

FINDING COMMON GROUND

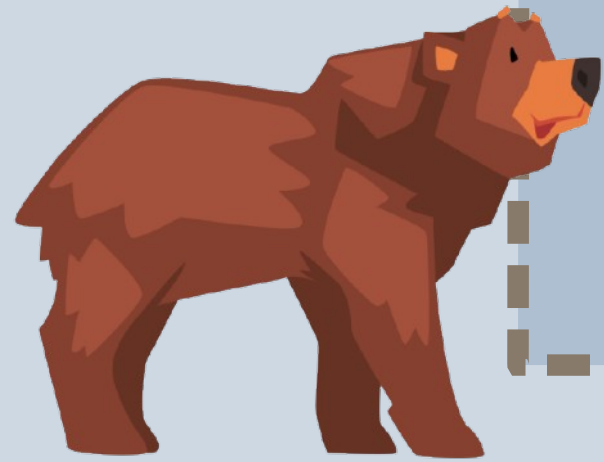
Sheep grazing, timber production, & carnivore fences

Sarah Malick-Wahls, Olivier Devineau, Barbara Zimmermann, & Morten Tofastrud



Are free-ranging sheep natural forest tenders?

Do fenced sheep damage spruce saplings?



LOCATION: Innlandet & Trøndelag, Norway
Inside and outside carnivore-resistant fences

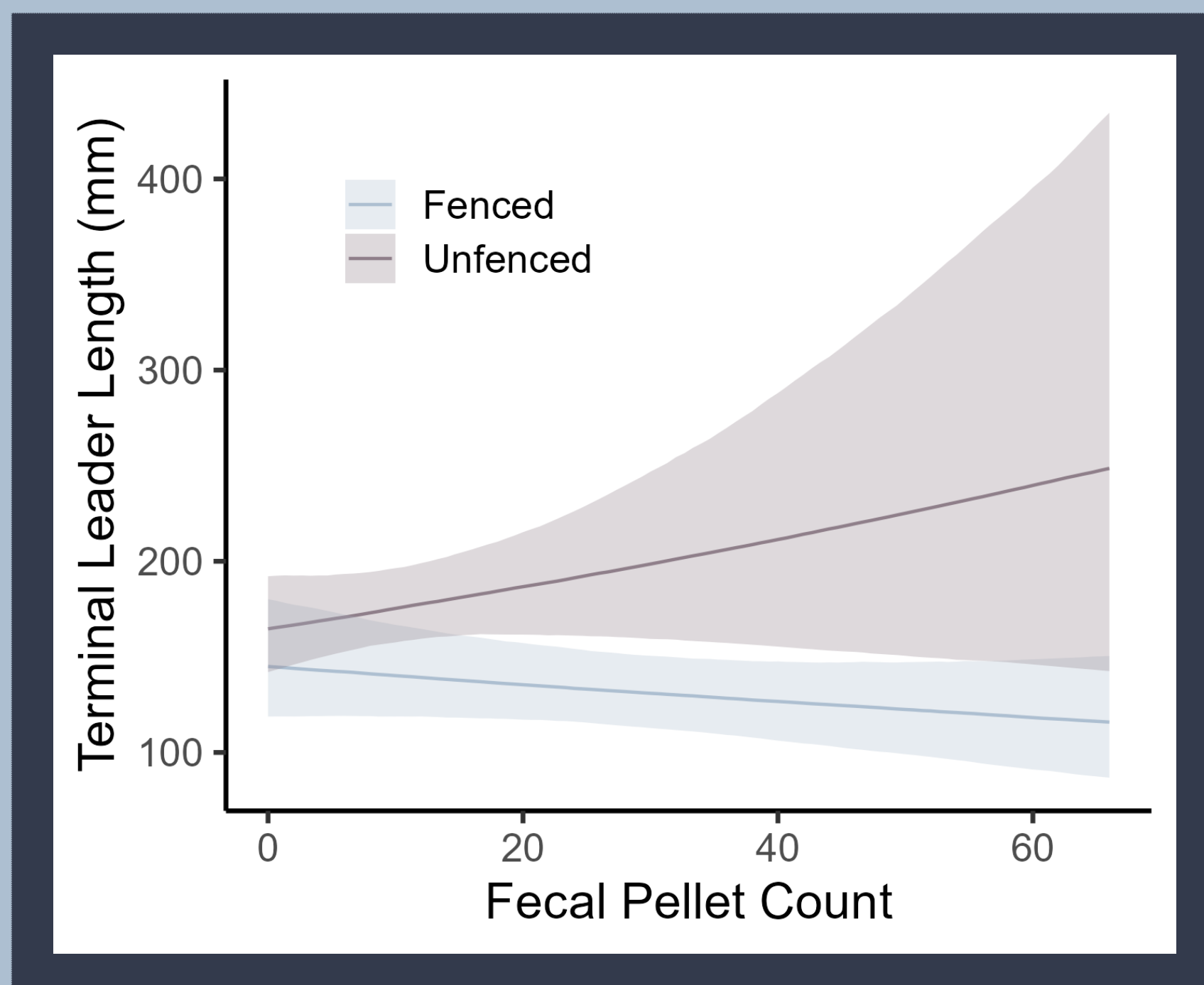
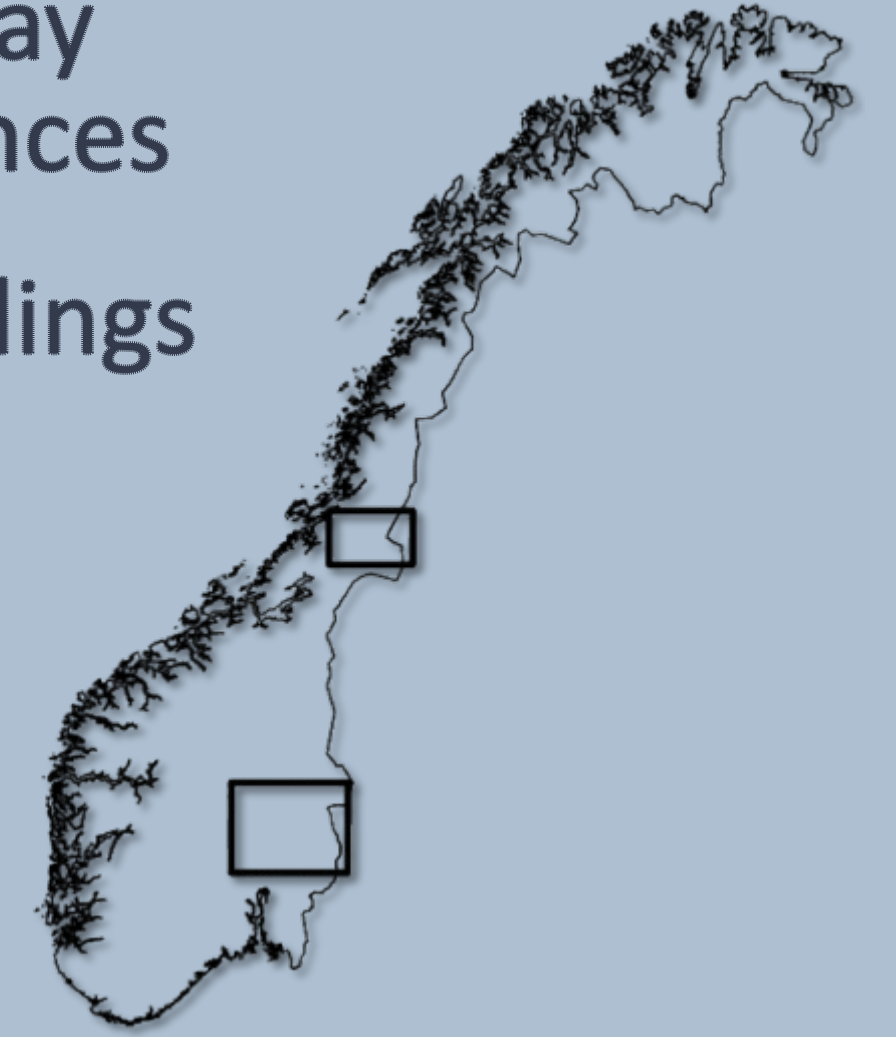
MEASUREMENTS: 3 - 5 yr old spruce saplings
50 m transects in clearcuts

Annual growth = terminal leader length

Robustness = height-to-diameter ratio

Grazing intensity = fecal pellet count

Damage = tip browsed



Effect on annual growth was opposite inside and outside fences



Saplings had more *robust* form as grazing increased

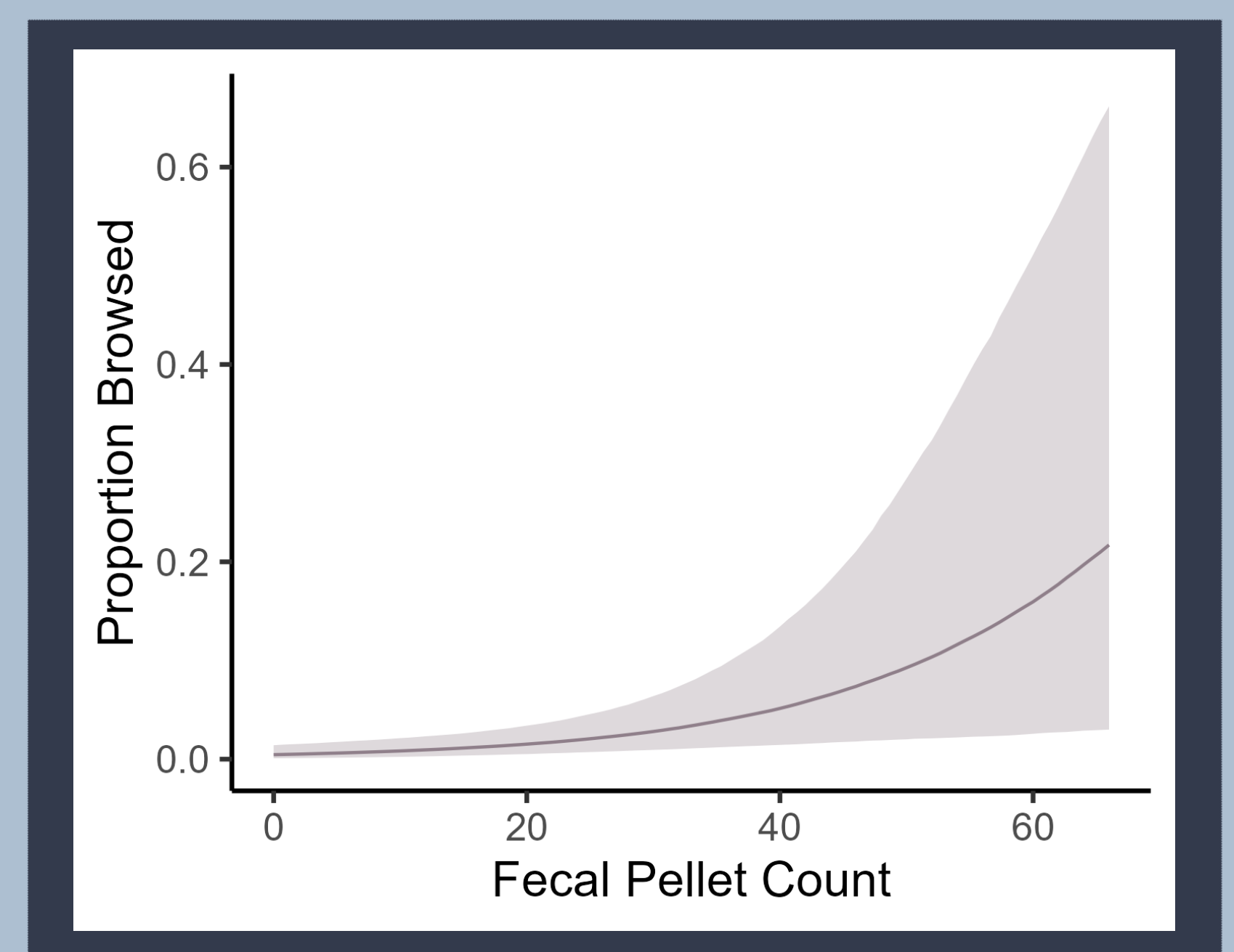
Sheep reduced competition so spruce grew...



shorter and fatter with lots of sheep



taller and skinnier with fewer sheep

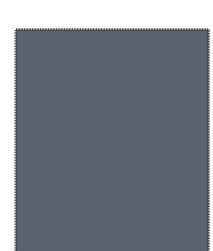


Sheep only browsed when they were many

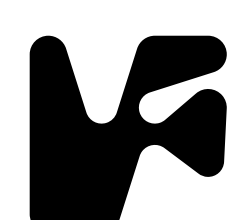


Images: Coulourbox.com (ID #42642402, ID #5409757)

Find out more:



Get in touch:



Funded by
The Research
Council of Norway



University of
Inland Norway