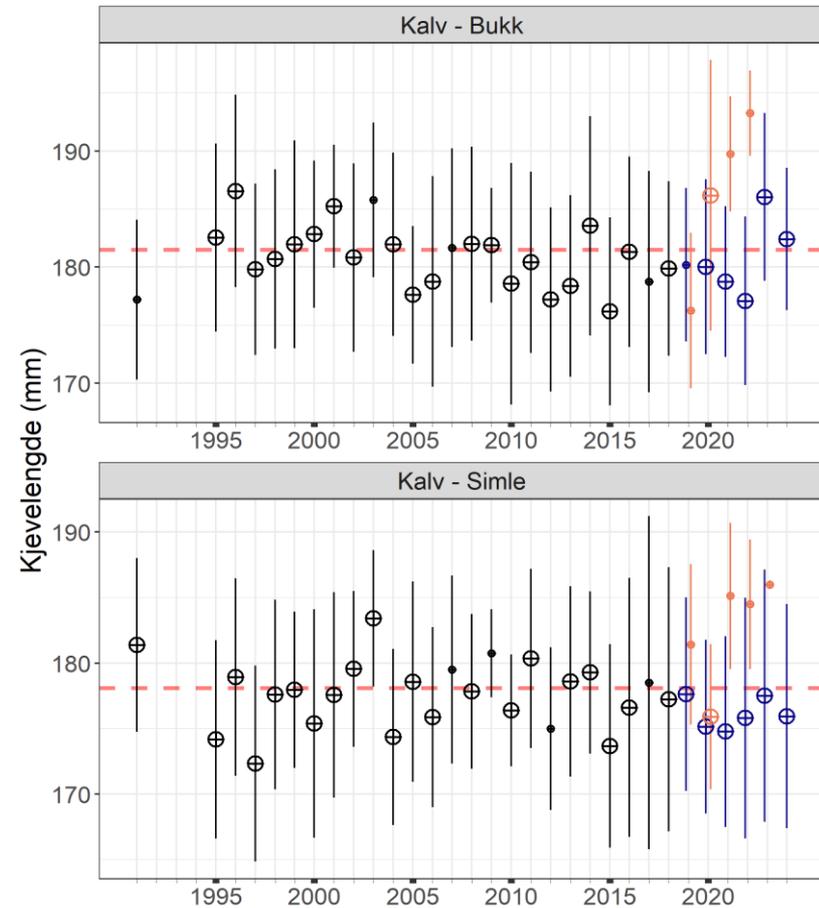
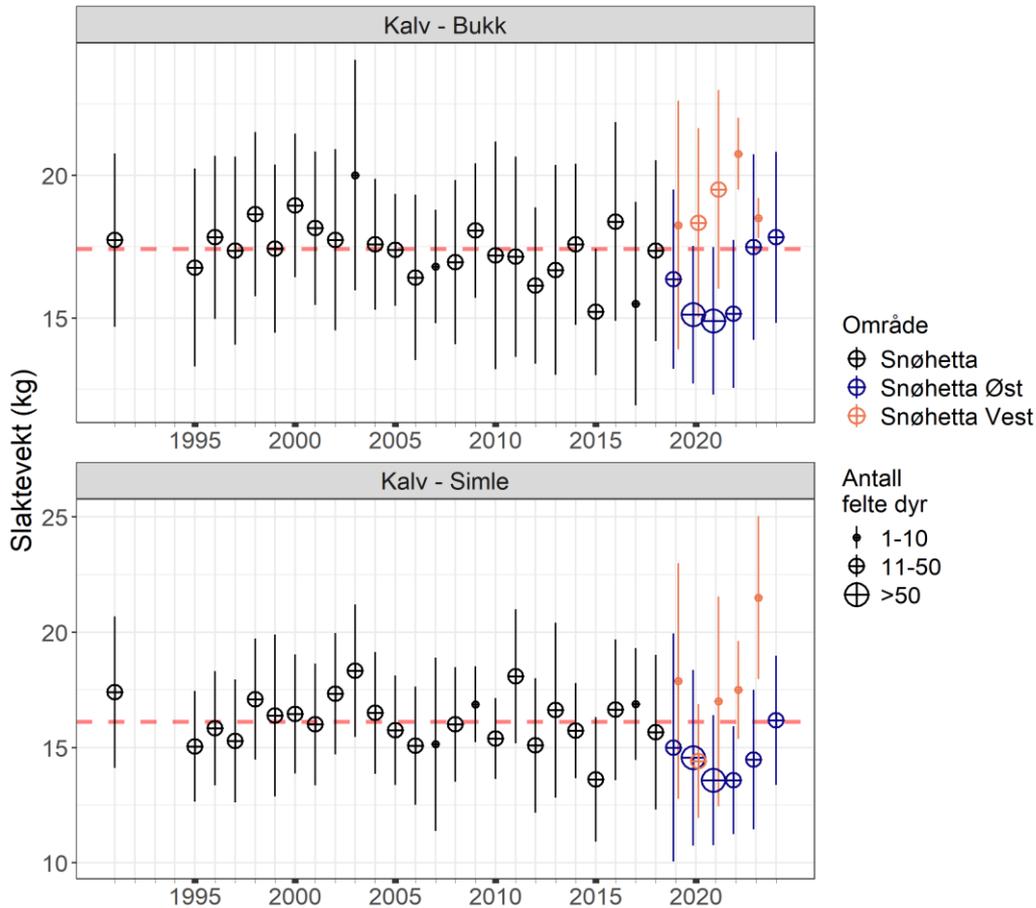


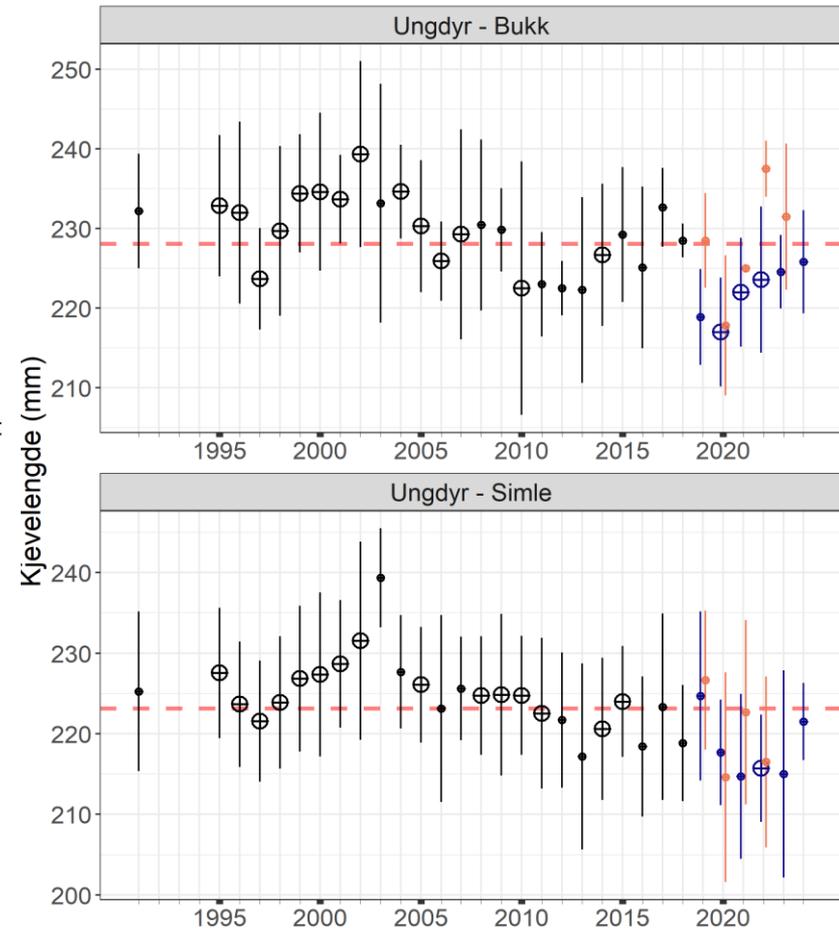
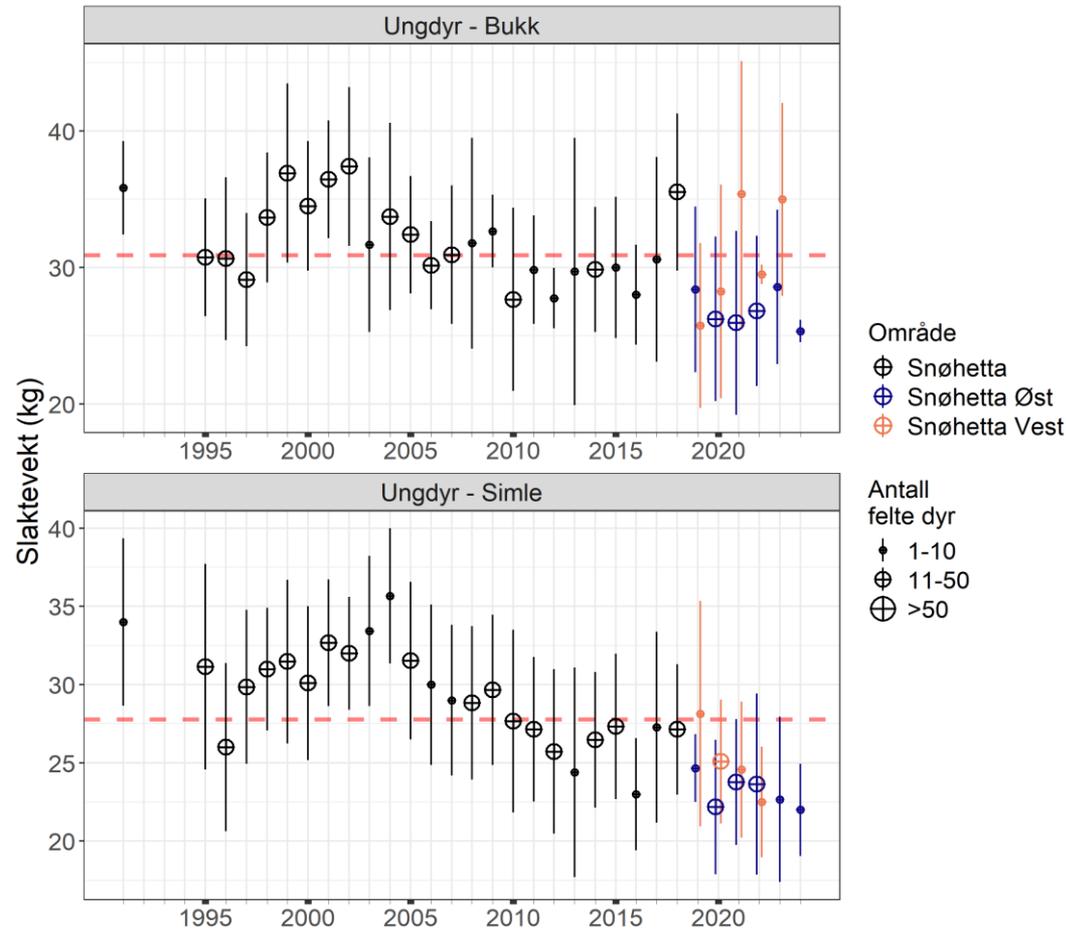
Endringer i bestandsforhold: Snøhetta vest, Snøhetta øst, Knutshø

FoU Villrein i Snøhetta-Knutshø, Hjerkin, 12. des. 2024
Brage Bremset Hansen, Olav Strand, Roy Andersen, mfl.

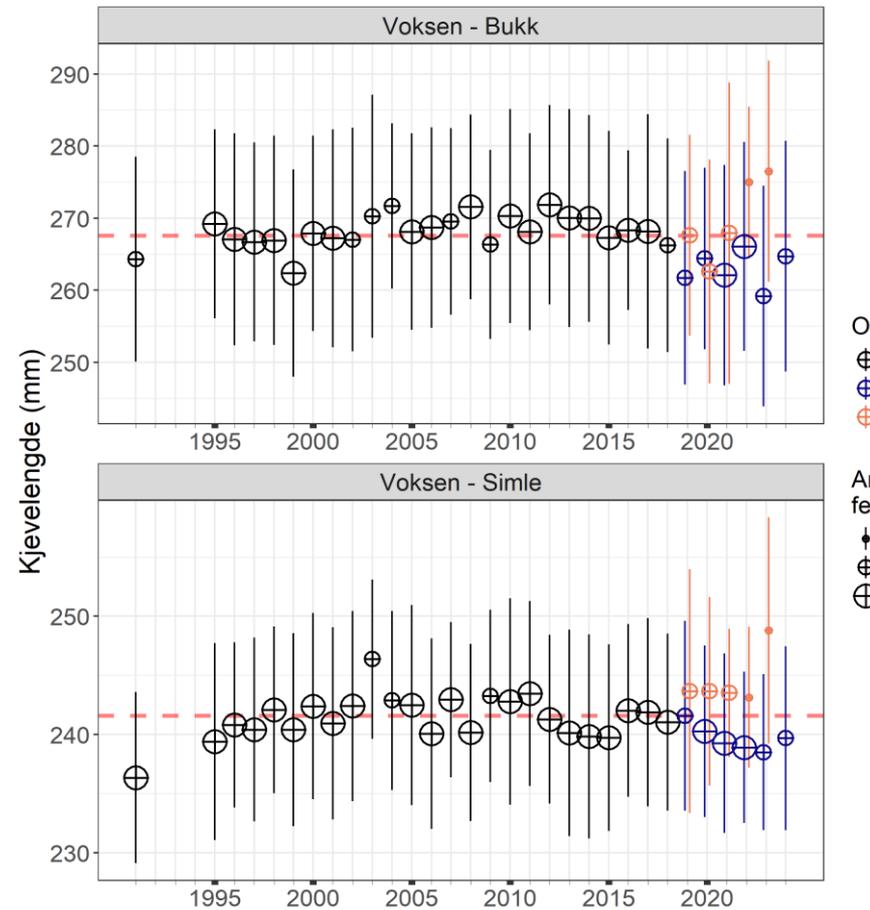
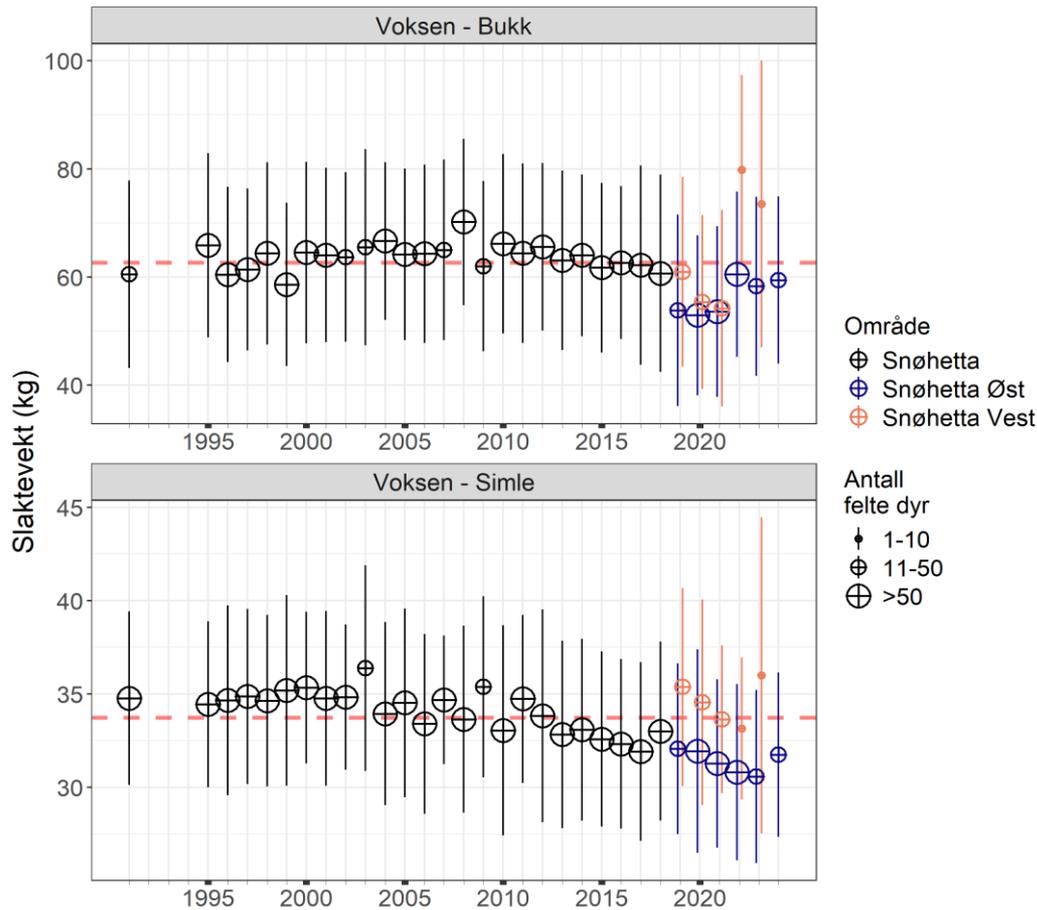
Snøhetta – Kondisjon kalv



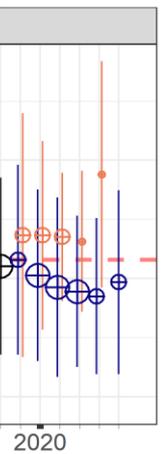
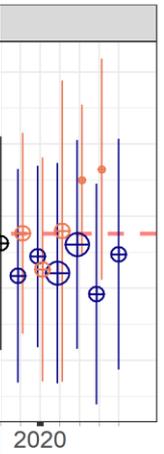
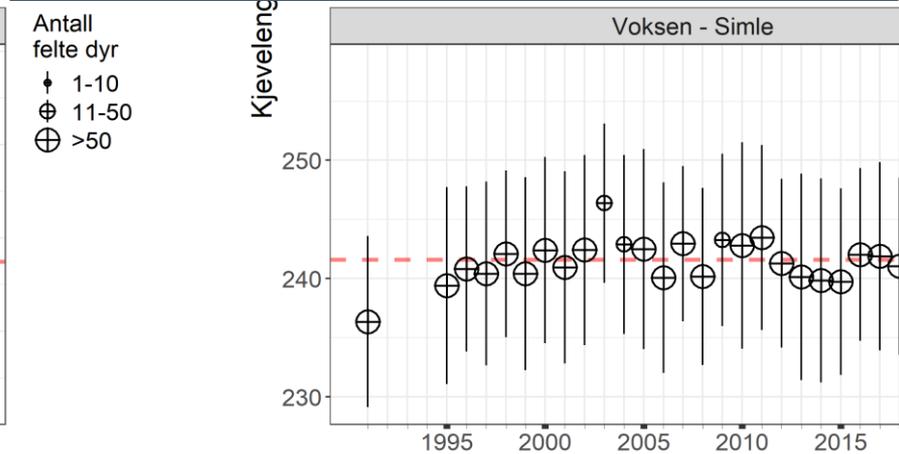
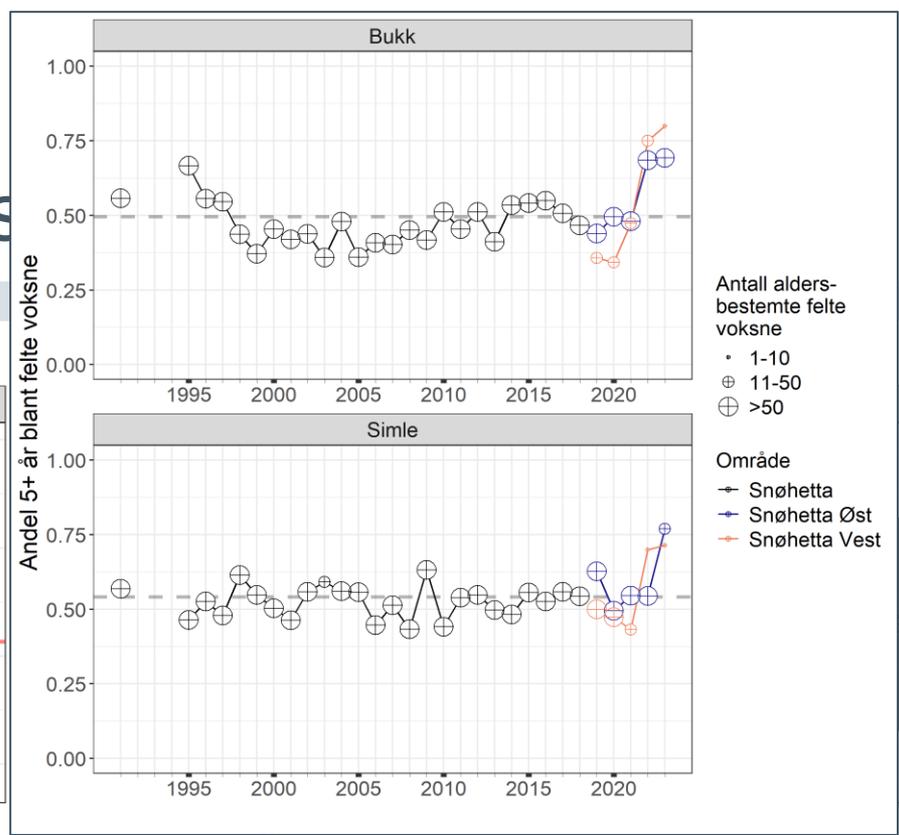
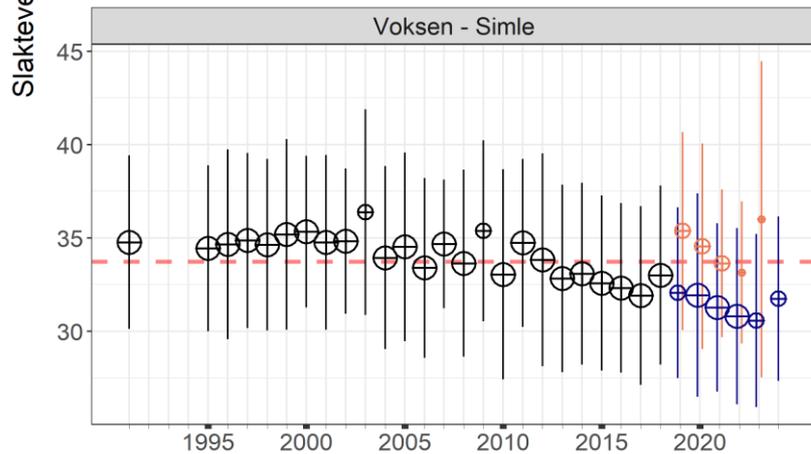
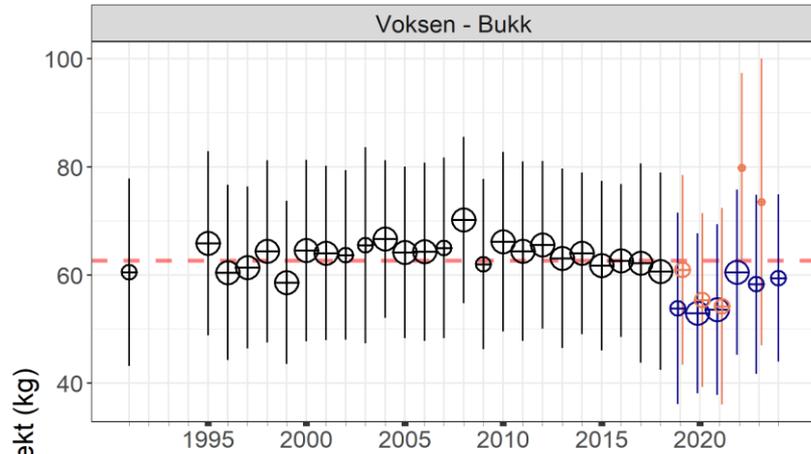
Snøhetta – Kondisjon ungdyr



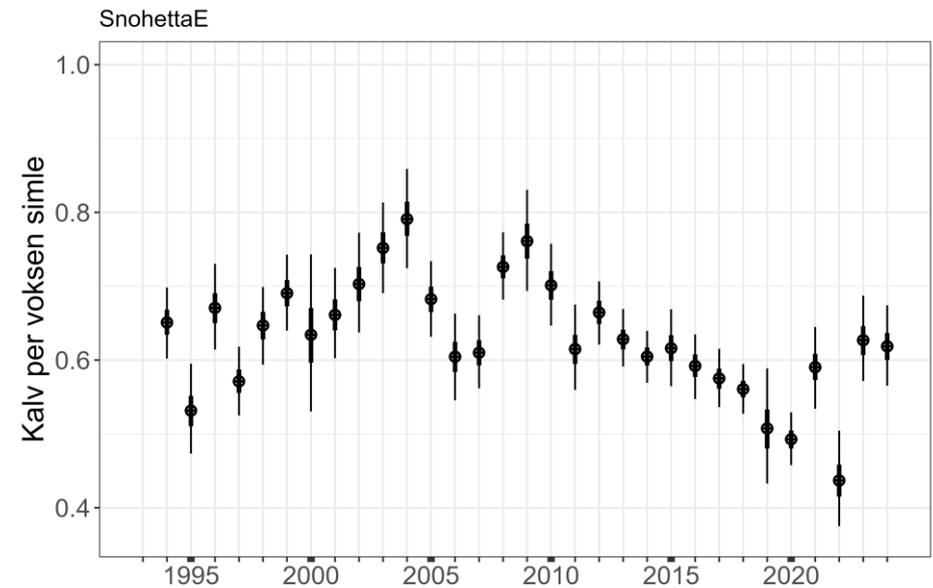
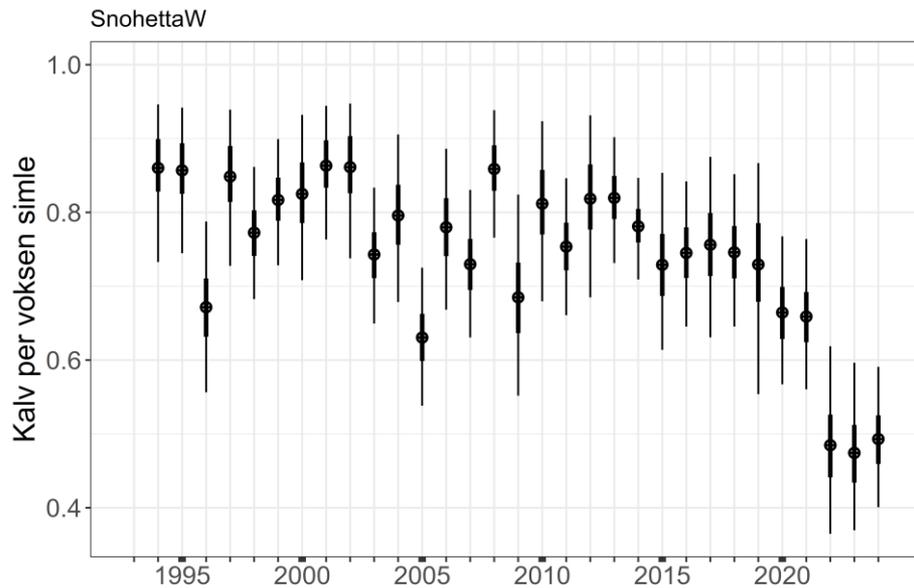
Snøhetta – Kondisjon voksne



Snøhetta – Kondis

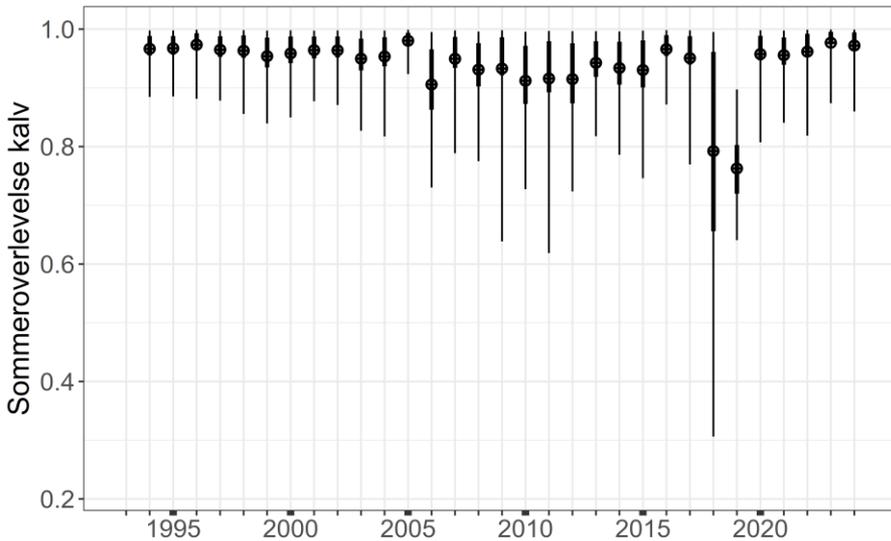


Snøhetta – Kalv per voksen simle (fra bestandsmodell)

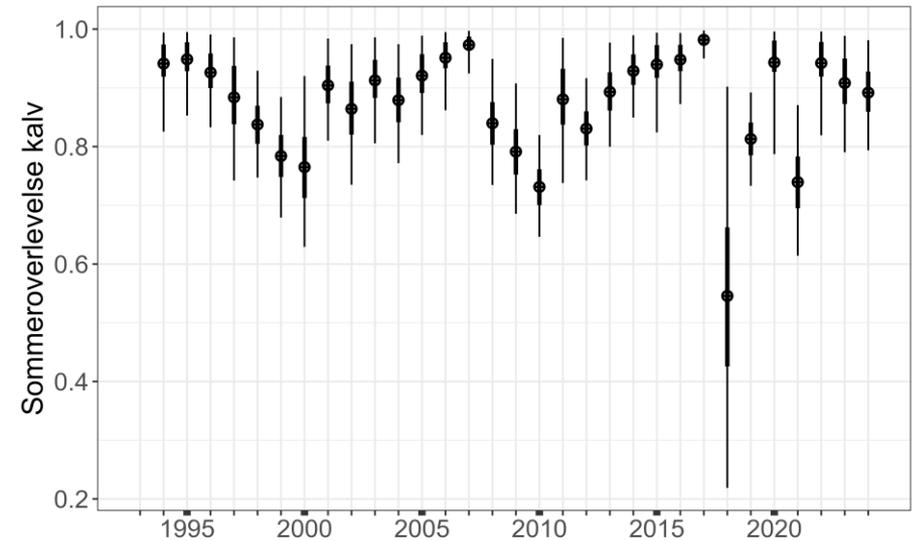


Snøhetta – Kalveoverlevelse sommer (fra bestandsmodell)

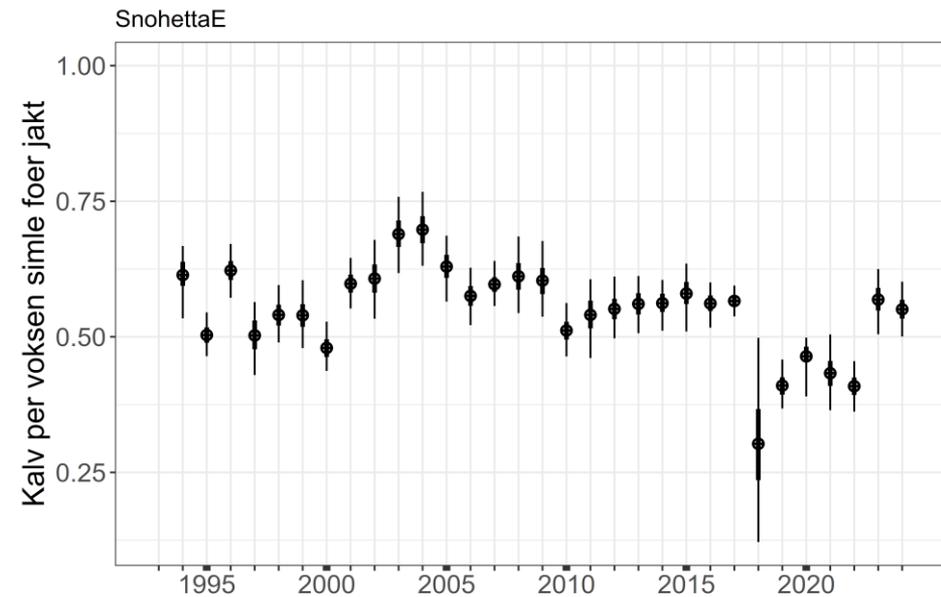
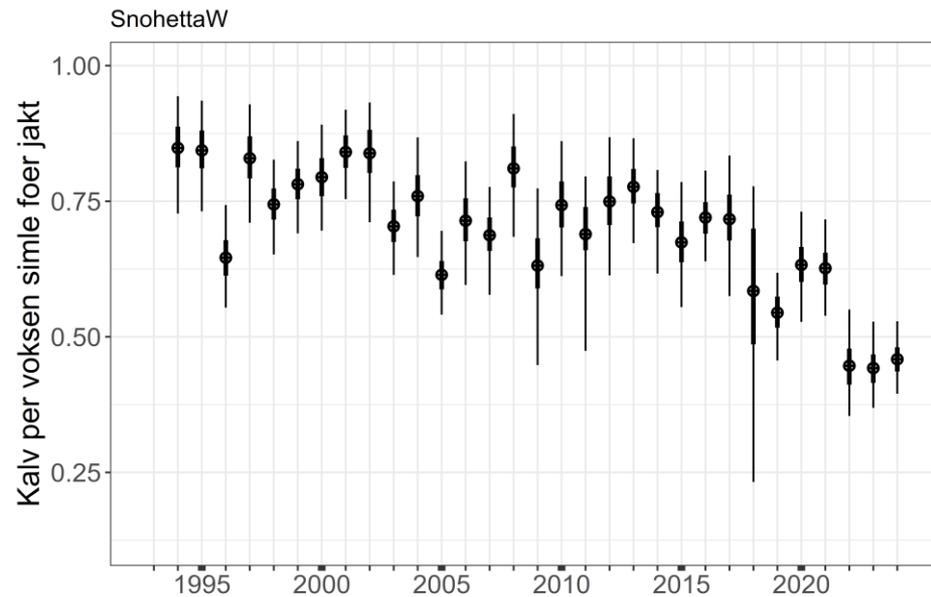
SnohettaW



SnohettaE

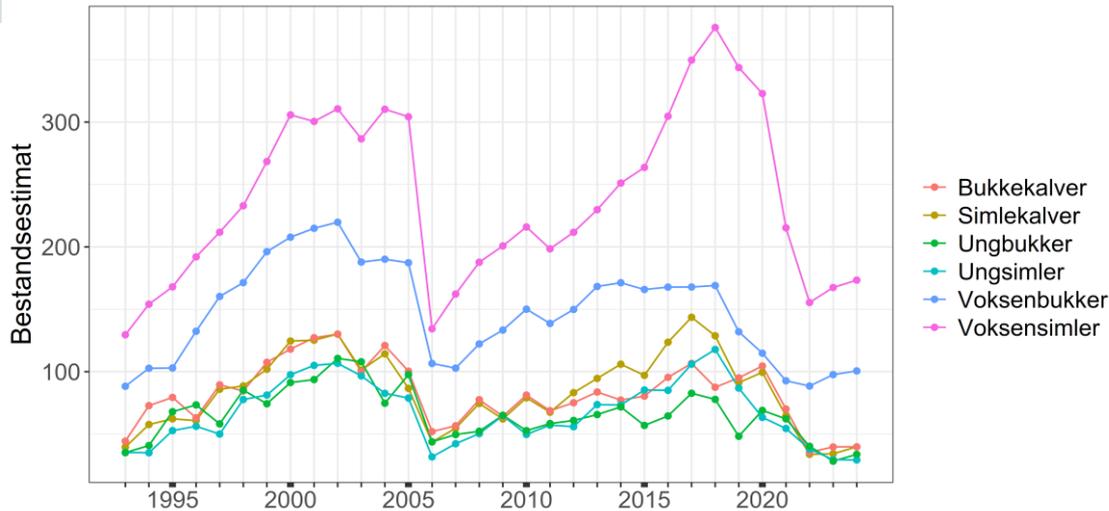


Snøhetta – Kalv per voksen simle før jakt (fra bestandsmodell)

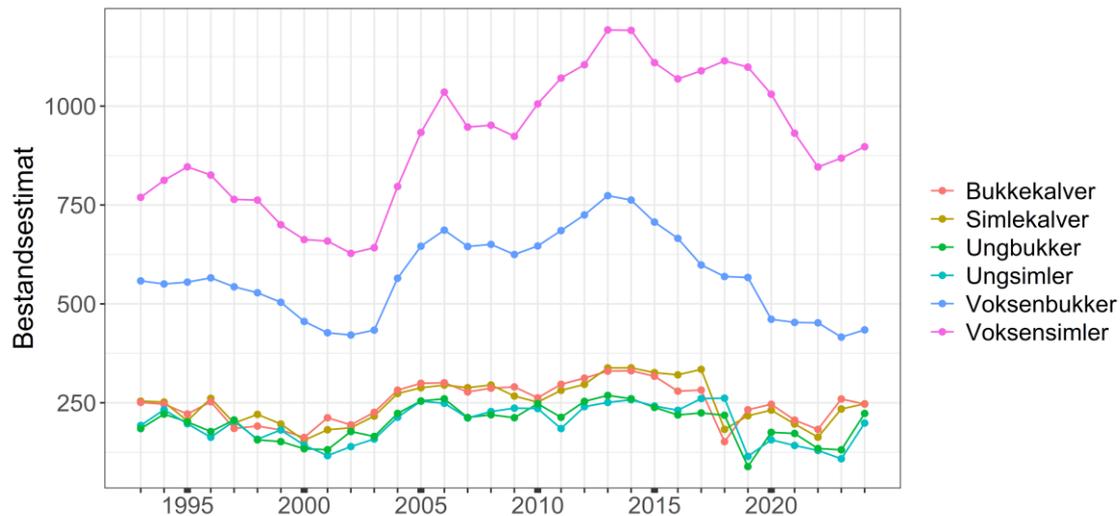


Snøhetta – Bestandsstruktur før jakt (fra bestandsmodell)

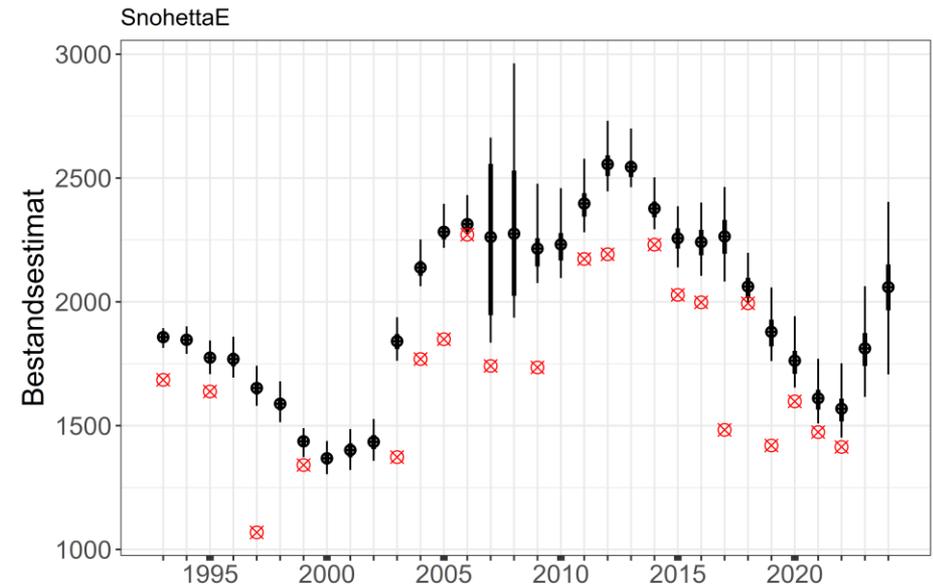
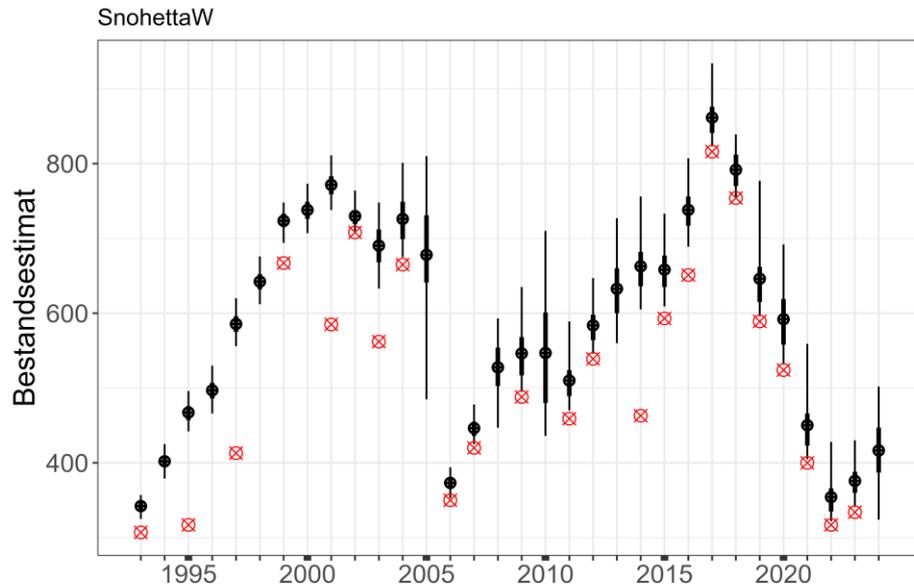
Time series of N for SnohettaW



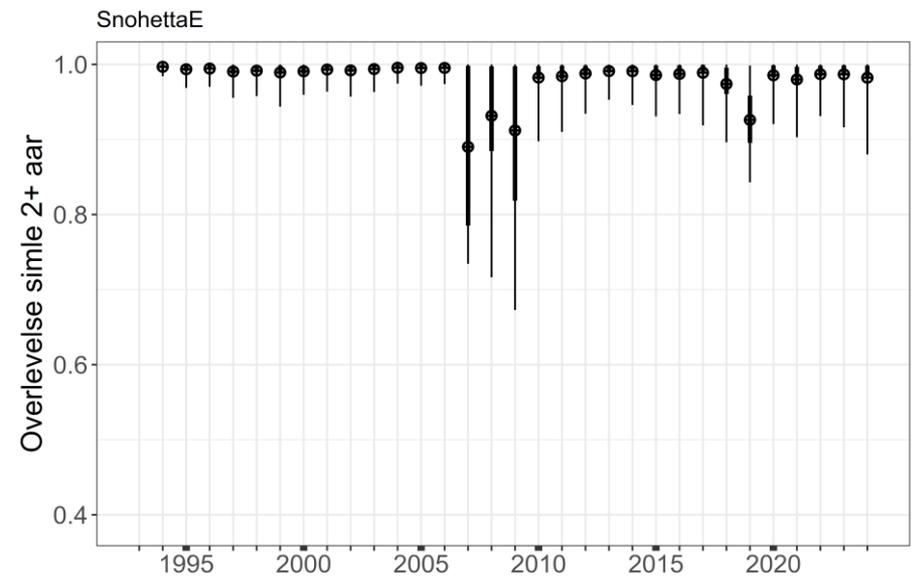
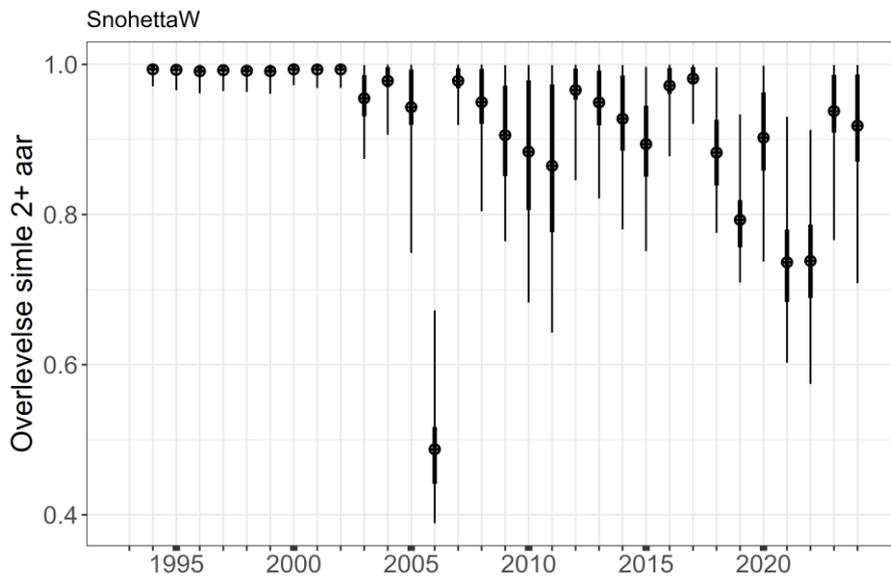
Time series of N for SnohettaE



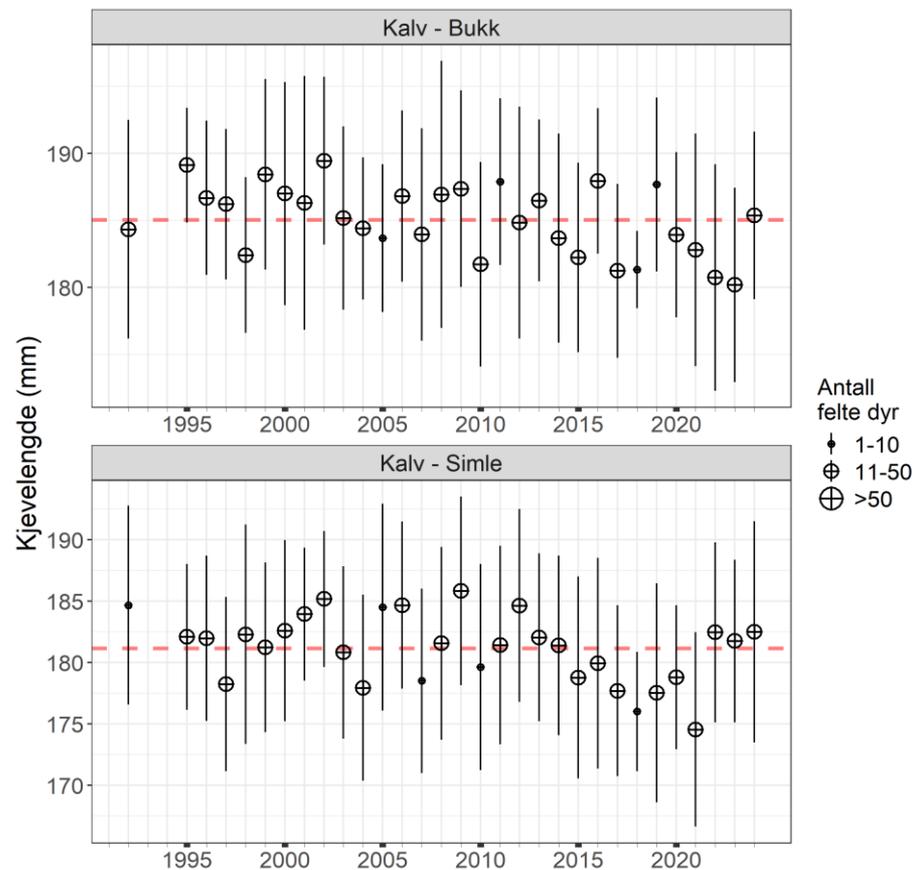
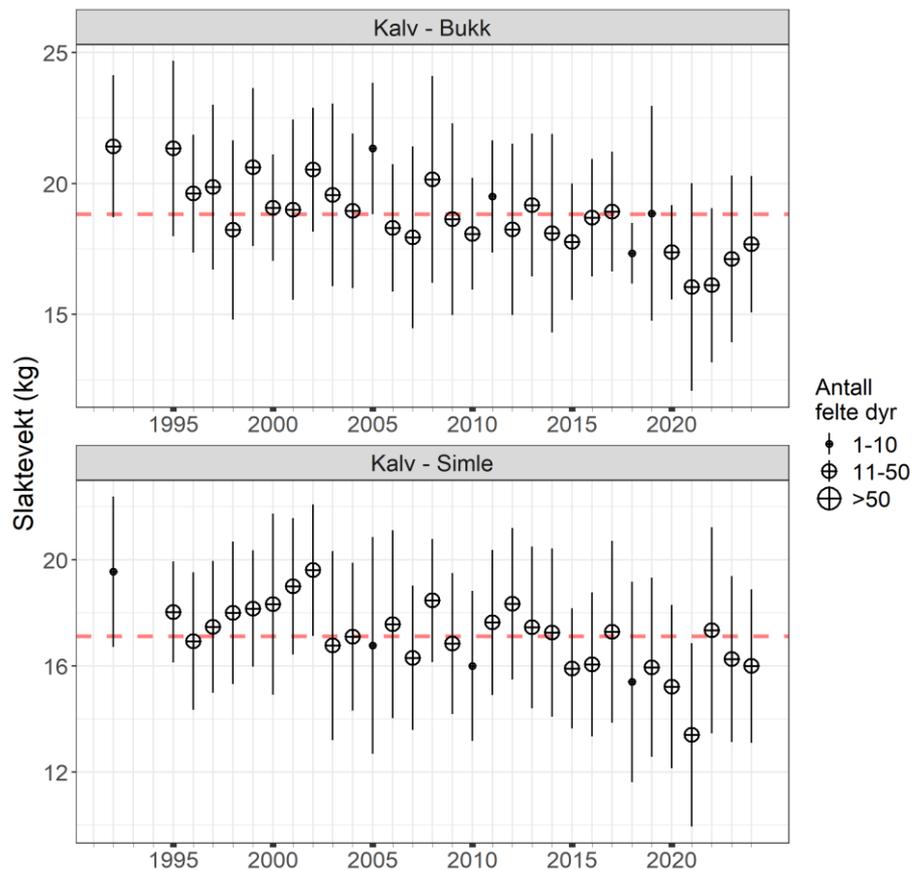
Snøhetta – Bestandsstørrelse etter jakt (fra bestandsmodell)



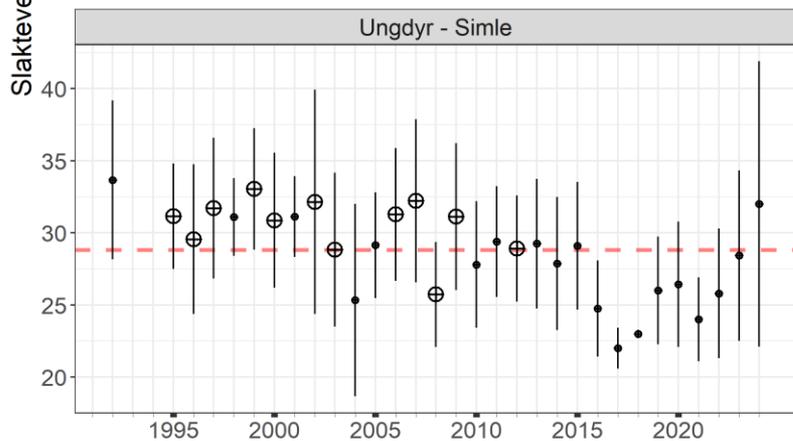
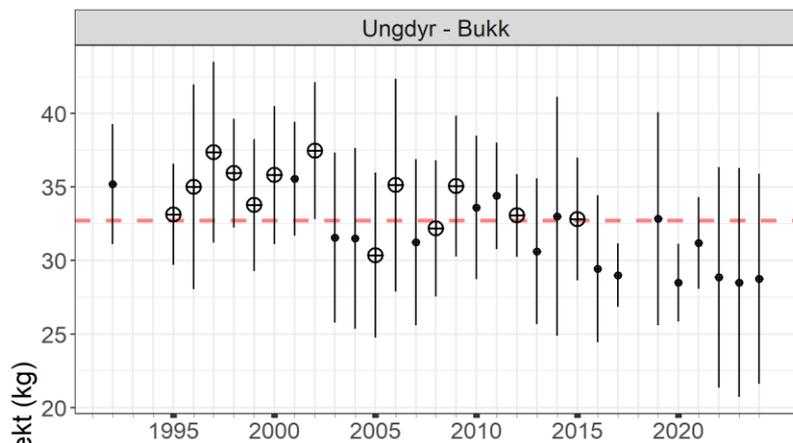
Snøhetta – Overlevelse fra jakt til jakt (fra bestandsmodell)



Knutshø – Kondisjon kalv

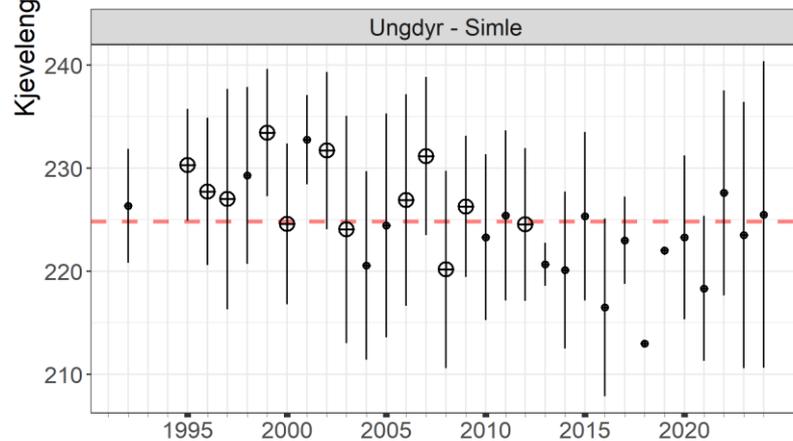
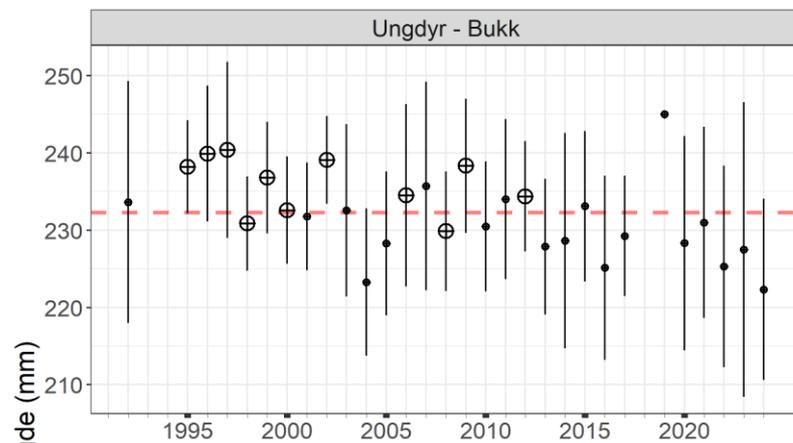


Knutshø – Kondisjon ungdyr



Antall felte dyr

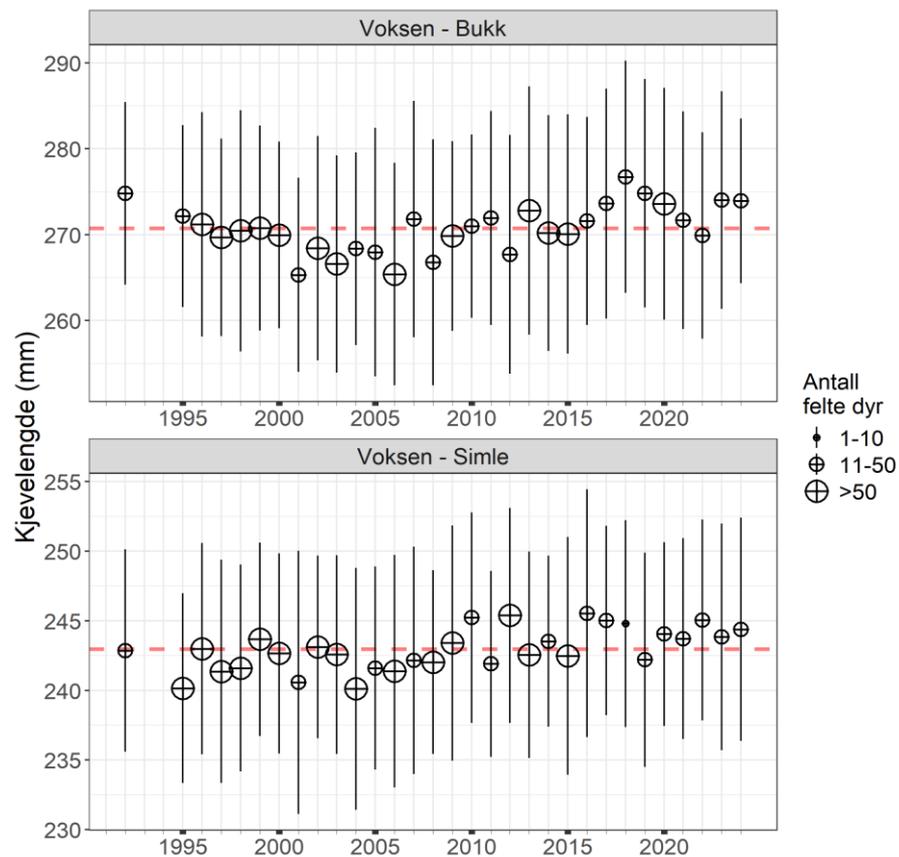
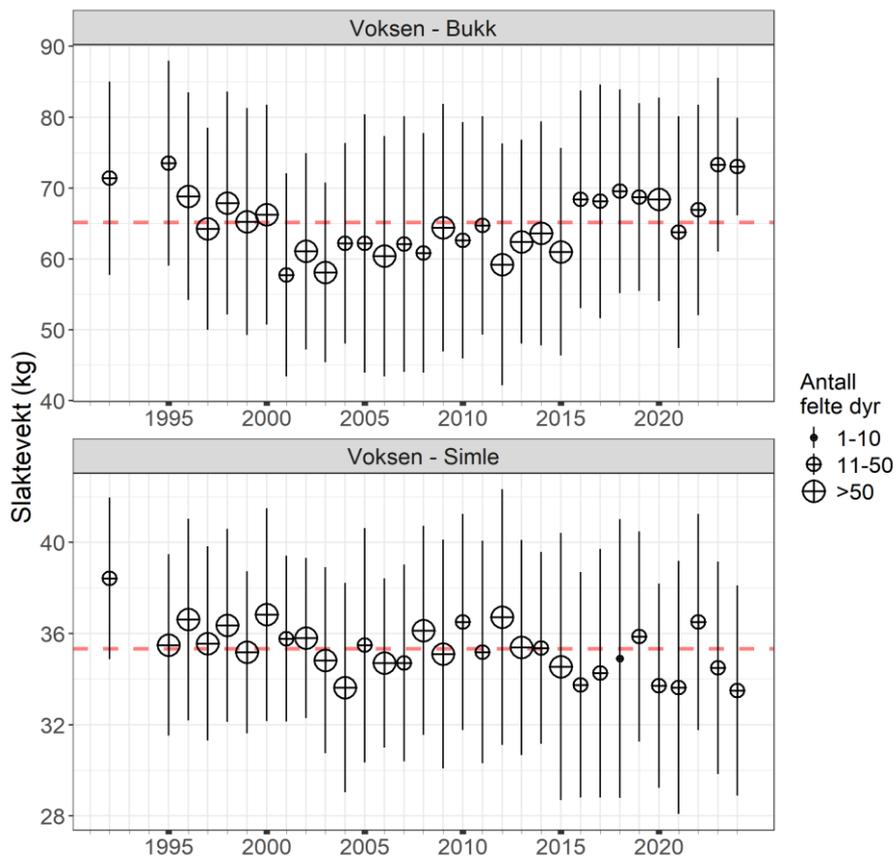
- 1-10
- ⊕ 11-50
- ⊕ >50



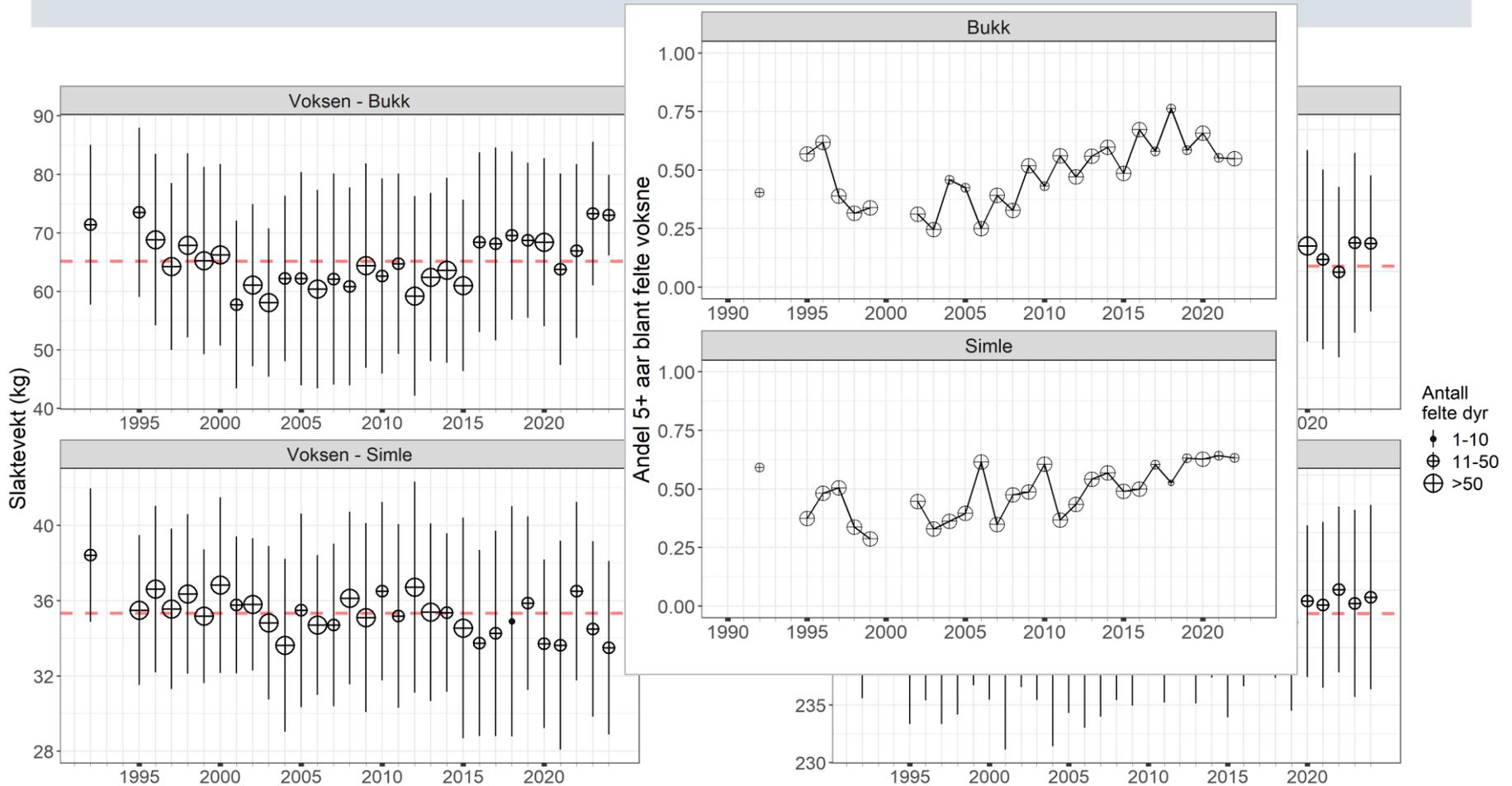
Antall felte dyr

- 1-10
- ⊕ 11-50
- ⊕ >50

Knutshø – Kondisjon voksne



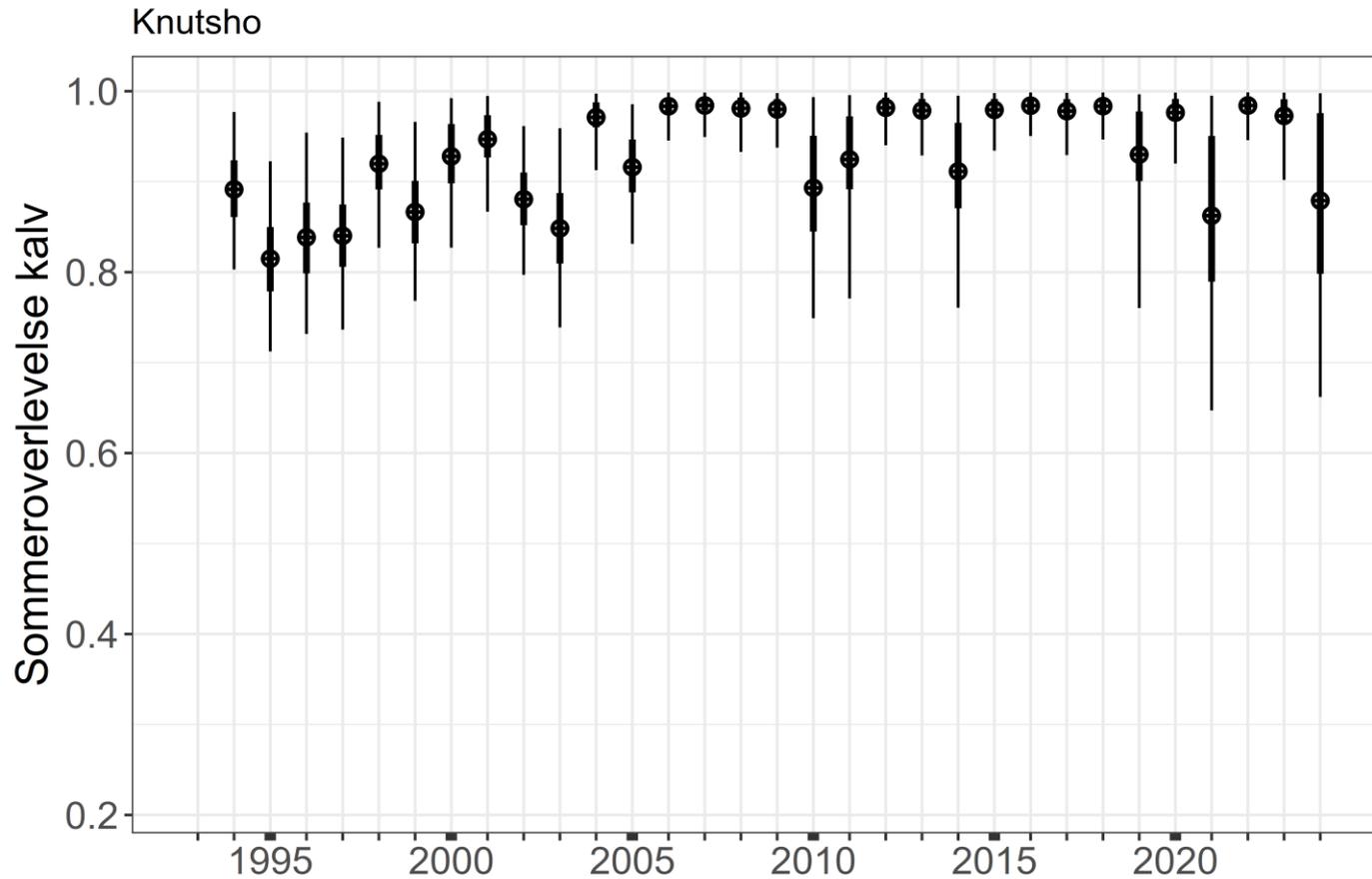
Knutshø – Kondisjon voksne



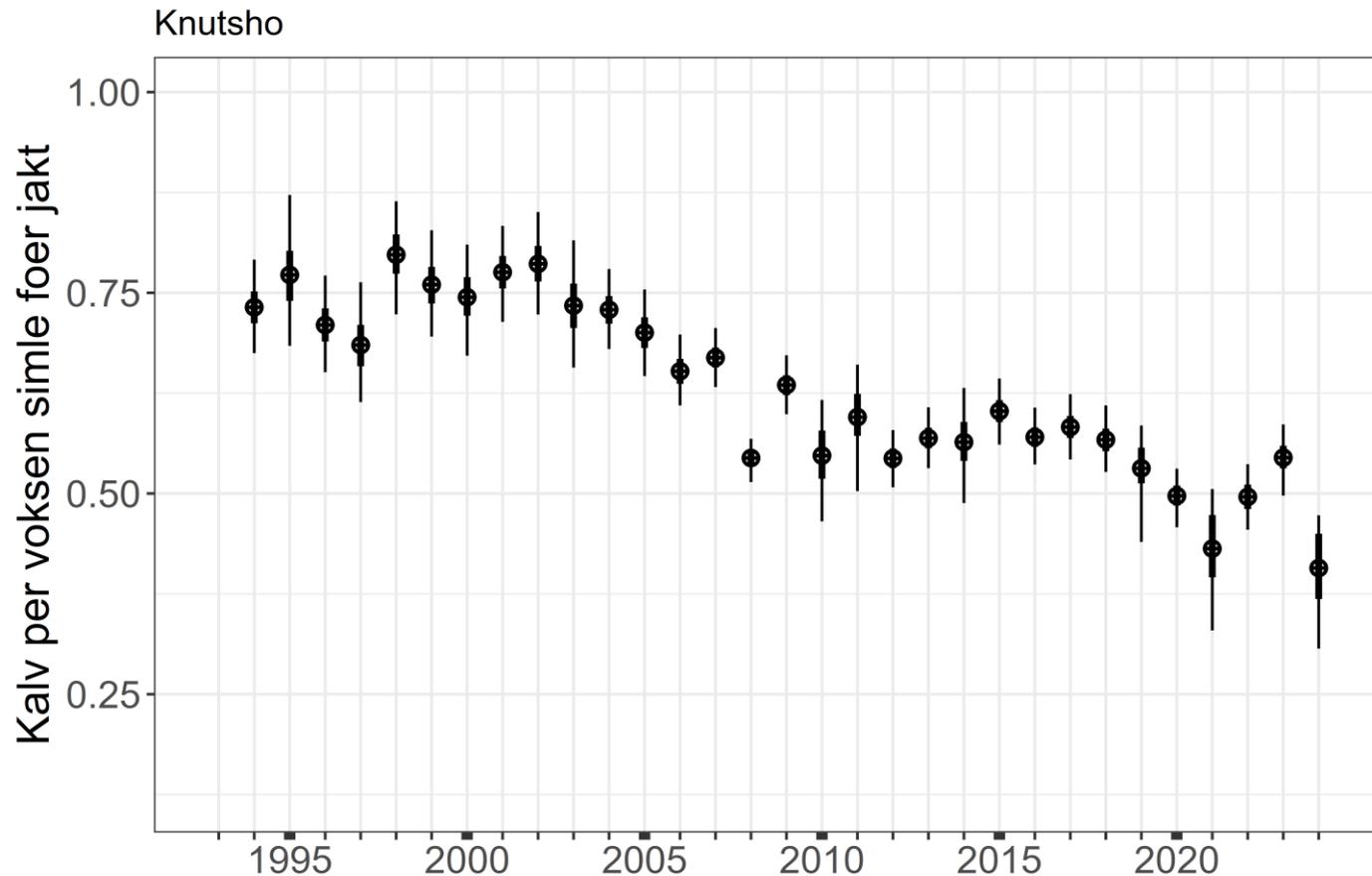
Knutshø – Kalv per voksen simle (fra bestandsmodell)



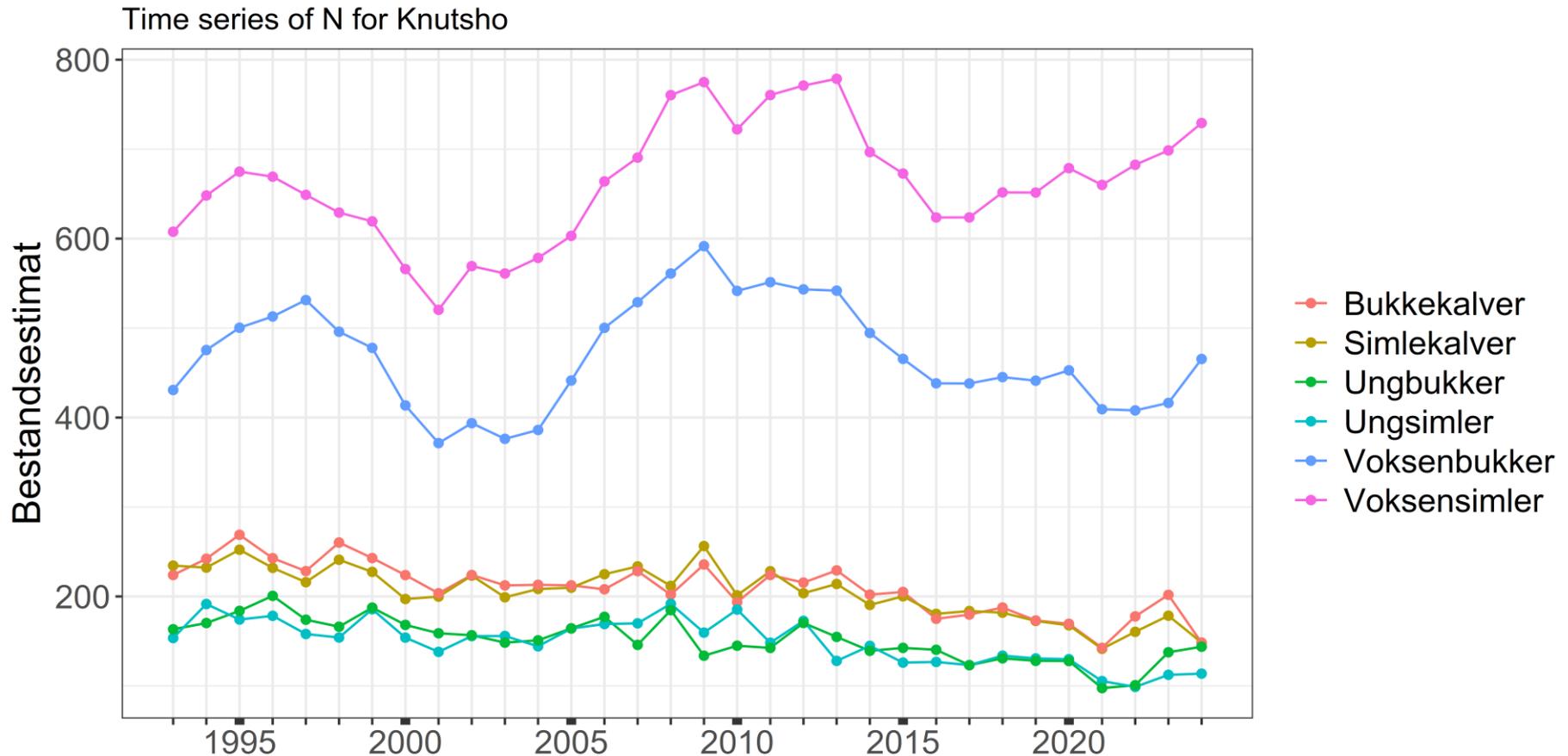
Knutshø – Kalveoverlevelse sommer (fra bestandsmodell)



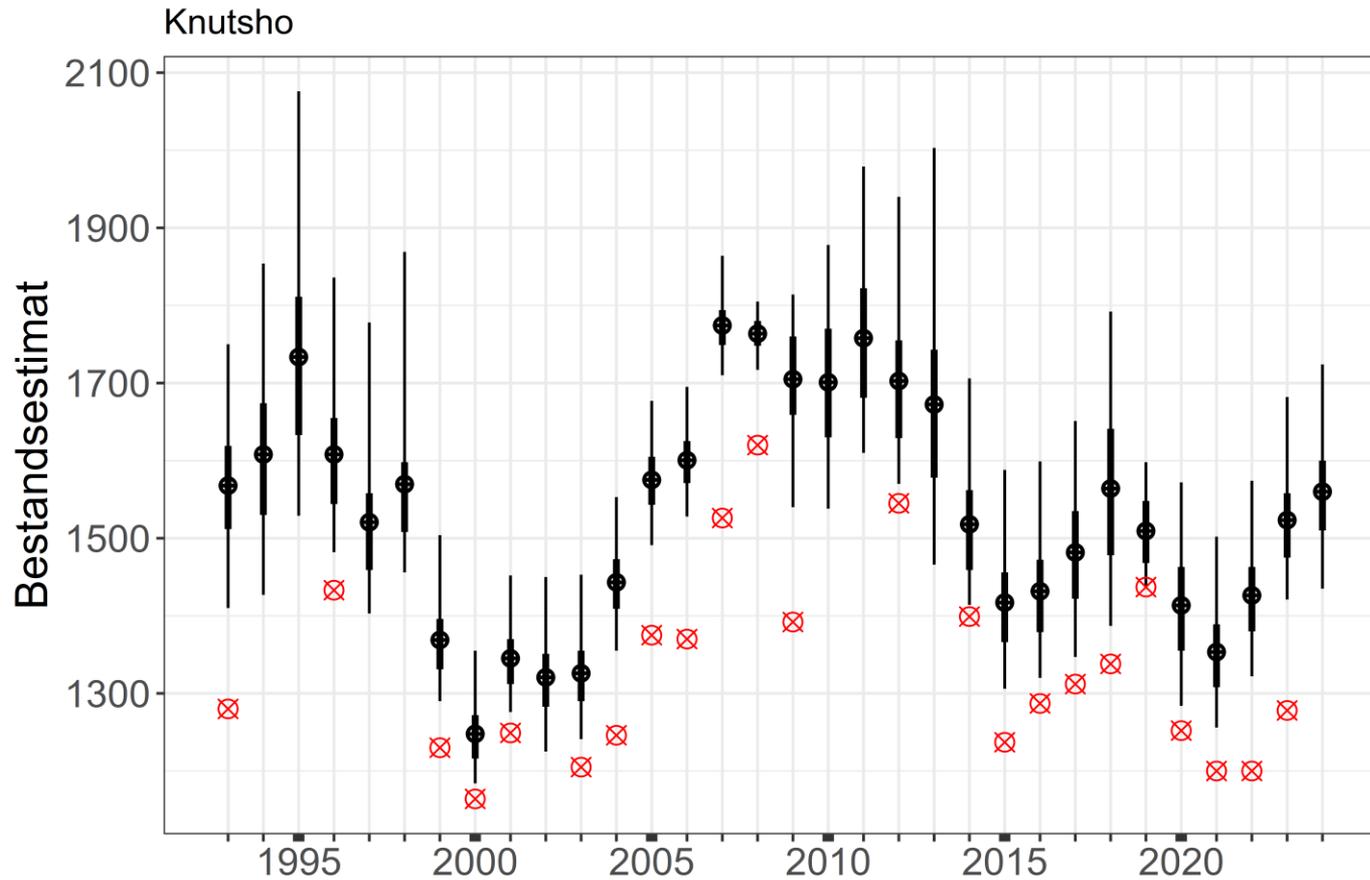
Knutshø – Kalv per voksen simle før jakt (fra bestandsmodell)



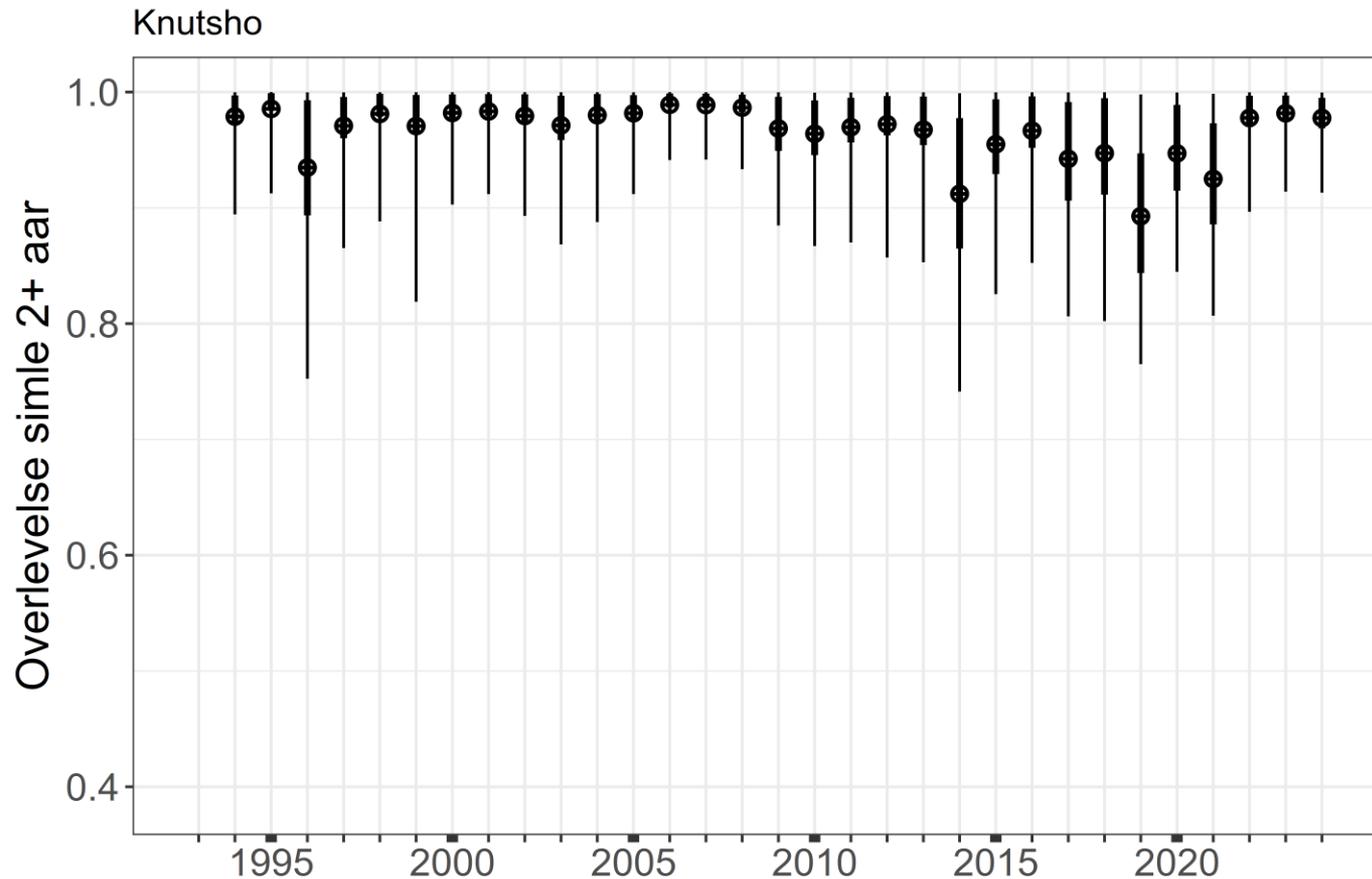
Knutshø – Bestandsstruktur før jakt (fra bestandsmodell)



Knutshø – Bestandsstørrelse etter jakt (fra bestandsmodell)



Knutshø – Overlevelse fra jakt til jakt (fra bestandsmodell)



Hva kan forklare negative trender – og at de ikke snur?

Tetthetsavhengighet?
Overbeiting?
Forstyrrelser, arealbruk?
Predasjon?
Vær og klima?
Parasitter og helse?

Effektstudier i prosjektet:

- Ferdsel, arealbruk, trekk
- Observasjonsstudier
- Bestandsanalyser

Eksempel Knutshø – Sau/parasitter?

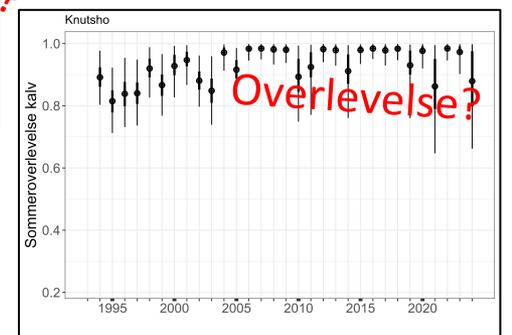
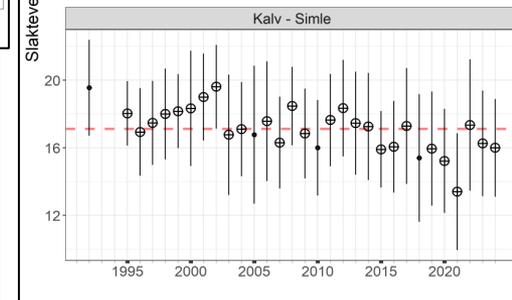
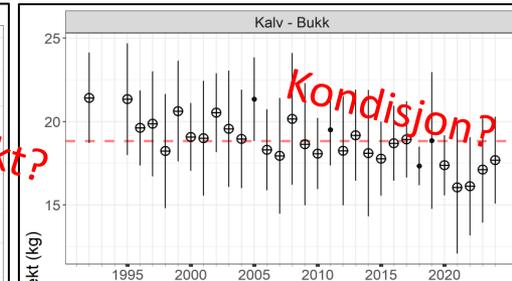
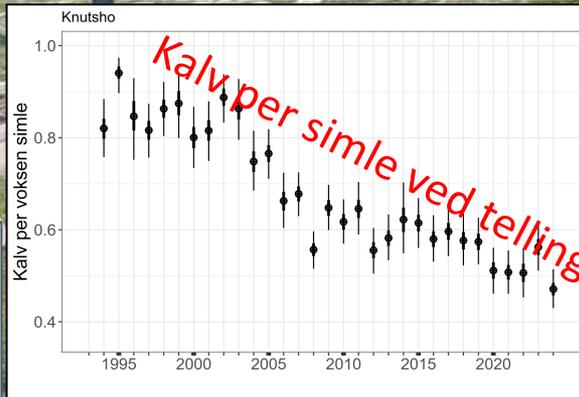
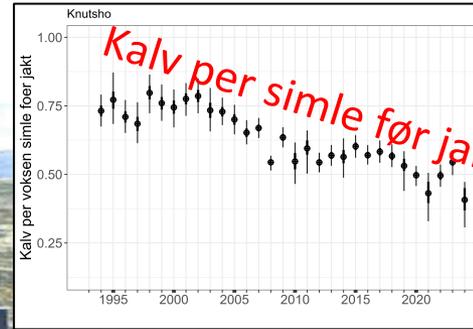


Article
Parasite Spillover from Domestic Sheep to Wild Reindeer—The Role of Salt Licks

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- ² Faculty of Bioscience and Aquaculture, Nord University, 8049 Bodo, Norway
- ³ Department of Biomedical Science and Veterinary Public Health, Swedish University of Agricultural Sciences, P.O. Box 7028, 750 07 Uppsala, Sweden
- ⁴ Norwegian Veterinary Institute, Holtvegen 66, 9016 Tromsø, Norway
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Abstract: Attraction sites are important for environmental pathogen transmission and spillover. Yet, their role in wildlife disease dynamics is often poorly substantiated. Herein, we study the role of salt licks as potential attraction sites for the spillover of gastrointestinal parasites from domestic sheep to wild reindeer. Eggs from the introduced sheep nematode *Nematodirus battus* were found in faecal samples of both species, suggestive of spillover. DNA metabarcoding of soil, collected at salt licks, revealed that *N. battus*, in addition to *Teladorsagia circumcincta*, were the most frequently occurring parasitic nematodes, with a significantly higher prevalence of nematodal DNA in salt lick



Helse og parasitter (2024-prøver kommer)

Prevalens (forekomst) i prøver fra jakt 2023:

Alder	Villreinområde	N	<i>Eimeria</i>	<i>N. battus</i>	<i>Nematodirus</i> sp.	<i>Capillaria</i>	<i>Trichuris</i>	<i>Marshallagia</i>	<i>Skjrabinema</i>	<i>Strongylidetypeegg</i>	<i>Strongyloides</i>	<i>Dictyocaulus</i>	DSL	<i>Elaphostrongylus</i>	<i>Varestrongylus</i>
Kalv/årsunge	Forollhogna	9	0.22	0.11	0	0.11	0	0	0	0.89	0	0.33	0.29	0	0
Kalv/årsunge	Knutshø	12	0.17	0.42	0.33	0	0.08	0.08	0.17	0.83	0.08	0.09	0	0	0
Kalv/årsunge	Rondane	2	0.50	0	0	0	0	0	0	0.50	0	0	0	0	0
Kalv/årsunge	Snøhetta	1	0	1.00	1.00	0	0	0	0	1.00	0	0	0	0	0
Ungdyr	Knutshø	1	0	0	0	0	0	0	0	1.00	0	0	0	0	0
Ungdyr	Snøhetta	1	0	0	0	0	0	0	0	1.00	0	0	0	0	0
Voksente dyr	Hardangervidda	3	0.33	0	0	0	0	0	0	1.00	0	0.33	0.67	0.67	0
Voksente dyr	Knutshø	5	0.20	0	0	0	0	0	0	0.80	0.20	0.50	0.50	0.50	0
Voksente dyr	Snøhetta	4	0	0	0	0	0	0	0	0.75	0	0.50	0.25	0.25	0

Eimeria - encellede parasitt (koksidier)

N. Battus – rundorm

Nematodirus sp. – rundorm, slekt

Capillaria – rundorm, slekt

Trichuris - rundorm, slekt

Marshallagia - rundorm, slekt

Skjrabinema - rundorm, slekt

Strongylidetypeegg – egg fra rundormer

Strongyloides – rundorm, slekt

Dictyocaulus – rundorm, lungeorm

DSL - protostrongylidae larver

Elaphostrongylus – rundorm, hjernemark

Varestrongylus - rundorm, lungeorm



Samarbeid og kunnskap
for framtidens miljøløsninger