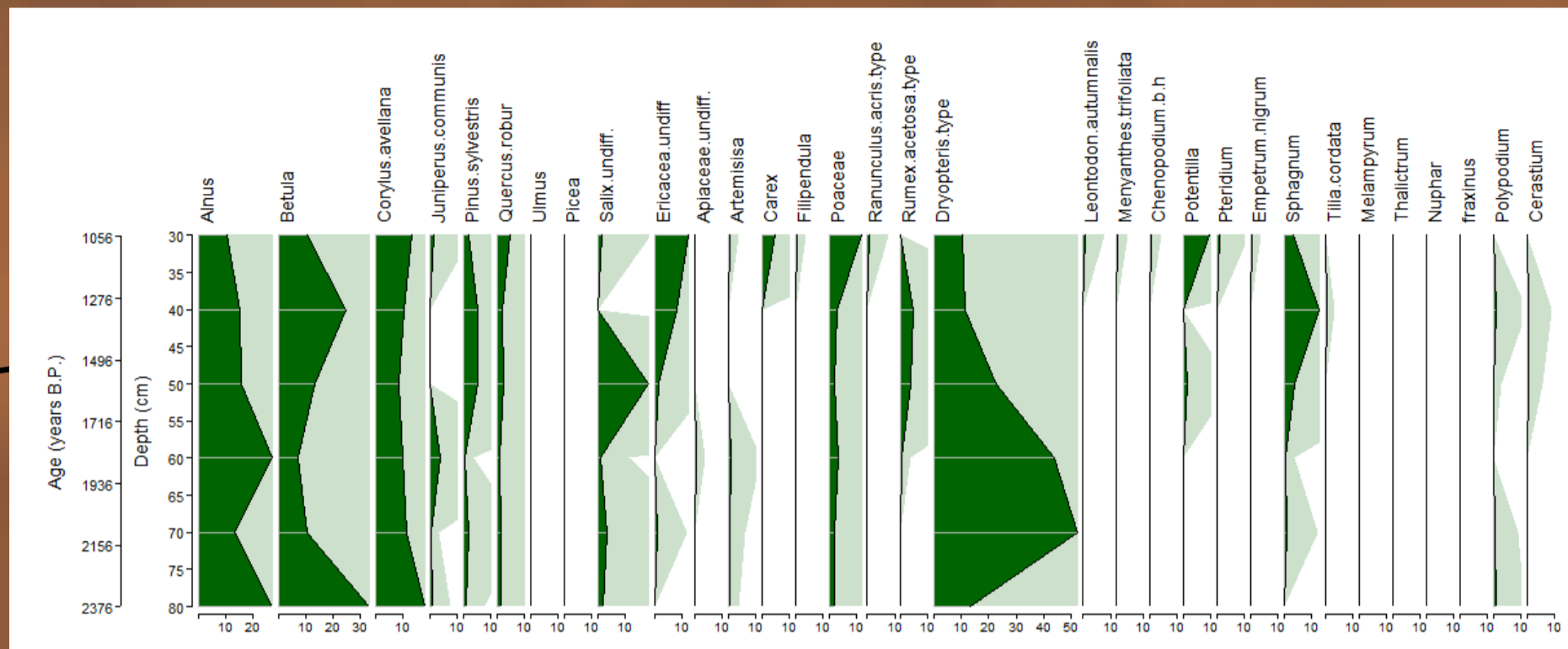


# The main trends in floral biodiversity at different times through the Holocene

30 cm  
80 cm

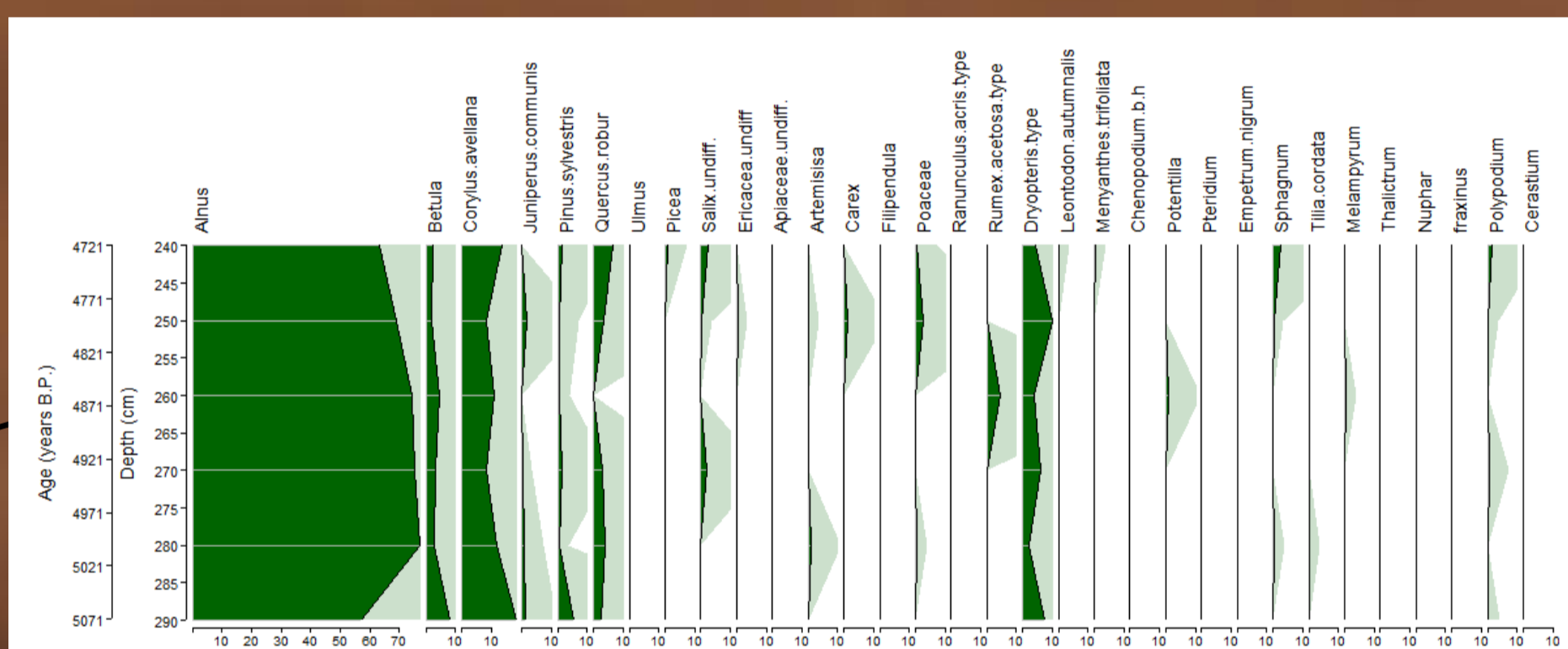


**Figure 1:** Pollen diagram illustrating the distribution of pollen across various species and genera. The six samples, taken at depths ranging from 30 to 80 cm, are estimated to date back from 1056 to 2378 years B.P., arranged from top to bottom.

## Introduction:

Palaeoecological data gives us an insight into what existed at prehistoric times before modern records. A Russian peat corer collecting 1-meter-long core samples at a time can provide us with thousands of years of accumulated biomass that can say a lot about the local area. By analyzing the pollen grains found in these cores we have attempted to establish what the main trends are, for this location, at different periods of the Holocene.

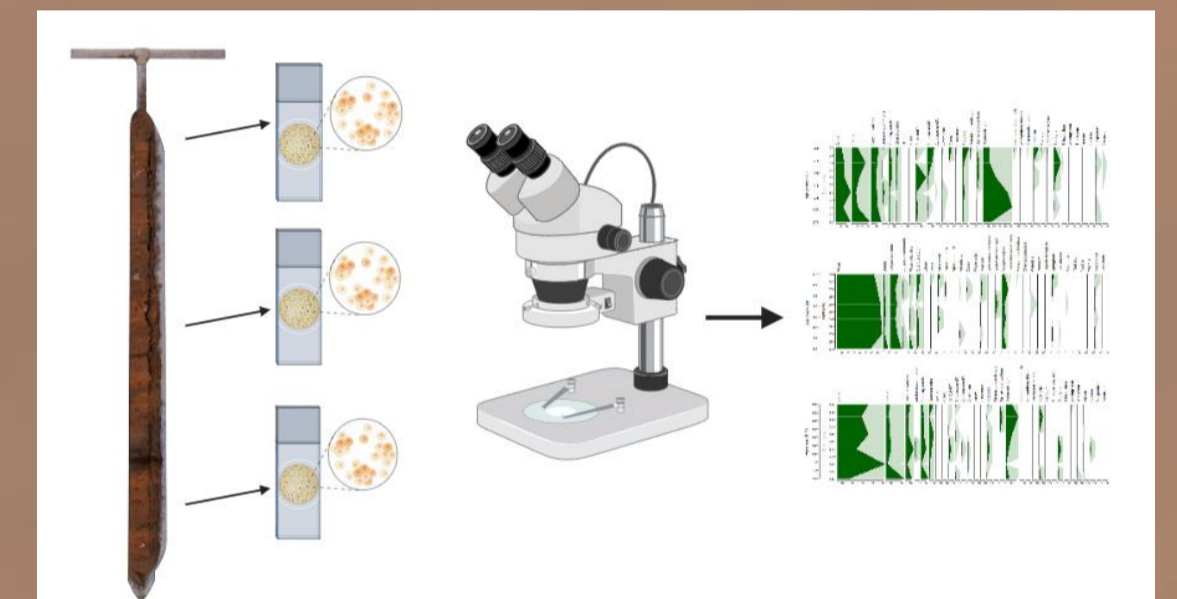
240cm  
290cm



**Figure 2:** Pollen diagram illustrating the distribution of pollen across various species and genera. The six samples, taken at depths ranging from 240 to 290 cm, are estimated to date back from 4721 to 5071 years B.P., arranged from top to bottom.

## Method:

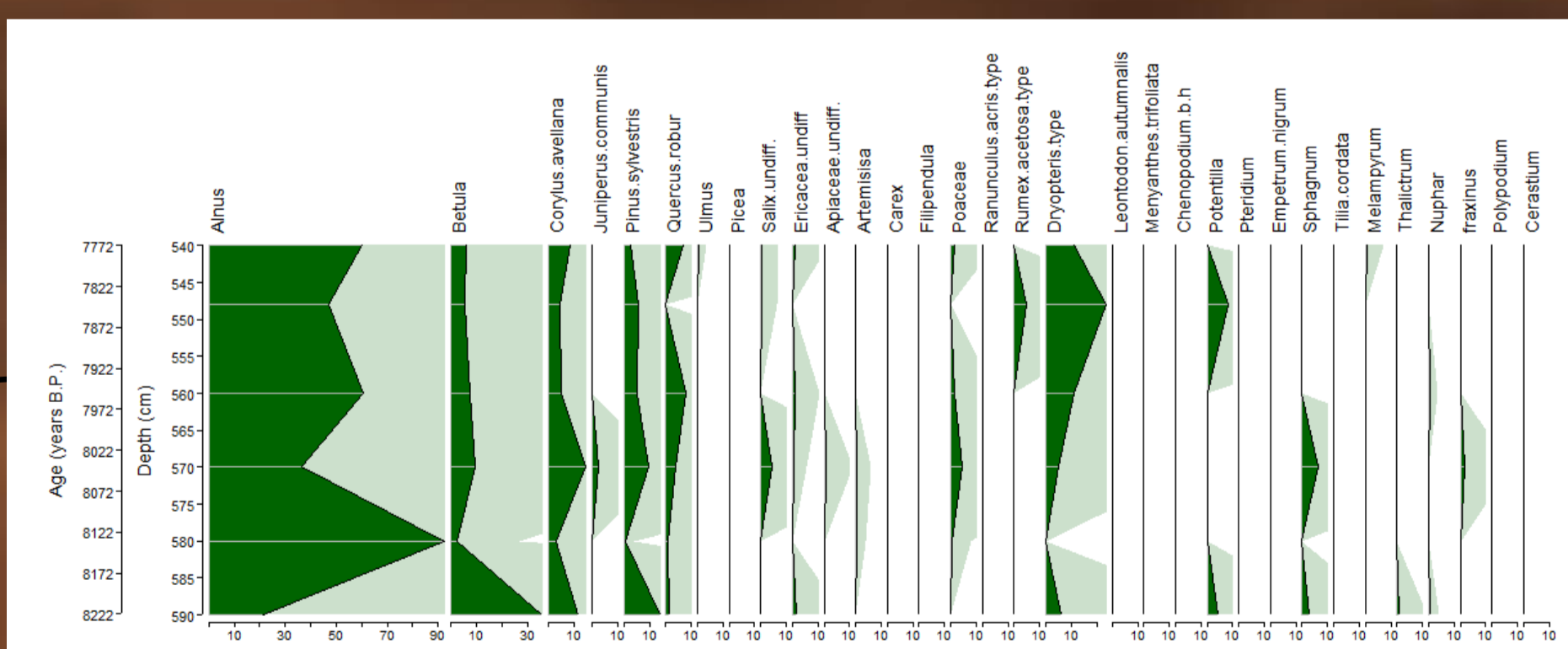
The cores used for this project were collected from Lygra in 2018.



300 pollen grains from 18 samples were counted. The samples were collected from three core sections.

RStudio was used to make pollen diagrams to visualize the main trends seen at the different depths.

540cm  
590cm



**Figure 3:** Pollen diagram illustrating the distribution of pollen across various species and genera. The six samples, taken at depths ranging from 540 to 590 cm, are estimated to date back from 7772 to 8222 years B.P., arranged from top to bottom.

## Discussion and conclusion:

The transition in Lygra's landscape from a successional vegetation associated with the end of the last glacial, to a denser forest, suggests a natural ecological shift. The uppermost core sample shows an increase in species like Ericaceae, Poaceae, Carex and Potentilla, indicating a shift to an open landscape, caused by cultivating and grazing at the time.

Lygra's paleoecological record, as revealed through pollen analysis, highlights the landscape's dynamic history. Natural shifts in vegetation density, coupled with human activity like grazing, changes the region's floral composition through time.



SCAN ME

