LOOKING FOR A LONG-TERM RECORD IN THE GREATER YELLOWSTONE ECOSYSTEM: SOME THOUGHTS ABOUT THE STINKING SPRINGS ROCKSHELTER, TETON COUNTY, WYOMING

Kenneth P. Cannon
Christopher Morgan
Molly Boeka Cannon

USU Archeological Services
and
Utah State University
Logan, Utah

Presented at the 76th Annual Meeting of the Society for American Archaeology, Sacramento, California
In the symposium
Crown of the West: Mountain Archaeology from the Sierra Nevada to the Rocky Mountains
REGIONAL RECORD

Wyoming Portion of GYE

- 10,113 precontact sites
  - 10,026 open sites
  - 87 caves/rockshelters
REGIONAL RECORD
Wyoming Portion of GYE

- 204 open sites tested
- 2 cave/rockshelters tested
- 195 open sites with faunal material
- 2 caves/rockshelters with faunal material
COMPARISON OF FAUNAL ASSEMBLAGES

Number of Taxa

Cave/ Rockshelter

Open Site
MUMMY CAVE
PARK COUNTY, WYOMING

- Nearly 9-m of deposits extending back 10,000 years.
- Used in the development of a regional cultural chronology.
- Quality of work has allowed more recent research to be conducted.
MUMMY CAVE
PARK COUNTY, WYOMING

• Susan Hughes (2001) dissertation on changes in bighorn sheep ecology over the last 10,000 years.

• Hughes also provided additional radiocarbon dates.

• Robert Kelly’s recent investigations (2008, 2010) to assess the presence of Terminal Pleistocene deposits.
WESTON ROCKSHELTER (10FR4)
FRANKLIN COUNTY, IDAHO

- Located in narrow canyon in southern part of Bannock Range and northwestern Malad Range, SE Idaho.
- Excavations conducted between 1968-1970 by Idaho State University.
- Faunal analysis reported as MA Thesis by Susanne Miller (1972).
Lamar Cave
Yellowstone National Park

- Protected ecosystem
- ~3000 ybp-present
- <93% of local taxa
- ~20,000 identified mammals, birds, amphibian specimens
- Fish, reptiles, plants not yet identified
Lamar Cave
Yellowstone National Park

N=18 dates

Average Depth Below Datum (cm)

CALIBRATED AGE (yr B.P.)

modern
LAMAR CAVE FLOOR

- Amberat
- Roof-fall
- Organic detritus
- Bones
STINKING SPRINGS ROCKSHELTER (48TE1823), TETON COUNTY, WYOMING
STINKING SPRINGS ROCKSHELTER (48TE1823), TETON COUNTY, WYOMING

• Hand auger probes in 2006.
• Evidence of relatively deep deposits.
• Radiocarbon age of 4210 ± 50 yrs BP from charcoal @ 90 cmb.
STINKING SPRINGS ROCKSHELTER (48TE1823), TETON COUNTY, WYOMING

2010 USU Field School
- 2 1-m$^2$ units excavated.
- Unit 1 excavated to 1 meter.
- Slab-line feature identified.
- Recovery of bighorn sheep mandible.
- Date of 3360 ± 25 yrs BP.
STINKING SPRINGS ROCKSHELTER (48TE1823), TETON COUNTY, WYOMING

2010 USU Field School

• Unit 2 excavated to 1.9 cmbs.
• Two features identified.
• Concentration of charcoal and broken large mammal remains @1.9 cmbs dated to 4350 ± 25 yrs BP.
ACKNOWLEDGEMENTS

We would like to extend our gratitude to the following individuals and institutions that have supported our work:

• Jamie Schoen, Bridger-Teton National Forest
• National Speleological Society
• Teton County Preservation Board
• Hank Harlow, UW/NPS Research Station
• Chris Young, Wyoming SHPO
• Students of the Utah State University Field School
• Kristin Griffin
• Ben Marett, Utah State University