BIO250 – PALAEOECOLOGY

What can macrofossils tell us about the past?

By Eric Mykleby Storum, Kalina Sonne Hable, Sander Rosvold Anstorp og Sofie Klem

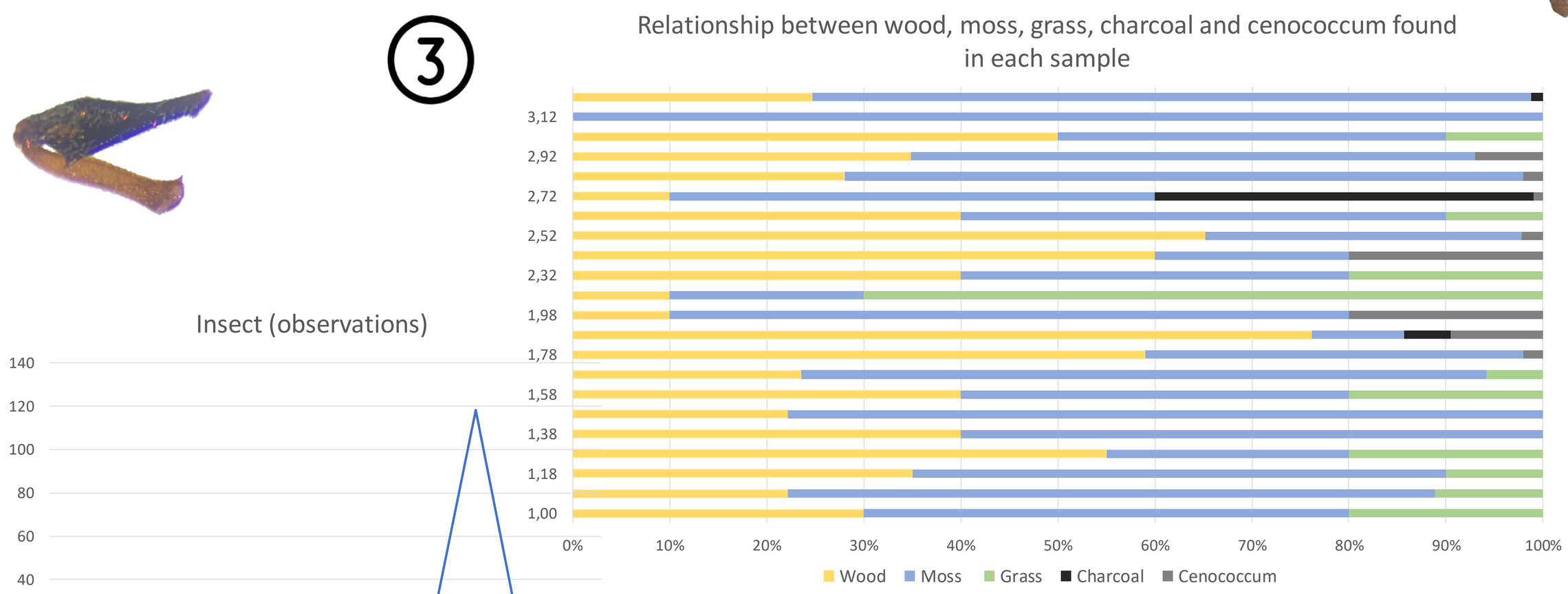
1 What are macrofossils?

- "Preserved organic remains large enough to be seen without a microscope."[1]
- Range from a size of about 0.5 mm to huge tree trunks.
- Include both animal and plant remains.
- Often studied in conjunction with pollen.

2 Methods

- We retrieved two sediment cores: Core 1 (1-2 m depth) and Core 2 (2.24-3.24 m) using a russian peat corer from a bog at Lygra
- 11 samples from each core were prepared and analysed with a stereomicroscope

3



4 What does this tell us?

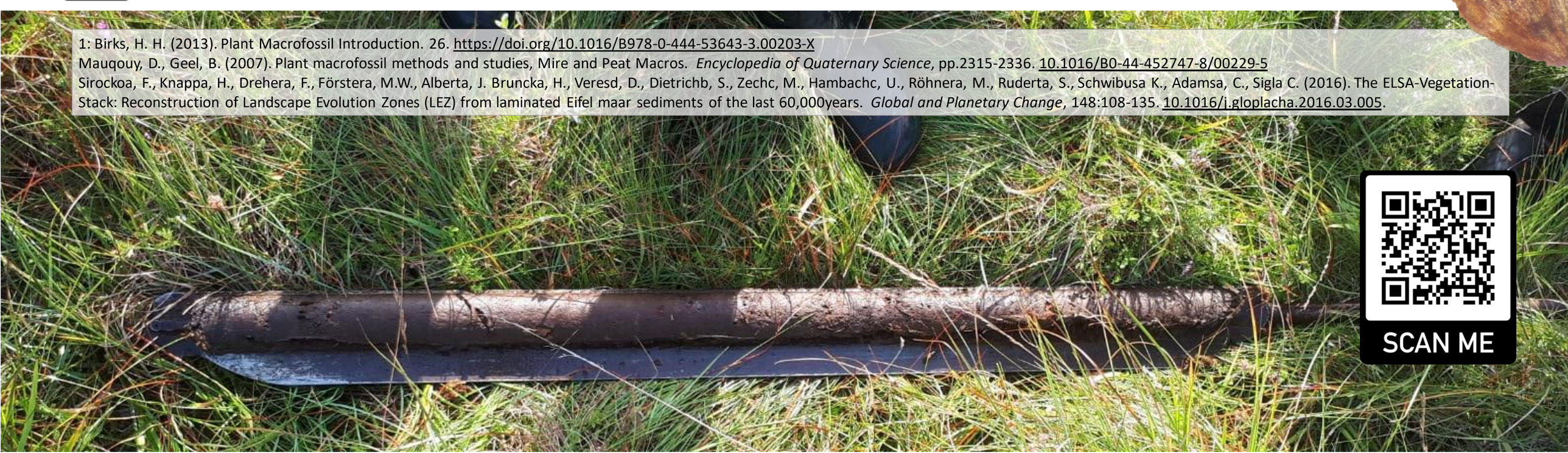
- Traces of a fire at depth 2.72 m
- Macrofossils from water living organisms – indicates that the bog used to be a lake.

5 Limitations

- Not enough observations to make a proper dataset
- Why the sudden increase in insect observations?

Sources

1: Birks, H. H. (2013). Plant Macrofossil Introduction. 26. https://doi.org/10.1016/B978-0-444-53643-3.00203-X
Mauqouy, D., Geel, B. (2007). Plant macrofossil methods and studies, Mire and Peat Macros. *Encyclopedia of Quaternary Science*, pp.2315-2336. 10.1016/B0-44-452747-8/00229-5
Sirockoa, F., Knappa, H., Drehera, F., Förstera, M.W., Alberta, J. Bruncka, H., Veresd, D., Dietrichb, S., Zechc, M., Hambachc, U., Röhnera, M., Ruderta, S., Schwibusa K., Adamsa, C., Sigla C. (2016). The ELSA-Vegetation-Stack: Reconstruction of Landscape Evolution Zones (LEZ) from laminated Eifel maar sediments of the last 60,000years. *Global and Planetary Change*, 148:108-135. 10.1016/j.gloplacha.2016.03.005.



SCAN ME