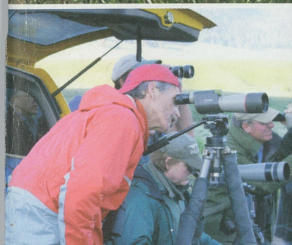




YELLOWSTONE
ASSOCIATION
INSTITUTE

EDUCATIONAL PROGRAMS * SUMMER 2006

Phillips / Reese
YI Collection



I N S P I R E . E D U C A T E . P R E S E R V E .

www.YellowstoneAssociation.org

WELCOME TO THE YELLOWSTONE ASSOCIATION INSTITUTE

The mission of the Yellowstone Association is to, in partnership with the National Park Service, foster the public's understanding, appreciation and enjoyment of Yellowstone National Park and its surrounding ecosystem by funding and providing educational products and services.

To help visitors understand the entire Yellowstone ecosystem, we offer courses on the Gallatin, Caribou-Targhee, and Shoshone National Forests under a special use permit.

REGISTRATION

Registration for Yellowstone Association members begins January 3 at 8 a.m. and January 9 for non-members. Register by phone at 307-344-2294 or online at www.YellowstoneAssociation.org. Lodging & Learning registration has begun; call 307-344-5566 for reservations.

TABLE OF CONTENTS

Lodging & Learning Programs	4
Personal Ed-Ventures	7
Group Programs	7
Field Seminars	8
Backcountry Courses	30
Instructor Profiles	34
Membership Information	40
General Information	41
Registration Form	42
Travel Information	43

COVER PHOTOGRAPHY: Main photo: Pam Cabill. Insets: Bridget Lyons, Jonmikel Pardo.



A Message from Yellowstone's Chief of Interpretation

Since 1933 the nonprofit Yellowstone Association has been the National Park Service's primary partner in education at Yellowstone National Park. The Yellowstone Association Institute was established by the Yellowstone Association in 1976 to provide in-depth educational programs for park visitors. Since that time the Institute has distinguished itself as a top quality program with expert instructors and a strong commitment to park stewardship. I am proud to introduce the 2006 catalog of courses, and I hope you will join the Institute for what is sure to be a memorable and rewarding educational experience here in Yellowstone National Park.

Sincerely,
Diane Chalfant,
 Chief of Interpretation

Visit our website at www.YellowstoneAssociation.org or call 307-344-2294.

SUMMER 2006 EDUCATIONAL PROGRAMS

WHICH OF OUR PROGRAMS IS RIGHT FOR YOU?

LODGING & LEARNING PROGRAMS mix just the right amount of education and recreation on your vacation. You'll be based at historic park hotels and taught by naturalist guides who are intimately familiar with Yellowstone. If you want a vacation package that covers almost all you'll need and provides fun and discovery, Lodging & Learning Programs are for you. See page 4.

PERSONAL ED-VENTURES immerse families or other small groups in Yellowstone through one-day natural history tours in the northern portion of the park. An Institute naturalist guide will meet you at a predetermined location for your private introduction to park wildlife and ecology. If your family or group are here for only a short time and want a naturalist to show you around, a Personal Ed-Venture is for you. See page 7.

GROUP PROGRAMS provide educational experiences to fit the particular needs of your group. You can choose day or overnight programs throughout the Yellowstone area that are taught by Institute instructors. Group programs fit the needs of extended families, non-profit organizations, alumni associations, and colleges. See page 7.

FIELD SEMINARS are educational experiences that go deep! Taught by researchers, field biologists, and other experts, field seminars focus on specific subjects such as predator/prey relationships, vegetation of the park, illustrating the wild, and observing wildlife. You'll be amazed at how much you can learn in one to four days. See page 8.

We offer two different settings for field seminars:

- Our Lamar Buffalo Ranch campus is based in the quiet northeast corner of the park, far from other development. You share a cabin with up to two other participants, and prepare your own meals in the group kitchen. **LAMAR TITLES APPEAR IN BROWN.**
- Courses based in and around the park take advantage of vast learning opportunities throughout the Yellowstone region. You stay in hotels at various park locations and in gateway communities, and enjoy the restaurants and amenities of these areas during your learning experience. **REGIONAL TITLES APPEAR IN GREEN.**

BACKCOUNTRY COURSES take you on a learning adventure in the vast wilderness of the Yellowstone area. Designed to be both light on the land and educational, backcountry courses are taught by a professional outdoor leader and a content expert. If you are physically fit and can carry your own gear and prepare your own meals, then venture into the Yellowstone backcountry on one of these courses. See page 30.

HOW FIT DO YOU NEED TO BE?

Most Institute courses include hiking, unless otherwise indicated. To rate the difficulty of each course, we consider distance, pace, elevation gain, and terrain. Please note the ratings are only guidelines; for example, a hike in strenuous terrain can be moderately paced, thus reducing the field trip's difficulty. For the most precise information about each activity, please refer to your student letter or contact the Institute Registrar at 307-344-2294.

 **MINIMAL ACTIVITY**—Leisurely hikes up to 1 mile per day through relatively flat terrain on maintained trails.

 **EASY**—Hikes of 1 to 3 miles per day with climbs up to 250 feet, with some off-trail walking.

 **EASY TO MODERATE**—Brisk hikes of 3 to 5 miles per day with climbs up to 500 feet, through moderate terrain.

 **MODERATE**—Brisk aerobic hikes of 5 to 8 miles per day (rest stops as needed) with climbs up to 1000 feet on dirt trails that may have loose rock and uneven footing, or off-trail hiking.

 **STRENUOUS**—Brisk aerobic destination-oriented hiking of 8 to 12 miles per day with climbs up to 2000 feet off-trail or on dirt trails with loose rock, uneven footing, steep hillside traverses, and stream crossings.

SUMMER 2006 LODGING & LEARNING PROGRAMS

Explore the best of Yellowstone National Park with one of our award-winning Lodging & Learning Programs. By day you'll explore Yellowstone with a fun and knowledgeable naturalist guide from the Yellowstone Association, the official educational partner of the National Park Service. Each night you'll return to historic park hotels for excellent meals and comfortable accommodations provided by Xanterra Parks & Resorts®, the official concessioner for Yellowstone National Park hotels. All programs include expert instruction, breakfast and box lunches, in-park transportation, and optional evening programs by the National Park Service or Xanterra.

Programs have a limit of 12 to 14 participants per session. The minimum age is 12 unless otherwise stated.

Rates are per person and do not include taxes.

SO HOW DOES THIS ALL WORK?

To register or for more information about Lodging & Learning Programs, call Yellowstone National Park Lodges at 307-344-5566, 8 a.m. to 5 p.m., seven days a week, Mountain Time. Programs fill fast so register early. A 50% deposit, payable by check or major credit card, is required within two weeks of registration.

You'll receive a confirmation with a student letter, clothing and equipment list, park entrance pass, and personal data forms you need to fill out and return right away. These help us get to know you better so we're prepared for your arrival.

You must pay the balance of 50% program cost 30 days prior to your arrival, otherwise your reservation will be cancelled.

You are responsible for transportation to and from the location where the program begins.

CANCELLATION & REFUND POLICY FOR LODGING & LEARNING PROGRAMS

Your deposit is fully refundable if you cancel at least 60 days prior to arrival. Cancellations made between 60 and 30 days prior to arrival will result in a 50% penalty of the package cost. Cancellations made inside 30 days prior to arrival will result in a penalty of the total package cost. If we cancel, you will receive a full refund. We cannot make exceptions to the refund policy for any reason including but not limited to illness, travel delays, emergencies, or weather. We recommend that you take out accident, baggage, and trip cancellation insurance through a travel agent or website such as www.TravelGuard.com. Travel insurance can help protect you against financial loss if you must cancel or interrupt your trip.

Photo: Jonmikel Pardo

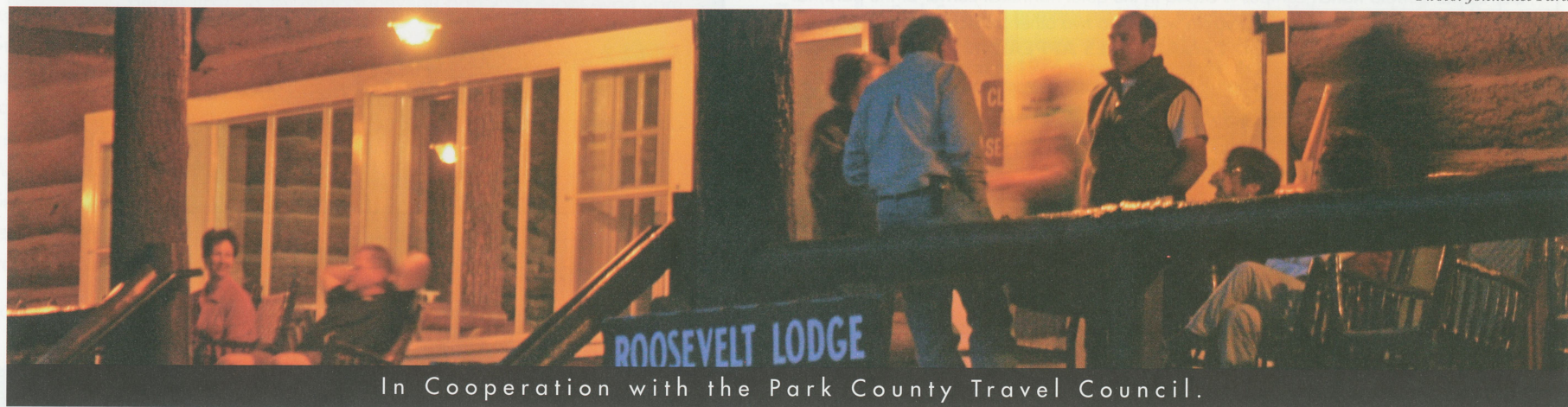




Photo: Jonmikel Pardo



Photo: Jonmikel Pardo



Photo: Jonmikel Pardo



Photo: Marilyn Alkire

SPRING WOLF & BEAR DISCOVERY



This is your opportunity to delve into the world of Yellowstone's wolves and bears. You'll join an Institute naturalist guide for sunrise trips in Yellowstone's Northern Range to look for these charismatic carnivores. During the day, you'll take short hikes in their habitat, learning about their behavior, ecology, and conservation. Your program fee includes dinner the last night. *

Dates:

3-day programs offered May 14, 17, 20, 23, 26, 29, June 1, 4, 7, 10, 13

Lodging:

4 nights at Mammoth Hot Springs

Rates:

\$565 Double Occupancy
\$773 Single Occupancy

OLD TIMES ON THE GRAND TOUR



Take the famous Grand Tour of Yellowstone in the luxury of an innovative new touring vehicle designed to resemble the classic yellow touring cars of the early 20th century. You'll visit cultural sites from Yellowstone's past, take walking tours of historic and thermal areas, and make stops for wildlife to learn about their natural history. To complete each day of history and sightseeing, you'll stay overnight in three historic areas—Mammoth, Old Faithful, and Lake. *

Dates:

5-day program offered May 16, 22, September 25, October 2

Lodging:

2 nights each at Mammoth Hot Springs, Old Faithful Snow Lodge, Lake Hotel

Rates:

\$965 Double Occupancy
\$1,426 Single Occupancy

NEW! SPRINGTIME IN WONDERLAND



Enjoy the quintessential Yellowstone experience in this spring program. By day, you'll explore the hidden secrets and sights of the park—wildlife watching in the Hayden Valley, walking along the rim of the Grand Canyon of the Yellowstone River, and touring the heart of the Yellowstone volcano. Each evening, you can relax in the elegant Lake Hotel, which sits on the shore of Yellowstone Lake and is listed on the Register of Historic Places. Your program fee includes dinner the last night. *

Dates:

3-day programs offered May 24, 29, June 3, 8, 13

Lodging:

4 nights at Lake Hotel

Rates:

\$725 Double Occupancy
\$1,101 Single Occupancy

TRAILS THROUGH YELLOWSTONE



Lace up your hiking boots and sling on your daypack for four days of hiking, wildlife viewing, and discovery in the world's first national park. You'll be led by an Institute naturalist guide on carefully chosen hikes to explore Yellowstone's diverse landscapes, from the geyser basins around Old Faithful to the Grand Canyon of the Yellowstone River. Search for elk, bison, grizzly bears, wolves, and other species on an evening wildlife viewing expedition. Be prepared to hike every day in this active program. *

Dates:

4-day programs offered Saturday to Wednesday from May 27 to September 30

Lodging:

2 nights at Mammoth Hot Springs, 2 nights at Grant Village

Rates:

\$625 Double Occupancy
\$851 Single Occupancy

YELLOWSTONE FOR FAMILIES

Experience the magic of Yellowstone with this unique learning adventure for families with children 8 to 12 years old. Guided by an Institute naturalist guide, your family can explore canyons, waterfalls, and geyser basins, and enjoy activities including animal tracking, wildlife watching, photography, painting, and hiking. During the program, your children can become Yellowstone National Park Junior Rangers. You can choose from two activity levels (see below) for children between the ages of 8 and 12. *

Monday programs



Friday programs



Dates:

4-day programs offered Monday to Friday and Friday to Tuesday from June 9 to August 28

Lodging:

4 nights at Mammoth Hot Springs or Grant Village

Mammoth Rates:

\$595 Double Occupancy
\$803 Single Occupancy
\$365 Each Child

Grant Rates:

\$625 Double Occupancy
\$869 Single Occupancy
\$365 Each Child

Members of the Yellowstone Association receive a \$10 discount.



Photo: NPS



Photo: NPS

FALL WOLF & ELK DISCOVERY



This is your opportunity to delve into the world of Yellowstone's wolves and elk. You'll join an Institute naturalist guide for sunrise trips to look for these charismatic mammals. Elk should be easy to find—they are gathered for their annual rutting season, which is full of drama. Wolves are more elusive in the fall, but you'll have a good chance to see them. During the day, you'll take short hikes in elk and wolf habitat, learning about their behavior, ecology, and conservation. Your program fee includes dinner the last night. ☀

Dates:

3-day programs offered August 30, September 4, 9, 14, 19, 24, 29, October 4

Lodging:

4 nights at Mammoth Hot Springs

Rates:

\$565 Double Occupancy
\$773 Single Occupancy

ROOSEVELT RENDEZVOUS



The historic Roosevelt Lodge sits in the center of Yellowstone's Northern Range, where you can enjoy the arresting bugle of bull elk among the fall colors of aspen, willow, and cottonwood. During the day, you can enjoy a vigorous guided hike, search for wolves, enjoy a series of easy geology strolls, or do your own thing. At night, we convene in the main lodge for buffet-style dinners and entertaining evening programs. You'll stay in rustic but comfortable individual guest cabins. Each program has a limit of 52; daily field trips are in small groups. ☀

Dates:

4-day programs offered
September 8, 12, 16, and 20

Lodging:

4 nights in private cabin with shared bath at Roosevelt Lodge

Rates:

\$585 Double Occupancy
\$705 Single Occupancy

NEW! AUTUMN IN WONDERLAND



From a historic base in the heart of a volcano, you can enjoy the quintessential Yellowstone in autumn. By day, you'll explore the hidden secrets and sights of the park—wildlife watching and autumn colors in the Hayden Valley, walking along the rim of the Grand Canyon of the Yellowstone River, and touring within the Yellowstone caldera. Each evening, you can relax in the elegant Lake Hotel, which overlooks Yellowstone Lake and is listed on the Register of Historic Places. Your program fee includes dinner the last night. ☀

Dates:

3-day programs offered September 19, 24, 29, October 4

Lodging:

4 nights at Lake Hotel

Rates:

\$725 Double Occupancy
\$1,101 Single Occupancy



Photo: Jonmikel Pardo

Visit our website at www.YellowstoneAssociation.org or call 307-344-5566.

SUMMER 2006 PERSONAL ED-VENTURES & GROUP PROGRAMS

PERSONAL ED-VENTURES

Personal Ed-Ventures provide you and your family or small group with a private natural history program led by an Institute naturalist guide. You'll meet at a predetermined location for an introduction to Yellowstone's Northern Range and your program, then spend the day wildlife watching with high powered spotting scopes and hiking, if you choose. Members of the Yellowstone Association receive a \$10 discount.

LENGTH: Approximately 8 hours

RATES: \$395 for up to seven people, \$50 for each additional person up to 14 (if space is available) Rates effective through October 31, 2006.

LOCATIONS: An Institute naturalist guide will meet you at Mammoth Hot Springs or Gardiner, Montana (MT). For an additional fee of \$50, your naturalist guide will meet you at Cooke City, MT, Lamar Valley Buffalo Ranch, or Roosevelt Lodge.

For more information and Ed-Venture reservations, please contact the Institute registrar at 307-344-2294.



Photo: Bridget Lyons

GROUP PROGRAMS

Consider a group program if your group is a nonprofit organization, university, extended family, or other group of eight or more people who want to learn about the natural or cultural history of Yellowstone. Expert Institute instructors lead the program, which typically runs eight hours a day for one to five days. Each group can choose from a variety of program options.

College and university groups can work with Institute specialists to design custom academic programs taught by Institute instructors with advanced degrees and highly specialized knowledge of Yellowstone. We can tailor the content, length, and location of these programs to your institution's needs.

For group programs, the Institute provides instruction, in-park transportation, park entrance passes (for multi-day courses), classroom space, and program materials such as spotting scopes. Participants must provide their own personal clothing and equipment, meals, and lodging.

Accommodation options include the Lamar Buffalo Ranch Field campus (available primarily in November, December, and August), Yellowstone National Park Lodges, and other local lodging.

LENGTH: Approximately 8 hours for one to five days.

RATES:

STANDARD GROUP PROGRAM: \$600 per day for 8 to 14 participants (one instructor) or \$1200 per day for 15 to 28 participants (two instructors). Rates effective through October 31, 2006.

CUSTOM COLLEGE PROGRAM: \$700 per day for 8 to 14 participants or \$1400 per day for 15 to 28 participants.

FIELD CAMPUS LODGING, WHEN AVAILABLE: \$300 per day for 8 to 14 participants and \$600 per day for 15 to 28 participants.

To arrange a group program, please contact program manager Jenny Golding at 406-848-2169 or jgolding@yellowstoneassociation.org

Members of the Yellowstone Association receive a \$10 discount.

FIELD SEMINARS

Enjoy focused educational experiences that closely examine individual aspects of the Yellowstone ecosystem. You'll learn about the park through the eyes of an animal tracker, a wolf biologist, a photographer, a geothermal scientist, and other noted experts, through just the right combination of field excursions and classroom presentations.

FIELD SEMINARS

We offer two different settings:

LAMAR BUFFALO RANCH FIELD CAMPUS: Far from other development in Yellowstone's quiet northeast corner, the Buffalo Ranch offers comfortable lodging in a remarkable wilderness setting. For just \$25 per night, you will enjoy cozy log cabins with propane heaters, a new bathhouse with private showers, and a common building with fully equipped kitchen and classrooms. You cannot camp at the Buffalo Ranch, and you cannot bring pets—but service animals are allowed. You are responsible for transportation to and from the Lamar Buffalo Ranch. An Institute staff person will greet you at check in and orient you to the facility. **LAMAR TITLES APPEAR IN BROWN.**

PARK HOTELS AND LOCATIONS THROUGHOUT THE YELLOWSTONE REGION: These field seminars are based at hotels in the park and in gateway communities, with lodging, restaurant and other amenities available. For multi-day courses based at hotels inside the park, we have set aside a block of rooms that will be held until 30 days prior to the course. Call 307-344-5566 for rates and reservations. You are responsible for booking your own rooms and arranging for your own meals. Often, meals are enjoyed as a group, sometimes out in the field. You are responsible for transportation to and from the meeting locations, but transportation is provided during the day. **REGIONAL TITLES APPEAR IN GREEN.**

Please remember that these courses are for adults. Children over 15 may attend if accompanied by an adult. For most field seminars, you will need basic day-hiking supplies such as trail food, water, sunscreen, rain gear, daypack, plus notebook and pen or pencil. If you are a member of the Yellowstone Association, you'll receive a \$10 tuition discount.

EARNING UNIVERSITY CREDIT

You can earn one semester hour from Colorado State University (CSU) for field seminars marked "credit pending." On the first day of the course, you need to fill out a registration form and write a tuition check payable directly to CSU. Credit fees are approximately \$70 per semester hour and are in addition to the tuition and cabin fees. To receive academic

credit, you may be required to successfully complete exams and other assignments. As an alternative, we are happy to provide you with a Letter of Certification after completion of the course, stating the focus of the course and the hours of instruction.

SO HOW DOES THIS ALL WORK?

To register or for more information about a Field Seminar, call us at 307-344-2294, 8 a.m. to 4:30 p.m., Monday through Friday or visit us online at www.YellowstoneAssociation.org. Courses fill fast so register early. Full payment is required at the time of registration. Online course requests are not final until confirmed by our registrar.

After you register, we'll send you a confirmation letter, park entrance pass, and personal data forms you need to fill out and return right away. These help us get to know you better so we're prepared for your arrival.

Approximately 30 days prior to your course, we'll mail you a student letter from the instructor and a general welcome letter that includes recommended clothing and equipment. We will send these by email or regular mail, depending on what you requested when you signed up.

CANCELLATION & REFUND POLICY FOR FIELD SEMINARS

Payments are fully refundable, less a \$35 per course processing fee, if you cancel at least 60 days before the course. Tuition and cabin fees are non-refundable for cancellations received fewer than 60 days before the start of the course, unless your space can be filled. If we can fill your space, a refund will be made, less the course processing fee. As an alternative, we can credit your tuition and cabin fees to another course of the same type offered before October 1, 2006, on a space available basis. We reserve the right to cancel a course up to 30 days before the first class day. If we cancel, you will receive a full refund. We regret that the Institute cannot make exceptions to the refund policy for any reason, including but not limited to illness, travel delays, emergencies, or weather. We urge you to take out accident, baggage, and trip cancellation insurance through a travel agent or website such as www.TravelGuard.com. Travel insurance can help protect you against financial loss if you must cancel or interrupt your trip.

Visit our website at www.YellowstoneAssociation.org or call 307-344-2294.



Photo: Jonmikel Pardo



Photo: Pam Cabill



Photo: Jonmikel Pardo



Photo: NPS

#501 THE MAGIC OF WATERFOWL MIGRATION



Start: April 28 at 7:30 p.m.
End: April 30 at 3 p.m.
Location: Gardiner, MT
Instructor: Terry McEneaney
\$180
Limit: 9
Credit Pending

Loren Easley once wrote "If there is magic on this planet it is contained in water." Explore the magic of Yellowstone's aquatic environments and the birds that inhabit them during the season that waterfowl are most abundant and colorful. You'll learn the nuances of waterfowl identification and also discover the differences among common to extremely rare species of ducks, geese, and swans. *

#502 THE SPRING WILDLIFE SHOW



Start: May 6 at 9 a.m.
End: May 8 at 4 p.m.
Location: Gardiner, MT
Instructor: Jim Garry, M.S.
\$240
Limit: 12
Credit Pending

Winter departs slowly from Yellowstone, but with spring comes a wildlife show second to none. The stage is Yellowstone's Northern Range, which includes one of the world's great wildlife viewing areas, the Lamar Valley. You'll explore this area, which is home to wolf dens full of growing pups, red bison calves frolicking, bear mothers with their young in tow, ground squirrels scampering about, and sandhill cranes setting up their nests. You may even see one of the year's first elk calves. *

#503 NEW! YELLOWSTONE'S PACK OF PREDATOR CONCERNS



Start: May 8 at 7 p.m.
End: May 11 at 4 p.m.
Location: Gardiner, MT
Instructors: James Halfpenny, Ph.D., Kerry Murphy, Ph.D. & Jim Garry, M.S.
\$325
Limit: 11
Credit Pending

Nothing in Yellowstone captures the human imagination more powerfully than the big three carnivores—lions, wolves, and grizzly bears. Add the largest weasel in Yellowstone, the wolverine, and you've got a pack of carnivores of great concern and intensive scientific study in Yellowstone National Park. You'll learn about these magnificent animals in classroom and field sessions led by ecologists who are working with these animals. You'll also enjoy sunrise and sunset wildlife watching with these experts. *

#504 INTO THE BEAR'S DEN



Start: May 12 at 8 a.m.
End: May 12 at 5 p.m.
Location: Gardiner, MT
Instructor: Kerry A. Gunther, M.S.
\$80
Limit: 12

The bears are awake and away from their dens—a great time to explore where they've spent the winter. You'll begin with a classroom overview of bear denning behavior and hibernation physiology, then hike to an unoccupied bear den. Along the way and during lunch, you'll discuss bear behavior, food habits, habitat use, predation, bear-human interactions, and nuisance bear management. Be prepared for a four-mile hike that begins with a strenuous, extremely steep section. *

#505 WOLF NATIONS: DYNAMICS OF A RECOVERED POPULATION



Start: May 13 at 8 a.m.
End: May 15 at 4 p.m.
Location: Gardiner, MT
Instructor: Nathan Varley, Ph.D. candidate
\$240
Limit: 12
Credit Pending

What do wolves do when they get too crowded? You'll find out as you hike among several wolf pack territories. Discover how packs organize themselves across the landscape; how they shift and change in size, composition, and location; and what these complex dynamics teach us about the wolf's role in the Yellowstone ecosystem. Each day you'll hike up to 5 miles off-trail to observation points where you might be able to observe some of the park's wolf packs. *



Photo: Pam Cabill



Photo: Jonmikel Pardo



Photo: NPS

#506

**WILDERNESS
FIRST AID**

Start: May 18 at 8 a.m.
End: May 19 at 5 p.m.
Location: Lamar Buffalo Ranch
Instructor: Wilderness Medicine
Institute Staff
\$160
Limit: 24
Credit Pending

Do you spend a lot of time in the outdoors? Have you ever wondered how you would respond to a backcountry emergency? This 16-hour certification course is ideal for hikers, skiers, and outdoor professionals who want to learn the basics of emergency care in remote settings. You'll learn patient assessment, shock, wilderness wounds, fractures and dislocations, hypothermia, heat illness, altitude illness, and bites and stings. May be used to re-certify as a Wilderness First Responder. No previous certification is required. *

#507

**YELLOWSTONE
COMES ALIVE**

Start: May 20 at 9 a.m.
End: May 22 at 4 p.m.
Location: Lake Village
Instructor: Jim Garry, M.S.
\$240
Limit: 12
Credit Pending

Yellowstone comes alive in springtime, and you'll witness its rebirth around the Yellowstone Lake area. In Hayden Valley, you'll search for bears recently emerged from their dens and bison just born. On the shores of Yellowstone Lake and at the Grand Canyon of the Yellowstone River, you'll see geological forces at work. At the Lake Hotel, you can imagine what Yellowstone was like in earlier years. You may even take in a geyser or two. *

**#508 WILDLIFE
WATCHING
IN GRIZZLY
COUNTRY**

Start: May 20 at 10 a.m.
End: May 22 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructor: Gene Ball
\$240
Limit: 12

The grizzlies are out and about, which makes wildlife watching especially interesting now. You'll find out how to adjust and use spotting scopes and binoculars for safe viewing. You'll also learn to observe the park's many wildlife species unobtrusively and ethically while exploring their habitats. In between and during viewing sessions, you'll discuss various wildlife topics, issues, and controversies. Be prepared for a few moderate hikes at higher elevations. *

**#509 NEW!
BEHIND THE
SCENES OF WOLF
BEHAVIOR AND
ECOLOGY**

Start: May 20 at 4 p.m.
End: May 22 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructor: Jon Trapp, M.S.
\$200
Limit: 12

What do wolf howls mean? Why do wolves kill each other? How do wolves affect their habitat and its ecology? You'll discover answers to these questions and more by observing Yellowstone's wolves during the mornings and evenings of this active time of year. You'll also spend time in the classroom learning what scientists have found out about wolves since they were restored to the ecosystem. Be prepared for inactive hours outdoors in cold, wet weather. *

**#510 WE ARE
NOT FOOLS YET!
CROW TRIBAL
CULTURE &
YELLOWSTONE
NATIONAL PARK**

Start: May 22 at 7 p.m.
End: May 24 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructors: Timothy P. McCleary & Alden Big Man, Ph.D. candidates
\$230
Limit: 20
Credit Pending

In this class led by an anthropologist and Crow tribal historian, you will examine the importance of Yellowstone National Park to Crow people historically and today. Through a combination of classroom sessions and field trips to critical cultural sites, you will learn about the origins and history of Crow people, the Crow explanation of how natural features within Yellowstone National Park were created, child rearing and training, hunting and warfare, historic and contemporary Crow beliefs and practices in Yellowstone Park. *



Photo: Jonmikel Pardo



Photo: NPS

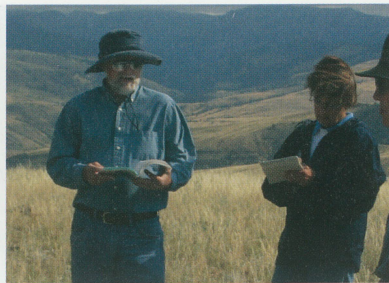


Photo: Jonmikel Pardo



Photo: Pam Cabill

#511 **NEW!** WHO'S THE MOOSE?



Start: May 25 at 8 a.m.
End: May 26 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructor: Dan Tyers, Ph.D.
\$160
Limit: 12

Explore some of the best moose habitat in Yellowstone—the northeast corner of the park. As you enjoy short hikes, you'll find out why moose live in this area, how scientists study these large animals, what they have discovered, and issues facing park managers. In the classroom, you'll learn more about this elusive animal and its natural history—and its future in Yellowstone. Be prepared for short hikes in cold, wet weather. *

#512 **NEW!** ARE WOLVES WORTH THE EFFORT?



Start: May 25 at 9 a.m.
End: May 26 at 5 p.m.
Location: Lamar Buffalo Ranch
Instructors: Douglas Smith, Ph.D. & Christine Smith
\$200
Limit: 11

Some people wonder if wolves are worth all the public attention and scientific research they are receiving. You can learn about the value of this attention to humans and to ecosystems in which wolves live by finding out what scientists are learning from long-term research in Yellowstone and other parts of the world. You'll learn about wolf natural history through field trips to observe them and to examine their scat, tracks, other sign, and carcasses they have killed. *

#513 ARTISTIC FIELD JOURNALS IN YELLOWSTONE



Start: May 26 at 7 p.m.
End: May 29 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructor: Eleanor Williams Clark, M.L.A.
\$275
Limit: 10

Explore the inspiring season of spring with the tools and skills of the artistic field journal. You'll spend early mornings and evenings in the field watching the events of the natural world unfold in the Lamar Valley. In the class, you'll use skins and mounted specimens to study the intricacies of fur and feathers. Add your experiences to the class's bound booklet, which you'll help produce during a session on bookbinding and the artistic elements of field journals. *

#514 FROM BISON TO BIGHORN: THE HOOFED MAMMALS OF YELLOWSTONE



Start: May 27 at 9 a.m.
End: May 29 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructors: Harold Picton, Ph.D. & Terry Enk, Ph.D.
\$300
Limit: 11

Yellowstone visitors have a good chance of seeing bison and elk. But what about the other cud-chewing, hoofed mammals that inhabit the park? In this class, you'll learn about them all: elk, bison, mule deer, pronghorn, bighorn sheep, moose, mountain goats—and maybe see each of them. Through field observation, you'll examine their adaptations and their roles in the Yellowstone ecosystem. *

#515 **NEW!** CHANGING LIVES IN THE LAMAR: THE IMPACT OF WOLVES ON A YELLOWSTONE LANDSCAPE



Start: May 30 at 8 a.m.
End: May 31 at 5 p.m.
Location: Lamar Buffalo Ranch
Instructor: Dan Stahler, M.S.
\$160
Limit: 12

Imagine beginning your day as light arrives in the Lamar Valley and the air fills with low howls of wolves regrouping after a hunt. Spend the early morning and evening walking the hills to study remains of wolf kills, to observe the many species that consume these carcasses, and to understand the role the landscape plays in wolf ecology. Midday, in the classroom, you'll learn about current research on wolves through illustrated presentations. Be prepared for hiking 1 to 2 miles over uneven terrain and standing for several hours in varying weather. *



Photo: Jonmikel Pardo



Photo: NPS



Photo: NPS



Photo: Jonmikel Pardo

#516 MAMMAL TRACKING: INTERPRETING TRACKS, SCAT & OTHER SIGNS



Start: May 30 at 9 a.m.
End: June 2 at 5 p.m.
Location: Lamar Buffalo Ranch
Instructor: James Halfpenny, Ph.D.
\$350
Limit: 12
Credit Pending

Mammals are elusive and hard to observe in the wild, but you can discover their behavior in the signs they leave behind. Through illustrated lectures and laboratories, you'll learn about natural history, ecology, anatomy, gaits, track averaging, relative size, estimating track age and speed, print identification, finding clues, and following trails. During afternoons in the field, you'll put your learning into practice as you explore animal behavior by reading the stories that tracks tell. *

#602 GRIZZLIES: FROM DUMPS TO RECOVERY?



Start: June 1 at 6 p.m.
End: June 4 at Noon
Location: Lamar Buffalo Ranch
Instructors: Sue Consolo Murphy, M.S. & Mark Haroldson
\$345
Limit: 11
Credit Pending

As grizzlies are being considered for delisting from the endangered species list, have you wondered if they've really recovered? What about the challenges and threats they face (and pose)? Through field trips and lectures, you'll explore the bears' natural and cultural history and current status. You'll also search for these magnificent bruins in the early morning. We will meet for a picnic at 6 p.m. the first night. *

#603 NEW! WOLVES AT THE DOOR: SUCCESSES AND CHALLENGES OF RECOVERY



Start: June 2 at 7 p.m.
End: June 4 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructor: Diane Boyd, Ph.D.
\$180
Limit: 12

Late spring in the Lamar Valley presents a vivid backdrop for observing wolves and discussing the challenges they present both inside and outside the park. Each day, you'll have opportunities to observe wolves interacting with other wildlife, and to explore their habitat and look for their tracks and other sign. Through thoughtful discussions and illustrated presentations, you'll explore the challenges of wolf recovery including the science and emotions involved, wolf/prey/hunter dynamics, wolf-livestock conflicts, and wolf habituation to human activities. *

#604 BEARS: BONES, SIGNS & STORIES



Start: June 5 at 9 a.m.
End: June 8 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructors: James Halfpenny, Ph.D. & Jim Garry, M.S.
\$420
Limit: 11
Credit Pending

Ursophiles (Greek for "bear lovers") unite! Discover a uniquely broad view of bears from their evolutionary origins to interpretation of their sign to compelling renditions of classic bear tales. In lectures and the field, you'll learn about bear evolution, ecology, and management from carnivore ecologist Dr. James Halfpenny and the rich cultural history of bears from folklorist Jim Garry. Perhaps you'll see these magnificent bears during the field trips. *

#605 MAMMALS GREAT & SMALL



Start: June 6 at 8:30 a.m.
End: June 9 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructor: Don Streubel, D.A.
\$320
Limit: 12
Credit Pending

If you enjoy observing wildlife, this class provides a wonderful opportunity to spend long hours in the field learning about the large and small mammals of Yellowstone, from bears to chipmunks and lots of species in between—as long as it is seen. For example, if you spot a badger, we'll discuss its role in the Northern Range ecology, its interactions with other mammals, its abundance, and if it is managed in the park. No specific biological background is required, but enthusiasm and a desire to be in the field with animals are prerequisites. *



Photo: Jonmikel Pardo

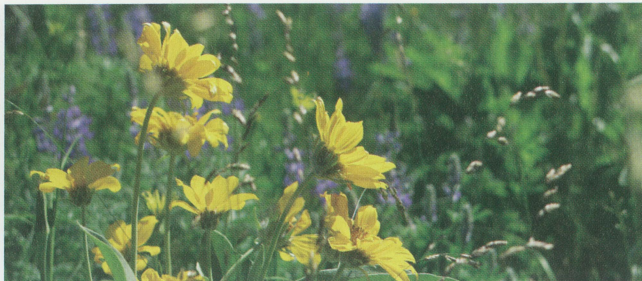


Photo: Jonmikel Pardo



Photo: Jonmikel Pardo

#606 WOLVES OF THE PAST, PRESENT, & FUTURE



Start: June 9 at 9 a.m.
End: June 11 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructors: James Halfpenny, Ph.D. & Jim Garry, M.S.
\$320
Limit: 11
Credit Pending

Discover a uniquely broad view of wolves from their evolutionary origins to interpretation of their sign to compelling renditions of classic wolf tales. In lectures and the field, you'll learn about wolf evolution, ecology, and management from carnivore ecologist Dr. James Halfpenny and the rich cultural history of wolves from folklorist Jim Garry. During field trips, you'll look for these magnificent canids and learn more about their restoration to Yellowstone. *

#607 LIFE ON THE EDGE



Start: June 9 at 7 p.m.
End: June 11 at 4 p.m.
Location: Mammoth Hot Springs
Instructor: Susan Kelly, M.S.
\$180
Limit: 12

Do terms like chemolithotrophy, PCR, and *Sulfolobus* make you scratch your head? Increase your vocabulary by studying the unique thermophiles (heat-loving microorganisms) of Yellowstone. You'll explore thermal areas where microbes make their living eating arsenic and sulfur, viruses live in boiling battery acid, and heat-tolerant plants survive in soil temperatures over 120°F. You'll also find out how thermophiles can be used in medicine and what they reveal about life on other planets. *

#608 SPRING WILDFLOWERS



Start: June 10 at 9 a.m.
End: June 11 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructor: Jennifer Whipple, M.A.
\$160
Limit: 12

From the low-elevation sagebrush to high subalpine meadows, the northern portion of Yellowstone National Park is home to an extraordinary variety of wildflower habitats. In discussions with the park's botanist, you'll learn about wildflower lore, the influence of wildlife, and how climate and geology determine the park's vegetation. You'll learn to recognize wildflower families, genera, and species, including some rarely seen in the park. And you'll look for early blooming wildflowers, such as bitterroot and calypso orchid, by identifying and exploring their habitats. *

#609 **NEW!** NATIVE AMERICAN HERBS AND EDIBLES



Start: June 13 at 9 a.m.
End: June 15 at 4 p.m.
Location: Caribou-Targhee National Forest
Instructor: Wayne Phillips
\$240
Limit: 12

Spend three days in Squirrel Meadows of Caribou-Targhee National Forest and the Bechler area of Yellowstone National Park searching for plants used by Native Americans for food, medicine, and ceremonies. In addition to learning the cultural importance of these plants, you'll also learn their key characteristics and habitat requirements. On the last day, you'll prepare a meal from these wild plants. Be prepared to tent camp at a rustic U.S. Forest Service cabin and to walk 1 to 3 miles over level terrain. (Lodging is also available in Ashton, Idaho, which is less than one hour away.) *

#611 IN CELEBRATION OF BIRDS



Start: June 16 at 7 p.m.
End: June 17 at 4 p.m.
Location: Old Faithful
Instructor: Katy Duffy, M.S.
\$100
Limit: 12

Do birds fascinate you? Do sweet bird songs make you smile? Then come enjoy Yellowstone's winged wonders on the west side of the park. The evening before going afield, you'll review common birds of Yellowstone, with a focus on raptors (hawks, eagles, falcons and owls). The following morning you'll head out to watch birds, polish your identification skills, and listen to bird songs. Wrap up this celebration of birds by investigating specialized adaptations to habitats, how birds migrate, and why birds sing. *



Photo: Jonmikel Pardo



Photo: NPS



Photo: Bridget Lyons



Photo: NPS



Photo: NPS

#612 PLANTS OF THE LEWIS & CLARK EXPEDITION



Start: June 17 at 8:30 a.m.
End: June 18 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructor: Wayne Phillips
\$160
Limit: 12

Explore the Lamar Valley as Lewis and Clark would have two hundred years ago, had they come to what is now Yellowstone National Park. You'll search for the wildflowers, shrubs, and trees they collected, catalogued, and preserved in other parts of the high plains and Rocky Mountains. The Native Americans encountered by the Corps of Discovery were using many of these plants. You'll learn the history and botany of these plants through the field trips plus short illustrated lectures at Lamar. *

#613 WOLVES—REALITY & MYTH



Start: June 17 at 7 p.m.
End: June 19 at 3 p.m.
Location: Lamar Buffalo Ranch
Instructor: Nathan Varley, Ph.D.
candidate
\$180
Limit: 12

Immerse yourself in the ecological, cultural, and spiritual realm of the wolf through field observations and classroom discussions. As you search for wolves, explore the role their mythology plays in your relationship to these controversial carnivores. Plan on being in the field for sunrise and sunset each day and for moderately strenuous hiking in the morning or afternoon. *

#614 NEW! NATIVE TROUT CONSERVATION IN YELLOWSTONE



Start: June 19 at 8 a.m.
End: June 21 at 4 p.m.
Location: Lake Village
Instructors: Todd Koel, Ph.D. & Bob Gresswell
\$300
Limit: 11

If cutthroat trout and other native sport fish are to survive in Yellowstone National Park and remain an ecologically significant component of the ecosystem, it will be through intensive efforts based on sound, defensible science. You can join this effort by participating in spawning stream surveys, stream inventories, native fish restoration activities, and other management and scientific projects. Most of your time will be spent on the streams and lakes of the park, but you'll have some class time to learn details about the trout and current issues making their management a true challenge. *

#615 THE CARNIVORE CONSERVATION CHALLENGE



Start: June 20 at 8:30 a.m.
End: June 22 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructors: Steve Primm, M.A. & Jason Wilmot, M.E.M.
\$300
Limit: 11
Credit Pending

Grizzly bears, gray wolves, Canada lynx, and wolverines are in dramatically different stages of recovery in the Greater Yellowstone Ecosystem. During field trips outside the park, you'll learn up-to-date information about the contentious crossroads facing grizzly bear recovery, the political controversies surrounding wolf recovery, and the formation of recovery plans for lynx and wolverine. You'll also explore the ecology and management of these and other Yellowstone carnivores. *

#616 AMPHIBIANS & WETLANDS OF YELLOWSTONE NATIONAL PARK



Start: June 20 at 9 a.m.
End: June 22 at 5 p.m.
Location: Lamar Buffalo Ranch
Instructors: Charles R. Peterson, Ph.D. & Debra A. Patla, M.S.
\$320
Limit: 11

Yellowstone's wetlands harbor some of the most intriguing but rarely seen animals—amphibians and reptiles. You'll learn how to identify amphibians, where to find them, why they are important, what threatens their populations, and what we can do to conserve them. You may be able to observe the following species: tiger salamanders, boreal toads, boreal chorus frogs, Columbia spotted frogs, and terrestrial garter snakes; and you'll have opportunities to photograph some of them. Be prepared for moderate hiking in hilly terrain. *



Photo: Pam Cabill



Photo: Jonmikel Pardo



Photo: Jonmikel Pardo

#617

PHOTOGRAPHY IN YELLOWSTONE: A FOUNDATION FOR CREATIVITY



Start: June 21 at 9 a.m.
End: June 24 at 4 p.m.
Location: Gardiner, MT
Instructor: Sandra Nykerk, B.S.
\$330
Limit: 11

Yellowstone provides an unparalleled setting for learning and expanding your photographic skills. As you photograph its landscapes, wildlife, and geyser basins, you'll build a foundation of technical and creative photographic principles such as the ethics of nature photography, creative visualization, metering and exposure, and composition. You'll explore the differences between film and digital imaging, and the possibilities of macro photography. You should bring a 35mm SLR camera (either film-based or digital) with interchangeable lenses. You'll depart with technical excellence and a personal vision of photography. *

#618

WILDFLOWERS FOR BEGINNERS



Start: June 23 at 8:30 a.m.
End: June 23 at 5 p.m.
Location: Mammoth Hot Springs
Instructor: William C. Edwards, Ph.D.
\$80
Limit: 12

More than 1000 different kinds of plants add to the visual splendor of the Yellowstone. During a full day in the field, you'll seek them out in meadows, forests, and along streams. Marvel at the visual spectrum they display, learn about their uses and how they were named, and discover how you can identify other flowers you may find in the park. *

#619

THE ART OF WILDFLOWER IDENTIFICATION



Start: June 23 at 8:30 a.m.
End: June 25 at 3 p.m.
Location: Lamar Buffalo Ranch
Instructor: Meredith E. Campbell, B.S.
\$240
Limit: 12

Develop a new way to identify and remember the names of the diverse and beautiful wildflowers that enhance our world. You'll begin with a classroom session on basic botanical terminology, how to use beginner keys and field guides, and simple sketching techniques. Then you'll spend most of the time on short hikes to observe wildflowers and develop these new skills. With this knowledge and the observations that come with field sketching, you'll better understand and appreciate Yellowstone's wildflowers. *

#621

LEARNING BIRDS BY SOUND



Start: June 23 at 7:30 p.m.
End: June 25 at 3 p.m.
Location: Lamar Buffalo Ranch
Instructor: Terry McEneaney
\$180
Limit: 9

Challenge your birding skills by undertaking identification not with binoculars or field guides, but with your ears. Learn to identify bird songs, calls, chip notes, vocal clucks, quivering, fluttering, gaping, and even flying noises. Using intense concentration, you'll focus on the sounds of 30 species to form a sound learning foundation, and will learn approximately 20 more species. You'll spend most of your time in the field developing these difficult but rewarding skills. *

#622

EXPLORING YELLOWSTONE BY MAP & COMPASS



Start: June 24 at 9 a.m.
End: June 24 at 4 p.m.
Location: Old Faithful
Instructor: Orville E. Bach, Jr., Ed.D.
\$80
Limit: 12

Learn the essential map and compass skills that will enable you to explore Yellowstone's off-trail backcountry and its seldom-visited natural phenomena such as lakes and waterfalls. You'll learn to read a topographic map and use a compass by actually setting and following compass courses to hidden lakes and historical sites in the Old Faithful area. Maps and compasses will be provided. *



Photo: Jonmikel Pardo



Photo: Jonmikel Pardo



Photo: NPS



Photo: Jonmikel Pardo

#623 **NEW!** INDIANS AND GEYSERS



Start: June 25 at 9 a.m.
End: June 25 at 5 p.m.
Location: Mammoth Hot Springs
Instructor: Rosemary Sucec, M.A.
\$80
Limit: 12

One of the most persistent misconceptions about Yellowstone is that Native Americans were afraid of its geysers. You can learn the truth through visits with the park's anthropologist to hydrothermal sites that tribes consider vital to their culture. You'll learn about the importance of the Mud Volcano area, Norris Geyser Basin, and Mammoth Hot Springs through short hikes and discussions. You'll also visit Roaring Mountain and Apollinaris Spring to find out about their importance to the tribes. *

#624 **NEW!** FIELD SKETCHING FOR BEGINNERS: THE ART OF NATURE STUDY



Start: June 26 at 9 a.m.
End: June 27 at 3 p.m.
Location: Lamar Buffalo Ranch
Instructor: Meredith E. Campbell, B.S.
\$160
Limit: 12

See more as the natural world unfolds for you in the pages of your own field sketch journal. By learning to sketch you'll begin to see things you have never noticed before. Sketching is a simple process of mechanics and basic geometry that everyone can learn, at any age. You'll learn and practice these skills as we explore the Lamar Valley and its habitats and creatures. *

#625 AQUATIC INSECTS OF YELLOWSTONE



Start: June 26 at 9 a.m.
End: June 27 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructor: Robert Anderson, Ph.D.
\$160
Limit: 12
Credit Pending

What goes on beneath the surface of Yellowstone's ponds, riffles, streams, and rivers? You'll find out by examining and observing the diversity of aquatic insects in Yellowstone. Through field and lab excursions, you'll follow young mayflies, caddisflies, salmonflies, and their relatives as they live with backswimmers, water boatmen, water striders, water bugs, scavengers, diving beetles, whirligigs, and maggots. You'll also examine the bigger picture: How these aquatic insects affect the lives of larger animals such as fish and birds. *

#626 YELLOWSTONE'S SOUTHERN ROADSIDE HISTORY



Start: June 27 at 8:30 a.m.
End: June 29 at 4 p.m.
Location: Old Faithful
Instructor: Lee Whittlesey, M.A., J.D.,
Ph.D. (Hon.)
\$240
Limit: 12
Credit Pending

Yellowstone's landscape is rich with evidence of previous human activity. Through roadside viewing and short hikes (up to 3 miles round-trip), you'll examine sites that reveal this history from early Native American use to more recent human activity. You'll learn more interesting details about the park's history through illustrated discussions led by Yellowstone's historian. He will also take you on a special tour of Yellowstone's antique stagecoaches and early buses, which are not usually on view to the public. *

#628 YELLOWSTONE TIME TRAVEL: HIKING INTO THE GEOLOGICAL PAST



Start: June 27 at 7 p.m.
End: June 30 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructor: Robert W. Spoelhof, Ph.D.
\$260
Limit: 12
Credit Pending

Take a walk on any Yellowstone hiking trail and you will find lost worlds underfoot and all around—from ancient seas to explosive volcanism to a frozen Yellowstone capped by 3,000 feet of ice. Through illustrated presentations and hikes of 4 to 7 miles, you'll explore Yellowstone's rich geologic history that can be found by anyone venturing onto the park's trails. *

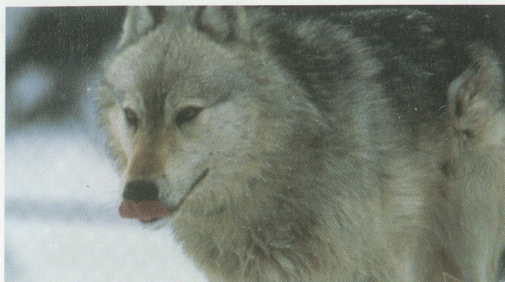


Photo: NPS



Photo: NPS



Photo: Jonmikel Pardo



Photo: NPS

#629 **NEW!** WOLVES IN AND OUT OF THE PARK: ECOLOGY AND MANAGEMENT



Start: June 28 at 8 a.m.
End: June 30 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructor: Jon Trapp, M.S.
\$240
Limit: 12

Wolves inside Yellowstone National Park have a dedicated following of scientists, amateur observers, and enthusiastic visitors. Outside the park, they are not always so welcomed—nor easy to manage. Through observation, class discussions, and field trips, you'll learn more about wolf ecology, how these large predators impact agricultural communities, and other complex issues of their management. *

#701 GHOST HOTELS OF YELLOWSTONE



Start: July 1 at 8 a.m.
End: July 1 at 5 p.m.
Location: Old Faithful
Instructor: Leslie J. Quinn, M.Ed.
\$80
Limit: 12

Did they really build a hotel in Yellowstone and never open it? Has Old Faithful Inn lost 51 rooms since it opened in 1904? Which hotel was slated to have a "drive through" installed for automobiles? In this field class, you'll discover the answers to these and other questions. As you tour the sites of Old Faithful, Fountain, Marshall's, Norris, Canyon, and Lake hotels, you'll envision the scenes through antique photographs and learn the hotel histories from a park hotel expert. You might even discover some ghosts among the current hotels. *

#702 WOLVES OF THE WORLD



Start: July 1 at 9 a.m.
End: July 2 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructors: Douglas Smith, Ph.D. & Matt Metz, M.S.
\$200
Limit: 11
Credit Pending

In this comprehensive and intensive class, you'll learn about worldwide wolf population status, taxonomy, predator-prey relationships, relationships with other carnivores, morphology, and evolution. You'll also discuss controversies involving Yellowstone wolves, such as their interactions with humans and livestock. On field trips, you'll visit one of the acclimation pens used during wolf restoration, examine typical wolf habitat, and perhaps see wolves in the wild. *

#703 A TRAIL THROUGH LEAVES: THE ART OF THE ILLUSTRATED FIELD JOURNAL



Start: July 1 at 9 a.m.
End: July 4 at Noon
Location: Lamar Buffalo Ranch
Instructor: Hannah Hinchman
\$320
Limit: 12

Enter nature in a new way, through the exhilaration and creativity of an illustrated field journal. You'll learn to mix words and images with exploration and introspection to record your encounters with the natural world. Explore these techniques through early morning writing rambles, classroom and field instruction in basic drawing methods, creative mapping, design and color, and careful observation. You'll have ample time for solitude and for browsing in the instructor's extensive library. *

#705 OLD TIMES AT OLD FAITHFUL



Start: July 2 at 9 a.m.
End: July 2 at 5 p.m.
Location: Old Faithful
Instructor: Leslie J. Quinn, M.Ed.
\$80
Limit: 15

Imagine diving into a swimming pool as Old Faithful erupts, or enjoying hothouse flowers in your room at the Old Faithful Inn. You'll explore these long-gone places through site visits, antique photographs, and discussions with a park hotel expert. You'll also visit current places important to the cultural history of Old Faithful village, such as the Inn, the Lodge, and the two general stores. Find out what happened to the Haynes Photo Shops, why the Upper General Store is nicknamed the B.A.C., and other interesting details about Old Faithful village past and present. *

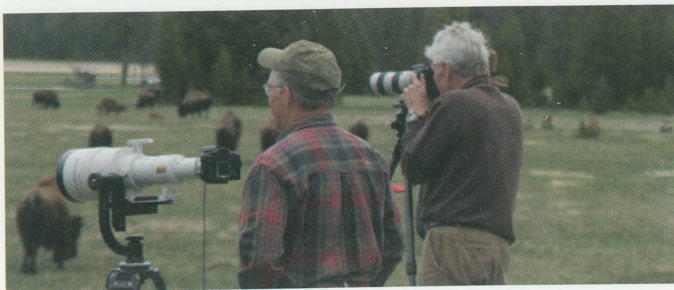


Photo: Jonmikel Pardo



Photo: Jonmikel Pardo



Photo: Jonmikel Pardo

#706 **NEW!** PHOTOGRAPHING YELLOWSTONE'S SUMMER



Start: July 3 at 9 a.m.
End: July 6 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructor: Tom Murphy
\$320
Limit: 12

Surrounded by the lively, colorful landscape of summer in Yellowstone, you'll learn photography techniques and philosophy. On early morning and evening field trips, you'll learn to photograph nesting birds and other wild animals, scenics, and the beginnings and endings of each day. You'll also discuss composition, ethics, and technical challenges. Bring your digital or film camera. This course is ideal for beginning to intermediate photographers. *

#707 **ARTISTIC FIELD JOURNALS**



Start: July 6 at 9 a.m.
End: July 9 at 2 p.m.
Location: Old Faithful
Instructor: Eleanor Williams Clark,
M.L.A.
\$335
Limit: 10

Thomas Moran's field sketches in 1871 helped convince the public and politicians to create Yellowstone National Park. Create your own artistic notes in this same landscape of thermal features, creeks, rivers, meadows, and wildlife in the Old Faithful area. Learn to record your observations in ink, pencil, charcoal, and watercolor paint and experience how field art can provide you with a unique understanding of the park. *

#708 YELLOWSTONE UNDER ICE



Start: July 7 at 9 a.m.
End: July 9 at 5 p.m.
Location: Lamar Buffalo Ranch
Instructor: Kenneth Pierce, Ph.D.
\$240
Limit: 12
Credit Pending

Through field trips and hikes, you can observe first-hand the geologic forces that shaped dramatically different terrains in the northern Yellowstone area and laid the foundation for its ecosystems. Find out how glaciers helped create the grassland ecosystems that support much of Yellowstone's wildlife. Hike to the summit of Mount Washburn, which was under a vast ice cap at one time, for an overview of Yellowstone's geologic landscape. Follow these forces beyond the park's borders to observe how volcanoes and catastrophic glacial floods sculpted other parts of this vast landscape. *

#709 **NATURE PHOTOGRAPHY IN YELLOWSTONE: THE DIGITAL IMAGE**



Start: July 7 at 9 a.m.
End: July 10 at 4 p.m.
Location: Gardiner, MT
Instructor: Sandra Nykerk, B.S.
\$330
Limit: 11

Using the many photographic opportunities in Yellowstone National Park as inspiration, you'll integrate the many aspects of digital photography into your photographic skill set. Explore the digital workflow from pixels to prints and learn about the differences between film and digital cameras, and techniques of image editing and adjustment. You'll have time to practice these new digital skills in the field and the class. Bring a digital SLR camera with which you are familiar; you should also understand basic photographic principles. You'll be able to produce digital prints but will be responsible for lab fees. *

#710 **NEW!** WHAT'S NEW WITH YELLOWSTONE'S WOLVES?



Start: July 7 at 6 p.m.
End: July 9 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructors: Nathan Varley & Dan
MacNulty, Ph.D. candidates
\$225
Limit: 11

Since the day wolves stepped into Yellowstone in 1995, dozens of scientists have studied them. What's new now? You'll find out from two scientists whose work focuses on wolf-prey relationships, territoriality among packs, population dynamics, and conservation issues. In the mornings and evenings, you'll climb up hills and stand along roadsides to look for wolves. During classroom sessions, you'll view research results and discuss how they relate to what you have observed. *



Photo: NPS



Photo: NPS



Photo: Jonmikel Pardo

#711 ALPINE WILDFLOWERS OF THE BEARTOOTH PLATEAU



Start: July 9 at 7 p.m.
End: July 11 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructor: John S. Campbell, Ph.D.
\$180
Limit: 12
Credit Pending

High, windswept, and cold, the Beartooth Plateau seems inhospitable to wildflowers. In this field course, you'll discover the truth: the plateau is rich with wildflowers adapted to live at high altitudes. You'll learn about these alpine survivors, their ecological adaptations, and the distribution and ecology of tundra plant communities. *

#712 MAMMAL TRACKING: INTERPRETING TRACKS, SCAT & OTHER SIGNS



Start: July 10 at 9 a.m.
End: July 13 at 5 p.m.
Location: Lamar Buffalo Ranch
Instructor: James Halfpenny, Ph.D.
\$350
Limit: 12
Credit Pending

Mammals are elusive and hard to observe in the wild, but you can discover their behavior in the signs they leave behind. Through illustrated lectures and laboratories, you'll learn about natural history, ecology, anatomy, gaits, track averaging, relative size, estimating track age and speed, print identification, finding clues, and following trails. During afternoons in the field, you'll put your learning into practice as you explore animal behavior by reading the stories that tracks tell. *

#713 IN THE FOOTSTEPS OF LEWIS & CLARK



Start: July 11 at 9 a.m.
End: July 13 at 3 p.m.
Location: Mammoth Hot Springs
Instructor: Jim Garry, M.S.
\$240
Limit: 10
Credit Pending

In the summer of 1805, Lewis and Clark passed through the Yellowstone region en route to the Pacific Ocean. More than 200 years later, you can walk in their footsteps, see what they saw, read their journals, and speculate on what they would think of this country today. After an orientation in Gardiner, Montana, you'll join their route at the Three Forks of the Missouri River (west of Bozeman, Montana). Your journey will continue south to Dillon and on to Lemhi Pass. Along the way, you'll examine some of the impacts on the country since the days of Lewis and Clark. *

#714 NEW! DAY HIKING THE WILD YELLOWSTONE: GRAND CANYON AREA



Start: July 11 at 7 p.m.
End: July 14 at 4 p.m.
Location: Canyon Village
Instructor: Julianne Baker, M.A.
\$260
Limit: 12

The Grand Canyon of the Yellowstone, Observation Peak, Mount Washburn, Hayden Valley, lodgepole forests, flower-filled meadows, backcountry lakes and streams—these make up the Canyon area of Yellowstone. Explore these landscapes during a series of day hikes where you'll learn the geology, natural features, and cultural stories about the area. You'll begin with an evening orientation to review the basics of safe, comfortable, low-impact backcountry travel. Expect to hike 8 to 12 miles daily with possible elevation gains of 1500 feet, walking trails that few visitors travel. *

#715 YELLOWSTONE'S WILDLIFE HISTORY



Start: July 12 at 9 a.m.
End: July 14 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructors: Lee Whittlesey, M.A., J.D., Ph.D. (Hon.) & James Pritchard, Ph.D.
\$300
Limit: 11
Credit Pending

A tangled tale of cougars exterminated, bison protected, fish propagated, bears degraded, and wolves restored—the history of wildlife in Yellowstone includes some of the park's finest moments and darkest hours. You'll examine this history using documents from the Yellowstone National Park archives, visiting historic sites, and discussing the issues with two historians intimately familiar with Yellowstone's wildlife. Find out how this history has shaped how the world views wildlife, national parks, and nature itself. *



Photo: Jonmikel Pardo



Photo: Jonmikel Pardo



Photo: Jonmikel Pardo

#716

YELLOWSTONE'S GEOECOSYSTEM



Start: July 13 at 8 a.m.
End: July 15 at 4 p.m.
Location: Mammoth Hot Springs, Lake Village
Instructor: Paul Doss, Ph.D.
\$300
Limit: 10
Credit Pending

Find out firsthand how geology puts the "system" in ecosystem by exploring the geologic controls so magnificently displayed in Yellowstone National Park. During field trips and brief lectures, you'll learn how geology controls the ecosystem—from entire landscapes to small hillside niches, from charismatic megafauna to microscopic plants and animals. You'll also discover the intricate interplay among volcanic and hydrothermal processes, rock types, hydrogeology and the distribution of flora and fauna that make Yellowstone so unique. Participants should have a small overnight bag for the stay at Lake on the second night. *

#717 LESSER-KNOWN CARNIVORES



Start: July 14 at 9 a.m.
End: July 16 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructor: James Halfpenny, Ph.D.
\$255
Limit: 12
Credit Pending

Meet the lesser-known carnivores of the Greater Yellowstone Ecosystem: coyotes, foxes, cougars, lynx, bobcats, wolverines, otters, fisher, badgers, and martens. You'll explore their biology, ecology, behavior, conservation, and evolution through classroom presentations and field trips to the habitats where these carnivores are found. *

#718 NEW! EXPLORERS OF YELLOWSTONE



Start: July 15 at 9 a.m.
End: July 16 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructor: Jim Garry, M.S.
\$160
Limit: 12

European-American explorers—from individual hunters to organized scientific expeditions—brought Yellowstone to the attention of the world. Today's explorers continue to reveal the wonders of this region. You'll discover this exploration history through the explorers' own stories and records, class presentations, and field trips to sites that speak of these explorations. *

#719 GEYSERS, MUDPOTS & HOT SPRINGS



Start: July 15 at 9 a.m.
End: July 17 at 4 p.m.
Location: Old Faithful
Instructor: Duncan Foley, Ph.D.
\$255
Limit: 12
Credit Pending

Based in the center of the world's greatest concentration of hydrothermal features, you'll examine how they form and why they do the things they do. You'll spend the first day looking at the plumbing of hydrothermal systems, and observing features at Mud Volcano and along the shores of Yellowstone Lake. The second day you'll explore the Upper, Midway, and Lower geyser basins—and probably see several major geysers erupt. On the third day, you'll visit dynamic Norris Geyser Basin and end the day among the travertine terraces of Mammoth Hot Springs. *

#720 NEW! MAMMOTH: 320 MILLION YEARS IN THE MAKING



Start: July 17 at 8 a.m.
End: July 18 at 4 p.m.
Location: Mammoth Hot Springs
Instructor: Paul Doss, Ph.D.
\$160
Limit: 12

In this field course, you'll unravel the unique geological history and development of the Mammoth travertine terraces and the surrounding landscape. During field trips and short hikes, you'll study the geology forming the Gallatin Range, the Lamar Valley, Norris Geyser Basin, and learn how they relate to the geologic history of Mammoth. You'll also see how different geologic materials behave differently and you'll make specific geological, ecological, and hydrothermal observations in the backcountry. *



Photo: Jonmikel Pardo

#721 **NEW!** TRANSFORMING LIFE INTO ESSAY



Start: July 17 at 9 a.m.
End: July 18 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructors: William Kittredge & Annick Smith
\$200
Limit: 18

Consider all the stories or anecdotes you've told recently about your daily life or adventures. A few will stand out as stories that can become intriguing essays, which you'll begin in this workshop. Working with two accomplished writers, you will discuss your ideas, explore the craft of writing through exercises, and learn useful techniques to transform your experience into essay. 🌟



Photo: Jonmikel Pardo

#722 **GEYSERS, MUDPOTS & HOT SPRINGS**



Start: July 19 at 9 a.m.
End: July 21 at 4 p.m.
Location: Old Faithful
Instructor: Duncan Foley, Ph.D.
\$255
Limit: 12
Credit Pending

Based in the center of the world's greatest concentration of hydrothermal features, you'll examine how they form and why they do the things they do. You'll spend the first day looking at the plumbing of hydrothermal systems, and observing features at Mud Volcano and along the shores of Yellowstone Lake. The second day you'll explore the Upper, Midway, and Lower geyser basins—and probably see several major geysers erupt. On the third day, you'll visit dynamic Norris Geyser Basin and end the day among the travertine terraces of Mammoth Hot Springs. 🌟

#724 **ALPINE ECOLOGY IN THE BEARTOOTH**



Start: July 22 at 6 a.m.
End: July 24 at 4 p.m.
Location: Cooke City, MT
Instructor: James Halfpenny, Ph.D.
\$245
Limit: 12
Credit Pending

Led by an avid arctic ecologist, you'll explore the high-elevation landscapes of the Beartooth Plateau. Experience first-hand the dichotomy of stunning alpine wilderness and a forbidding environment of bitter cold and cutting wind. You'll learn how geology, climate, plants, and animals form the alpine ecosystem. Using an ecosystem approach, we'll examine individual species and their remarkable adaptations to this extreme environment of unsurpassed beauty. 🌟

#725 **NEW!** LAMAR IN THE NATURALIST TRADITION



Start: July 25 at 7 a.m.
End: July 28 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructors: George Bumann, M.S., Robert W. Spoelhof, Ph.D., & Eleanor Williams Clark, M.L.A.
\$325
Limit: 30

Embrace the "naturalist tradition" in this new educational retreat. Join 30 other enthusiasts in studying the Lamar Valley as naturalists do: through the various disciplines of art and science and by sharing your experiences with each other. Each day, you'll break into small groups to learn different things with one of three instructors. You can choose to focus on geology, wildlife, or field journaling (or combinations of them) as you explore the riches of the Lamar. In the evening, everyone will gather to share observations, field notes, sketches, and excitement. Through these fascinating and fun days and nights with other naturalists, you'll create a more complete picture of the Lamar Valley, in the naturalist tradition. 🌟



Photo: Jonmikel Pardo

#726 **NEW! THE MILITARY IN YELLOWSTONE**



Start: July 25 at 8:30 a.m.
End: July 26 at 5 p.m.
Location: Mammoth Hot Springs
Instructor: Lee Whittlesey, M.A., J.D., Ph.D. (Hon.)
\$160
Limit: 12

Before the National Park Service came into being, the U.S. Army managed Yellowstone National Park for more than 30 years. Through class discussions and a walking tour of Fort Yellowstone, you'll examine the U.S. Army's tenure in Yellowstone National Park and discover why the troops were here, their successes and failures, why they left, and the legacy the Army left to the National Park Service. 🌟



Photo: Pam Cabill



Photo: Pam Cabill



Photo: NPS

#727 GEOLOGY OF YELLOWSTONE LAKE



Start: July 27 at 7 p.m.
End: July 30 at 4 p.m.
Location: Lake Village
Instructor: Lisa Morgan, Ph.D.
\$260
Limit: 12
Credit Pending

In this field-intensive class, you'll explore the geologic forces shaping Yellowstone Lake, the centerpiece of the dynamic Yellowstone Plateau, and how these forces influence the lake's ecosystem. In brief illustrated lectures and discussions, you'll find out how high-resolution technologies have been used to map the floor of the lake. In the field, you'll examine the active hydrothermal systems, large explosion craters and associated deposits, and rhyolitic lava flows that create the dynamic landscape of Yellowstone. *

#728 DAY HIKING THE WILD YELLOWSTONE: NORTHERN RANGE AREA



Start: July 28 at 7:30 p.m.
End: July 31 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructor: Julianne Baker, M.A.
\$260
Limit: 12

John Muir once exclaimed that Yellowstone is "wild enough to awaken the dead." More than 100 years later, Yellowstone's wild side is still out there waiting for you lace up your boots, leave the roadside, and hike into the backcountry. After an evening to review the basics of safe, comfortable, low-impact backcountry travel, you will hit the trail to soak up the history, geology, ecology, wildlife and wildflowers with stories, discussion, and hands-on exploration. Daily hikes will range from 8 to 12 miles, with 1500-foot elevation gains, so come prepared to breathe the air that "is electric and full of ozone." *

#730 BEARS: FOLKLORE & BIOLOGY



Start: July 29 at 9 a.m.
End: July 31 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructors: Jim Garry, M.S. & Harold Picton, Ph.D.
\$300
Limit: 11
Credit Pending

Why does the bear loom large in Yellowstone and in our psychic landscape? You'll explore this question in both the classroom and the field. Learn about the bear's basic biology, including reproduction, behavior, food habits, home ranges, habitat use, and population biology. You'll also delve into the bears of myths, dreams, folklore, and popular culture. Throughout the course, you'll explore the importance of both scientific and folk knowledge as part of our relationship with the land. *

#801 TRUE TO LIFE: THE ART & SCIENCE OF DRAWING ANIMALS



Start: August 1 at 8:30 a.m.
End: August 3 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructors: Peg Steunenberg & George Bumann, M.S.
\$300
Limit: 11

Find out why a fox's face fur falls the way it does and how to capture those details with drawing. See for yourself where the ankle is on an elk and where it's hidden on a bird's wing. You'll learn to use pencil, pen and ink, and watercolor to depict fur, feathers, and behavior in this class designed for anyone with an interest in learning more about Yellowstone's wild animals and how to capture their lives in art. *

#802 NEW! EXPLORING YELLOWSTONE WITH SCIENCE AND MUSIC



Start: August 1 at 9 a.m.
End: August 3 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructors: James Halfpenny, Ph.D. & Ron Cisar, M.S.
\$300
Limit: 11

In this unique class, you'll make "musical discovery visits" to major habitats such as riparian, grassland, forest, and alpine. Use techniques and activities from science and music to compare and contrast these habitats and discuss their future. In the evenings, you'll expand your exploration through more stories and music: One evening, Ron will present a guitar concert, "A Celebration of the Earth," and the other evening Jim will share "The Magic of the Bears." *



Photo: Pat Cole



Photo: Jonmikel Pardo



Photo: Jonmikel Pardo

#804 **NEW!** BISON, BEARS, AND SNOWMOBILES: CONTROVERSY IN YELLOWSTONE



Start: August 3 at 7 p.m.
End: August 6 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructor: Michael Yochim, Ph.D.
\$325
Limit: 12

Wolves, lake trout, wilderness designation, bison, bears, and snowmobiles—you'll learn the background of these and other issues through class presentations and field trips to explore sites and to observe the animals involved. You'll also examine the values people bring to these controversies, how various interest groups relate to the National Park Service, and what these controversies contribute to creating a sense of place in Yellowstone. *

#805 **NEW!** SEARCHING FOR YELLOWSTONE'S MOST ELUSIVE CARNIVORES



Start: August 4 at 9 a.m.
End: August 5 at 5 p.m.
Location: Lamar Buffalo Ranch
Instructors: James Halfpenny, Ph.D. & Kerry Murphy, Ph.D.
\$200
Limit: 11

How do you study an animal you seldom see? You'll discover the answers by working with two scientists who are researching Yellowstone's most elusive predators—the wolverine and the Canada lynx. You'll learn to identify these carnivores, their footprints, and their sign. You'll visit a live-trap used on the wolverine research project and see how hair-snare devices can detect Canada lynx. And you'll find out why this research is so important to these animals and the rest of Yellowstone's ecosystem. *

#806 **GHOST HOTELS OF YELLOWSTONE**



Start: August 5 at 8 a.m.
End: August 5 at 5 p.m.
Location: Old Faithful
Instructor: Leslie J. Quinn, M.Ed.
\$80
Limit: 12

Did they really build a hotel in Yellowstone and never open it? Has Old Faithful Inn lost 51 rooms since it opened in 1904? Which hotel was slated to have a "drive through" installed for automobiles? In this field class, you'll discover the answers to these and other questions. As you tour the sites of Old Faithful, Fountain, Marshall's, Norris, Canyon, and Lake hotels, you'll envision the scenes through antique photographs and learn the hotel histories from a park hotel expert. You might even discover some ghosts among the current hotels. *

#807 **OLD TIMES AT OLD FAITHFUL**



Start: August 6 at 9 a.m.
End: August 6 at 5 p.m.
Location: Old Faithful
Instructor: Leslie J. Quinn, M.Ed.
\$80
Limit: 15

Imagine diving into a swimming pool as Old Faithful erupts, or enjoying hothouse flowers in your room at the Old Faithful Inn. You'll explore these long-gone places through site visits, antique photographs, and discussions with a park hotel expert. You'll also visit current places important to the cultural history of Old Faithful village, such as the Inn, the Lodge, and the two general stores. Find out what happened to the Haynes Photo Shops, why the Upper General Store is nicknamed the B.A.C., and other interesting details about Old Faithful village past and present. *

#808 **EXPLORING YELLOWSTONE'S MICROBES**



Start: August 6 at 9 a.m.
End: August 9 at 5 p.m.
Location: Lamar Buffalo Ranch
Instructor: Anna-Louise Reysenbach, Ph.D.
\$320
Limit: 12
Credit Pending

Discover the spectacular microbe communities that thrive in Yellowstone's hot springs. You'll learn about their amazing diversity, the extremes in which they thrive, and what they might reveal about how life evolved on Earth and if life exists on other planets. You'll combine brief classroom time with visits and occasional short hikes to hydrothermal areas. You'll be able to help extract DNA from samples collected during the day and to use the polymerase chain reaction (PCR) to amplify the microbes' diagnostic genes. In the evening, you'll learn about related topics such as the biology of deep-sea hydrothermal vents. *

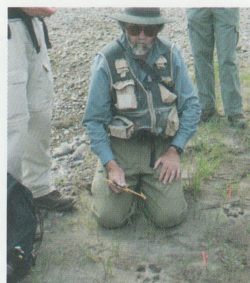


Photo: Jonmikel Pardo



Photo: Jonmikel Pardo



Photo: Jonmikel Pardo



Photo: Jonmikel Pardo

#809 INTRODUCTION TO MAMMAL TRACKING



Start: August 7 at 8 a.m.
End: August 7 at 5 p.m.
Location: Gardiner, MT
Instructor: James Halfpenny, Ph.D.
\$85
Limit: 12

Brush up your natural history detective skills by learning to read mammal tracks. In the morning at Dr. Halfpenny's Track Museum in Gardiner, you'll learn about foot anatomy, footprint identification, movements and gaits, and trails. In the afternoon, you'll travel to one of Yellowstone's hottest tracking areas to locate footprints, make plaster casts, follow faint trails, and interpret the stories that tracks tell. *

#810 SHAPING THE NORTHERN YELLOWSTONE LANDSCAPE



Start: August 7 at 9 a.m.
End: August 9 at 3 p.m.
Location: Lamar Buffalo Ranch
Instructor: Grant A. Meyer, Ph.D.
\$240
Limit: 12
Credit Pending

Northern Yellowstone displays the spectacular geologic processes—from volcanism to huge landslides—that shaped this region. You'll learn to read this landscape, interpret its evolution, and understand how physical processes and climate affect Yellowstone's ecosystems. With illustrated programs, you'll see less accessible areas and learn about scientific methods of interpreting geologic processes and history. During short hikes each day, you'll apply this knowledge and use maps and digital images to understand this still-evolving landscape. *

#811 NEW! FOREST, FIRE, AND DISTURBANCE ECOLOGY



Start: August 9 at 7 p.m.
End: August 11 at 4 p.m.
Location: Old Faithful
Instructor: Dan Tinker, Ph.D.
\$180
Limit: 12

Yellowstone's forest landscape includes blackened and reddened trees that offer visual evidence of how natural disturbances affect forest ecosystems. As you visit the park's forests, you'll examine these trees, measure forest response to fire and insect outbreaks, examine how lodgepole pine survive intense fires, and perhaps excavate pine bark beetles to observe their biology, breeding, and effects on trees. *

#813 DAY HIKING THE WILD YELLOWSTONE: LAKE VILLAGE



Start: August 12 at 7:30 p.m.
End: August 15 at 4 p.m.
Location: Lake Village
Instructor: Julianne Baker, M.A.
\$260
Limit: 12

From the top-of-the-world views on Avalanche Peak to the churning waters of the Canyon's Seven Mile Hole, Yellowstone's interior offers an outstanding diversity of backcountry hiking. After an evening to review the basics of safe, comfortable, low-impact backcountry travel, you will hit the trail to soak up the history, geology, ecology, wildlife and wildflowers with stories, discussion and hands-on exploration. Daily hikes will range from 8 to 12 miles, with possible 2000-foot elevation gains, so bring the boots that are your feet's best friend. *

#815 WILD EDIBLE PLANTS & MEDICINAL HERBS



Start: August 19 at 8 a.m.
End: August 21 at 2 p.m.
Location: Caribou-Targhee National Forest
Instructor: Robyn Klein, M.S.
\$250
Limit: 12
Credit Pending

Experience food gathering as early Americans did by searching among the meadows, aspen groves, and coniferous forests of the Bechler area between Yellowstone and Grand Teton National Parks. You'll learn to identify edible and medicinal plants, and taste their leaves and fruit. You'll also learn how to build a root-baking pit and how to make an herbal salve and tincture. Be prepared to tent camp at a rustic U.S. Forest Service cabin and to walk 1 to 3 miles over level terrain. (Lodging is also available in Ashton, Idaho, which is less than one hour away.) *



Photo: Scott Morrison



Photo: Scott Morrison



Photo: NPS

#816 YELLOWSTONE'S WORLD OF BATS



Start: August 19 at 11 a.m.
End: August 20 at 11 p.m.
Location: Mammoth Hot Springs
Instructor: Douglas Keinath
\$160
Limit: 12

At dusk, most Yellowstone visitors retire indoors—but not if you are taking this tour of the world of bats. You'll get to know and observe more than a dozen bat species that fly the night skies of the Yellowstone area. During the day, you'll learn about bats through illustrated talks. At night, you're in the field. You'll use an echolocation handheld computer to locate bats hunting over a wetland, and you'll help a scientist count the park's most sensitive bat species as they fly from a cave at dusk. *

#817 DISCOVER YOUR SKY: OBSERVING TECHNIQUES FOR BACKYARD ASTRONOMERS



Start: August 19 at 7 p.m.
End: August 21 at 5 p.m.
Location: Lamar Buffalo Ranch
Instructor: Mike Murray
\$180
Limit: 15

If you've ever wanted to learn the "tricks" for easily getting around the sky, this class is for you! Yellowstone's pristine night sky is your lab, star maps, binoculars, and telescopes are your tools. You'll spend the early night hours "star-hopping," which is one of the most fun and useful ways to find constellations. You'll also learn to find astronomical wonders in the night sky, including deep sky objects that elude many night-sky watchers. *

#818 WONDERLAND'S SERENE SPOT: HISTORY ON YELLOWSTONE LAKE



Start: August 22 at 9 a.m.
End: August 22 at 4 p.m.
Location: Lake Village
Instructor: Leslie J. Quinn, M.Ed.
\$100
Limit: 10

Lake Hotel has long been a place to slow down and enjoy Yellowstone, but the hotel's button-down exterior belies the area's colorful past. Traveling on foot and in a 1937 White Touring Car, you'll visit the hotel and Lake Lodge plus the sites of a vanished lodge, the colorful Wylie "Permanent Camp," and other historical curiosities. You'll also travel by boat to Stevenson Island, where the shipwrecked SS *E. C. Waters* rests. *

#819 THE BISON OF YELLOWSTONE



Start: August 22 at 9 a.m.
End: August 24 at 3 p.m.
Location: Lamar Buffalo Ranch
Instructors: Jim Garry, M.S. & Harold Picton, Ph.D.
\$300
Limit: 11
Credit Pending

The big boys are rumbling. While you're observing the often noisy and always fascinating bison rut, you'll also learn about one of the Old West's classic, enduring symbols. You'll explore the bison's history and natural history, its role in native cultures, and its role in the expanding white culture of the nineteenth century. Discover the role of the Buffalo Ranch in the survival of the bison and explore the current political turmoil around the bison management and the definition of the Yellowstone ecosystem. *

#820 THE AMERICAN BEAVER: ECOSYSTEM ARCHITECT AND HABITAT-MAKER



Start: August 23 at 9 a.m.
End: August 24 at 4:30 p.m.
Location: Lamar Buffalo Ranch
Instructor: Bruce Thompson, M.S.T.
\$160
Limit: 12

No other animal on our continent has so uniquely gnawed its way into both the natural and cultural history of our nation. As you explore the beavers' wetland habitat, you will observe active beaver colonies, learn about beaver evolution and behavior, discover the status of *Castor canadensis* in the greater Yellowstone area, find out what current research tells us about this preeminent dam builder, and even see some of the latest innovations in low impact beaver "behavior modification." *



Photo: NPS

#821 THE WOLVES OF YELLOWSTONE



Start: August 25 at 9 a.m.
End: August 27 at 4 p.m.
Location: Gardiner, MT
Instructor: George Bumann, M.S.
\$240
Limit: 12

Are you intrigued by wolves and hungry to learn more? This course will satisfy even the biggest appetite for wolf knowledge and experience. You'll begin with a comprehensive overview of wolf evolution, behavior, communication, and predation. Then you'll learn about Yellowstone wolf restoration, how well the wolves are doing, and how they relate to prey species, scavengers, and other animals. In addition to some class time, you'll spend plenty of time in the field observing wolves and prey, visiting the carcass of an animal killed by wolves, and exploring wolf habitat. *



Photo: Jonmikel Pardo

#822 DAY HIKING THE WILD YELLOWSTONE: NORTHERN RANGE AREA



Start: August 28 at 7:30 p.m.
End: August 31 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructor: Julianne Baker, M.A.
\$260
Limit: 12

John Muir once exclaimed that Yellowstone is "wild enough to awaken the dead." More than 100 years later, Yellowstone's wild side is still out there waiting for you lace up your boots, leave the roadside, and hike into the backcountry. After an evening to review the basics of safe, comfortable, low-impact backcountry travel, you will hit the trail to soak up the history, geology, ecology, wildlife and wildflowers with stories, discussion, and hands-on exploration. Daily hikes will range from 8 to 12 miles, with 1500-foot elevation gains, so come prepared to breathe the air that "is electric and full of ozone." *



Photo: Jonmikel Pardo

#823 THE WOLVES OF YELLOWSTONE



Start: August 29 at 9 a.m.
End: August 31 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructor: George Bumann, M.S.
\$240
Limit: 12

Are you intrigued by wolves and hungry to learn more? This course will satisfy even the biggest appetite for wolf knowledge and experience. You'll begin with a comprehensive overview of wolf evolution, behavior, communication, and predation. Then you'll learn about Yellowstone wolf restoration, how well the wolves are doing, and how they relate to prey species, scavengers, and other animals. In addition to some class time, you'll spend plenty of time in the field observing wolves and prey, visiting the carcass of an animal killed by wolves, and exploring wolf habitat. *



Photo: NPS

#901 NEW! JUNIPERS AND CLIMATE CHANGE: WHAT'S THE CONNECTION?



Start: September 1 at 7 p.m., Lamar
End: September 3 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructor: John King
\$180
Limit: 12

Ancient juniper trees in Yellowstone record climate change in their growth rings, growth form, and landscape position. You'll explore these patterns as part of a current research project to reconstruct the long-term climate of the region. You will examine tree-ring samples, photographs, and other materials to develop a set of tree and forest search images. In the field, you'll use these search images to locate and collect 1000–2000 year old tree-ring samples. Back in the classroom, you will analyze the tree rings for their connection to climate and discuss the political and resource management implications of global climate change. *

#902 NEW! WHITEBARK PINE, NUTCRACKERS, BEARS, AND SQUIRRELS: THE STORY OF A KEYSTONE SPECIES



Start: September 1 at 7 p.m.
End: September 3 at 5 p.m.
Location: Cooke City, MT
Instructor: Sabine Mellman-Brown, Ph.D.
\$180
Limit: 12

Hike the high splendor of the Beartooth Plateau while examining a key to its subalpine ecology—whitebark pine. You'll observe Clark's nutcrackers and squirrels harvesting and caching the large and nutritious whitebark pine nuts, which are a major food source for grizzlies and black bears. You'll also see how fire suppression, disease, and insect infestations are contributing to an ongoing decline of whitebark pine. Find out about the consequences of losing this keystone species and options for its restoration. *

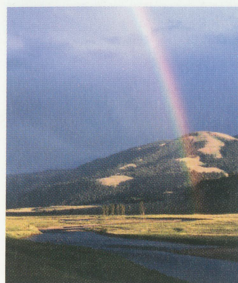


Photo: Pam Cabill



Photo: NPS



Photo: Jonmikel Pardo



Photo: Jonmikel Pardo

#903 WORDS INSPIRED BY WILDERNESS



Start: September 1 at 9 a.m.
End: September 4 at 4 p.m.
Location: Lamar Buffalo Ranch
Instructor: Alan Kesselheim
\$260
Limit: 12
Credit Pending

In this intensive field and classroom course, you'll learn to render experiences and personal insights into powerful, vivid writing through the skills of "diving in" to scenes, showing rather than telling, hitching anecdotes to universal themes, editing to tighten and strengthen, and highlighting details in a scene. You'll develop and hone an essay or other piece of writing. You'll discuss your work and that of other participants much like a writer's group that meets to discuss issues and provide feedback. Accept the challenge to push your writing to the next level. ✨

#904 THE WOLVES OF YELLOWSTONE



Start: September 7 at 9 a.m.
End: September 9 at 4 p.m.
Location: Gardiner, MT
Instructor: Jim Garry, M.S.
\$240
Limit: 12

Are you intrigued by wolves and hungry to learn more? This course will satisfy even the biggest appetite for wolf knowledge and experience. You'll begin with a comprehensive overview of wolf evolution, behavior, communication, and predation. Then you'll learn about Yellowstone wolf restoration, how well the wolves are doing, and how they relate to prey species, scavengers, and other animals. In addition to some class time, you'll spend plenty of time in the field observing wolves and prey, visiting the carcass of an animal killed by wolves, and exploring wolf habitat. ✨

#905 NEW! THE ARTISTIC EYE: WATERFOWL AND WATER



Start: September 7 at 9 a.m.
End: September 10 at 4 p.m.
Location: Lake Village
Instructor: Eleanor Williams Clark, M.L.A.
\$330
Limit: 10

While exploring the abundant waterfowl habitat of Yellowstone Lake, you'll develop the ability to observe and artistically render birds, their behavior, and the qualities of the water that form their habitat. Between morning and evening field sessions, you'll use bird skins and specimens to study their anatomy, feathers, and colors. You'll have time to compare and contrast details, and to understand the ecological aspects of the field work. Come, enjoy the peaceful sound of waves against shorelines and birds lifting off watery surfaces as they rise into the sky. ✨

#907 NEW! THE WONDERLAND COLLECTIONS: UP CLOSE AND PERSONAL



Start: September 9 at 9 a.m.
End: September 9 at 5 p.m.
Location: Gardiner, MT
Instructor: Colleen Curry, M.A.
\$80
Limit: 12

From deer-hide leggings to Thomas Moran's field sketches to a chair from a long-gone hotel—these objects and more speak vividly of Yellowstone National Park's history. You'll be able to search the collections database and choose paintings, photographs, objects, and documents to examine firsthand. You'll find out how they are collected and processed, and how to properly handle and store them. You'll also be able to visit several of the park's early museums. ✨

#908 THE AUTUMN WILDLIFE SHOW



Start: September 14 at 9 a.m.
End: September 16 at 4 p.m.
Location: Mammoth Hot Springs
Instructor: Jim Garry, M.S.
\$240
Limit: 12

Amidst the biggest show of autumn—the elk rut—venture into Yellowstone's Northern Range on short, easy hikes. You'll surely hear the haunting bugle of bull elk echoing across the landscape and you might see wolves testing the strength and speed of well-fed elk. Some small mammals, such as Uinta ground squirrels, have already gone underground, but others—such as red squirrels and pika—continue their intense winter preparations. As you observe the action, you'll learn about complex biological and political challenges affecting the future of Yellowstone wildlife. ✨



Photo: Pam Cabill



Photo: Jonmikel Pardo



Photo: Pam Cabill



Photo: Jonmikel Pardo

#909 RAPTORS ON THE WING



Start: September 14 at 7:30 p.m.
End: September 16 at 3 p.m.
Location: Gardiner, MT
Instructor: Terry McEneaney
\$180
Limit: 8

Look above Yellowstone's mountains and ridges this time of year, and you are likely to see raptors (birds of prey) soaring on updrafts on their way south. You'll find out why they fly along these ridges, where they are going, and other aspects of their ecology. You'll also learn to observe field marks for immature and adult hawks, eagles, falcons, and osprey. If you are an advanced birder, you'll pick up new identification tips as you observe these traveling raptors. *

#910 RAPTORS ON THE WING



Start: September 16 at 7:30 p.m.
End: September 18 at 3 p.m.
Location: Gardiner, MT
Instructor: Terry McEneaney
\$180
Limit: 8

Look above Yellowstone's mountains and ridges this time of year, and you are likely to see raptors (birds of prey) soaring on updrafts on their way south. You'll find out why they fly along these ridges, where they are going, and other aspects of their ecology. You'll also learn to observe field marks for immature and adult hawks, eagles, falcons, and osprey. If you are an advanced birder, you'll pick up new identification tips as you observe these traveling raptors. *

#911 TIME FOR THE ELK RUT



Start: September 18 at 7 p.m.
End: September 20 at 4 p.m.
Location: Mammoth Hot Springs
Instructor: Don Streubel, D.A.
\$180
Limit: 12
Credit Pending

The cool, crisp September air in Yellowstone reverberates with the bugling of bull elk and the lawns of Mammoth Hot Springs are crowded with females seemingly indifferent to the action. After a lecture the first night, you'll witness the spectacular rut and explore elk habitat during short, moderate hikes in Yellowstone's Northern Range. You'll learn about the not-so-private reproductive behavior of elk, their life history, and how they fit into the Yellowstone ecosystem. You'll also have opportunities to observe and learn about other large mammals of Yellowstone. *

#912 AUTUMN DAY HIKING IN YELLOWSTONE



Start: September 25 at 9 a.m.
End: September 27 at 4 p.m.
Location: Mammoth Hot Springs
Instructors: Melissa Pangraze & Edward Schauster, M.S.
\$300
Limit: 12

Autumn day hikes in Yellowstone enliven all of your senses. You'll hear the eerie sounds of bugling elk announcing the mating season has begun, smell the fragrance of aspens and cured grasses, feel the contrast of cold breezes and hot sun. As you hike through the park's backcountry, you may see bighorn sheep and migrating hawks, find moose along willow-filled creek beds, or spot the elusive coyote, wolf and bear. Be prepared to hike from 8 to 12 miles each day with elevation gains up to 1500 feet. *

#913 AUTUMN PHOTOGRAPHY IN YELLOWSTONE



Start: September 26 at 9 a.m.
End: September 29 at 4 p.m.
Location: Gardiner, MT
Instructor: Sandra Nykerk, B.S.
\$330
Limit: 11

Immerse yourself in photography while exploring the opportunities of autumn in Yellowstone, from bugling elk to the delicate colors of the changing landscape. You'll build a foundation of technical and creative photographic principles and the ethics of nature photography while exploring differences between film and digital imaging, the possibilities of macro photography, and the importance of understanding natural history. You will need a film or digital SLR camera with which you are familiar and a thorough understanding of basic photographic principles. You'll be able to process film and produce digital prints but will be responsible for lab fees. *



Photo: Pam Cabill



Photo: Jonmikel Pardo

#914 FALL WRITING & ECOLOGY



Start: September 28 at 9 a.m.
End: October 1 at 4 p.m.
Location: Gardiner, MT
Instructors: James Halfpenny, Ph.D. & Ann Zwinger
\$400
Limit: 11

The subtle beauty of Yellowstone in autumn provides the foundation for building an essay on the glories and fascination of fall. You'll begin with daily field time, classroom presentations, and writing assignments that synthesize the different approaches of science and art. You can explore how to combine your immediate outdoor experience with careful research, and learn literary skills to write the essay. You'll also have time to discuss writing techniques and approaches with the class and with the instructors individually. After the class ends, you'll finish your essay and turn it in for feedback. 🌟

#915 AUTUMN DAY HIKING IN YELLOWSTONE



Start: September 29 at 9 a.m.
End: September 31 at 4 p.m.
Location: Mammoth Hot Springs
Instructors: Melissa Pangraze & Edward Schauster, M.S.
\$300
Limit: 12

Autumn day hikes in Yellowstone enliven all of your senses. You'll hear the eerie sounds of bugling elk announcing the mating season has begun, smell the fragrance of aspens and cured grasses, feel the contrast of cold breezes and hot sun. As you hike through the park's backcountry, you may see bighorn sheep and migrating hawks, find moose along willow-filled creek beds, or spot the elusive coyote, wolf and bear. Be prepared to hike from 8 to 12 miles each day with elevation gains up to 1500 feet. 🌟



Chief by Robert Bateman

#1001 MASTER ARTIST SEMINAR: ARTISTS' RETREAT WITH ROBERT BATEMAN



Start: October 2 at 9 a.m.
End: October 4 at 5 p.m.
Location: Mammoth Hot Springs
Instructor: Robert Bateman
\$240
Limit: 40

Experienced artists are invited to register for this intensive seminar with Robert Bateman. Up to 40 artists will gather to discuss inspiration, philosophy, process, technique, and evaluation of wildlife art. The retreat will include the opportunity for artists to have their work critiqued by Mr. Bateman, to work with him in an afternoon photography session capturing useful reference photos for wildlife art habitat, and to observe him demonstrating his techniques. Participants should bring cameras with telephoto lenses and a few slides of their work for group critique. 🌟

BACKCOUNTRY COURSES

If you are a physically fit adult, consider experiencing the Yellowstone wilderness in a small group. Two experts lead all backcountry courses. The backcountry instructor will teach the group about wilderness travel, including minimum-impact camping and bear safety. A content instructor will teach about a specific subject (for example, wolves or history) related to Yellowstone.

Every course begins with a front country day where the morning is spent on orientation to the course topic, the Yellowstone backcountry, the route and itinerary, Leave No Trace principles, and the group expectations and goals. Both instructors will present important information to prepare the group for their backcountry seminar. After lunch as a group, the backpacking instructor will cover the logistical details of backcountry travel, including reviewing food and gear requirements, packing techniques and helpful hints, bear safety, and other backpacking information. You'll be able to make last minute purchases at this time. (Stores in nearby communities and in the park carry some backpacking supplies.) The afternoon session is required for all participants new to Yellowstone Association Institute backcountry courses. Returning students who have taken a YAI backpacking course within the last year are eligible for an exemption coupon to skip the afternoon session and use the time to pack on their own, purchase supplies, or relax in Yellowstone.

Rates include tents, stoves, and other group equipment but you must provide your own personal equipment (such as backpack, water bottles, sleeping bags, clothing) and food. Students who are not prepared at the time of their course may be asked to refrain from participating.

For all backcountry courses, trip itineraries may change based on trail conditions and the availability of backcountry campsites. Participants must secure their own accommodations before and after the course, and for the first evening of the course.

SO HOW DOES THIS ALL WORK?

To register or for more information about a backcountry course, call us at 307-344-2294, 8 a.m. to 4:30 p.m., Monday through Friday or visit us online at www.YellowstoneAssociation.org. Courses fill fast so register early. Full payment is required at the time of registration. Online course requests are not final until confirmed by our registrar.

After you register, we'll send you a confirmation letter, park entrance pass, and personal data forms you need to fill out and return right away. These help us get to know you better so we're prepared for your arrival.

Approximately 30 days prior to your course, we'll mail you a student letter from the instructor and a list of supplies and equipment you'll need. We will send these by email or regular mail, depending on what you requested when you signed up.

CANCELLATION & REFUND POLICY FOR BACKCOUNTRY COURSES

Payments are fully refundable, less a \$35 per course processing fee, if you cancel at least 60 days before the course. No refunds will be made for cancellations received fewer than 60 days before the start of the course, unless your space can be filled. If we can fill your space, a refund will be made, less the course processing fee. As an alternative, we can credit your tuition to another course of the same type offered before October 1, 2006, on a space available basis. We reserve the right to cancel a

course up to 30 days before the first class day. If we cancel, you will receive a full refund. We regret that the Institute cannot make exceptions to the refund policy for any reason, including but not limited to illness, travel delays, emergencies, or weather. We urge you to take out accident, baggage, and trip cancellation insurance through a travel agent or website such as www.TravelGuard.com. Travel insurance can help protect you against financial loss if you must cancel or interrupt your trip.

WHAT'S THE BEST BACKCOUNTRY COURSE FOR YOU?

To enjoy your Institute backcountry course without endangering yourself or others, you must be sufficiently fit. Backpacking is a physically demanding activity, particularly carrying a full pack at high elevations (5,000 to 12,000 feet). You should expect significant demands on heart, lungs, and all major muscle groups, particularly the back and legs. To help you select an appropriate course, we rate the difficulty level of all backpacking courses. It is critical that you accurately assess your ability to fulfill the physical requirements of each course you consider. Selecting a course that is too difficult can endanger your health and that of the other participants and diminish everyone's enjoyment of the course.

If you have any questions about the rating scale or the difficulty of any specific course, please call the Institute office and a staff member will be happy to help.

BACKPACKING DIFFICULTY SCALE

- 1 Slower paced backpacks with relatively short hikes (3 to 6 miles per day) through relatively flat terrain.
- 2 Moderately paced backpacks with moderate hikes (6 to 8 miles per day) through undulating terrain.
- 3 Moderately paced backpacks with moderate hikes (6 to 8 miles per day) through sometimes rough and steep terrain.
- 4 Aggressive backpacks with long hikes (8 to 13 miles per day) through sometimes rough and steep terrain.
- 5 Aggressive and extended backpacks of 7 days or longer with long hikes (8 to 13 miles per day) through sometimes rough and steep terrain.

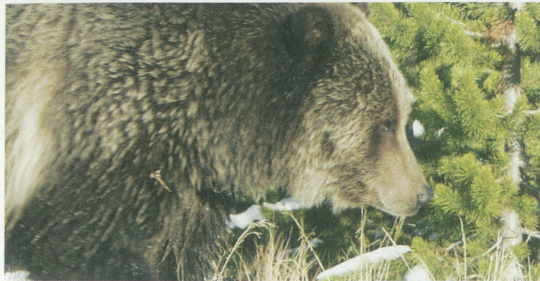


Photo: Jonmikel Pardo



Photo: Jonmikel Pardo

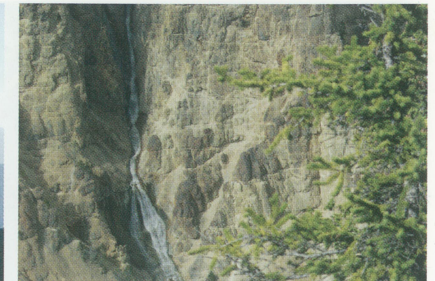


Photo: Jonmikel Pardo

#601 YELLOWSTONE WOLF BASECAMP

2

Start: June 1 at 9 a.m., Gardiner, MT
End: June 4 at Noon
Location: Northern Range
Instructors: Dan Stahler, M.S. & Nathan Varley, Ph.D. candidate
\$400
Limit: 8

Settle into a basecamp among the territories of several wolf packs. As you explore their territory, you'll begin observing the world as wolves see it—reading their sign, watching their prey, exploring their habitat, and examining the dynamic relationships between packs. With luck and patience, you may see or hear wolves. Before going afield, we will review the history of wolves in the park and the ecology of wolf restoration. *

#610 GRIZZLY BEAR BASECAMP

2

Start: June 13 at 9 a.m., Gardiner, MT
End: June 16 at 4 p.m.
Location: Slough Creek
Instructors: Jim Garry, M.S. & Melissa Pangraze
\$400
Limit: 8

Venture into the heart of picturesque Slough Creek, where elk calves are being born and grizzly bears are hunting them. Find out why and how grizzlies seek elk calves; discover what other foods they search for. See where the great bears have been by learning to identify and interpret their tracks, scat, and other sign. Along the trail and in camp, you'll also learn about grizzly bear evolution, taxonomy, folklore, conservation, and management. At sunrise and sunset, you'll be able to look for elk, bison, and bears. *

#620 BLACK CANYON WILDLIFE BACKPACK

3

Start: June 23 at 9 a.m., Gardiner, MT
End: June 26 at 4 p.m.
Location: Black Canyon
Instructors: Nathan Varley, Ph.D. candidate & Angela Patnode
\$400
Limit: 8

Follow the Yellowstone River through the heart of Yellowstone's famous Northern Range where elk, mule deer, pronghorn, bison, and bighorn sheep congregate each spring. Not far behind are the wolves, bears, and mountain lions that prey on winter-weakened herds. As you pass through diverse landscapes, you'll examine the unique habitat requirements of the wildlife we encounter, learn to identify and interpret animal sign, and attempt to make direct observations. *

#627 COUGAR ECOLOGY BACKPACK

4

Start: June 27 at 9 a.m., Gardiner, MT
End: June 30 at 4 p.m.
Location: Black Canyon
Instructors: Toni Ruth, Ph.D. & Melissa Pangraze
\$400
Limit: 8

Rocky terrain and steep, broken canyon sidewalls mixed with small grassy meadows . . . purr-fect cougar habitat! You'll be hiking the Black Canyon, home to some of Yellowstone's cougars. You'll look for tracks, scats, and other sign of cougars and other carnivores. During the trek and in camp you will learn about cougar food habits, habitat use, interactions with other carnivores, and conservation and management issues. We probably won't see a cougar, but they probably will be watching us. *

#704 YELLOWSTONE WOLF BASECAMP

2

Start: July 1 at 9 a.m., Gardiner, MT
End: July 4 at Noon
Location: Northern Range
Instructors: Jim Garry, M.A. & Melissa Pangraze
\$400
Limit: 8

Settle into a basecamp among the territories of several wolf packs. As you explore their territory, you'll begin observing the world as wolves see it—reading their sign, watching their prey, exploring their habitat, and examining the dynamic relationships between packs. With luck and patience, you may see or hear wolves. Before going afield, we will review the history of wolves in the park and the ecology of wolf restoration. *



Photo: Jonmikel Pardo



Photo: Jonmikel Pardo



Photo: Jonmikel Pardo

#723 HOODOO BASIN BASECAMP

3

Start: July 21 at 9 a.m., Gardiner, MT
End: July 27 at 4 p.m.
Location: Sunlight Basin/Hoodoo
Basin
Instructors: Jim Garry, M.S. & Angela
Patnode
\$700
Limit: 8

For many aficionados of the Yellowstone backcountry, the dazzling high country of Hoodoo Basin is the crème de la crème. You'll soak in the endless alpine scenery, climb peaks, marvel at the hoodoo rock formations, and share the world with wolves, bears, and elk. We will focus on the related themes of wildlife, geology, and history during hikes that illuminate these themes. *

#729 **NEW!** THE ALPINE UNLOCKED: BASECAMP IN THE HIGH COUNTRY

3

Start: July 28 at 9 a.m., Gardiner, MT
End: July 31 at 4 p.m.
Location: Beartooths
Instructors: Nathan Varley, Ph.D.
candidate & Melissa Pangraze
\$400
Limit: 8

From a base camp at 9000 feet, you'll hike the rugged peaks and ridgelines of the remote Absaroka Mountains. Discover for yourself the fascination and beauty of this enchanted realm of eagles, mountain goats, and pika. You'll learn about the ecology, geology, and human exploration of this majestic landscape and how to travel safely and effectively in this challenging terrain. *

#803 BACKPACKING THE TRAIL OF THE NEZ PERCE

4

Start: August 3 at 9 a.m., Gardiner, MT
End: August 8 at 4 p.m.
Location: Lamar River/Miller Creek/
Hoodoos/Sunlight Basin
Instructors: Jim Garry, M.S. & Melissa
Pangraze
\$600
Limit: 8

Follow the flight of the Nez Perce out of Yellowstone as they fled the U.S. Army in 1877. We'll pick up their trail along the Lamar River, follow Miller Creek into the spectacular high country of the Hoodoo Basin, then out Sunlight Basin. Along the way, you'll learn about historic accounts of the trek, alternate routes various groups of Nez Perce might have taken, Nez Perce history and traditions, and why this trail remains significant to the tribe. *

#812 GEYSER GEOLOGY BACKPACK

2

Start: August 10 at 9 a.m., Old Faithful
End: August 13 at 5 p.m.
Location: Old Faithful
Instructors: Cheryl Jaworowski, Ph.D.
& Angela Patnode
\$400
Limit: 8

As you backpack through the backcountry of Yellowstone, you'll learn to read the epic story of its volcanic and glacial origins. The storytellers are hydrothermal explosion craters, hot springs, mudpots, a faulted resurgent dome, geysers, fumaroles, outcrops of rocks, sediments, and waterfalls. You'll unravel their tale through geologic maps, field observation, and field journals. *

#814 WATERFALLS BACKPACK

4

Start: August 14 at 9 a.m., Ashton, ID
End: August 18 at 5 p.m.
Location: Bechler
Instructors: Lee Whittlesey, M.A., J.D.,
Ph.D. (Hon.) & Angela Patnode
\$500
Limit: 8

Almost 300 waterfalls plunge over the terrain of Yellowstone. During a short orientation, you'll learn about their history, how to classify them, and where some are located. Then you'll hit the trail through "Cascade Corner"—the nickname for the Bechler Region, which hosts more waterfalls than any other part of Yellowstone. You'll visit Ouzel Falls, Iris Falls, Colonnade Falls, Ragged Falls, Tendoy Falls, Wahhi Falls, Gwinna Falls, and Sluiceway Falls. *



Photo: Jonmikel Pardo

#906 PELICAN VALLEY GRIZZLY BEAR BASECAMP

4

Start: September 7 at 9 a.m.,
Gardiner, MT

End: September 10 at 4 p.m.

Location: Pelican Valley

Instructors: Kerry A. Gunther, M.S. &
Melissa Pangraze

\$400

Limit: 8

Hikers familiar with Yellowstone know the Pelican Valley as one of the best places to see grizzly bears in the backcountry. Explore this spectacular country and learn about bear behavior, food habits, habitat use, bear-human interactions, and bear-human conflict resolution. You'll also learn to distinguish the tracks and other sign of a grizzly from a black bear, and perhaps see both species. Our basecamp will be over Mist Pass, so the first and last days are a long backpack with an extremely strenuous climb over the pass, and the middle observation days will require descending and ascending the pass. *



Photo: Jonmikel Pardo

Members of the Yellowstone Association receive a \$10 discount.

INSTRUCTOR PROFILES

ROBERT ANDERSON, PH.D. (Aquatic Insects of Yellowstone) is an entomologist and professor of biological sciences at Idaho State University, where he teaches and writes about applied ecology and medical entomology. He has also produced videos on crickets, insect collecting, and butterflies of Yellowstone and Grand Teton National Parks.

ORVILLE E. BACH, JR., ED.D. (Exploring Yellowstone by Map & Compass) is a familiar face at the Old Faithful Visitor Center, where he works each summer as an interpretive ranger. He wrote *Exploring the Yellowstone Backcountry*, a popular hiking guide, and *Tracking the Spirit of Yellowstone: Recollections of Thirty-One Years as a Seasonal Ranger*.

JULIANNE BAKER, M.A. (Day Hiking the Wild Yellowstone: Grand Canyon Area, Lake Village, Northern Range Area) moved to Gardiner, Montana, after more than 20 years visiting Yellowstone to hike, backpack, kayak, and ski. She retired from teaching in Michigan, where she taught environmental science, and now is the Resident Instructor for the Yellowstone Association Institute. She is a graduate of the National Outdoor Leadership School (NOLS), a Wilderness First Responder, and a certified master educator.

GENE BALL (Wildlife Watching in Grizzly Country) was director of the Yellowstone Association and Institute from 1985–88. He now lives in Meeteetse, Wyoming, and teaches a wide variety of topics and does other freelance projects for a variety of organizations throughout the West.

ROBERT BATEMAN (Master Artist Seminar: Artists' Retreat with Robert Bateman) evokes the light and space of wilderness in his paintings of wild animals, creating moods rather than precisely rendering a scene. An acclaimed artist who has exhibited worldwide and whose work resides in museum collections, he has won many awards and honorary degrees. A Canadian, Bateman was made Officer of the Order of Canada, his country's highest civilian award.

ALDEN BIG MAN JR., PH.D. CANDIDATE (We Are Not Fools Yet! Crow Tribal Culture & Yellowstone National Park) is a member of the Crow Nation who speaks Crow fluently and has in-depth knowledge of the traditions, history, and culture of his tribe. He is completing a Ph.D. in history at the University of New Mexico, with an emphasis on the American West and Northern Plains Culture.

DIANE BOYD, PH.D. (Wolves at the Door: Successes and Challenges of Recovery) began studying wolves in Minnesota with Dave Mech during the 1970s. She has since conducted wolf research in Montana, Alberta, British Columbia, Northwest Territories, Romania, Italy, Arizona, and New Mexico. Her subjects included the first wolves to den in Montana since their extirpation in the early 1900s, a decade before wolves were restored to Yellowstone National Park.

GEORGE BUMANN, M.S. (Lamar in the Naturalist Tradition; True to Life: the Art & Science of Drawing Animals; The Wolves of Yellowstone) can draw, paint, describe, and teach about all aspects of Yellowstone National Park's ecology. He has a degree in wildlife ecology and experience teaching field biology, ornithology, dendrology, mammalogy, drawing, and field journaling. His art and writing have appeared in popular and scientific publications.

JOHN S. CAMPBELL, PH.D. (Alpine Wildflowers of the Beartooth Plateau) has studied arctic and alpine plant ecology in the Greater Yellowstone Ecosystem since 1973. He is associate professor of biology at Northwest College, located immediately east of Yellowstone National Park, and recently published an extensive review of North American alpine ecosystems.

MEREDITH E. CAMPBELL, B.S. (The Art of Wildflower Identification; Field Sketching for Beginners) holds a Bachelor of Science Degree from Saint Lawrence University; a certificate in Scientific Illustration; and has been published in numerous science-related books, textbooks and magazines. Meredith shows her wildlife paintings in the Wyoming Gallery in Jackson Hole. Meredith has been teaching all ages how we can use drawing as a way to learn and understand more about our natural world for more than 18 years.

RON CISAR, M.S. (Exploring Yellowstone With Science and Music) educates people of all ages about the environment through his program, "Earth Music" and recordings such as *The Spell of Yellowstone*. Educators around the world use his songs in environmental education classes. As a high school biology teacher, he won the Presidential Award for Excellence in Science Teaching by the National Science Foundation and numerous other awards. He currently teaches environmental science at Iowa Western Community College.

ELEANOR WILLIAMS CLARK, M.L.A. (The Artistic Eye: Waterfowl and Water; Artistic Field Journaling in Yellowstone; Artistic Field Journals; Lamar in the Naturalist Tradition) is Chief of the Division of Planning, Compliance and Landscape Architecture in Yellowstone National Park and has kept journals of landscape projects for 15 years. Her work in landscape design involves ecology, sculptural aspects of landscape, and the influence of art in shaping our connections to the land.

Photo: Jonmikel Pardo

COLLEEN E. CURRY, M.A.

(The Wonderland Collections: Up Close and Personal) is the supervisory museum curator at Yellowstone National Park where she oversees park's museum program, the archives, and the research library. She planned and supervised moving the park's 5.3 million item collection to the new Heritage and Research Center, which opened in 2005. Before coming to Yellowstone, she was curator at other National Park Service sites and at the U.S. Supreme Court.

PAUL DOSS, PH.D.

(Mammoth: 320 Million Years in the Making; Yellowstone's Geocosystem) vividly describes geologic processes so that you can almost see the landscape forming. Supervisory geologist for Yellowstone National Park from 2000–2001, he is now chair of the Department of Geology and Physics at the University of Southern Indiana. For nearly two decades, he has taught field geology, conducted research, and completed geologic mapping in the Rocky Mountain Region and the Yellowstone Plateau.

KATY DUFFY, M.S.

(In Celebration of Birds) identifies raptors on the wing and songbirds by sound. She is a licensed bird bander specializing in owls, hawks and songbirds, and holds an ecology degree from Rutgers University. A resident of the Greater Yellowstone Ecosystem for more than two decades, she was a naturalist for Grand Teton National Park before becoming the West District Interpretive Ranger for Yellowstone National Park.

WILLIAM C. EDWARDS,

PH.D. (Wildflowers for Beginners) is a retired professor of biology who has taught at high school, junior college, and university levels. Now living in the Yellowstone area, he pursues his interest in plant ecology of Grand Teton and Yellowstone National Parks. He has worked for both parks as a seasonal ranger, researcher, and volunteer.

TERRY ENK, PH.D.

(From Bison to Bighorn: The Hoofed Mammals of Yellowstone) studied bighorn sheep and mountain lions for his doctorate in wildlife biology from Montana State University.

DUNCAN FOLEY, PH.D.

(Geysers, Mudpots & Hot Springs) keeps coming back to teach in Yellowstone, where he guides students among the ever-changing and fascinating hydrothermal features and teaches about the volcano that fuels them. A professor of geosciences at Pacific Lutheran University in Tacoma, Washington, he has studied hydrothermal geology throughout the western United States and in Guatemala.

JIM GARRY, M.S.

(Autumn Wildlife Show; Backpacking the Trail of the Nez Perce; Bears: Bones, Signs & Stories; Bears: Folklore & Biology; Bison of Yellowstone; Explorers of Yellowstone; Grizzly Bear Basecamp; Hoodoo Basin Basecamp; In the Footsteps of Lewis & Clark; Spring Wildlife Show; Wolves of the Past, Present, & Future; Wolves of Yellowstone; Yellowstone Comes Alive; Yellowstone Wolf Basecamp; Yellowstone's Pack of Predator Concerns) weaves together natural history, human history, folklore, and myth into spell-binding stories. A naturalist and folklorist, he has spent a good part of the last 37 years in the Yellowstone ecosystem. Since 1980 he has directed Great Plains Lore and Natural History, Inc. His books include *This Ol' Drought Ain't Broke Us Yet* and *The First Liar Never Has a Chance*.

BOB GRESSWELL

(Native Trout Conservation In Yellowstone) knows the cutthroat trout intimately after more than 30 years studying this fish. He is a research biologist with the USGS Northern Rocky Mountain Science Center in Bozeman, Montana, and teaches at Montana State University and Oregon State University.

KERRY A. GUNTHER, M.S.

(Into the Bear's Den; Pelican Valley Grizzly Bear Basecamp) studied how Yellowstone's grizzlies behaved when people approached on a trail. His innovative research led to his work as a bear management specialist for Yellowstone National Park. He has published papers on bear management, grizzly bear-human interactions, bear-human conflict resolution, and grizzly predation on elk calves. In 1977, he received the Sigurd Olsen Environmental Achievement Award.

JAMES HALFPENNY,

PH.D. (Alpine Ecology in the Beartooths; Bears: Bones, Signs & Stories; Exploring Yellowstone With Science and Music; Fall Writing & Ecology; Introduction to Mammal Tracking; Lesser-Known Carnivores; Mammal Tracking: Interpreting Tracks, Scat & Other Signs; Searching for Yellowstone's Most Elusive Carnivores; Wolves of the Past, Present, & Future; Yellowstone's Pack of Predator Concerns) is an ecologist, educator, and writer who has taught field courses since 1961 and was coordinator of Long-Term Ecological and Alpine Research at the University of Colorado. Jim, president of A Naturalist's World, produces educational books, computer programs, and videos, and travels the world teaching about bears, wolves, and animal tracks. Jim's most recent book is *Yellowstone Wolves in the Wild*.

MARK HAROLDSON

(Grizzlies: From Dumps to Recovery?) has studied bears for more than 30 years. He is supervisory wildlife biologist for the Interagency Grizzly Bear Study Team in Bozeman, Montana, and has authored or coauthored more than 25 publications about grizzly bears. Recent topics include grizzly bear population parameters in the Yellowstone ecosystem and a book chapter on grizzly bear ecology and management.

HANNAH HINCHMAN

(A Trail Through Leaves: The Art of the Illustrated Field Journal) keeps illuminated journals as she explores her home territory in Augusta, Montana, with four cats, two horses, and a dog. She is the author of *A Trail Through Leaves: the Journal as a Path to Place, A Life in Hand: Creating the Illuminated Journal*, and *Walks with Sisú: An Artist and Her Dog Take to the Hills*.

CHERYL JAWOROWSKI, PH.D.

(Geyser Geology Backpack) is a geologist for Yellowstone National Park. Her scientific research and interests include Yellowstone's volcano, glacial geology, geologic mapping, and the evolution of the landscape. She has enjoyed hiking and skiing in the Greater Yellowstone area for more than 20 years.

Photo: Jonmikel Pardo

Members of the Yellowstone Association receive a \$10 discount.

DOUGLAS KEINATH

(Yellowstone's World of Bats) is an expert on the fauna of Wyoming, and recently completed an inventory of bats in the Greater Yellowstone Ecosystem. As Senior Zoologist for the Wyoming Natural Diversity Database, he guides research efforts, manages field surveys, and consults with state, federal, and private organizations. Keinath also maintains a prioritized list of locally sensitive species, including bats.

SUSAN KELLY, M.S. (Life On the Edge) earned her degree in earth sciences with an emphasis in plant ecology, which provided her with the background to work as a seasonal naturalist for Grand Teton National Park. Currently, she combines her scientific and educational experience as outreach coordinator for the Thermal Biology Institute (TBI) at Montana State University–Bozeman.

ALAN KESSELHEIM (Words Inspired by Wilderness) is a wilderness adventurer, accomplished paddler, and freelance writer. He has written hundreds of magazine pieces and eight books, including *Water and Sky: Reflections of a Northern Year* and *Threading the Currents: A Paddler's Passion for Water*. Kesselheim has taught dozens of writing workshops throughout North America, from the Yucatan to Canada.

JOHN KING (Junipers and Climate Change: What's the Connection?) studies trees and what they tell us about climate and our changing environment. He is the director of a tree-ring research firm in Bozeman, Montana, and received his training and education at the University of Arizona Laboratory of Tree-Ring Research. He collaborates with other specialists in this field, publishing scientific articles and technical papers.

WILLIAM KITTREDGE

(Transforming Life Into Essay) is a renowned writer, editor, film producer, and teacher. He won the 1994 NEH Charles Frankel Prize, which is awarded to citizens who have enriched the nation through their scholarship, writing, and leadership. He taught and mentored writers at the University of Montana for more than a quarter century, while also writing several books on the American West, publishing numerous articles, editing notable anthologies, and co-producing *A River Runs Through It*.

ROBYN KLEIN, M.S. (Wild Edible Plants & Medicinal Herbs) is a medical botanist and western herbalist whose focus is the Northern Rocky Mountains. She teaches five courses at Montana State University: Herbal Medicine, Herbal Medicine Laboratory, Medicinal Plants of Montana, Flowering Plants of the Northern Rocky Mountains, and Medical Botany.

TODD M. KOEL, PH.D. (Native Trout Conservation In Yellowstone) is the Supervisory Fisheries Biologist for Yellowstone National Park. He collaborates with state, federal, and private partners to restore imperiled native fishes in their natural range in the Greater Yellowstone Ecosystem. He has established a program to monitor the park's aquatic ecological health, prevent additional aquatic invasive species introductions, and integrate angling volunteers into the park's fisheries program.

DAN MACNULTY, PH.D.

CANDIDATE (What's New With Yellowstone's Wolves?) began his career as one of the park's first volunteer wolf research assistants, where he led efforts to document the behavior of wolves hunting elk. In his graduate work at the University of Minnesota, he is exploring how predator-prey behavioral interactions influence ecological dynamics.

TIMOTHY P. MCCLEARY, PH.D. CANDIDATE

(We Are Not Fools Yet! Crow Tribal Culture & Yellowstone National Park) works with the Crow Nation to record and share their history, traditions, and culture. He is a professor at Little Big Horn College, the Crow tribal college, and is a Ph.D. candidate in anthropology at the University of Illinois: Urbana-Champaign. He has published papers on Crow culture, and the book, *The Stars We Know: Crow Indian Astronomy and Lifeways*.

TERRY MCENEANEY (Learning Birds by Sound; The Magic of Waterfowl Migration; Raptors On the Wing) is Yellowstone National Park's ornithologist and first began birding Yellowstone in 1968. He teaches field ornithology throughout Montana and Wyoming, and wrote *Birds of Yellowstone*, *The Uncommon Loon*, and *Birding Montana*. He is writing a book on the ecology of Yellowstone birds and a scientific monograph on the Yellowstone trumpeter swan.

SABINE MELLMANN-BROWN, PH.D.

(Whitebark Pine, Nutcrackers, Bears, and Squirrels: The Story of a Keystone Species) has spent many hours studying subalpine and alpine vegetation—particularly whitebark pine—of this region as a graduate student, a research assistant for the University of Colorado, a field ecologist for the University of Wyoming, and as an ecological consultant. She now is a postdoctoral research scientist at Montana State University.

MATT METZ, M.S. (Wolves of the World) has worked with the Yellowstone Wolf Project for more than eight years. He studied the Leopold Pack for eight winters and knows the habits and habitats of all the park wolves. When not in the field, he is analyzing wolf predation data.

GRANT A. MEYER, PH.D.

(Shaping the Northern Yellowstone Landscape) studied fires and climate change in northern Yellowstone, which earned him the 1997 Kirk Bryan Award of the Geological Society of America. He is assistant professor in the Department of Earth and Planetary Sciences at the University of New Mexico and has studied landforms and geological processes in Yellowstone since 1983.

LISA MORGAN, PH.D.

(Geology of Yellowstone Lake) studies the geology and geophysics of volcanic terrains in and near Yellowstone National Park as a research geologist for the U.S. Geological Survey. With Ken Pierce, she developed major concepts and a model for the Yellowstone hot spot. Currently, she is focusing on caldera-forming eruptions, hydrothermal explosions, and the geology of Yellowstone Lake.

KERRY MURPHY, PH.D.

(Searching for Yellowstone's Most Elusive Carnivores; Yellowstone's Pack of Predator Concerns) is a wildlife ecologist and management biologist for Yellowstone National Park. He has researched and managed the wild cats of the Northern Rocky Mountains. He currently works on furbearer (e.g., lynx) and endangered species conservation, and has published numerous scientific and popular articles on carnivore ecology.

Photo: Jonmikel Pardo

SUE CONSOLO MURPHY, M.S. (Grizzlies: From Dumps to Recovery?) is Chief of Science and Resource Management at Grand Teton National Park. She also worked for Yellowstone National Park from 1982 to 2003. She has worked with the Interagency Grizzly Bear Study Team and served on the conservation strategy team for Yellowstone's grizzlies. She has written papers on grizzly management and a book, *Wildlife @ Yellowstone*.

TOM MURPHY (Photographing Yellowstone's Summer) owns Wilderness Photography Expeditions and conducts natural history photography seminars primarily in Yellowstone National Park. Tom's work has been published in *The New York Times Magazine*, *Newsweek*, *Outside*, *National Geographic*, and most of the major magazines that deal with natural history. Tom has published *Silence & Solitude: Yellowstone's Winter Wilderness* and *The Light of Spring: The Seasons of Yellowstone*.

MIKE MURRAY (Discover Your Sky: Observing Techniques for Backyard Astronomers) conducts presentations and workshops on amateur observing for astronomy clubs, museums, and star parties. He has written about popular astronomy for newspapers, magazines, and professional journals. He also founded the Southwest Montana Astronomical Society. Currently, he is the production manager for the Clark Planetarium in Salt Lake City.

SANDRA NYKERK, B.S. (Autumn Photography in Yellowstone; Nature Photography in Yellowstone: The Digital Image; Photography in Yellowstone: A Foundation for Creativity) is a naturalist and photographer in Gardiner, Montana, who has taught photography and led natural history workshops for two decades. Her photographs and fine art images are widely published and exhibited. Her interdisciplinary degree in photography, cultural anthropology, and environmental history explored the role of photography in the conservation of natural spaces, including Yellowstone.

MELISSA PANGRAZE (The Alpine Unlocked: Basecamp in the High Country; Autumn Day Hiking in Yellowstone; Backpacking the Trail of the Nez Perce; Cougar Ecology Backpack; Grizzly Bear Basecamp; Pelican Valley Grizzly Bear Basecamp; Yellowstone Wolf Basecamp) has studied coyotes in Yellowstone, red wolves in the Great Smokies, and the swift fox in Colorado. As an environmental educator, she teaches in the backcountry for both the National Outdoor Leadership School (NOLS) and the Yellowstone Association Institute. She obtained her degree in wildlife science from Purdue University.

DEBRA A. PATLA, M.S. (Amphibians & Wetlands of Yellowstone National Park) has spent summers of the past decade in the wetlands of the Yellowstone area, researching and surveying amphibians. She is a research associate of the Idaho State University Herpetology Laboratory and coordinates the Greater Yellowstone Ecosystem Amphibian Monitoring Program.

ANGELA PATNODE (Black Canyon Wildlife Backpack; Geyser Geology Backpack; Hoodoo Basin Basecamp; Waterfalls Backpack) specializes in backpacking, mountaineering, and ski instruction. With more than 15 years experience as an outdoor educator, she now teaches for the National Outdoor Leadership School (NOLS) and the Yellowstone Association Institute. She also has published a guidebook on winter ecology for NOLS.

CHARLES PETERSON, PH.D. (Amphibians & Wetlands of Yellowstone National Park) has studied the amphibians and reptiles of the Greater Yellowstone Ecosystem since 1989. He currently is a professor in the Department of Biological Sciences at Idaho State University and curator of Herpetology at the Idaho Museum of Natural History.

WAYNE PHILLIPS (Native American Herbs & Edibles; Plants of the Lewis & Clark Expedition) is a former Forest Service ecologist who now teaches and writes about the flora of the Central and Northern Rocky Mountains, and is active in the Montana Native Plant Society. He wrote *Central Rocky Mountain Wildflowers*, *Northern Rocky Mountain Wildflowers*, and *Plants of the Lewis and Clark Expedition*.

HAROLD PICTON, PH.D. (Bears: Folklore & Biology; The Bison of Yellowstone; From Bison to Bighorn: The Hoofed Mammals of Yellowstone) is emeritus professor of wildlife at Montana State University and studies herbivores, carnivores, and wildlife management history. He and more than 50 previous graduate students have published more than 100 articles in both the scientific and popular press, many of which deal with the Yellowstone area.

KENNETH PIERCE, PH.D. (Yellowstone Under Ice) retired from U.S. Geological Survey where he studied the geologic origin of Rocky Mountain landscapes. He received the Kirk Bryan Award of the Geological Society of America for his report on the glacial geology of northern Yellowstone. He co-authored *Interpreting the Landscape: Recent and Ongoing Geology of Grand Teton and Yellowstone National Parks* and is exploring geologic controls on Yellowstone's ecology.

STEVE PRIMM, M.A. (The Carnivore Conservation Challenge) has conducted field research, and worked on projects involving community-based conservation and backcountry food storage. He is field director of the Gravelly Range Grizzly Project and has published articles on carnivore conservation and ecosystem management in *Conservation Biology* and *Policy Sciences*.

JAMES PRITCHARD, PH.D. (Yellowstone's Wildlife History) teaches the history of wildlife in North America, renewable resources, and natural resource policy at Iowa State University. He is the author of *Preserving Yellowstone's Natural Conditions: Science and the Perception of Nature*, and co-author of *A Field Guide to Butterflies of the Greater Yellowstone Ecosystem*.

LESLIE J. QUINN, M.ED. (Ghost Hotels of Yellowstone; Old Times at Old Faithful; Wonderland's Serene Spot: History on Yellowstone Lake) trains park bus tour guides, boat guides, and wranglers for Xanterra Parks and Resorts in Yellowstone. He also contributes to Yellowstone Science. His special interests include Yellowstone Park village history, the Howard Eaton Trail, and the maritime history of Yellowstone Lake.

Photo: Pam Cahill

Members of the Yellowstone Association receive a \$10 discount.

ANNA-LOUISE REYSENBACH, PH.D.

(Exploring Yellowstone's Microbes) studies the ecology of microorganisms from high temperature environments. Over the past decade, her work has taken her to the thermal springs of Yellowstone National Park, Iceland, New Zealand, and the Azores, and in research submersibles to the deep-sea hydrothermal vents along the mid-oceanic ridges. She teaches at Portland State University, Oregon.

TONI RUTH, PH.D. (Cougar Ecology Backpack) has spent many winters snowshoeing Yellowstone's backcountry on the trail of cougars. As an associate conservation scientist with the Wildlife Conservation Society, she leads the Yellowstone cougar project, which is investigating the effects of wolf reintroduction on the cougar population. She has studied these and other large carnivores in a variety of habitats including Florida, Texas, New Mexico, and Montana.

EDWARD SCHAUSTER, M.S. (Autumn Day Hiking in Yellowstone) earned his graduate degree in wildlife biology and is a wildlife ecology consultant and field instructor with the National Outdoor Leadership School. He has studied many species, including coyotes in the Lamar Valley and swift foxes and coyotes on the shortgrass prairies of Colorado.

ANNICK SMITH (Transforming Life Into Essay) is a writer and film producer whose books include *Homestead*, *Big Bluestem*, and *In This We Are Native*, *Memoirs and Journeys*. She was co-editor of the Montana anthology, *The Last Best Place*, and her essays have appeared in numerous publications and anthologies. Smith's film credits include *Heartland* and *A River Runs Through It*. Currently, Smith is working on a dog/travel/memoir about crossing the plains with her chocolate lab Bruno.

CHRISTINE SMITH (Are Wolves Worth the Effort?) previously taught high school wildlife biology and now works in the research permit office in Yellowstone National Park, helping to organize and regulate research in the park. She has lived in the Yellowstone area since 1994 and has worked with the Yellowstone wolf project since 1999.

DOUGLAS SMITH, PH.D. (Are Wolves Worth the Effort?: Wolves of the World) leads the Yellowstone Wolf Project. He has published widely on the subject in magazines, books, and scientific journals. He is the co-author of *The Wolves of Yellowstone* and *Decade of the Wolf*, a summary of the first ten years of wolf recovery in Yellowstone. He also appears in the National Geographic video entitled *Return of the Wolf*.

ROBERT W. SPOELHOF, PH.D. (Lamar in the Naturalist Tradition; Yellowstone Time Travel: Hiking into the Geological Past) works as a National Park Service interpretive ranger and an instructor for the Yellowstone Association Institute. Bob also teaches an annual course at Calvin College on the geology of the national parks. Before working in Yellowstone, Bob spent 27 years as an exploration geologist specializing in the Rocky Mountain region.

DAN STAHLER, M.S. (Changing Lives in the Lamar: The Impact of Wolves On a Yellowstone Landscape; Yellowstone Wolf Basecamp) has studied wolves since 1996 and earned his degree studying the relationship between Yellowstone's ravens and wolves. He is the project biologist for the Yellowstone Wolf Project where he helps coordinate and direct research on wolves, their prey, and scavenger communities.

PEG STEUNENBERG (True to Life: the Art & Science of Drawing Animals) illustrates the natural world with the precision and detail of her discipline, science illustration. Her work has appeared in publications, the Nature Company's product line, and her own educational products, and has been shown in exhibitions at the Smithsonian Museum of Natural History and other museums. In 2000, she received the Gold Award from the San Francisco Society of Illustrators.

DON STREUBEL, D.A. (Mammals Great & Small; Time for the Elk Rut) has conducted research on cougars, ground squirrels, and science education, and is the author of *Small Mammals of the Yellowstone Ecosystem*. A professor of biology for 25 years at Idaho State University, he also was director of the Yellowstone Association Institute from 1989–1991, and now serves on the Association's board of directors.

ROSEMARY SUCEC, M.A. (Indians and Geysers) is the liaison between Yellowstone National Park and its 26 associated tribes. She communicates with the tribes, facilitates their official visits to the park, and arranges government-to-government consultations. A cultural anthropologist for Yellowstone National Park, she has worked ten years with the National Park Service, most of it at the Regional Office in Denver.

BRUCE THOMPSON, M.S.T. (The American Beaver: Ecosystem Architect and Habitat-maker) operates ECOTRACS (Ecology-based Teaching, Resources, and Curriculum Services)—based in Salt Lake City. He conducts field and indoor natural science programs, interpretive training, educator workshops, instructional design and development, and education research throughout the Intermountain West. Bruce is an avid animal tracker and has been combining photography and natural science education for more than 25 years.

DANIEL B. TINKER, PH.D. (Forest, Fire, and Disturbance Ecology) studies forest and ecosystem ecology, focusing on natural disturbances and their effects on ecological processes, including those of the Greater Yellowstone Ecosystem. He is an Assistant Professor in the Department of Botany, University of Wyoming.

JON TRAPP, M.S. (Behind the Scenes of Wolf Behavior and Ecology; Wolves In and Out of the Park: Ecology and Management) serves as wolf specialist for Montana Fish, Wildlife, and Parks. He has worked for the Mexican Wolf Program, the Nez Perce Wolf Program, and for the U.S. Fish and Wildlife Service on Wyoming wolf management. He earned his master's degree in conservation biology from Prescott College.

DAN TYERS, PH.D. (Who's the Moose?) has been involved in wildlife research and management in the Yellowstone area for 30 years. Currently, he is the District Wildlife Biologist and program manager for wildlife, wilderness, and trails for the Gardiner Ranger District, Gallatin National Forest. His doctoral research involved the winter ecology of moose in the Northern Range of Yellowstone.

Photo: Jonmikel Pardo

NATHAN VARLEY, PH.D.

CANDIDATE (The Alpine Unlocked: Basecamp in the High Country; Black Canyon Wildlife Backpack; What's New With Yellowstone's Wolves?; Wolf Nations: Dynamics of a Recovered Population; Wolves—Reality & Myth; Yellowstone Wolf Basecamp) is a naturalist, writer, and guide specializing in Yellowstone ecology. He has studied many wildlife species including gray wolves, mountain goats, grizzly bears, river otters, coyotes, moose, and pine marten. As a Ph.D. candidate in wildlife biology at the University of Alberta, Nathan is studying the effects of wolf recovery on the northern Yellowstone elk herd.

JENNIFER WHIPPLE, M.A.

(Spring Wildflowers) brings enthusiasm and expertise to her work as botanist for Yellowstone National Park. She has lived in Yellowstone for more than 20 years and taught many classes in botany for the Institute. She also has taught plant taxonomy and grass identification labs at Humboldt State University, is former president of the Wyoming Native Plant Society, and co-authored the *Wyoming Rare Plant Field Guide*.

LEE WHITTLESEY, M.A.,

J.D., PH.D. (HON.) (The Military in Yellowstone; Waterfalls Backpack; Yellowstone's Wildlife History; Yellowstone's Southern Roadside History) can tell you who named Old Faithful, when it happened, and probably what the weather was. He is Yellowstone National Park's historian. He has written more than a half dozen books about the park, including *Death In Yellowstone* and *A Guide to Yellowstone Waterfalls and Their Discovery*. His most recent book is *Storytelling in Yellowstone: Horse-and-Buggy Tour Guides in the Grand Old Park, 1872–1920*.

WILDERNESS MEDICINE

INSTITUTE (WMI), an institute of the National Outdoor Leadership School (Wilderness First Aid) has been a leader in wilderness medicine education since 1976. WMI provides all levels of wilderness medicine training for state and federal agencies, colleges, and outdoor programs throughout the West.

JASON WILMOT, M.E.M.

(The Carnivore Conservation Challenge) is the Executive Director of the Northern Rockies Conservation Cooperative in Jackson, Wyoming. He helped establish an ongoing wolverine ecology research project in Glacier National Park. He is collaborating on a book about large carnivore conservation in the Rocky Mountain West.

MIKE YOCHIM, PH.D.

(Bison, Bears, and Snowmobiles: Controversy in Yellowstone) earned his doctorate by examining public interest group influence on national park policy. For more than 15 years, he has educated visitors about Yellowstone and now works on winter use management and other park policies. He has published articles on elk management, reclamation, kayaking, and conservation in Yellowstone, and is writing a book about the history of winter use in the park.

ANN ZWINGER

(Fall Writing and Ecology) is a prize-winning natural history writer and author of *Land Above the Trees*, *Downcanyon*, *The Nearsighted Naturalist*, and numerous magazine essays. As adjunct professor at Colorado College, she teaches "Writing the Natural History Essay." She teaches and travels widely, serves as a natural history consultant, and spends a large amount of her time happily working in faraway places you can't get to from here.



Photo: Jonmikel Pardo

Photo: Pam Cabill

Members of the Yellowstone Association receive a \$10 discount.

JOIN THE YELLOWSTONE ASSOCIATION



Photo: NPS

Your voice will be added to those of more than 18,000 people who believe that education is the most powerful and effective method for ensuring that Yellowstone will remain as it is today: a treasured refuge to share with our children, grandchildren, and countless others who seek solace and renewal in its majestic wilderness. Since its inception in 1933, the Yellowstone Association has been instrumental in preserving the park's varied wildlife, dynamic geology, intricate ecosystem, and lengthy human history.

The Yellowstone Association is the park's official educational partner, working diligently to encourage in-depth understanding of Yellowstone's unique and fragile ecosystem and priceless cultural treasures. Each year we teach more than 4,500 Institute participants, park visitors take home more than 540,000 educational products from our stores in park visitor centers, and our 18,000 members receive educational opportunities and publications.

When you join the Yellowstone Association, you can be satisfied knowing you are helping to preserve irreplaceable wildlands, save endangered and threatened wildlife, and protect this national treasure for generations to come. With the help of people like you, we can send a strong message of support for America's remaining wild places. Your membership counts!

Becoming a member means you'll receive *Yellowstone Discovery*, which features in-depth articles about Yellowstone's wildlife, history, current events, geology, and cultural resources. You will also be eligible for discounts on Institute courses and our educational products in our park stores and online.

Of every dollar you give, 81 cents supports visitor education in Yellowstone. The Association provides funds to the National Park Service for wayside and museum exhibits, interpretive programs, scientific conferences, research, and educational publications. So please—join the effort to preserve Yellowstone and join the Association today!

To become a member please complete the membership section on the Institute registration form on page 42 or join online at www.YellowstoneAssociation.org. For more information about the Association's membership program, call 307-344-2289 or send an email to members@yellowstoneassociation.org.

THE PARK STORE

The Yellowstone Association's Park Store features more than 600 books, maps, and videos to help you plan your visit, along with a wide selection of shirts, hats and other logo items to remind you of your time in Yellowstone.

To purchase items, please visit the Park Store at www.YellowstoneAssociation.org or call the mail order staff toll-free at 877-967-0090. Members of the Yellowstone Association receive a 15% discount. Proceeds support research and education in Yellowstone.

Visit our website at www.YellowstoneAssociation.org or call 307-344-2294.

GENERAL INFORMATION



Photo: Jonmikel Pardo

ALTITUDE

Most of Yellowstone Park is above 6000 feet. If you are coming from a much lower elevation, allow at least one "easy" day to adjust to this altitude before beginning strenuous activity. Be sure to drink plenty of fluids to prevent dehydration.

SAFETY, RESPONSIBILITY, AND RISK

Your safety is important to the Institute. We have established procedures to reduce medical emergencies and to provide treatment of those that occur. All members of the Institute staff are trained to follow these procedures. They also receive additional training in driver safety, wilderness medicine, and the use of portable radios to contact National Park Service emergency services.

The Institute needs and expects you to take an active role in protecting yourself. You should be careful to choose a program that is appropriate to your medical and physical condition. Before arriving for a program, you need to fully and accurately inform Institute staff of relevant medical conditions, consult with your personal physician about any relevant medical conditions, and obtain all recommended clothing and equipment. Once you arrive, you need to continually monitor your condition and any external hazards, make prudent decisions, stay hydrated and well fed, and keep Institute staff informed of how you are doing.

Despite our combined efforts, Institute programs entail some inherent risks, many of which are associated with moderate to vigorous physical activity in high altitude mountainous or wilderness terrain. Even programs that include little activity and do not stray far from developed areas may take place in areas where advanced medical care may be significantly delayed.

RELEASE FROM LEGAL LIABILITY AND COLLECTION OF HEALTH INFORMATION

On receipt of your completed registration form we will send you an Assumption of Risks/Release of Liability form that must be signed by all participants, minors and adults. If you are participating in a course that includes particularly strenuous activity or extended wilderness travel, we will also send you a form to assist us in identifying medical issues that may arise during your course or activity. All information on this form will remain confidential and will be reviewed only by Institute staff or a licensed physician.

Members of the Yellowstone Association receive a \$10 discount.

2006 REGISTRATION/MEMBERSHIP FORM

Name _____

Address _____

City _____ State _____ Zip _____

Home Phone _____ Business Phone _____

Fax Number _____ Email Address _____

☐ Check here if you would like to receive Yellowstone Association information and updates such as additional course offerings and member benefits, or special discounts on items in the Park Store by email. (We do not share your e-mail address without your permission.)

Where can you be reached one month prior to the course? (if different than above) _____

ADDRESS _____

TELEPHONE _____

☐ I have read the refund policy and understand to receive a refund, I must cancel at least 60 days before a course and pay \$35 course processing fee.

☐ Check here if you are a current member of the Yellowstone Association or are joining now.

MEMBERSHIP INFORMATION

☐ Renewing ☐ Joining

Memberships are family memberships, and include children through the age of 18. One membership card is usually issued per family. Additional cards are available upon request.

Annual Membership Dues:

- ☐ General \$30
☐ Gibbon \$50
☐ Firehole \$100
☐ Lewis \$250
☐ Madison \$500

The Yellowstone Society

- ☐ Lamar \$1,000
☐ Gallatin \$2,500
☐ Bechler \$5,000



Photo: NPS

Course #	Title	Dates	Tuition
1.			
2.			
3.			

Lodging:

☐ I want to stay at the Institute cabins at Lamar the following nights at \$25/night.

Dates _____

☐ Male ☐ Female (Please check for cabin lodging.)

☐ My class does not meet at the Lamar facility. See course descriptions for recommended lodging or contact the registrar.

☐ I will make my own lodging or camping arrangements.

Total tuition fee(s) \$ _____

Cabin fee(s) at \$25 per person per night _____

Membership (optional, see left) _____

Total Enclosed \$ _____

Payment by: ☐ Check ☐ American Express ☐ Discover ☐ MasterCard ☐ Visa

Credit Card# _____ Exp. Date _____

Signature _____

CARD VERIFICATION#

(the 3-digit number located on the back of your card to the right of the card #)

Would you prefer to receive your pre-course letter via email ☐ or regular mail? ☐

This will be sent approximately 4 weeks prior to your course.

Mail to:

Yellowstone Association Institute
P.O. Box 117
Yellowstone Park, WY 82190

Fax to:

307-344-2485

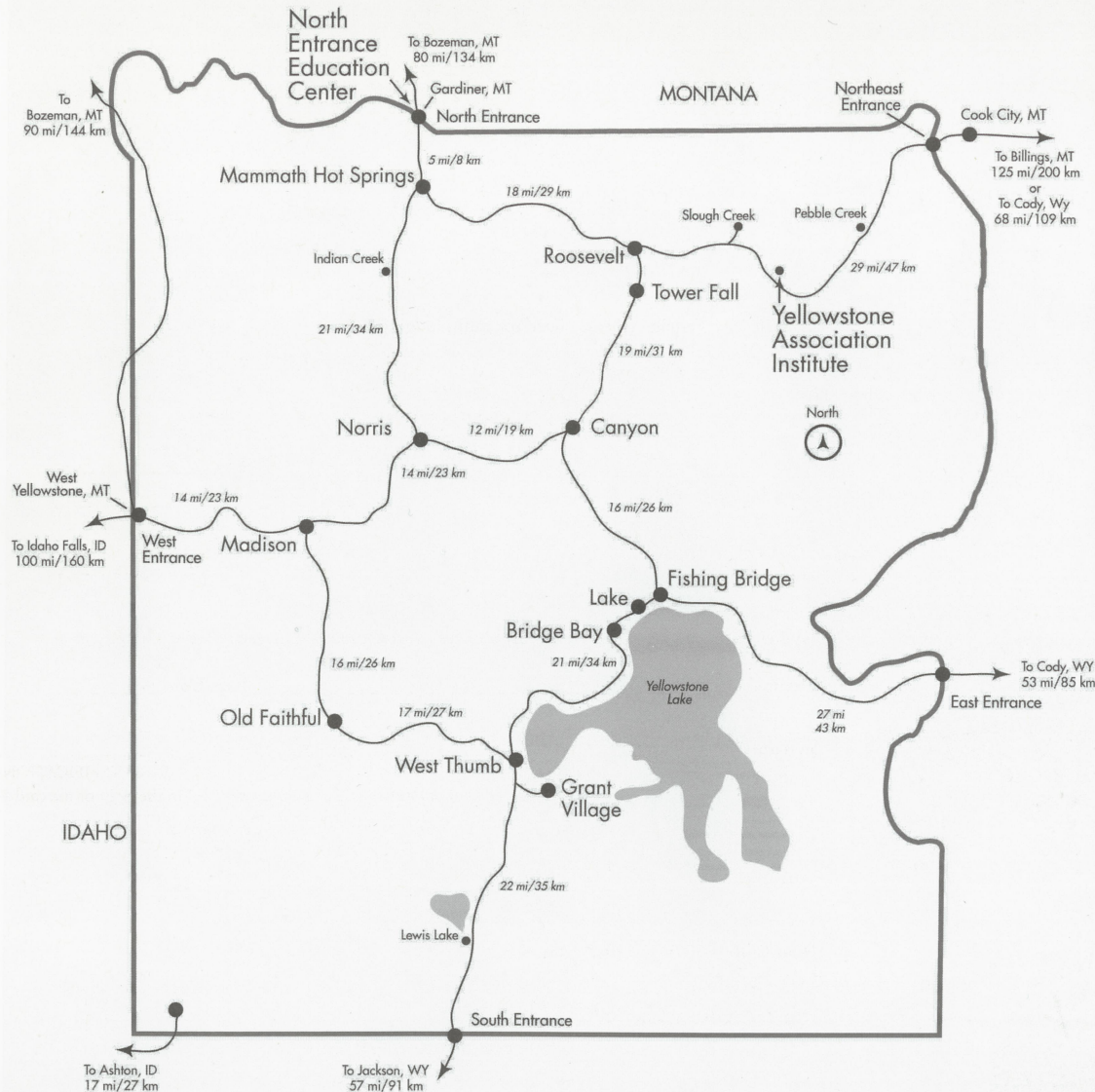
Telephone:

307-344-2294

Please duplicate this form for multiple participants, or go to our website for additional forms.

Visit our website at www.YellowstoneAssociation.org or call 307-344-2294.

TRAVEL INFORMATION



Directory

Camping & Park Information
National Park Service
Visitor Services 307-344-7381
www.nps.gov/yell/

Lodging, Campground, Activity Bookings
Xanterra Parks & Resorts
307-344-7311
www.travelyellowstone.com

Wyoming Travel Information
Wyoming Division of Tourism
800-225-5996
www.wyomingtourism.org

Airports

Distances/Auto Travel Times To Lamar Buffalo Ranch Field Campus

Billings, MT	From Billings	
	via Red Lodge	143 mi. 3 1/2 hrs.
	via Livingston	207 mi. 3 3/4 hrs.
Bozeman, MT	From Bozeman	
	via Livingston	118 mi. 2 1/2 hrs.
Cody, WY	From Cody	
	via East Entrance	126 mi. 3 hrs.
	via Northeast Entrance	84 mi. 2 1/4 hrs.
Idaho Falls, ID	From Idaho Falls	240 mi. 4 1/2 hrs.
Jackson, WY	From Jackson	146 mi. 3 1/2 hrs.
West Yellowstone, MT	From West Yellowstone	70 mi. 2 hrs.

Plan on extra driving time in the park.
The speed limit is 45 mph or lower.

Members of the Yellowstone Association receive a \$10 discount.



YELLOWSTONE
ASSOCIATION
INSTITUTE

FIRST CLASS

P.O. Box 117
Yellowstone National Park
Wyoming 82190

www.YellowstoneAssociation.org

ADDRESS SERVICE REQUESTED