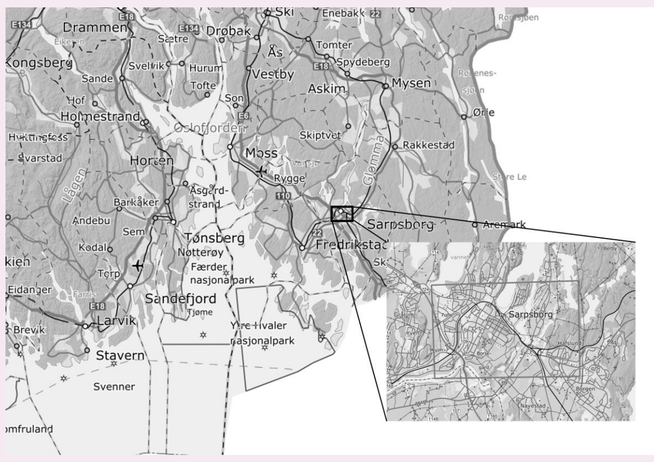
Fieldwork in Sarpsborg

Nora Sandbæk
GLA305



The location of the city of Sarpsborg, Norway. This is the selected spot for the fieldwork.

There were expensive housing in Kulåsparken, with great gardens, and natural surroundings.

Kulåsparken looks like a hidden forest, where nature functions in a way that creates "rooms" when walking in the neighborhood. It creates a layer of mystique, and beauty.

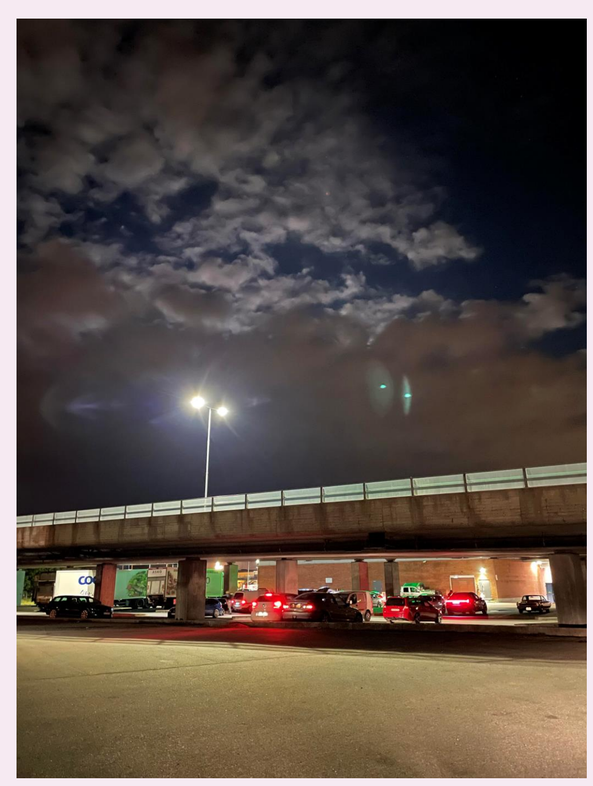
Alvinhaugen neighborhood seemed to have the opposite first impression of Kulåsparken. The landscape seems to be bare, or even naked. It feels vulnerable. The area can look like typical "drabantby".

The industrial area on the opposite site from Alvinhaugen, It created a visual contrast. From a flat, "naked", industrial area, to a flourishing forested neighborhood. The massive agricultural field, creates a homogeneous landscape.

The opening of Kulåsparken from the city center. It's humble, and not an "obvious entrance". The forested area is not generated by the typical "city tree", It seems to be produced by a slowly naturally grown forest. It looks like it have always been, and that small patches of forest have been removed to create the neighborhood.

A higher visual point, which captures the city trees. It looks like a more typical urban nature area.

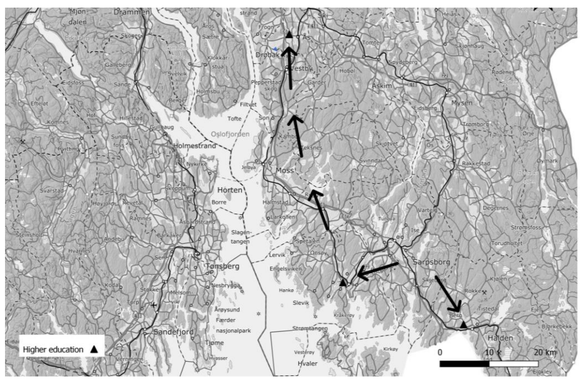
The bridge crossing "Sarpefossen", with railway tracks following above. It is a trafficated area.



The parking lot next to McDonald's, near Alvinhaugen. Here, "Rånere" are often observed.

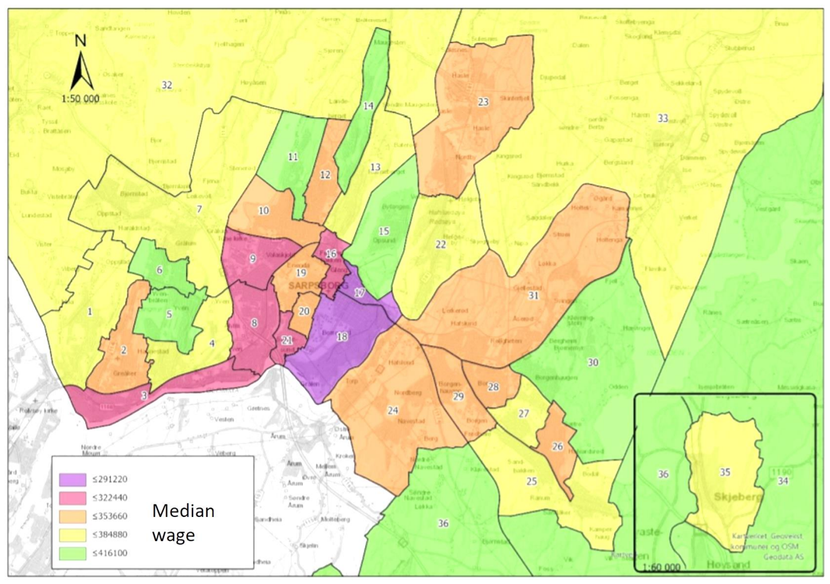
Research after fieldwork

Nora Sandbæk
GLA305

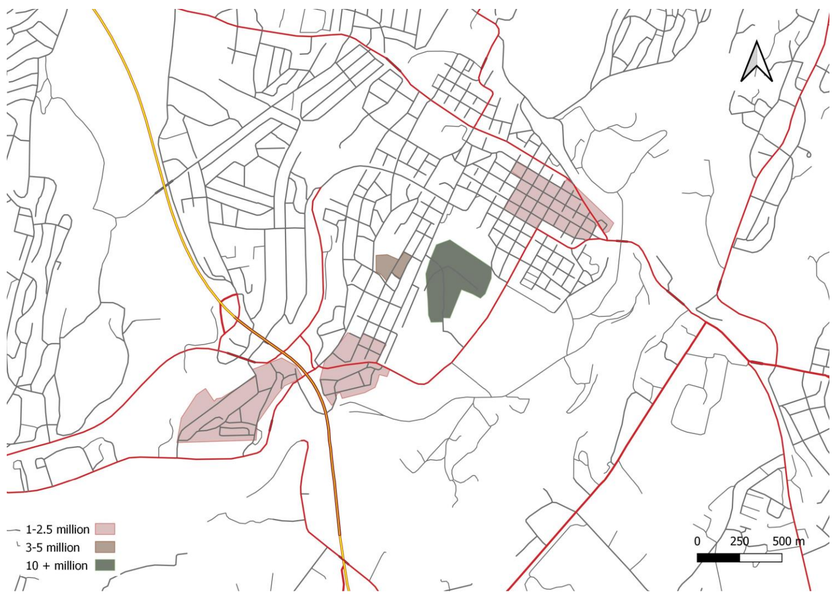


Map over the routes on a regional level. It is a city of movement, both internally and externally.

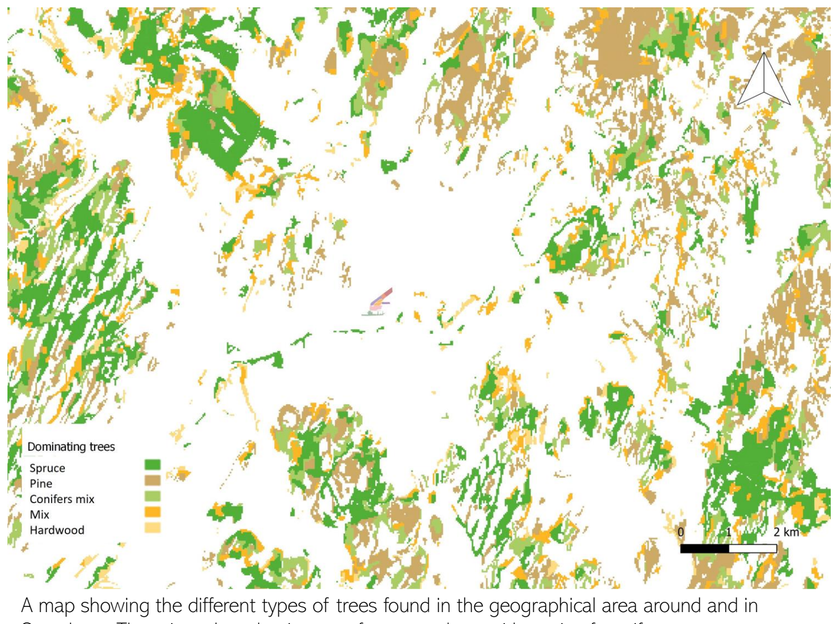
Map over the "hotspots" of Sarpsborg.



Map over medium wage based on location of citizens. Alvinhaugen has a significant lower wage than the purple areas. (Sarpsborg kommune, 2020)



Map over the contrasting socio economic areas

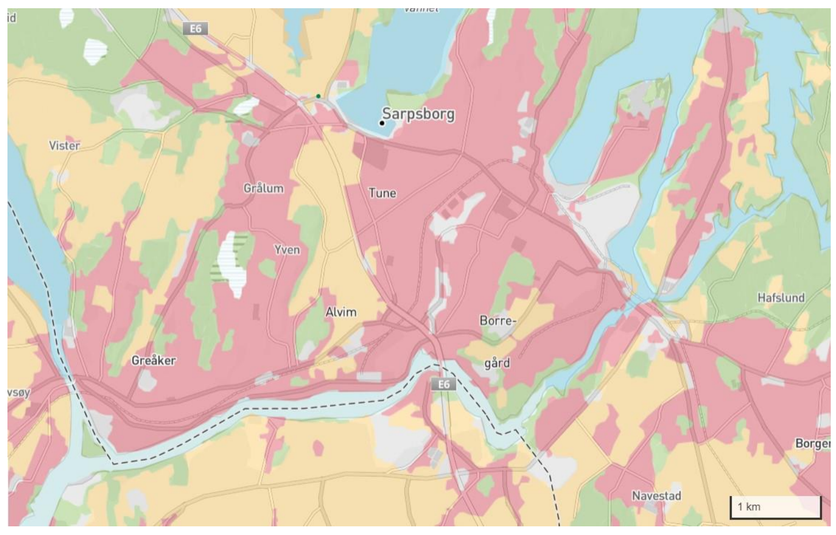


A map showing the different types of trees found in the geographical area around and in Sarpsborg. There is a clear dominance of spruce, along with a mix of conifers.

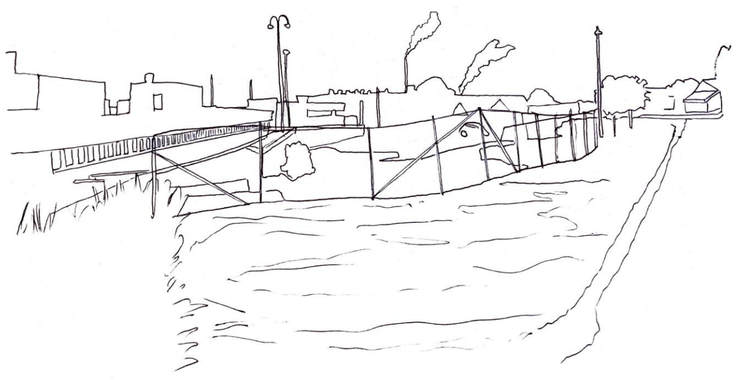
The species found in Sarpsborg tells a bit about the nature types. Found at (Artsdatabanken, (2021)

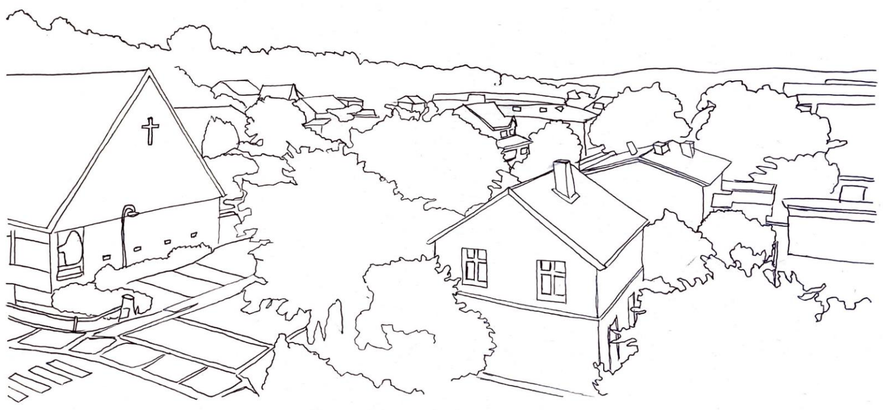
Visual analyzing

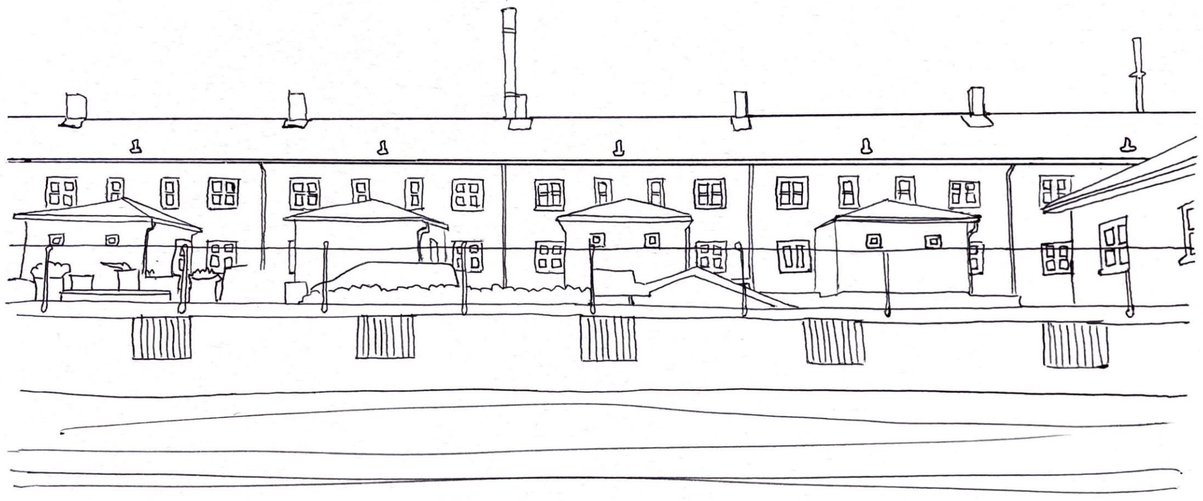
Studying the lines and elements of different areas in Sarpsborg.



This map shows the areal use of Sarpsborg. The red is urban areas, the orange is agricultural land, and the green is nature. (kommunekart.no)
The fields of agriculture are very dominant, and a homogeneous landscape. Therefore, agriculture is a main global driver for biodiversity loss (WWF, 2018)







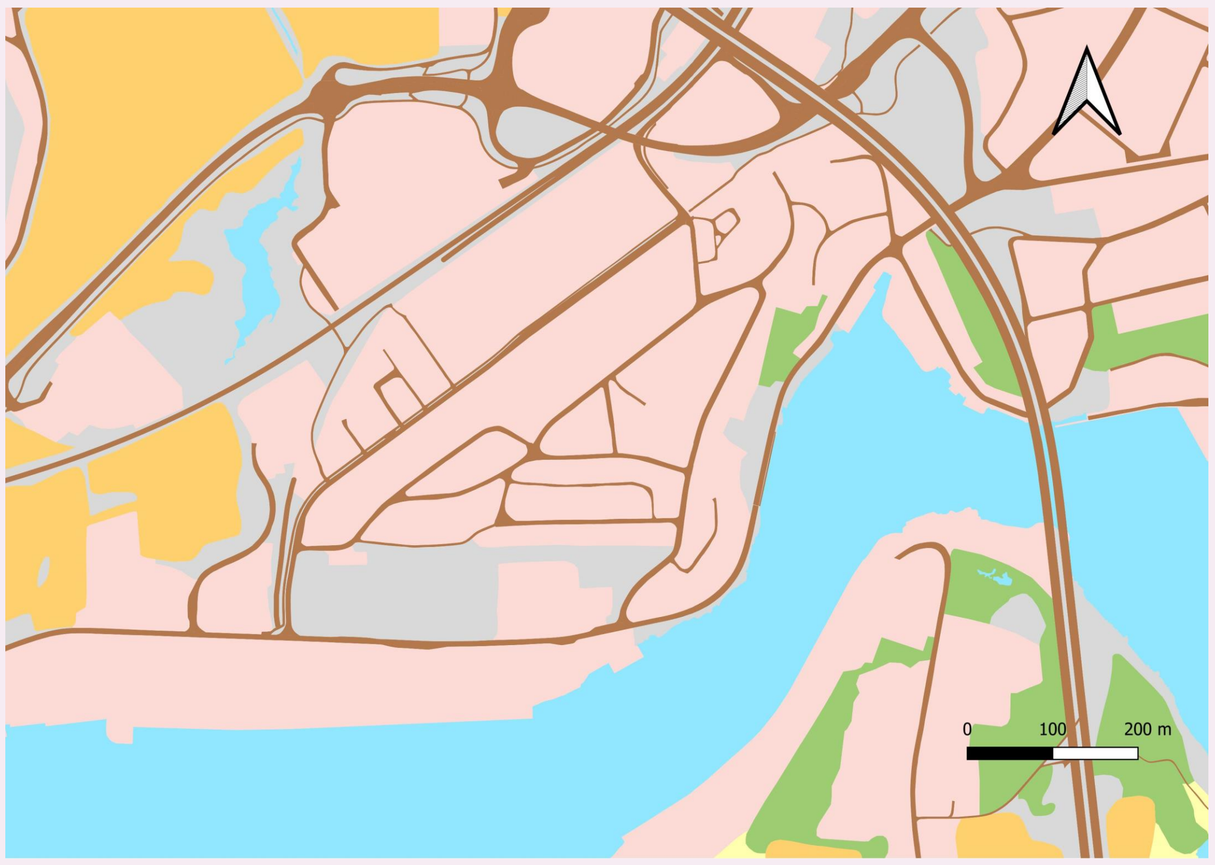
References:
Sarpsborg kommune. (2020). Levekår i Sarpsborg 2020. Available at: https://www.sarpsborg.com/globalassets/dokumenter/levekar-i-sarpsborg-2020.pdf (Read 10.11.2021)
Artsdatabanken. (2021). Available at:
https://artskart.artsdatabanken.no/app/#map/427864,7623020/3/background/nibwmts/filter/%7B%22IncludeSubTaxonIds%22%3Atrue%2C%22Found%22%3A%5B2%5D%2C%22NotRecovered%22%3A%5B2%5D%2C%22Style%22%3A1%7D
WWF. (2018). Living Planet Report - 2018: Aiming Higher. Available at: https://c402277.ssl.cf1.rackcdn.com/publications/1187/files/original/LPR2018_Full_Report_Spreads.pdf (Read 25.11.2021)

Analysis of Alvinhaugen

Nora Sandbæk
GLA305

The areal use of Alvinhaugen and the surrounding areas

The pink, is built area, the orange is agricultural land, grey is open field, the green is forest. Alvinhaugen itself is quite homogeneous, along with the agricultural field.



3D model over Alvinhaugen

Maps with the areas with dangerous levels of toxins
(Norkart AS/Geovekst og kommunene/NASA, Meti, 2021).

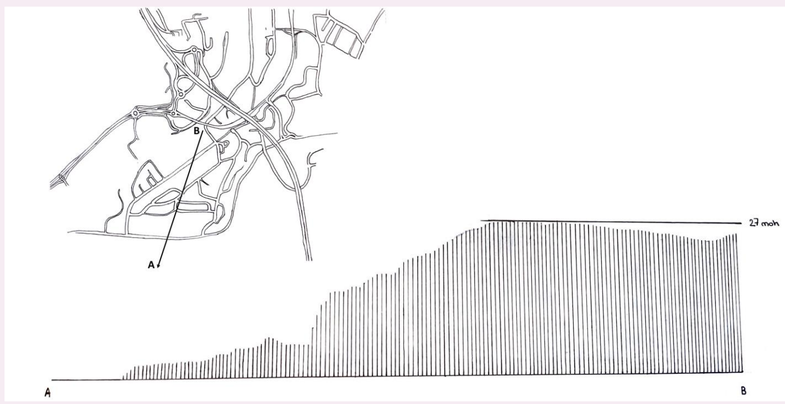
Map of the agricultural areas
These areas are very dominant
(Norkart AS/Geovekst og kommunene/NASA, Meti, 2021).

Map of the urban green areas
(Norkart AS/Geovekst og kommunene/NASA, Meti, 2021).

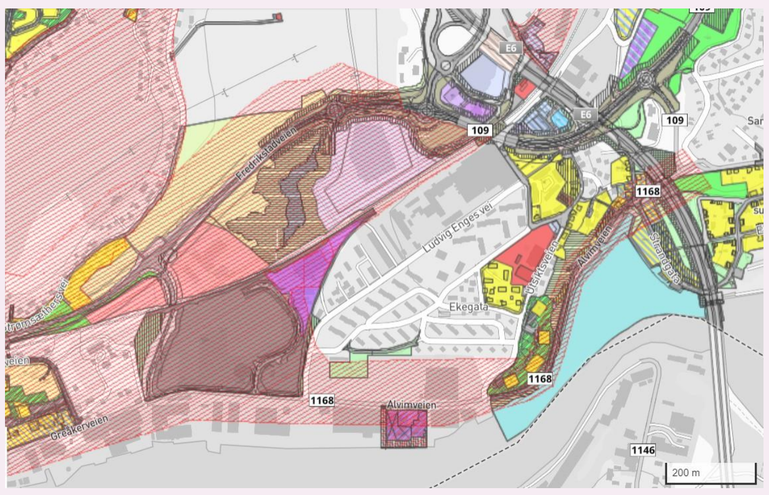
Map of the geological layer beneath the soil
The blue is thick layer of sea deposits, the grey is filling sediments.

Maps on likely movement through the landscape

Map over the current situation



Profile view of the terrain

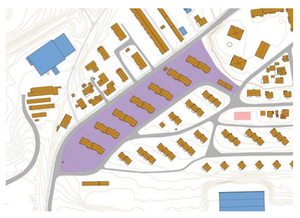


Municipality plans are surrounding Alvinhaugen, but there does not exist a plan for the neighborhood
(Norkart AS/Geovekst og kommunene/NASA, Meti, 2021).

References:
Norkart AS/Geovekst og kommunene/NASA, Meti. (2021). Sarpsborg. Available at:https://kommunekart.com/klient/sarpsborg/avansert (Read. 02.11.2021)

Metapopulation park in Alvinhaugen

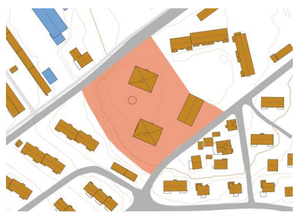
Nora Sandbæk
GLA305



Tree specids
Alnus incana, the grey alder
Salix caprea, Goat willow
Betula pubescens, Downy birch
Salix caprea, Goat willow
Salix, Willows

Plants
Vaccinium myrtillus, European blueberry
Polypodiaceae
Anemone nemoroso, the wood anemone
Ficaria verna, lesser celandine
Anemonoides ranunculoides,, the yellow anemone

Mosses
Cirriphyllum piliferum
Eurhynchium angustirete
Atrichum undulatum
Thuidium tamariscinum
Rhytidiadelphus squarrosus



Tree species
Betula pubescens, Downy birch
Salix caprea, Goat willow
Alnus incana, the grey alder

Mosses
Rhytidiadelphus triquetrus
Sciuro-hypnum reflexum
Eurhynchium angustirete
Rhodobryum roseum
Plagiomnium affine
Ptilium crista-castrensis
Hylocomium splendens
D. Scoparirim

Tree species
Betula pubescens, Downy birch
Salix caprea, Goat willow
Alnus incana, the grey alder

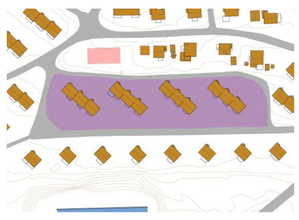
Mosses
Rhytidiadelphus triquetrus
Sciuro-hypnum reflexum
Eurhynchium angustirete
Rhodobryum roseum
Plagiomnium affine
Ptilium crista-castrensis
Hylocomium splendens
D. Scoparirim

Choice of species

The species are chosen due to geographical location, climactic conditions, and natural habitat. They emulate to a degree "nature types" found in the region. They have differences in order to create a more stable overall population. This is also supported by the variety of species..(Prest, 1994)

Tree species
Tilia cordata, the small-leaved lime
Salix caprea, Goat willow

Plants
Viburnum opulus, the guelder-rose
Calluna vulgaris, common heather
Vaccinium myrtillus, European blueberry
Polypodiaceae
Anemonoides ranunculoides,, the yellow anemone



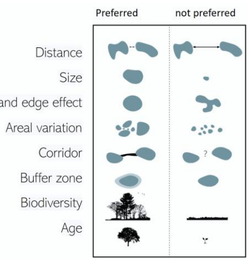
Tree specids
Alnus incana, the grey alder
Salix caprea, Goat willow
Betula pubescens, Downy birch
Salix caprea, Goat willow
Salix, Willows

Mosses
Cirriphyllum piliferum
Eurhynchium angustirete
Atrichum undulatum
Thuidium tamariscinum
Rhytidiadelphus squarrosus

Design goals:

Use ecological principles as framework for the park.
Create a landscape with more heterogeneity.
Impede sound and air pollution.
Create spaces that can be enjoyed.
Create the impression of mystique.
Promote the degree of biodiversity

Landscape ecological areal- principles



Le & Olavsen, (2019)

Metapopulation

Illustration of the general shapes on how metapopulation looks like in the finished park. Small connections within green spaces, connects it enough to be a population, however the roads separates the areas. Since there is small space between the areas, a continuous migration of species will likely occur. This is what we define as a "metapopulation". (metapopulasjon, 2020)

Overall design plan over Alvinhaugen

References
D. Ø. Hjermann. (2020). Metapopulasjon. Available at :https://snl.no/metapopulasjon. (Read 25.11.2021)
T. Prest. (1994). Moser i skog, systematikk og økologi. UNIVERSITETET I TRONDHEIM, VITENSKAPSMUSEET. Available at: https://www.ntnu.no/c/document_library/get_file?uuid=1575e5cb-1a5a-4bc9-a3e2-3c0ccaa6dde0&groupId=10476 (Read 26.11.2021) (s.17-24)
Le & Olavsen, (2019)
Le, T. T. H. & Olavsen, L. T. (2019) Balansegang i planlegging - hvordan bynaturen kan gi rom for både mennesker og biologisk mangfold. Master. Ås: Norge miljø- og biovitenskapelige universitet. Available at: LeOlavsen2019 (2).pdf (Read 12.11.2021)