

# Analysis of fossil samples from Lygra

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## Problem / Question

Is the formation of the heathlands caused by humans or climate?

## Hypothesis

The formation of the heathland landscape in Lygra is caused by human activity.

## Project Overview

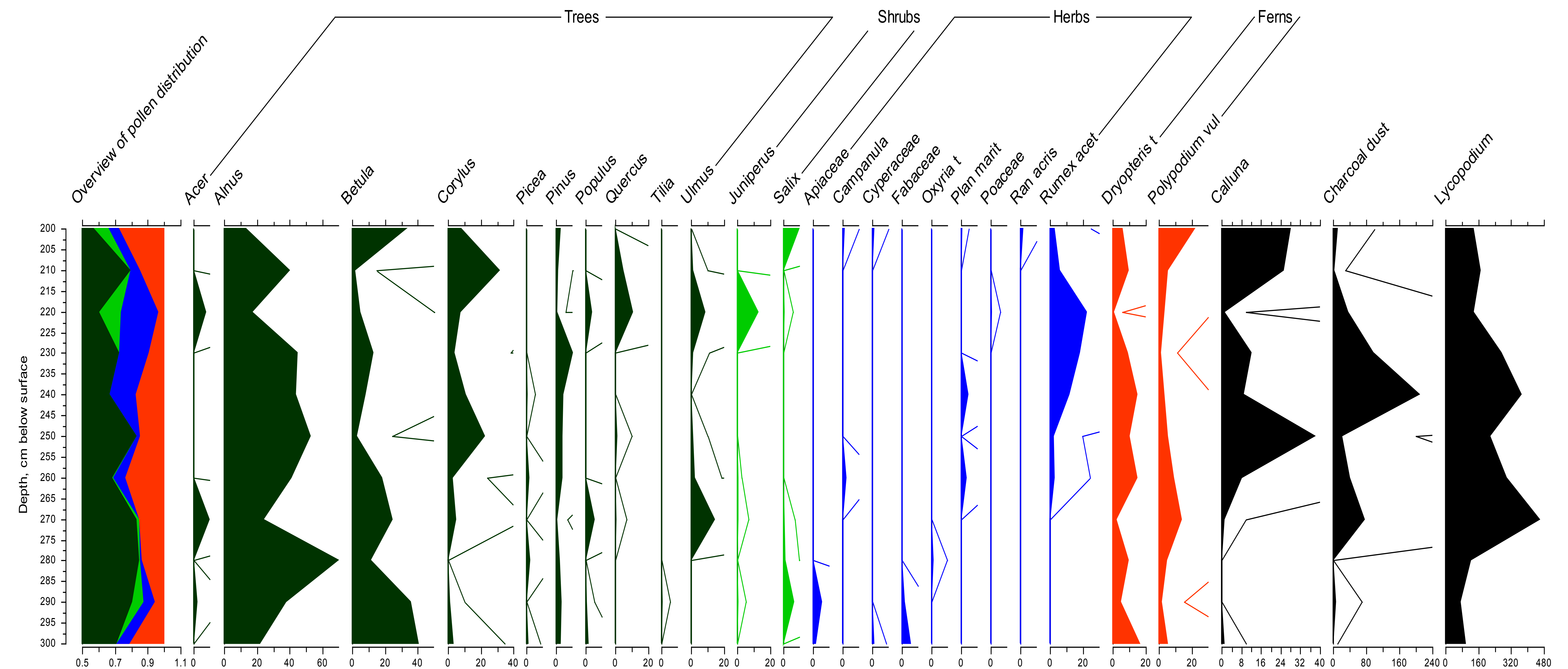
We started out in the field of Lygra to collect pollen samples from a bog. To get the most reliable sample site in the selected bog we tested three different spots. We measured the first site to be the most relevant for our study.

By using a russian corer we cored down four meters. We described all of the sediment, but only took pollen samples from the sediment between two and three meters down.

Before we got the samples back, the samples were prepared for microscopic observation.

In the lab we analysed our samples, where we counted both pollen and charcoal.

## Results: Proxy percentage



- Absolute numbers of counted Calluna, charcoal and Lycopodium
- Correlation between charcoal dust and Calluna
- Rumex acet arices
- Boreal forest decreases

## Procedure

### Step 1



Finding the sample site.

### Step 2



Using a russian corer to find relevant sediments

### Step 3



Sediment sampling, using sediments from two to three m down. Sampling every 10th cm.

### Step 4



Analysing pollen from the samples taken out in the field.

## Proxy of specific interest



Calluna vulgaris



Charcoal

## Conclusion

- Due to our findings, we conclude with: The formation of the heathlands out on Lygra is man made.
- Without the human impact, the landscape would probably still be a boreal forest. With Corylis, Betula and Alnus as the main species. The human activity of burning the landscape regularly, created a possibility for Calluna to arise. The Calluna made it possible for humans and livestock to survive this harsh landscape.