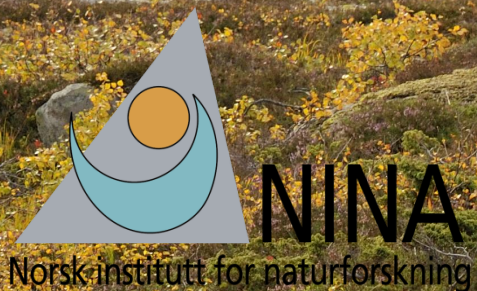


Rovdyr og rein

Fokus på Trøndelag & Nordland

Audun Stien



Omstridte konklusjoner ?



Sami herder Per Anders Eira wrangles a reindeer calf in northern Norway.

ECOLOGY

What's killing the reindeer?

Conservationists and herders in Norway differ about whether to blame predators or overpopulation

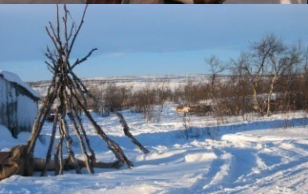
By Eli Kintisch, in Nordkapp, Norway

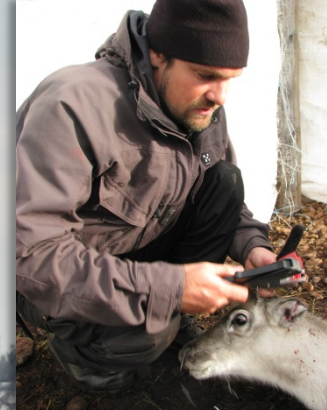
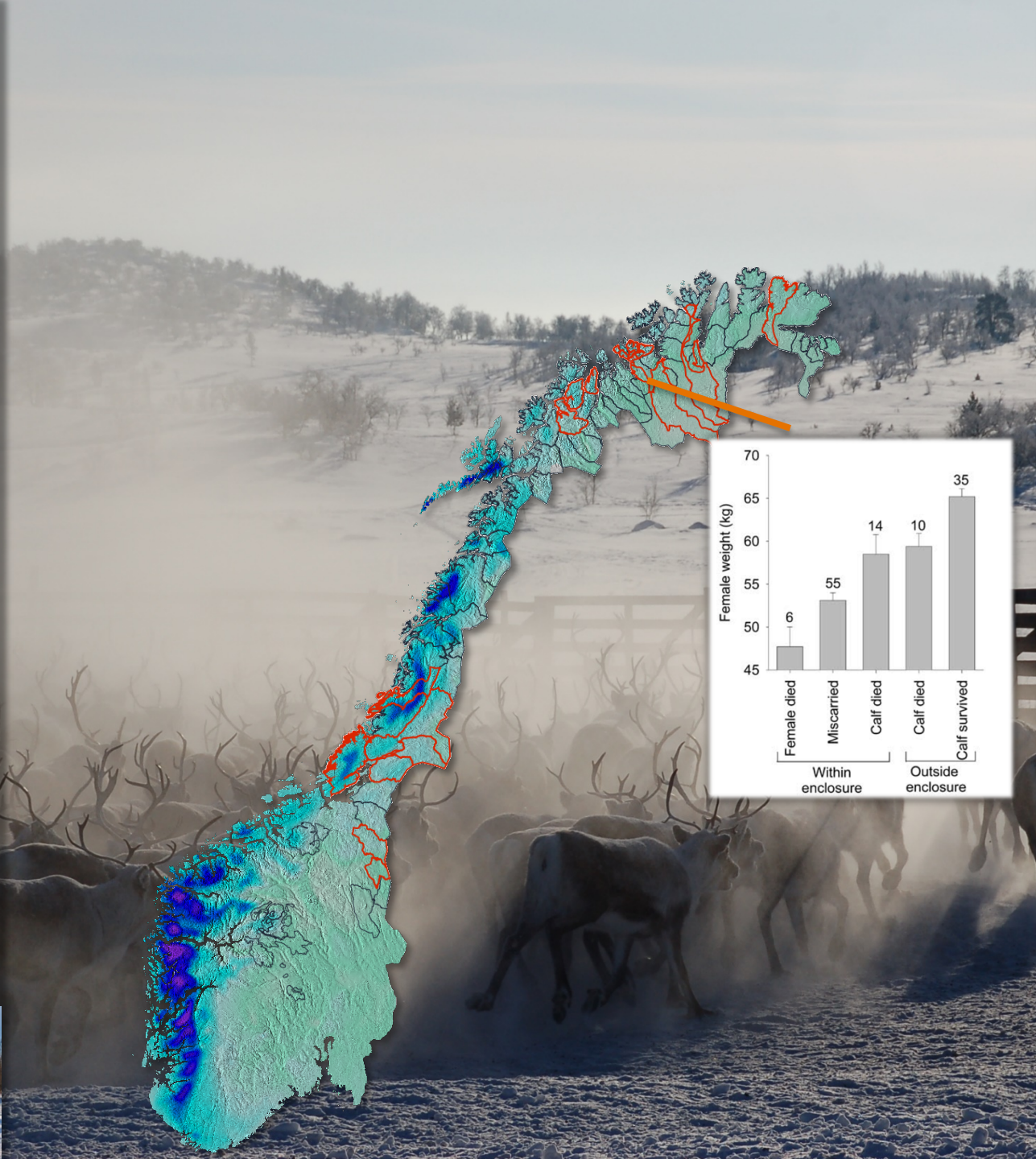
An ecologist's study of reindeer has touched off a firestorm in this land of ice, tundra, and Sami herders, who tend vast numbers of the semi-domesticated animals. Each year, the herders file compensation claims for tens of thousands of reindeer deaths that they blame on carnivores, primarily lynx and wolverines. Ecologist Torkild Tveraa, however, pins the blame on overpopulation: The land simply cannot support the herds, which number roughly 180,000 here in Finnmark, Norway's most northern region.

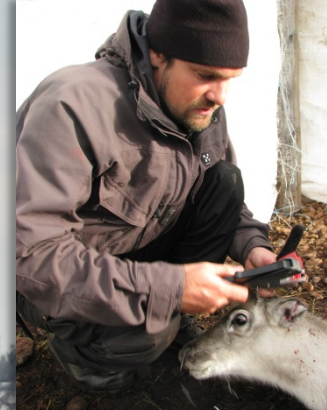
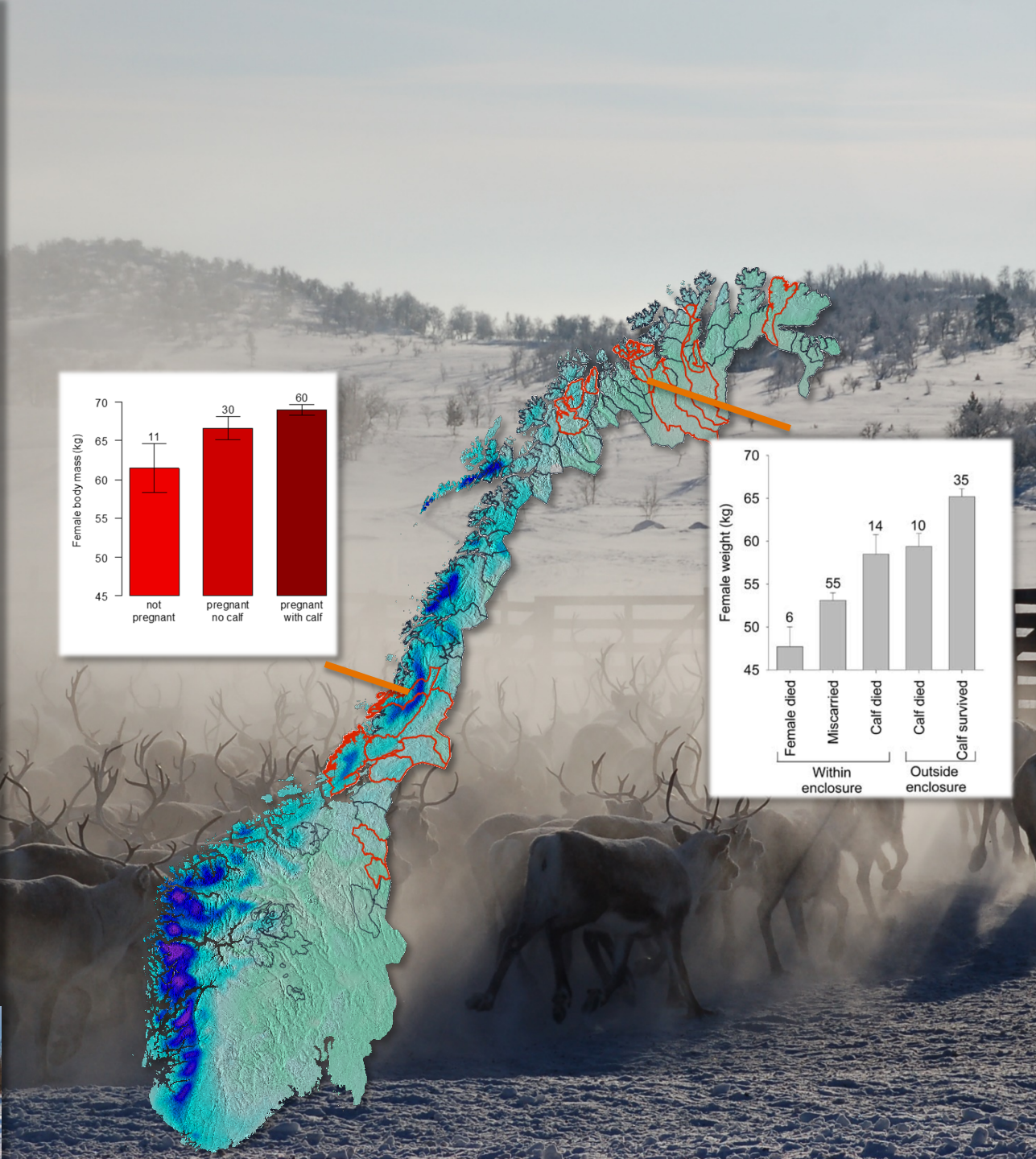
Tveraa, who is with the Norwegian Institute for Nature Research in Tromsø, first presented his case in a government-funded report last year, and he added new analysis in a study published in the October issue of

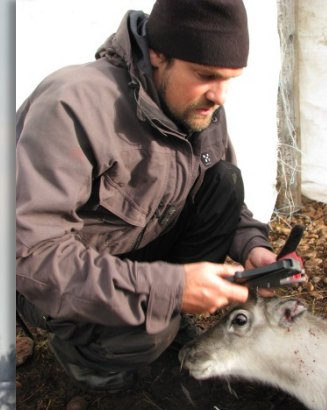
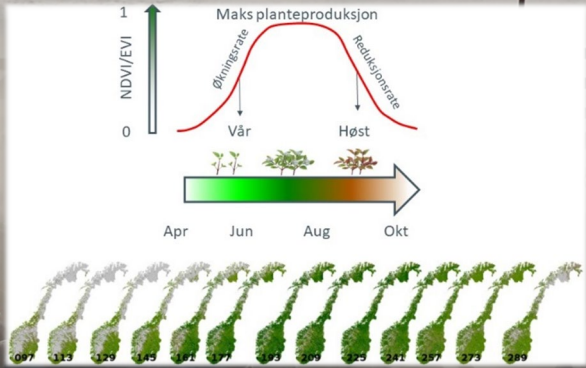
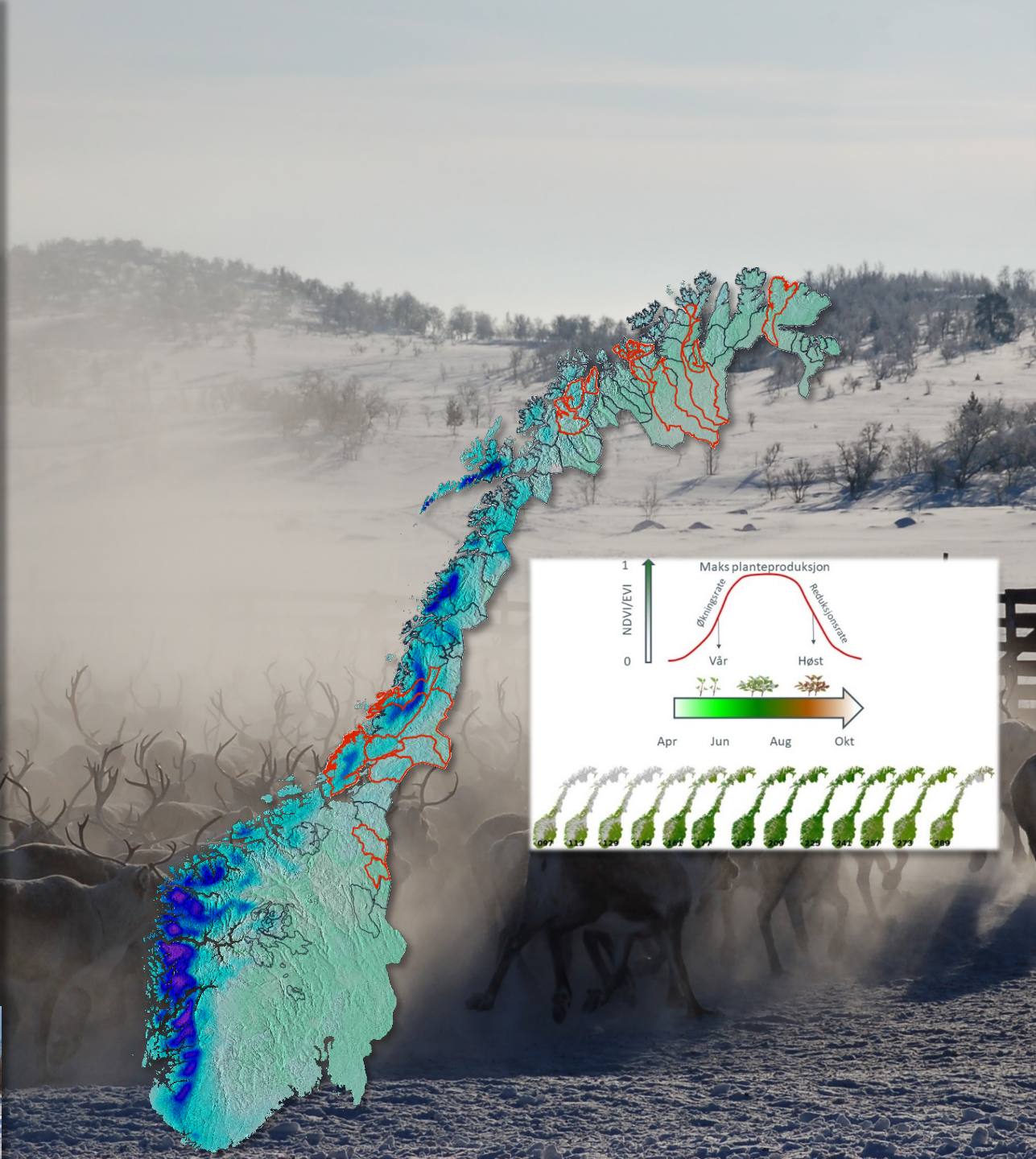
conservationists and herders in Norway differ about whether to blame predators or overpopulation

vations of lynx and wolverines, and satellite data on grazing areas. They found that as a factor in reindeer mortality, food scarcity was two to three times more significant than lynx, and more than 20 times more significant than wolverines. "Tveraa has a very solid basis for these findings—a very large data set collected over a very long time series," says Terje Bø, head of wildlife management in the Norwegian government's environment division in Trondheim. In the global canon of human-carnivore conflict research, Tveraa's "robust" study, says Matt Hayward, an ecologist at Bangor University in the United Kingdom, "goes against the grain of papers saying, 'It's the predators' fault.'" Other experts agree that the findings are plausible. "It's sort of official: We have too many reindeer," says Emil Halvorsrud, a wildlife official in Lak-

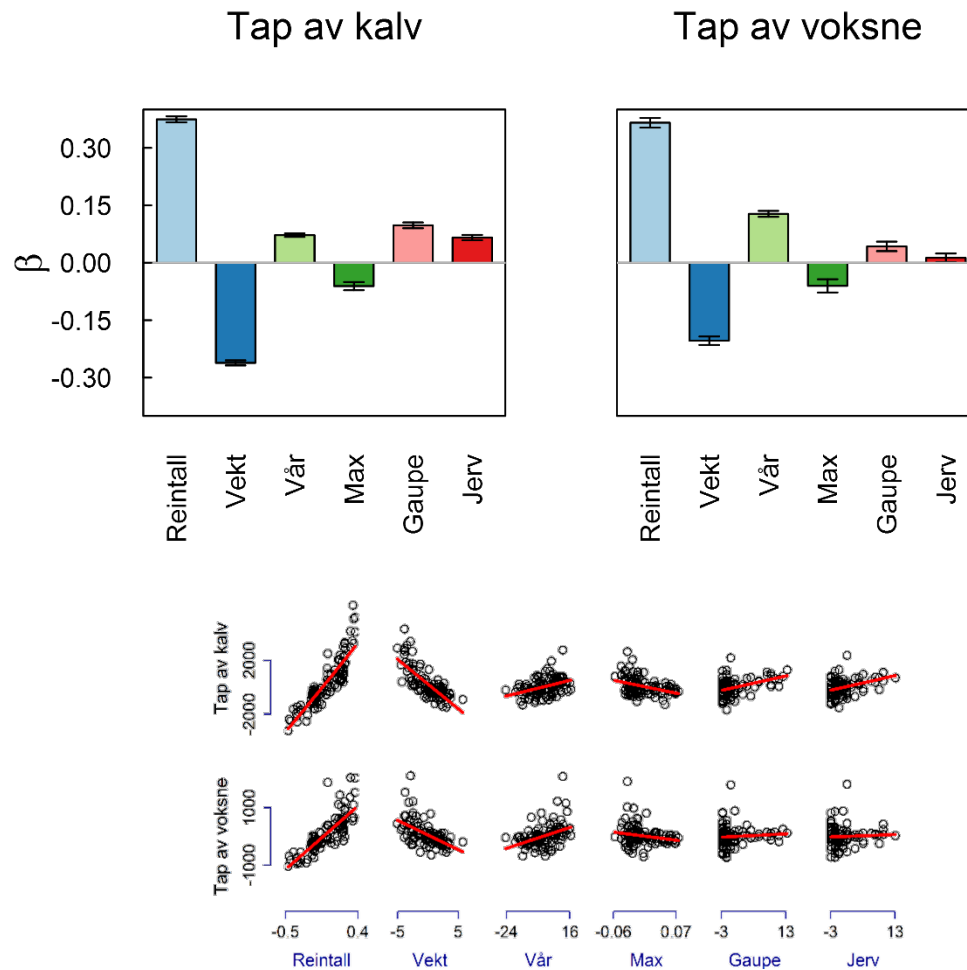




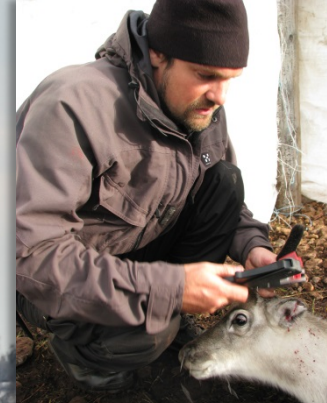
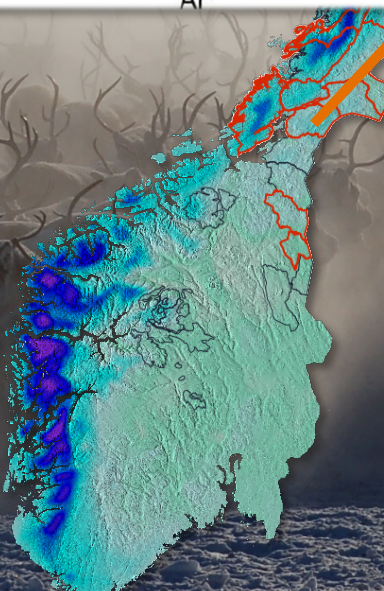
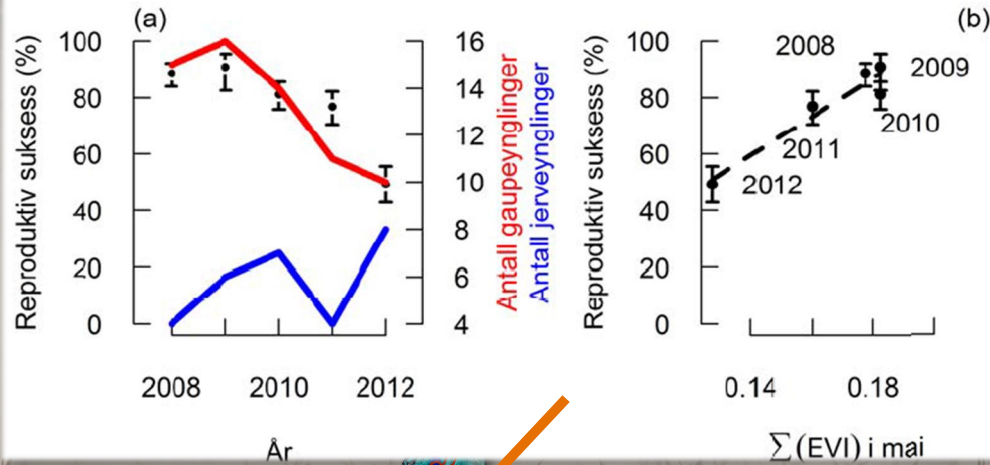




Nasjonalt: Matmangel viktigst for tap



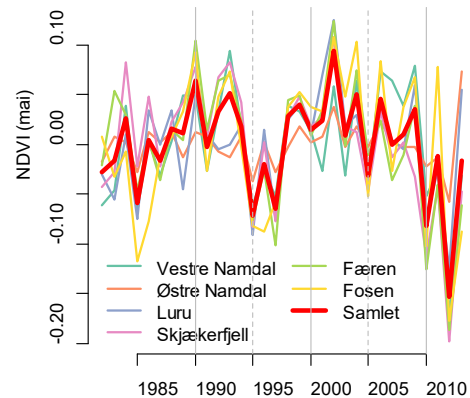
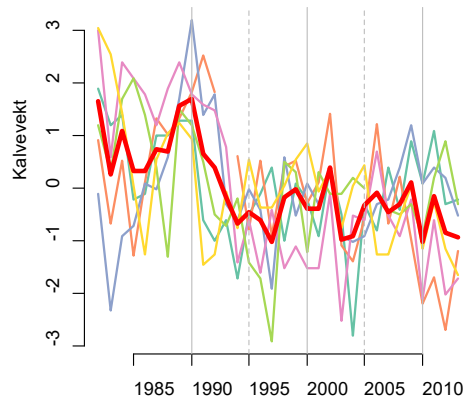
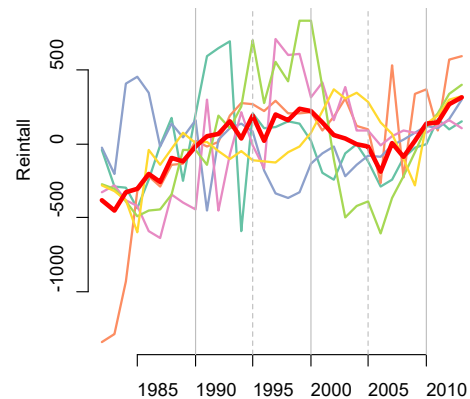
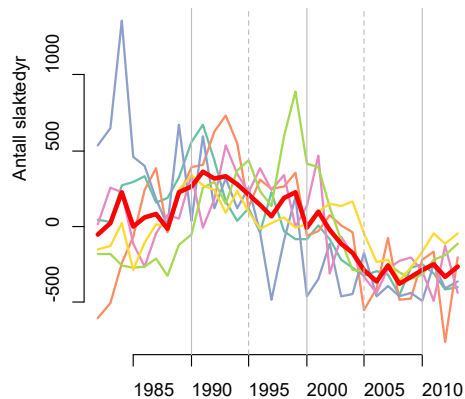
Skjækerfjella



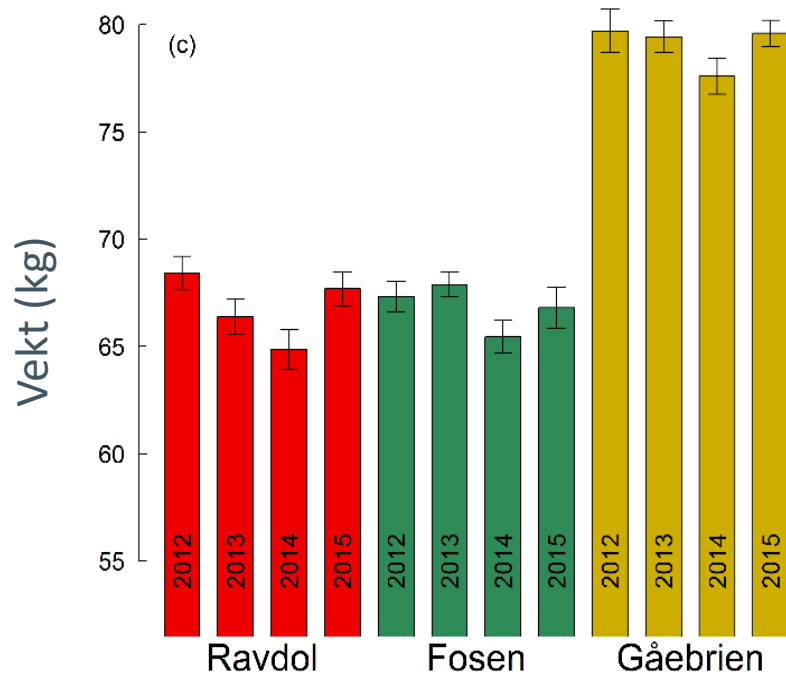
Rovdyr og rein i Midt-Norge

- Offentlig statistikk på reindrifft, rovdyr og klima
- Individbaserte studier i reindriffta på Fosen
- Radiomerking av gaupe og jerv

Nord-Trøndelag:



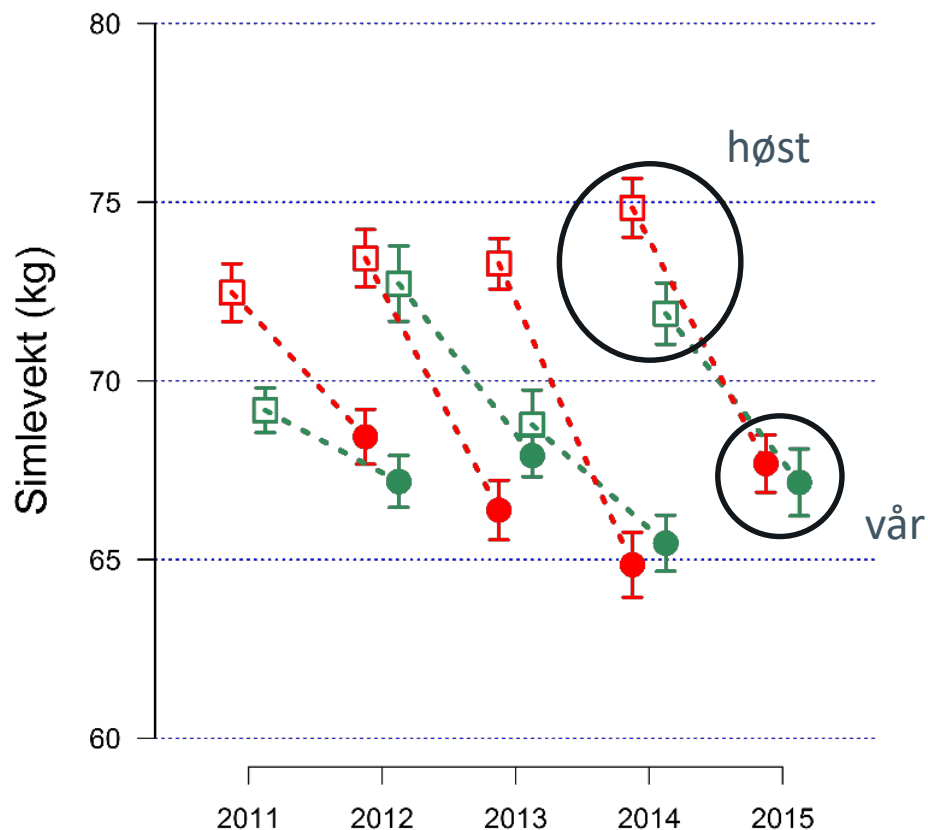
Vinter-vårvekter voksne simler



- Fosen som Ravdol i Finnmark
- Lavere vekter enn i Røros området

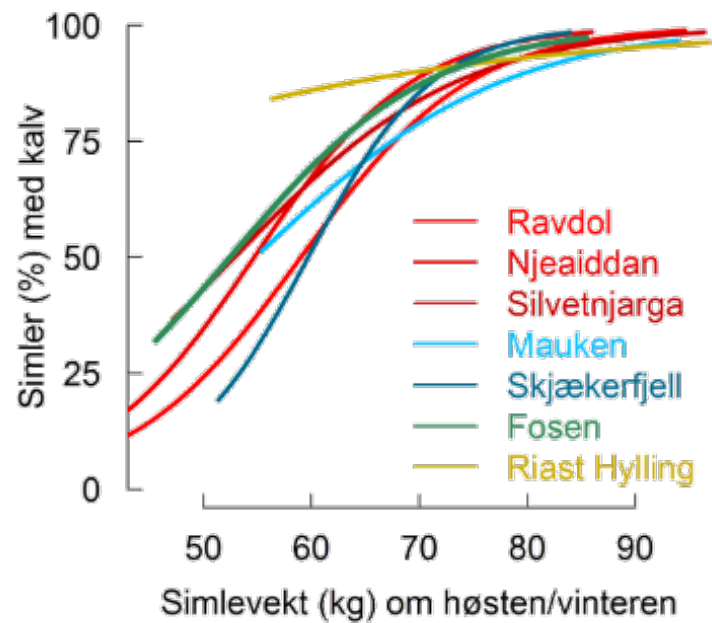
Vektutvikling voksne simler

Ravdol (rød) og Fosen (grønn)

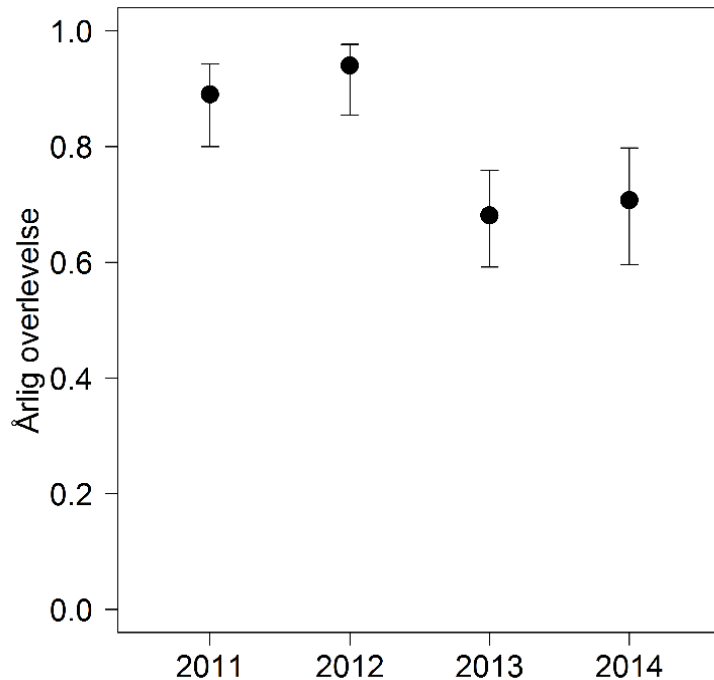


- Lavere høstvekter på Fosen

Reproduksjon og vekt



Overlevelse voksne simler Fosen



Dødsårsak radiomerkede simler 2014-2015 (n=25)

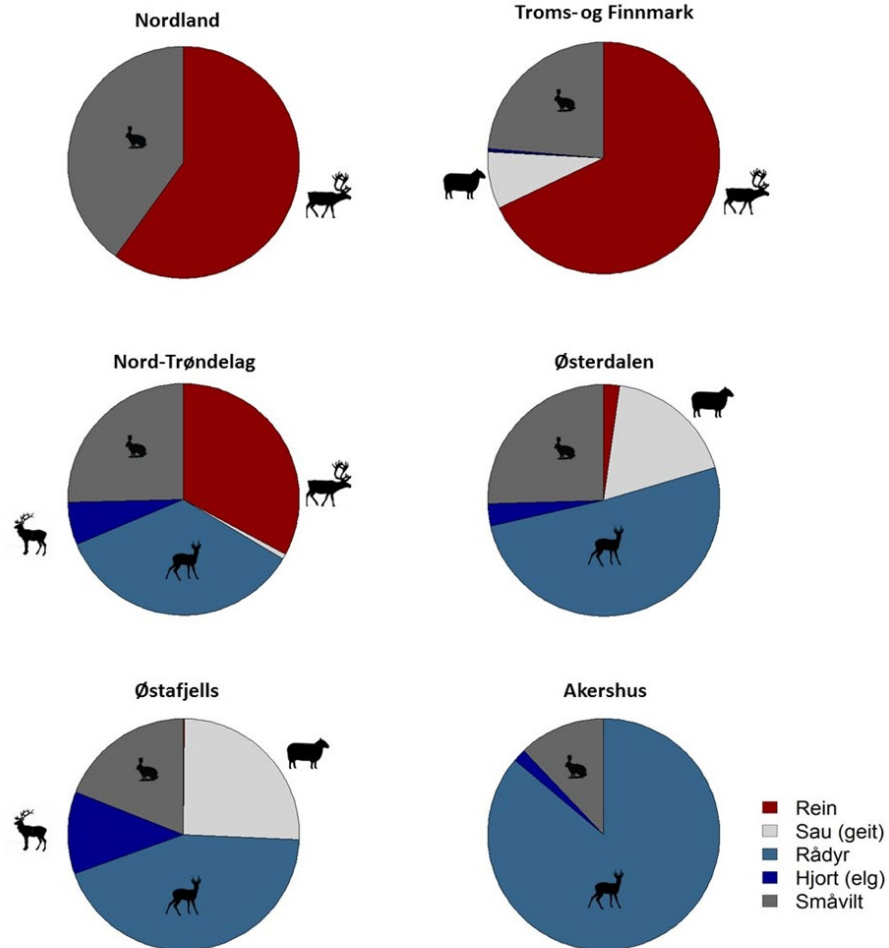
| Dødsårsak | antall |
|----------------|--------|
| Fredet rovvilt | 2 |
| Gaupe | 1 |
| Kongeørn | 2 |
| Ukjent | 3 |

Rovdyrstudier

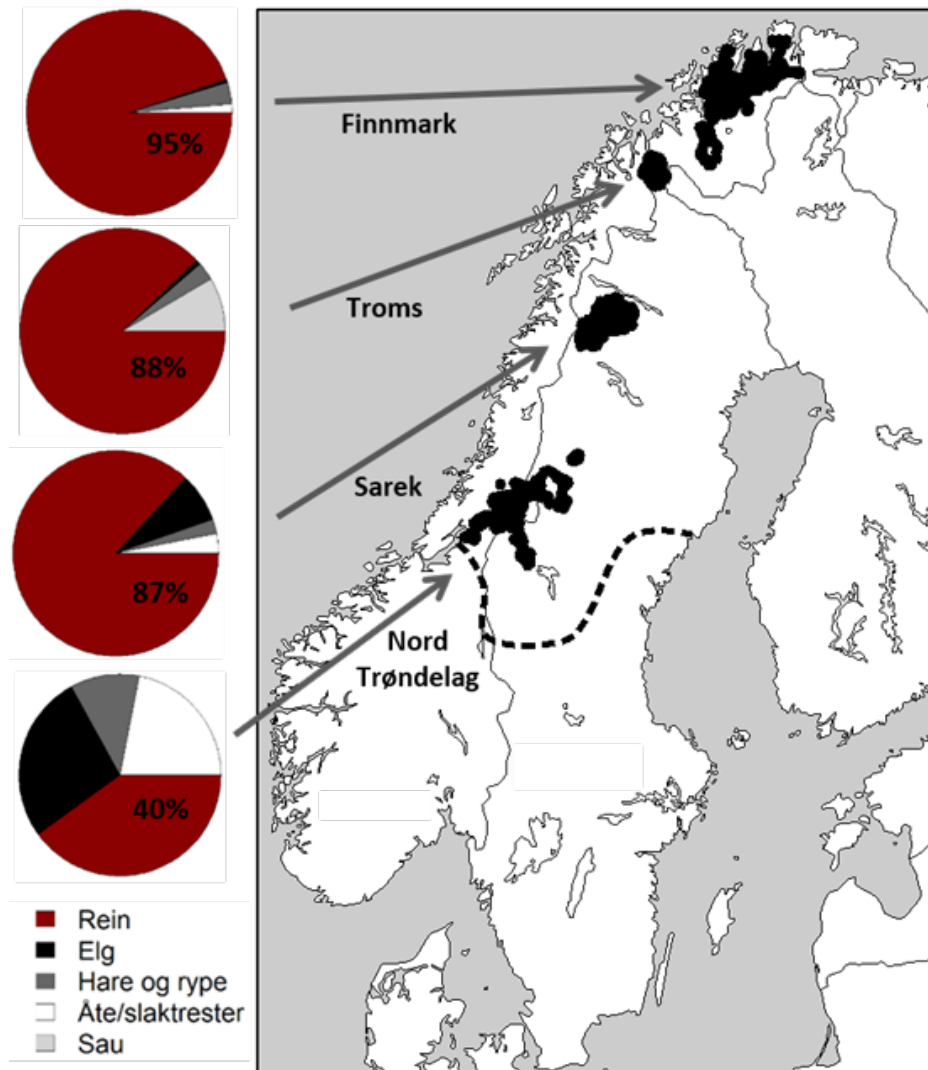
Gaupas drapstakt, rein drept per måned

| | Sommer | Vinter |
|----------------|--------|--------|
| Nord-Trøndelag | 3,5 | 1,8 |
| Nordland | 6,2 | 5,8 |
| Troms/Finnmark | 5,6 | 3,1 |

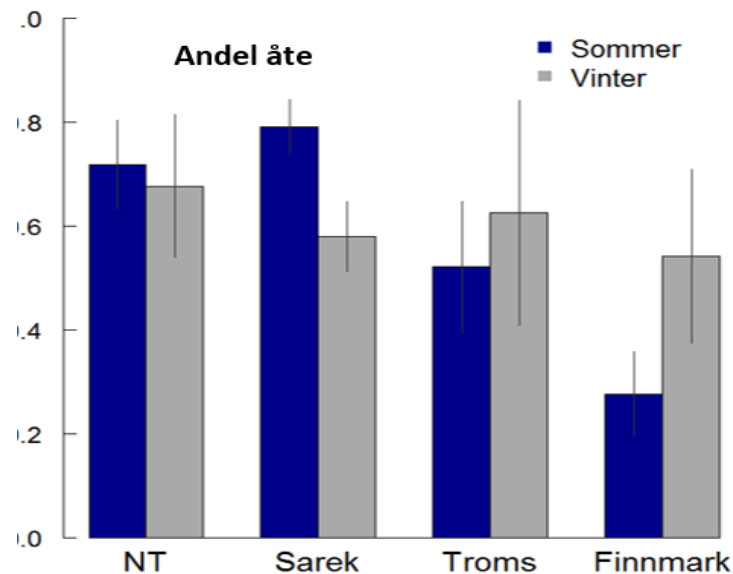
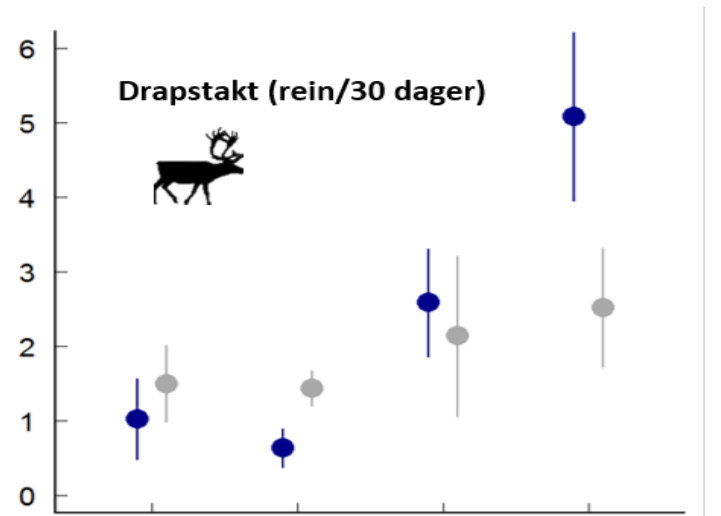
Gaupas diett



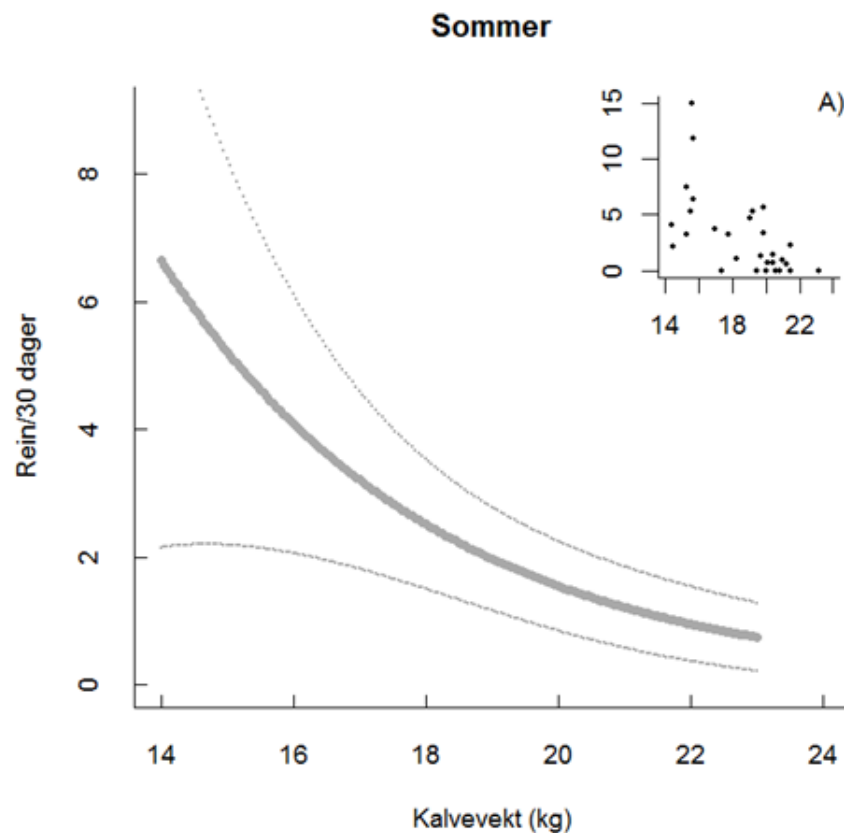
Jervens diett



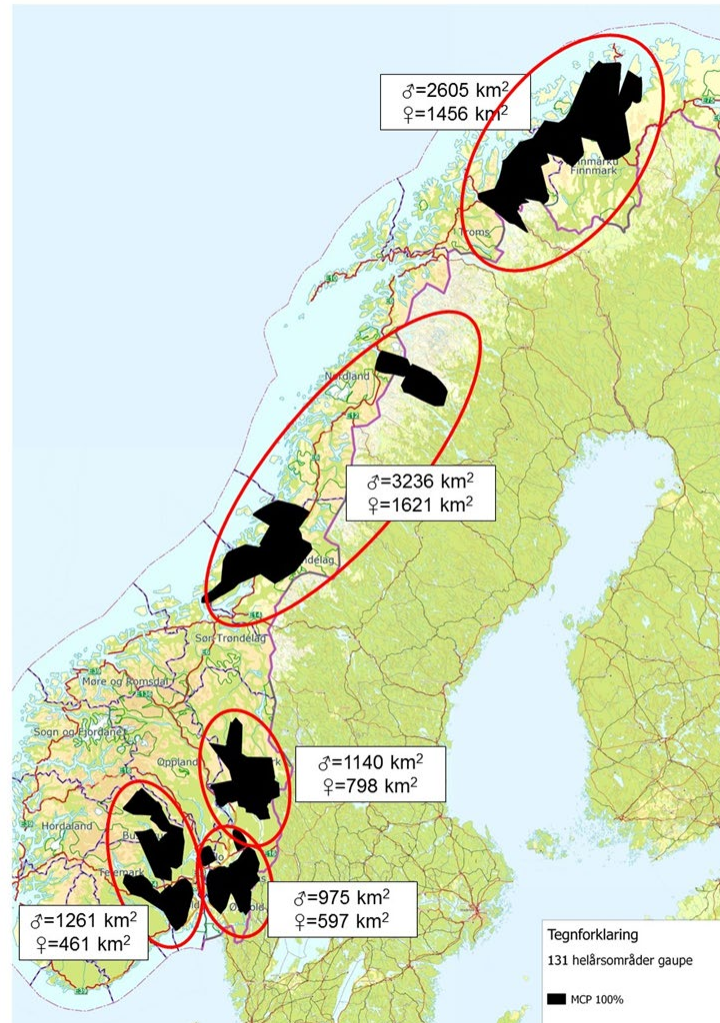
Jervens drapstakter og bruk av åtsler



Jervens drapstakter på sommeren og slaktevekter på reinkalv



Gaupa har store leveområder i Midt- og Nord-Norge



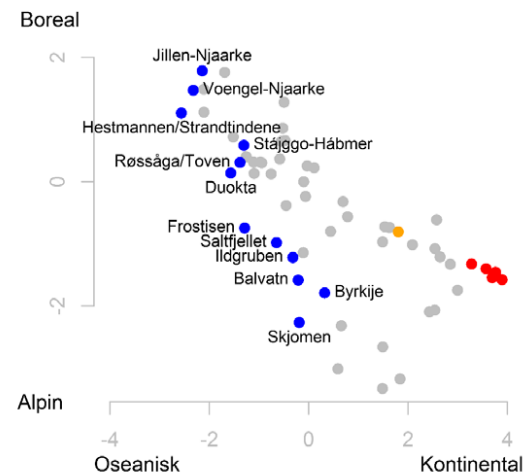
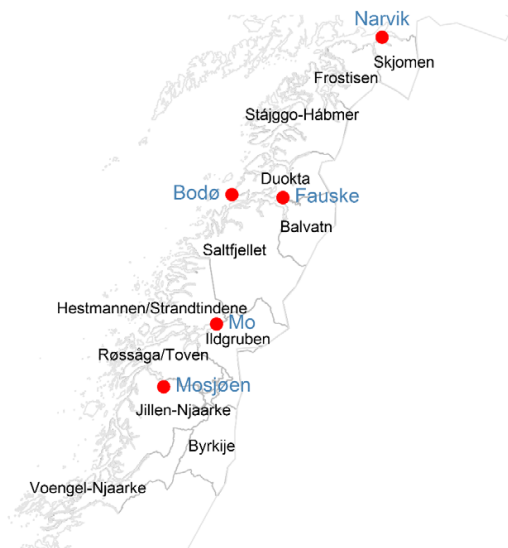
Konklusjon

- Effekter av reintall og klima på produktiviteten i reindrifta også i Midt-Norge
- Vektutvikling og kalvetilgang på Fosen liknet mer på Finnmark enn innlands distriktene ved Røros
- Skiller seg med relativt høye tap av voksne simler på sommeren i enkelte år

- Store leveområder for gaupe og jerv
- Lavere drapstakter på rein enn lengre nord, større bruk av andre byttedyr
- Beregnet tap samsvarer godt med erstattet tap

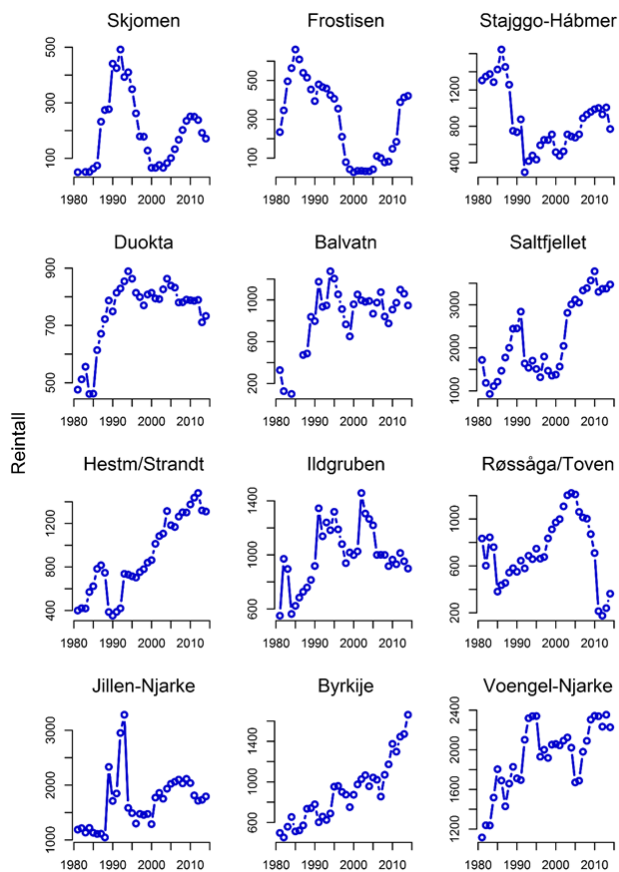
Produksjon og tap i Nordland

- Forprosjekt, gjennomgang av tilgjengelige data



- Oceanisk klima for landskapstype

Reintallsutvikling

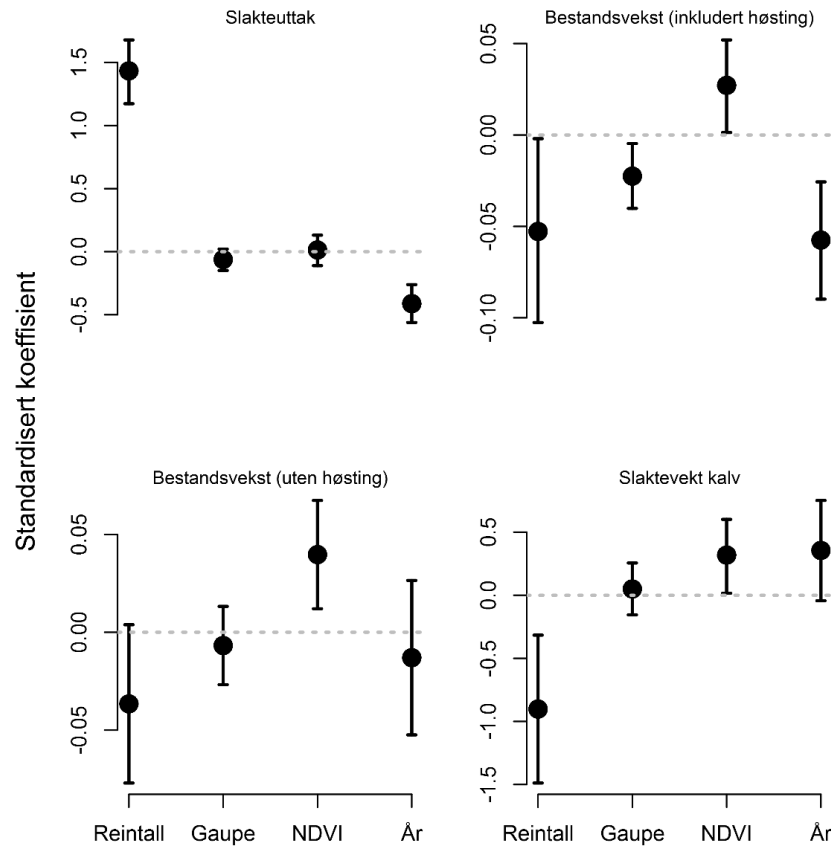


- Stor variasjon
- Mange små distrikt

Hovedtrender

- Økende trend i reintall,
- Synkende trend i slaktevekter (men relativt høye)
- Ingen klar trend i slakteuttak, NDVI (planteproduksjon), gaupe, jerv, bjørn

Effekt estimater



Ingen tydelig effekt av:

- Bjørn
- Jerv

Uforklart tidstrend

Konklusjon

- Finner en del likheter med andre deler av reindriftnorge med hensyn på sammenhenger mellom produktivitet, reintall og klima.
- Noen effekter av gaupe på bestandsvekst
- Mye uforklart variasjon, bl. a. tidstrend