Lakselus utvikling i et område med koordinert brakklegging gjennom 3 produksjonssykluser

Lone S. Jevne
Taskforce Lakselus
22.01.2020

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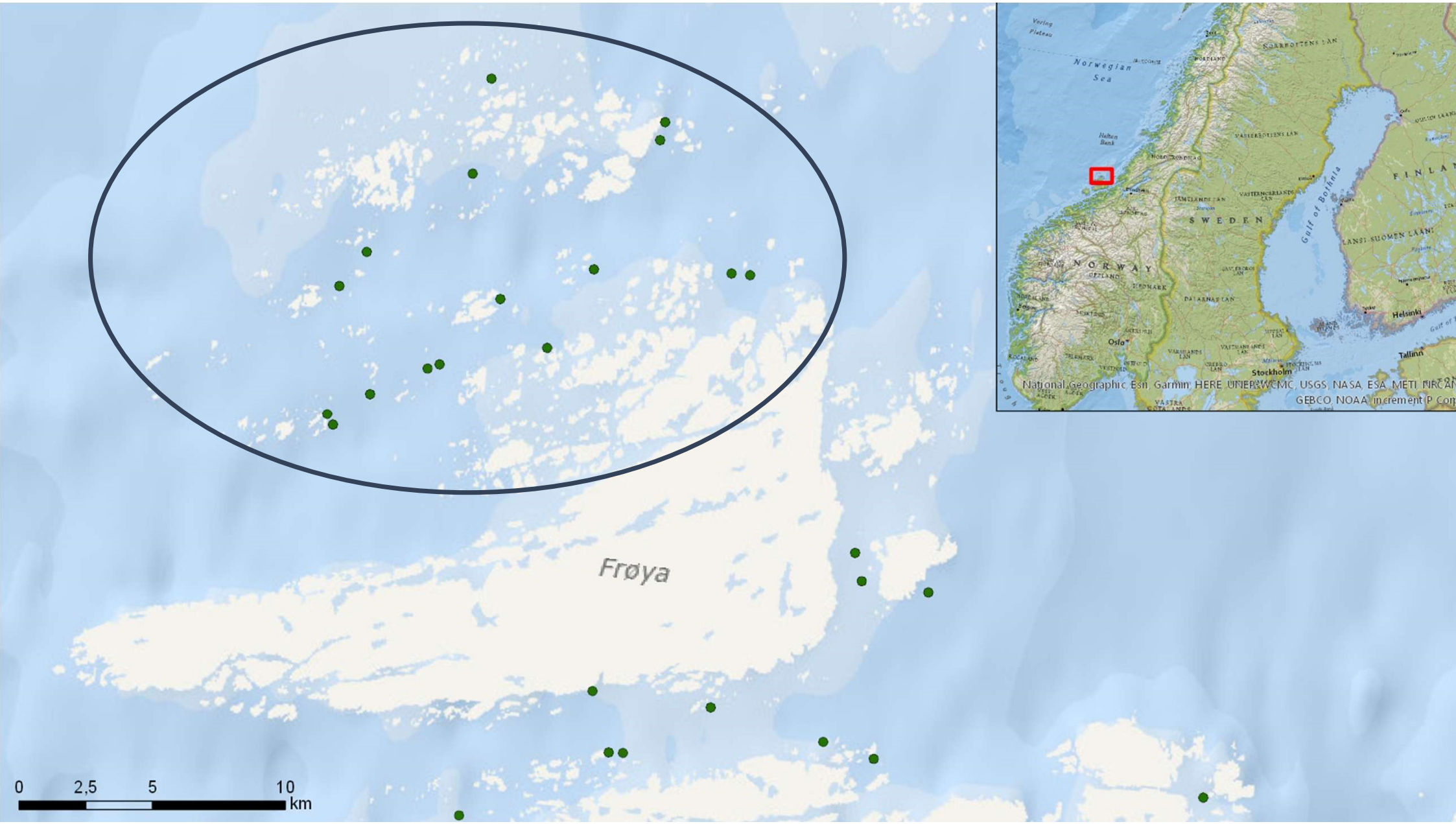
NTNU Oceans


Frøya
0
2,5
5
10
km
Norwegian Sea
NORWAY
SWEDEN
FINLAND
Oslo
Stockholm
Helsinki
Tallinn
Gulf of Bothnia
National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN
GEBCO, NOAA, increment P Corp

De viktigste funnene

- Snakk sammen
- Vær tidlig ute

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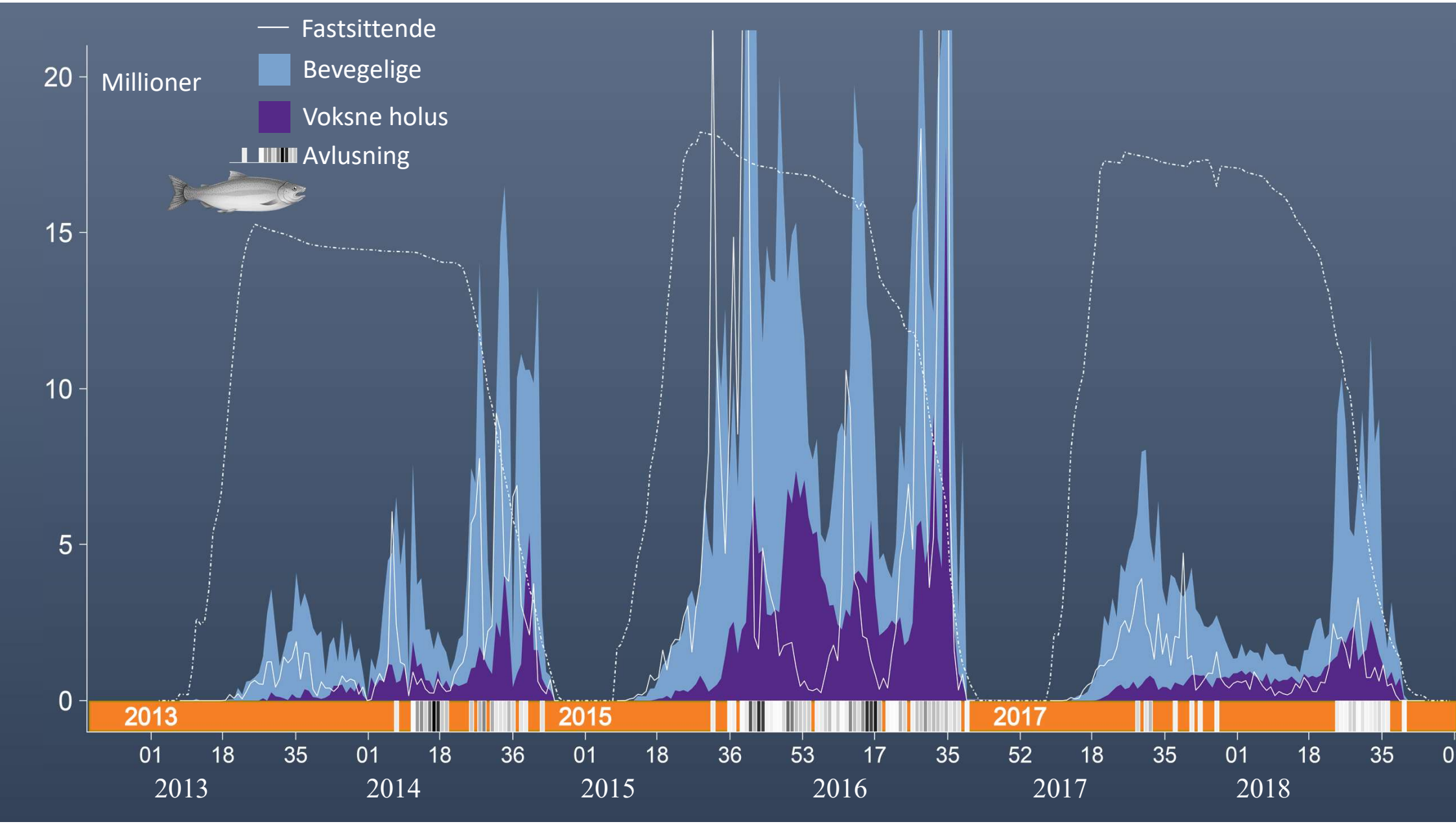
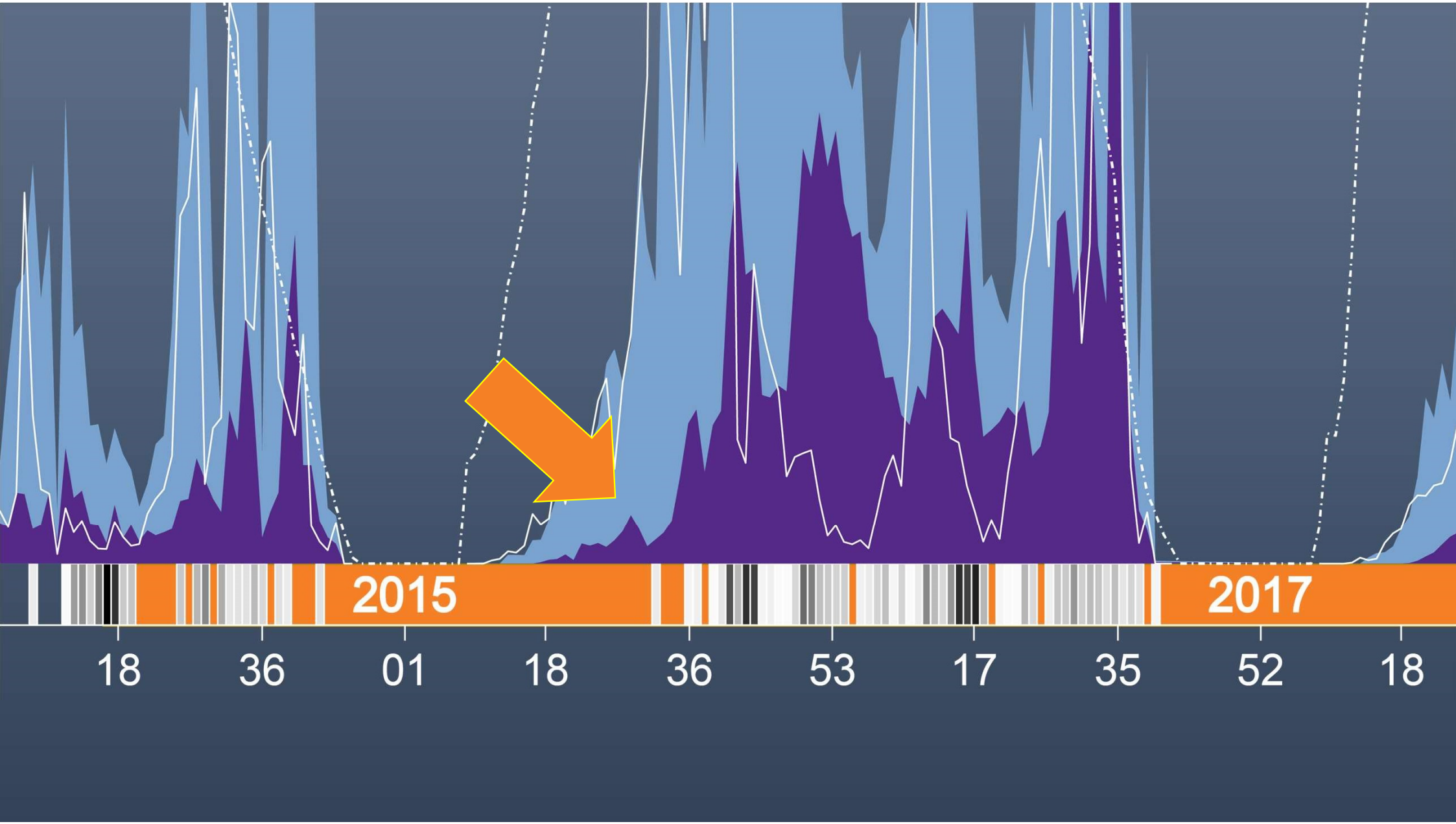
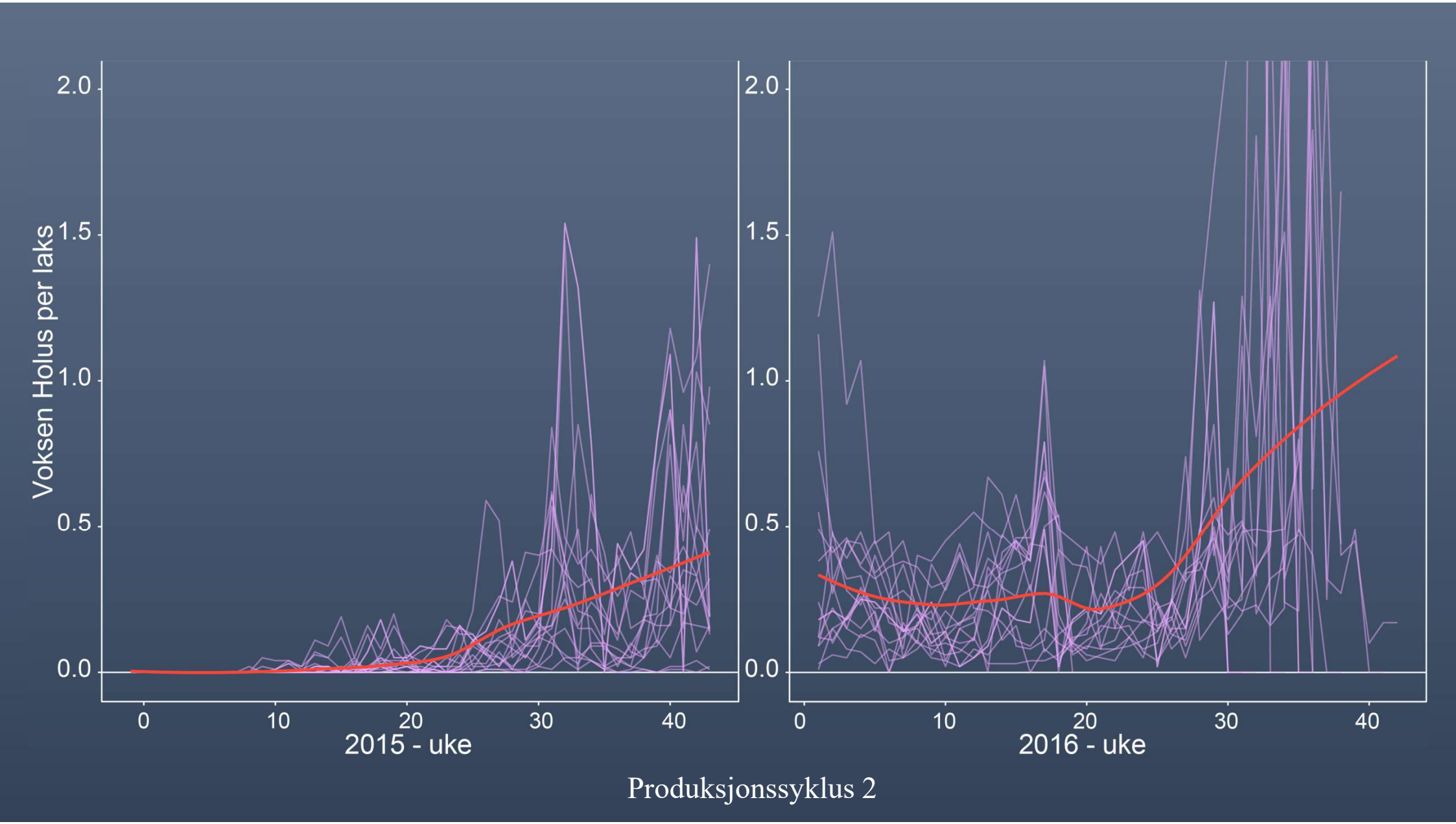
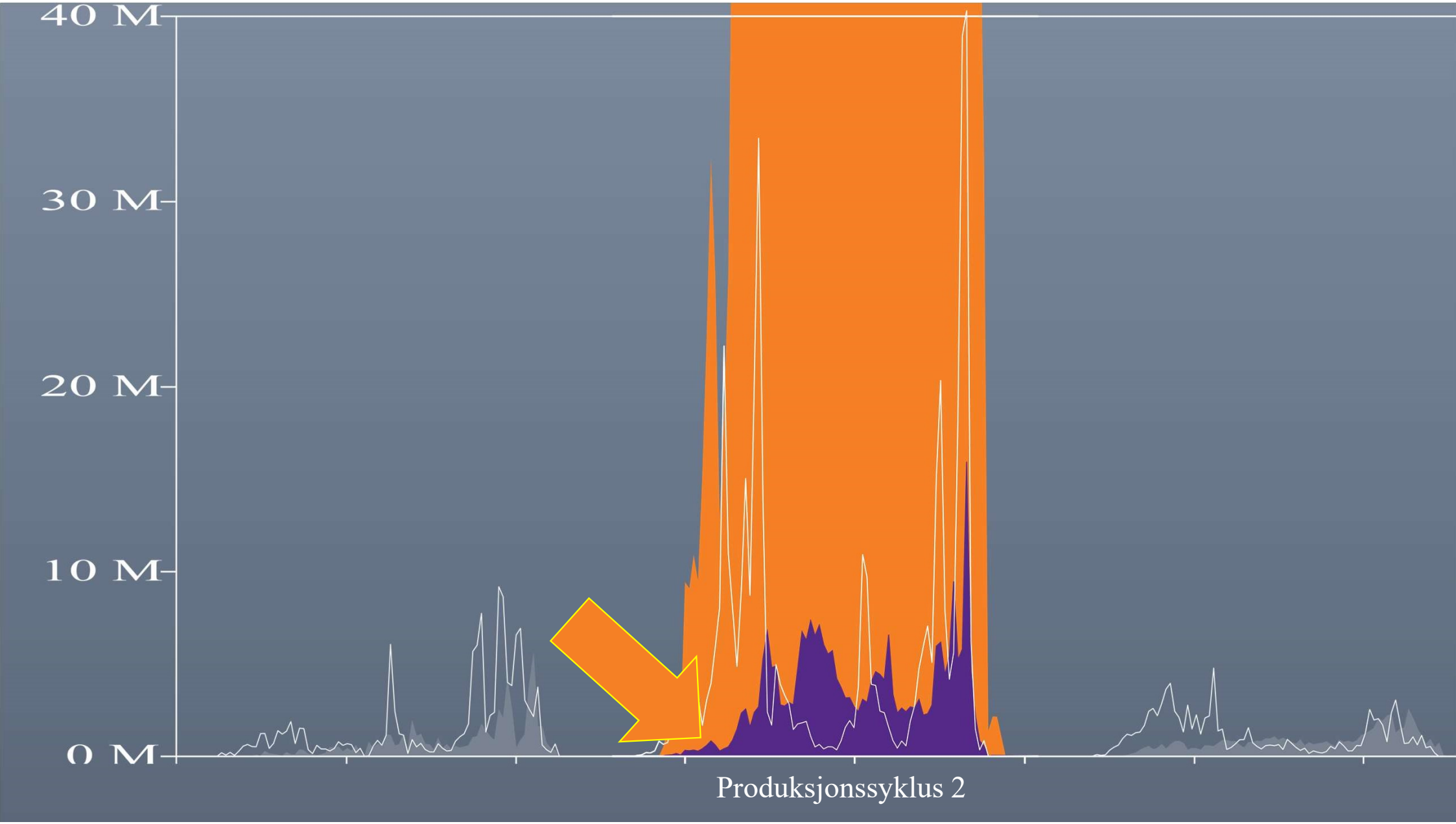

Fastsittende
Bevegelige
Voksne holus
Avlusning
Millioner
20
15
10
5
0
2013
2015
2017
01 18 35 01 18 36 01 18 36 53 17 35 52 18 35 01 18 35 0
2013
2014
2015
2016
2017
2018

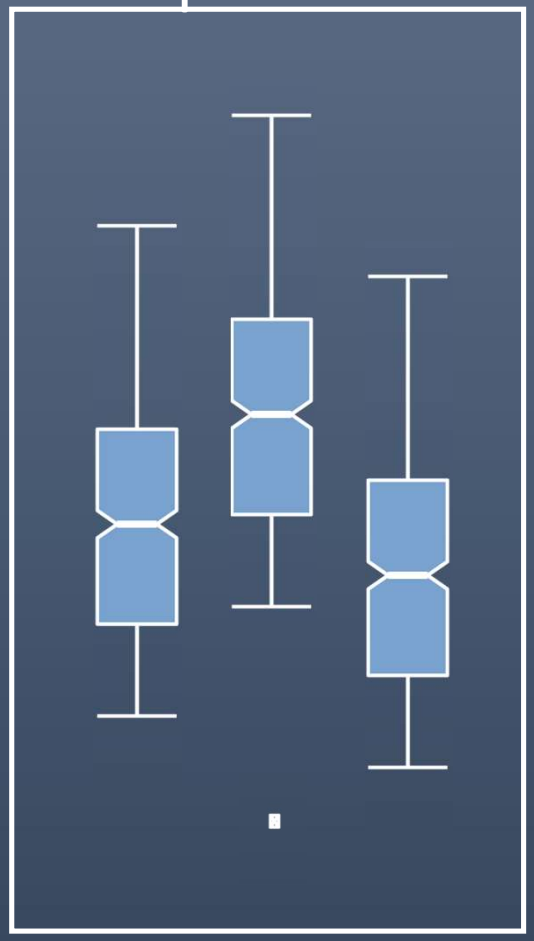

2015
2017
18
36
01
18
36
53
17
35
52
18

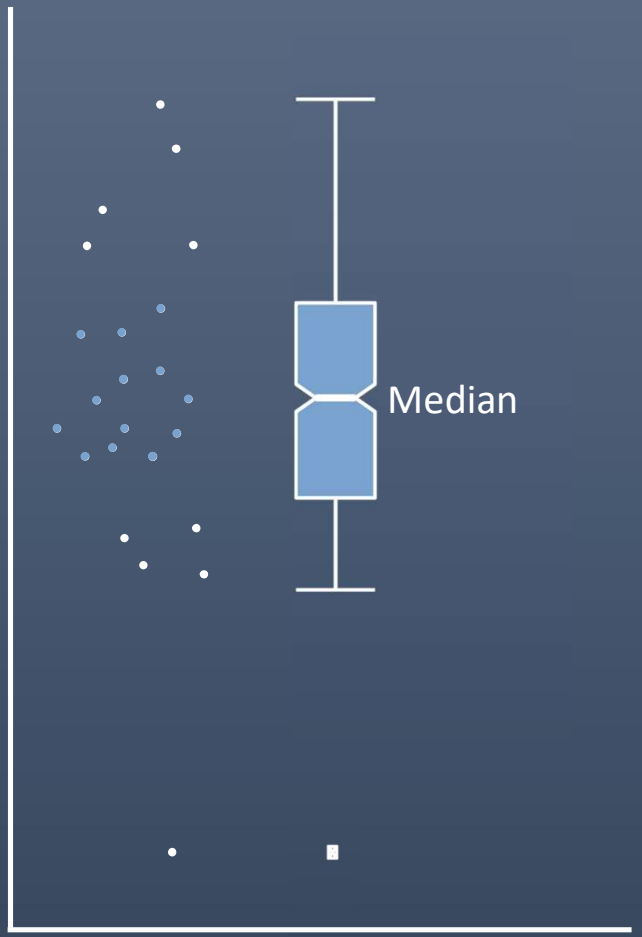


Produksjonssyklus 2


40 M
30 M
20 M
10 M
0 M
Produksjonssyklus 2

Boxplot





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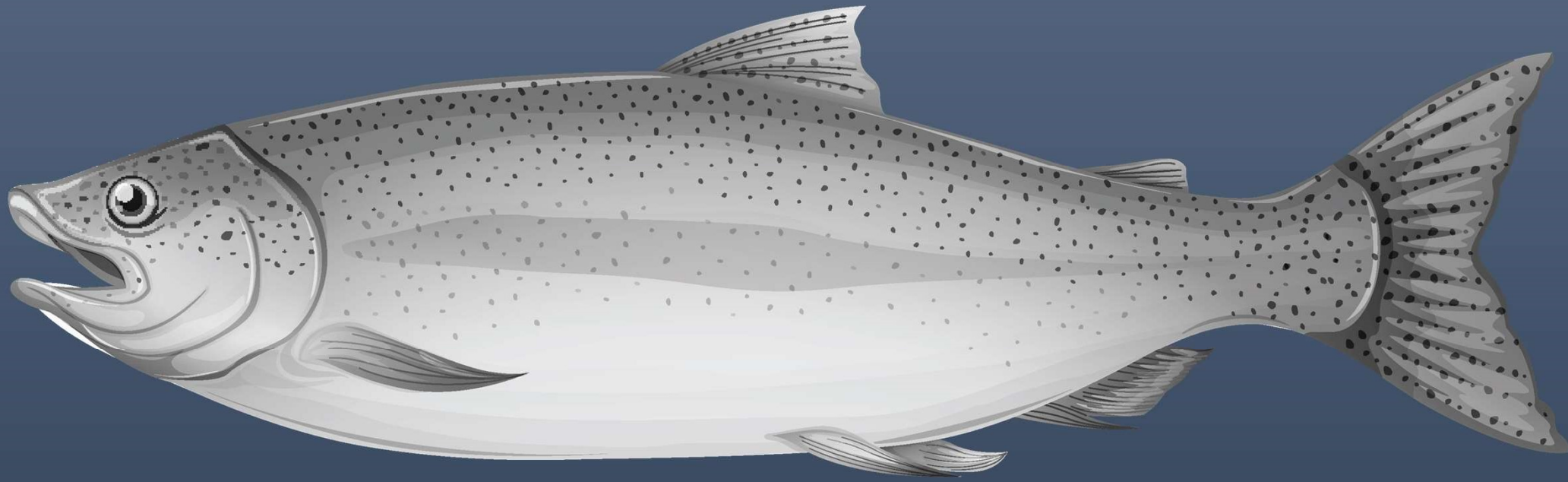
Når kom påslaget ?



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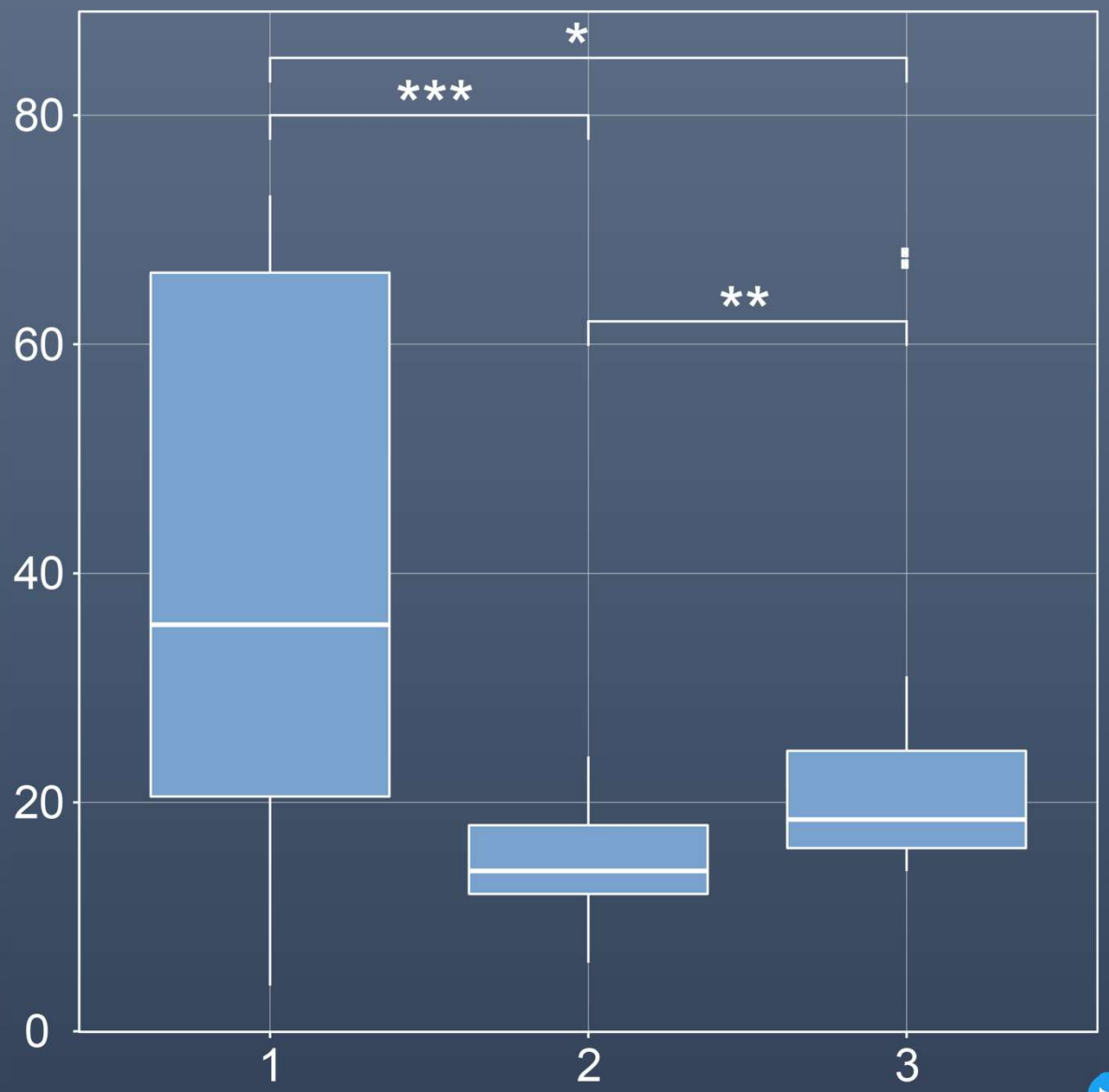
Uker fra utsett til 0.3 fastsittende lus per laks



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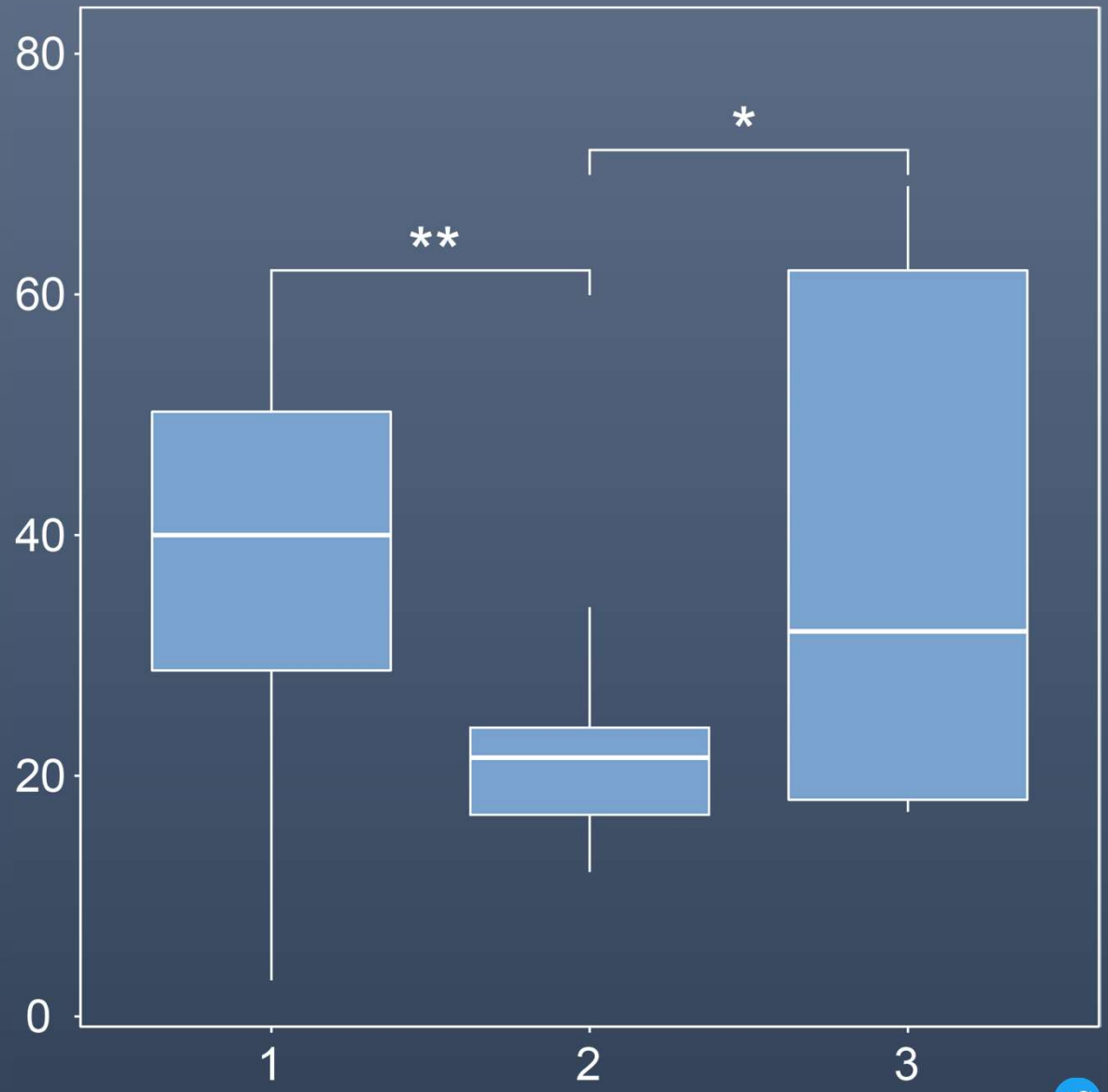
Uker fra utsett til 0.1 voksen holus per laks



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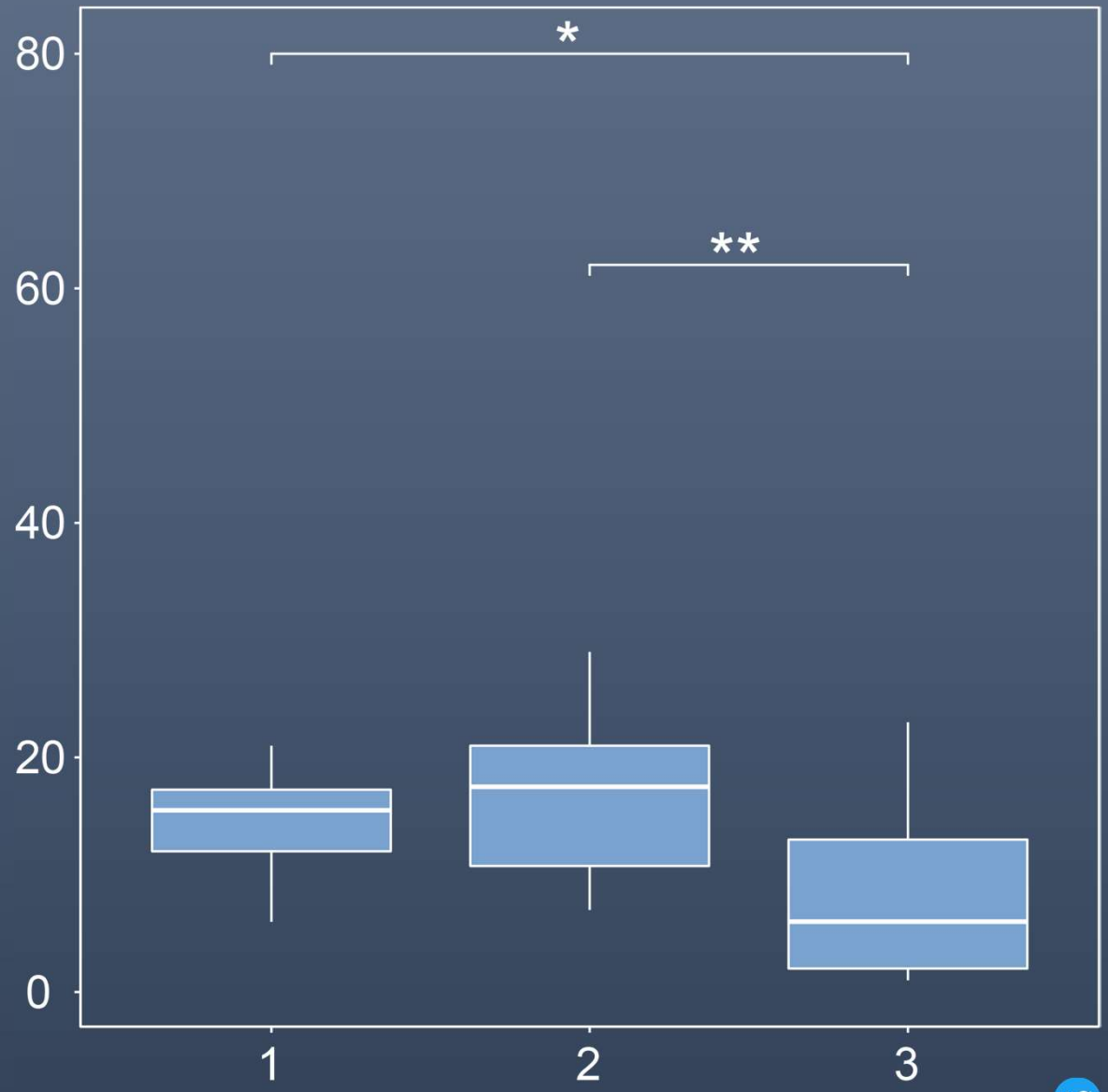
Uker fra utsett til utsett av første rensefisk



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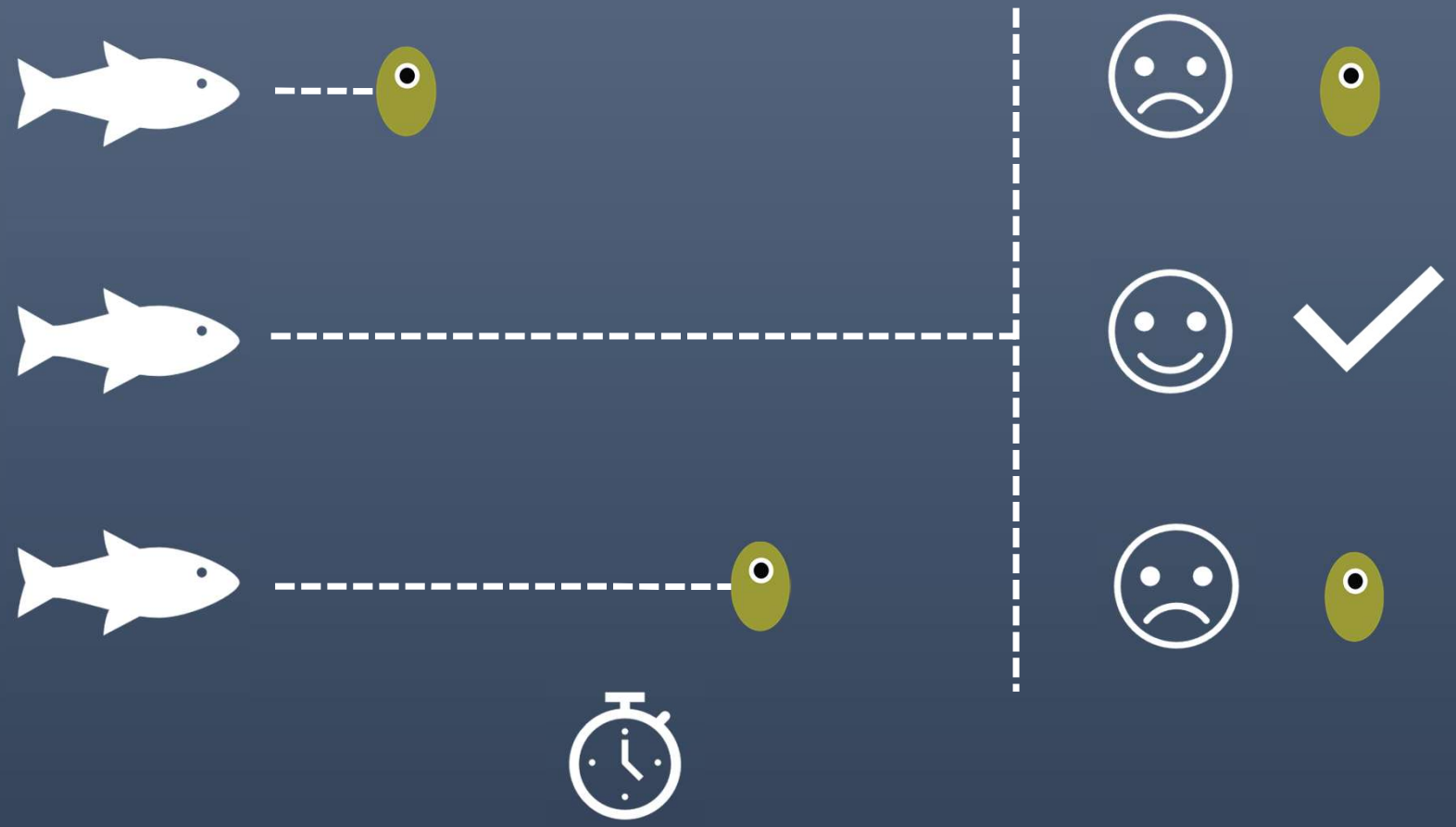
Overlevelsesanalyser



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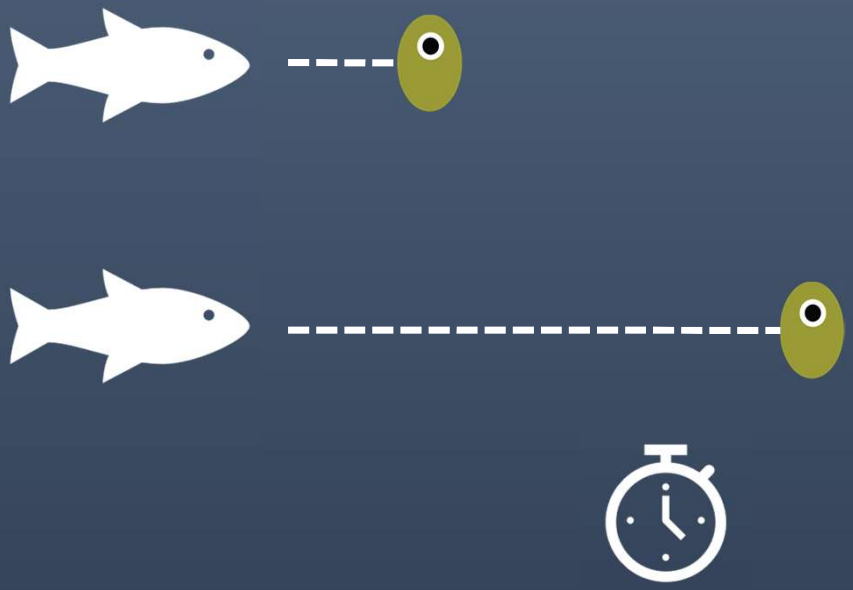
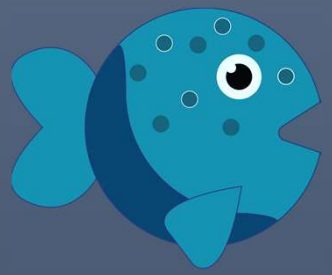
Overlevelsesanalyser - Tid til 0.1 Voksne holus





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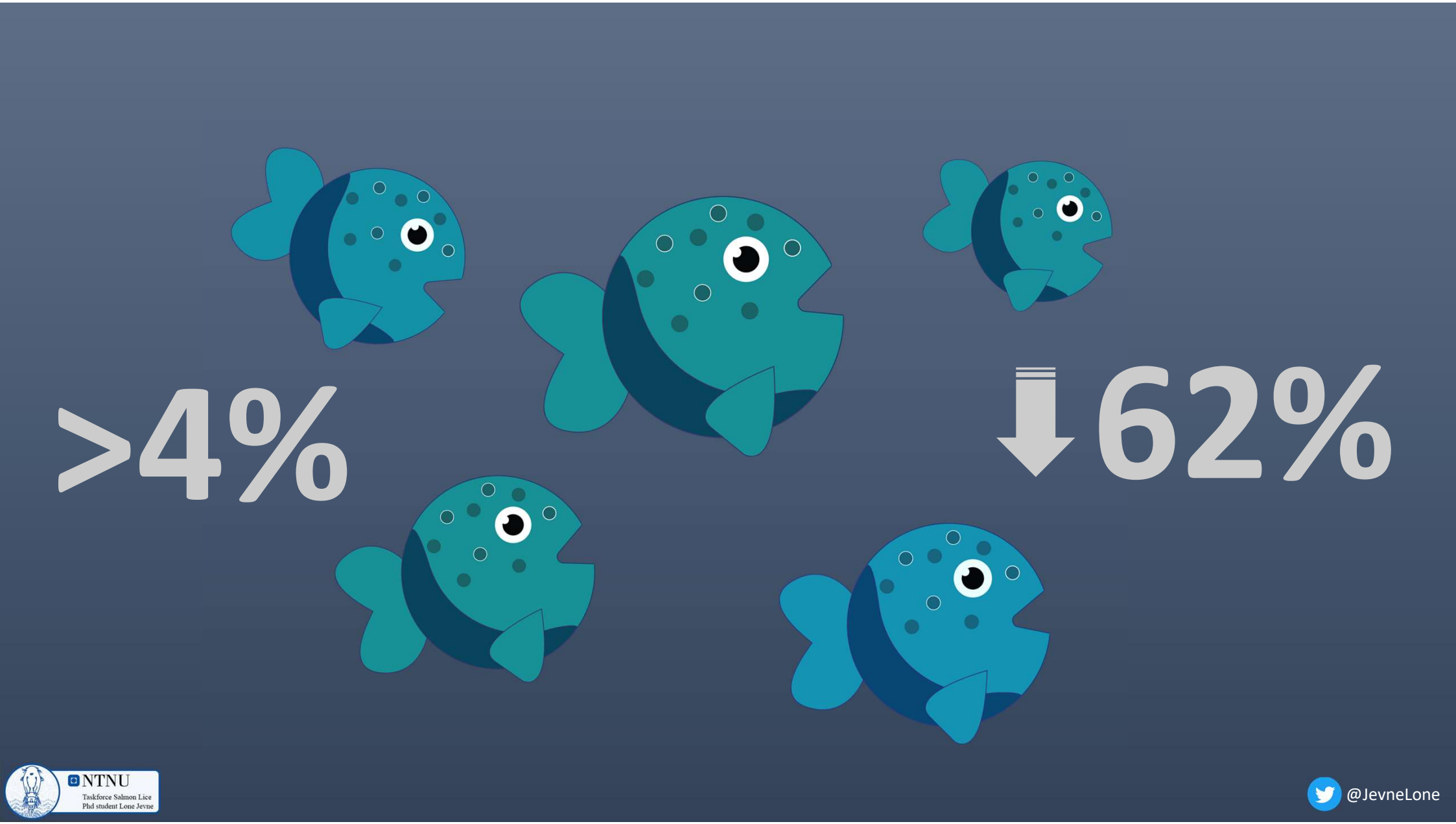

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https://onlinelibrary.wiley.com/doi/full/10.1111/jfd.13080

Received: 31 May 2019 | Revised: 3 August 2019 | Accepted: 5 August 2019

DOI: 10.1111/jfd.13080

ORIGINAL ARTICLE

Journal of Fish Diseases WILEY

How are the salmon lice (*Lepeophtheirus salmonis* Krøyer, 1837) in Atlantic salmon farming affected by different control efforts: A case study of an intensive production area with coordinated production cycles and changing delousing practices in 2013–2018

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Funding information
Norwegian Seafood Research Fund, Grant/Award Number: 901241; Salmon Industry in Mid-Norway

Abstract

The aims of the present study were to describe the salmon lice (*Lepeophtheirus salmonis* Krøyer, 1837) situation in an intensive salmon production area in mid-Norway and to consider implications of changing practices of how salmon lice infestation can be controlled. The results in this study suggest that there are steps that can be carried out to keep salmon lice under control even during years when the temperature facilitates a quick salmon lice development. The present work indicates that the use of cleaner fish can delay the time it takes adult female lice to reach 0.1 per salmon in the beginning of a production cycle. It suggests that the timing of cleaner fish deployment into salmon cages can influence its effectiveness in controlling salmon lice. It also gives caution to letting salmon lice develop unchecked, even at levels far below the current lice limit, because of the difficulties to control salmon lice when the external infection pressure is too high. This study took place during a rapid change in delousing methods, in an area with coordinated salmon production. Despite its exploratory nature, this study offers insights into the salmon lice fluctuations in relation to efforts aimed at controlling it.

KEYWORDS

cleaner fish, delousing, *Lepeophtheirus salmonis*, preventative methods, salmon aquaculture, salmon lice

Oppsummering

- En lusesituasjon kan oppstå raskt
- Rensefisk kan utsette problemet
- Tidlig utsett av rensefisk
- Tidlig tiltak mot lus

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EMILSEN FISK AS

Kilder:

Stien, A., Bjørn, P.A., Heuch, P.A., Elston, D.A., 2005. Population dynamics of salmon lice Lepeophtheirus salmonis on Atlantic salmon and sea trout. Mar. Ecol. Prog. Ser. 290, 263–275. http://dx.doi.org/10.3354/meps290263.