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## **ABSTRACT BOOK**

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## Age profile of terminal Pleistocene Columbian mammoths (*Mammuthus columbi*) from the Tule Springs fossils beds of Nevada, U.S.A.

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The Tule Springs Fossil Beds are highly fossiliferous, Late Pleistocene deposits adjacent to Las Vegas, in southern Nevada (Wormington and Ellis, 1967). Fossil remains of Columbian mammoths (*Mammuthus columbi*) are especially abundant. One site, on private property owned by Bill Gilcrease, has produced more than one hundred mammoth teeth and fragments of molars and premolars. The abundance of mammoth cheek teeth at the Gilcrease cauldron spring site provides an opportunity to construct an age profile of the local mammoth population.

I selected 46 teeth that are complete enough for the age of the animal to be determined, using the methodology

described by Roth and Shoshani (1988) and Haynes (1991). Twenty-six are maxillary teeth, and twenty are mandibular teeth. A minimum of twenty individual animals are represented by these 46 teeth. Radiocarbon dates of a subset of these teeth indicate an age range of at least five thousand years, from approximately 18 ka to approximately 13 ka (Vetter, 2007).

As shown in Fig. 1, 48% of the teeth came from juveniles (age 0-12), 22% represent young adults (age 13-24), another 22% represent mature adults (age 25-36), and 9% represent older adults (age 37-48). Age data from maxillary teeth are in close accordance with age data from mandibular teeth. The resulting age profile closely matches Haynes's (1991) 'type A' profile, which is typical of stable or expanding populations in which deaths are time-averaged and non-selective.

These results suggest that between the Last Glacial Maximum and 13 ka the *M. columbi* population in southern Nevada was stable.

### References

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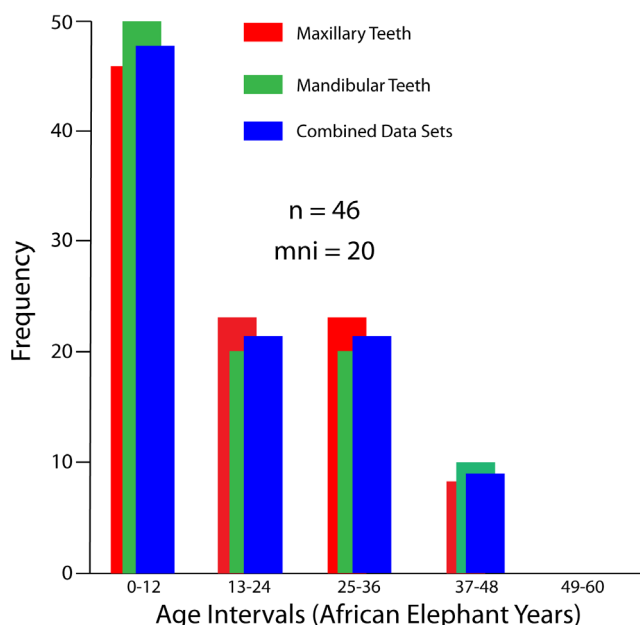


Fig. 1. *Mammuthus columbi* age distribution histogram based on 48 cheek teeth from the Gilcrease cauldron spring site, Tule Springs Fossil Beds of southern Nevada.

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