

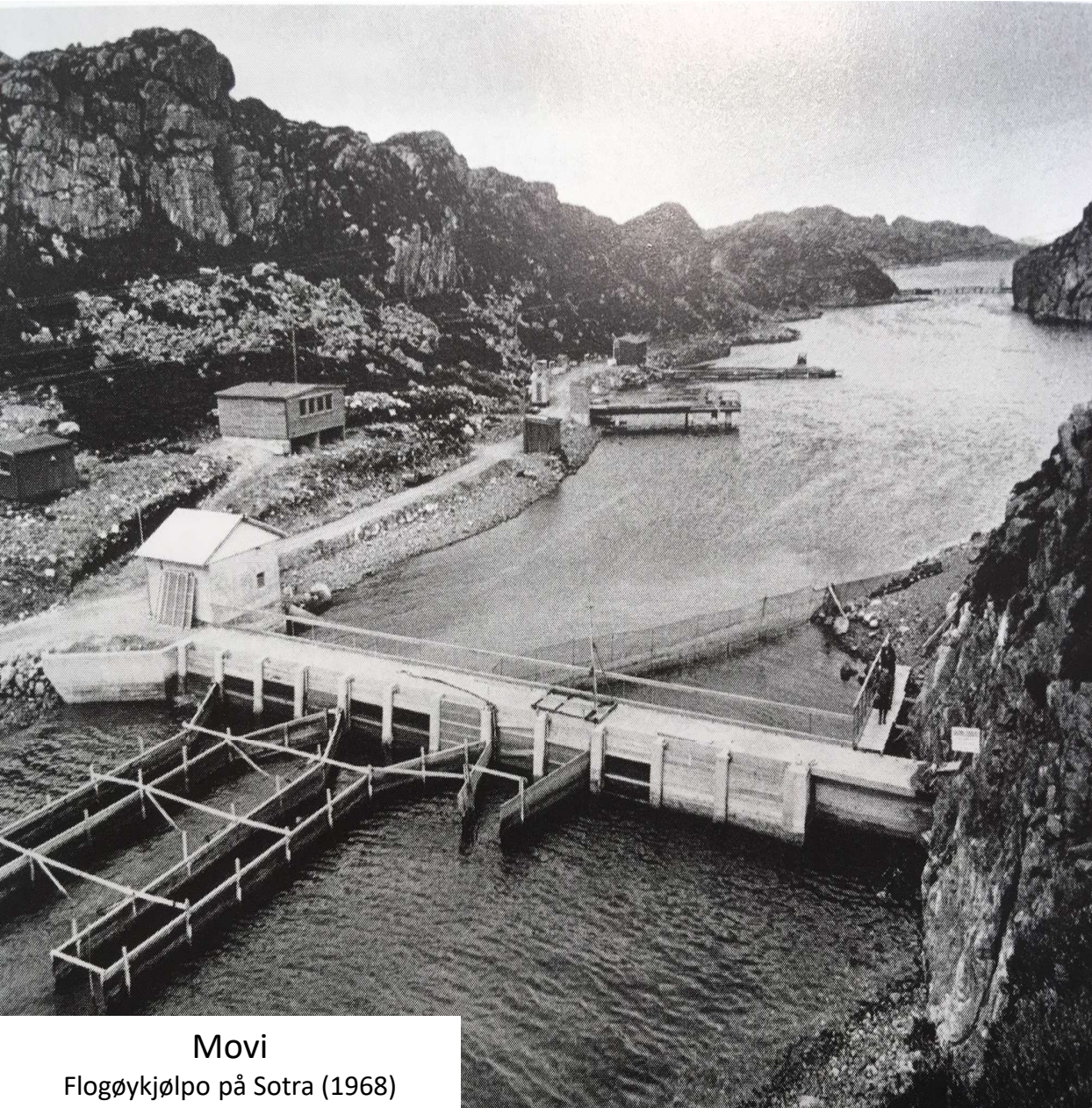


# VELKOMMEN TIL LUSEKONFERANSEN

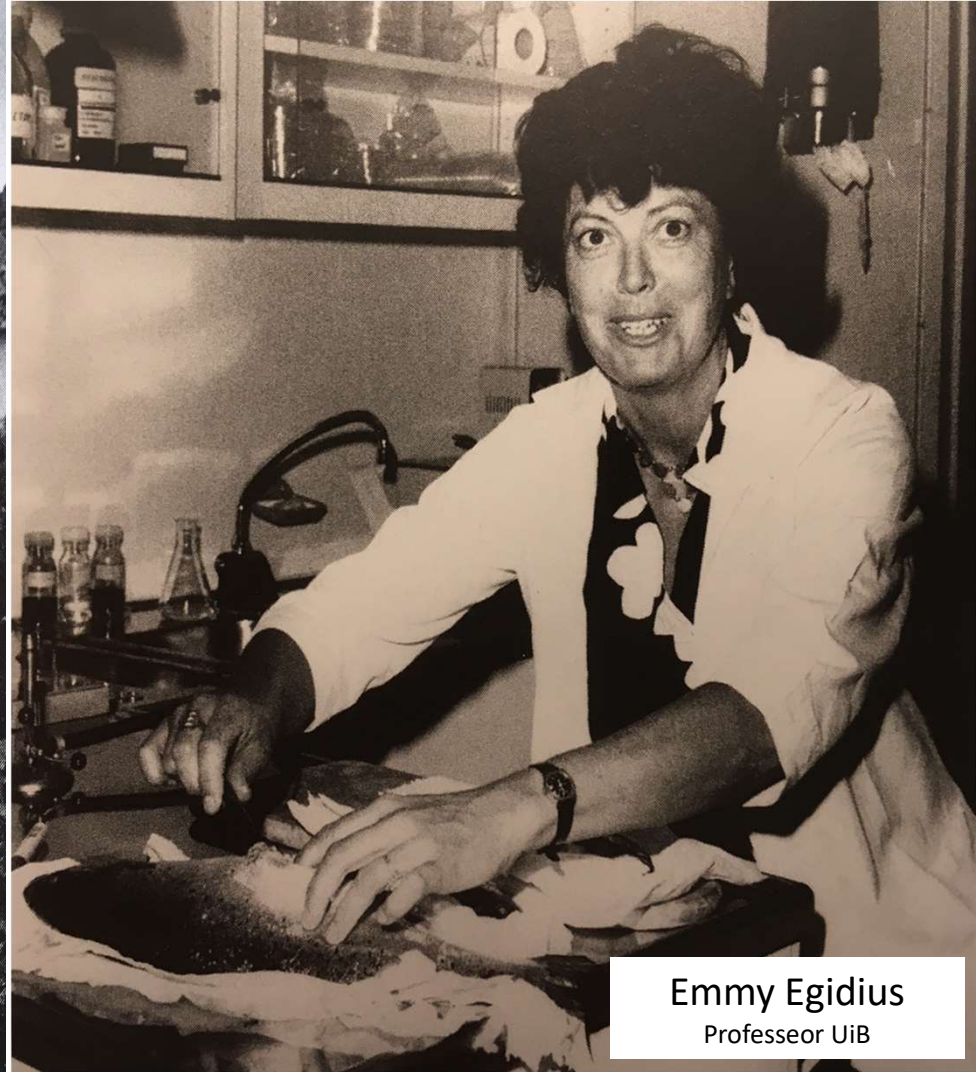
**2019** 21.–23. januar

FISKERI- OG HAVBRUKSNÆRINGENS  
FORSKNINGSFINANSIERING





Movi  
Flogøykjølpo på Sotra (1968)



Emmy Egidius  
Profesoor UiB



Mowi salmon, Flogøy, Norway 1971

PLOUGHING THE SEA  
*The story of Mowi*

developed into some of the best food produced and today the use of antibiotics is microscopic. Preventive health measures have become an important part of the agenda.

### GOOD OR BAD SIGN?

In 1978 Mowi experienced the effect of sea lice on salmon, when Flogøy was attacked. The lice die after a few days in freshwater, but at Flogøy the North Sea provided a steady and continuous supply of fresh saltwater, and the lice thrived. They use their microscopic claws to attach themselves to the salmon, and eat their way into the flesh.

Marine biologist Per Olav Brandal from the Institute of Marine Research was brought in by Mowi following the attack in Flogøy. Brandal chose to bathe the fish in a liquid mix of medicines containing Neguvon. He had developed this treatment method for his master's degree thesis together with his tutor, Professor Emmy Egidius from the Institute.

The medicine was introduced into the basin through a perforated tube placed on the outside of the net. A representative from the insurance company who had approved the treatment was watching silently from the shore. A dye had been added to the mixture so that Brandal and his colleagues could watch the process from shore. Measuring the correct dosage was one of many critical aspects. Too small a dosage would have no effect, whereas too much would be lethal to the salmon. The pumps would feed in right dosage in suitable portions. But the fish disappeared from view in the coloured water, and the onlookers struggled with an increasing sense of having lost control, the insurance representative was dumbstruck. And then all hell broke loose! Thousands of salmon started jumping and splashing. The spectacle lasted for several minutes, before everything suddenly became quiet. The atmosphere on Lokøy was like a vacuum – neither sound nor movement from people or salmon. The insurance representative broke the silence by asking, 'Is this a good or a bad sign?'

An hour passed before it was possible to conclude that it was a good sign. The pumps sucked the dyed water containing the medicine back

81

PLOUGHING THE SEA – The story of Mowi

82

PLOUGHING THE SEA – The story of Mowi

out again, revealing a shoal of happy salmon in clear water. They had defeated the lice. The experiment was a success, and only resulted in the loss of some hundred salmon that died from injuries after the frantic jumping. For the marine biology student Per Olav Brandal, the lice treatment experiment in Mowi was like a final examination, and he was subsequently employed as a marine biologist.

Mowi's closed-off sounds were more vulnerable to lice attacks than production sites using floating cages. But the company developed know-how that facilitated treatment at an early stage of attack. A connection has also been established between the salmon's general health and the danger of potential lice attacks. However, good results in controlling lice were achieved with a type of fish called wrasse, which they started using after having transferred the seawater production into floating cages. The wrasse are released into the cages and act as 'cleaner' fish eating the lice directly from the salmon. They have proved to be highly efficient during the salmon's first year in seawater. Local fishermen are now delivering wrasse to the sites, the gold sinny being used most frequently. Mowi has also experimented with the ballan wrasse, but it has so far proven a bit too aggressive when performing its duties. They are therefore still experimenting with other types of fish suitable for 'lice-cleaning'. The battle against the lice has not yet been completely won, however. It is still plaguing both wild and farmed salmon, and in the last few years it has been proven that smolts from wild salmon stocks are attacked by lice when they leave the rivers and pass fish farms on their way to the ocean. During the winter of 1999 the medication added to the feed has also been a topic of debate. Some people suspect that the medicine, which has been approved by the authorities, contains components that may cause cancer. Although this theory has never been verified, it has provided environmental organisations with ammunition that they are threatening to use to damage the industry. This is an illustration of the complex and comprehensive problems the industry is facing, especially the conflict between the protectors of the wild salmon and the salmon farmers. But none of the parties is indifferent to the actual situation, including the fish-farming industry. This may be the best



Inntil 64 millioner kroner utlyses nå for å øke kunnskapsgrunnlaget for forebygging og kontroll av lus i lakseoppdrett. Foto: Jørn Grønham.

## Største enkeltsatsing noensinne

Dette er den største enkeltsatsingen FHF noensinne har gjort.

av Cecilie Aalvold  
8. jan. 2024 12:42

Om  E-mål

Inntil 64 millioner kroner utlyses nå for å øke kunnskapsgrunnlaget for forebygging og kontroll av lus i lakseoppdrett, melder [FHF](#).

Utlysningen er delt inn i fire ødelområder:

- Grunnleggende biologisk kunnskap om samspill mellom lakselus og vert
- Forebyggende tiltak mot lus
- Rensefisk
- Kontrollerende tiltak

– En av næringens største biologiske og økonomiske utfordringer i dag er knyttet til lakselus og håndtering som følger av denne. Det er folgelig helt sentralt å sikre kontinuerlig lave nivåer av lakselus, med minst mulig håndtering av laksen og resistensdrivende medikamentbruk, heter det i utlysningen.

Fristen for å søke er 8. mars.