## IS REPEATED BURNING OF A LANDSCAPE ACTUALLY BENEFICIAL TO IT‘S BIODIVERSITY?

## INTRODUCTION

The island of Lygra, located about an hour north of Bergen, is famous for it's protected and preserved heathlands. But that is not their 'natural' state: Humans use fire cycles to preserve the open landscape and stop forest landscapes from taking over. But is this manipulation of the landscape actually beneficial to it's biodiversity?

## METHODS

Taking samples from a bog on Lygra we were able to look at pollen preserved from thousands of years ago. We analysed them under the microscope and checked the slides for charcoal.
We then used R for statistical analysis of our findings, creating the diagram on the right.
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## RESULTS

## CONOLUSION \& DISCUSSION

The vege ation'stays very similar unt around 2000 Seis ago, when there is a clear trend towards an diening of the landseape demarkated by a rise in C. utgaris pollen along with an increase in pollen of shrubs, grasses and chareoal the No and DCAI curves support these results statictily with the bigges changes in vegetaten composition taking dace towards the beginning and end of the studied period

Fig. 1: Palaeoecological diagram showing the charcoal level (levels $0-3,0=$ no charcoal present, $1<5 \%$ of sample, $2<10 \%$ of sample, $3<25 \%$ of sample), relative amount of pollen by species by age and palynological analysis. $C$. avellana, A. glutinosa, B. verrucosa and Dryopteris $s p$. were not exagerrated, all but the latter belong to the category 'trees', Dryopteris $s p$. being a 'fern'

