

BUTTERFLIES OF YELLOWSTONE

Itinerary & Details

FIELD SEMINAR - SUMMER 2023

INSTRUCTOR: George Bumann, M.S.

INSTRUCTOR BIOGRAPHY: George Bumann, M.S., can draw, sculpt, and teach about all aspects of Yellowstone. He has a degree in wildlife ecology and works as a professional artist and educator. His art and writing have appeared in popular in scientific publications, and his culture can be found in collections throughout the United States and abroad.

ACTIVITY LEVEL: This course is an activity <u>level 2</u> and students enrolled in this course are expected to be active participants. Be prepared to hike up to 3 miles per day, comfortably, with elevation gains up to 600 feet. Some off-trail hiking possible.

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

LOCATION: Course begins at the Yellowstone Forever classrooms located in Gardiner, MT.

PROGRAM DATES & TIMES: The program begins at 5:30 p.m. on Thursday, July 13, 2023, and ends on Saturday, July 15 2023, at 5:00 p.m.

LODGING CHECK-IN & CHECK-OUT: No lodging is provided for this course, however, there may limited lodging available through Yellowstone Forever at the Yellowstone Field Overlook Campus. For more information, please contact the Institute at institute@yellowstone.org. You can also find more information on Gardiner based lodging here: Gardiner, MT - Lodging. (Yellowstone River Motel will grant you 10% off their rooms if you mention that you are taking a Yellowstone Forever Field Seminar.)

MEALS: You will need to bring your own food; lunch should be able to travel in the field with you.

For general information about the facilities, preparing for classes, what to expect, cancellation policies, and more, please see the <u>Gardiner Field Seminars - Summer General Information</u> document.

FROM THE INSTRUCTOR

I look forward to sharing the wonderful world of Yellowstone butterflies with you! We will spend ample time learning species-level identification skills and observation techniques, as well as exploring as broad a spectrum of the butterflies' world as possible. To accomplish this, we will spend much of our time outdoors in Yellowstone investigating areas such as breeding habitat, flight patterns and timing, host plants, geography, geology, and more. Specific gear that will aid in your enjoyment of the class will include close-focus binoculars (i.e. ones that will allow you to clearly look at your own feet (<6' focal distance), a good field guide or two (specific options listed below in reading list), a camera with macro lens/setting and a small sketchbook or spiral-bound pad for jotting notes. Please bring sturdy walking/hiking shoes, preferably with ankle support—especially if you would like to try your hand at netting (more on this below)! Sunscreen and sunglasses are also a good idea as good butterfly watching conditions are also ones that lend themselves to sunburn in humans.

We will also have the opportunity to do some limited capture-and-release of insects under the Yellowstone Forever's educational permit. This will allow us to reinforce lessons on species-level identification, to determine gender and breeding status, etcetera AND to be involved with the capstone event of the program—participating in our 20th annual contribution to the national "4th of July Butterfly Count" citizen science effort in coordination with the North American Butterfly Association. This event pools data across the United States, Canada, and Mexico, not unike the Audubon Society's "Christmas Bird Count," in order to track large- and small-scale changes in butterfly abundance and distribution. Make sure to bring a lunch or funds to purchase lunch on the count day where we will be based out of Gardiner at the North Entrance to the park.

Please be prepared for a variety of weather conditions and contingencies in the agenda. Even though butterflies are fair weather creatures—not getting out of bed until the sun is high and ducking for cover at the first hint of rain—the class time is fixed and so we will make the most of whatever comes our way.

If you have any questions feel free to contact me at gb@GeorgeBumann.com.

Best regards,

George Bumann

PROGRAM EQUIPMENT

For a full list of recommended equipment for all courses see the <u>Gardiner Field Seminars - Summer General Information</u> document.

Required:	
	Notebook and pencil for observations
Optional:	
	Magnifying glass or hand lens
	Camera
	Binoculars

RECOMMENDED READING

No prior reading is required, but participants might enjoy the following publications, that complement the program. Most publications are available at Yellowstone Forever's online store at shop.yellowstone.org Yellowstone Forever supporters receive a 15% discount and proceeds directly support the park.

- Brock, J. & K. Kaufman Butterflies of North America (Kaufman Field Guides). 2006. Houghton Mifflin Harcourt.*
- Glassberg , Jeffrey. Butterflies through Binoculars: The West A Field Guide to the Butterflies of Western North America. 2001. Oxford University Press.*
- Scott, J. The Butterflies of North America: A Natural History and Field Guide. 1992. Stanford University Press.
- Pyle, R.M. Handbook for Butterfly Watchers. 1992. Houghton Mifflin Harcourt.
- Debinski, D. & J. Pritchard. A Field Guide to Butterflies of the Greater Yellowstone Ecosystem. 2002. Roberts Rinehart Publishing.

WHOM TO CONTACT

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

- Program itinerary, health forms, payment, and activity 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