

Effects on Bilberry (*Vaccinium myrtillus*) height and percentage cover in relation to tree canopy cover.



- Deciduous herb with small pink flowers and purple-black berries
- Grows in acidic, nutrient poor soils
- Temperate or subarctic regions
- Dominant ground flora across boreal forest
- Tolerance to Scots Pine (*Pinus sylvestris*) allelopathic toxins

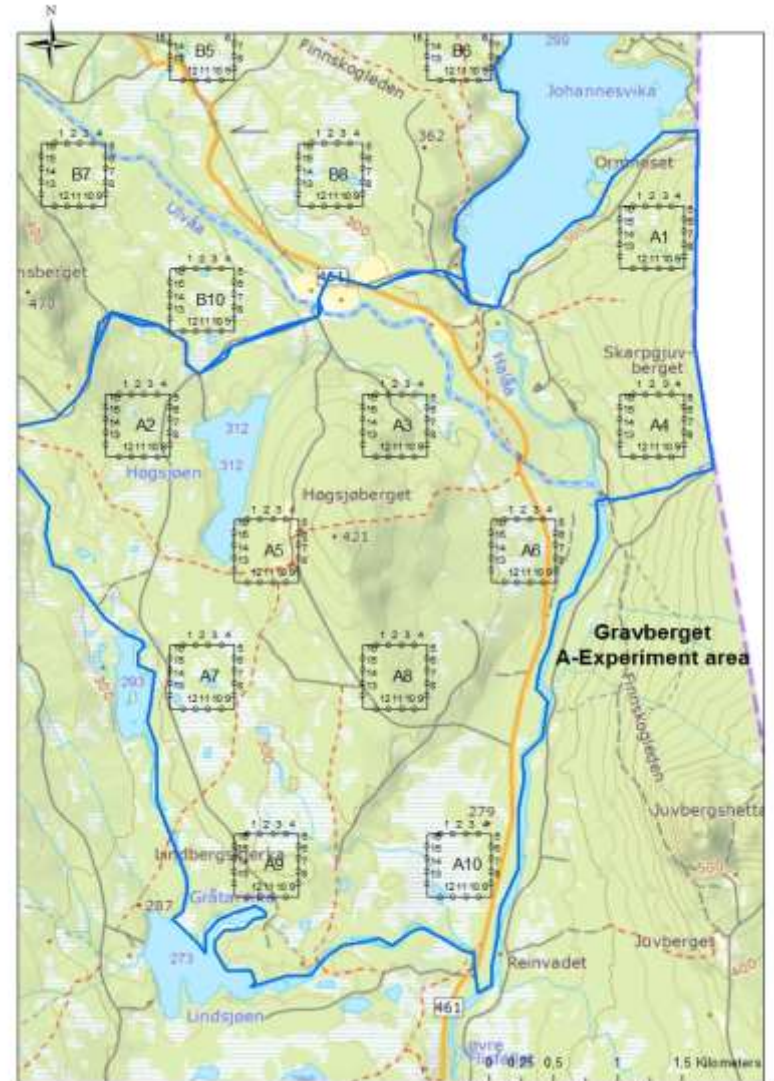
Importance

- Vital food source to many organisms
- Berries eaten widely by humans
- Important forage to moose during summer and autumn

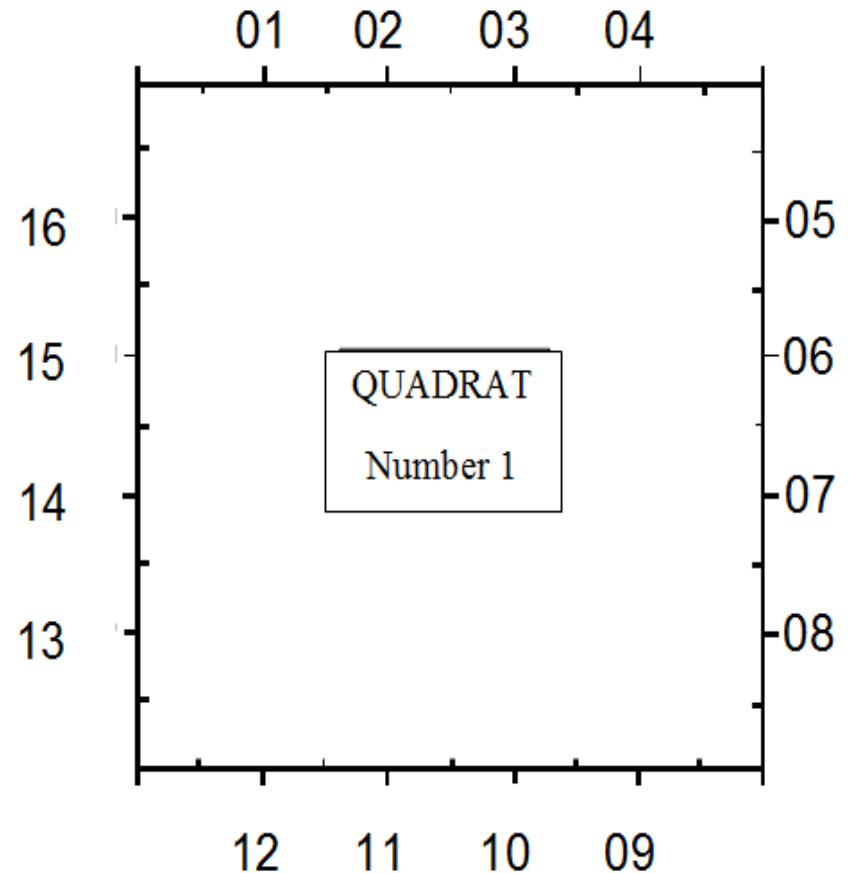


Method

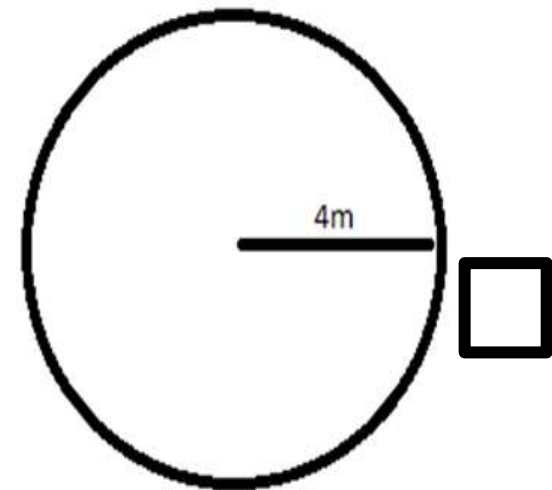
- Ljørdalen, Gravberget and Plassen
- Each site has 2 sampling areas; one with experimental treatments (A) and one control (B)



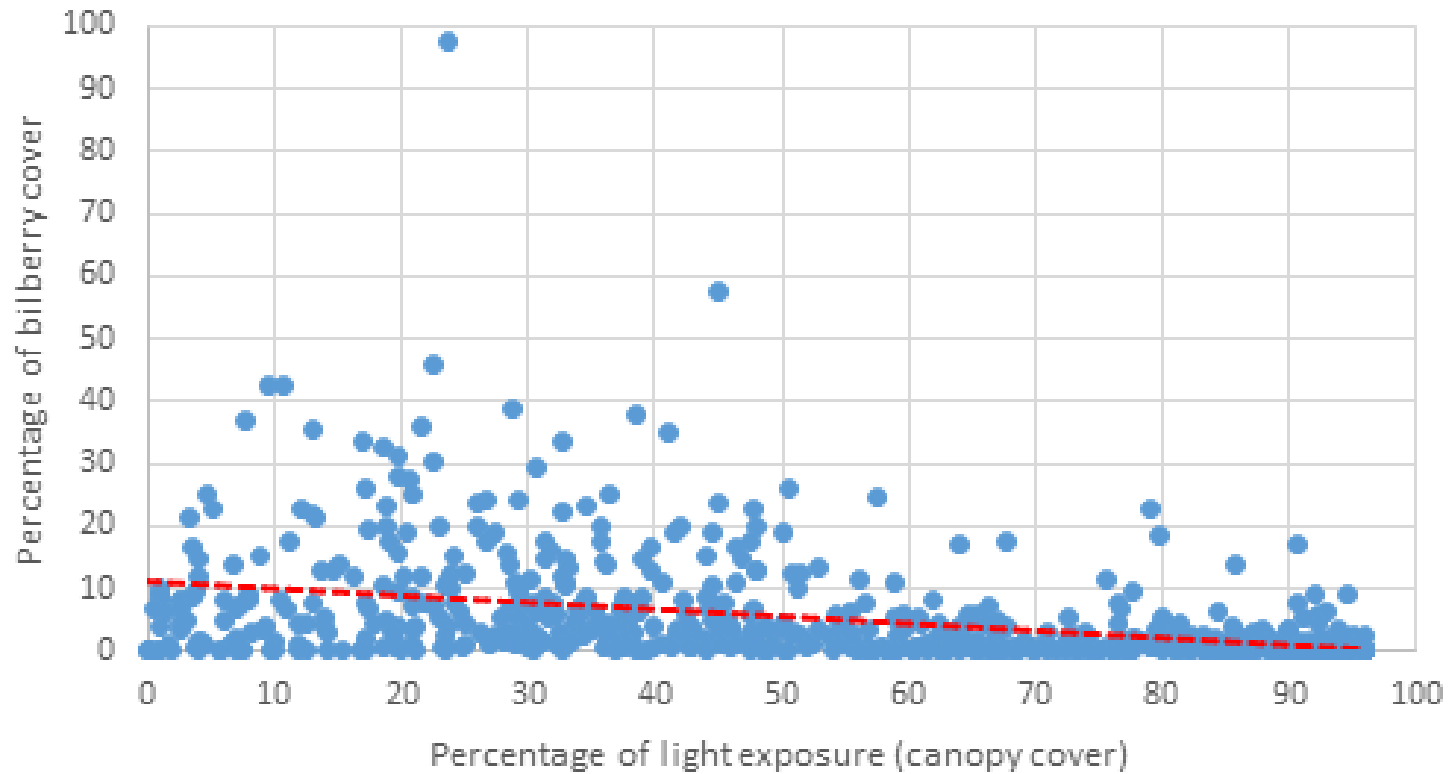
- 10-11 quadrates of 500 m x 500 m
- 16 sampling plots, 4 along each side with 100 m between them
- Centre of each plot marked with a white pole



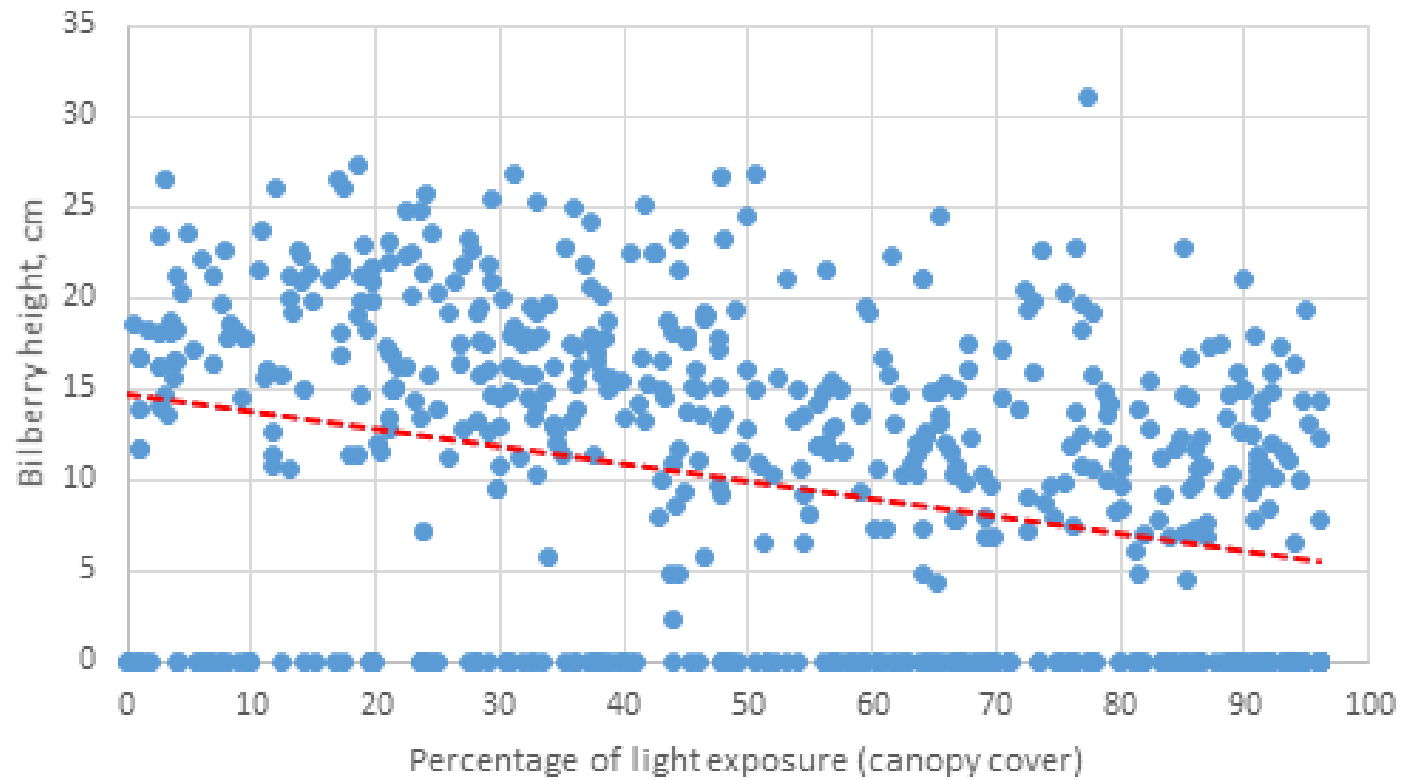
- North, east, south and west
- Canopy cover reading taken facing away from the central point; measured at elbow height
- Bilberry coverage was estimated
- No. flowers/buds were counted
- Each corner bilberry plant closest to each corner was measured in height and whether it had been browsed in winter, summer and by insects.



Light exposure versus bilberry cover



Light exposure versus bilberry height



- Our results support the conclusion by Atlegrim & Sjöberg (1996), that increased light exposure decreases bilberry cover.
- Increased sunlight may dry bilberry roots quicker
- Competition might also increase with more sunlight.

- Bilberry affects most living things in the boreal forest.
- Can aid in silvicultural decision making in boreal forest habitats

