

2017 ECOLOGY FIELD CLASSES

Note: Recent changes are in blue.

Demystifying Gulls: Beginning/Intermediate Gull Identification

Bill Schmoker



Despite being landlocked and about as far from a coast as one can be, Colorado offers fantastic gull-watching opportunities and ID challenges. Many birders dislike or even ignore gulls, deeming them too difficult to deal with. But twenty-two species of gulls have been recorded here, so they are obviously a big part of our state 's avifauna. Gulls are wonderful subjects in the slow, cold winter months and can be found almost anywhere. This class will give you the skills to identify gulls, better understand them, and maybe even make larophiles out of a few larophobes! An evening workshop precedes a field day near Pueblo (location subject to change based on recent sightings) for some eyes-on practice. This site typically offers one of the state's best collections of wintering gulls.

Indoor Class: Friday, February 17, 2017, 6:00 pm — 9:00 pm, north Boulder. Field Class: Sunday, February 19, 2017, 9:00 am — 3:00 pm, near Pueblo.

Tuition: \$80.00. Limited to 16 participants. Registration opens on January 6, 2017.

State Parks pass is required for each vehicle (\$7.00 per car). We will cover almost 300 miles on our field trip, round trip from Boulder. Bill suggests that you might drive down Saturday and spend the night to arrive more easily by 9 am on Sunday. It's about a 2 ½ hour drive from the Boulder area.*

Bill has taught middle school science for 23 years. He's an instructor for the American Birding Association, National Audubon Society, The Nature Conservancy, and for BCNA. Bill is on the Leica Birding Team. He has embarked on two Arctic Ocean research expeditions as a PolarTREC teacher. A widely-published bird/wildlife photographer, author, and public speaker, Bill seeks new knowledge wherever he finds himself.

Little Dogs of the Prairie

Heather Swanson



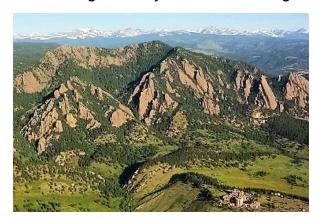
Few species elicit intense emotions from us like prairie dogs. Love them or hate them, we share a long, complicated history. These fascinating rodents have an intricate social system and complex relationships with many other species. Our native prairie and many of its plants and animals depend on these charismatic little burrowers. We 'll learn the biology, behavior, and ecological importance of these small ground squirrels, as well as many species that share close ecological relationships with them. We will also explore the complexity of our coexistence with them, especially along the urban Front Range.

Indoor Class: Tuesday, June 8, 2017, 6:30 pm — 8:30 pm Field Class: Saturday, June 10, 2017, 8:30 am — 12:00 pm

Tuition: \$60.00, Limited to 12 participants. Registration opens on April 27, 2017.

We will cover about 20 miles on our field trip, round trip from Boulder.

Heather is a senior wildlife ecologist with City of Boulder Open Space and Mountain Parks. She received her PhD in Ecology and Evolutionary Biology from the University of Colorado. While she works with a variety of species, for the last 12 years she's been involved with Boulder County and City of Boulder OSMP on prairie dog and grassland conservation and management issues.



There's a story where the foo thills meet the plains. And you can read it in the landscape, if you know what you are seeing. Let an expert show you the evidence that unlocks it all. He 'll show you the pieces of our local geologic history, and how to use them to i nterpret other regions as well. You'll explore the meaning of "deep time." Travel from the black shales and fossiliferous limestone near Neva Road to the ancient granite in Eldorado Canyon. You'll touch unconformities where 1.5 billion years of strata are missing and see a 60 million-year-old oyster reef. An introductory hand-out lists key points at twelve stops. Others put the story all together. Watch a recap DVD to finish.

ONE DAY field class, ending with an indoor presentation. Starts and ends in Boulder.

The same class will be taught from 9:30 am – 4 pm on Wednesday, June 7 and on Wednesday, June 21.

Register for only one day. Bring water and a sack lunch to eat at a stop along the way.

Tuition: \$50.00. Limited to 8 participants in two cars due to parking limitations. Instructor hopes to alternate between cars. Registration opens on April 26 for the June 7th class and on May 10 for the June 21 class.

State Parks pass is required for each vehicle at Eldorado Springs State Park (\$8.00 per car). We will cover about 50 miles on our field trip. *

Pete received a PhD in geology from the University of Minnesota. For 16 years he was a paleontologist with the USGS in Washington, DC. He spent another 14 years as a Professor of Geology at Stony Brook University. He came to Boulder in 1980 as the Centennial Science Program Coordinator for the Geological Society of America and supervised the production of some 40 books summarizing the geology of North America. He retired in 1992 and has spent most of the last 25 years on activities related to a sustainable future for all.

What Birds Eat David Leatherman



Birders are good at finding birds and naming them. This class will take things up a notch, asking not just "what is it?" but "what is it doing?" and "why is it there?" A knowledge of birds' food habits can help answer these questions. Our indoor session will cover the basics of bird anatomy and physiology as they relate to food acquisition and sustenance of bird activity, and cover some of the major foods used by area birds. Interesting cases, anecdotes, and displays will be included . Field trips will be unrehearsed "live" attempts to find birds and figure out what they are eating. Bring your curiosity and camera. The instructor will bring vials for close-up looks at unwary insects.

Indoor class: Wednesday, June 14, 2017, 6:00 pm — 9:00 pm, near Longmont Field class: Saturday, June 17, 2017, 8:00 am — 12:00 pm, Loveland area Field class: Saturday, June 24, 2017, 8:00 am — 1:00 pm, Fort Collins area Tuition: \$95.00. Limited to 10 participants. Registration opens on May 3, 2017.

We will cover about 95 miles on our Loveland field trip, roundtrip from Boulder*, and about 180 miles on our Fort Collins filed trip, roundtrip from Boulder. *

Dave obtained a B.S. in Biology from Marietta College and a Master of Forestry from Duke University. He worked as Forest Entomologist for the Colorado Forest Service. Hobbies are birding (an obsession with what they eat) and nature photography. He edited Colorado Birds, the journal of the Colorado Field Ornithologists, and his column, "The Hungry Bird," appears on their website. He is working on a book about "life among the headstones," an account of natural history in an old Fort Collins cemetery.



Plants and pollinators have complicated and often surprising relationships. This workshop will cover the identification and natural history of many Front Range pollinator species, the distinction between specialist and generalist pollinators, and the impact that native plants and restored habitats can have on pollinator diversity. We'll conduct some pollinator surveys in the gardens at Butterfly Pavilion and in the adjacent Big Dry Creek open space to observe pollinators in their natural environment.

Indoor Class: Thursday, July 13, 2017, 6:30 pm — 8:00 pm, Westminster Field Class: Sunday, July 16, 2017, 8:00 am — 11:00 am, Westminster

Tuition: \$45.00. Limited to 25 participants. Registration opens on June 1, 2017.

We will cover about 30 miles on our field trip, round trip from Boulder.*

Amy's work at Butterfly Pavilion, where she has been the Horticultural Director since 2006, touches on her many passions: plants, insects, habitat conservation, and science education. She currently heads the Urban Prairies Project, which restores habitat in urban and suburban green spaces in Westminster and Broomfield.

Colorado Hummingbirds: Identification & Plant Food Sources

Tina Jones



Want to become more familiar with the ecology and natural history of hummingbirds, including Colorado's two "semi-resident" species and assorted migrants? We'll learn to identify their different characteristics, and discuss behaviors like feeding, territoriality, courtship, nesting, and migration. We'll visit Tina's six hummingbird gardens, to see which plants best attract the birds. Six species of hummingbirds have come there to feed, and it is an excellent example of creating a bird habitat. While there may not be the numbers of hummingbirds seen in the foothills, we can identify them more easily because they are concentrated in a small area.

Indoor Class: Wednesday, July 26, 2017, 6:30 pm — 8:30 pm, Boulder Field Class: Saturday, July 29, 2017, 7:30 am — 11:30 am, north Littleton. Tuition: \$60.00. Limited to 8 participants. Registration opens June 14, 2017.

We will cover about 80 miles on our field trip, round trip from Boulder. *

Tina has taught natural history classes for The Denver Museum of Nature and Science, the Denver Botanic Gardens, and the Audubon Master Birder Program in Denver. Her yard has been featured in three books, including Hummingbird Gardens, by Newfield and Nielson, and in the Rocky Mountain News. With an extensive background in botany, she has created a one-acre habitat using many native plants. She particularly loves hummingbird and songbird plant associations.

Mushrooms of the Front Range

Jennifer Frazer



Thousands of species of mushrooms lurk in the woods and yards of Colorado. This class will cover basic mushroom biology, important mushroom toxins, Common Colorado mushrooms, how mushrooms make a living and how to recognize major mushroom families. We'll also learn how to make beautiful spore prints that can be vital to identification. In the field you get hands-on experience finding and identifying mushrooms, learn how not to get lost on forays, and be trained in the uncommon art of the mushroom Hoot. (Field locations subject to change based on moisture conditions Preceding the trips.) Please see next page for more information.

Mushrooms, continued -

Indoor Class: Thursday, August 3, 2017, 6:45 pm - 8:45 pm

Field Class: Saturday, August 5, 2017, 9:00 am — 1:00 pm (Peak to Peak Highway area) — 1:00 pm (Peak to Peak Highway area)

Tuition: \$80.00. Limited to 12 participants. Registration opens on June 22, 2017.

We will cover about 60 miles on each of our two field trips, round trip from Boulder.

Jennifer is a freelance science writer and blogger of The Artful Amoeba for Scientific American. She has been a guest on Radiolab and has written for Scientific American Magazine, High Country News, Grist, and National Geographic online. She was the health and environment reporter at the Wyoming Tribune-Eagle in Cheyenne and won the AAAS Science Journalism Award. Trained in biology and plant pathology at Cornell University, she is a member of the Colorado Mycological Society.

Grasslands Ecology Steve Jones



Camp out on the last expanse of uninterrupted prairie in North America while experiencing native grasses, grasslands birds and insects, and the evolutionary ecology of "the land where the sky began." During three days in the Nebraska Sandhills expect to see or hear trumpeter swans, prairie grouse, white-faced ibises, various owls, pronghorns, coyotes, and white-tailed jack rabbits. And before we leave Colorado, we'll cozy up to grassland butterflies and other insects on our morning exploration of the South Boulder Creek State Natural Area. It features a mosaic of wetlands, wet meadows, and grasslands, including a remnant of the tallgrass prairie ecosystem.

Indoor Class: Thursday, August 10, 2017, 6:30-9:00 pm

Field class: Sunday, August 13, 2017, 7:00 – 11:00 am, in south Boulder

Field classes: Thursday, September 21 — Saturday, September 23, 2017 — Two-night camping trip to explore Crescent Lake National Wildlife Refuge and Smith Lake State Wildlife Area in the Nebraska Sandhills. Optional Saturday night B&B stay in Lewellen, NE, followed by an exploration for swans on Sunday.

Tuition: \$150.00. Limited to 8 participants. Registration opens on June 29, 2017.

We will cover about 700-800 miles on our Nebraska trip, depending on whether you stay for Sunday. Camping is free and participants must camp with the group. No lodging is available in the immediate area.

Steve is author of The Last Prairie and co-author of Peterson Field Guide to the North American Prairie, Wild Boulder County, Colorado Nature Almanac, and Butterflies of the Colorado Front Range. He taught in the Boulder Valley Public Schools for 33 years and has taught BCNA field classes for 21 years. His consulting work includes more than 25 breeding bird surveys for local agencies and private companies.

*IMPORTANT NOTE: Some of th is year's field trips are close by, while others are not. A few involve significant travel from Boulder. If you wish to carpool, you can make your own arrangements. We will provide a list of participants who agree to share their names and emails. Shorter trips can be discussed at the first class. We suggest that all occupants share the fair cost of gas/operating costs, along with any park entrance fees. Drivers might ask for varying reimbursement amounts, based on their vehicle or needs. The meeting place for each indoor session and field session will be provided by your instructor about two weeks before the class starts.

To register, go to www bcna org and click on "Classes" six weeks before the class starts. Questions? Email Mary Stuber at bcnaclassesreg@gmail.com