PLEISTOCENE BONE TECHNOLOGY IN THE BERINGIAN REFUGIUM pdf

1: jimjos_yt1h1ia0k | eBay Stores

Note: Citations are based on reference standards. However, formatting rules can vary widely between applications and fields of interest or study. The specific requirements or preferences of your reviewing publisher, classroom teacher, institution or organization should be applied. Publisher: Ottawa.

Southwestern Lore, 41 4: Dawson, Jerry and Stanford, Dennis J. Southwestern Lore, 40 3: Its Place in the Birnirk and Thule Cultures. Smithsonian Contributions to Anthropology, Archaeology of Eurasia in Russian ,: Comments of Push vs. Pull Technique of Lithic Reduction. Flintknapers Exchange, 1 1: Comments on Cody Flaking Technology. The Antropological Society of Washington. Pre-Llano cultures of the Americas: The Selby and Dutton Sites: The Anthropological Society of Washington, pp. Resolving the Question of New World Origins. Archaeological Investigations of the Lamb Spring Site. Southwestern Lore, 47 1: Science 81, 2 5: American Genesis, by J. New Mexico Historical Review,: Stanford, Dennis and Broilo, F. Archaeological Essays in Honor of Mark Wimberly, Southwestern Lore, 48 1: Southwestern Lore, 48 2: Frison and Bruce A. A Report on the Banting and Hussey Sites. Pleistocene Bone Technology in the Beringian Refugium. American Anthropologist, 84 2: Ewers and Waldo R. Smithsonian Institution Press, pp. Emory, Sloan and Stanford, Dennis J. Sage Publications Inc, pp. China News Exchange, The National Speleological Society Bulletin, National Geographic Society Research Reports,: Quaternary Research, 22 2: New Mexico Anthropological Proceedings, 6 1: Preliminary Report on the Occurrence of Mammuthus sp. Blackwater Draw Locality 1: History, Current Research and Interpretations. The Paleoindian Case Example. The Geological Society of America, Boulder, pp. Bradley, Bruce and Stanford, Dennis J. Natural History, 96 9: Society for Archaeological Sciences Newsletter, 10 1: How to Deep-Freeze a Mammoth, by B. The Drake Clovis Cache. Current Research in the Pleistocene, 5: Jodry, Margaret and Stanford, Dennis J. Transactions of the American Philosophical Society, Vol. American Anthropologist, 91 2: Colorado Ground Water Association, pp. Archaeological Research in the San Luis Valley. San Luis Valley Historian, Loveland Archaeological Society, pp. History, Current Research, and Interpretations. The Lubbock Lake Landmark. Museum of Texas Tech University, pp. Current Research in the Pleistocene, 7: The Hutton-Pinkham Site and Vicinity. A mammoth-ivory semifabricate from Blackwater Locality No. American antiquity, 55 1: Clovis Origins and Adaptations: Bonnichsen, Robson and Turnmire, Karen L. Current Research in the Pleistocene, 9: American Antiquity, 57 2: Applications of Refitting Studies in Archaeology. University Press of Colorado, pp. Ice Age Hunters of the Rockies. Current Research in the Pleistocene, Plains Anthropologist, 40 The Public Trust and the First Americans. Oregon State University Press, pp. A further evaluation of the San Jon site, New Mexico. Early Paleoindians and Eastern U. Kentucky Heritage Council, pp. Jodry, Margaret, Turner, M. Folsom in the Colorado High Country: The Black Mountain Site. Anthropology Newsletter, 37 7: Changing hydrologic regimes and prehistoric landscape use in the northern San Luis Valley, Colorado. Colorado Geological Survey, pp. On the Pleistocene antiquity of Monte Verde, southern Chile. American Antiquity, 62 4: Les Paleoindiens des Grandes Plaines. Musee Departemental de Prehistorire de Solutre, pp. Bones and Stones-or Sheep?. Paleoindian archaeology and late Pleistocene environments in the Plains and southwestern United States. Environments, Origins, and Adaptations. Center for the Study of the First Americans, pp. Anthropology News, 40 6: Scientific American Discovering Archaeology, 2 1: Ocean trails and prairie paths? Thoughts about Clovis origins. The Pleistocene Colonization of the New World, Remembering Robert Humphrey Mammoth Trumpet, 18 2: Digging for the color of life: Geoarchaeology-an International Journal, 18 1:

2: Robson Bonnichsen | Open Library

Pleistocene Bone Technology in the Ber- in Pleistocene Bone Technology in the Beringian Refugium, refugium at an early time period.

The method uses a combination of fracture plane and fracture angle data that are useful for elucidating the relative role of hominids in the accumulation of prehistoric archaeofaunas, especially when employed in concert with other classes of taphonomic data. We briefly summarise the method and apply it to the ungulate limb bone subassemblage from Swartkrans Member 3, a c. Results of the fracture pattern analysis corroborate indications from other lines of taphonomic data that there was minimal carnivoreâ€"hominid interdependence in the formation of the fauna, and that carnivores were probably responsible for the majority of the bone collection in Member 3. However, we also document a significant hominid influence on assemblage formation, a finding that expands and refines our understanding of large animal carcass foraging by hominids in southern Africa during the early Pleistocene. Bunn, , ; Haynes, ; Johnson, , e-mail: This is in contrast to limb bones that are broken when dry, which usually preserve fracture angles that are right. Longitudinal L , transverse T and oblique O fracture planes are illustrated on the fragment edges. Another way in which zooarchaeologists have considered fracture patterns relevant to the cur- Morales, ; Gifford-Gonzalez, ; Marshall, rent study regards planes of fracture. Conven- ; Anconetani, Figure 1. Gifford- tionally, it is agreed that with reference to its long Gonzalez provided clear definitions of axis, any broken limb bone fragment can possess fractures that are longitudinal fractures parallel one or more the following fracture planes: Sadek- fractures at right angles to the long axis of the Kooros, , ; Shipman et al. Analytical consideration of the ways ulna, metacarpal, femur, tibia and metatarsal, even though the in which these planes are combined in archae- metacarpals and metatarsals are technically bones of the foot. However, we group the metapodials with actual limb bones because ofaunas has been used previously in attempts to they are anatomically and functionally similar to limbs in most elucidate fracture patterns at the assemblage level ungulates. Further, we make this decision to avoid the often-used e. Sadek-Kooros, ; Shipman et al. Member 3 is esti- other systems are highly subject to equifinality mated to be c. In total, the Myers et al. Of that total, we re- et al. This sample includes We collected data on numerous tapho- hominids versus carnivores and effectors e. Follow- dynamic impact of a hominid-wielded hammer- ing the recommendations of several experts stone from that caused by the static loading of e. Attribution of bone surface experimental results, and then apply them to the damage was corroborated in a sample of speci- ungulate limb bone component of the c. This exercise illustrates the utility of this novel analytical method by Application of new system of bone providing new information about the carcass fracture analysis foraging behaviour of early hominid and carni- vore bone accumulators at Swartkrans. Follow- excavated â€" was analysed originally ing these criteria, individual fracture planes by Brain a; Brain et al. In summary, shaft specimens were created by hammerstone percussion dynamic loading from a starting total of14 whole limb bones three humeri, one radius, five femora and five ti- biae. In each case, a defleshedbone still retainingitsperiosteum was rested onananvilpositioned directlybelow the intendedpoint of impact cf. However, because novice student bone-breakers were used in the study, impact points varied between bones with respect to the aspect medial, lateral, ventral or dorsal on which force was directed and along the length of each. Next, 48 shaft speci- mens were created by pressure static loading from a starting total of11whole limb bones two humeri, one radius, five femora and three ti- biae. Most of these shaft fragments resulted from the chewing activities of a large domestic dog and spotted hyenas on nine of the limb bones. Data are summarised for each fracture plane longitudinal, transverse and oblique and by animal body size. Using the well-known classification scheme of Brain , sheep fall into size classes 1 and 2 small animals , while cows are size class 3 large animals. Data include means, standard deviations S. Some of the limb bone et al. However, after our We first classified each green fracture plane as extensive experience with the assemblage, we are longitudinal, transverse or oblique. As Bunn comfortable stating that the majority of speci- , has observed and commented, it is mens are less ambiguously classified. On this sometimes difficult to define boundaries between latter type of specimen, inter-plane boundaries the end of one fracture plane and the beginning were fairly straightforward to set, and we found a of another on a single bone specimen. If posed analytical systems that might circumvent there was no agreement, then the specimen was the problem highlighted by Bunn, but these not included in our sample. Limb bone shaft specimens from Swartkrans Member 3 illustrating the boundaries of individual green fracture planes along each fossil. An fractured by the chewing of a large domestic exception is the occurrence of acute angles on dog and wild spotted hyenas pressure or static fragments from the larger cow bones size class 3; loading. The legend to Table 1 contains perti- for size class definitions, see Brain, In contrast to longitudinal and transverse frac- tures, there is much less overlap in the angles of Results oblique fractures imparted by humans and carni- vores. Fortunately, oblique fractures are also the Results of the Swartkrans Member 3 limb bone most common fracture type imparted by both fracture analysis are summarised in Table 2. For acute angle fractures and oblique fractures, and this smaller sample on longitudinal planes, the Swartkrans small size means that the range of variation of angles animal mean is identical to that of the modern along transverse planes is wider and with more sample created by human percussion, while the overlap. Carnivore-imparted both modern samples. These differences are sta- verse planes in the Swartkrans sample are closest tistically significant, and most apparent on long- to those in the modern human-derived sample. The means of both acute and obtuse fracture Except in cases with extreme angle values, frac- angles on oblique planes in the Swartkrans small Table 2. Using the well-known classification scheme of Brain , small animals fall into size classes1and 2, while large animals are size class 3 and larger. The the complementary classes of taphonomic data of same can be said of the obtuse angle mean for hammerstone percussion marks and carnivore the Swartkrans large animal sample, while the tooth marks. Fractures on specimens that also acute angle mean in that sample is outside the bear hammerstone percussion marks, such as range of the modern carnivore-derived sample. This sugges- values for acute angles Data are summarised for each fracture plane longitudinal, transverse and oblique and by bone surface modification type, percus- sion marks and tooth marks. These values are indicative of specimens that also bear tooth marks reveals hammerstone percussion with reference to the values in the high range for acute angles modern experimental sample Table 1. These values face damage and angle creation implies fairly match closely those observed in the experimental robust diagnostic value for the use of green break sample created by carnivores Table 1. These angles in identifying dynamic fracture events. As Henry Bunn personal communication, specimens 2 and with carnivore tooth reminded us, carnivore tooth marks can damage In created sample, implies this was an unlikely order to compare the Swartkrans data to that scenario in the formation of the Member 3 limb experimental standard, we adjusted the fossil data bone subassemblage. In other words, based on to compensate for several factors common in fracture angle data, we posit minimal hominidâ€” fossil bone assemblages but non-existent in the carnivore interdependence in the creation of that modern comparative sample Pickering et al. This result supports our previous One of these factors most relevant to conclusion based on the very low co-occurrence the current discussion is the prevalence of diage- of hominid butchery damage and carnivore tooth netic fracture in the Member 3 archaeofauna marks on individual fossil specimens in Swartk- and its complete absence in modern assemblages. Brain, ; Pickering, , An excep- Thus, whether considering raw or adjusted tion is the presence of several cutmarked bone values, the very low proportion of percussion- specimens and many other burned pieces from marked specimens in the Swartkrans sample, Swartkrans Member 3 documented by Brain contrasted with the higher incidence of carni- a: With regard to those impact flakes, it work on the remainder of the assemblage will is interesting to note that while too small to measure, almost all of them preserve obtuse fracture angles. This means that the corre- result in the identification of even more cutmarks sponding bone specimens from which they were detached will on specimens from other body regions. How- assemblage was forming on the cave floor. How- ever, few other South African cave sites that yield ever, neither alternative i. Sterkfontein Member 5; employing dynamic hammerstone percussion. This limits the utility of bone That said, it is still important to note that the surface modification analyses in these other new data presented here combined with those assemblages; and the same situation characterises published elsewhere e. This might be alter dramatically our views of early hominid initially disheartening since bone surface modifi- carcass foraging in southern Africaâ€"which until cations are currently one of the most powerful this point had been based on a total of only 15 sources of data in constructing inferences of early cutmarked and chopmarked bone specimens from hominid foraging behaviour. They indicate further ofaunas combined, and moves Swartkrans that, while not ideal, the system can be used in Member 3 behind only FLK 22 Zinjanthropus isolation to infer the relative contribution of early Olduvai Gorge, Tanzania for the total number hominid behaviour in poorly preserved faunal of hominid-modified bones from the whole of assemblages. Africa Pickering et al. In addition, the current analysis of fracture angle patterns corroborates our previous suggestion that the Acknowledgements hominid- and carnivore-derived portions of Swartkrans Member 3 were contributed mostly Foremost, the first three authors gratefully and independently of one another Egeland et al. This means that of C. Thanks more common in faunas that formed under to Kathy Kuman, Ron Clarke and the Depart- higher degrees of interdependence between ment of Archaeology, University of the Witwa- hominids and carnivores. Very special thanks go to the Northern Flagship Institution formerly the Broader analytical implications Transvaal Museum and especially Stephany Potze for granting us permission to study the As discussed above, bone surface damage data in material and for facilitating its convenient acces- Swartkrans Member 3 corroborate the conclu- sibility. TRP was supported by a may have resulted from the fire-using activities of early hominids. He also their taphonomic implications. Paper presented at the thanks his family and Nick Toth and Kathy 12th Biennial Conference of the Society of Africanist Archae- Schick for continued encouragement, advice ologists. Percussion marks, tooth ing him to participate in this research on the marks, and experimental determinations of the timing of hominid and carnivore access to long Swartkrans fauna, and Complutense University bones at FLK Zinjanthropus, Olduvai Gorge, for funding. CPE was supported in part by a Tanzania. Journal of Human Evolution Percussion Research Award from Indiana University. This marks on bone surfaces as a new diagnostic of paper is dedicated to the memory of William hominid behavior. On the marks of zooarchaeology at Indiana University for of marrow bone processing by hammerstones and nearly 60 years. Missouri Archaeologi- procesos de fractura sobre huesos frescos: On faunal analysis and the cos. A proposed typology of bone Bonnichsen R. Pleistocene bone technology in breakage. The Hunters or the Hunted? Intentional to African Cave Taphonomy. University of Chicago bone fracturing for marrow extraction in Atapuerca Press: Preli- the Swartkrans Cave in the light of the new minary taphonomical studies of some Pleistocene excavations. Paleogeography, Paleoclimatology, Pa- 22â€" Quantifying con- at Swartkrans and their implications for the control tinuous lesions and fractures on long bones. Journal of fire by early hominids. Ancient Men and Modern Myths. Brain CK, Sillen A. Surface marks on long rans Cave for the earliest use of fire. Osteodontokeratic industry from South African Journal of Science Meat-eating and Human Evolution:

3: Beringia - Wikipedia

Summary. This resource is a citation record only, the Center for Digital Antiquity does not have a copy of this document. The information in this record has been migrated into tDAR from the National Archaeological Database Reports Module (NADB-R) and updated.

Taxonomy[edit] From the s representatives of the American Museum of Natural History worked with the Alaska College and the Fairbanks Exploration Company to collect specimens uncovered by hydraulic gold dredging near Fairbanks , Alaska. Childs Frick was a research associate in paleontology with the American Museum who had been working in the Fairbanks region. In , he published an article which contained a list of "extinct Pleistocene mammals of Alaska-Yukon". This list included one specimen of what he believed to be a new subspecies which he named Aenocyon dirus alaskensis - the Alaskan dire wolf. The skulls were thought to be 10, years old. The geologist and paleontologist Theodore Galusha, who helped amass the Frick collections of fossil mammals at the American Museum of Natural History, worked on the wolf skulls over a number of years and noted that, compared with modern wolves, they were "short-faced". Eastern Beringia included what is today Alaska and the Yukon. On this tree the term basal is used to describe a lineage that forms a branch diverging nearest to the common ancestor. The historic population was found to possess twice the genetic diversity of modern wolves, [18] [19] which suggests that the mDNA diversity of the wolves eradicated from the western US was more than twice that of the modern population. The twenty Beringian wolves yielded sixteen haplotypes that could not be found in modern wolves, compared with seven haplotypes that were found in thirty-two modern Alaskan and Yukon wolves. This finding indicates that Beringian wolves were genetically distinct from modern wolves [18] [20] and possessed greater genetic diversity, and that there once existed in North America a larger wolf population than today. The study found that the sequences could be allocated into two haplogroups. As wolves had been in the fossil record of North America but the genetic ancestry of modern wolves could be traced back only 80, years, [12] [13] the wolf haplotypes that were already in North America were replaced by these invaders, either through competitive displacement or through genetic admixture. The replacement in North America of a basal population of wolves by a more recent one is consistent with the findings of earlier studies. However, much of their diversity was later lost during the twentieth century due to eradication. The proportions of the skulls of these wolves that vary do so in the rostral area. The area of the skull that is anterior to the infraorbital foramen is noticeably foreshortened and constricted laterally in several of the skulls Dishing of the rostrum , when viewed laterally, is evident in all of the short-faced skulls identified as Canis lupus from the Fairbanks gold fields. The occipital and supraoccipital crests are noticeably diminished compared to those found in average specimens of C. The occipital overhang of these crests, a wolf characteristic, is about equal in both groups of C. Examination of a large series of recent wolf skulls from the Alaskan area did not produce individuals with the same variations as those from the Fairbanks gold fields. Therefore, the flora and fauna of Beringia were more related to those of Eurasia rather than to those of North America. Moisture occurred along a north-south gradient with the south receiving the most cloud cover and moisture due to the airflow from the North Pacific. Steppe bison Bison priscus , Yukon horse Equus lambei , woolly mammoth Mammuthus primigenius , and Wild yak Bos mutus consumed grasses, sedges, and herbaceous plants. Caribou Rangifer tarandus and woodland muskox Symbos cavifrons consumed tundra plants, including lichen, fungi, and mosses. Beringian wolves preyed most often on steppe bison and horse. Isotope analysis can be used to allow researchers to make inferences about the diet of the species being studied. Two isotope analyses of bone collagen extracted from the remains of Late Pleistocene wolves found in Beringia and Belgium indicate that wolves from both areas preyed mainly on Pleistocene megafauna, [8] [14] [50] which became rare at the beginning of the Holocene 12, years ago. The analysis supports the conclusion that these wolves were capable of killing and dismembering large prey. Two wolves from the full-glacial period 23,â€"18, YBP were found to be mammoth specialists, but it is not clear if this was due to scavenging or predation. The analysis of other carnivore fossils from the Fairbanks region of Alaska found that mammoth was rare in the diets of the other Beringian carnivores. Today, the relatively deep jaws similar to those of the Beringian wolf can be found in the bone-cracking spotted hyena and in those canids that are adapted for taking large prey. These specimens predate the arrival of humans and therefore there is no possibility of cross-breeding with dogs. The study indicates that tooth crowding can be a natural occurrence in some wolf ecomorphs and cannot be used to differentiate ancient wolves from early dogs.

4: Beringian wolf - Wikipedia

*Pleistocene bone technology in the Beringian Refugium (Mercury series) [Robson Bonnichsen] on www.enganchecubano.com *FREE* shipping on qualifying offers. pp. this is paper number 89 of the archaeological survey of canada www.enganchecubano.com our archaeology and geology catalogue for further volumes from this series.*

5: SI NMNH Anthro Staff Publications: Dennis Stanford

Pleistocene Bone Technology in the Beringian Refugium. Robson Bonnichsen.: Early Man in America From a Circumâ€•Pacific Perspective. Alan Lyle Bryan, ed.

6: Dennis Stanford | Smithsonian Institution - www.enganchecubano.com

Pleistocene bone technology in the Beringian Refugium by Robson Bonnichsen starting at $ Pleistocene bone technology in the Beringian Refugium has 0 available edition to buy at Alibris.

PLEISTOCENE BONE TECHNOLOGY IN THE BERINGIAN REFUGIUM pdf

Kumbhojkar maths 3 The emergent continent: Africa in the nineteenth century Conflict of interest Ken Kipnis North American Indians Native Americans of the Northeast (North American Indians) Boonesborough; its founding, pioneer struggles, Indian experiences, Transylvania days, and revolutionary Evolution, order, and complexity On the measurement of product variety in trade Barrier of Spears How do you spell b-u-l-l-y? (a bully as words). Safety Advancement for Employees Act of 1997 2000 bmw z3 service manual Looking for moral guidance Oracle annual report 2016 The Epistles of Paul and Acts of the Apostles (Thrift Edition) Manufacturing processes reference guide Memoranda of the Lees and cognate families. 4)Emergency ophthalmology The Elders of the City Shadows of Ethics David K Underwood 526 Language, thought, and logic A typical American town The Complete Guide to Origami Papercraft Principles of form and design wong Android nougat user guide Ten lives of the Buddha From books to bandages to bazaars The Shadows of Power (Chivers Sound Library American Collections) Famous Eyes (Eye Eye Captain) W.H. Auden Reads His Poetry THE BEST OF TWO WORLDS Richard Rogers (Studio Paperback) The Complete Poetical Works Of William Wordsworth V2 WBC and RBC counts : manual procedures Google drive security best practices Michelin Austria/Autriche Preliminary study of runoff of selected contaminants from rural Maine highways Methods of water management Part 3 : Educational endeavors. Philip Johnson Texas