, the lice population in Norwegian fish farms could in some areas represent a potential threat for wild salmonids.

The Norwegian Food Safety Authority has a well equipped toolbox to handle the situation: They are authorised to instruct coordinated operation, fallowing and if necessary slaughtering of farmed fish. They have also a legal base to establish special zones with stricter regulations than the general regulatory framework. In such zones farmers may have to coordinate their sea transfers and fallowing periods. Two such zones are in place. One in Trøndelag county and one in the Hardanger area just south of Bergen. A recent evaluation showed that these zones are good and necessary tools, but more time will have to pass before we can see the full effect.

Norwegian fish farmers are required to undertake coordinated de-lousing campaigns every spring at extremely low treatment thresholds, to ensure that during the wild salmon smolt migrating periods, fish farms are practically free from sea lice. Monitorings over the past years indicate that the campaigns have been successful. However, there are still reports of high levels of sea lice on wild salmonids, especially on sea trout which are stationary in the fjord basins.

The regulations for sea lice are currently under revision and a proposal for new and stricter rules went on a three months public consultation in March. It is proposed to require more coordination between fish farmers in their sea lice control. It is also proposed a shift from a threshold limit for lice per fish to a maximum limit. The maximum limit will ensure a more proactive sea lice control. In addition stricter regulations for sensitivity tests for drugs used in sea lice control, is proposed.

As sea lice now is considered mainly a problem for the wild salmonids our strategy is to shift the focus from considering the sea lice limit in fish farms only, but also taking the sea lice infestations on wild salmonids into account when deciding upon measures in aquaculture. As there is controversy surrounding the impact of sea lice from farmed fish on wild stocks we are now putting great effort into establishing first generation indicators and threshold values for the effect of lice in fish farms on wild salmonids. These will be based on today's knowledge and then be evaluated and adjusted as new knowledge is available.

The fish farming industry depends on quality research. In Norway one of our advantages is our cold and clear waters. Another advantage is the knowledge we possess. The growth and development of the Norwegian fish farming industry has not been possible without good research and research communities.

If knowledge has been important to get where we are today, there is no reason to believe it will become less important in the future. Increased knowledge is a long-term project. We are now building competence we will need in the next 10 – 20 years of development.

The Norwegian government is aware of the importance of science. Therefore we focus on strengthening our research communities and knowledge centres. From 2009 to 2010 The Ministry of Fisheries and Coastal Affairs doubled its contribution to sea lice research. The high contribution has continued in 2011 and 2012. In 2011 the Norwegian Research Council, Institute of Marine Research and the Norwegian Veterinary Institute spent 40 million NOK on sea lice research. This equals 6.5 million US dollars. In addition the industry's own Research Fund allocated almost 20 million NOK on sea lice research. In addition, there are the investments in R&D (research and development) by individual companies.

Bergen is the capital of marine research in Norway. Bergen is also the host of the Sea Lice Research Centre. Here, several leading Norwegian research communities and the industry work together with the aim to find good, sustainable solutions to the sea lice problem. The centre aspires to become world leading on research on sea lice and similar parasites, especially in terms of shortening the time-line between research results and product development. The Research Council of Norway will over an eight-year period contribute with 80 million NOK to the centre. In addition the consortium will contribute with at least an equal amount of funding. The industry partners will cover at least 25% of the budget. We are all looking forward to seeing the results of this collaboration.

Aquaculture - like any other food production - has an environmental footprint. These footprints must, however, be kept within acceptable limits. Using the nature as production premises, environmental sustainability is a prerequisite for long-term development and growth.

The Norwegian authorities are currently putting great emphasis on reducing the problems of sea lice in Atlantic salmon. To achieve our goals we need more knowledge about the risk (i.e. likelihood and consequence). For this we depend on you – the researchers. Based on the knowledge you generate the authorities will establish limits for acceptable ecological footprint. Then, I expect the industry to take any means necessary to pave the way for increased production within the acceptable environmental limits.

So am I optimistic? Definitely! The salmon farming industry has tackled great problems before - with much thanks to people like you.

Let us take a little glimpse backwards. In 1992 Norway produced about 200,000 tons of farmed salmon. The industry had experienced a period with great disease problems and the use of antibiotics was sky high. The solution to the problem was both the development of vaccines against the most important bacterial diseases and a good cooperation between the authorities, the industry and science. As a result the use of antibiotics has been low and stable since the middle of the 90's.

It is the textbook example of how technological innovations, targeted research and cooperation between the industry and the authorities can contribute to sustainable solutions to the challenges we are faced with. I am convinced that not too long from now we will be able to tell the story of how the sea lice challenge was solved. And as so many times before, research will be a big part of the solution.

My goal is that sea lice disappear from the lime light and go back to being what it really is, a natural parasite of the northern fauna. I thank you all for contributing to this.