HOST-PARASÍTE PHYLOGEOGRAPHY: A TALE OF GLACIATION AND LOCAL ADAPTATIONS

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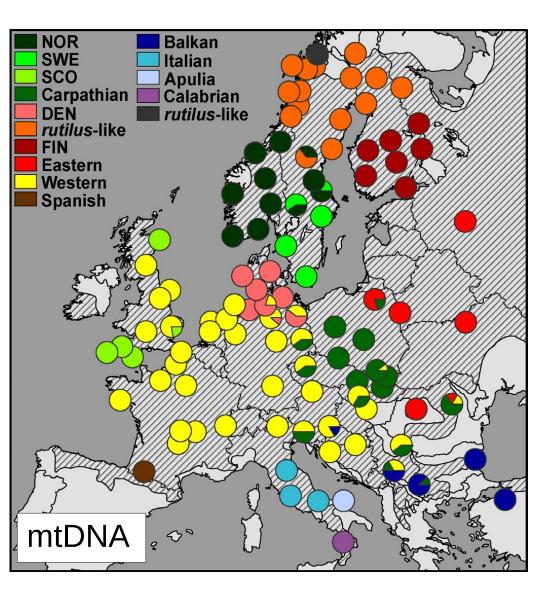


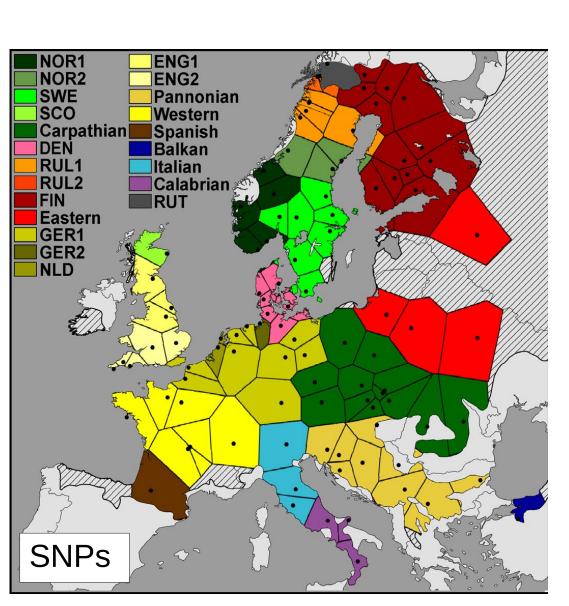






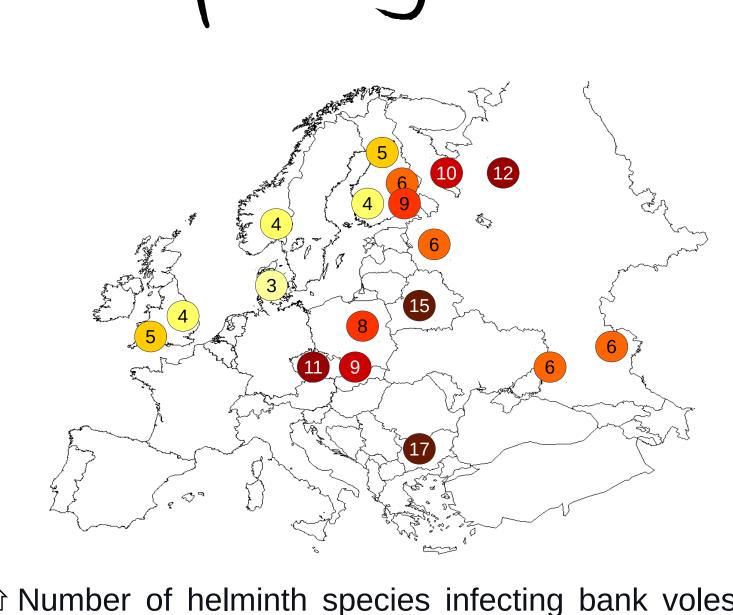
Host population structure reflects demography

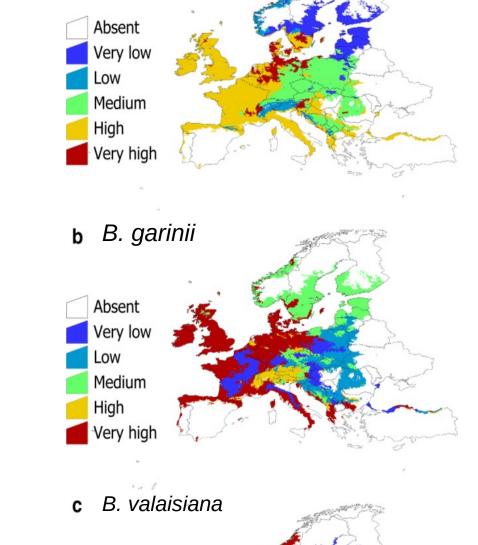




DNA clades of bank voles reveal post-glacial colonization and secondary contacts (Marková et al. 2019)

Pressure from parasites varies spatially -> local adaptations

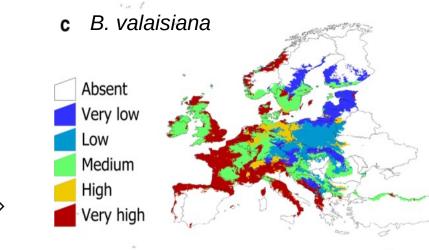




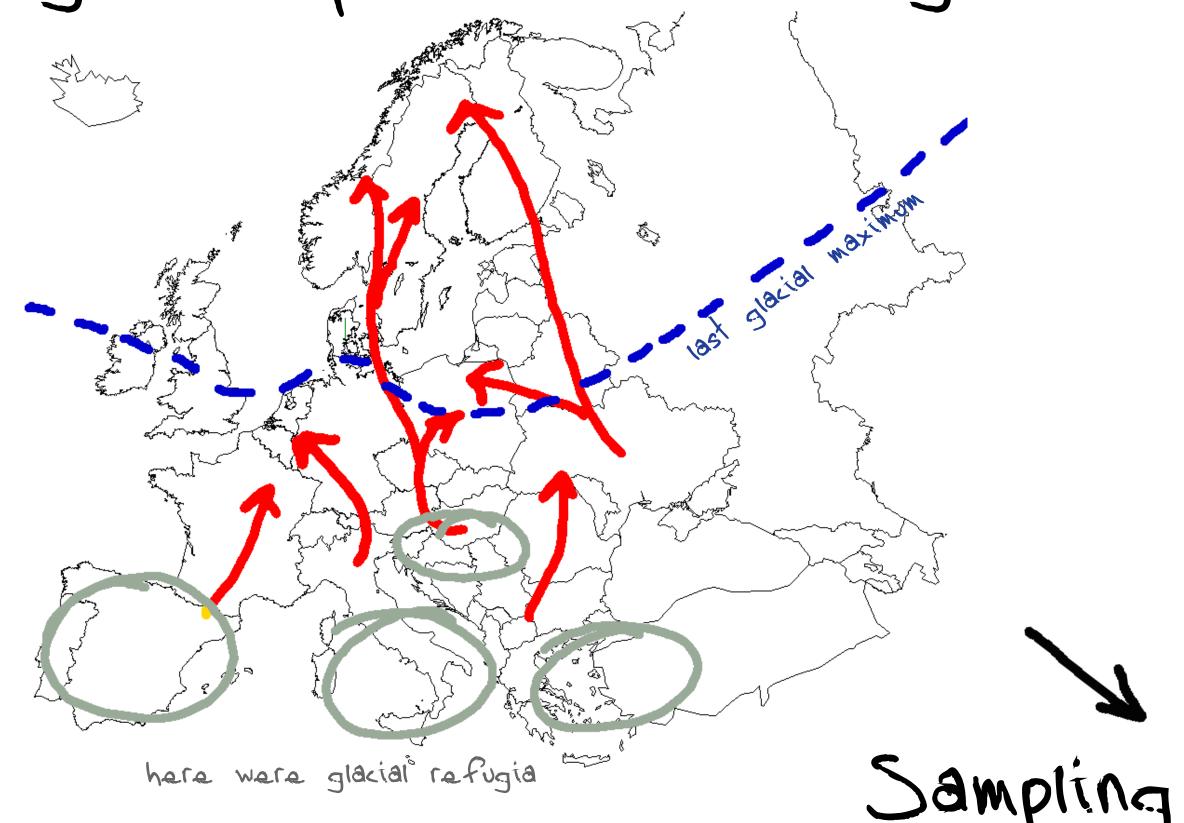
a B. afzelii

↑ Number of helminth species infecting bank voles
(Haukisalmi & Henttonen 2000)

Prevalence of three *Borrelia* species in ticks (Estrada-Peña et al. 2018) ⇒



Migration patterns after glaciation



Questions

- How do parasite genomes vary in space?
- Does parasite population structure reflects that of their hosts?
- Are spatial genetic patterns in hosts and their parasites adaptive or do they simply result from demography?
- What are the relative roles of demography and selection in shaping variation in functional loci?

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• RadSeq of voles and nematodes across NE-SW gradient

