



Credit: Inger Greve Alsos

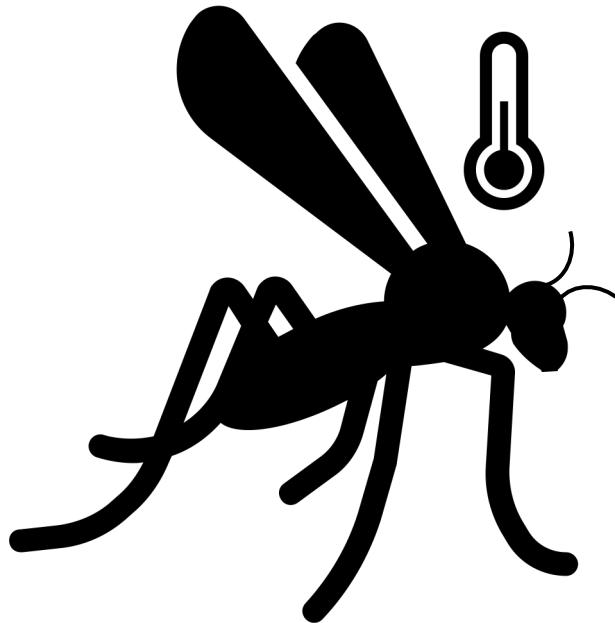
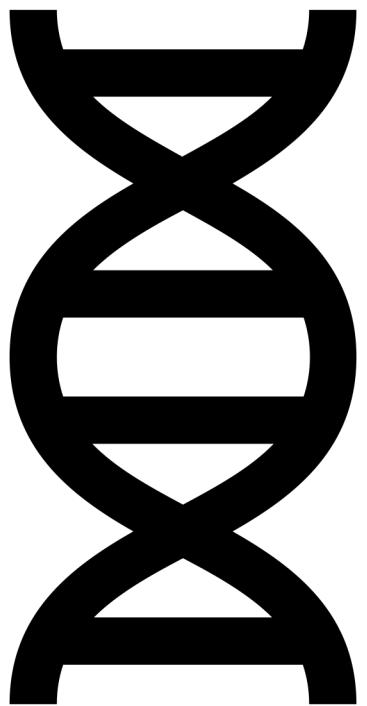
SedaDNA shows that transhumance of domestic herbivores has enhanced plant diversity over the Holocene in the Eastern European Alps

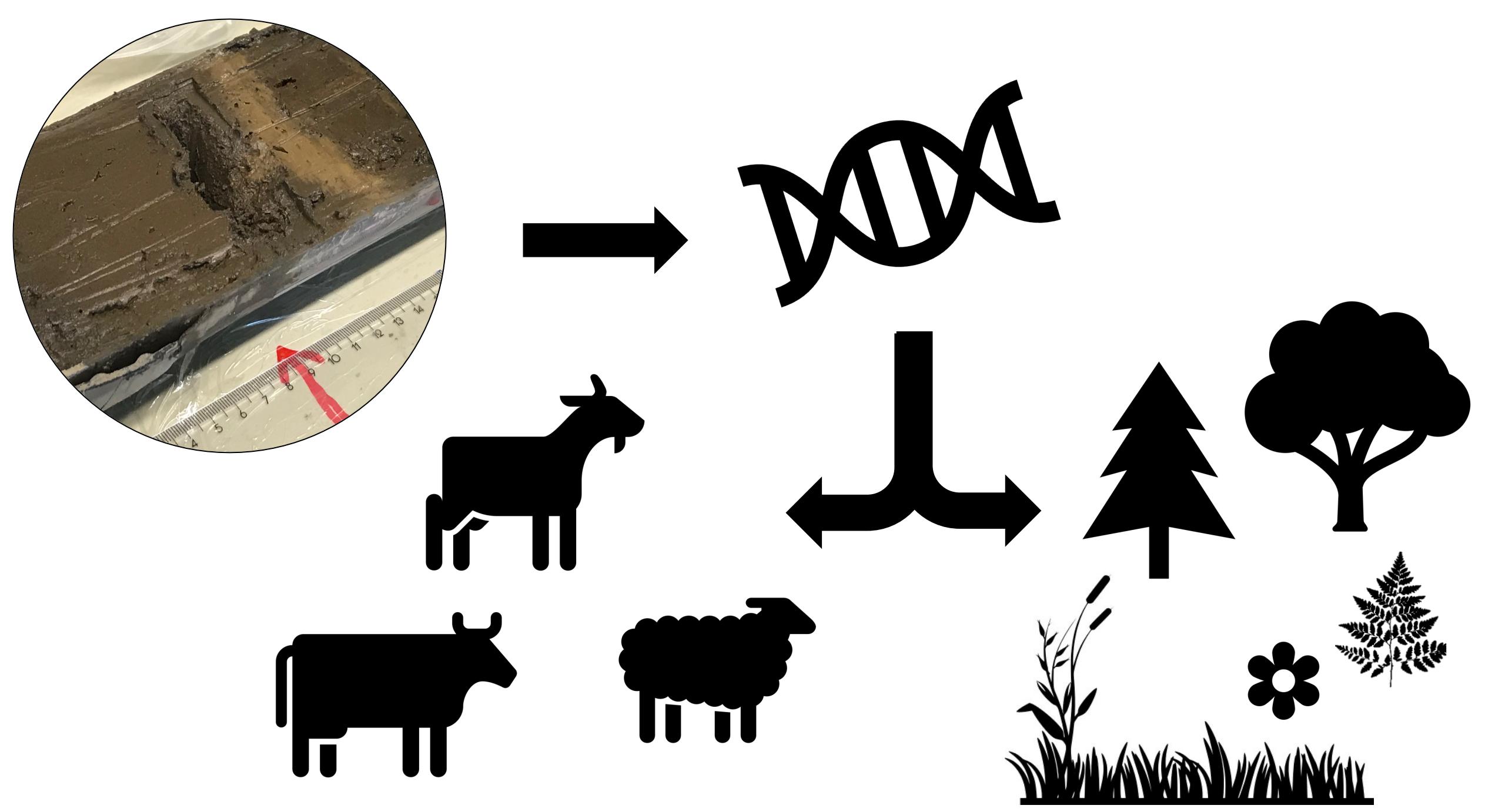
Scarlett Zetter, Sandra Garcés Pastor, Youri Lammers, Antony G. Brown, Sébastien Lavergne, Éric Coissac, PhyloAlps Consortium, Andreas Tribsch,
Peter D. Heintzman & Inger G. Alsos

Sedimentary ancient DNA (sedaDNA)

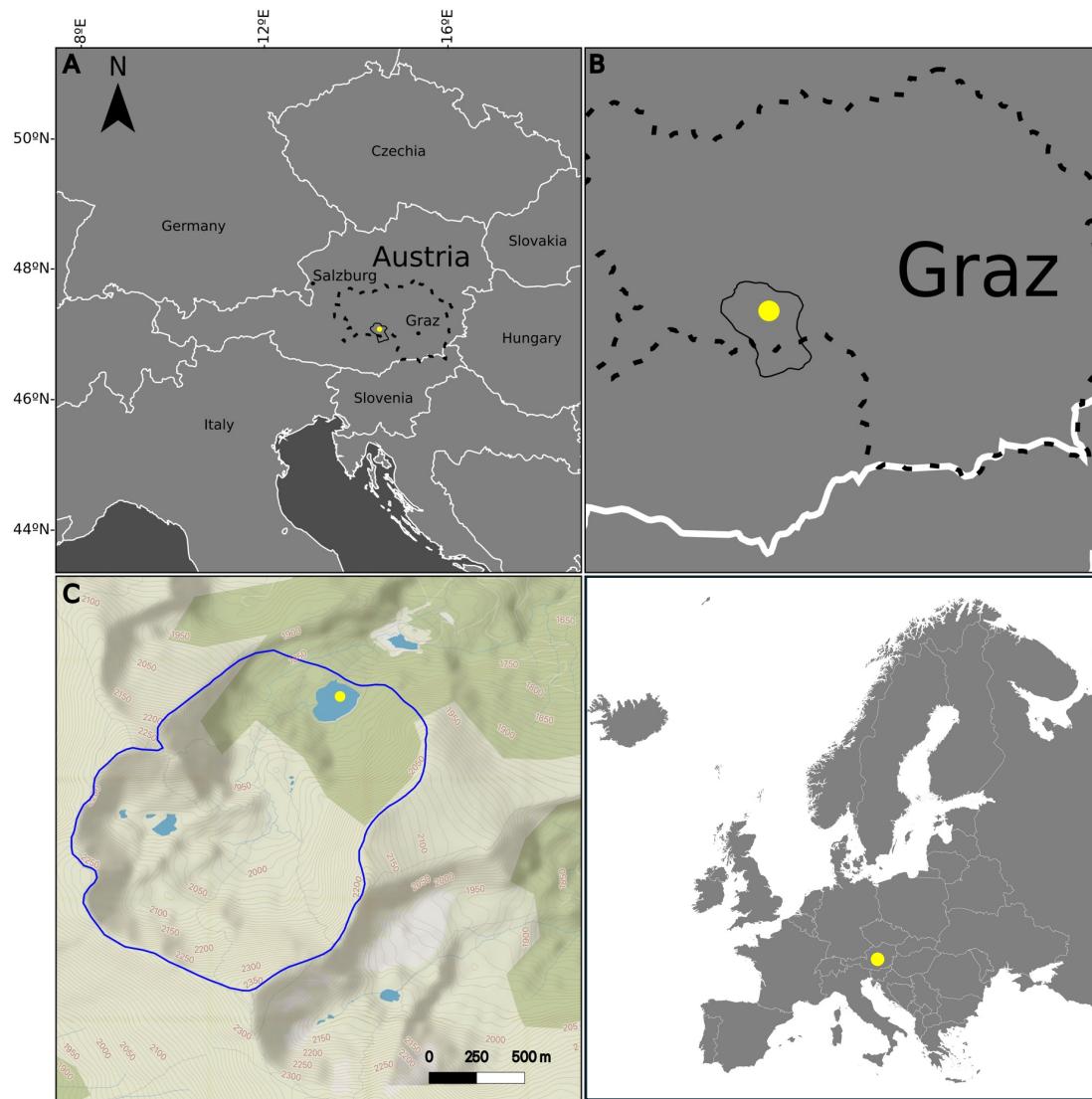


Proxies

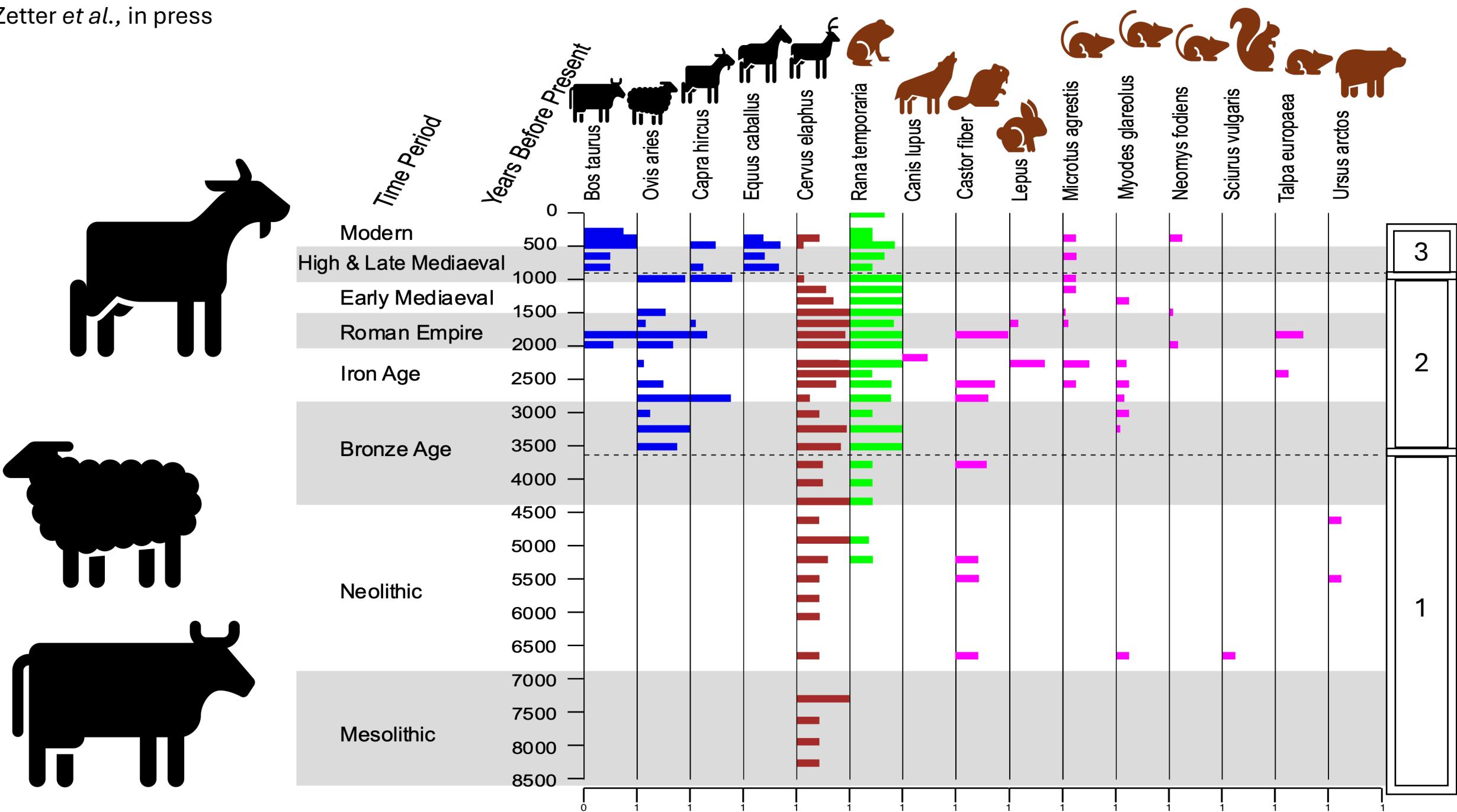


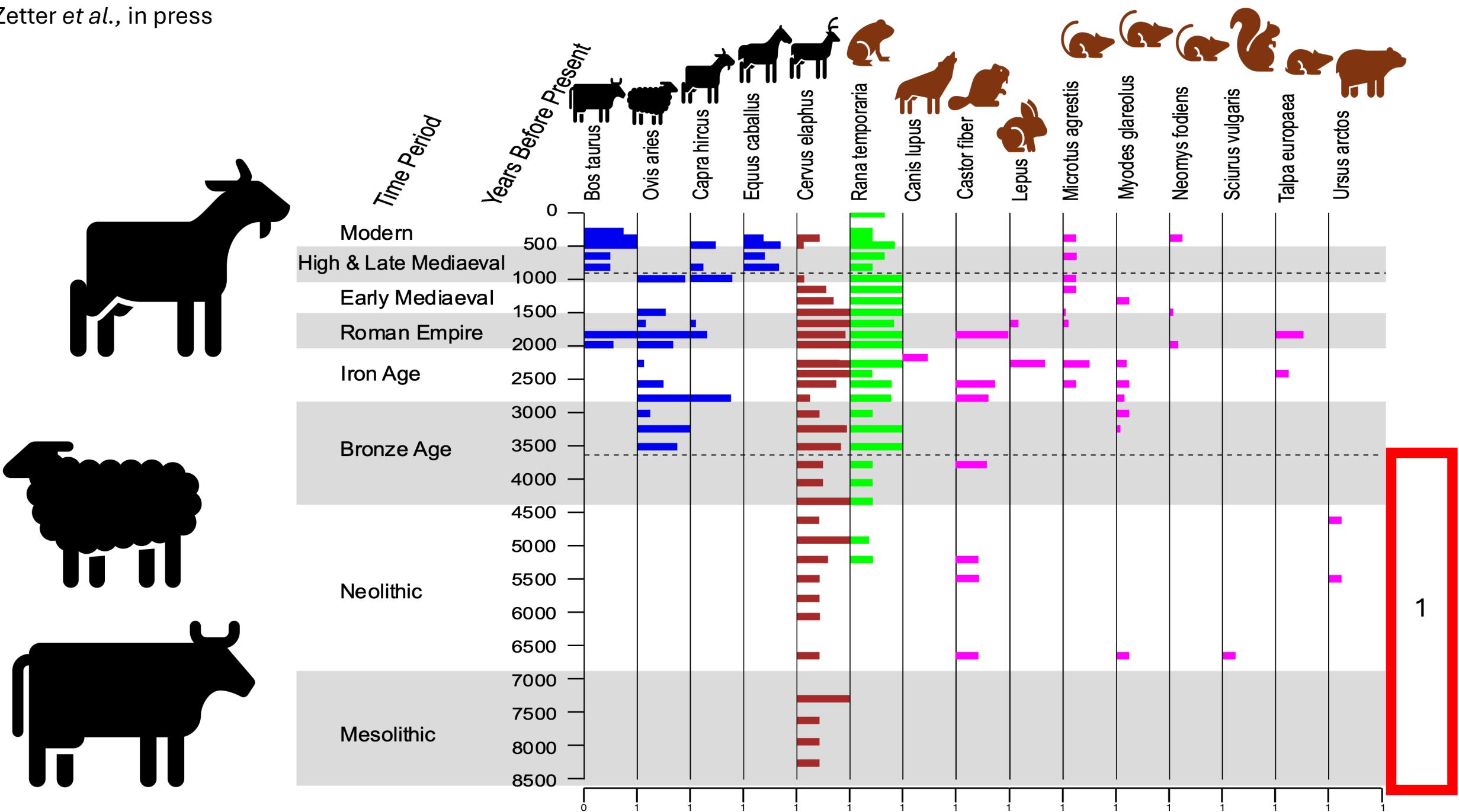


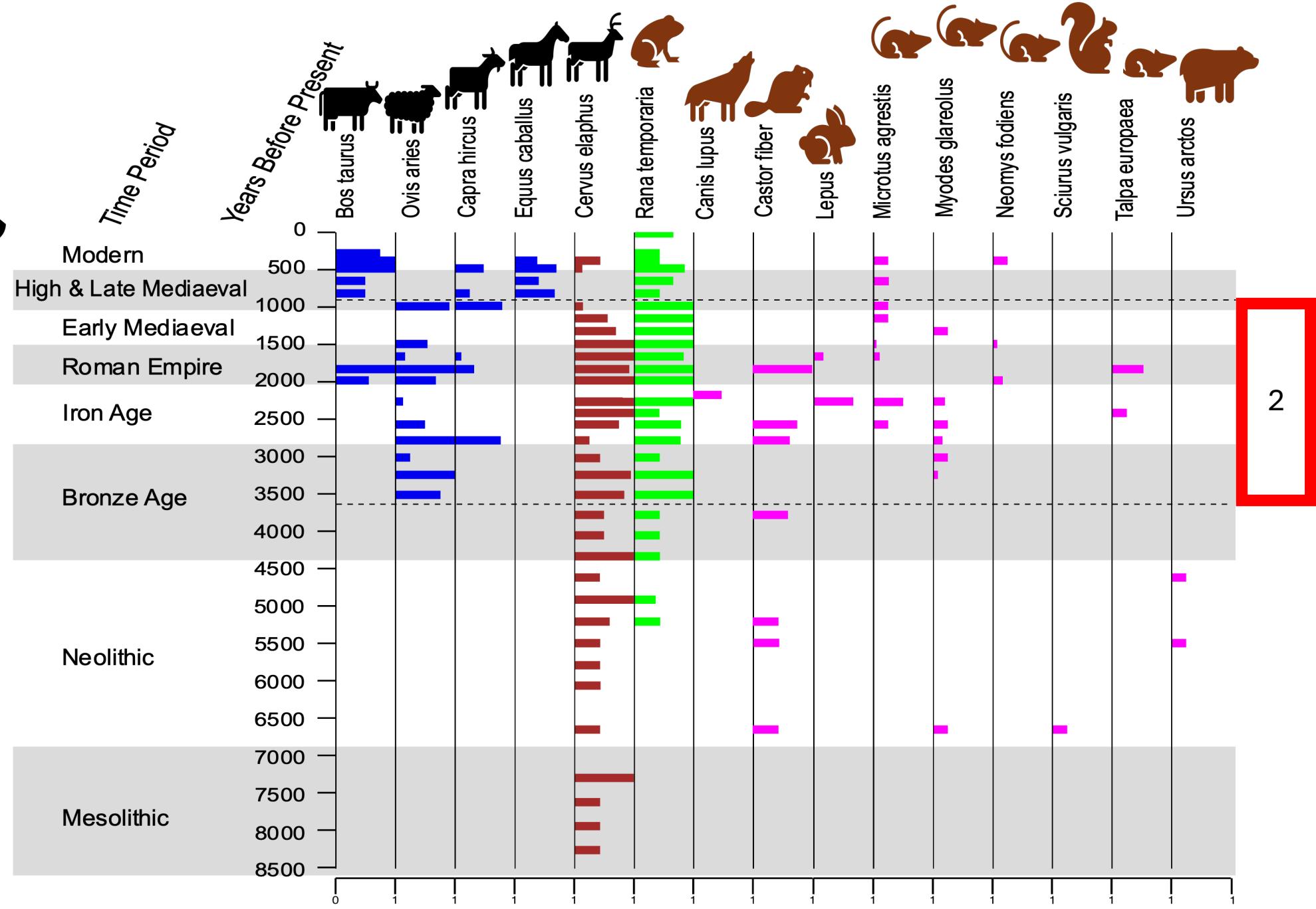
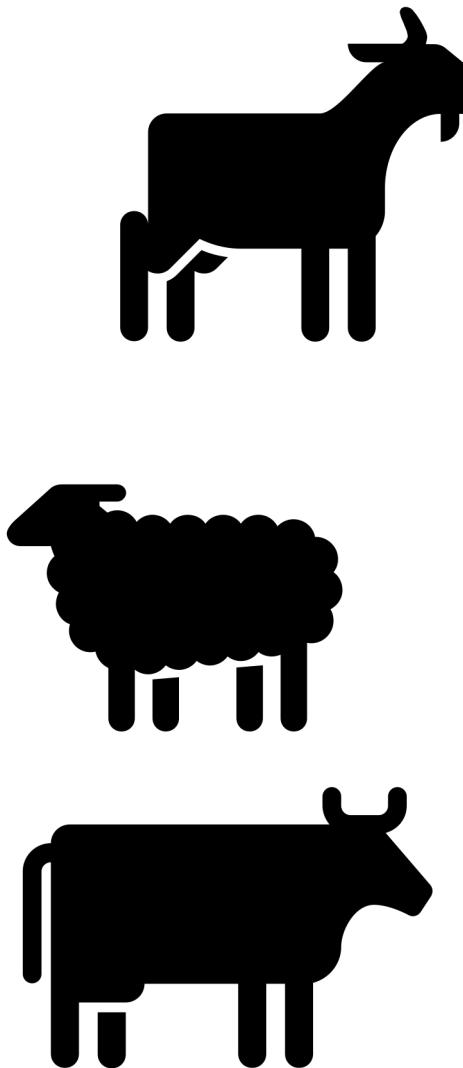
Großer Winterleitensee

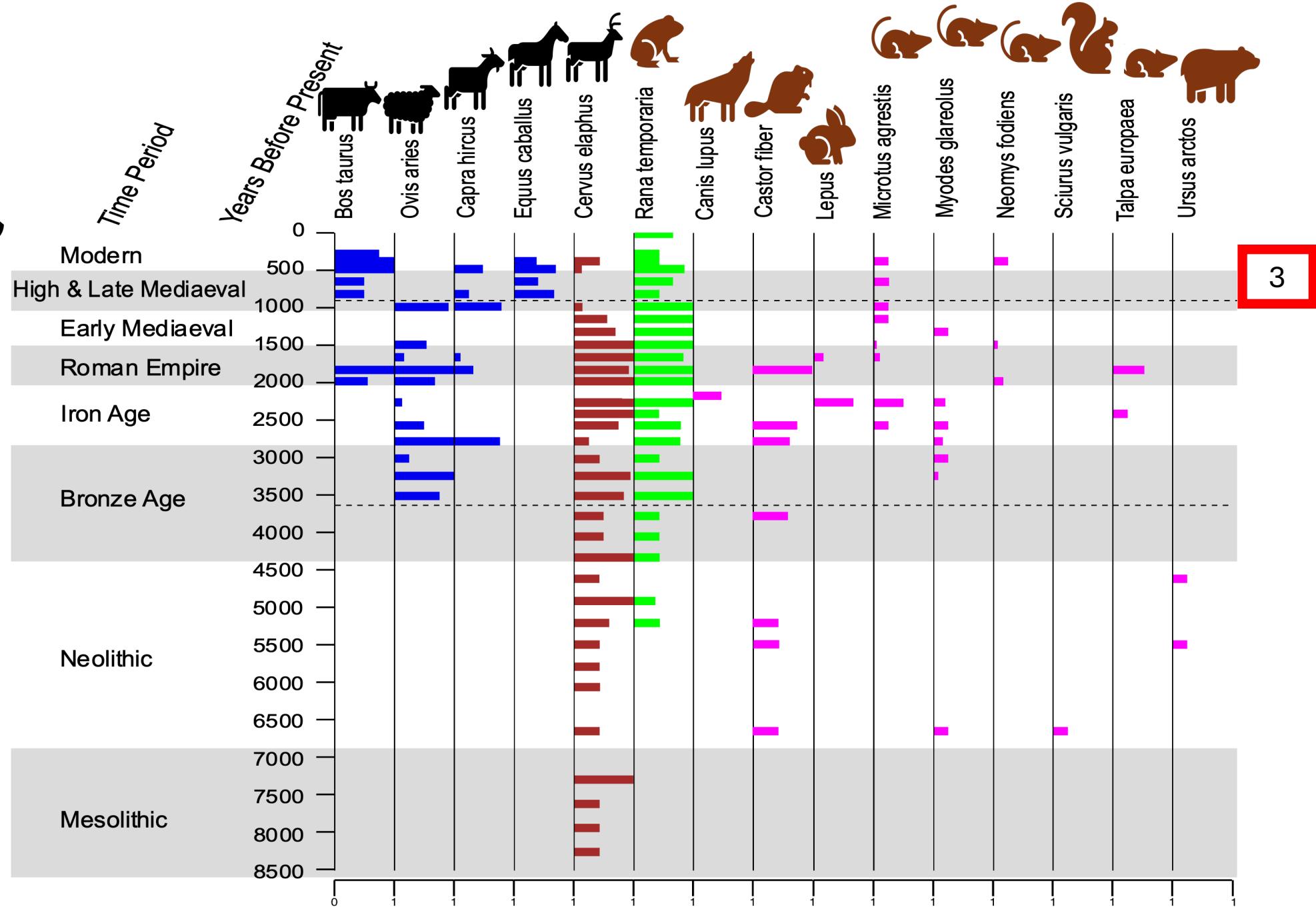
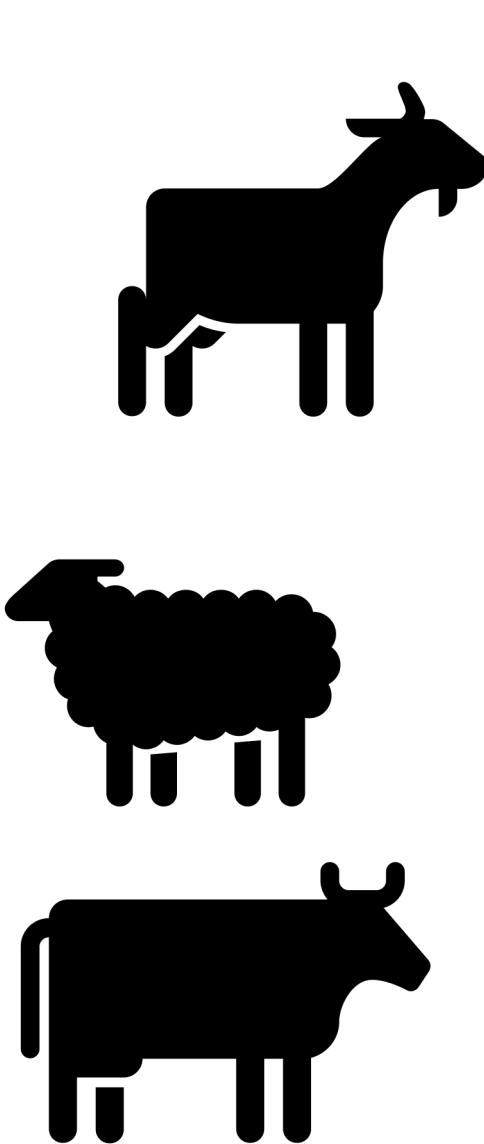


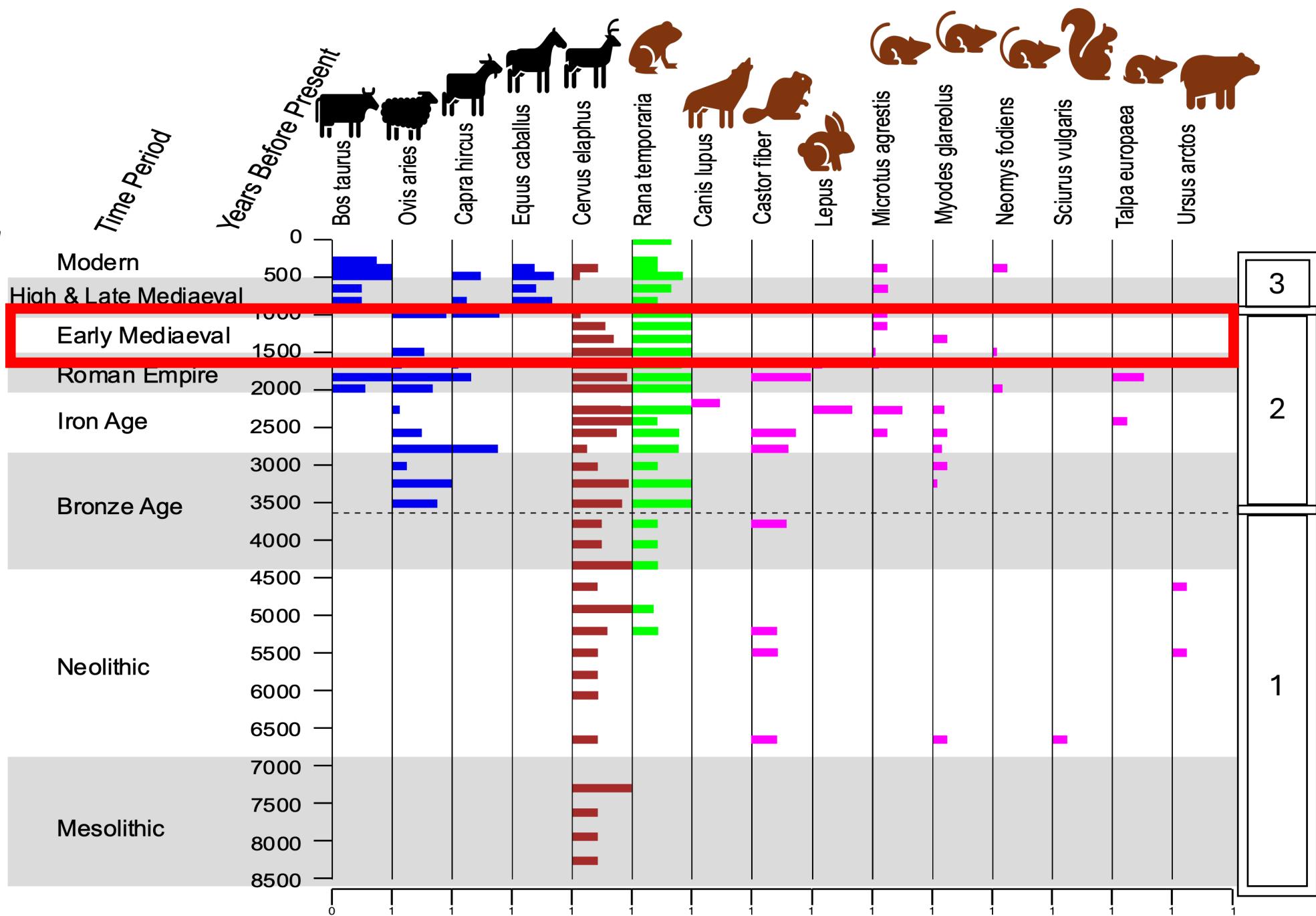
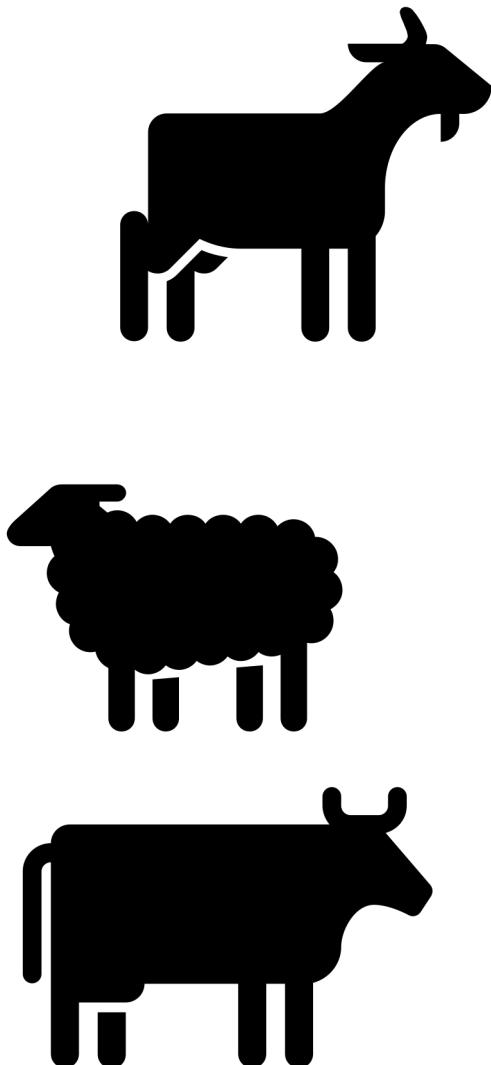
Credit: Inger Greve Alsos

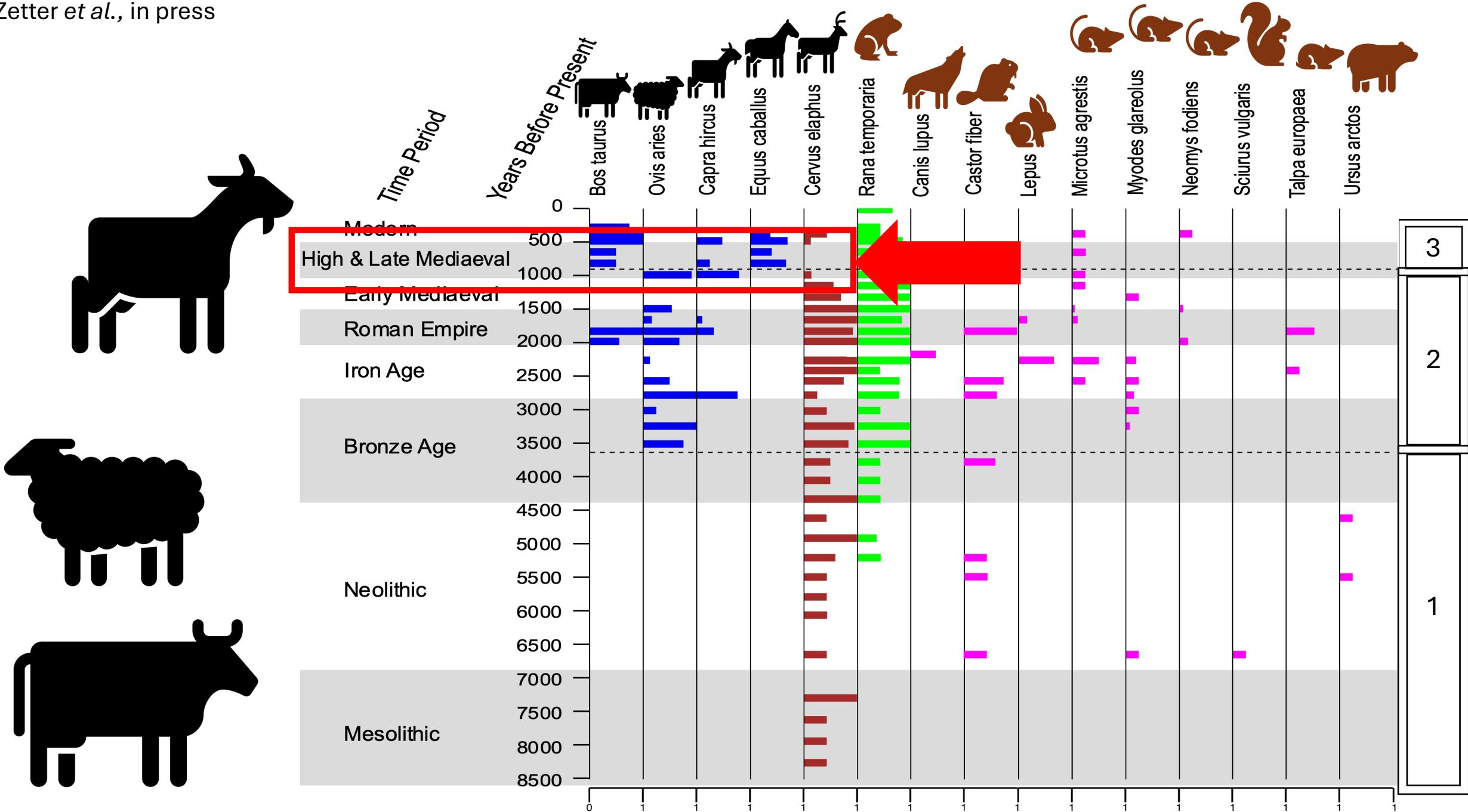














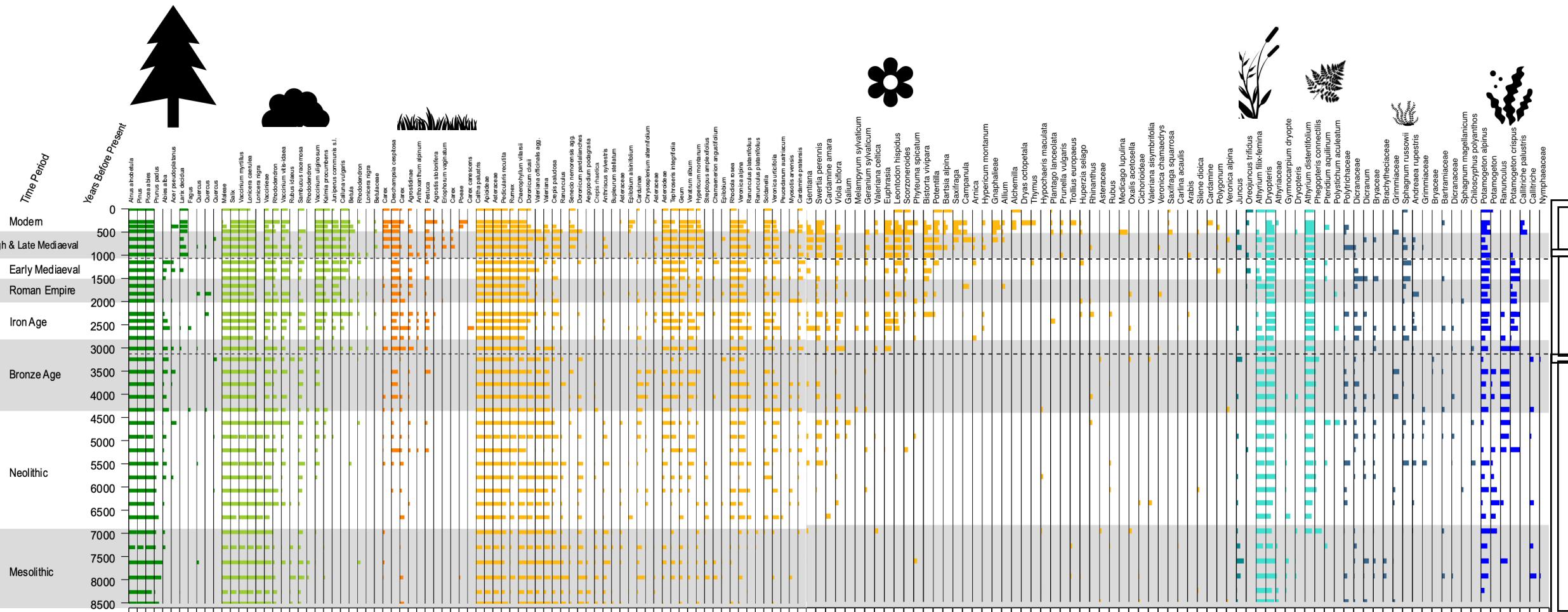
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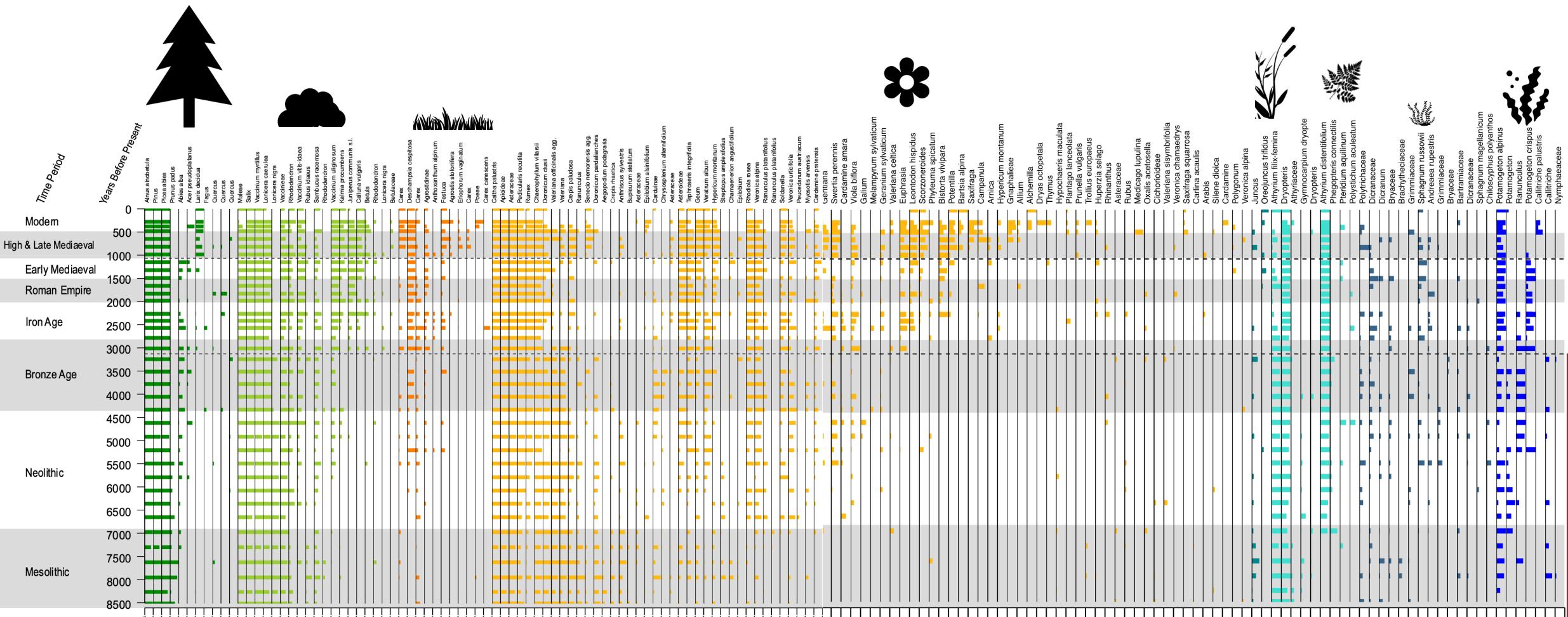
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1

Time Period

Years Before Present





Nymphaeace

Chloranthus

Alpinia

Polygonum

Calatrichaceae

Dianella

Thelypteris

Asplenium

Polypodium

Onoclea

Asplenium

Polypodium

Onoclea

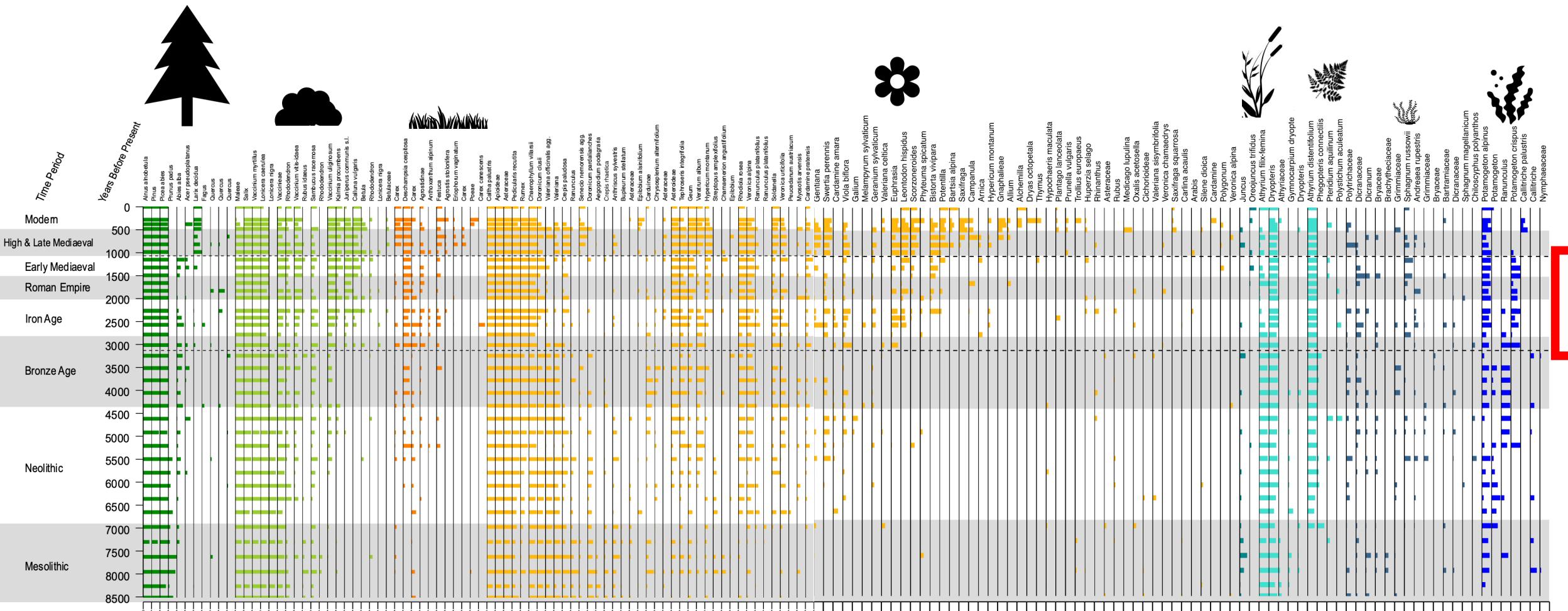
Asplenium

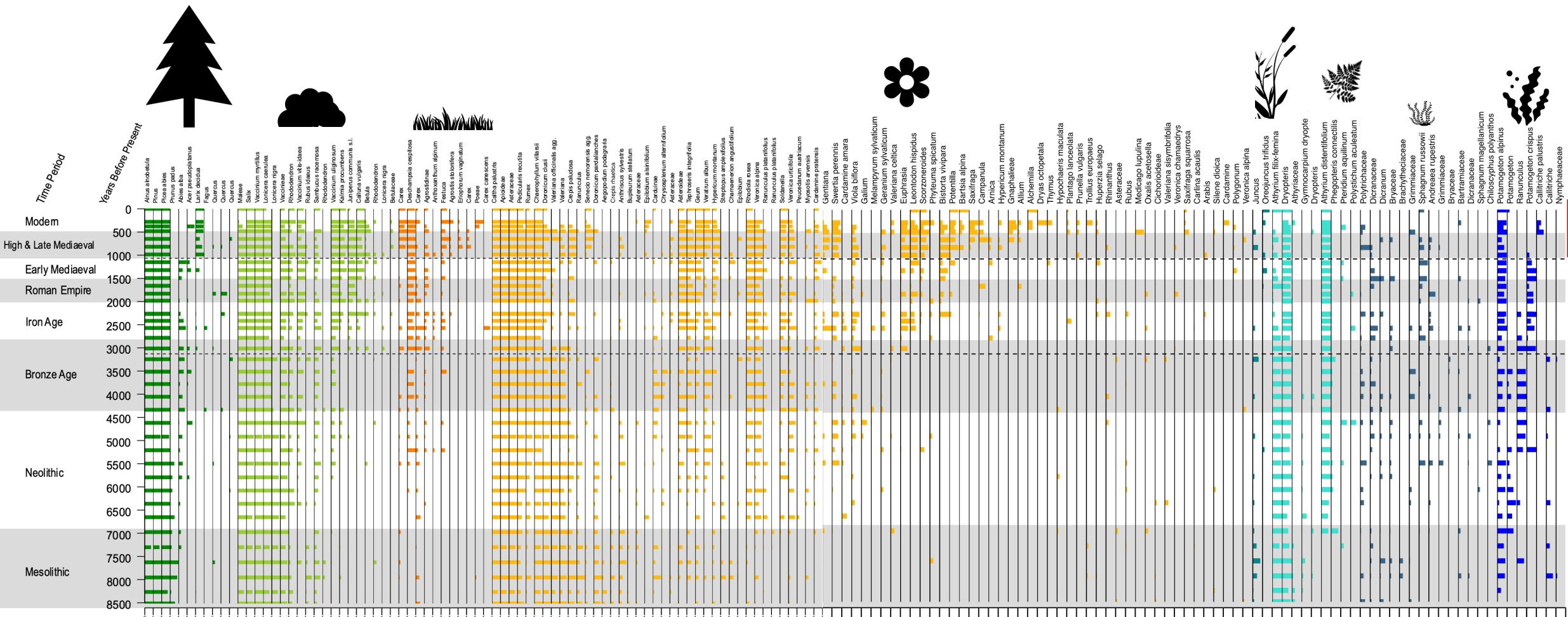
Polypodium

Onoclea

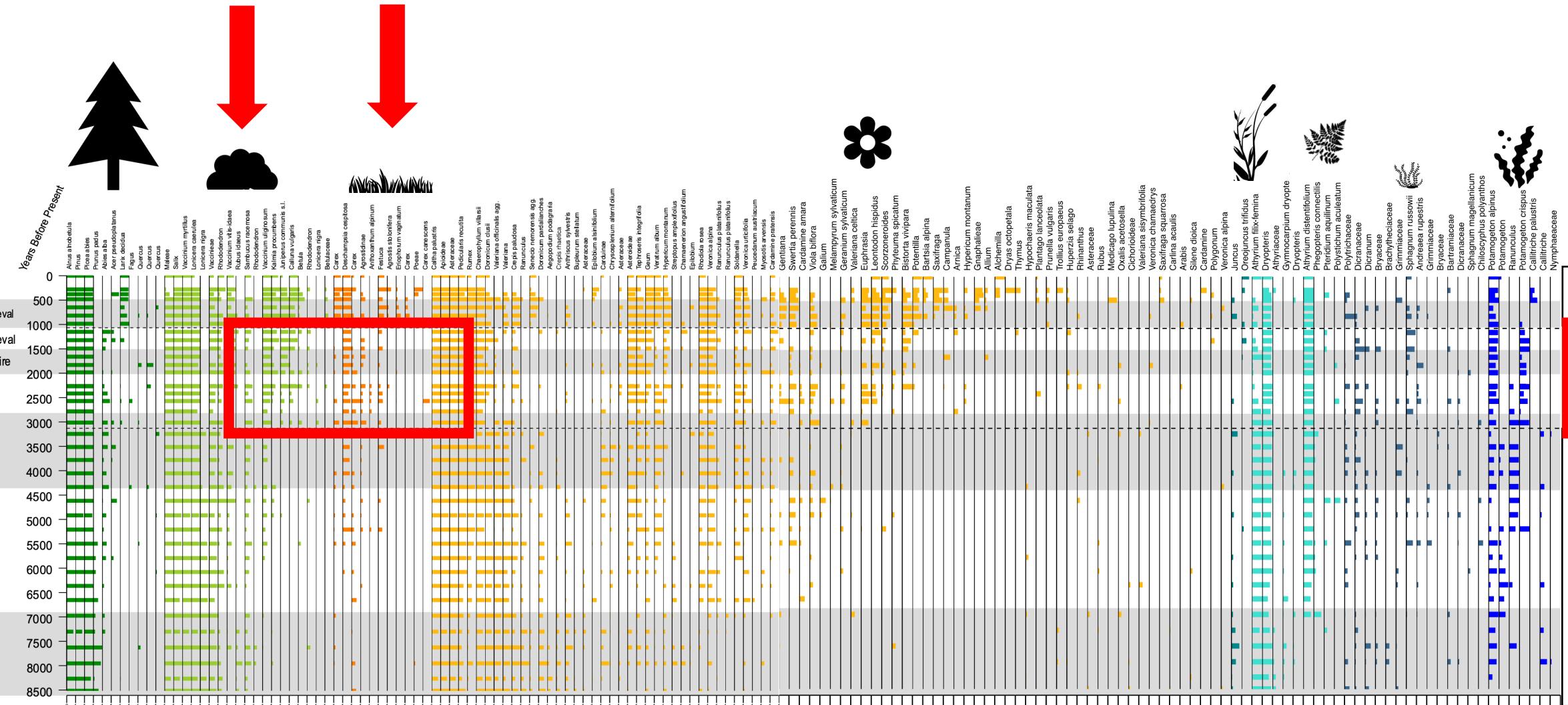
Asplenium

Polypodium





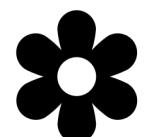
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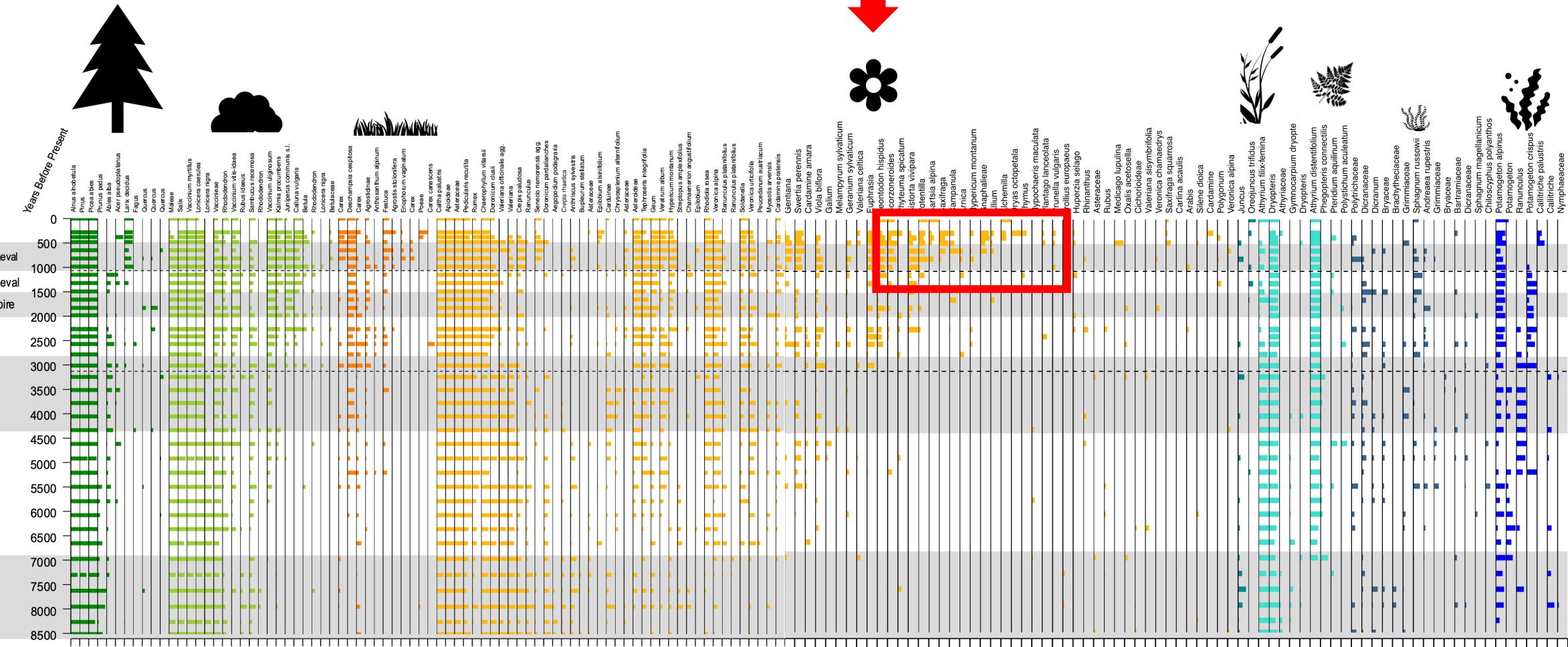


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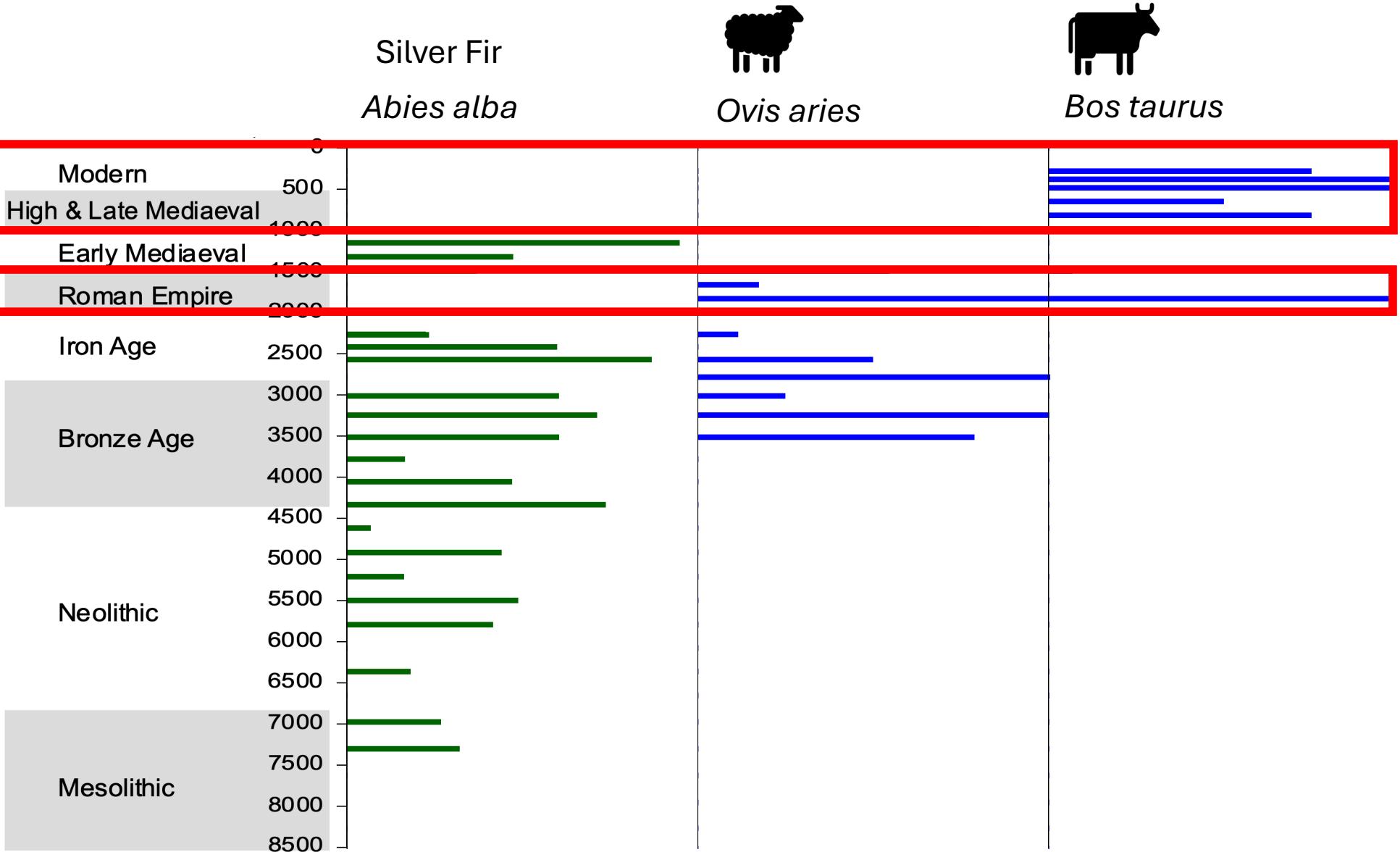
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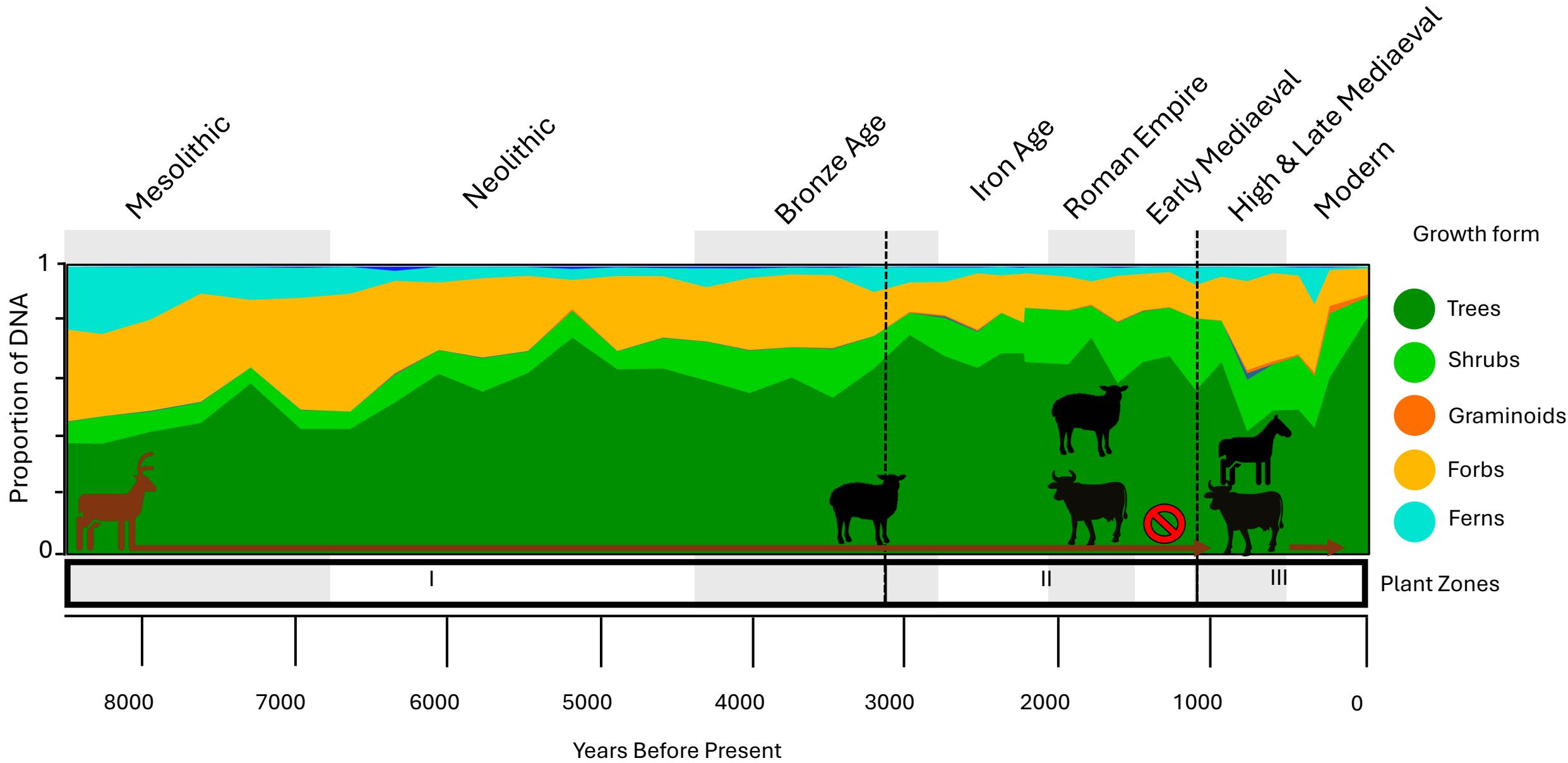
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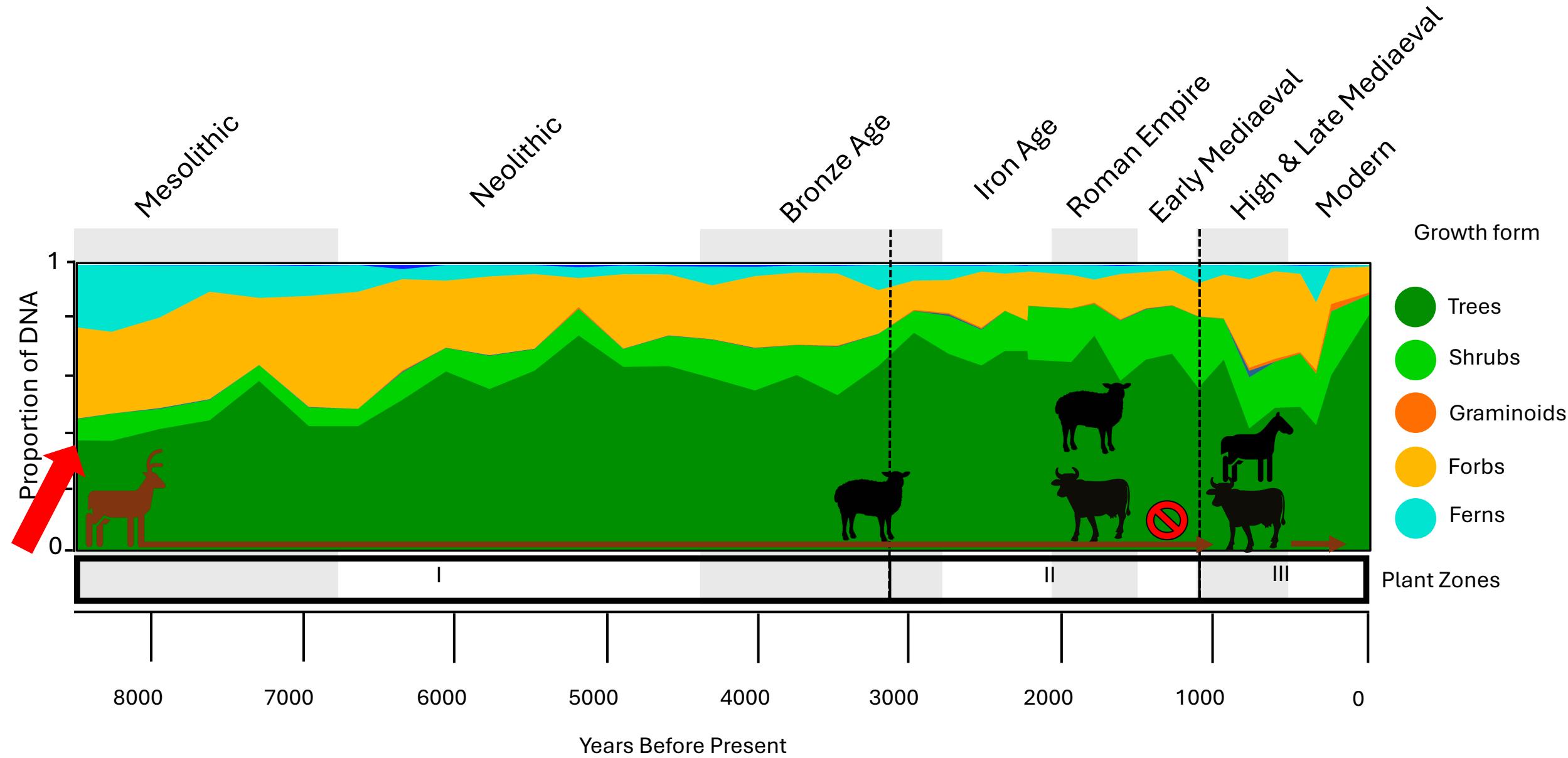
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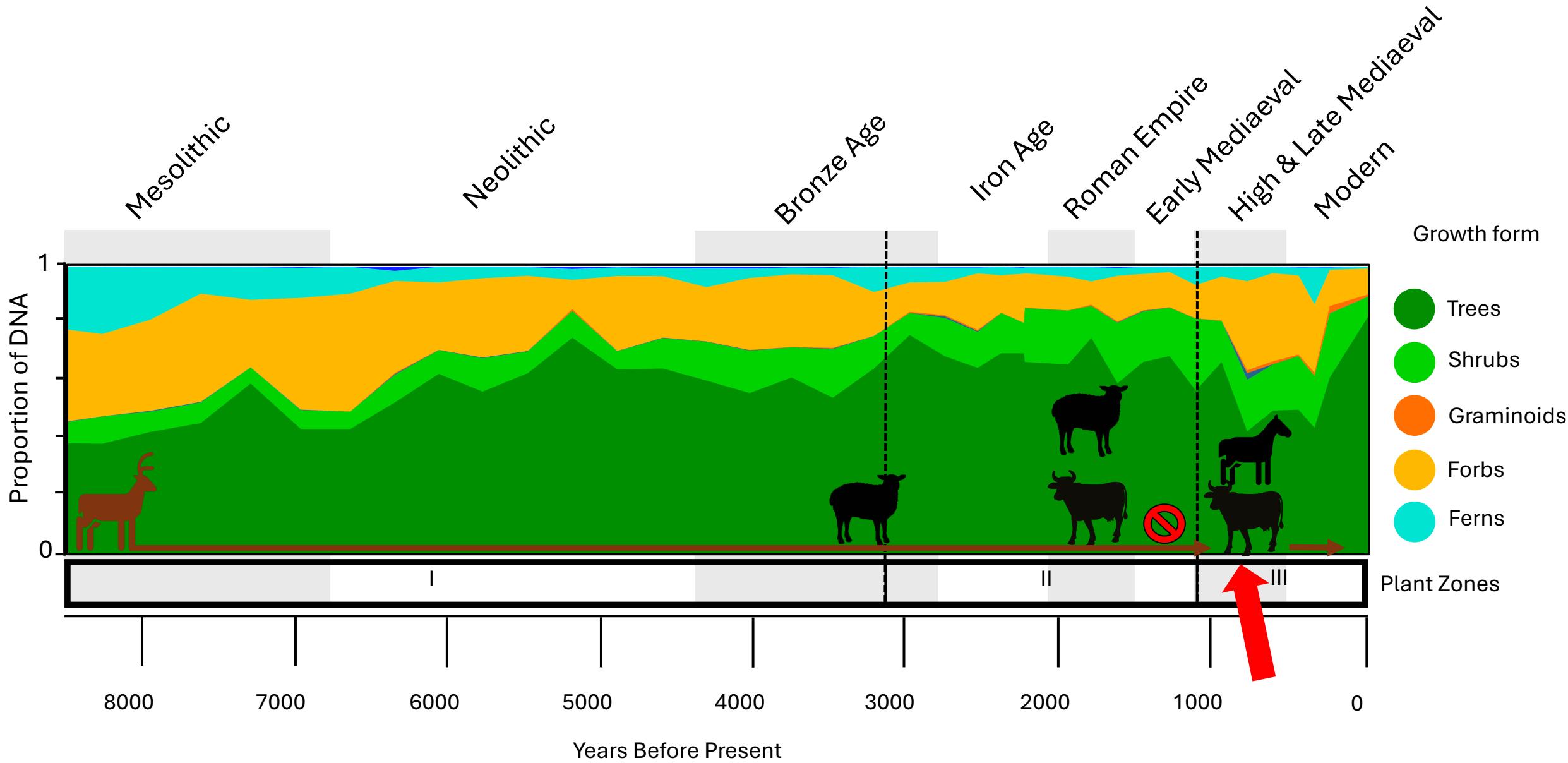


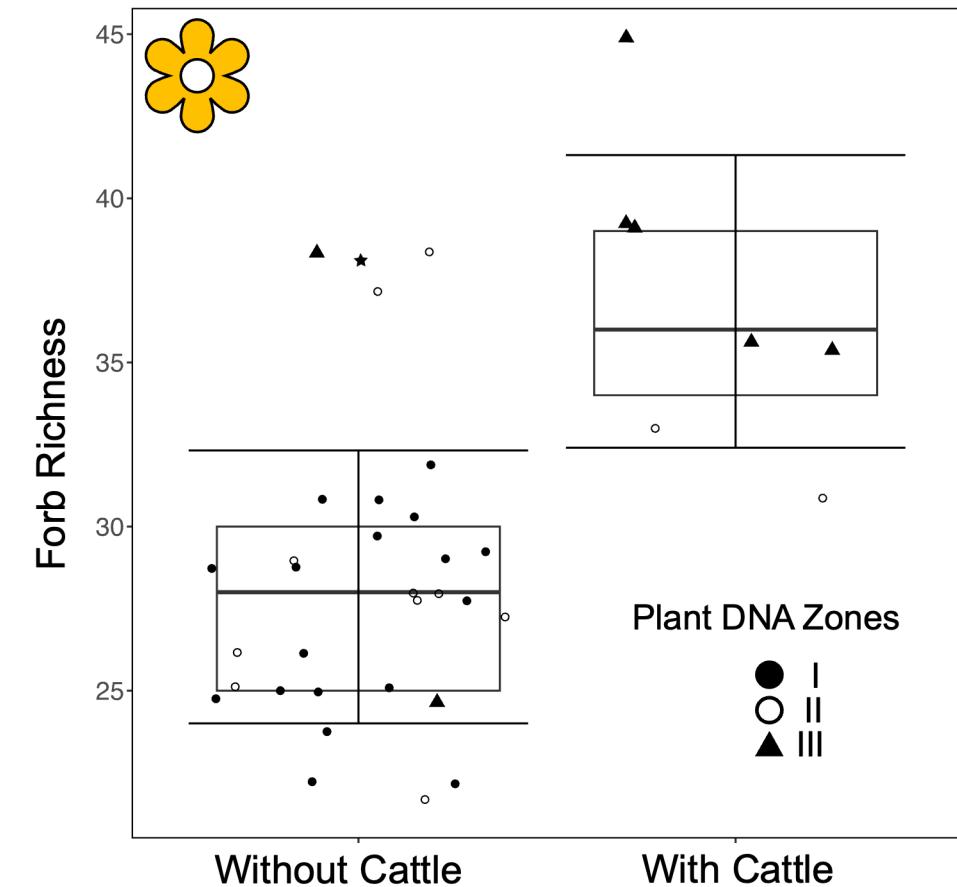
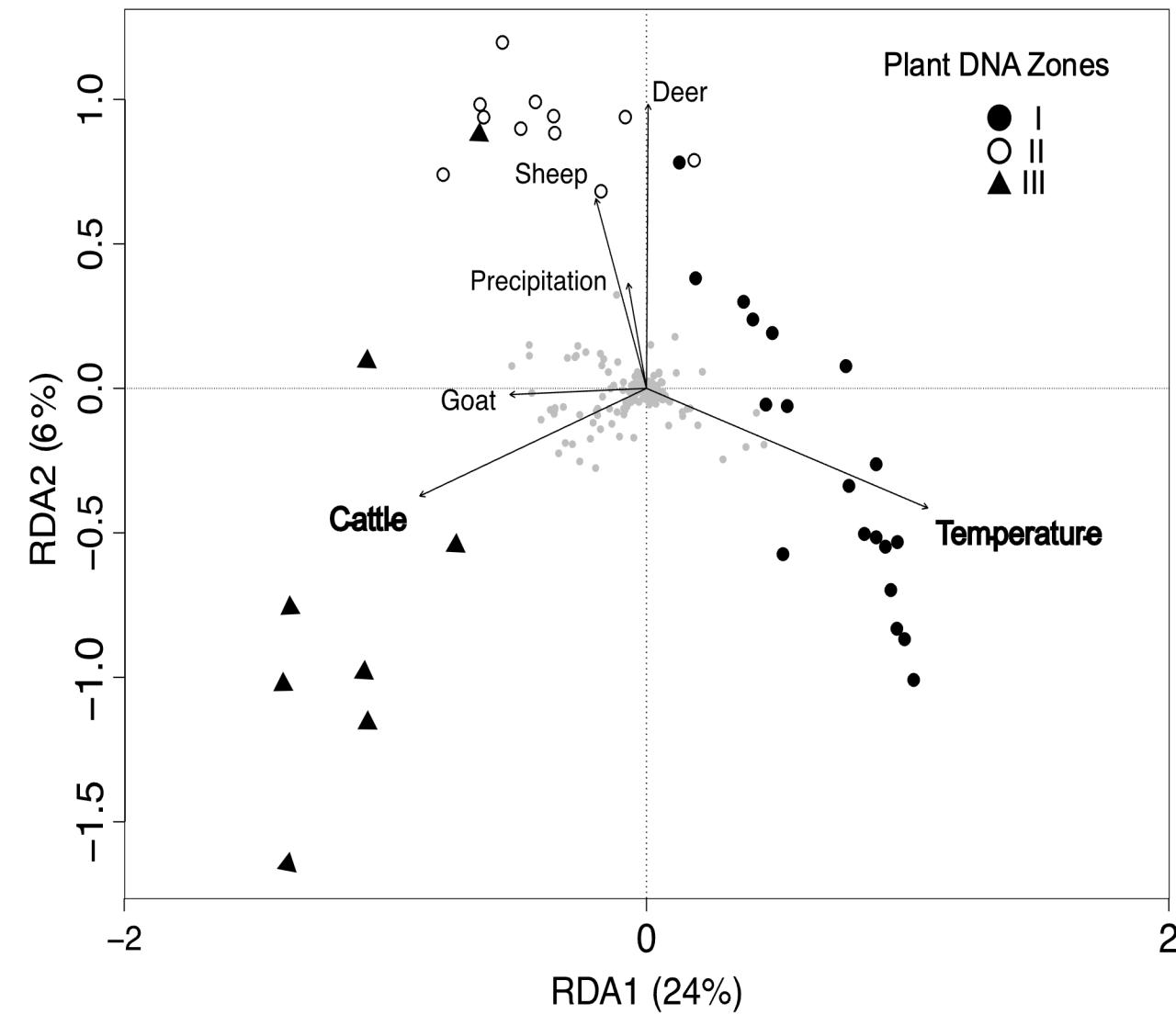
Credit: Ole Billing Hansen

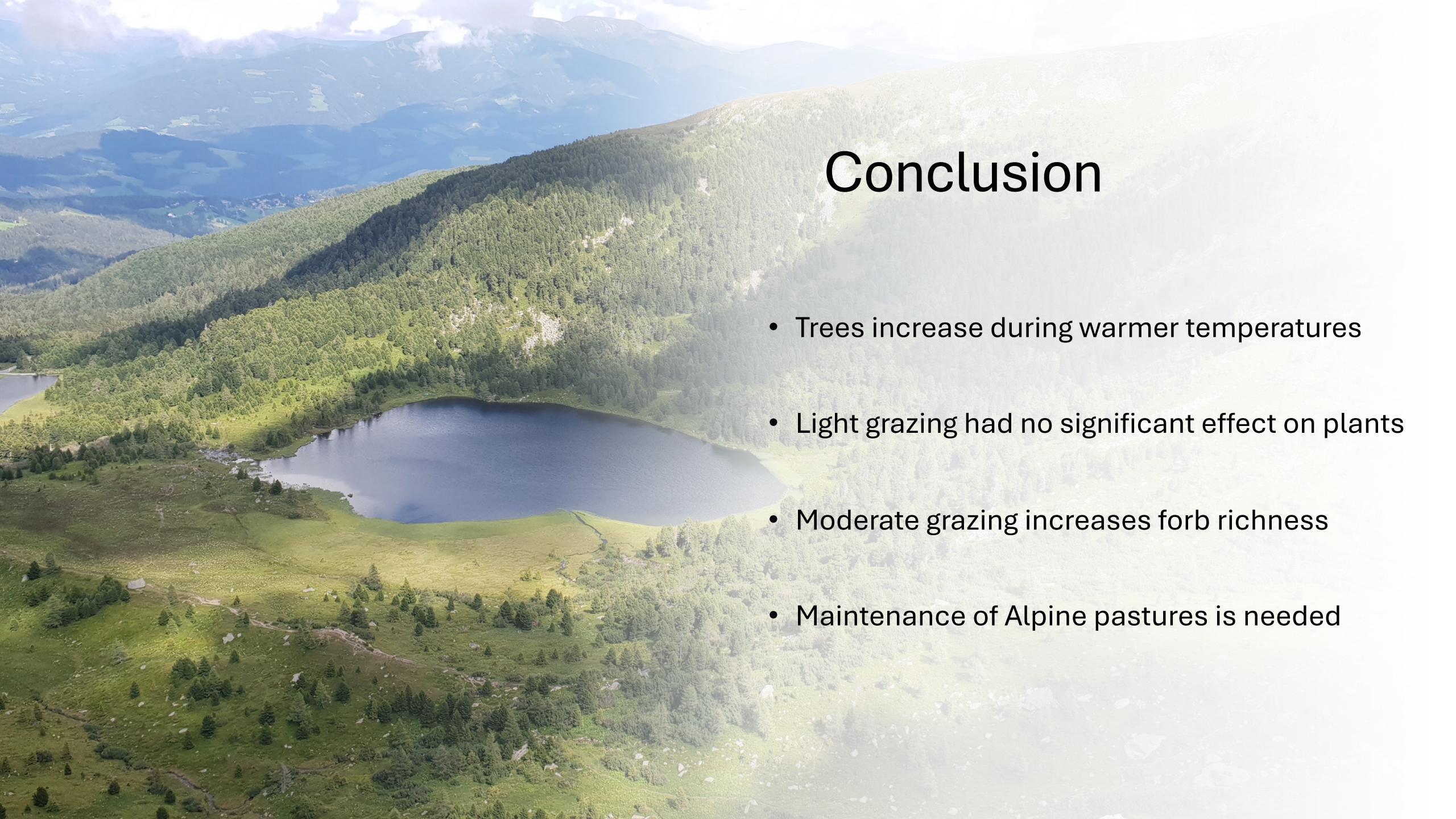










A wide-angle photograph of a mountainous region. In the foreground, there's a dark blue lake nestled among green hills. The hills are covered with a mix of green grass and clusters of tall evergreen trees. In the background, more mountains rise, their peaks partially obscured by white clouds. The sky is a bright, pale blue.

Conclusion

- Trees increase during warmer temperatures
- Light grazing had no significant effect on plants
- Moderate grazing increases forb richness
- Maintenance of Alpine pastures is needed

Zetter *et al.* (2025). 'SedaDNA shows that transhumance of domestic herbivores has enhanced plant diversity over the Holocene in the Eastern European Alps', *The Holocene*, 34(4)

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uit.no/research/arcecogen

Thank you

Zetter *et al.* (2025). 'SedaDNA shows that transhumance of domestic herbivores has enhanced plant diversity over the Holocene in the Eastern European Alps', *The Holocene*, 34(4)



Positions Available

Tromsø Museum in sedaDNA and archaeology/palaeoecology

April & May 2025



- PhD student x 2 (V2C - MEMELAND)
- Postdoctoral Researcher x3 (3 yrs - V2C, 4 & 6 yrs -MEMELAND)
- Technician (5 yrs - MEMELAND)
- Scientific Co-ordinator (5 yrs, 50% - MEMELAND)

