

Fig. 1. Study area and ancient footprints found at WHSA Locality 2.

(A) Map showing approximate location of the study site. In accordance with the Archaeological Resources Protection Act of 1979, the National Parks Omnibus Management Act of 1998, and the Paleontological Resources Preservation Act of 2009, the precise location of the site is withheld. Interested parties may contact

the National Park Service for this information, given a legitimate reason.

(B) Human footprints on track horizon 4 (TH4). (C) Human footprint on TH5, located in the base of the main trench. (D) Surfaced 3D model of part of the main trench showing three human footprints on different surfaces on the trench floor. (E) Human trackways on TH4.

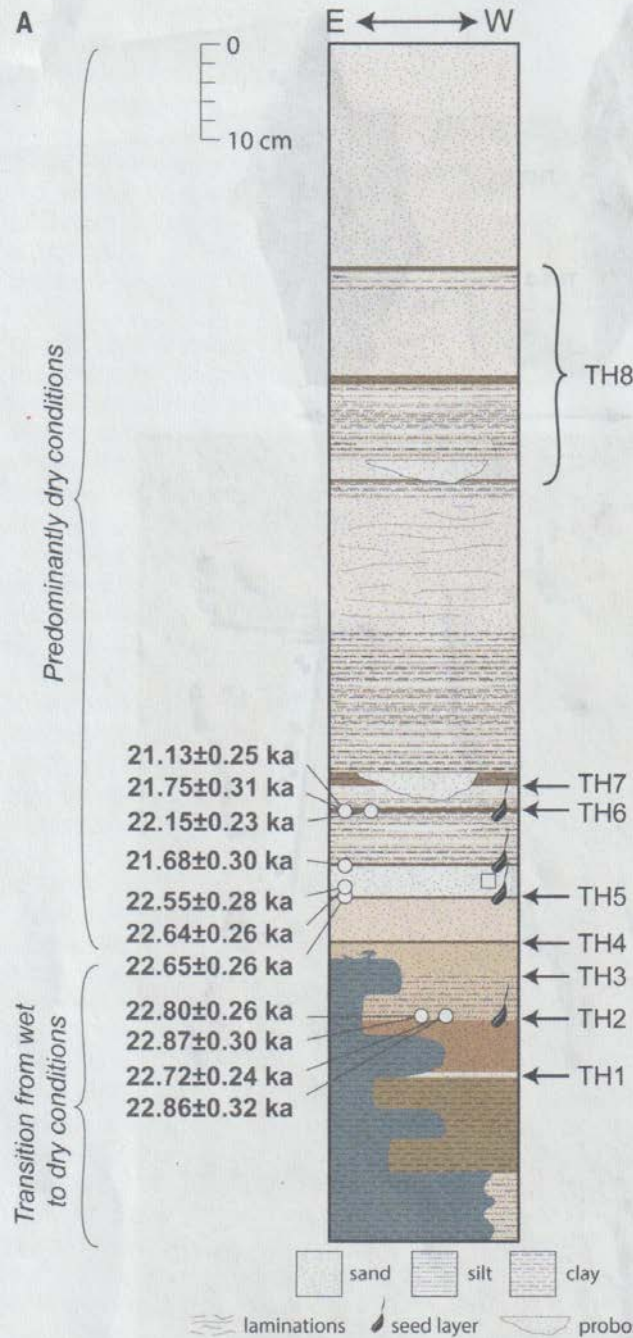
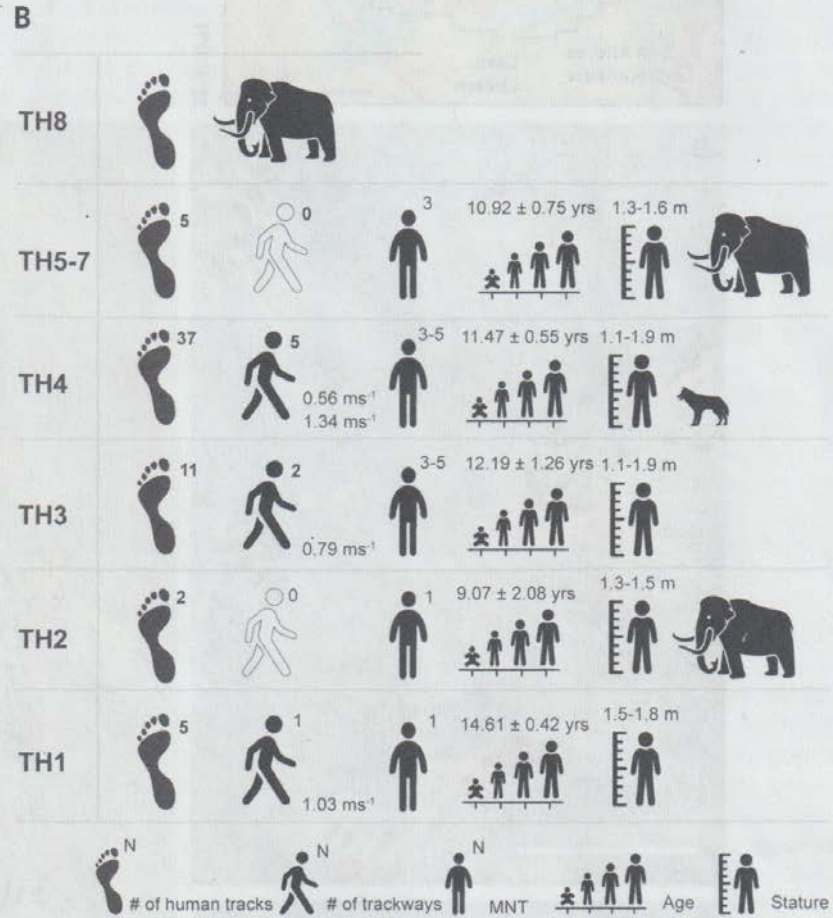


Fig. 2. Geologic context and track-maker demographics. (A) Composite stratigraphy, calibrated ages, and dominant hydrologic regime for sediments exposed in the trench at WHSA Locality 2. Filled circles denote ^{14}C samples; the filled square denotes a uranium series sample. The calibrated ^{14}C ages were used to construct the age models shown in Fig. 3. (B) Summary of footprint evidence on each horizon [number of human tracks, number of trackways, minimum number of track-makers (MNT), track-maker age, stature, and fauna]. For additional details, see (20).



Bennett et al. Science 373,
1528-1531, 24 Sept 2021

Last Glacial Maximum

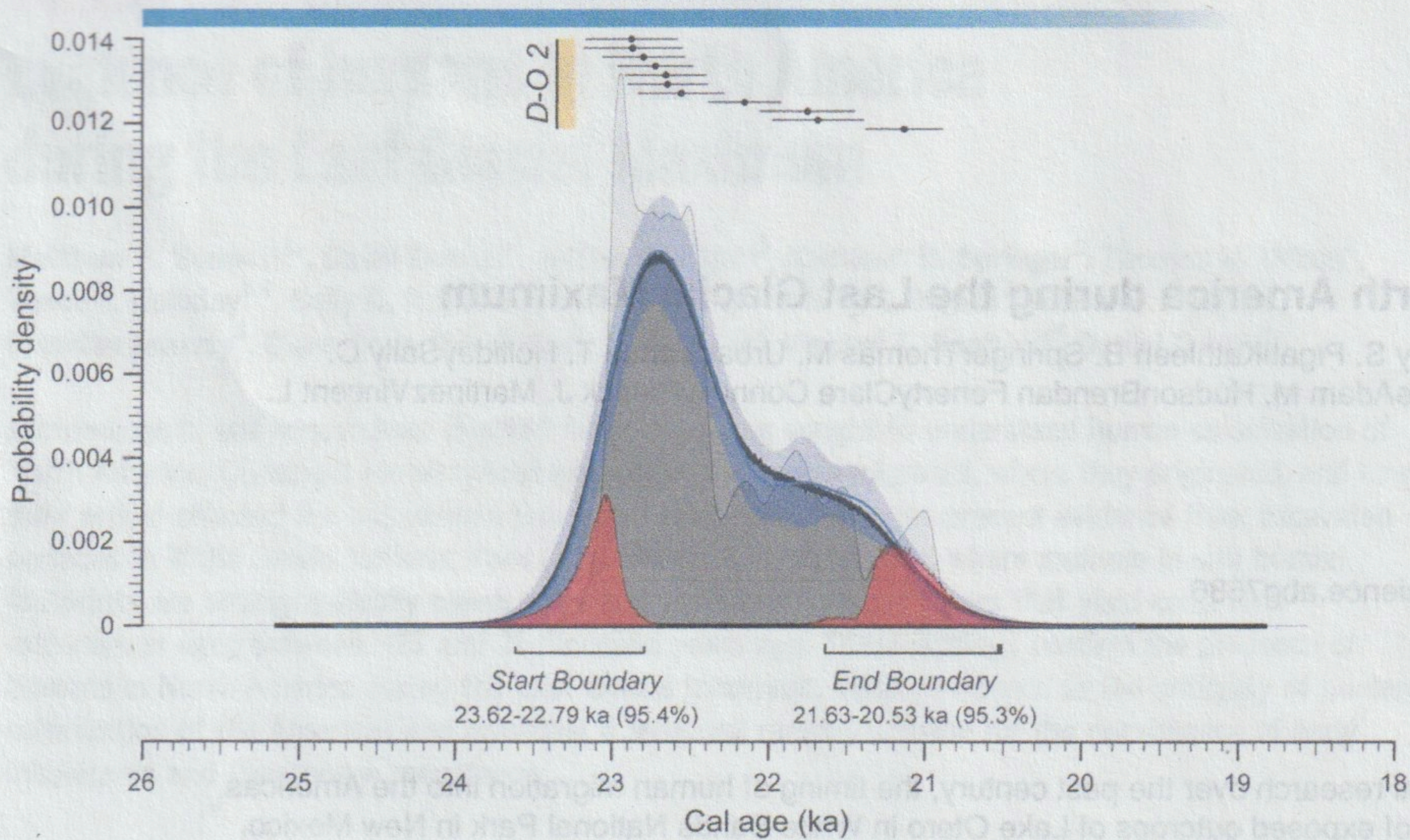




Fig. 1. North American Ice Sheet extents and potential colonization pathways. Extent of the Cordilleran and Laurentide ice sheets at 19 ka ago (white) and 15.5 ka ago. Areas of exposed continental shelf at 19 ka ago are shown in brown (6). Yellow stars indicate locations of offshore marine data discussed in the main text.

Lesnek et al., Sci. Adv., 2018, 4, 30 May

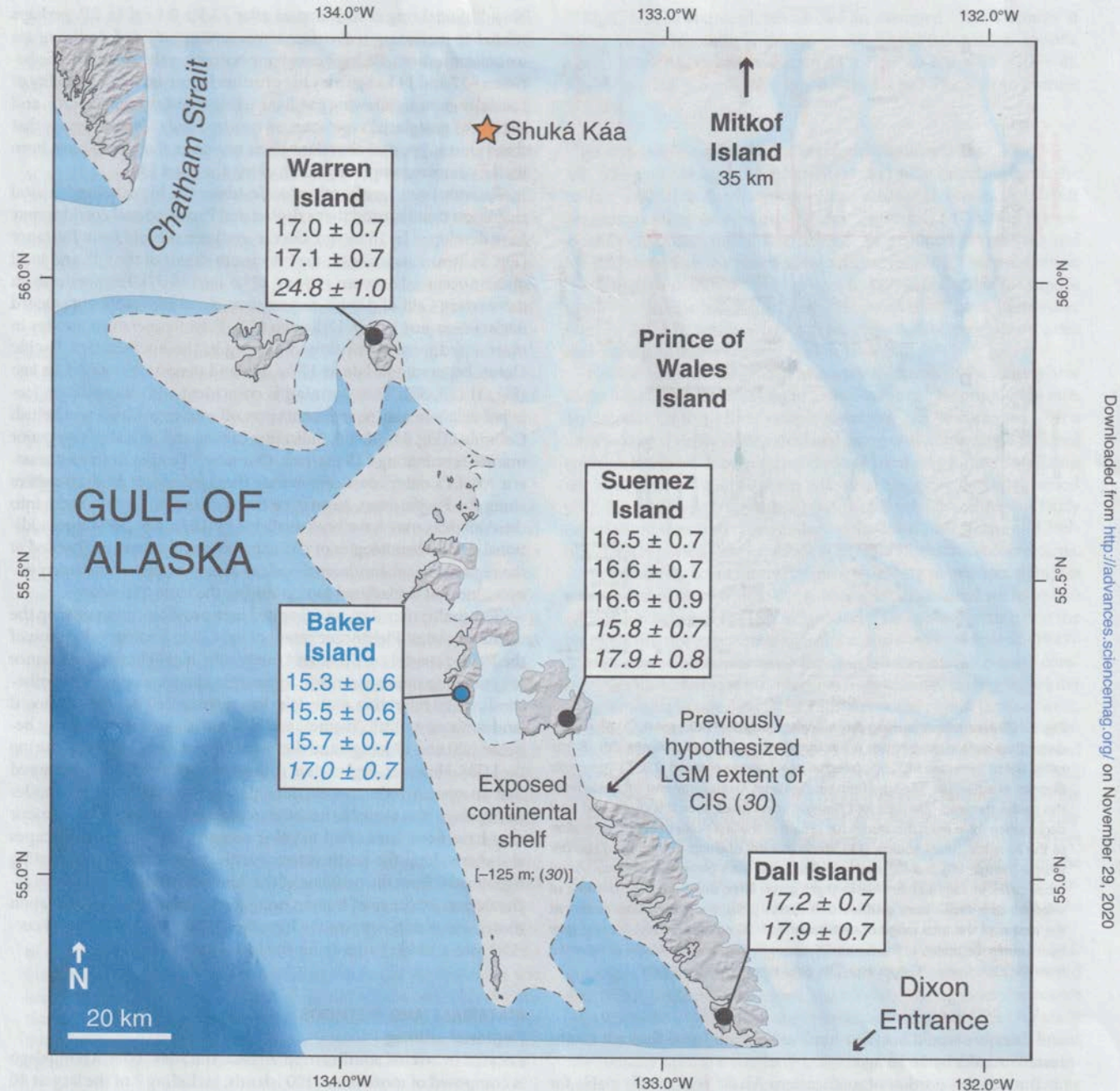


Fig. 2. New ^{10}Be ages from southeastern Alaska. Study region showing previously hypothesized CIS extent (white) and regions of potentially exposed continental shelf (solid gray; determined by subtracting 125 m from modern sea level) during the LGM (30). Sampling sites for ^{10}Be dating were selected within areas hypothesized by Carrara *et al.* (30) to have been ice-free during the LGM. Boulder (normal text) and bedrock (italicized text) ^{10}Be ages (thousand years; 1 SD external uncertainty) constrain CIS (black) and local deglaciation (blue) and demonstrate that sampling sites were not ice-free refugia. The location of Shuká Káa cave on Prince of Wales Island is marked with an orange star.

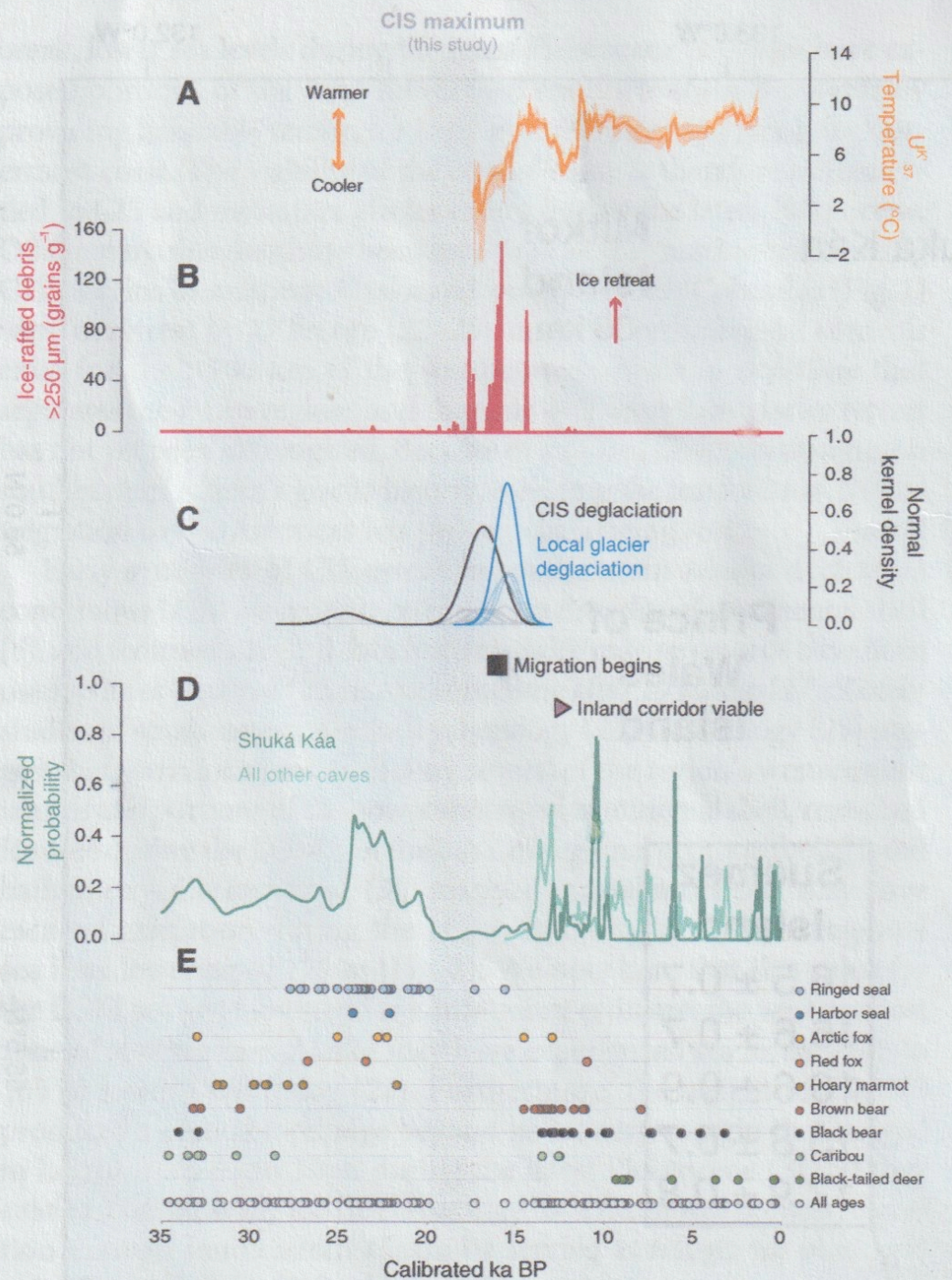


Fig. 3. Climate records and key chronologies along the Pacific coast. (A) Alkenone-derived sea surface temperature reconstruction from the Gulf of Alaska (36). (B) Ice-rafted debris from core MD0299, collected near Vancouver Island (23). (C) Composite diagram of individual ^{10}Be ages from southeastern Alaska (gray and light blue lines; this study), summed ^{10}Be ages for CIS deglaciation (black lines; this study), and local deglaciation (blue lines; this study). (D) Timing of the first pulse of human migration to the Americas [black square; (13)], the ecological opening of the inland corridor [purple triangle; (8)], and ^{14}C ages from Shuká Káa (dark green lines; this study) and other caves in southeastern Alaska (light green lines; this study). (E) Timeline of selected cave fauna from southeastern Alaska [(29); this study]. Dots represent the means of the total range of each calibrated ^{14}C age (this study). Vertical gray bar denotes the timing of maximum CIS extent in southeastern Alaska determined from the cave fauna ^{14}C ages and ^{10}Be ages reported in this study.

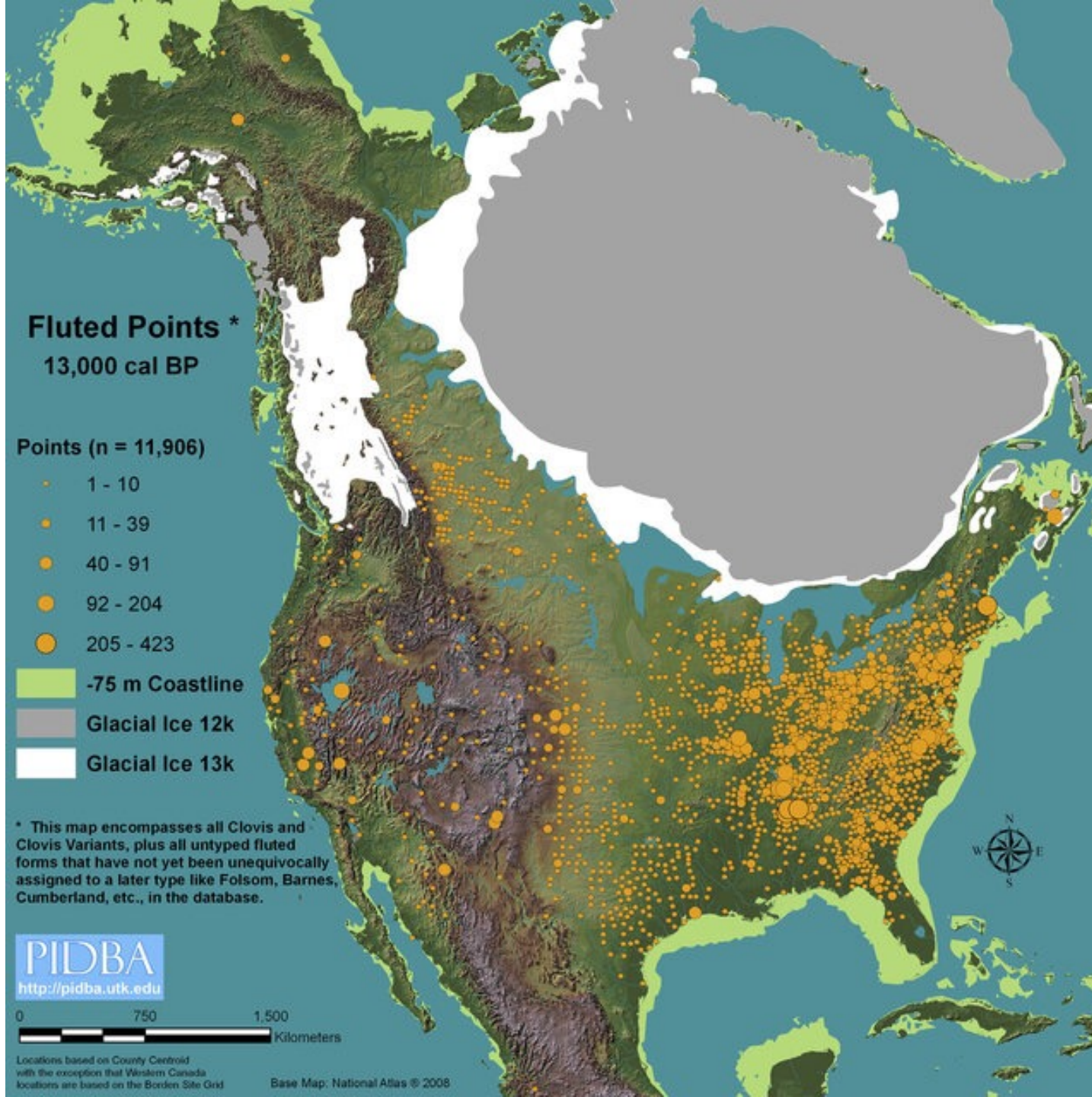
Lake Winnemucca Petroglyphs



Bisected chevron design.
The tree form is 70 cm tall.

“The lake in the Winnemucca Lake subbasin fell beneath its spill point between 14.8 and 13.2 ka and also between 11.3 and 10.5 ka (or between 11.5 and 11.1 ka), exposing the base of the collapsed tufa mound to petroglyph carving.”

L.V. Benson, E.M. Hattori, J. Southon, B. Aleck, 2013: Dating North America’s oldest petroglyphs, Winnemucca Lake subbasin, Nevada. *Journal of Archaeological Science*, 40.



Charismatic megafauna

Glyptodont

Mastodon

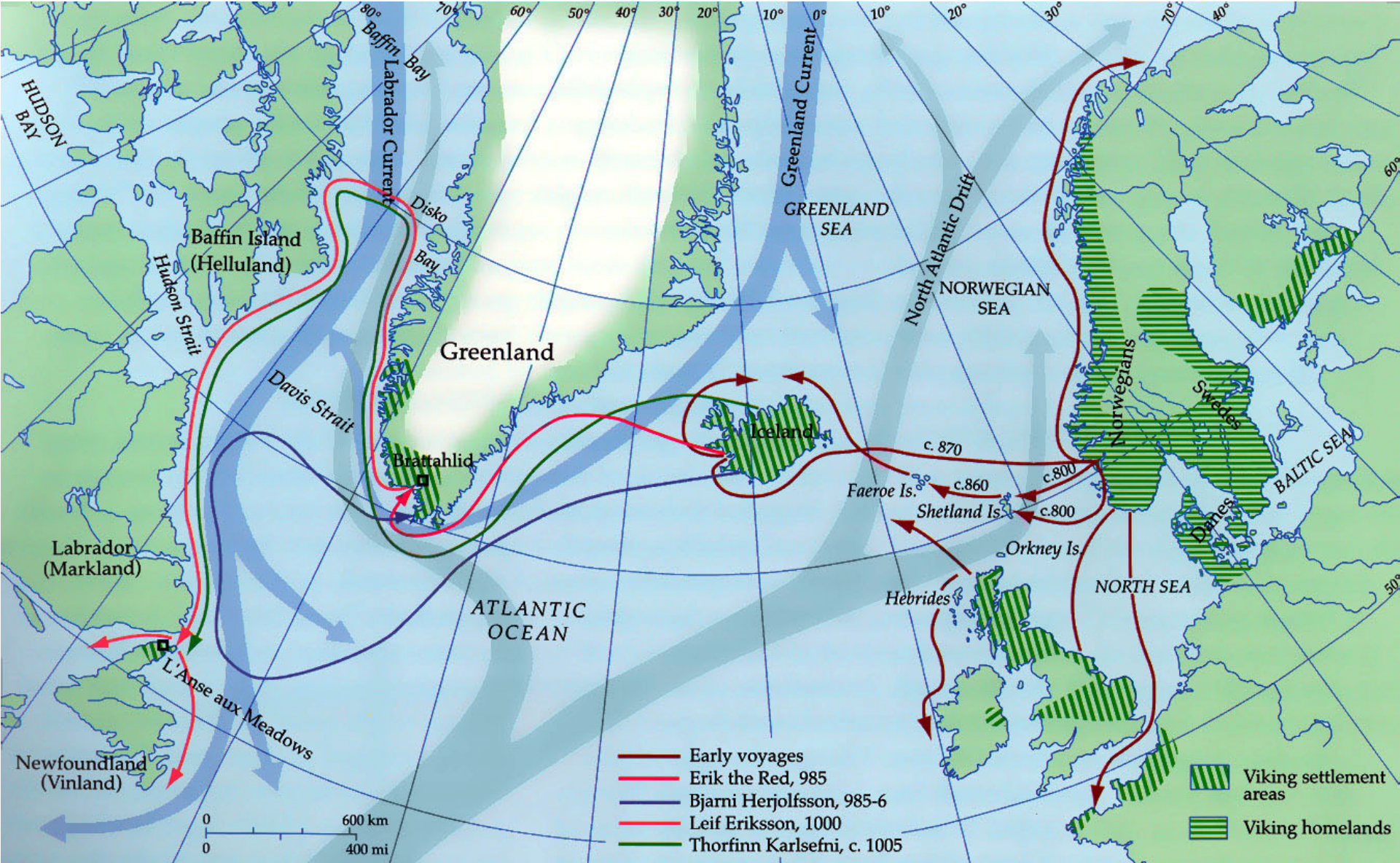
Mammoth

Left relict pairs

Catalpa

Osage orange









Vinland Map ~1400 or 1956?

Handwritten text at the top of the page, possibly a title or introductory note.

Several lines of handwritten text, likely a description or legend for the map.



Insulae Insularum
a Thimo regi
a Thimo regi

Mare Mediterraneum

Handwritten text labels for the islands on the right side of the map.