

Oppsamling av bevegelige lus som faller av og deres evne til spredning og reinfeksjon

FHF 901784 Luseoppsamling Sjø

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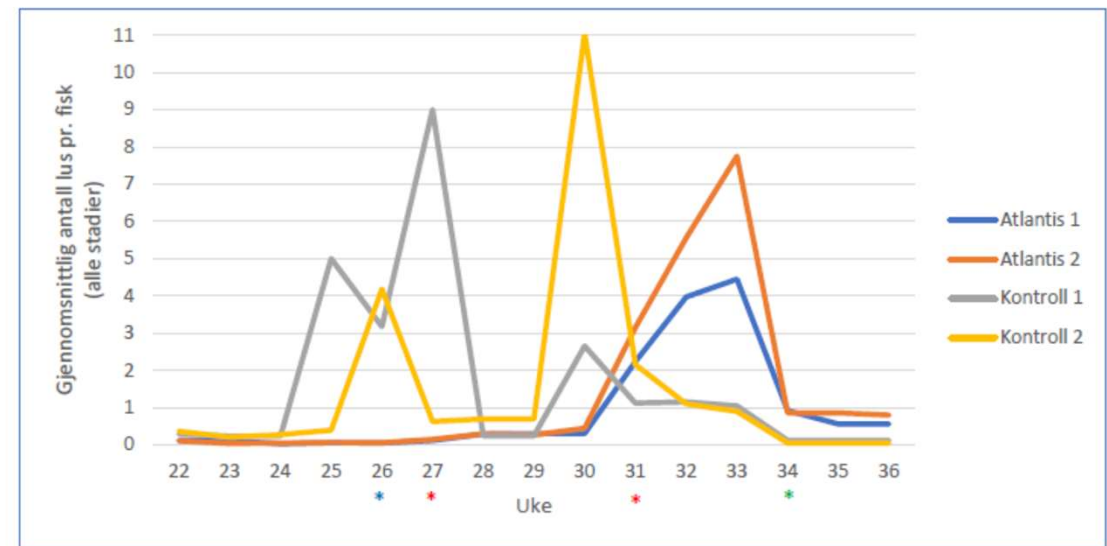
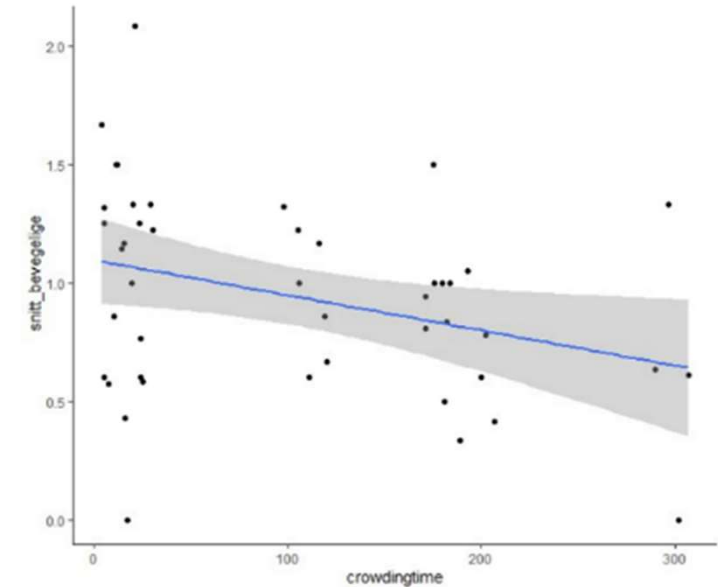
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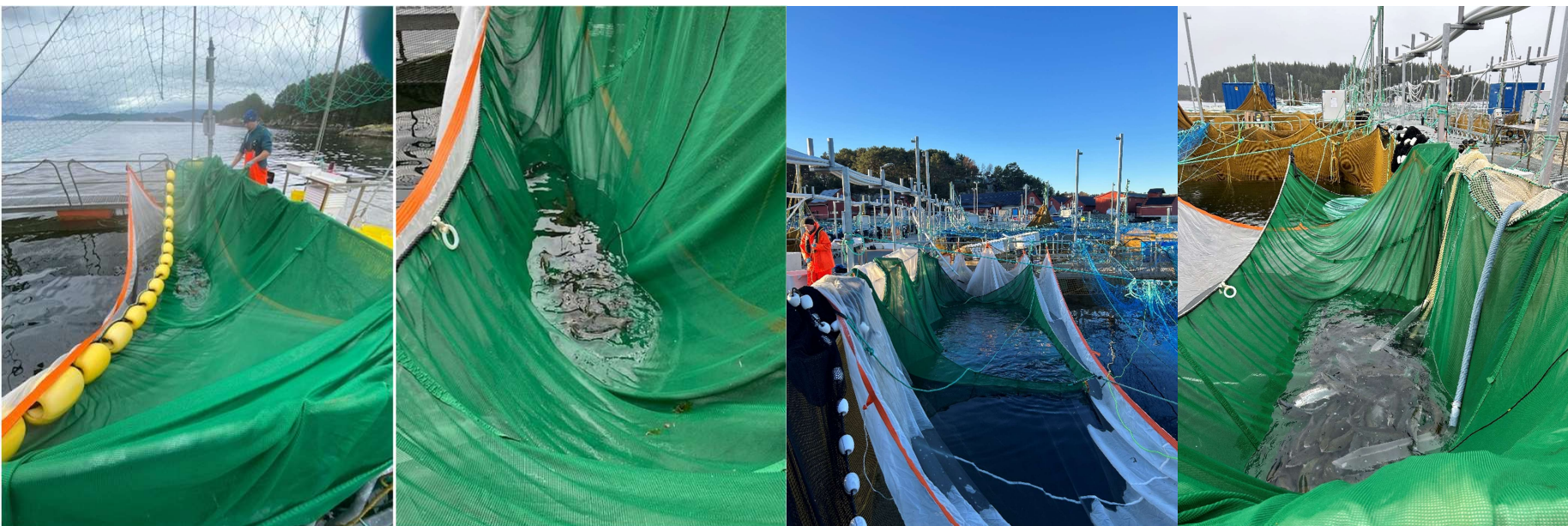
Lusekonferansen 2024, 22-23 januar, Trondheim

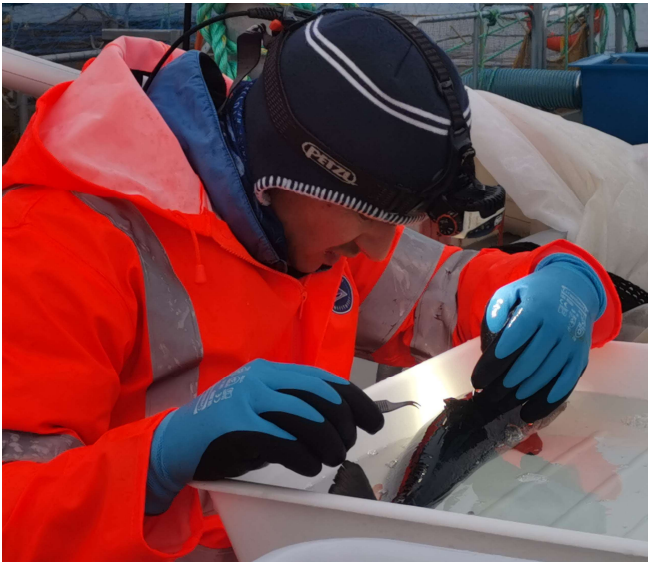
Bakgrunn

- Faller bevegelige lus av under trenging?
- Lever den lenge?
- Hva gjør bevegelige lus?
- Hvor langt kan den spres?
- Kan lusen reinfestere?
- Kan lusen samles opp?

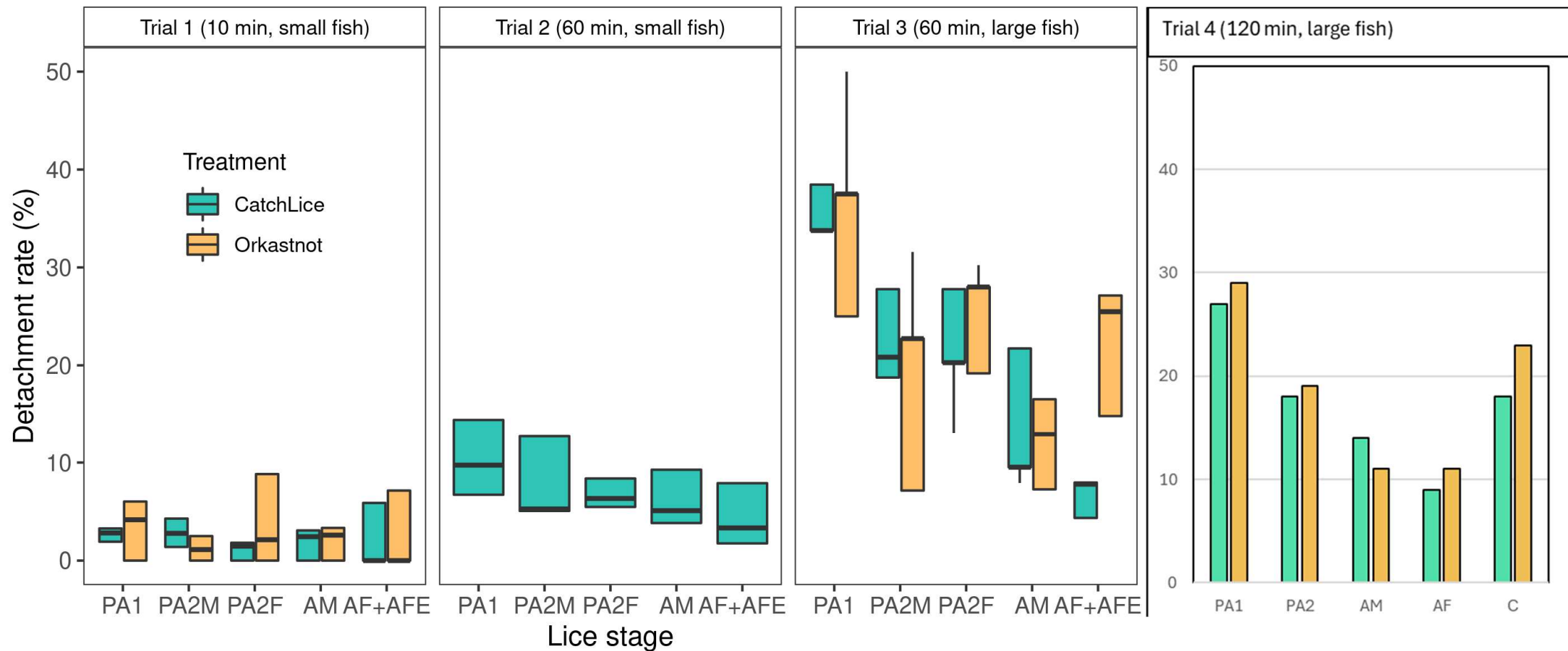


**Faller
bevegelige
lus av ved
trenging?**



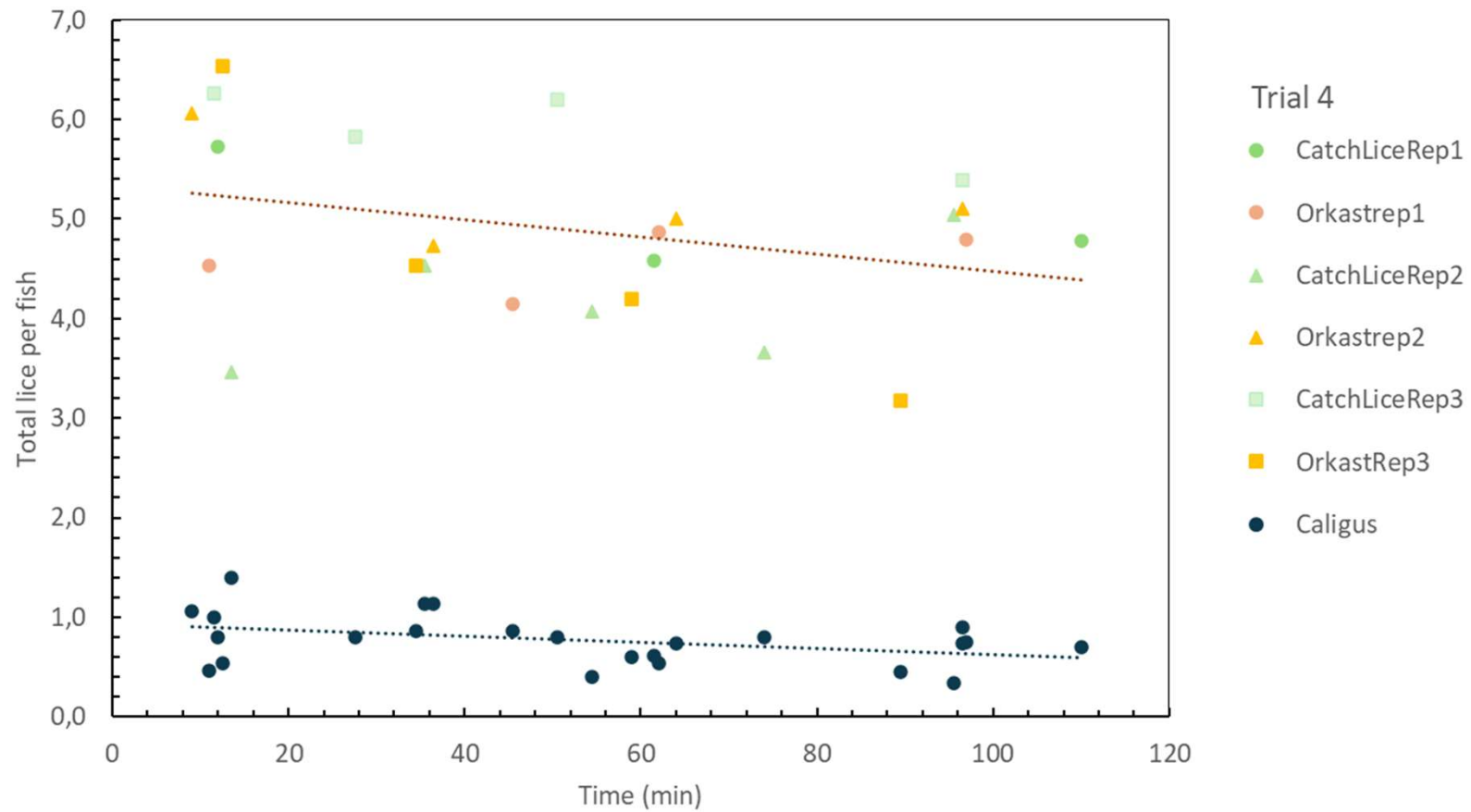


Bevegelige lus faller av



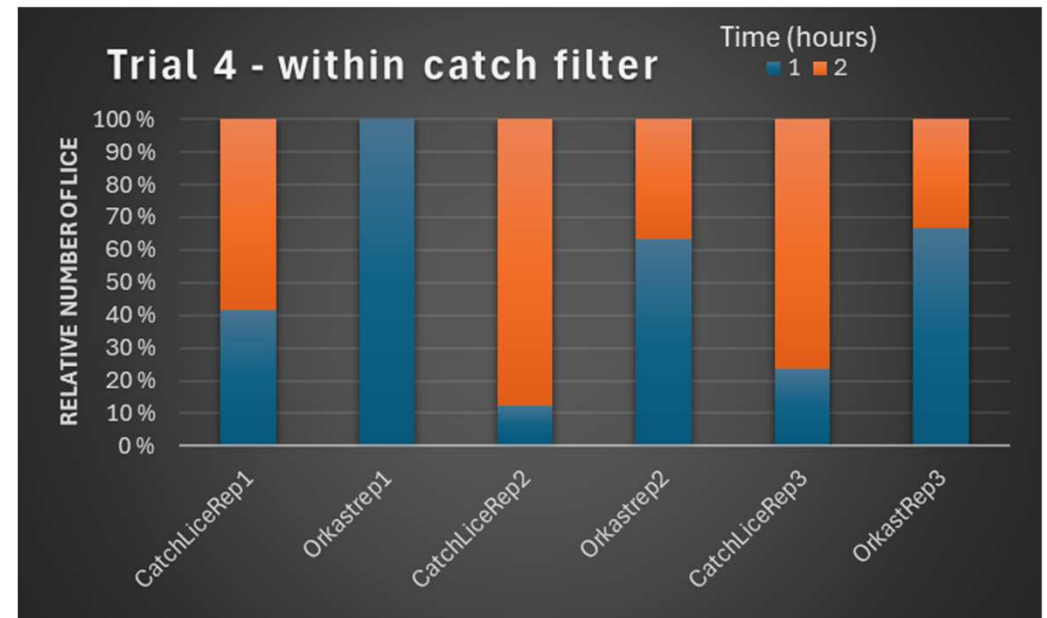
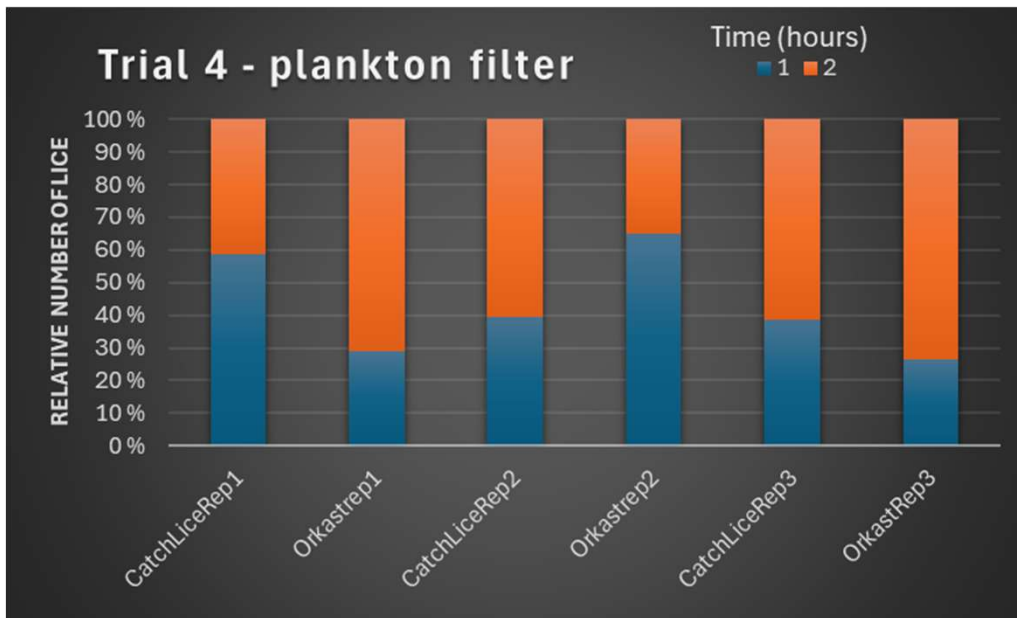
10-38% bevegelige lakselus faller av, 20% skottelus. Små lus faller mer av enn store.

Lusen faller av over tid

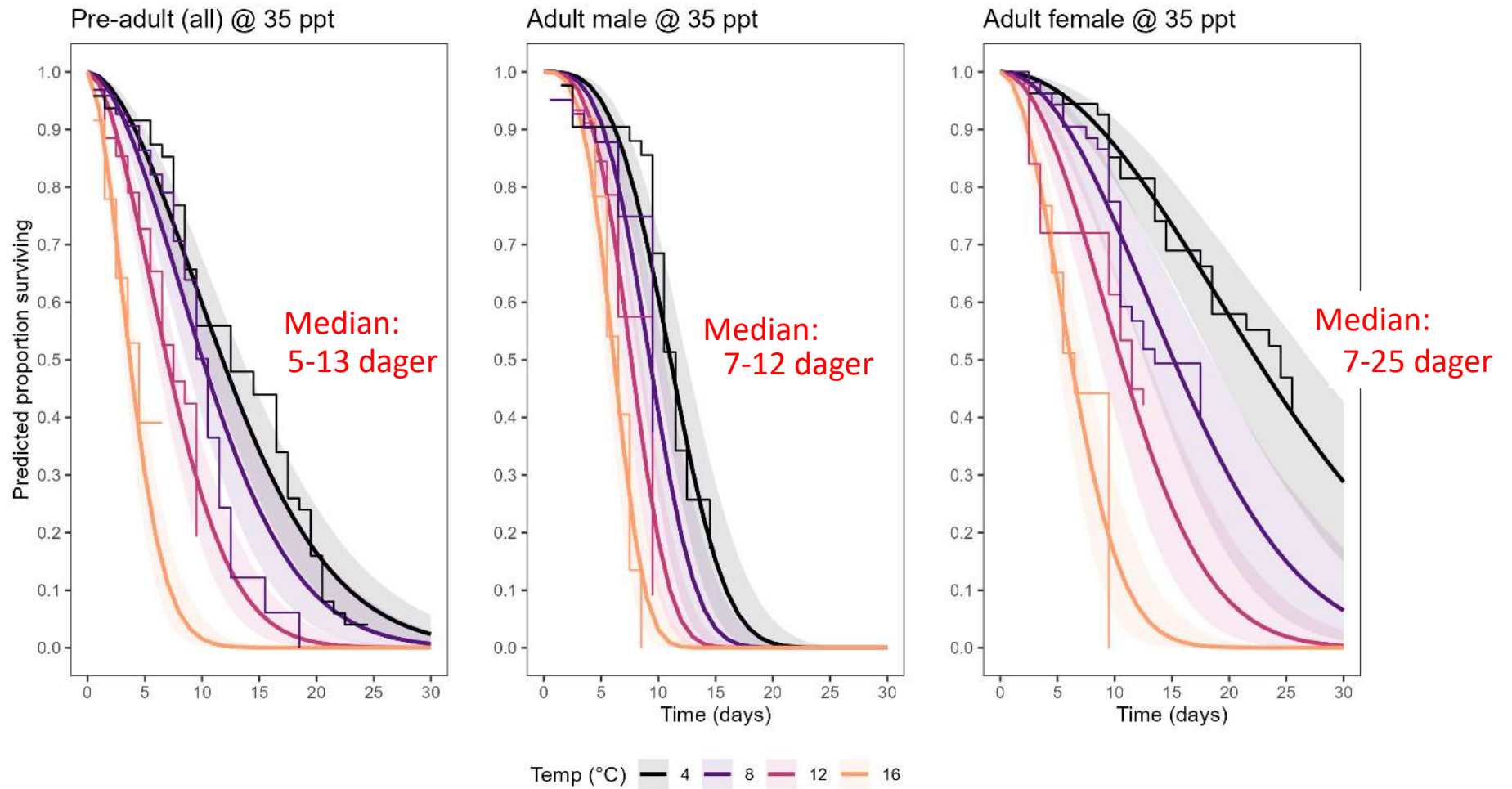


Lusen faller av over tid

Rød: 0-60 min. Blå 60-120 min

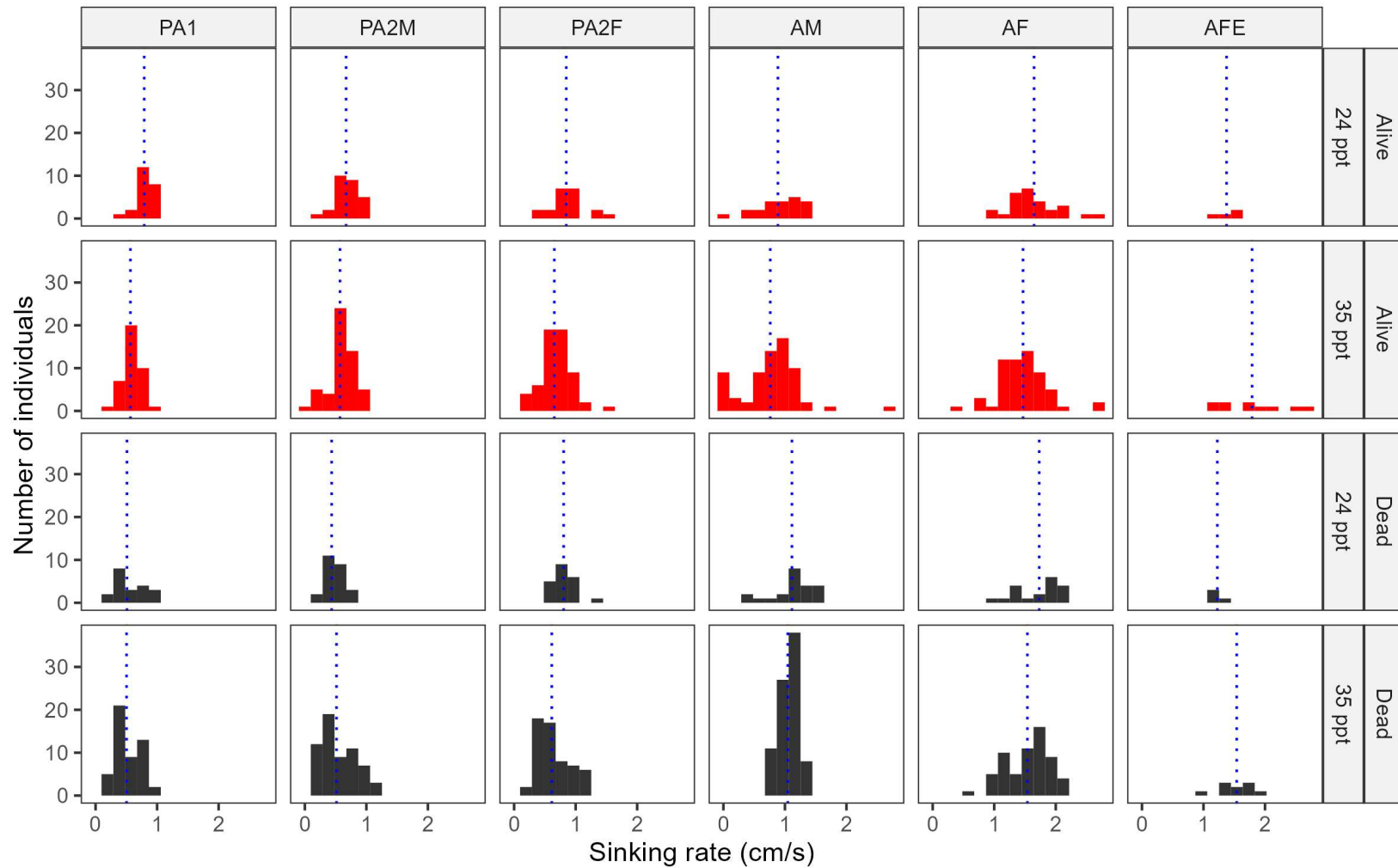


Lusen overlever 1-4 uker uten vert

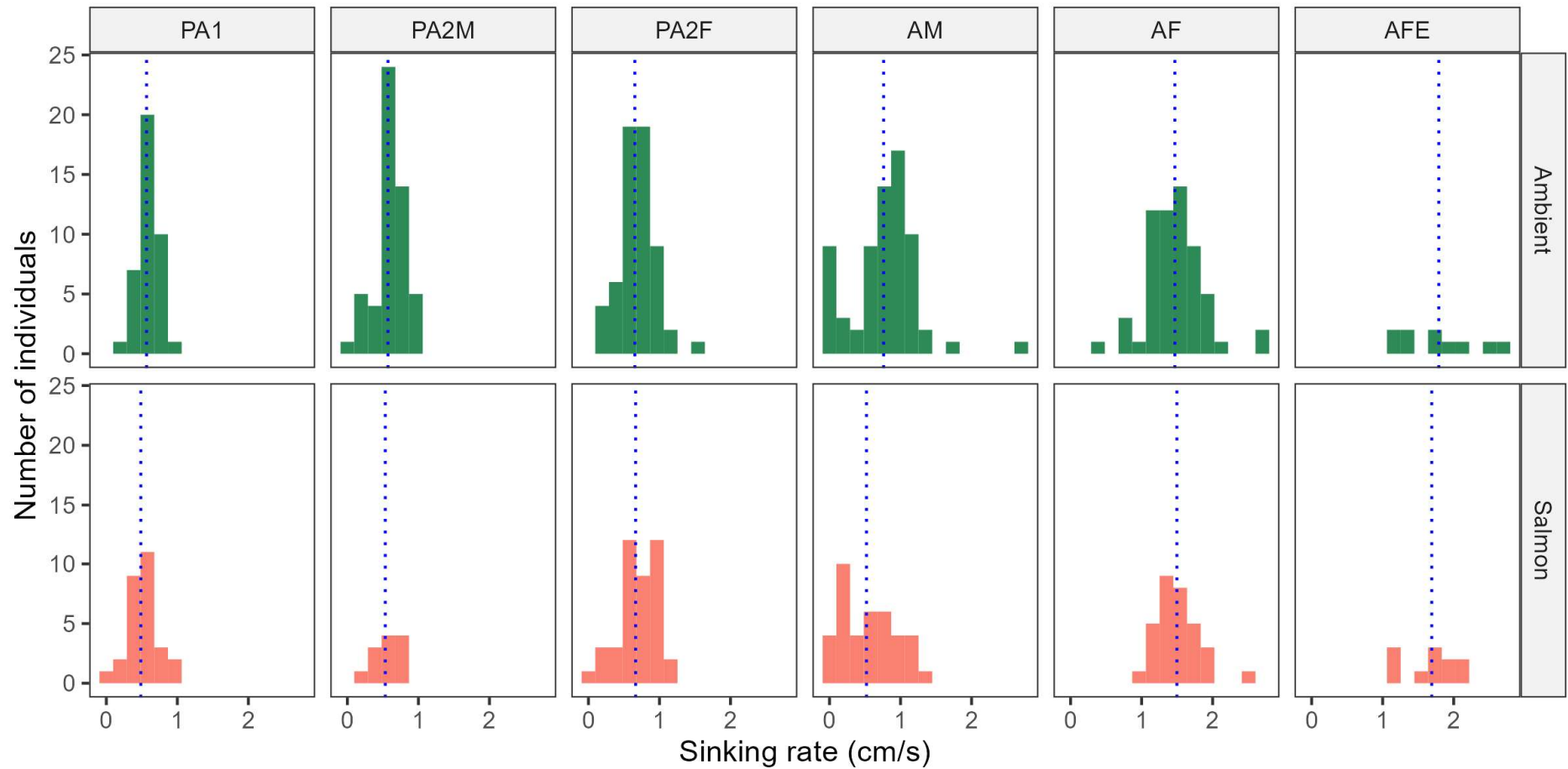


Bevegelige lus synker med $0,5-1,5 \text{ cm s}^{-1}$

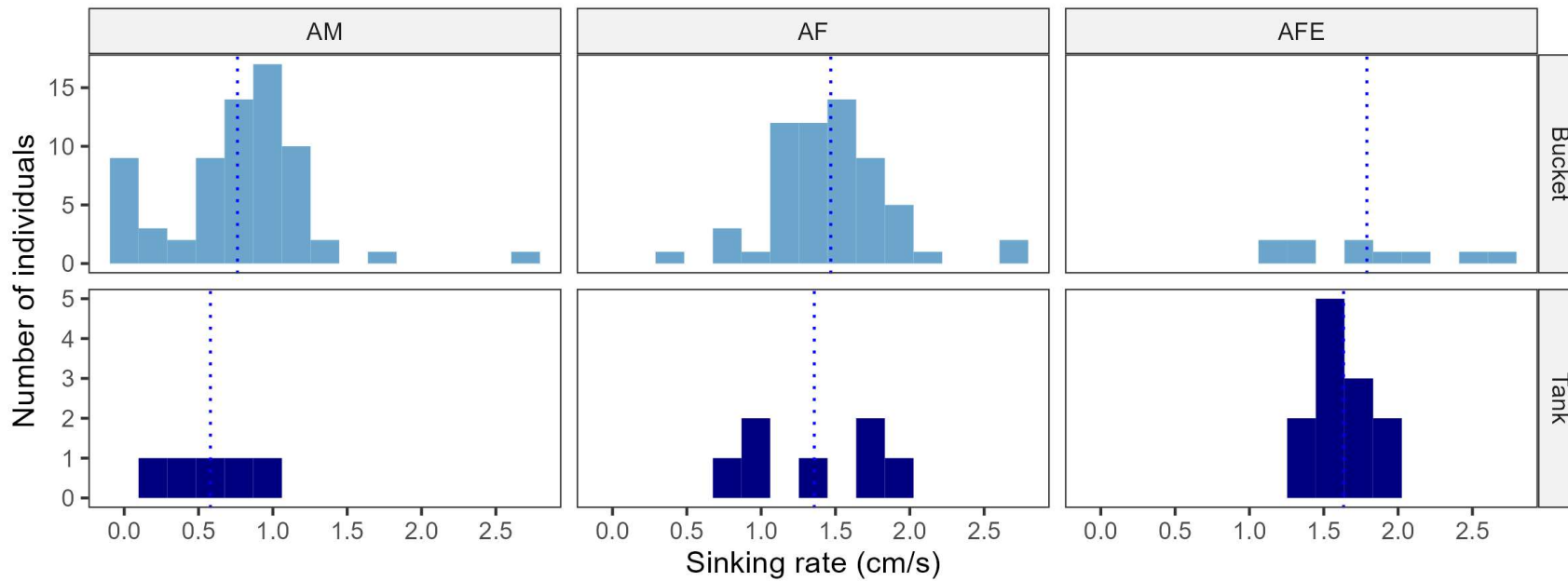
Større lus synker fortere
 Hanner er mer aktive
 Brakkvann = SV
 Død = levende
 Skottelus synker ikke



Lakselukt gir hanner pittelitt lavere synkerate



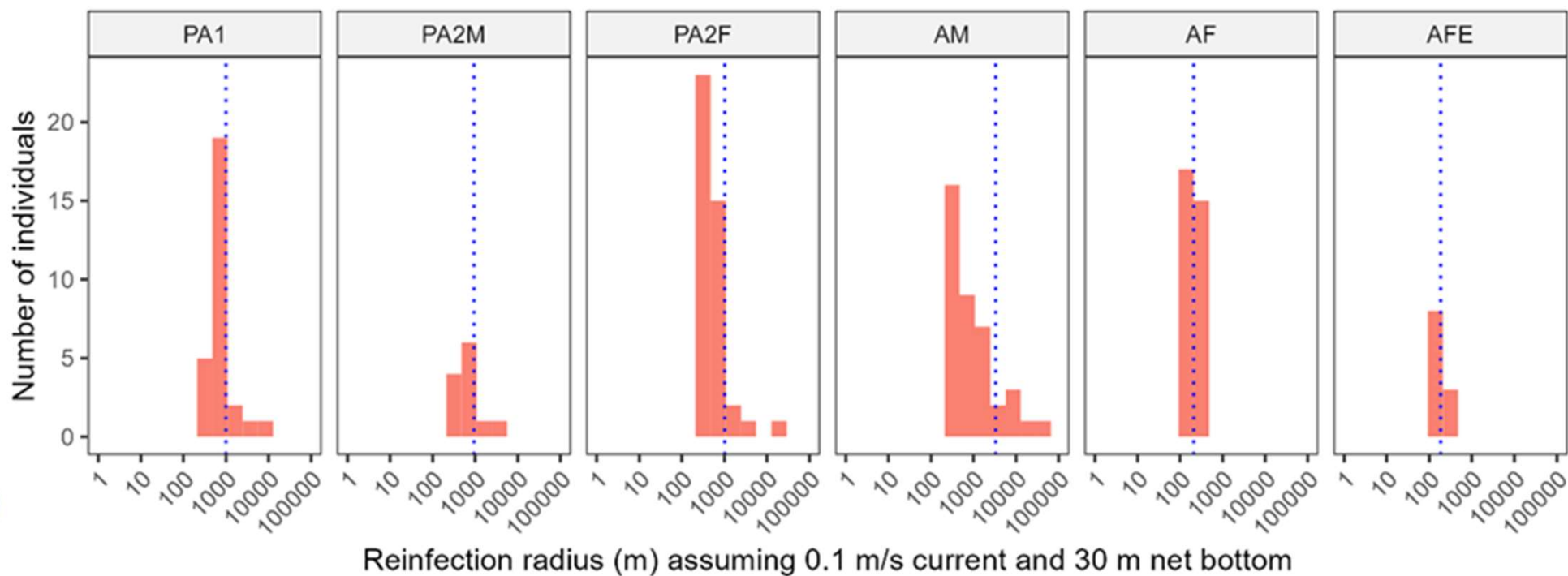
Lik synkehastighet i 40 og 340 cm dybde



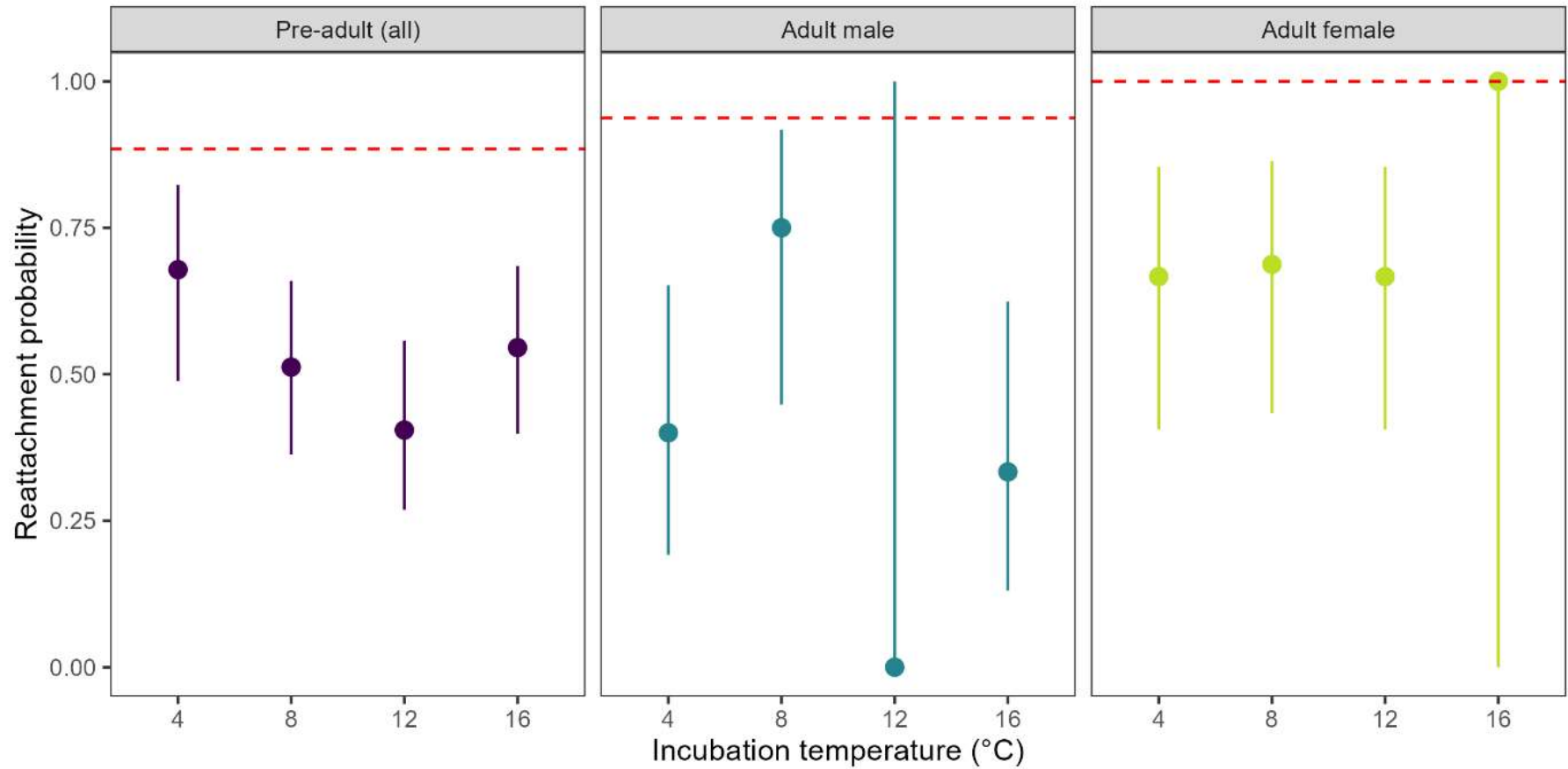
Men hva med økende dyp og trykk?

Hvor langt beveger lakselusen seg?

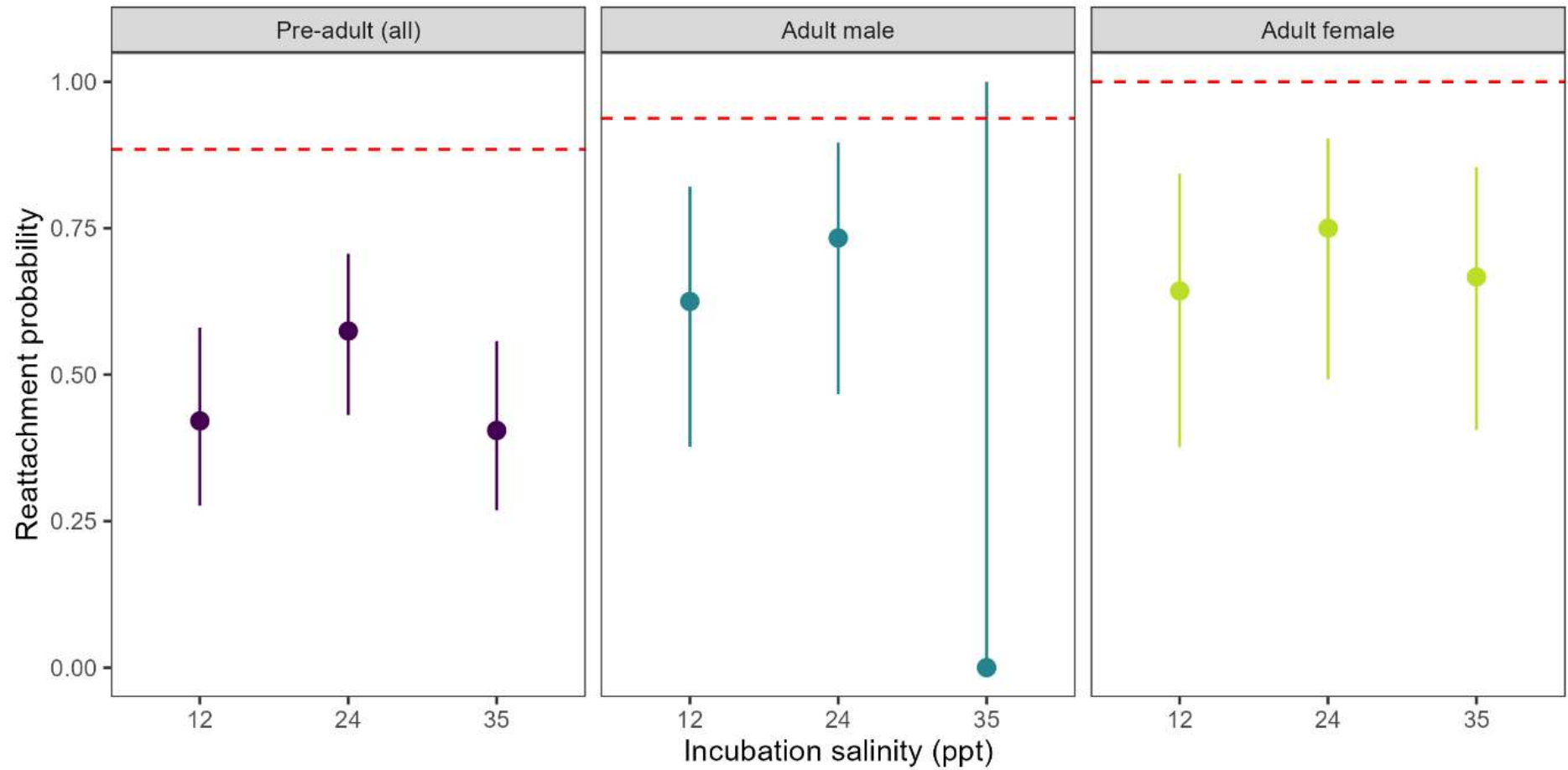
- Modellering av spredning ved relevante lokaliteter gjøres i 2024
- Preliminært eksempel: 0,3-5 km



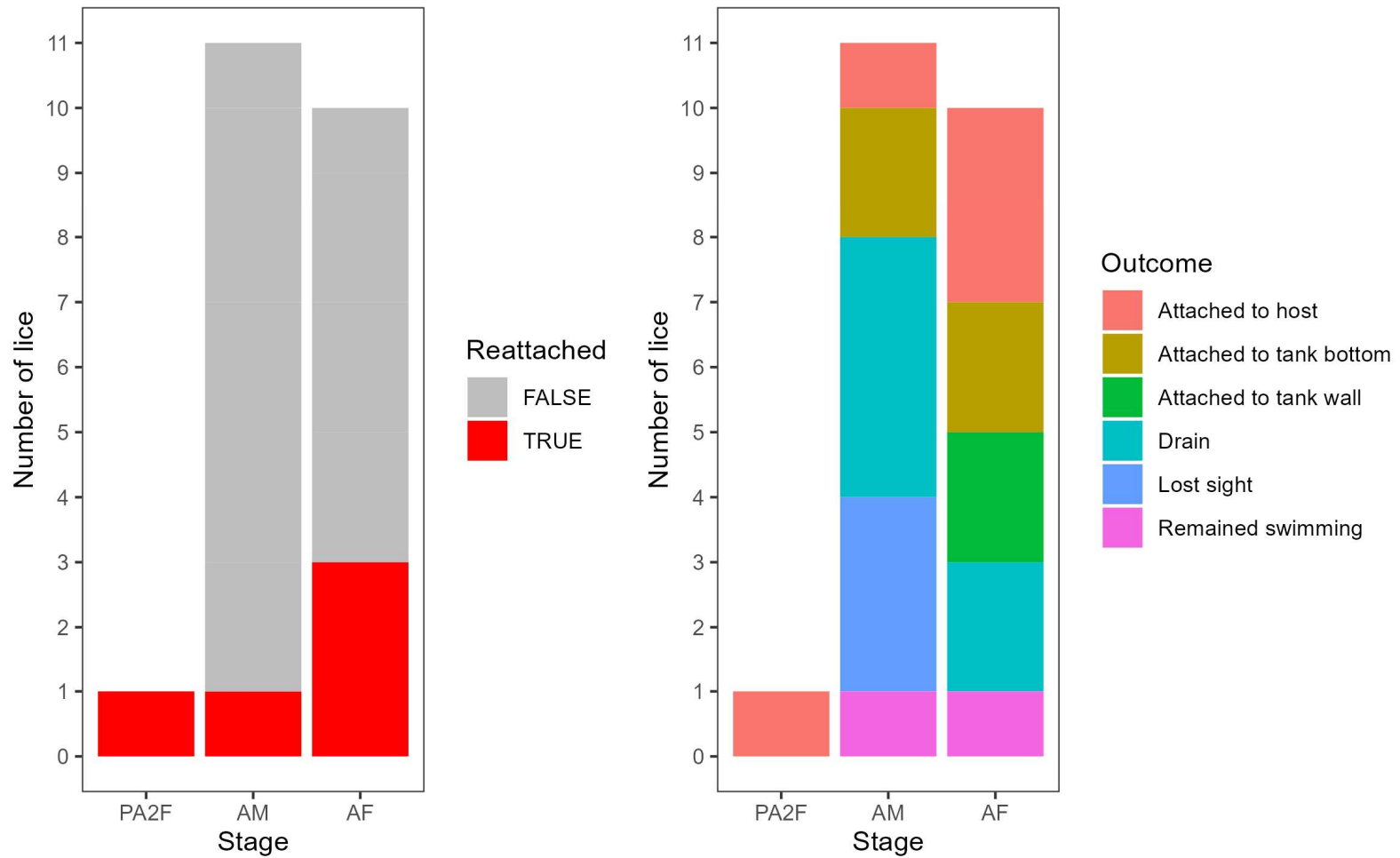
Lusen kan re-etablere seg, 4-16°C



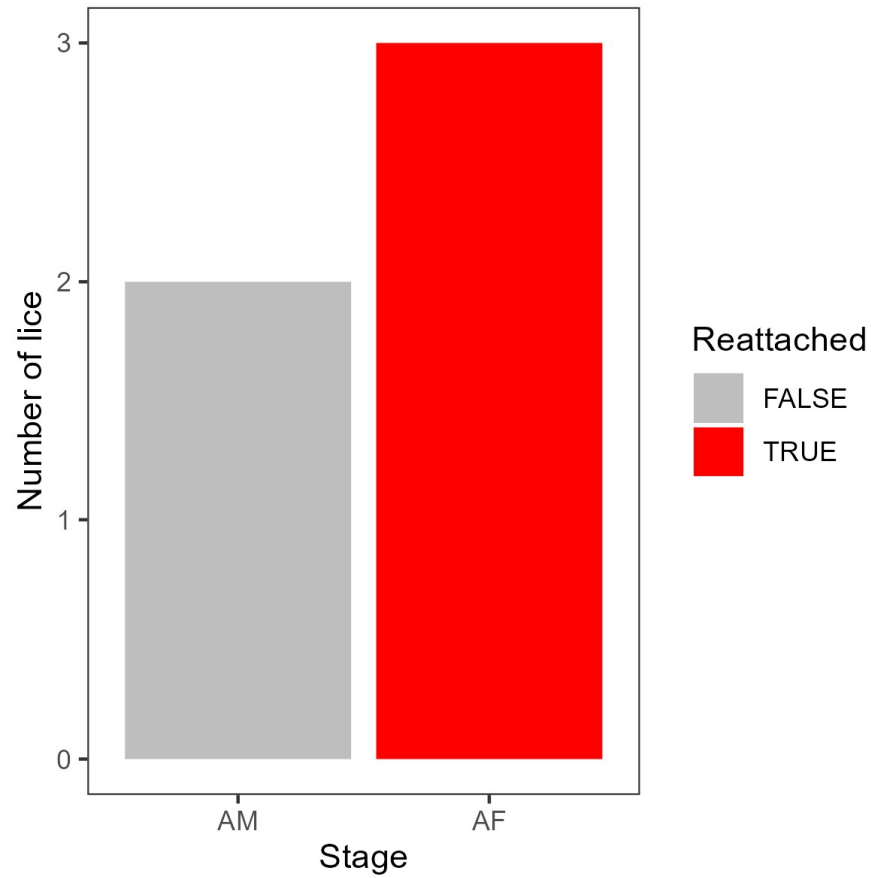
Lusen kan re-etablere seg ved 12, 24, 34 ppt



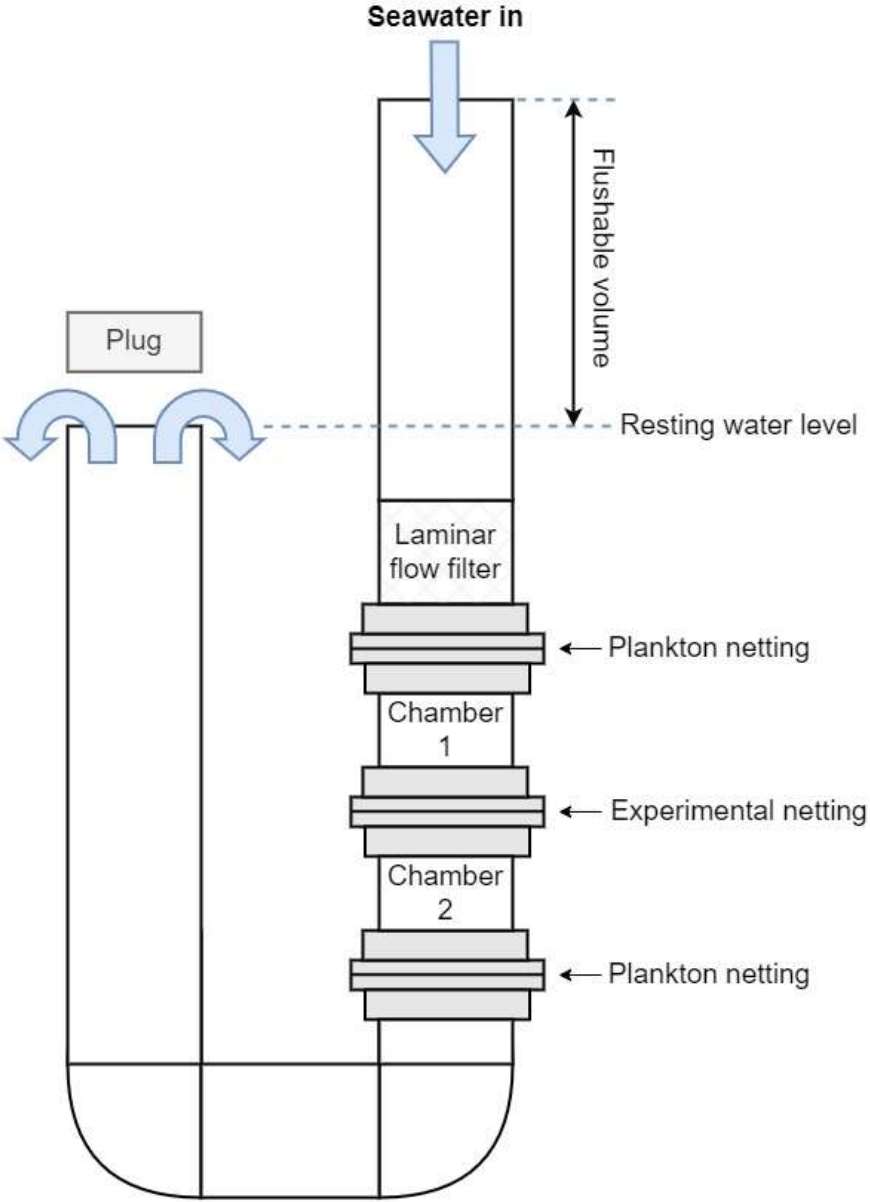
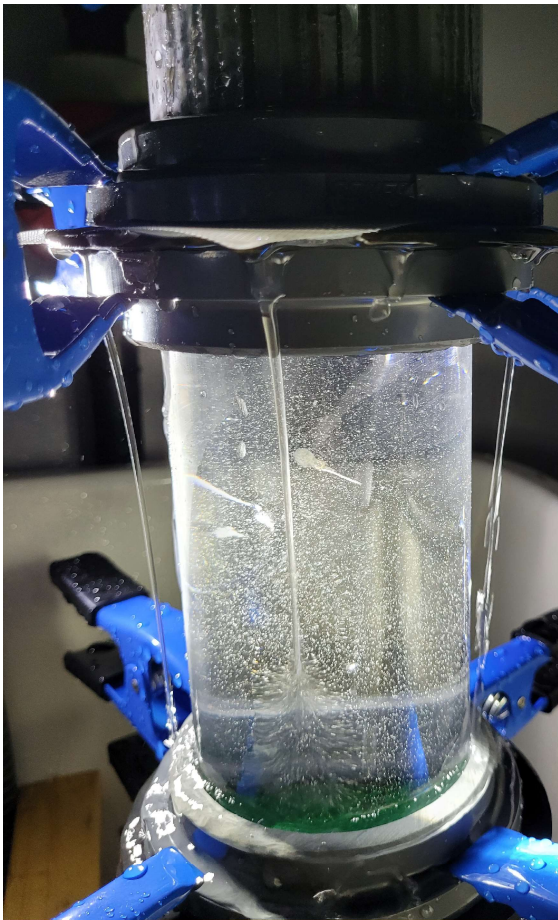
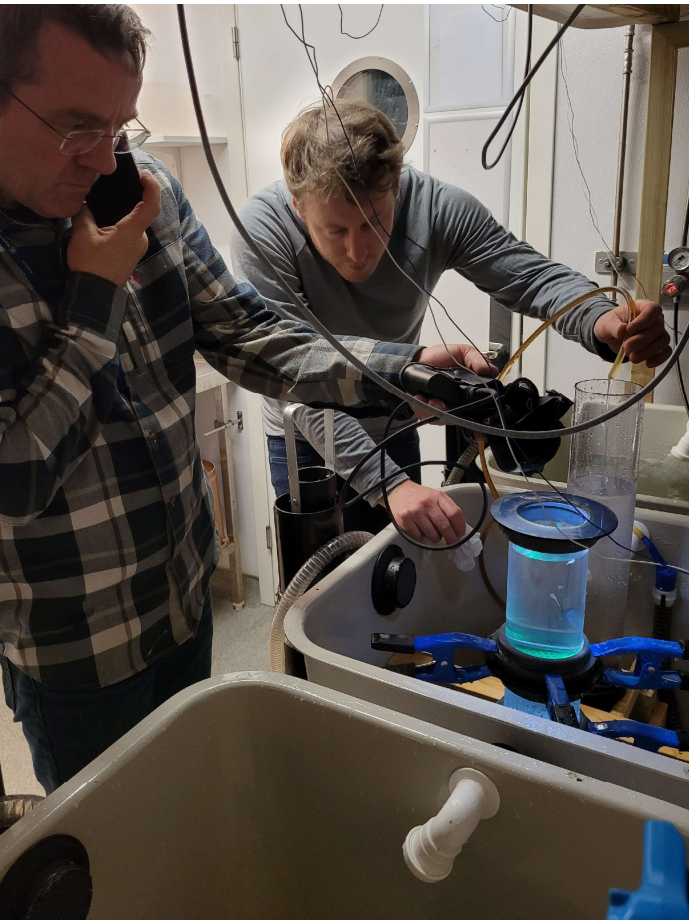
Lusen kan re-infestere selv



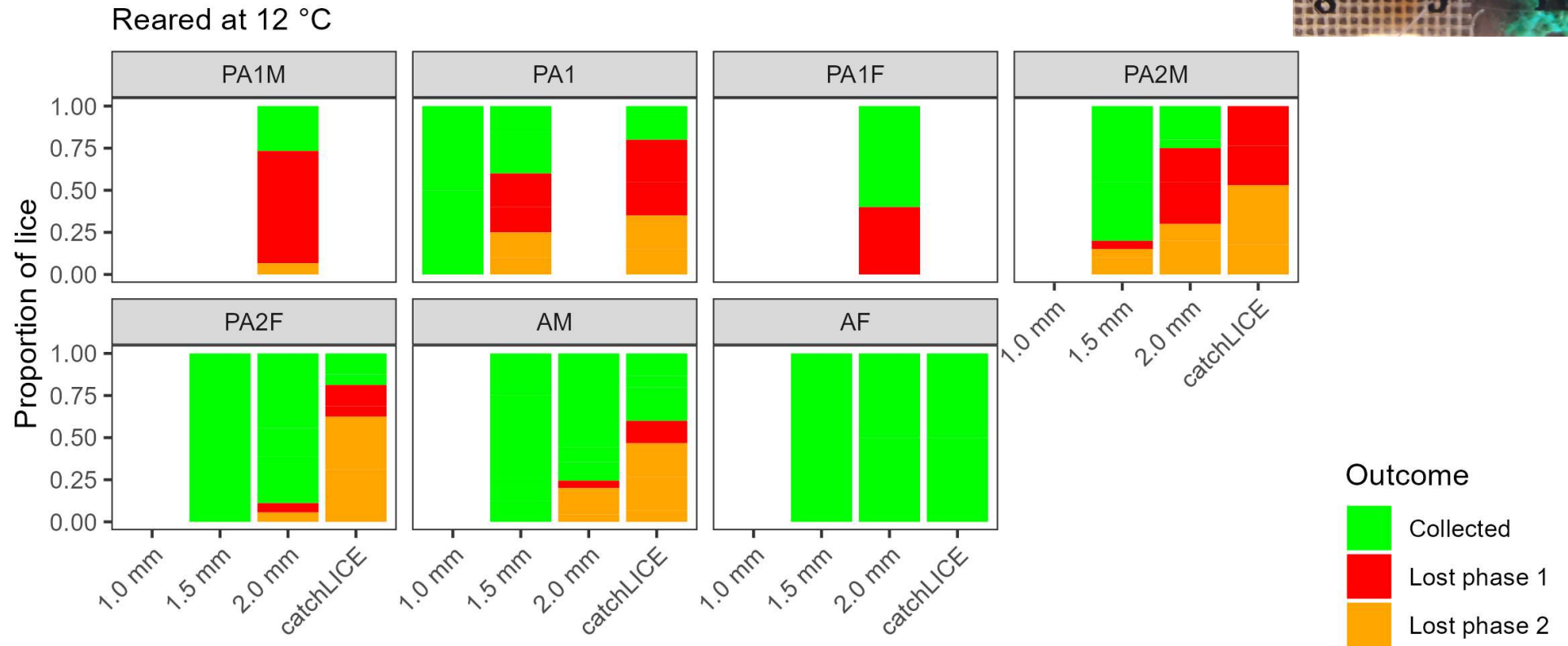
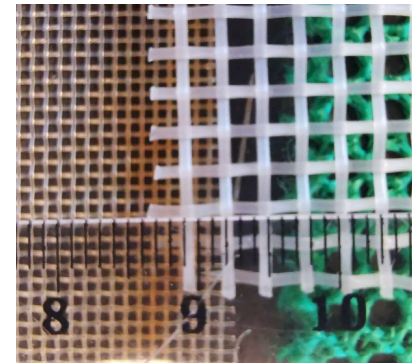
Skottelusen kan re-infestere selv



Hva må til for å fange lusen?



Hva må til for å fange lusen?

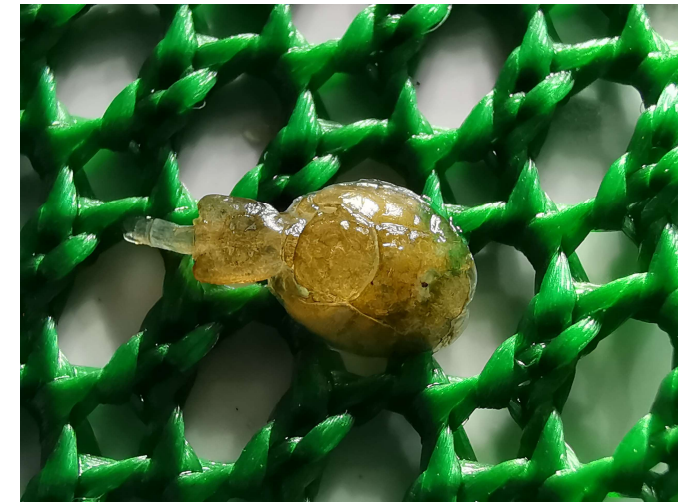
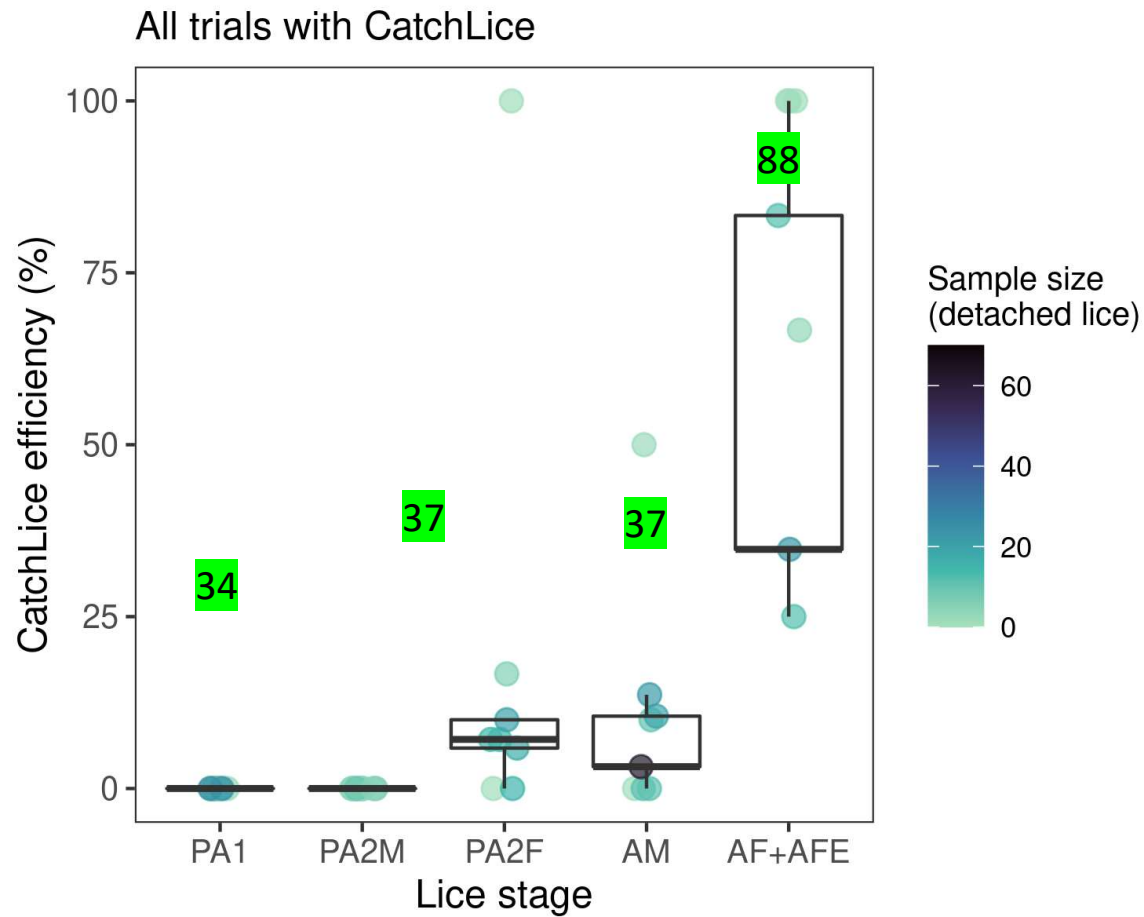


Minimum maskestørrelse for 100% oppsamling

| Salmon louse stage | Min. mesh size (mm) |
|---------------------|-----------------------------|
| Pre-adult I male | 1 mm rigid |
| Pre-adult I female | ~1.5 mm rigid |
| Pre-adult II male | 1 mm rigid |
| Pre-adult II female | 1.5 mm rigid |
| Adult male | 1.5 mm rigid |
| Adult female | 2 mm rigid / 2 mm catchLICE |
| <i>Caligus</i> | < 1.5 mm rigid |



Oppsamlingseffektivitet forsøk 1-4



Figurdata er forsøk 1-3
Tall er forsøk 4 inkl pumpe

Kommersielle data

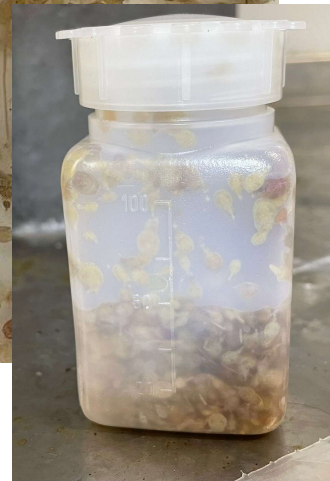


Catch vs normal

1.8

0.5

2.0



Oppsummering

- Bevegelige lus faller av ved trenging, 10-40%
 - Lusen lever i 1-3 uker uten vert
 - Lusen synker med 1 cms^{-1}
 - Spredningspotensial $> 500 \text{ m}$
 - Re-etablering / -infestering er mulig
 - Lus kan samles opp, 1-2 mm maske
 - CatchLice samler voksne hunner
- *Takk for oppmerksomheten*

