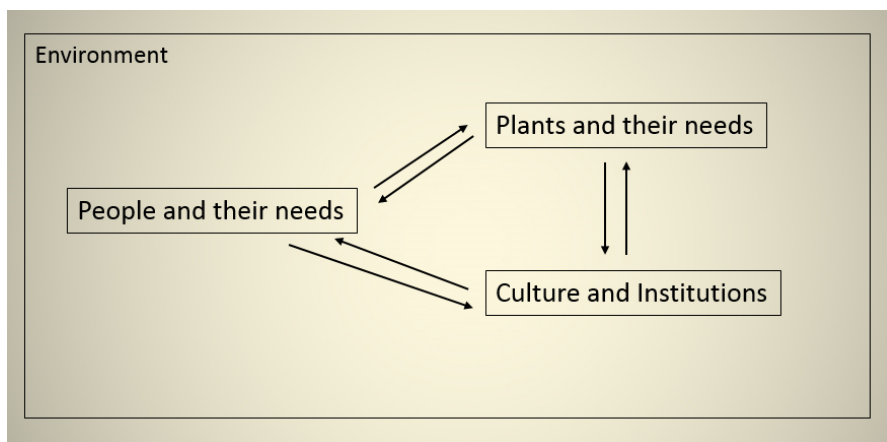


Notes: Ethnobotany – Origins of Agriculture – Wheat

Think big picture and the rubric.

Your Answers:







Younger Dryas

~20,000 BP end of last glacial period, warming.

~14,500 BP start of cooling period called the Younger Dryas

~11,500 BP abrupt end to Younger Dryas

10°C temperature increase in a decade in some places

Hence the start of farming.

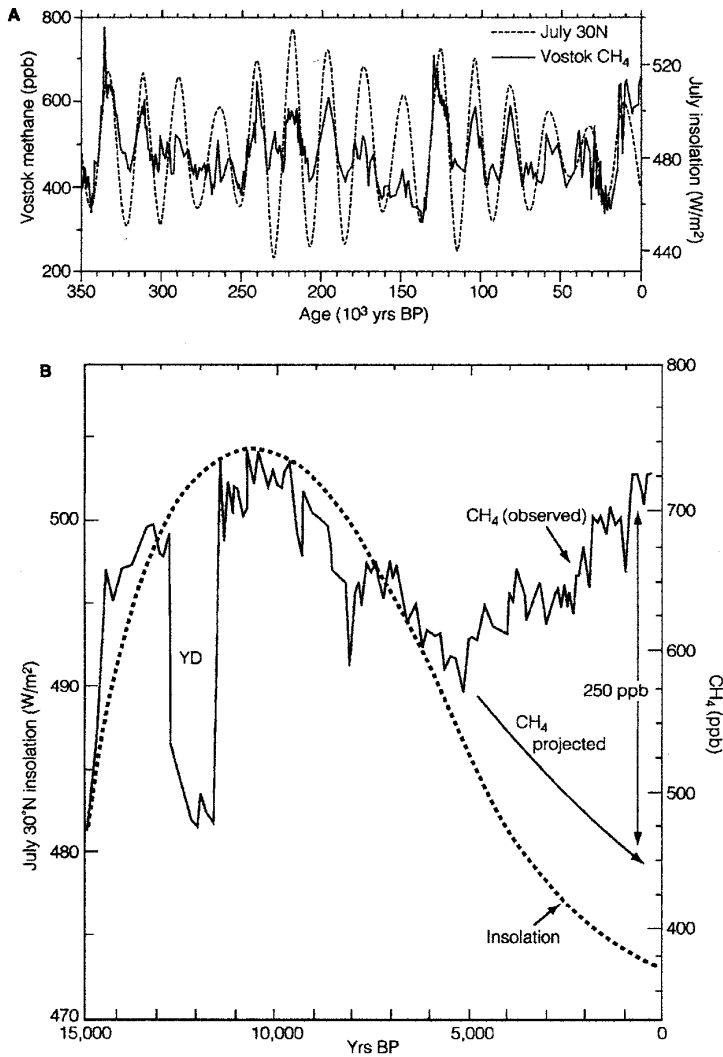
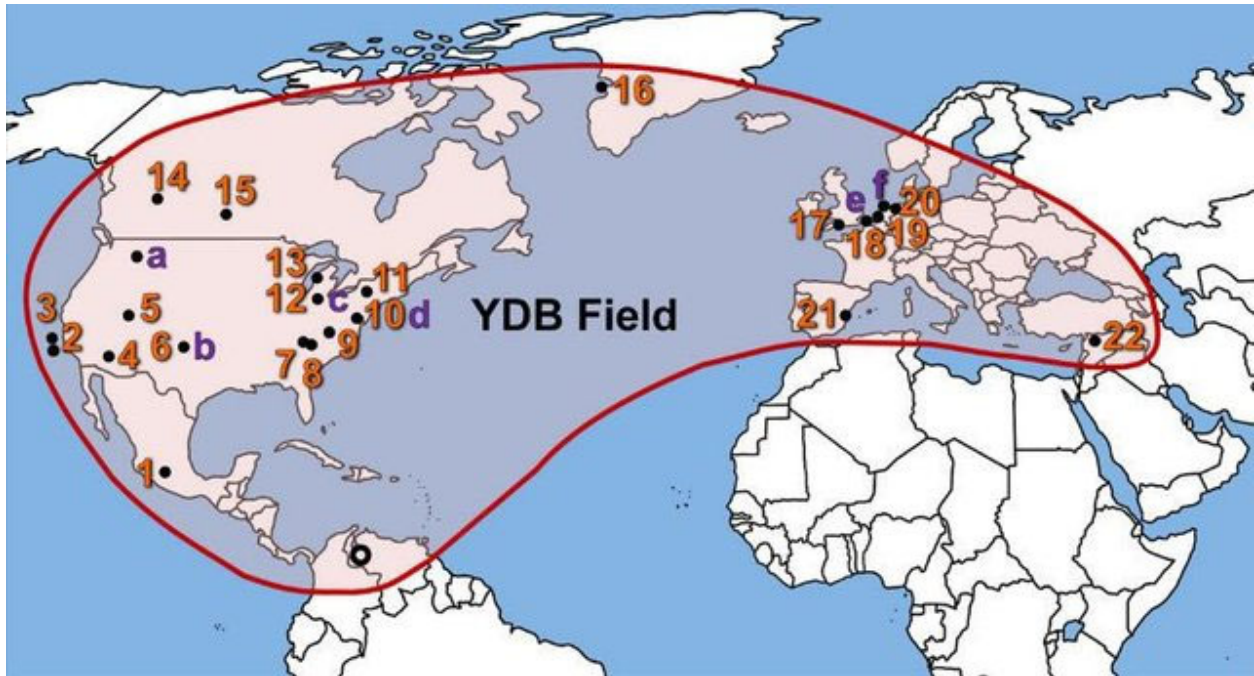


Figure 1. Comparison of July insolation values from Berger and Loutre (1996) with ice-core concentrations of atmospheric CH₄. (a) Long-term Vostok CH₄ record of Petit et al. (1999), using time scale of Ruddiman and Raymo (2003). (b) GRIP CH₄ record from Blunier et al. (1995), dated by counting annual layers. Early Holocene CH₄ trend projected in late Holocene to values reached during previous early-interglacial CH₄ minima.



THE ANTHROPOGENIC GREENHOUSE ERA BEGAN THOUSANDS OF YEARS AGO 273

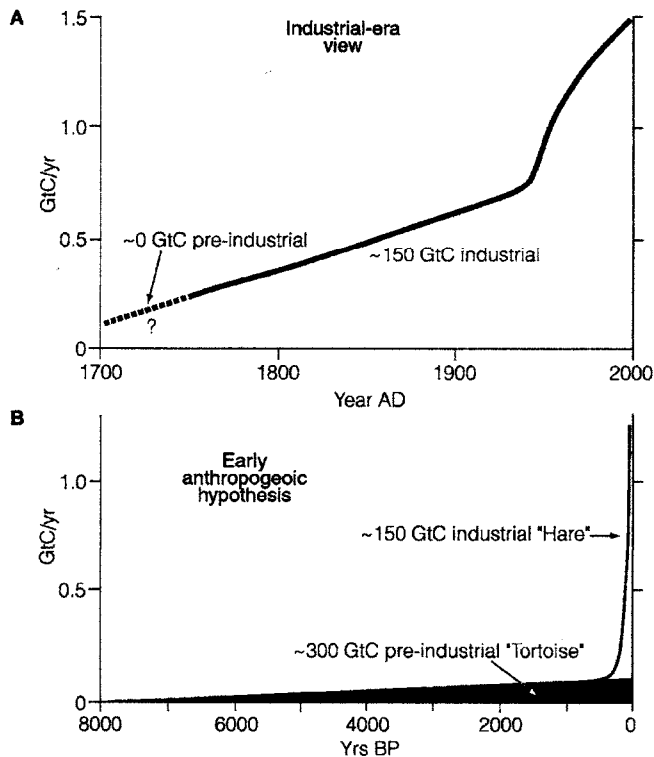


Figure 4. (a) Industrial-era perspective suggests that most land clearance occurred in the last 200 years. (b) Early-anthropogenic perspective suggests that much slower but longer-operating pre-industrial land clearance cumulatively exceeded clearance during the industrial era.

Wheat

Rachis – the entire head of wheat.

glumes – bracts around the seed, (also called lemmas)

hull – all of the glumes together

awn - end appendage on a lemma- emmer uses its awns to propel into the soil.

Einkorn, a hulled grain

The grain retains the hull after harvest. Hulls make processing harder, the hulls can be singed in a fire to make it easier to remove them. Hulls protect the grain.

Originally free-threshing, but farmers selected for non-free-threshing.

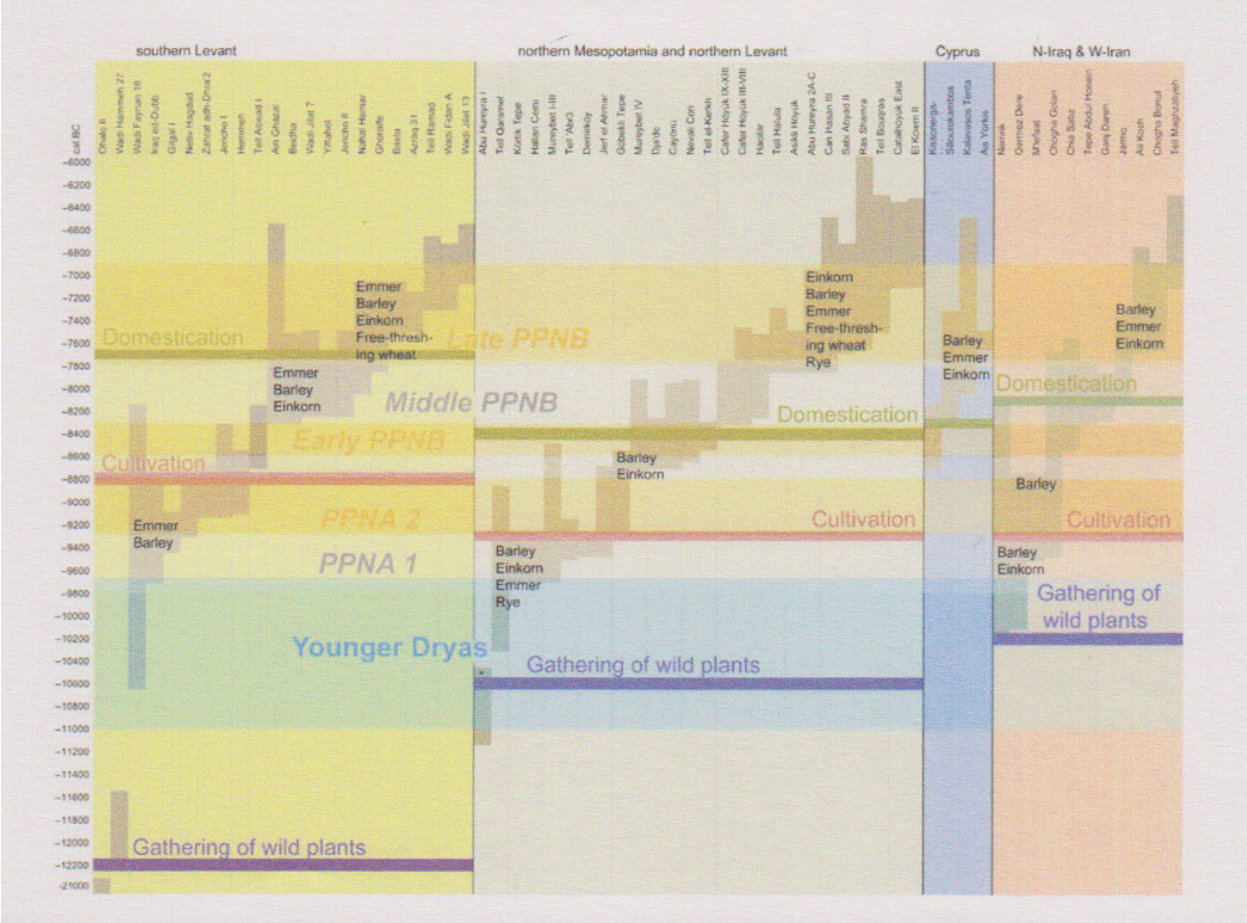
Free-threshing – grain easily separates from the glumes.

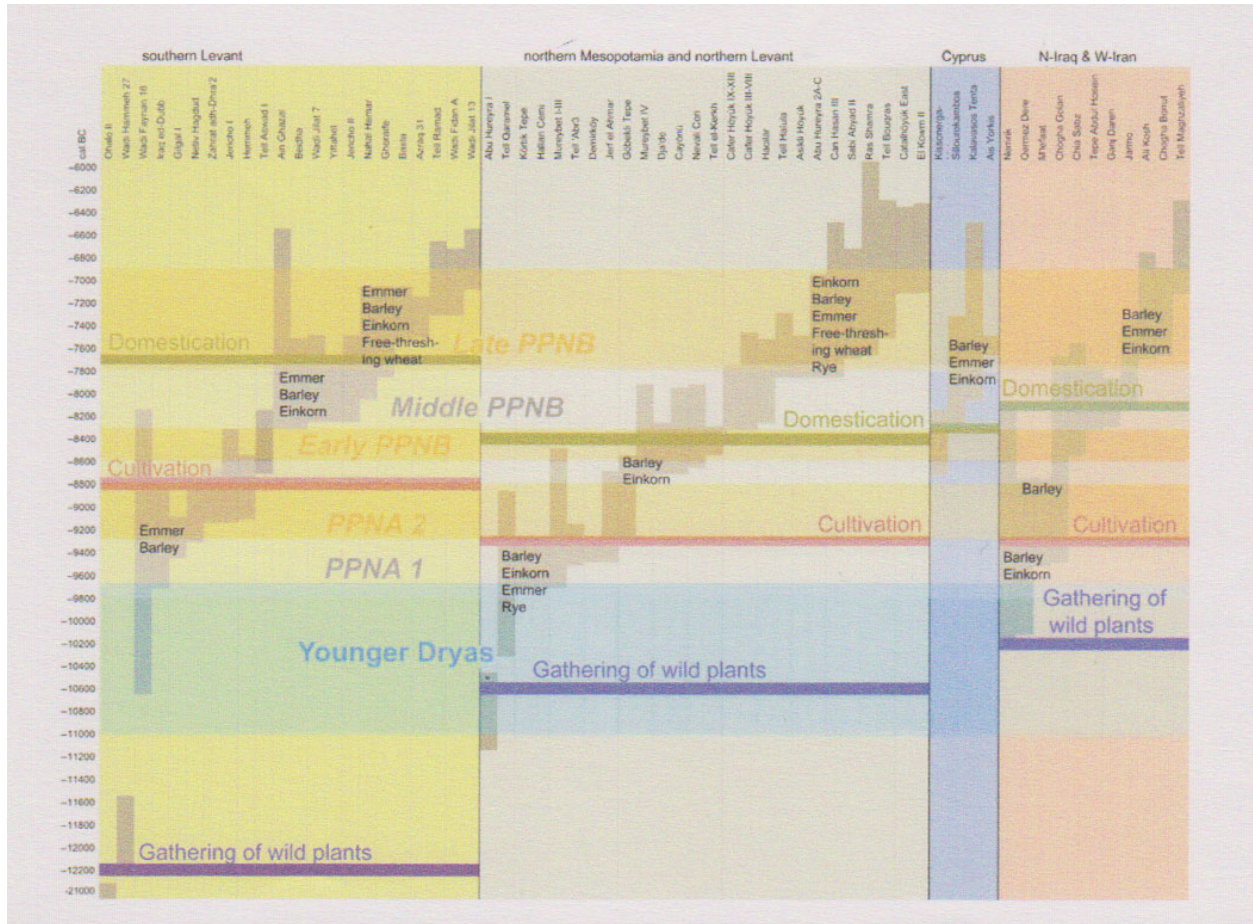
Emmer

Free-threshing wheats

Spelt

Common Wheat





Why would people do this?

Gobekli Tepe (a bit of a tangent)



Regroup mentally.

