DO NOT USE THIS AREA AS IT WILL DISAPPEAR IN THE POSTER CLAMPS

Authors: Martine Hauge, Elisabet Korsveien, Siri Helstad, Even Jacobsen, Linn Brustad & Sunniva Kronmüller

Salmon lice infestation on farmed Salmonids in 2023

How do observed salmon lice numbers differ in environmental conditions across the norwegian coastline?

This study examines how temperature differences across 13 aquaculture zones affect salmon lice (*Lepeophtheirus salmonis*) on farmed salmon (*Salmo salar*). Using data from January and July 2023, it analyzes seasonal impacts on lice numbers and compares fjord and coastal sites.

The dataset was extracted from BarentsWatch which is an official website for aquaculture that publish legally required salmon lice counting from all fish farms in the 13 norwegian productions zones. The dataset were processed using R studio along with creating the figures.

In both the coastal and fjord areas, the lice counts are generally higher in January than in July. Across both months, coastal sites tend to have higher lice levels than fjord sites. Additionally, there is a noticeable decline in lice numbers as production zones move from 1 to 13, indicating regional differences in lice infestations.

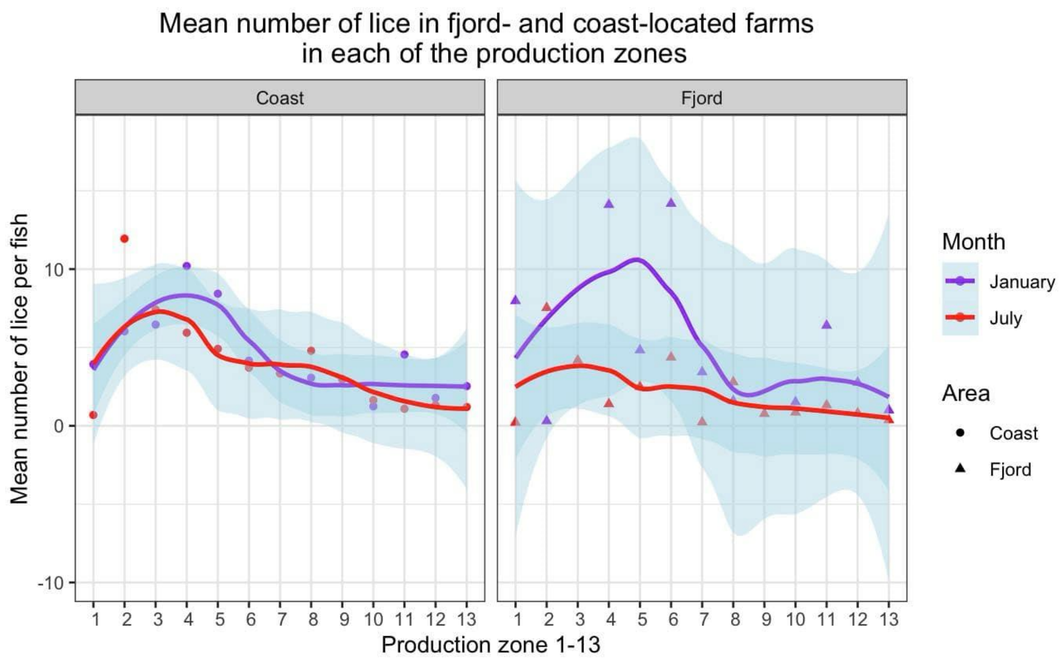

Figure 1 : Overview of the average number of lice infestations in the different production areas, divided between fjord and coastal locations for the months of January and July.

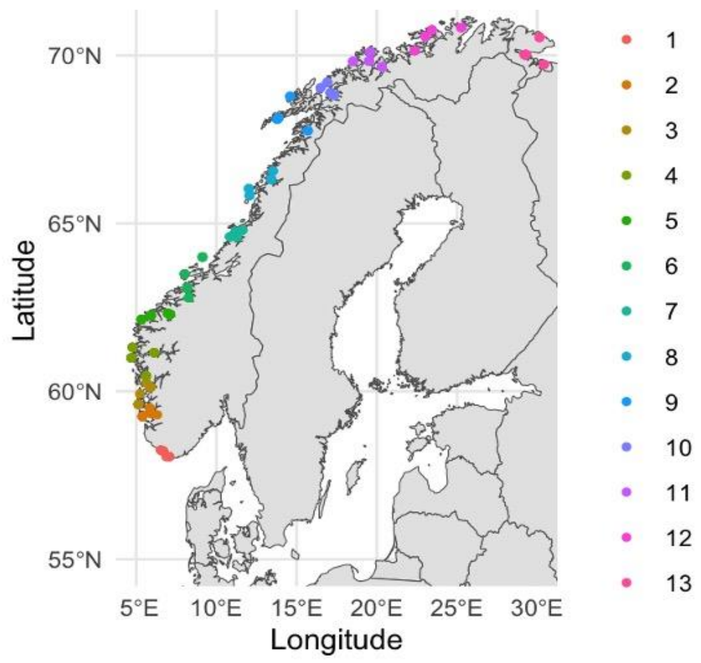

Figure 2: Overview of the four selected locations for each production area (1 – 13).

The findings of this paper demonstrates that there is a strong correlation between higher levels of Sea Lice and higher temperatures.

REFLECTIONS

Growing sea lice numbers, along with the failure to find suitable and reliable treatments, highlight the importance of prevention methods. By utilizing knowledge about the parasites' behavior, it might be possible to reduce sea lice numbers.

UNIVERSITY OF BERGEN
Faculty of Science and Technology

REFERENCES

- Lovdata (2009) *Forskrift om bekjempelse av lus i akvakulturanlegg (luseforskriften) - Lovdata*, *Lovdata*. Available at: https://lovdata.no/dokument/SFO/forskrift/2009-08-18-1095 (Accessed: 17 October 2024).
- BarentsWatch. (u.å.) *Lakselus i oppdrettsanlegg.* Tilgjengelig fra: https://www.barentswatch.no/data/fishhealth/lice [Lest 14. november 2024].

DO NOT USE THIS AREA AS IT WILL DISAPPEAR IN THE POSTER CLAMPS