THANK YOU for your registration in Yellowstone Forever’s **Cougars: Yellowstone’s Seldom Seen Carnivores** Field Seminar; we can’t wait to see you!

Below you will find detailed information specific to your class. For general information about the facilities, park information, preparing for classes, what to expect, and more, please see the *Lamar Buffalo Ranch - Winter General Information* document we sent to you.

**COURSE INFORMATION**

**Course Name:** Cougars: Yellowstone’s Seldom Seen Carnivores  
**Instructor:** Colby Anton, M.S.  
**Activity Level:** This course is an activity level 5 and students enrolled in this course are expected to be active participants. Be prepared for brisk aerobic snowshoeing or skiing up to 12 miles per day with climbs up to 1,500 feet; or steep, rugged, off-trail skiing or snowshoeing—including breaking trail in variable snow conditions. Good coordination is required.  
**Class Dates and Times:** The course begins with a required evening orientation at 7:00 p.m. on Friday, January 24 and ends on Tuesday, January 28 at 9:00 a.m.  
**Location:** Lamar Buffalo Ranch  
**Lodging:** Lodging check-in is at 4:00 p.m. on Friday, January 24 and lodging check-out is at 9:00 a.m. on Tuesday, January 28.

If you are running late call the Lamar Bunkhouse at 307-344-7749.

**FROM THE INSTRUCTOR**

This is a classroom and field course that will introduce you to Yellowstone’s most elusive large carnivore, the mountain lion. Also known as “ghosts of the Rockies,” cougars occur at low densities, are secretive and nocturnal, and require large areas of habitat. Because they are not directly observable, cougar populations are difficult to census; much of what we learn about their behaviors and needs are dependent on long-term research in conjunction with detection and interpretation of natural sign. This course is not designed to see and observe cougars in the wild, but does focus on the exciting detective work employed to understand cougar ecology.

We will focus on a range of cougar ecology topics, spending most our classroom time discussing past and present Yellowstone research concerning population dynamics, predator-prey relationships, carnivore competition, disease ecology, and ecophysiology. Together, these topics encompass the breadth of knowledge we have gained over the course of 30 years of cougar research in the park. We will use field time and hikes to cement these ideas, using cougar tracking and kill site investigation to better understand the complex ecology and natural behavior of cougars living alongside more dominant large carnivores like wolves and bears.

*Colby Anton, M.S.*
PROGRAM ITINERARY

Day 1   Orientation
The program starts with an evening orientation where participants will be introduced to the Lamar Buffalo Ranch and go over Field Seminar overview and itinerary.

Day 2   Cougar Ecology and Natural History
Morning will be spent in the classroom learning about general cougar ecology, natural history, distribution, and behavior. The afternoon’s class will discuss cougar habitat (food, hunting cover, escape cover, densities), and daily cougar movements as the group travels through the landscape. The route will be identical to those taken by researchers seeking to estimate the cougar population abundance through noninvasive genetic sampling. Also discussed will be adaptations and behaviors (including vocalizations) that are crucial to cougar survival and reproduction. Specific landscape features that are essential components of cougar habitat will be pointed out as the group travels along the same travel corridors that cougars take. Eyes, ears, and noses will be kept attuned to smells, sounds, prey animals, and scavenger activity as students search for cougar beds, kills, and toilets. There will be a focus on how to interpret sign: tracks, scats, hair, and evaluating kills for predation on prey data. Evening will host a video and/or discussion.

Day 3   Yellowstone Cougar Research
Morning will be spent in the classroom with a slide show on Yellowstone Cougar Research, with a focus on how often cougars kill prey in Yellowstone National Park, cougar-wolf interactions and resource partitioning, and conservation of large carnivores. The afternoon will be spent in the field looking for wolves, coyotes, elk, and other critters. During the field trip, the group will expand their classroom discussions and focus on ecological relationships between cougars and other species, including wolves, bears, coyotes, foxes, ravens, magpies, and other avian scavengers. Students will also learn how to react if they encounter a cougar, as well as cougar management issues in and beyond Yellowstone. Evening will host a video and/or discussion.

Day 4   Cougar-Wolf Energetics
Morning will be spent in the classroom with a slide show on Yellowstone Cougar-Wolf energetics study, with a focus on how to measure field metabolic rate in wild animals, how these measurements differ between individuals and species, and the implications for conservation and management. Afternoon will be spent in the field looking for wolves, coyotes, elk, and other critters. During the field trip, students will expand their classroom discussions and focus on ecological relationships between cougars and other species and non-invasive genetic sampling. If the group encounters cougar signs during the field trek (and if conditions allow) they will backtrack to see if they can collect hair or scat samples.

Day 5   Departure
Check-out from the ranch is 9:00 a.m.
PROGRAM EQUIPMENT
For a full list of recommended equipment for all courses see the *Lamar Buffalo Ranch - Winter General Information* document.

Items specific to this course are:

- Optics – *Binoculars and spotting scopes provided by the Yellowstone Forever Institute are available, however if you have your own optics, you are encouraged to bring them.*
- Snowshoes and Poles – *Will be provided by Yellowstone Forever, however you are welcome to bring your own.*

RECOMMENDED READING
There are books and reference materials at the ranch for you to enjoy during your stay. In addition to those materials the instructor has recommended you read the following.


Again, we look forward to hosting you at the beautiful Lamar Buffalo Ranch. If you have any questions, please refer to your *Lamar Buffalo Ranch – Winter General Information* document or reach out to the Institute at 406-848-2400.