

Down the Rabbit Hole: Comment on Sundstrom and Walker (2021)

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The Sheep Mountain juniper bark net, originally thought to be of Paleoindian age, was redated by Sundstrom and Walker (2021) to the Late Prehistoric period. Although the original investigators convincingly argued that the net was intended for use with mountain sheep or deer, Sundstrom and Walker suggest it was used to trap small game such as rabbits or sage grouse. Unfortunately, the authors ignore important information presented by the original investigators and misrepresent the archaeological record of the immediate area. The Sheep Mountain net is still best interpreted as designed for use to trap mountain sheep and deer.

Keywords: Rocky Mountains, mountain sheep trapping, game nets

Recibimos de buena manera las nuevas fechas publican por Sundstrom y Walker (2021) para la red de Sheep Mountain, encontrado cerca de Cody, Wyoming. Estas fechas indican que la red, fabricado de fibra de enebro, tiene una edad menos de 1300 cal aP. Presunto de ser de edad Paleoindian, los investigadores originales (Frison et al. 1986) presentaron argumentos fuertes que se utilizaban la red para la caza de borregos cimarrones. Pero, Sundstrom y Walker ofrecen que se la utilizaban para atrapar conejos. Desafortunadamente, Sundstrom y Walker ignoran hechos importantes presentados por Frison y colaboradores y tergiversan la prehistoria de la región. Todavía, la interpretación de Frison et al. que se utilizaban la red para atrapar borregos cimarrones es lo mejor.

Palabras clave: las montañas Rocossa, la caza de borregos cimarrones, red de caza

We welcome publication of new radiocarbon ages for the Sheep Mountain juniper bark net of purported late Paleoindian age (Frison et al. 1986). Frison and colleagues inferred that the net was used to trap medium-sized game, such as mountain sheep (*Ovis canadensis*) or deer (*Odocoileus* sp.) due to the sturdy construction of the netting, mesh size, and dominance of mountain-sheep remains in regional archaeological assemblages. We have no qualms with the four new AMS ages that place manufacture in the Late Prehistoric period (Sundstrom and Walker 2021). Despite not being found

on other nets analyzed by one of us (Adovasio), the authors propose that, because no animal hair, tissue, or blood has been found on the net, its function is ambiguous (Sundstrom and Walker 2021:837). Based on faulty arguments and poor data review, the authors then conclude that the Sheep Mountain net was used to trap small game such as leporids (Sundstrom and Walker 2021:841). We do not argue that small game sometimes constituted an important part of ancient diets. However, we, including the only living original analyst of this unique specimen, have strong reservations concerning their analysis and conclusion.

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Frison and colleagues (1986), including one of the present authors (Adovasio), used direct observation of the lengthwise trifolding and dimensions of the bundled net to estimate overall height between 1.5 and 2 m, consistent with ethnographic observations of deer nets. Extreme deterioration of the net over the last 35 years precluded further detailed observation. Sundstrom and Walker (2021:838) cite a single ethnographic reference to suggest that supporting stakes for rabbit nets were “a few inches shorter than the height of the net.” Using the length of one complete stick as a proxy, they estimate height between 0.5 and 0.6 m. The authors then concoct an argument that, *if* (emphasis added) the net had been folded in half, it would be significantly shorter than originally reported. This is pure speculation. The authors fail to recognize abundant ethnographic cases in which net ends are tied to trees or held by hunters with no stakes, and unfortunately, they go on to treat their estimate as fact, asserting that the Sheep Mountain net lies within the metrics for known rabbit nets (Sundstrom and Walker 2021:838).

The authors ignore information presented by Frison and colleagues (1986). First, they dismiss the significantly larger mesh size and cordage diameter of the Sheep Mountain net as a function of the juniper bark raw material without documentation (Sundstrom and Walker 2021:841). One of us (Adovasio) has analyzed more bona fide nets and fragments than any living scholar, and contrary to the assertions of Sundstrom and Walker, no actual rabbit net—for example, the Hinds Cave specimens (Andrews and Adovasio 1980)—even approaches the cordage diameter or mesh size of the Sheep Mountain net. Second, the net was found in known mountain-sheep habitat and winter range along the North and South Forks of the Shoshone Rivers (Wildlife Conservation Society 2011). Third, they ignore the efficacy of drop nets for sheep capture (see also Frison et al. 1990; John Mioncynski, personal communication 2021).

Sundstrom and Walker fail to recognize that the Sheep Mountain net was originally found at the eastern margin of the Greater Yellowstone ecosystem (GYE), the historical home of the Mountain Shoshone or Sheep Eaters (Nabokov and Loendorf 2004). They also ignore or

misrepresent the rich archaeological record of the GYE—in particular, the intensive investigations along the North Fork valley at Mummy Cave (48PA201; Hughes 2003; Husted and Edgar 2002) and in conjunction with the reconstruction of US 14/16/20 (Eakin 1989; Page 2016). For Mummy Cave, Sundstrom and Walker (2021:841) incorrectly assert that rabbit bone occurs in all cultural layers (for the original faunal counts, see Harris 2002:169–170) and suggest that mountain sheep do not become predominant until the Late Prehistoric period, roughly contemporaneous with the Sheep Mountain net. The authors further state that two “Late Prehistoric” sites, Pagoda Creek (48PA853) and Moss Creek (48PA919), also show greater dependence on mountain sheep (2021:841). However, they neglect Hughes’s reanalysis of the Mummy Cave fauna (2003, cited in Page 2016:12.11) that shows low species diversity and high artiodactyl indexes for all levels postdating 6000 BP. More important, Pagoda Creek is Late Archaic, approximately 2800 BP (Eakin 1989:62), and Moss Creek dates to the Middle Archaic between 3500 and 4420 BP (Eakin and Eckerle 2012:63). Similar patterns from late Paleoindian to Late Prehistoric times occur at 48PA325 (Goff Creek), where Page (2016:12.9–12.11) concludes that mountain sheep was the focal prey species in all cultural levels, with minimal usage of small mammals. Sundstrom and Walker further paint an inaccurate picture of the regional archaeological record by ignoring the growing evidence for sheep traps in the high elevations of the GYE (Eakin 2005; Frison et al. 1986:357–358; Kornfeld et al. 2010:304–312; Nabokov and Loendorf 2004:168–173; Scheiber and Finley 2017).

Sundstrom and Walker (2021:838–841) accurately note that faunal assemblages from southwest and central Wyoming reflect the importance of leporids in prehistoric subsistence, with four sites—including one in the interior Bighorn Basin—possibly reflecting communal procurement. These sites are all located in sagebrush steppes with large potential gathering areas, coinciding with overlapping distributions of jackrabbit (Hansen, Beatty, and Bedrosian 2017:6) and cottontail (Hansen, Bedrosian, and Beatty 2017:5). Their suggestion that the Sheep

Mountain net could have been used in the interior basin and then brought to the crest of Sheep Mountain (Sundstrom and Walker 2021:841) defies logic. Leporid bone has simply not been recovered in sufficient quantities in sites near the Sheep Mountain net's original discovery to suggest communal procurement. Instead, mountain sheep as the primary prey species for thousands of years is indicated. Furthermore, the dimensions of the Sheep Mountain net posited by Sundstrom and Walker are entirely conjectural. As originally inferred by Frison and colleagues (1986), the Sheep Mountain net was far more likely intended for use to trap mountain sheep and deer.

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