DETERMINING PREY PREFERENCES OF EXTINCT HOMINID GROUPS USING TAPHONOMIC DATA

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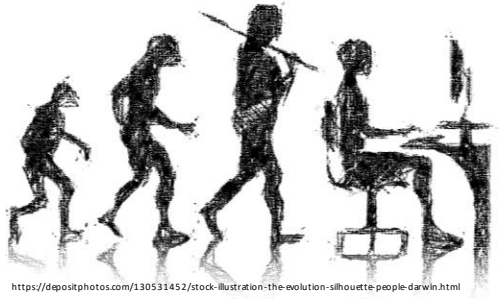
Background

Historically, hominids evolved and coalesced into larger, complex social structures, requiring energy to power large brains and driving the need to target larger prey. Using Optimal Forage Theory as the background for investigating extinct hominid prey preference, we aim to answer the questions- what are the preferred prey and why?

Methods

Literature review for Neanderthals and Anatomically Modern Humans (AMH) diet info



https://depositphotos.com/130531452/stock-illustration-the-evolution-silhouette-people-darwin.html

Variables for analyses in Rstudio 4.0.2: prey abundance (random bone accumulations), Body mass of prey (kgs), Taphonomic data (kills), Habitat and site, Periodization data (era, industry)

Use abundance and kill data to calculate Jacobs' Index for each species n >3

Determine drivers of preference through GLM within maximum likelihood frame

Segmented modelling for ideal body mass range preferred+

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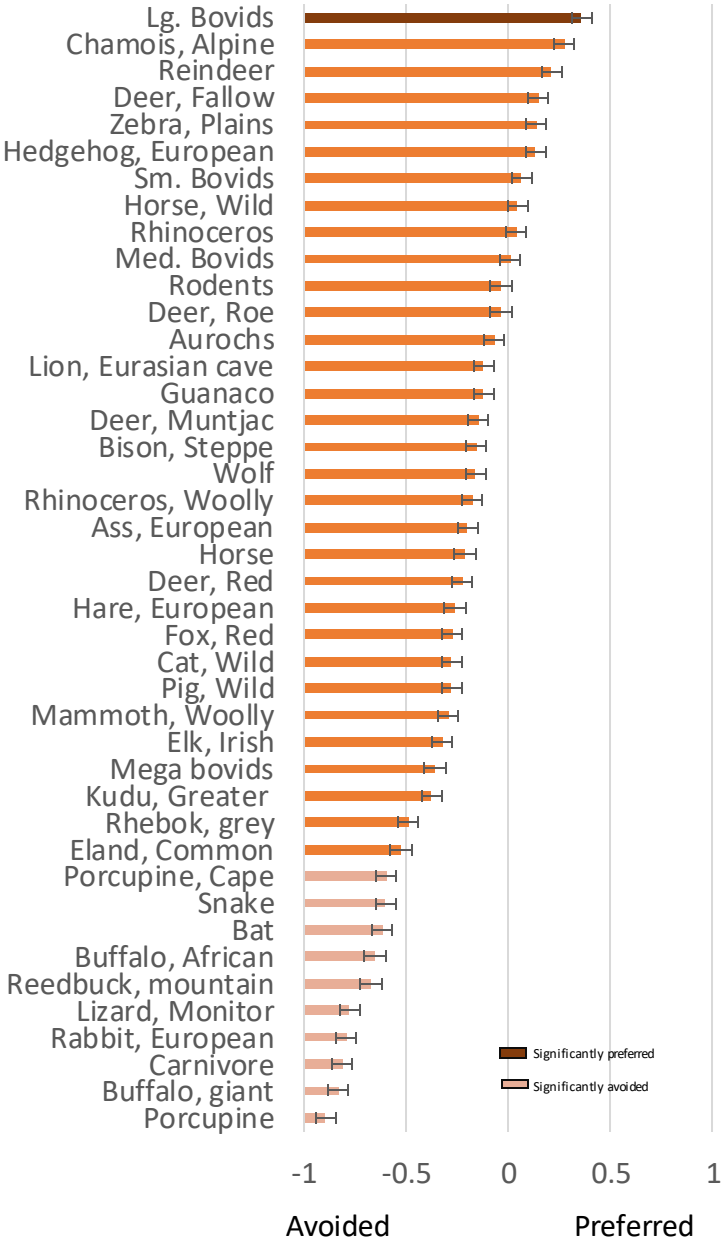
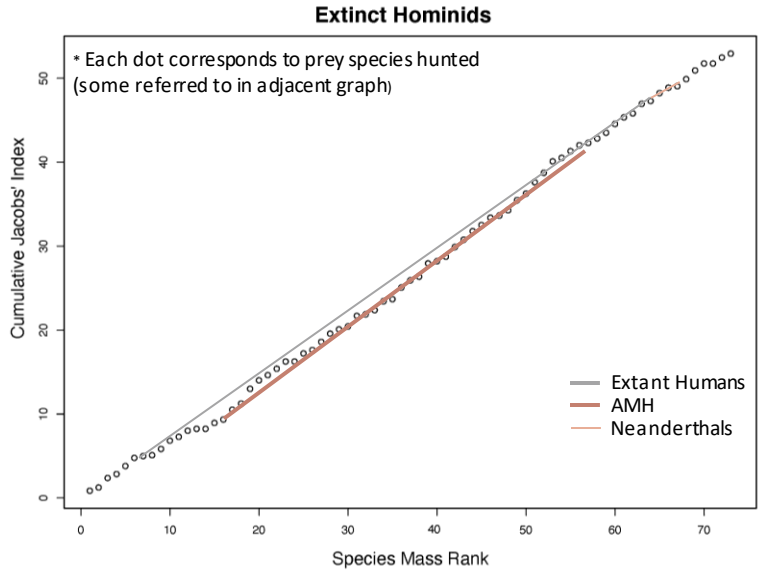
Results



	Neanderthal	AMH	Extant humans
# Sites	31	54	161
# Species	62	167	504
Countries	12	15	37
Pref. mass (kgs)	783	5.5 - 295	0.6 - 535



Conclusions

- Trends toward larger species, more energetic benefits for next hunt.
- Understanding hominid prey preferences in extinction and conservation
- The continuing role of humans as apex predators in natural systems.