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# **Author**

Blackburn, Thomas

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# COMMENT

# On the Scarcity of Salmon

#### THOMAS BLACKBURN

California State Polytechnic University, Pomona (Emeritus)

I welcome the increasing recognition by archaeologists of the taphonomic implications of native beliefs and practices regarding the proper butchery, processing, storage, and consumption of fish and animal resources, as exemplified by the following brief but significant observation made by Hash, Gobalet, and Harwood (2015:87–88) in a recent issue of the *Journal*:

Though the paucity of salmonid remains in the San Joaquin River drainage is perplexing, it is possibly explainable if the bones were dried, pulverized, and consumed as "salmon flour" (Aginsky 1943; Curtis 1924: Davis 1963: Dixon 1905, 1907: DuBois 1935; Kroeber 1925, 1971; Kroeber and Barrett 1962; Lightfoot and Parrish 2009; Rostlund 1952;). Kroeber (1932) also noted that fish processing was completed near the capture weirs, thus sparing the village from the scavengers attracted to the offal. In the Pacific Northwest, Stewart (1977) recorded various native practices, including the ceremonial return of salmon offal and bones to the sea, the burning of the uneaten remains, or the consumption of dried bones as snacks. Any of these practices may account for the paucity of salmon remains in the archaeological record....

In spite of an apparent dearth of archaeological evidence, historical and ethnographic records clearly show that vast quantities of salmon were removed from California's various river systems in the past and presumably consumed by native peoples. I suspect, however, that only a tiny portion of the captured fish was eaten fresh from the water (or even eaten by the fishermen themselves). Most salmon were prepared for storage and later consumption by some type of drying or baking process (Campbell 1999:435-37) that would have reduced the wet-weight by around 60% (Arason 2003) and allowed the flesh to be stored for a considerable (though as yet poorly defined) period of time. In addition, the dried salmon meat was often further processed by being pounded into a "salmon flour," with (presumably) an additional reduction in moisture content, weight, and volume, and an increase in "shelf life" and portability. The resultant product could be more easily stored, added to other foods such as acorn mush, or used as a valuable commodity to trade with groups lacking direct access to riverine resources of their own. I hope other scholars will explore these topics in greater depth through additional experimentation and the compilation of solid data.

#### REFERENCES

#### Aginsky, B. W.

1943 Culture Element Distributions: XXIV Central Sierra. *University of California Anthropological Records* 8:390–468. Berkeley.

#### Arason, S.

2003 The drying of fish and utilization of geothermal energy—the Icelandic experience. *Geo-Heat Center Quarterly Bulletins* 24(4):27–33. Oregon Institute of Technology.

#### Campbell, P.

1999 Survival Skills of Native California. Salt Lake City: Gibbs-Smith.

### Curtis, E. S.

1924 *The North American Indian: Volume 14*. New York: Johnson Reprint Corporation.

#### Davis, J.T.

1963 Trade Routes and Economic Exchange Among the Indians of California. In *Aboriginal California: Three* Studies in Culture History, R. F. Heizer, ed., pp. 5–75. Berkeley: University of California Press.

### Dixon, R. B.

1905 The Northern Maidu. Bulletins of the American Museum of Natural History 27:119-364.

1907 The Shasta. Bulletins of the American Museum of Natural History 27:381–498.

#### DuBois, C.

1935 Wintu Ethnography. *University of California Publications in American Archaeology and Ethnography* 36:1–148. Berkeley.

#### Hash, J. M., K. W. Gobalet, and J. F. Harwood

2015 Differential Decomposition May Contribute to the Abundance of Sacramento Perch (*Archoplites interrup*tus) in the Archaeological Record of California. *Journal* of California and Great Basin Anthropology 35(1):87–97.

#### Kroeber, A. L.

1925 Handbook of the Indians of California. *Bureau of American Ethnology Bulletins* 78. Washington, D.C.: Smithsonian Institution.

1932 The Patwin and Their Neighbors. *University of California Publications in American Archaeology and Ethnology* 29:253–290. Berkeley.

### Kroeber, A. L., and S. A. Barrett

1962 Fishing Among the Indians of Northwestern California. *University of California Anthropological Records* 221:1–210.

### Kroeber, T.

1971 *Ishi in Two Worlds*. Berkeley: University of California Press.

### Lightfoot, K. G., and O. Parrish

2009 *California Indians and their Environment*. Berkeley: University of California Press.

### Rostlund, E.

1952 Freshwater Fish and Fishing in Native North America. University of California Publications in Geography 9:1–314.

### Stewart, H.

1977 Indian Fishing, Early Methods on the Northwest Coast. Vancouver: Douglas & Mcintyre Ltd.

