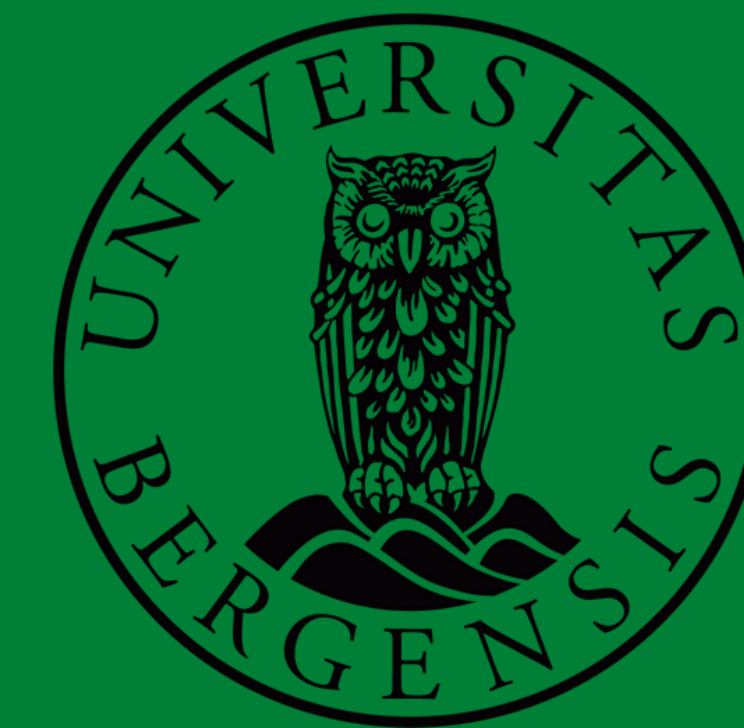


# Sitka Spruce - a Dilemma of Carbon Storage vs. Biodiversity



This poster was made by Dusi, M., Eichler, A.H., Håskjold, E.E., Jespersen, A.S., & Sjørnsen, T.F.

## What is Sitka Spruce?

The Canadian spruce "Sitka" was planted in Norway around 100 years ago. Considering its high resistance to wind and cold, it is a great choice for afforestation mainly for timber production purposes. Unfortunately, Sitka spruce is an invasive species, with no natural enemies in Norwegian nature. At this point, Stikas have outcompeted many native species leading to great biodiversity loss and are spreading uncontrollably in many parts of the country.

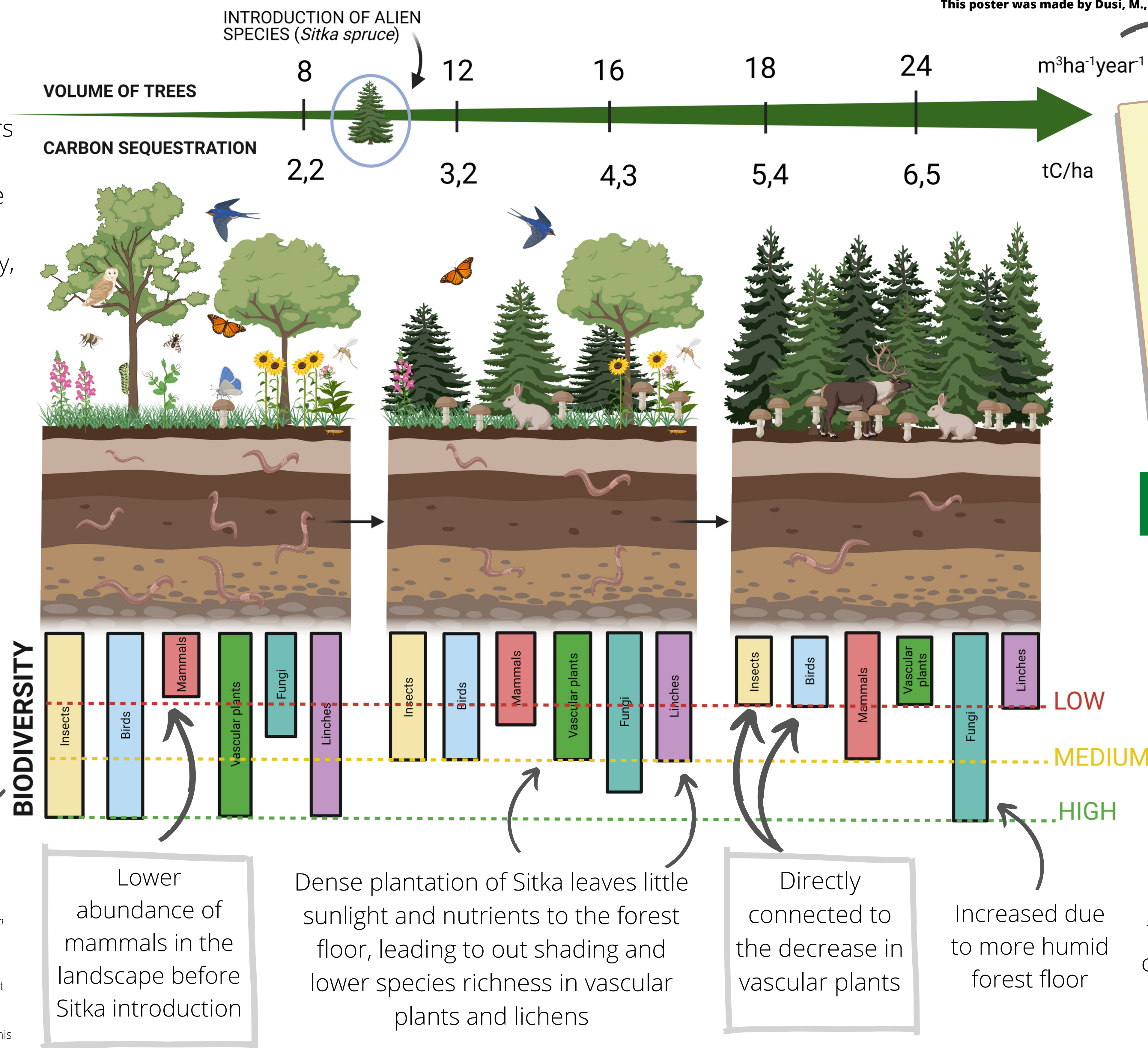
### BIODIVERSITY LOSS:

The early and rapid expanse of the Sitka Spruce leads to an overall reduction in biodiversity.



SCAN ME

This poster is based on the paper "Consequences of Sitka spruce afforestation in Norway" written by Dusi, M., Eichler, A.H., Håskjold, E.E., Jespersen, A.S., & Sjørnsen, T.F. (group 4) for the course "SDG215 - UN Sustainable Development Goal 15: Life on land" at the Faculty of Mathematics and Natural Sciences, University of Bergen. All references for this poster can be found in the paper.



### CLIMATE CHANGE MITIGATION:

The increase of land covered by Sitka spruce equals an increase in CO<sub>2</sub> removal from the atmosphere.

### Solving the dilemma

As with many other SDGs, it is difficult to reach the most sustainable compromise. Because forests take time to grow it is important to evaluate possible feral side effects in advance. In this case, introducing a bigger variety of species, that are not invasive, could be less damaging for the biodiversity, while at the same time potentially mitigate climate change by increasing forest land cover, thereby increasing CO<sub>2</sub> sequestration.