<u>Beartooth Ecosystems Alpine Archaeological Research (BEAAR) Project</u> **2023 Field Schedule**

For the 2023 field season, the BEAAR project will host three separate field sessions. One (14-day) session will be in and around the High Lakes region in the Beartooth Wilderness of Montana, with two shorter (4-day & 5-day) sessions in the Bridger Mountains of Montana. These high-elevation ecosystems represent two very different mountain environments; the Beartooth ecosystems are inundated with alpine lakes and whitebark pine groves between 9,000 and 11,000 feet above sea level, while the Bridgers is an isolated spine range, with hanging basins and sparse lake features. Both Ranges are part of the Greater Yellowstone Ecosystem and host evidence of ancient activity spanning the Holocene from ~10,000 calYBP in the Late Paleoindian to the contact period no more than 250 years ago. For the 2023 season, we will be focusing on new site recordation and pedestrian survey, as well as revisiting previously recorded sites for further analysis and documentation.

The BEAAR projects 2023 field goals are to continue understanding the nature of alpine habitation and landscape use in and between the mountain ranges of the Greater Yellowstone Ecosystem, with a primary focus on the Beartooth Mountains. The funding for this project comes from the Heritage Stewardship Enhancement Grant from the US Forest Service.

BEAAR Project 2023 Field Staff

P.I.	Scott Dersam Ph.D.,	(406)546-8891
	RPA	scott.wd@icloud.com
Crew Chief	Sari Dersam M.A.	(406) 498-1139
		Sbdersam@outlook.com

2023 Field Sessions

Session 1	North of Bozeman	5 Days	June 30 th – July 4 th
Session 2	North of Cooke City	14 Days	August 7 th – August 20 th
Session 3	North of Bozeman	4 Days	September 1 st – September 4 th

Welcome PCRG Volunteers!

Please feel free to contact Scott Dersam for any questions or concerns about field work or safety in the field.

Session 1

- <u>Location 1 -Bridger Range (June 30th July 4th)</u> (Please arrive at Bozeman, MT the evening of the 29th)
 - -Crewmembers will arrive at Bozeman, MT, on the evening of June 29^{th} to prep for getting into the field the following day. We will drive our gear in the morning of the 30^{th} .
 - -We will use a Truck to haul gear and crew in and out of the field. Our base camp will be \sim 3 miles back in the Bridger Mountains.
 - -We will meet Walmart parking lot (on 7th street) at 8 am the morning of the 30th. If you have a truck that is suitable for off-road backcountry driving, feel free to bring it. Otherwise, space will be provided for you.

The session will consist of pedestrian survey, as well as lithic debitage mapping and limited preliminary testing at some larger sites. The focus will be on collecting and assessing data related to habitation, occupation patterning, seasonality, and activities represented within these locations.

- We will arrive back in Bozeman on the evening of the 4th.

Session 2

- <u>Location 2- Beartooth Range (August 7th 20th)</u> (Please arrive at Cooke City on the evening of the 6th)
 - Arrive at Cooke City on the evening of August 6th to enter the field the following day. We will pack our gear in on the morning of the 7th, and we will be meeting at the Upper Lady of the Lake Trailhead, which is accessible \sim 5 miles up Lulu Pass road, East of Cooke City.
 - -We will use a UTV and single-track trailer to haul gear both in and out of the field. Our base camp will be in the Northwestern high lakes region.

The session will consist of limited testing and mapping of larger sites around the region. The data collection will consist of lithic debitage mapping, as well as continuing our goals from the first session of collecting and assessing data related to habitation, occupation patterning, seasonality, and activities represented within these locations.

- We will return to Cooke City on the evening of the 20th.
- **Note Lulu Pass Road is a rough road. A Subaru can make it but enter at your own risk. If you need a ride from Cooke City to Upper Lady of the Lake Trailhead, please let Scott know beforehand so he can facilitate a ride.

Session 3

- <u>Location 3- Bridger Range (September 1st 4th)</u> (Please arrive in Bozeman on the evening of the August 31st)
 - -Crewmembers will arrive at Bozeman, MT, on the evening of August $31^{\rm st}$ to prep for getting into the field the following day. We will drive our gear in the morning of the $1^{\rm st}$.
 - -We will use a Truck to haul gear and crew in and out of the field. Our base camp will be \sim 3 miles back in the Bridger Mountains.
 - -We will meet Walmart parking lot (on 7th street) at 8 am the morning of the 1st. If you have a truck that is suitable for off-road backcountry driving, feel free to bring it. Otherwise, space will be provided for you.

The session will consist of pedestrian survey, as well as lithic debitage mapping and limited preliminary testing at some larger sites. The focus will be on collecting and assessing data related to habitation, occupation patterning, seasonality, and activities represented within these locations.

- We will arrive back in Bozeman on the evening of the 4^{th} .

Please contact **Scott Dersam** if there are any questions or concerns.

2023 SAFETY PLAN and Field Schedule, maps, and Covid-19 research guidelines

This safety plan outlines the BEAAR project field team's safety procedures for fieldwork conducted in 2023.

1. a) Field Crew

- 1. Principal Investigator: Scott W. Dersam Ph.D., RPA
- 2. Crew: Sari Dersam M.A.

Field Gear Suggestions

Gear/luggage:

Regarding clothes and personal gear – the weather should be good this time of year, with warm days and cool nights, with afternoon thunder showers (occasional snow and hail possible) likely. Will be camping and working at high elevations, so come prepared for variable conditions. Hypothermia is a risk at any time of year in this area, so be sure your gear (tents, outer layer/raincoat, pants, boots, and the like) is high quality and durable. Remember that all bear attractants will be taking up space in the bear-resistant storage containers, so don't overload on shampoos, deodorants, breath mints, etc. (not only does nobody care, but the smell of most of these things are really nummy to bears). Do be sure to bring any personal medication, sunscreen, and insect repellant.

Regarding field equipment, we'll be doing surface documentation, predominantly non-collection. We will have two Emlid RS Reach GNSS units and a Garmin InReach. I have Goal Zero Yeti and Sherpa Solar batteries and solar panels to recharge all field equipment (note, we are fairly protective of our electric power in the backcountry, but we should have more than enough to be able to charge Phones, Kindles or other sorts personal electronic items).

Let me know of other special equipment that you'll be bringing, and it's approximate weight and bulk (individual GPS units can be carried on your person and won't count as either gear or equipment).

Boots – you'll need high-country hiking boots. Your boots must be well waterproofed, and you should have a good pair of gaiters to cross small streams (<10 cm deep).

Things the Project Provides:

If you have your own bear spray, bring it. If not, we'll have canisters available for loan at the trailhead when backpacking. Otherwise, all attractants must be stored in the project's bear-resistant panniers. In no case should you plan to have any attractants in your tent (this includes things like toothpaste, insect repellent, wet wipes, rum, sunscreen, midnight snacks, and so forth).

We'll have a satellite phone and In-Reach emergency transmitter for communication in the field. Note that there will not be cell phone coverage anywhere in the field. The project Sat. phone can be used for you to receive *emergency* contacts while in the field through text messages. This is not a personal "check-in at the home phone." We will send "All Safe" messages daily to USFS representatives and crew family members so everyone knows we are all ok. If you would like to add a number to the daily message, please let me know. NOTE- please tell family members not to respond to these texts, as you personally will not be responding back. We do not have the phone on at all times during the day. The primary purpose of the phone is to contact the outside world in case of an emergency situation that we might need help with and will not be available for general chats at home, etc.

Food

We'll be buying and packing all the basic food. Meals will be Mountain House Freeze dried for several reasons: 1) they produce little garbage, 2) can be prepared and consumed in less than 15 minutes with each person responsible for their own 'cooking,' and there are no dishes to clean up, 3) they are compatible with both a "leave no trace" and a "food's just fuel" field philosophies, 4) they're light, compact and easy to pack, 5) can be prepared even when having fire bans, 6) they provide vegetarian and omnivore options, and 7) they make daily calorie planning fairly simple.

In terms of utensils, bring a cup, bowl, and your own longish handled spoon. A note on coffee and tea – will have the Folgers dunk-in-cup coffee bags and a small variety of tea bags for general consumption.

Water filters

We have 2 Katadyn Gravity 3-liter filters that work well and quickly for general camp use and a hand pump filter for daily in-field use. It's a good idea to bring at least two or three one-liter water bottles each. If you have your own filter and, like me, don't think your day pack is complete without one, please feel free to bring it along.

Stoves

We have two JetBoil stoves for general water heating. Campfires may be a rare evening or cold morning event but are usually not the norm. There are almost constant fire bans in the Beartooth Wilderness, and we will not deviate from the Law- regardless of temperature.

Leave No Trace

We try to work as closely as possible within a leave-no-trace framework. If not familiar with LNT, visit (https://lnt.org/). Toilet paper can be tricky, so I recommend using natural wipes that don't need to be curated and packed out – sun-warmed rounded cobbles are a special backcountry treat.

Medical and Risk Planning

We have a comprehensive backcountry first aid kit, and at least two team members have had Wilderness first aid/or First Responder certification. You may, however, want to bring several personal medical items that you know you might need. For example, I know that a couple of Ibuprofen help me sleep and that I should have some extra duct tape for blisters, so I have these things with me in my daypack. It is especially important that if you have preexisting conditions or are taking medications, you let us know.

Bear Safety

We're in grizzly bear habitat, and bear safety rules for food/attractant storage will be in place (we have aluminum bear-resistant panniers). You will be required to have bear spray with you at all times.

FIELD GEAR SUGGESTIONS:

Total personal gear weight must be <u>at or less than</u> 50 pounds. Unless you are comfortable hiking in any weight over that amount.

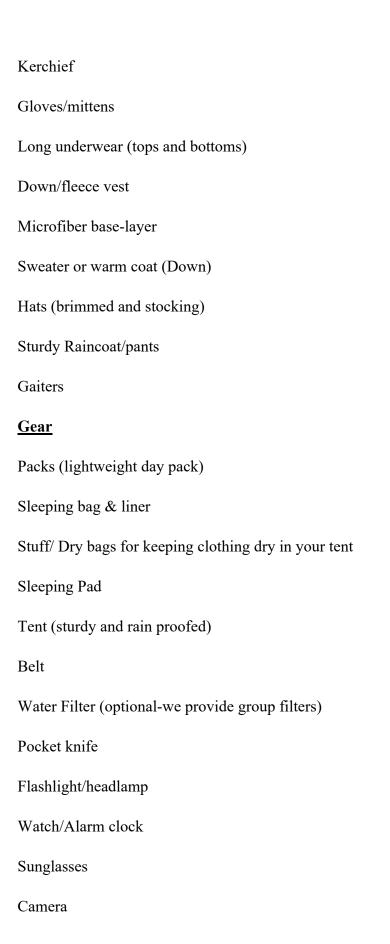
Clothing

Waterproof Boots!

Pants (2 for wet/cold conditions-Levis and other cotton pants do not dry quickly and are not optimal)

5-6 pairs of socks

1-2 T-Shirts



<u>Stuff</u> (many of these are bear attractants and must be stored safely – limit the amount you bring)

Ibuprofen
Bug Spray (Lots of Mosquitos)
Aloe or Sunscreen
Lip goo
Blister repair/Duct tape
Any personal medications
Personal Hygiene (e.g., biodegradable soap)
Ideas of Personal use items
Nail clippers
2-3 1 liter water bottles
Utensil set – fork/knife/spoon
Batteries/ Battery Packs for personal electronics
Blister kit
Coffee press cup, e.g., REI/Jax
Good coffee if needed
Cough drops
Walking poles
Ideas for Personal Between meal Snacks
(These are all bear attractants and must be stored safely)

Granola bars

Dried fruit and Nuts
Gorp
Summer sausage
Jerky
Power bars
Kool aid/emergency Vitamin C – drink powder

Hard candy/mints/chewy stuff