

Anthropogenic impacts on Lygra





Method

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Humans have continuously impacted vegetation and species variation over time due to their agricultural practices and land use changes. As a result, we investigated the different varieties of pollen species found within our samples to infer anthropogenic influences on Lygra Island.

METHODOLOGY

Samples were collected from Lygra using a russian corer. Samples were taken at 10cm intervals. 11 of these sample slides were produced and used for pollen count to construct a pollen diagram using C2 from depths of 210cm to 430cm.

ANALYSIS

Observing our pollen diagram, *Alnus* was most prominent in our samples and remained dominant throughout. *Dryopteris* and *Polypodium* is evident throughout but is more stagnated. *Ulmus* only seems present early on but is found again later. *Poaceae*, *Rumex* and *Ranunculus* were also found (Figure 1)

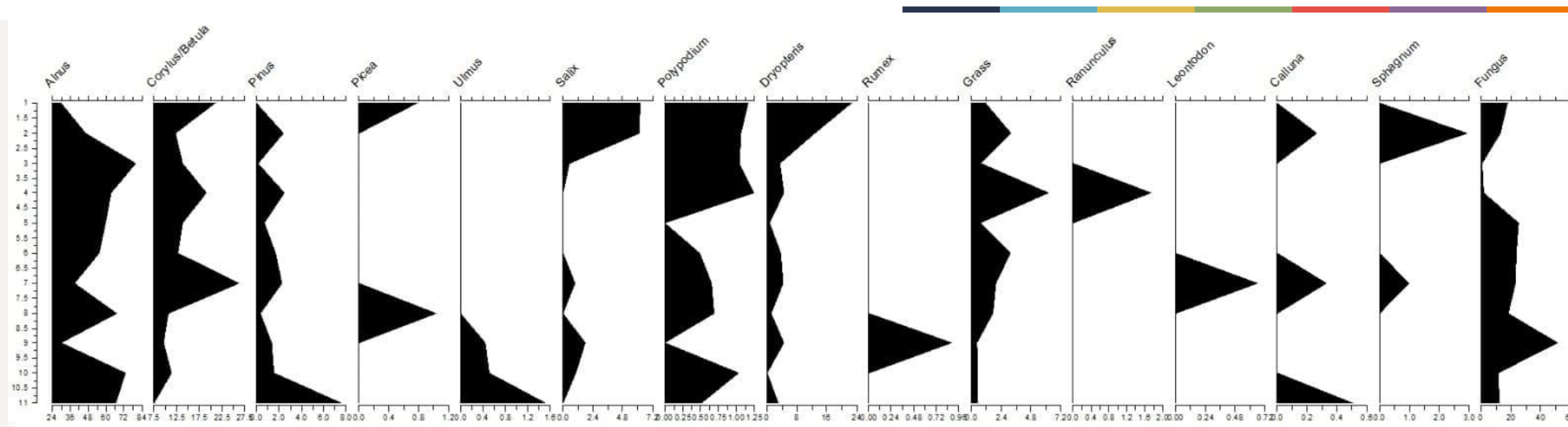
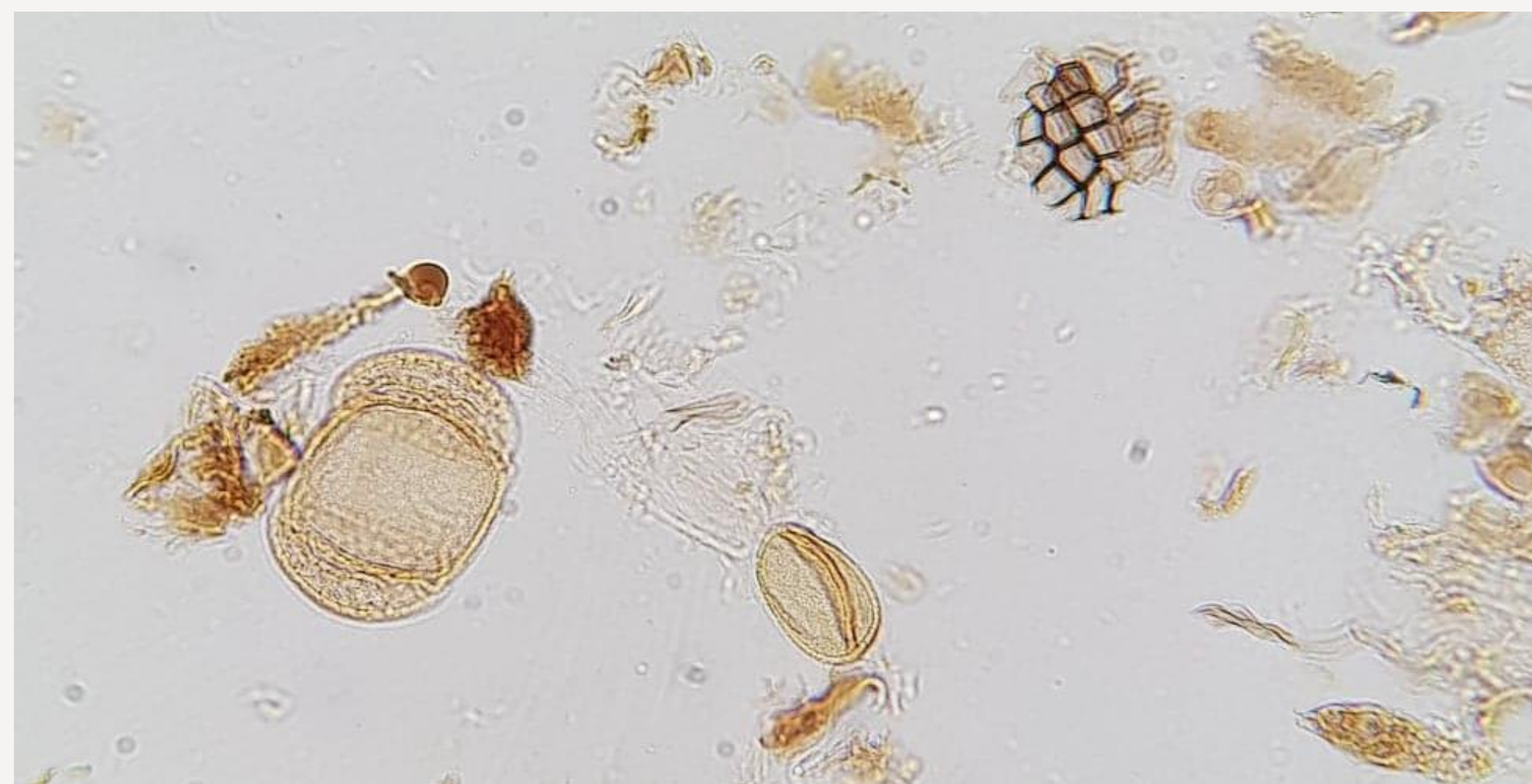


Figure 1. Percentage of pollen at different depths from core sample taken from Lygra



DISCUSSION AND CONCLUSION

Tree reductions can imply human disturbance as a result of tree clearances. Fungus supports the concept of human interference as fungus grows on animal dung during agricultural practices. Ferns and herbs establish human interference as their growth is promoted after the clearance of trees.

We anticipated finding more *Calluna* + charcoal to provide substantial evidence of human interference alongside more indicator species of grazing.

Our data concludes there are consistent fluctuations in agricultural practices on Lygra, creating periods of disturbance and without.

We expected the majority of tree fluctuations could be due to managed clearance at interstadial points - but we think humans remained present especially because of the herbs present.

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