Mesolithic Scandinavia

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Mesolithic of Scandinavia

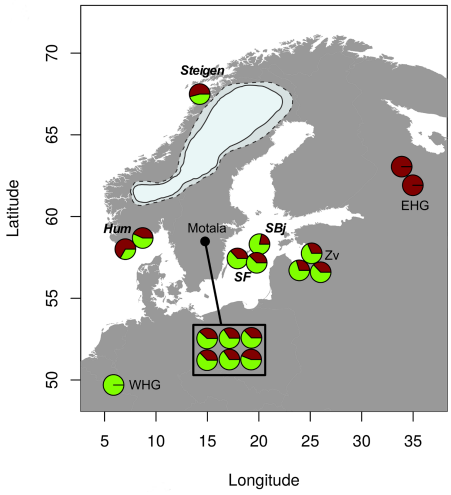
11,700 bp: earliest archaeological sites, both in North and South

Interior of Scandinavia still glaciated.

Different stone tool technologies—one from SW and one from E—show up early.

Günther et al. (2018) looked at the genetics of mesolithic Scandinavians.

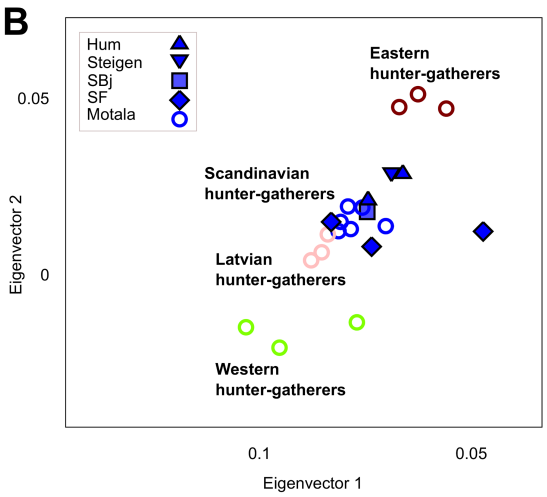
Genetic contributions to mesolithic Scandinavians



Eastern hunter-gatherers (EHG) contribute most in North.

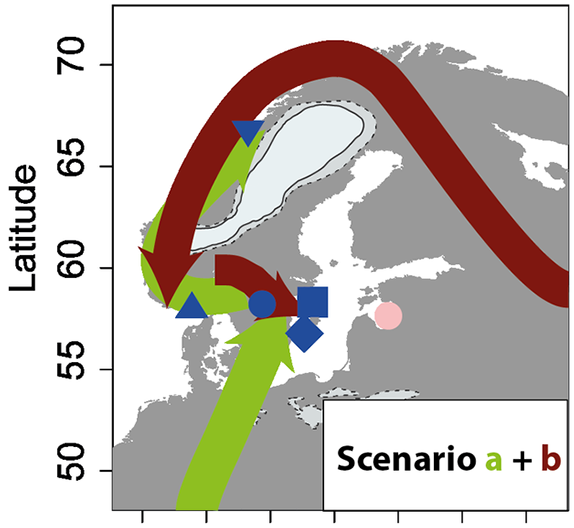
Western hunter-gatherers (WHG) contribute most in South and East.

PC map

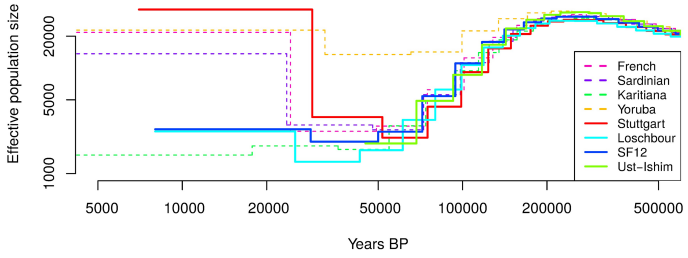


Scandinavian hunter-gatherers are a mix of WHG and EHG.

Inferred post-glacial migration into Scandanavia



Population history (estimated by MSMC)



- Bottleneck mild for Yoruba of Africa, severe for Eurasians.
- Pleistocene population explosions among Eurasian populations that later became farmers.
- Little growth in foraging populations (Loschbour, SF12, Ust-Ishim)
- Bottleneck worse for Loschbour than SF12 (a Scandanavian from 9 kya).

Mesolithic Scandinavians were genetically different

- Many alleles that were common then are absent from modern populations.
- Modern Scandinavians inherit only a small fraction of their DNA from mesolithic Scandinavians.

Mesolithic alleles that remain common today are likely to be locally advantageous

- Several such alleles are in the TMEM131 gene, which is associated with physical performance.
- Other such alleles affect metabolic, cardiovascular, developmental, and psychological traits.
- Günther et al. suggest these represent adaptation to cold.

Skin color

- Scandinavian hunter-gatherers (SHG) carried alleles for pale skin and eyes.
- Especially in northern Scandinavia.
- Not true of WHG or EHG: suggests selection.