YELLOWSTONE FOREVER

MAMMAL TRACKING: INTERPRETING TRACKS, SCAT & SIGN

Itinerary & Details

FIELD SEMINAR – SUMMER 2024

INSTRUCTORs: James Halfpenny, Ph.D. & Joshua Theurer, M.S.

INSTRUCTOR BIOGRAPHY: Dr. Jim Halfpenny, *U.S. Navy (Ret.)*, is an author, scientist, and educator who has taught tracking, along with many other courses, for the Institute since 1980. His career expands many disciplines and whose interest in COLD (altitudinal, latitudinal, and seasonal) has taken him to all seven continents, New Zealand and Greenland. He was Director of the *Mountain Research Station* and the *Long-Term Ecological Research program* in the Alpine. He is also a world leader in seasonal cold research - the ecology of winter. Currently Jim is President and owner of *A Naturalist's World*, an ecological education company located at the north gate to Yellowstone National Park. He is also President and owner of *Track Scene Investigation*, a forensic company that investigates rare mammal reports.

Jim is also a popular lecturer and field instructor, who travels the world providing lectures and multiple-day programs on his specialties which include ecology (alpine, polar, winter, long-term, climate change), animal tracking, and carnivores (bears, cougars, lynx, wolverine, wolves). Two of his most popular workshops are the professional-level *Cougar/Human Interactions, Verification and Ecology* and *Snow Tracking Rare Species*. His greatest love, bears, led to 50 years studying black, grizzly, and polar bears with on-the-ground field classes. In addition to many scientific articles, Jim authored over 30 books and videos including the annual *Yellowstone Wolf Chart*, *Charting Yellowstone Wolves: 25th Anniversary, Yellowstone Bears in the Wild, Yellowstone Wolves in the Wild, Discovering Yellowstone Wolves, Winter: An Ecological Handbook*, *A Field Guide to Mammal Tracking in North America, Tracking: Mastering the Basics, Scats and Tracks, Tracking Cougars, Tracking Wolves: the Basics, Track Plates for Mammals, A Celebration of Bears,* and *Living Among Ice Bears.*

Joshua simply loves following Dr. Halfpenny around and being mentored in the art and science of tracking. His background began early as his interests in natural history were cultivated by his naturalist grandparents. He holds a B.S. in Wildlife Biology and Philosophy from the University of Wyoming, and an M.S. in Enviornmental Studies from the University of Montana. Joshua served as a lead educator for the Institue for 6 years where he taught on a myriad of topics. He now serves as the Institute Program Director, where any day away from email and in the park is so cherished!

ACTIVITY LEVEL: This course is activity **level 3** and students enrolled in this course are expected to be prepared to hike up to 5 miles per day, comfortably, with occasional elevation gains up to 1000 feet in undulating terrain.

**All field activities will be conducted as a group. If participants cannot meet the activity level expectations during the program, they may be restricted from participation in daily outings. Program itineraries or activities will not be altered to accommodate participants who cannot meet the expectations of the stated activity level.*

LOCATION: Lamar Buffalo Ranch – Yellowstone National Park, WY

PROGRAM DATES & TIMES: The program begins at 7:00 p.m. on Saturday, May 25, 2024, and goes through Wednesday, May 29, 2024, at 5:00 p.m.

LODGING CHECK-IN & CHECK-OUT: Lodging check-in begins at 4:00 p.m. on Thursday, May 25, 2024 and lodging check-out is at 8:00 a.m. on Wednesday, May 29, 2024.

MEALS: This course is not catered. Participants will need to bring their own food; lunch should be able to travel in the field.

For general information about the facilities, preparation for classes, what to expect, cancellation policies, and more, please see the Lamar Buffalo Ranch - Summer General Information document.

PROGRAM ITINERARY

Mammals are elusive and hard to observe in the wild but much can be learned by detecting and reading their signs. As a Tracker you will learn the joys of interpreting natural history from signs. Our emphasis will be on tracking as a process for understanding animal behavior rather than on track identification. Topics include the roles of natural history through tracking, mammal classification, footprint identification, terminology, measurements, track averaging, relative size, estimating track age, gait patterns, judging mammal size, estimating speed, finding clues and following trails. Slide lectures by Dr. Jim Halfpenny will highlight his field experiences, while field outings will be lead by Joshua Thuerer who will introduce the concepts of gait, speed analysis and animal signs. Field seminars will aid in learning to follow the trail and read stories and tracks!

The itinerary is designed to take advantage of the best opportunities in the park, but may be adjusted to adapt to weather conditions, wildlife activity, holidays, and road construction.

The details and timing of the agenda are subject to change.

Day 1 **Welcome**

The program starts with an evening orientation. You will get to know one another and be introduced to the program. Throughout the evening, the itinerary and seminar key concepts will be discussed, as well as what to expect to pack for the field each day.

Day 2 **The Footprint**

On the first morning, your instructor will spend time introducing the history ot tracking through lectures. You will then learn how to to identify tracks along with associated termonology, and how to measure and record tracks.

You will then venture into the field to practice the art of seeing tracks and how to age them. You will also cast tracks using plaster, with the an opportunity to bring them home!

Day 3 **The Trail**

You will begin the morning with a review of tracks that were introduced the previous day. Then you will be introduced to gait patterns and how to read the stories left behind.

You will practice these lessons in the field during an afternoon outing. You will follow trails, learn how to mark them for measurement, and how to read these stories.

Day 4 **Mammal Leavings (Sign)**

Morning lecture will begin with a review of trails and stories. You will then be introduced to techniques used to identify hair and scats.

In the field, you will continue to refine your abilities to find and read tracks and trails, while incorporating other signs as rich components of the overall story.

Day 5 **Mammal Anatomy**

Check out of cabins by 8:00 a.m.

After you check out of the cabins, you will travel to a special site to learn about trees scratchings and sign. You will then travel to Gardiner, MT to visit the Track Education & Museum where you will be exposed to Dr. Halfpenny's extensive collection of bones, teeth, skulls, tracks, and antlers.

Finish in Gardiner, MT at 4:00 p.m.

*You will have the option to travel in your own vehicle to Gardiner so you may return home from Gardiner.

PROGRAM EQUIPMENT

For a full list of what is included in this course, in addition to recommended equipment check out the **Lamar Buffalo Ranch - Summer General Information** document.

- Boots or closed-toed shoes that you are willing to get wet. No sandals!
- Clothing that you are willing to get wet, muddy, and dirty with plaster.

RECOMMENDED READING

There are books and reference materials at the ranch for the class to enjoy during the stay. In addition to those materials, the following recommended readings are not required but may enhance the visit.

- Halfpenny, James. 1986. *A Field Guide to Mammal Tracking in North America*
- Halfpenny, James. 2019. Scats & Tracks of North America

WHOM TO CONTACT

For any questions, concerns, or additional information please contact the following:

- Program itinerary, health forms, payment, and general program questions please contact Yellowstone Forever at institute@yellowstone.org or 406-848-2400

- Road updates, park conditions, and general park information please contact Yellowstone National Park Service at https://www.nps.gov/yell/contacts.htm

- If running late for a program, please contact 406-848-2400.