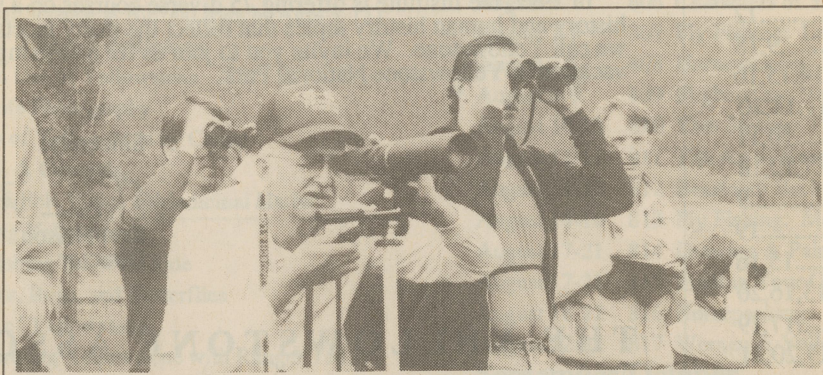


The Yellowstone Institute



FIELD COURSES
1992
NATURE STUDY VACATIONS

Phillips / Reese
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DIRECTORY

For information about Yellowstone's campgrounds and opening and closing dates contact:

Visitor Services
307-344-7381, Ext. 2206
Box 168
Yellowstone Park, WY 82190

For Information about in-park lodges, hotels, RV parks, marina, contact:

TWR Services, Inc. 307-344-7311
Yellowstone Park Division
Yellowstone Park, WY 82190

For travel information from states surrounding Yellowstone contact:

Wyoming Division of Tourism
800-225-5996
I-25 at College Drive
Cheyenne, WY 82002

Idaho State Travel Commission
Room 108 State Capitol
Boise, ID 83720

Montana Travel Promotion Bureau
Department of Commerce

THE YELLOWSTONE INSTITUTE

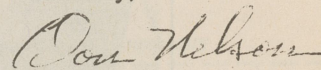
Dear Participant,

The unique and varied landscape of the Yellowstone area has long been a magnet to those who love the natural world. Its many herds of elk and bison, the world's greatest concentrations of geysers and other thermal features, and large, untrammeled wild lands now attract millions of visitors each year.

For seventeen years the Yellowstone Institute has provided the opportunity for visitors to enjoy the park's natural wonders, away from crowds, in intimate outdoor learning environments.

In 1992, the Institute is offering 75 diverse courses on a wide range of natural history and human history topics that reflect the many facets of this unique place we call Yellowstone. We invite you to join us for a relaxing, refreshing learning vacation in Yellowstone National Park.

Sincerely,


Don Nelson,
Director

THE YELLOWSTONE ASSOCIATION

Founded in 1933 to support educational, historical and scientific programs for the benefit of Yellowstone National Park and its visitors. Among the Association's past and present projects are the following:

- * *Founded the Yellowstone Institute in 1976 and serves as its sponsoring organization*
- * *Donated research library to park in 1967 and provides continued support through purchase of books and periodicals and hiring of part-time librarians*
- * *Publishes trail guides for self tours of thermal areas*
- * *Publishes books and pamphlets pertaining to Yellowstone*
- * *Assists naturalists with visitor information services at Visitor Centers*
- * *Aids naturalists with distribution of schedules of programs for visitors.*
- * *Administers grants and gifts received for designated projects in Yellowstone*
- * *Helps fund seasonal training for park naturalists*
- * *Funded Yellowstone's first braille trail*
- * *Donated computer equipment to the naturalist division for use in preparing the park newspaper and schedules of ranger-led activities.*

The Yellowstone Association for Natural Science, History and Education is a non-profit, tax-exempt organization.

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307-344-7381
ext. 2384

*Photos by
Gene Ball &
Don Streubel
Layout by
Jeanne Peterman*

CALENDAR 1992

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- May 26-29 501 Mammal Tracking: Tracks, Scat & Other Sign
May 26-29 502 Wildlife Observation in the Spring

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June 5-8 602 Grizzly Bear Ecology & Management
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* June 19-21 610 Birding Yellowstone
June 19-21 611 Fly Fishing the West Side
June 22-24 612 Beetles, Bugs, and Butterflies
June 22-26 613 Birds of Yellowstone
June 22-24 614 Interpreting Yellowstone with Ranger Ted
June 24-26 615 Family Days at Pebble Creek
June 26-28 616 Post-Glacial History of Yellowstone Lake
June 30-July 3 617 Horsepacking: Springtime Flora & Fauna

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* July 4-5 704 Fire in Paradise: The Fourth Year
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July 9-10 708 Hiking & Camping in Grizzly Country
* July 11-12 709 Alpine Wildflowers
* July 11-12 710 Wolves of Yellowstone: The Missing Link
July 13-15 711 Fire, Ice and Fossil Forests
July 13-16 712 Learning Outdoor Photography
July 13-17 713 Horsepacking: Teton Crest Trail
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July 20-23 719 Llama Trekking in the Tetons
July 21-25 720 Hydrothermal Systems & Yellowstone Caldera
July 22-24 721 Family Days with Park Ranger Family
July 23-25 722 Family Days at Grant Village
July 23-27 723 Horsepacking: Traditional Nez Perce Route
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- * Sept. 4-6 901 Wildlife Photography in the Fall
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* Sept. 11-13 903 Autumn Scenic Photography
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- Dec.31-Jan.3 121 Winter Photography
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January 28-31 102 Yellowstone Night Skies
February 12-15 201 Yellowstone's Winter World

Other winter classes may be added to this schedule; contact registrar for more information.

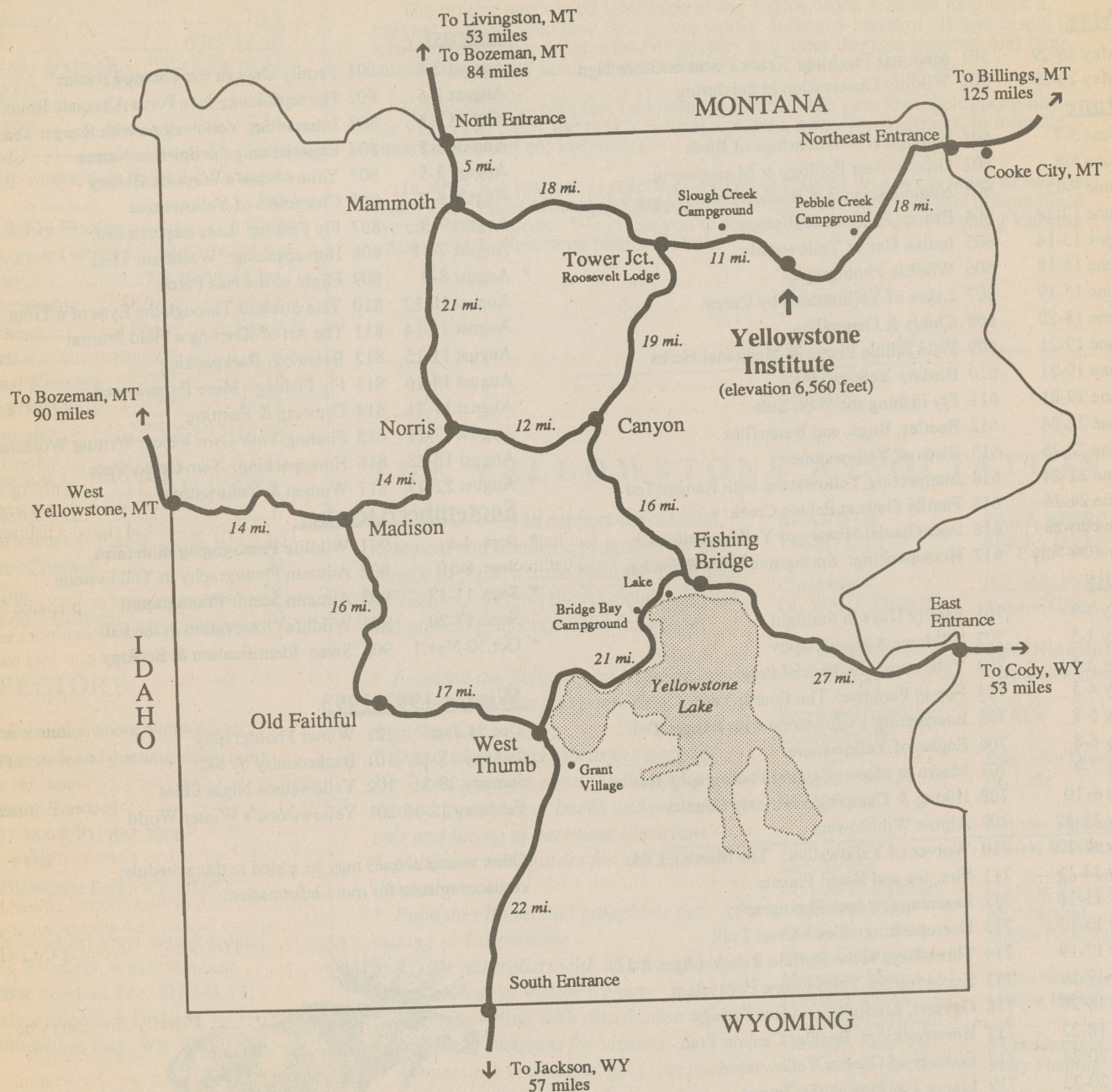


* denotes a weekend class (which may begin on Friday evening)



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TRAVEL INFORMATION



Major Airports

Bozeman, MT
Billings, MT

Regional Airports

Cody, WY
Jackson, WY
W. Yellowstone, MT
Idaho Falls, ID

Distances/Auto Travel Times to Yellowstone Institute

From Bozeman		
via Livingston	118 mi.	2-1/2 hrs.
From Billings	143 mi.	3-1/2 hrs.
Cody	126 mi.	3 hrs.
Jackson	146 mi.	3-1/2 hrs.
W. Yellowstone	70 mi.	2 hrs.

Plan on extra driving time in the park. Speed limit is 45 mph.

GENERAL INFORMATION

Tuition Unless otherwise specified, the tuition fee does not include lodging, meals, books, course materials, transportation, or university credit fees.

There are discounts for current members of the Yellowstone Association or those who join when they enroll.

Registration Complete and mail the attached registration form along with the tuition fee (and cabin fee if applicable).

Most courses are limited to 12-15 participants. Early registration is advised. Reservations can be made by phone.

Location Courses are held at various locations within the Yellowstone ecosystem. Most are conducted at the Institute facility known as the Buffalo Ranch. It is an historic Park Service facility located in the Lamar Valley between the Northeast Entrance and Tower Junction. (See map at left.) All classes meet there unless otherwise stated *next to date* under class descriptions.

Transportation Participants must arrange their own transportation to and from Yellowstone and to the location where their class begins. Where appropriate, Institute vehicles will be provided for travel associated with the courses. Car pooling may be necessary in some cases.

Cabins There are thirteen rustic *multiple-occupancy* cabins. Most have two or three single beds. They have no plumbing, heating, or electrical outlets, but do have wall lights. Everyone must bring a pillow and warm sleeping bag. Life there has been affectionately described as "indoor camping." Cabin reservations should be made when registering for class. The fee is \$8 per person per night. Space is limited. Cabin rental for family members of participants may be allowed *if space is available*.

Accommodations and Camping

For those who choose not to stay at the Institute, other nearby sites in the park include campgrounds at Pebble Creek (9 miles east) and Slough Creek (7 miles west) or lodging at Mammoth Hotel (29 miles west), Roosevelt Lodge (11 miles west at Tower Junction), and Canyon Lodge (30 miles southwest). Motels are available outside the park in Montana at Silver Gate (19 miles east) and Cooke City (23 miles east).

Pets, RVs, and Camping Pets are not allowed at the Institute, and Park Service regulations prohibit camping and recreational vehicle use on the grounds at the Yellowstone Institute facility.

Lodging at Other Park Locales

For courses which do not meet at the Institute's Lamar facility, information about camping and lodging options will be sent upon request or when registration is received. For some classes, group campsites will be reserved. The Institute registrar is available to assist or advise you.

For classes which meet at other locales in the park, rooms may be reserved through TWR Services (307-344-7311). Early reservations are essential.

Children Most courses and the Institute facilities are designed for adults. Therefore, children are not encouraged to attend—with the exception of the children's and family classes.

Classroom & Kitchen Facility

The Institute's log building is heated and has two classrooms, three bathrooms with showers, a kitchen where people do their own cooking, and an eating area. The facility, though clean and adequate, is fairly simple. There are also picnic tables and a back porch overlooking Lamar Valley.

Food and Preparation

Unless otherwise specified, participants provide their own food. There are 2 stoves and 3 refrigerators, a microwave and food storage areas. Ample cooking and eating utensils are provided. Space is limited so meals should be kept simple. The camaraderie of the community kitchen is one of the joys of students.

Student Packet Four weeks before class begins, each student will be mailed more course information, suggested study materials if appropriate, plus a park entrance fee waiver.

Academic Credit Courses for which academic credit is available are so designated. Credit seekers may be required to take an exam, submit field notes, and/or complete a post-course project.

Institutions which offer credit include the University of Montana, Montana State University, Idaho State University, Brigham Young University, Ricks College, and the University of Wyoming. Registration forms will be provided on the first day of the course. Fees for credit are collected on the first day of class and are usually \$25-\$60. Students may enroll through their own university for independent study.

Teacher In-Service Credits

Certification of course completion listing the course title, hours of instruction, and the nature of the course is available upon request.

Scholarships Limited scholarships may be available to Wyoming and Idaho teachers. Contact Institute registrar for information.

We gratefully acknowledge the Scott Foresman Publishing Company which has established a Yellowstone Institute scholarship program for teachers they select in the western U.S.

Tax-deductible donations to a general scholarship fund are always welcome.

Physical Condition

Participants should be in good general health for these courses because most courses require at least some walking at higher elevations. Classes which involve backpacking, horsepicking, and canoeing will be more demanding.

Insurance and Liability

Participants must provide their own health and accident insurance. Please read and sign the liability waiver on the registration form.

Weather Students should be prepared for a variety of mountain weather conditions and some cold temperatures. Rain gear and warm clothing are essential.

Funding The Yellowstone Institute is non-profit. Tuition fees cover only a portion of the Institute costs. Other funding comes primarily through membership contributions plus other fundraising activities of the Yellowstone Association, a non-profit, tax-exempt organization.

Since 1985, humanities courses offered by the Yellowstone Institute have been partially funded by grants from the Wyoming Council for the Humanities.

Cancellation Policy Enrollees who cancel at least one month in advance will receive an 80% refund (except Association members, who receive a full refund minus a \$15 per-course cancellation fee.) Cancellation for any reason, including weather, with less than one month notice will result in the entire tuition fee being retained. Cancellation fees may be applied toward tuition for another course during the current calendar year. Cabin fees are 100% refundable.

The Institute reserves the right to cancel a course if fewer than eight persons are enrolled 30 days prior to the first class day. Enrollees will be notified at that time and will receive a full refund.

(Note: Cancellation insurance is available through travel and insurance agents.)

1992 SUMMER FIELD COURSES

THE SEVENTEENTH ANNUAL
YELLOWSTONE INSTITUTE



The Yellowstone Institute facility is located in the Lamar Valley, Yellowstone National Park. Lamar River in background; Rose Creek in foreground.

Mammal Tracking:

Interpreting Tracks, Scat, & Other Sign

May 26-29: 501

July 25-28: 725

\$180 (Member's fee \$170)

Credit available (U, 2 quarter hours, U of MT; or 1 semester hour, MSU)

This course will be offered once in the spring and once in mid-summer; each season having different characteristics and conditions for looking at animals and their sign.

Mammals are elusive and hard to observe in the wild. Much can be learned about them from detecting and reading their sign. Nature detective work through tracking will teach students the joys of interpreting natural history from mammal sign. Emphasis is placed not on track identification, but on tracking as a process for understanding animal behavior.

Course content includes the role of natural history and ecology, keeping field notebooks, taxonomy, anatomy, terminology, measurements, track averaging, relative size, estimating track age, print identification, gait patterns, estimating speed, field techniques, finding clues, following trails, and teaching tracking. Slide lectures will provide access to Dr. Halfpenny's years of field experience, and laboratory activities will introduce concepts of gaits and speed. Field sessions will aid in learning to trail and read stories in tracks. *Fee includes a copy of the instructor's book plus other course materials.*

James Halfpenny, Ph.D., is coordinator of the University of Colorado Long-Term Ecological Research Program and a Research Fellow of the Institute of Arctic and Alpine Research. He has taught for 22 years in the Greater Yellowstone Ecosystem and is the author of Mammal Tracking in North America and co-author of Winter: An Ecological Handbook. He has tracked mammals in Tanzania and studied endangered mammals in China.

Wildlife Observation in the Spring: 502

May 26-29

\$120 (Member's fee \$110)

Field observation will be the major goal and activity of this class. The informal format will feature early morning and evening field trips with mid-day programs on related topics such as osprey, moose, bears, birds, animal sign, observation techniques, photo tips, optics, and the ethics of interaction with wildlife. Presentations by selected wildlife researchers will be included. Activities begin at 4:00 pm on May 26. Note: "Wildlife Observation in the Fall" is being offered September 17-20.

Gene Ball, a freelance writer/educator and Yellowstone Institute director from 1985-88 will be the coordinator for this course.

Ecological Relationships of Birds: 601

June 5-7

Limit: 10

\$90 (Member's fee \$80)

Rather than focusing on bird identification, this course will examine the physical factors of the environment (soil, light, climate, weather), and will emphasize habitats and the role that biological factors (food, prey, competition, niches, migration, etc.) play in the distribution of birds in Yellowstone. The ecological role of the Clark's nutcracker, red crossbill, common raven, bald eagle, osprey, white pelican, Caspian tern, trumpeter swan and common loon will be examined. You will learn the role of birds in relation to other birds, mammals, etc.. Field trips will be the emphasis, since hands-on experience is the key to learning. Class will begin on Friday, June 5 at 7:00 pm.

Terry McEneaney is the bird biologist for the National Park Service in Yellowstone. He was a wildlife biologist for the U.S. Fish & Wildlife Service for 12 years, has taught field ornithology for the Nature Conservancy in Montana, and is the author of Birds of Yellowstone and The Uncommon Loon.

Grizzly Bear Ecology and Management: 602

June 5-8

\$135 (Member's fee \$125)

Conservation of Yellowstone's grizzly bear population involves a long history of controversy, research, and management challenges. This course will examine the ecology of the threatened grizzly bear, its natural history and current status in the Yellowstone ecosystem and a number of on-going management issues that affect the population's potential for long-term survival. A variety of past and present bear researchers and managers will participate as guest speakers. Participants should be prepared for field trips daily to try and observe bears in the wild. These trips will not involve lengthy or strenuous hiking, but may occur in cold or inclement weather and in early morning and evening hours. The course will begin at 7:00 pm on Friday, June 5.

Sue Consolo Murphy is a management biologist for Yellowstone Park. Since 1982 she has worked as a ranger-naturalist and resource manager, specializing in bear management and park planning. She works closely with scientists from the Interagency Grizzly Bear Study Team, some of whom will contribute lectures to this course. She has a M.S. in Resource Conservation from the University of Montana.



NPS Photo

Natural Science at Buffalo Ranch (ages 9-12): 603

June 9-11

Limit: 20

\$80 (Member's fee \$70)

This two day, two night course is designed for children interested in natural science. It is a hands-on general ecology and field science experience, using the Lamar Valley as an outdoor lab. Students will explore aquatic and terrestrial ecosystems as they learn about life in ponds and streams, plants, birds, animals, geology, and glaciers. Each child will create a field journal for recording observations. Days will be active and spent in the field. Evening activities will include wildlife observation, campfire stories and discussions. Students should arrive between 6:00-7:00 pm on June 9th. *Fee includes meals and lodging. Children must provide their own sleeping bags and day packs. A complete equipment list will be provided.*

Mardy Nelson has taught in public schools for 15 years as well as the Thorne Ecological Institute Summer Science School and the University of Colorado Science Discovery Program, and Physics 4 Fun. She has been involved with numerous science education efforts.

Don Nelson worked for the National Audubon Society as a Regional Representative and Director of the Camp in the West, taught with his wife in a public school middle-level alternative program which they designed, and is the director of the Yellowstone Institute.

Bears: Folklore and Biology: 604

June 12-14

\$120 (Member's fee \$110)

Credit available (U, 1 semester hour, MSU)

This class will combine the two disciplines along with field observation time to explore the basic aspects of bear biology including reproduction, behavior, food habits, home ranges, habitat use, and population biology and to address the bear's role in folkstories, images of bears in popular culture, bears as cult symbols, and the role of bears in today's world. Comparing and contrasting folk and scientific knowledge, and the importance of both, will be a continuing course theme.

Harold Picton, Ph.D., is a professor of Wildlife Management at Montana State University. He has directed a number of graduate student studies of the Yellowstone grizzly, co-authored several scientific papers with members of the Interagency Grizzly Bear Study Team, and is a member of the grizzly bear committee of The Wildlife Society.

Jim Garry is both a naturalist and a folklorist. His degree as a naturalist is from the University of Michigan as is his M.S. in Environmental Communications. He has worked on numerous wildlife research projects, primarily for Texas Parks and Wildlife. He is the founding director of Great Plains Lore and Natural History, Inc.

Indian Use of Yellowstone: 605

June 13-14

\$80 (Member's fee \$70)

This class offers an Indian perspective on the Yellowstone area. Topics will include tribal migrations, trails, treaties, traditional roles of men and women, interrelationships with whites, and the interest of Indians in the park itself. Also addressed will be the role of family, folklore and religion concerning the natural environment of Yellowstone. Field trips to Obsidian Cliff and some Indian trails and crossings will be included. The course includes a traditional Indian meal the evening of Saturday, June 13.

Jeanne M. Eder was born on the Fort Peck Indian reservation in Montana, is an enrolled member of the Sioux tribe and is currently working on a Ph.D. at Washington State University. She has completed work on the use of the Star Quilt among Sioux and Assiniboiné women and has produced a one-hour monologue on a traditional Hidatsa woman named Waheenee, Buffalo Bird Woman.

Wildlife Photography: 606

June 15-18

\$170 (Member's fee \$160)

This course will emphasize practical applications of photography rather than technical theory and assumes at least moderate experience. Techniques, use of light, equipment, composition, form, and development of the creative eye will be discussed—emphasizing photography as an art. There will be special emphasis on environmental sensitivity and the ethics of, and various approaches to, wildlife photography. Participants must provide their own camera, lenses, tripod, film and accessories and be familiar with the operation of their equipment. The majority of each day will be spent out in the field and students should be prepared for all kinds of weather.

Tom McBride, is an award winning photographer, naturalist, and teacher recognized throughout the West for his photographic diversity. His work has been published in more than 100 magazines and he has been commissioned by many federal agencies, United Artists for cinematography, and by Stephen Cross for films released by the B.B.C. He was judged Photographer of the Year by the Montana Professional Photographers Association.



Lakes of Yellowstone by Canoe: 607

June 15-19 (Lewis Lake, YNP)

\$325 (Member's fee \$315)

Limit: 12

Credit available (U or G, 1 semester, Ricks College/BYU)

This five day canoe trip across Lewis Lake and into magnificent Shoshone Lake, the largest wilderness lake in the lower 48, will provide interpretation of the lake environment and instruction on low-impact backcountry camping techniques. Canoeing skills such as strokes, portaging, safety and tripping (how to pack a canoe) will be studied and American Red Cross canoeing certification may be earned if desired. Class will start from the Lewis Lake campground boat dock on the morning of June 15. *Fee includes all canoeing equipment, group camping gear, and food.*

Scott Wood has 18 years experience in outdoor education, is an instructor at Ricks College, and a doctoral candidate at the University of Utah. He is a certified Red Cross canoeing instructor.

Chiefs & Generals: 608

American Indian Military Campaigns, 1806-1877

June 18-20

\$120 (Member's fee \$110)

Credit available (G or U, 2 semester hours, BYU)

This will be an in-depth study of eight significant confrontations between the American Indians and the United States military. The class emphasis will be centered on 1) causation 2) critical analysis of the engagements, and 3) impact. The issue of time and geography will be considered so that a complete overview of different conditions and cultures can be examined. A portion of the course will be designed to examine specific historical sites within the park, including a field trip to the Bannock Trail and the trail's crossing at Tower Falls on the Yellowstone River. Some pre-course reading will be required. *Fee includes \$5 for handouts that will be distributed in class.*

Note: Fred Gowans and Richard Clark will be leading a horsepacking field trip August 18-22 over Two Ocean Pass, see description on pages 10-11.)

Fred R. Gowans, Ph. D., is a professor of Western American History and is the director of the Native American Studies Program at Brigham Young University. He has been a consultant for historical films on mountain men and is the author of Rocky Mountain Rendezvous, Mountain Man and Grizzly, and A Fur Trade History of Yellowstone Park: Notes, Documents, Maps.

Wild Edible Plants and Medicinal Herbs: 609

June 19-21 Squirrel Meadows, Targhee National Forest, Idaho

\$115 (Member's \$105)

Credit available (U, 2 quarter hours, U of MT)

The blue camas meadows in the forests between Yellowstone and Grand Teton National Parks were an important food source for early American people. The meadows, ponds, aspen groves and coniferous forests of this area have outstanding plant diversity, providing an exceptional opportunity to study native vegetation. This course will focus on the edible and medicinal properties of the native plants of the West. The toxicity and poisoning principles of poisonous plants will also be discussed. Identification techniques will be presented during the many field trips.

Classroom headquarters for the course will be at the historic Forest Service cabin at Squirrel Meadows along the scenic road between Ashton, Idaho and the Flag Ranch near the South Entrance to the park. Participants should come prepared to camp out, or may choose to stay in a motel in Ashton, which is less than an hour away.

Wayne Phillips has a degree in forestry and is an ecologist with the U.S. Forest Service on the Lewis and Clark National Forest. He has taught plant identification for the College of Great Falls, is intimately familiar with the vegetation of the Mountain West, writes botanical articles, and is an avid wildflower photographer.

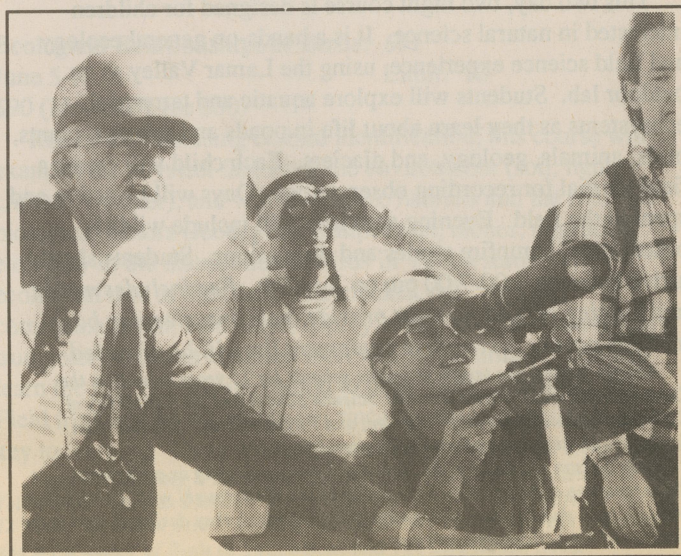
Birding Yellowstone: 610

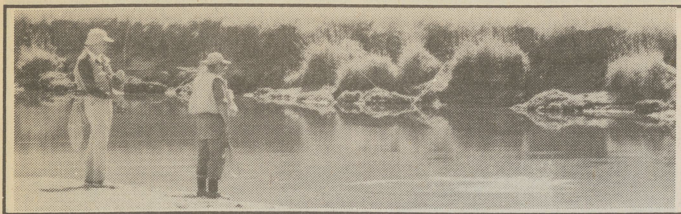
June 19-21

\$80 (Member's fee \$70)

The objective of this fast-paced course will be to see as many Yellowstone bird species as possible in two days! The class will feature early morning departures to visit prime locations and varied habitat sites with a goal of observing more than 50 species including the osprey, bald eagle, and trumpeter swan. There will also be opportunities to observe many of the park's mammals. The class will begin at 8:00 pm on Friday, June 19 with introductions and a session on birding in Yellowstone.

Richard Follett is author of Birds of Yellowstone and Grand Teton National Parks and Birds of Crater Lake National Park. He is a specialist on the birds of Yellowstone where he worked seven years as a ranger-naturalist and compiled the park's bird checklist.





Flyfishing the West Side: 611

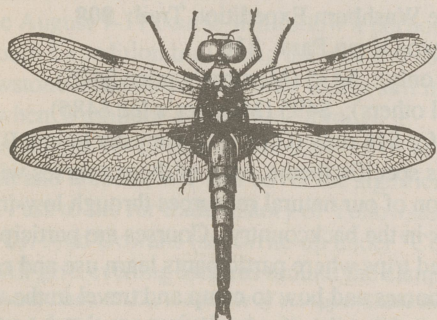
June 19-21 West Yellowstone, MT

\$150 (Member's fee \$140)

Limit: 9

Based out of West Yellowstone, this course will focus on fishing the Madison, Firehole, and Gibbon drainages. It is geared for the more experienced person who has mastered the basics. The instructor will act primarily as a resource person in assisting participants in polishing their skills. Most instruction will be on an individual basis or in small groups. The instructor will work intensively with three persons each day. During the two days you are not having intensive instruction, you will practice on your own and meet with the group for morning and evening discussions. Participants must make their own lodging or camping arrangements. Note: Flyfishing courses based at the Institute are offered in August, see page 18.

Richard Parks is the manager of Parks' Fly Shop, a family business that has been in Montana for over thirty years. Richard is highly respected as a fly tier, a teacher and a river guide and is intimately familiar with Yellowstone's waters.



Beetles, Bugs, and Butterflies: 612

June 22-24

\$115 (Member's fee \$105)

Credit available (G or U, 1 semester hour, ID State U)

Insects and other arthropods are the most abundant, varied, and widespread animals in Yellowstone Park. Their total biomass exceeds that of all the bears, birds, and bison combined, and yet they go unnoticed as they suck sap, pollinate flowers, kill trees, feed fish, and recycle deadwood and carrion. Various macro- and microhabitats comprising the park system will be surveyed and characterized in terms of the resident arthropod assemblage, with a focus on the significance of these animals to aesthetics and the park's ecological equilibrium.

Robert Anderson, Ph.D., is an entomologist and professor of Biological Sciences at Idaho State University. In addition to General and Medical Entomology, he teaches courses in General and Invertebrate Zoology, and Parasitology. He has published works in applied ecology and medical entomology, and most recently completed research on the biology and ecology of the Idaho sand dunes tiger beetle.

Birds of Yellowstone: 613

June 22-26

\$200 (Member's fee \$190)

Credit available (G or U, 2 quarter hours, U of MT)

This introductory ornithology course will emphasize field identification and ecological relationships of birds in the Yellowstone ecosystem. Field surveys include a hike to the summit of Mt. Washburn, a breeding bird census on Blacktail Deer Plateau, observations of osprey nests in the Grand Canyon of the Yellowstone, a boat trip on Yellowstone Lake, and numerous opportunities to observe waterfowl on the pothole lakes of Lamar Valley.

An effort will be made to tailor instruction to the individual needs of the enrollees. Amateur birders, including novices, as well as teachers and undergraduate and graduate students will find this course extremely informative. Binoculars required.

Richard Follett, see write-up under "Birding Yellowstone."

Interpreting Yellowstone with "Ranger Ted"

June 22-24 Fishing Bridge: 614

Limit: 20

July 6-8 Fishing Bridge: 705

August 3-5 Fishing Bridge: 803

\$55/person (Member's fee \$45)

Credit available (G, 1 semester hour, BYU)

Participants will be introduced to the wonders and dilemmas of Yellowstone by a semi-retired ranger-naturalist whose first summer in Yellowstone was in 1945. His series of nature walks and programs will encompass themes such as park history, environmental issues, personal reminiscences, kinship and interdependence of *all* life forms, predator-prey relationships, wilderness ecosystems and true bear stories. Activities will include short hikes, a visit to a bear den, wildlife observation, and plant identification. All hikes will include lots of short stops for relevant comments. Families will carpool to various locations around the park each day. Note: A group site will be reserved for tent camping at Bridge Bay Campground.

Ted J. Parkinson served 37 seasons as a ranger-naturalist in Yellowstone and has delighted thousands of children with his informative, inspiring nature walks. As a special faculty member at Brigham Young University he has taught environmental biology and natural history. He is the author of the "Ranger Ted" conservation programs presented throughout northern Utah.



Family Days at Pebble Creek: 615

June 24-26 Limit: 20

\$55/person (Member's fee \$45)

This three-day family camping experience will headquarter at Pebble Creek Campground in the northeast corner of Yellowstone. From there we will explore this area's spectacular landscape both in and out of the park. Through hikes, discussions, and games, participants will learn about the geology, wildlife, botany, and history of this very special region. We will also spend some time looking at the effects of the '88 fires to understand why this was such an important process for the Yellowstone Ecosystem. Critter watching at dawn will be an option. An evening campfire storytelling session will introduce the mythology and folklore of the Yellowstone country. Class will begin at 9:00 am on June 24. Families must provide their own food, including picnic lunches in the field. Campsites are available at Pebble Creek for \$6/night and it is recommended that sites be secured by mid-morning. For the non-campers, lodging is available at Roosevelt in the park or Cooke City, MT.

Sandy Nykerk is a naturalist and photographer based in Gardiner, Montana. Her work has been published in many calendars, books, and journals, and she teaches photography and natural history workshops around the country. Also active in environmental issues, she serves on the board of the Greater Yellowstone Coalition.

Jim Garry, see write-up under "Bears: Folklore & Biology."



Post-Glacial History of Yellowstone Lake: 616

June 26-28

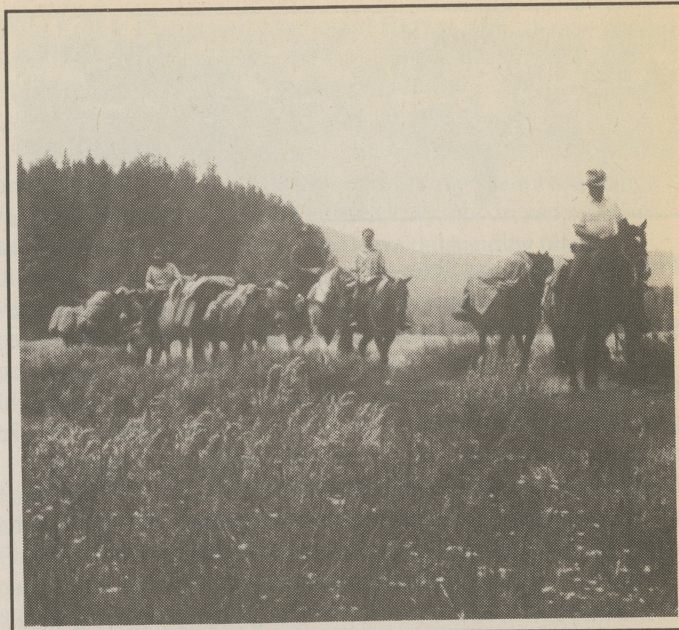
\$115 (Member's fee \$105)

Credit available (U or G, 1 semester hour, MSU)

Since the melting of glacial ice at Yellowstone Lake about 15,000 years ago, the level of the lake has been dominantly controlled by bedrock at LeHardy Rapids—the effective outlet located at the midline of the Yellowstone caldera. Abandoned shorelines of the lake, like bathtub rings, are found as much as 30 meters above and below the present shore. These elevated and submerged shorelines reveal the complex history of caldera unrest atop the largest active volcano in the Western Hemisphere.

By visiting several lakeshore localities each day and evaluating the sedimentary record in detail, you will see and come to understand evidence of early ice margins, stream deltas, abandoned beaches, deepwater deposits, 13,000 year old shoreline vegetation, buried soils, recent volcanic ash, breccias from steam explosions, and much more. You will be joining ongoing investigation, so you are assured of being personally involved in making new discoveries.

Wayne Hamilton, Ph.D., is a research geologist with the National Park Service in Yellowstone and adjunct assistant professor at Montana State University. His research involves measuring and mapping the subsurface geothermal systems in boundary areas subject to nearby geothermal development. He is also active in research at Yellowstone Lake, using records of lake levels to reconstruct a caldera deformation history.



Wilderness Horsepacking

Limit: 12 per class

June 30-July 3, Springtime Flora & Fauna: 617

July 13-17, Teton Crest Trail: 713

July 18-22, Exploring the Bechler Canyon Trail: 717

July 23-27, The Traditional Nez Perce Trail: 723

July 28-August 1, Indian Trails: 727

August 2-6, Nez Perce Trail: Alternate Route: 802

August 7-11, The Washburn Expedition Trail: 808

August 18-22, Two Ocean Pass: 816

4-day class (617 only): \$435 (Member's price \$425)

5-day classes (all others): \$495 (Member's fee \$485)

Credit available for 816 only (G or U, 2 semester hours, BYU)

Along with its specific theme, each of these courses will stress conservation of our natural resources through low-impact use of pack stock in the backcountry. Courses are participatory rather than catered trips where participants learn use and care of pack and riding horses and how to camp and travel in the wilderness without damaging the fragile country. *Fee includes horses, special equipment and food. Participants must provide their own sleeping bags and pads.*

The four day June 30-July 3 Springtime Flora and Fauna class will spend the first day at the Institute where basic horsemanship and botany lessons will take place. The horsetrip begins on day two and crosses the park's northern boundary and goes up the Yellowstone River to the Hellroaring country, an area of bountiful wildlife and colorful displays of spring flowers.

The July 13-17 Teton Crest trip will emphasize the special concerns of horseback trips through the fragile alpine ecosystem found along the west slope of the Tetons. At times the route passes through 10,000 ft. elevations with spectacular views of the Tetons—including striated walls, tarn lakes and braided streams.

The July 18-22 trip takes place in the seldom-traveled Bechler Canyon country between Old Faithful and the southwest corner of the park which features lush meadows and scenic canyon waterfalls.

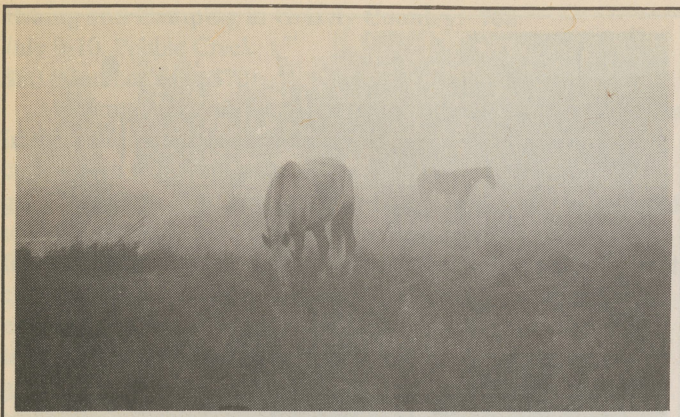


Photo by Rob Whittemore

The July 23-27 course will explore the probable route taken in August 1877 by Nez Perce Indians while pursued by the U.S. Army. To this day, their exact route through one of Yellowstone's most remote areas is unknown. It was wild and rugged then and remains so today.

The July 28-August 1 session will explore portions of Indian routes through Yellowstone, such as the Bannock Trail. The ride will take participants through sections of the upper Lamar Valley, Mirror Plateau, and Pelican Creek and provide a chance to examine the effects of the Clover-Mist fire of 1988.

The August 2-6 session will explore an area that has interested some historians as a possible Nez Perce route. The ride will loop through portions of the Pelican Creek and Broad Creek areas and end near Canyon.

The August 7-11 course will follow a portion of the original Washburn Expedition trail along the east and south shores of Yellowstone Lake through country that is still much as it was in 1870 when Washburn's party rode through it.

The August 18-22 course will start out from a point between Jackson and Dubois, WY and cover the significance of Two Ocean Pass to the fur trade history of Yellowstone National Park. Dr. Fred Gowans (see write-up under "Chiefs & Generals") will give evening lectures around the campfire.

Richard Clark, Ph.D., is a native of the upper Snake River Valley and has spent over a decade as a professional guide and outfitter in the Tetons and Yellowstone. He is a faculty member at Ricks College. His wealth of outdoor experience has been augmented with academic preparation in biology and botany at Utah State University, the University of Oregon, and Brigham Young University.



Photo by Rob Whittemore

Family Days in Sunlight: 701

July 1-3: (Shoshone National Forest) Limit: 20 people
\$55/person (Member's fee \$45)

Sunlight Basin and the Beartooth Mountains form the northeast flank of Yellowstone, an area noted for its scenic, high country beauty. This three day course will offer families an opportunity to share in learning about and from this natural wonderland. Participants will be introduced to the area's geology, wildlife, archaeology, history, and the fires of '88, as well as naked-eye astronomy. Critter watching at dawn will be an option, and an evening campfire storytelling session will introduce the mythology and folklore of the Yellowstone country. Fieldtrips will include short hikes.

The course will be headquartered adjacent to the park in the Shoshone National Forest at Fox Creek Campground, approximately seven miles east of Cooke City, MT. Field trips will include short hikes. Participants will meet at Fox Creek at 9:00 am on the first day, July 1. Campsites are available at Fox Creek for \$5/night. Families who do not plan to stay in their tents, campers, or RVs may request a list of nearby accommodations. Families must provide their own camping equipment and food for all meals.

Jim Garry, see write-up under "Bears: Folklore and Biology."

Sandy Nykerk, see write-up under "Family Days at Pebble Creek."



Wilderness Photography: 702

July 1-5 Pilot Creek (Shoshone National Forest)
\$335 (Member's fee \$325)

This course will cover all of the subject matter in "Wildlife Photography" (June 15-18) but will take place in the Absaroka Beartooth Wilderness adjacent to the park. The group will spend most of its time in remote locations shooting infrequently viewed scenes. Outings will involve moderate hiking with light packs through untracked wilderness. Group equipment, food, and other heavy items will be hauled to the campsite by horsepackers. Participants will have to carry camera gear and some personal gear to the campsite, a moderate six hour hike. Expect daily hikes in mountain country up to 9,000 feet elevation.

Each person must provide tent, sleeping bag, pad, pack and personal gear. A detailed equipment list will be provided in the student packet. *Fee includes group equipment, food, and horsepacking. A camp cook will prepare meals.*

Tom McBride, see write-up under "Wildlife Photography".

Yellowstone's Birds of Prey: 703

July 3-5

\$115 (Member's fee \$105)

Credit available (U, 1 semester hour, MSU)

This course features Yellowstone's hawks, eagles, falcons, and owls, collectively known as raptors, in their natural habitats. Identification will be emphasized along with the role of predation in ecological communities, predator-prey relationships, breeding strategies, and habitat influences. Conservation measures and management problems unique to raptors will also be examined during the course. A special boat trip to Frank Island on Yellowstone Lake will be made to see nesting ospreys and bald eagles. The instructor's great horned owl will also participate.

John W. Martin is currently a wildlife biologist in Land Acquisition Planning for the U.S. Fish & Wildlife Service in Denver, CO. His research leading to an M.S. in Wildlife and Range Resources was based on Northern Harrier habitat utilization.



Fire in Paradise—the Fourth Year: 704

July 4-5

\$80 (Member's fee \$70)

The Yellowstone fires of 1988 appeared to change the landscape forever. News stories told of Yellowstone's "incineration" and the blackening of the first and best national park. However, ecological benefits and realities often are masked by our immediate perceptions.

Was the land irrevocably altered? Why does new life spring from the darkened soil? Come on a scientific journey with Dr. Shovic to see for yourselves. We will examine what is actually occurring as Yellowstone patiently rises again from the ashes. We will explore the landscapes and get our hands dirty with the stuff of life: water, soil, and the thousands of seeds sprouting in the rich, fertile soil.

Henry Shovic, Ph.D., is an interagency soil scientist for Yellowstone National Park and the Gallatin National Forest. He played an active roll collecting and analyzing samples for preliminary reports on fire effects during the summer of 1988.

Interpreting Yellowstone with Ranger Ted: 705

July 6-8 (see description on page 9)



Eagles of the Yellowstone Ecosystem: 706

July 6-8

\$115 (Members fee \$105)

Credit available (U, 1 semester hour, MSU)

Bald eagles and golden eagles will be the subjects as the instructor compares and contrasts their hunting patterns, habitat preferences, mating strategies, nesting behavior, territoriality, and competition with other species.

Presentations will combine field trips with discussions on radio tracking, eagle biology, rational management strategies, research programs, and threats to eagle habitat. The instructor will bring a captive of each species.

Al Harmata, Ph.D., is a raptor biologist, eagle specialist. He is a research professor at Montana State University involved with research on bald eagles of the Yellowstone ecosystem.

Macro and More: Beyond Photography Basics: 707

July 7-9

\$115 (Member's fee \$105)

This three day workshop will emphasize several advanced techniques for photography with special consideration given to the basics of close-up photography. A working knowledge of photographic principles and an understanding of your equipment will be assumed. Topics will include a short review of general principles, the ethics of nature photography, macro basics, film and equipment selection, depth of field, making the most of natural light, techniques for using flash in the field, and obtaining natural effects.

Mornings will be spent in the classroom. Afternoons will be devoted to field sessions focusing on the photography of flowers and other "little things." Emphasis will be on developing personal vision and creativity combined with technical excellence.

Sandy Nykerk, see write-up under "Family Days at Pebble Creek."

Hiking and Camping in Grizzly Country: 708

July 9-10, Pebble Creek

\$80 (Member's fee \$70)

Limit: 10

Moderate hikes of five to six miles each day and an overnight in the Yellowstone backcountry will provide the format for this class which will emphasize safety and precautions necessary in grizzly country. The first morning of this course will be devoted to a discussion of the history of bear/man confrontations followed by a discussion of techniques for the prevention of such confrontations including suggestions for dealing with grizzly encounters. The remainder of the course will cover camping techniques and further discussion about the current status of the great bear and its uncertain future. Teenagers accompanied by adults are welcome. *Participants provide their own backpacking gear and food. A complete equipment list will be provided in the student packet.*

Bill Schneider is the author of Where the Grizzly Walks, The Hiker's Guide to Montana, and dozens of magazine articles on grizzlies. He has a degree in wildlife biology and was editor of the Montana Outdoors for nine years. He is currently a publisher with Falcon Press of Helena, Montana, a company specializing in hiking guides and other outdoor books.

Alpine Wildflowers: 709

July 11-12

\$80 (Member's fee \$70)

Credit available (U, 2 quarter hours, U of MT)

Wildflowers growing in the alpine tundra above the tree line will be the focus of this course. Participants will make day trips to the high country of the Beartooth Plateau to study the beauty of flowers found only in circumpolar arctic environments and on the highest mountain tops below their arctic home. A variety of alpine ecosystems will be studied including the "krummholz" or windbattered, horizontal pygmy forest, the cushion plants of the boulder fellfields, the lush alpine meadows, and the flowers that spring up behind the receding snowbanks.

Wayne Phillips, see write-up under "Wild Edible Plants and Medicinal Herbs."



Wolves of Yellowstone: The Missing Link: 710

July 11-12

\$95 (Member's fee \$85)

This course will focus on the wolf as the major missing link in the Yellowstone ecosystem. The ecological role of the wolf as a major predator of large ungulates will be examined as well as the historical and present status of wolves and their habitat in the park. The course will also explore the issues, options and strategies associated with restoration of wolves to Yellowstone. *Course fee includes \$15 for a large resource manual assembled by the instructor.*

John Weaver is a wildlife researcher with the Northern Rockies Conservation Cooperative in Missoula, Montana. He holds graduate and undergraduate degrees in wildlife science and has published scientific papers on wolves including a treatise on "The Wolves of Yellowstone." He was a member of the Northern Rocky Mountain Wolf Recovery Team and is now studying wolves in Jasper National Park for his Ph.D.



Fire, Ice and Fossil Forests: 711

July 13-15

\$115 (Member's fee \$105)

Credit available (U, 1 semester hour, MSU)

This course will introduce participants to the unique petrified forests of Yellowstone and to the Ice Age history of the park which profoundly influenced today's flora and fauna. There will be a discussion of the theory that repeated episodes of volcanic activity buried living forests in ash and mudflows to be slowly petrified by mineral-bearing hot water. Moving to the last two million years, discussion will focus on glacial ice and volcanic explosions. The course will involve a field trip to observe evidence of glaciation and discuss the volcanic history of Yellowstone and the Absaroka and Beartooth Mountains, an all-day hike on Specimen Ridge, and a hike up Mt. Washburn where glacial and volcanic phenomena are visually united.

John Good was chief naturalist of Yellowstone National Park for six years. During his distinguished career in the National Park Service he served as superintendent of Acadia and Everglades National Parks and assistant superintendent of Yosemite. He holds a masters degree in geology and is a fellow of the Geological Society of America.



Learning Outdoor Photography: 712

July 13-16

\$160 (Member's fee \$150)

This field course is geared to those who want to develop their skills in outdoor photography. No previous photography experience is necessary. The course will provide instruction on all aspects of the use of the camera, proper exposure, composition, and use of tripods and wide angle, telephoto, and close-up lenses. Special emphasis will be given to seeing and interpreting a variety of Yellowstone subjects including wildflowers, water scenes, landscapes and wildlife.

Pete Houdeshel's photographic prints have been featured in galleries in over 25 cities across the nation and his clients include Hallmark Cards, Marriott Hotels, Aloha Magazine, and Hyatt Regency Hotels. He worked for ten years for New Worlds Magazine and has a special interest in discovering how to present scenes with imagination and clarity. He flies jets for Delta Airlines when not out with a camera.

Horsepacking: Teton Crest Trail: 713

July 13-17 (see description on pages 10-11)

Three Days at the Buffalo Ranch (Ages 8-12): 714

July 17-19

\$115 (Member's fee \$105)

Limit: 20

This three day stay at the Lamar Buffalo Ranch is especially for children. It provides an exciting time for youngsters to learn and explore in a national park and make new friends. Each day includes a hike to observe wildlife and learn about plants, ecology, and the park's history. Bring your own white or light colored t-shirt to decorate with a personal Yellowstone design. Active days of fun and learning are concluded each evening with games, songs, and wildlife films. *Fee includes meals and lodging. Children must provide their own sleeping bags, water bottle, and day packs. A complete equipment list will be provided in the student packet.* (A class for adults has been scheduled to coincide with this course to give parents a class option. See write-up for "Exploring The Yellowstone Ecosystem.")

Louise Bruce has a degree in recreation management. She has extensive experience in outdoor and environmental education through work with nature centers, schools, and camps and at Yellowstone and Grand Canyon National Parks. She has taught at the Institute for six years and has worked as an organizer for the Northern Plains Resource Council.

Exploring the Yellowstone Ecosystem: 715

July 17-19 Mammoth

\$95 (Member's fee \$85)

This course will look at park geology, wildlife, botany and history in the context of an ecosystem. It will examine Yellowstone's fiery birth, its frozen past and how these events prepared the stage upon which plants and animals act out their interdependent roles. The class will look at geysers and hot springs and many wildlife species and will consider what they are, why they are present in Yellowstone and the threats they face. An abiding interest in nature, not scientific training, is the only requirement. The class will meet from 1:00 pm, July 17 through early afternoon July 19 and will headquarter at Mammoth Hot Springs. Contact the Institute office for lodging and camping information. (Note: See schedule tie-in with children's class, "Three Days at the Buffalo Ranch.")

Tom Watson teaches high school biology and geology in California. He has spent 11 summers studying the Greater Yellowstone Ecosystem at the Yellowstone Institute and has worked as a volunteer for the Institute.



Geysers, Mudpots, and Hot Springs: 716

July 18-20 Old Faithful

\$100 (Member's fee \$90)

Credit available (U, 1 semester hour, MSU)

The rare, spectacular geothermal features of Yellowstone will be explored in this course. After a short introduction, visits to mudpots, hot springs, and geysers will begin with hikes timed to see several of the less common geysers erupt. The class will meet at the Grand Canyon of the Yellowstone at noon on July 18 and then proceed to the Old Faithful area for a full day of geyser gazing on July 19. Norris Geyser Basin and other sites will be visited on July 20, with class ending early afternoon. No background in geology is required. Fee does not include lodging. This class will headquarter at Old Faithful. Early lodging reservations are essential. Contact the Institute office for information on lodging and camping.

Duncan Foley, Ph.D., teaches geology at Pacific Lutheran University in Tacoma, Washington. He has worked throughout the western United States and Guatemala on volcanoes and geothermal systems and has taught Institute classes for the past 13 years.

Horsepacking: Bechler Canyon Trail: 717

July 18-22 (see description on pages 10-11)



Ecology of Greater Yellowstone: 718

July 20-24

\$200 (Member's fee \$190)

Credit available (U or G, 1 semester hour, Idaho State U)

This class will provide an introduction to the greater Yellowstone ecosystem's ecology, plant and animal populations, biotic communities, key management challenges, and use of the ecosystem concept in the greater Yellowstone area. Each of the major biotic communities will be visited and the role of succession, fire, and other factors will be discussed. The course will feature guest speakers plus field trips to observe large mammal and bird species and to survey some of the ecosystem's major challenges such as wildlife management, threatened and endangered species, and surrounding forest lands. The course is designed for beginners as well as advanced students.

Tim Clark, Ph.D., is Professor adjunct, Yale University and President, Northern Rockies Conservation Cooperative, Jackson, WY. He has taught and carried out ecological and policy research for over 20 years in the Greater Yellowstone Ecosystem. He has published numerous papers and several books and monographs.

Llama Trekking in the Tetons: 719

July 20-23 Targhee National Forest

\$295 (Member's fee \$285)

Limit: 8

Experience a four day trip into the high alpine lake basins of the Teton Mountain Range. This loop trip includes breathtaking views of the Tetons and Yellowstone to the north from elevations near 10,000 feet. Learn about the natural history of the Jedediah Smith Wilderness while learning about using llamas as pack animals in a wilderness setting. The history of the camelid as a species originating on the North American continent will also be covered. Instructors are experts in primitive survival skills and will enhance the trip with fire building, tool making and the use of animal fibers for spinning and cordage making. Each participant will be able to return home with an item twisted from the wool of their pack llama. Participants will be involved in all aspects of this trek, including cooking, setting up camp, and packing and leading llamas.

Enrollees should be prepared to hike a total of 20 miles at elevations of 7,500 to 8,000 feet with day packs of 5-15 lbs. *Fee includes food and group camping gear. Each enrollee must bring a sleeping bag, canteen, and day pack and will be allowed 20 lbs. of personal gear for llama transport. This is a participatory rather than a catered trip.*

Carrie Wilson has a degree in recreation education and eight years experience as a Wilderness Trip Leader for Ricks College. and has also taught courses on aboriginal survival skills.

Greg Smith has his associate degree from Ricks College in Recreation Education and is certified in advanced first aid. He has six years of llama packing experience and is the lead guide for Teton Llamas' commercial pack trips.

Hydrothermal Systems & the Yellowstone Caldera: 720

July 21-25

\$200 (Member's fee \$190)

Credit available (U or G, 3 quarter hours, U of MT)

The class will present a thorough discussion of the geological evolution of the Yellowstone caldera and the nature and occurrence of hot springs, geysers, and mudpots. Lectures will include discussions of volcanic rocks, caldera cycles, and development of geologic structures that influence the location of hydrothermal systems, the geology of geothermal features and the chemistry of thermal waters. Field trips will visit areas that feature the many types of rocks produced during several stages of the Yellowstone caldera and famous and unusual hydrothermal features that are off the beaten path.

The class will have special appeal for teachers of earth science and others with serious interest. A background knowledge of geology will help in understanding many of the topics.

Duncan Foley, Ph.D., see write-up under "Geysers, Mud Pots, and Hot Springs."

Roy Mink, Ph.D., was a manager of geotechnical science with Morrison-Knudsen Engineers and is now Director of the Idaho Water Resource Research Institute with the University of Idaho. He has extensive experience in geothermal systems, was formerly chief of the geothermal energy branch of the U.S. Department of Energy at Idaho Falls, and has worked on national geothermal programs with the DOE. He is presently working on a geothermal power project in Guatemala.

Clay Nichols, Ph.D., is deputy assistant manager for Projects and Energy Programs at the Idaho Falls office of the Department of Energy where he manages programs at the Idaho National Engineering Laboratory and many universities. He has also worked on national geothermal programs for the DOE.

Exploring the Park with a Ranger Family: 721

July 22-24 (Grant Village)

Limit: 20 people

\$55/person (Member's fee \$45)

This is a class for families—taught by a family. Two former National Park Service rangers and their 5 and 2 year-old sons will lead you off the beaten track, sharing their years of experience in Yellowstone. The course is based at the Grant Village group campsite, but families may stay in nearby lodges. The class will include both easy walks and more strenuous walks at a family pace. This class will explore the West Thumb Geyser Basin, hike to points overlooking Yellowstone Lake, learn about how fish are managed in the park, and sharpen photography and compass skills. You may stay at the Grant Village group campsite starting the evening of Tuesday, July 21. Class begins at 9:00 am Tuesday, July 22 and runs until 10:00 pm on Friday July 24. Families must provide their own camping equipment and food.

Jack de Golia is the Public Affairs Officer for the Beaverhead National Forest in Dillon, Montana. For seven years he was an interpretive naturalist in Yellowstone, in charge of the environmental education program. He has written two books, one about Everglades National Park and one about fire.

Louise Bruce, see write-up under "Three Days at the Buffalo Ranch."

Alex de Golia, age 5, first came to Yellowstone from the hospital in Livingston, MT when he was five days old. His first word was "elk" and his first phrase was "big elk eat." He brings his unique perspective of Yellowstone that only a little kid can have!

Kyle de Golia, age 2, is a native of Montana and an expert observer.

Family Days at Grant Village: 722

July 23-25

Limit: 20 people

\$55/person (Member's fee \$45)

This family camping experience will focus on the southern section of the park. We will be based at the Grant Village group campsite, where families are encouraged to stay, but families may stay at nearby lodges in Grant Village. We will explore the West Thumb Geyser Basin, Upper Geyser Basin, the Old Faithful area and the north shore of Yellowstone Lake. Discussion and learning activities will focus on fire ecology, geology, plants, wildlife and photography. During the class we will take leisurely walks and hikes at a pace allowing ample time to look and learn. We will enjoy luncheon picnics, a special Yellowstone gift exchange, and introduce you to some special literature. You may stay at the group campsite starting the evening of July 22. Class begins at 9:00 am July 23 and concludes by 5:00 pm July 25.

Sandy Nykerk, see write-up under "Family Days at Pebble Creek."
Bill Williams holds a B.S. in Urban & Regional Planning and Environmental Studies. His first summer with the Institute was in 1981, teaching a children's class and assisting with backcountry classes. He co-leads a photo tour in the park in the summer and teaches 6th grade in Southwest Colorado during the school year.

Horsepacking: Traditional Nez Perce Route: 723

July 23-27 (see description on pages 10-11)

Wildflowers of the High Country (Llama Trek): 724

July 25-28 Beartooth Backcountry

\$320 (Member's fee \$310)

Limit: 10

Credit available (U, 2 quarter hours, U of MT)

For this four day backcountry study of alpine plants and their environment, group gear and food will be transported by llama to a campsite near the high country lakes of the Beartooth Mountains. Participants should be prepared for hikes of four to five miles per day on relatively gentle terrain at an elevation of about 8,000 feet. Wildflowers along the edges of the many lakes, streams, snowbanks and glaciers will be featured, from the alpine tundra to the open subalpine forest. *Enrollees must bring sleeping bag, pad, and pack. Fee includes group equipment, food and llama packing. A camp tender will prepare meals.*

Wayne Phillips, see write-up under "Wild Edible Plants and Medicinal Herbs."

Mammal Tracking: Tracks, Scat & Other Sign: 725

July 25-28 (see description on page 6)

**Geology of the Yellowstone Country: 726**

July 27-31

\$200 (Member's fee \$190)

Credit available (U or G, 1 semester hour, U of WY)

This course, conducted in the natural field laboratory of Yellowstone Park, will concentrate on the geological evolution of the area. Daily travel through the park will introduce you in depth to such topics as volcanic rocks and processes, glaciation, earthquakes and faulting, hydrothermal features, sedimentary rocks and processes, metamorphism and tectonics. Completion of an introductory geology course is preferable but not required.

David Fountain, Ph.D., is a professor of geology at the University of Wyoming. He has taught field courses in Yellowstone and Glacier National Parks, served as co-instructor in a National Science Foundation course for science teachers, and is editor of the journal Geology for the Geological Society of America. His research interests are crustal evolution and structure which he has studied in Europe, Canada, the northwest Pacific Ocean, and the Rockies.

Horsepacking: Indian Trails: 727

July 28-August 1 (see description on pages 10-11)

**Small Mammals—Prey and Predators: 728**

July 29-31

\$115 (Member's fee \$105)

Credit available (U or G, 1 semester hour, ID State U)

This course emphasizes identification, ecological role, behavior, and factors affecting the distribution and abundance of small mammals in Yellowstone. Field work will involve live trapping and tracking small mammals, and their role in the ecosystem as prey and predators will be considered. We will also study the impact of the 1988 fires on small mammals.

Don Streubel holds a Doctor of Arts degree in Biology and is a professor of biology at Idaho State University and is the author of Small Mammals of the Yellowstone Ecosystem. He was director of the Yellowstone Institute from 1989 to 1990.

Alpine Ecology: 729

July 29-August 1 Cooke City, MT

\$175 (Member's fee \$165)

Credit available (U, 2 quarter hours, U of MT; or 1 semester hour, MSU)

The Beartooths are still locked in glaciation as they form the northeast bastions of the Yellowstone Ecosystem. From the Beartooth section of U.S. 212, called by Charles Kuralt, "...the most beautiful roadway in America," there will be day trips to this incredible region above tree line. The class will carpool to various locations and explore the patterns and processes of geology, glaciers, peri-glacial features, climate, and plant and animal communities as they combine to form the alpine tundra. Using a hierarchical approach, ecosystem functions over differing time and space scales will be stressed. The interference with modern civilization will also be analyzed. *Tuition includes course materials.* **Note:** This course will headquarter at Cooke City, MT.

Jim Halfpenny, see write-up under "Mammal Tracking."

**Backcountry Photography: 730**

July 30-August 3 Buffalo Horn Lakes (Gallatin Nat'l. Forest)

\$335 (Member's fee \$325)

This course will cover all of the subject matter in "Wildlife Photography" (June 15-18) but will take place in a beautiful backcountry setting outside the northern boundary of the park in the Gallatin National Forest. The group will spend most of its time in remote locations shooting infrequently viewed scenes. Outings will involve moderate hiking with light packs.

Camp gear will be taken by a horsepacker to the basecamp. Participants will accompany the instructor on a 4 mile hike to the site. Daily hikes are in mountain country at 6,500 to 8,500 feet elevations.

Each person must provide tent, sleeping bag, pad, personal gear and pack. A detailed equipment list will be provided in the student packet. *Fee includes group equipment, food, and horsepacking. A camp cook will prepare meals.*

Tom McBride, see write-up under "Wildlife Photography."

Family Days in the Thermal Basins: 801

August 2-4

\$55/person (Member's fee \$45)

The thermal areas of Yellowstone are unique in the world for their number and diversity. For three days, this family class will explore the thermal basins of Yellowstone, gaining an understanding of the geology and ecological systems which make these features possible. We will spend time at many of the thermal areas, both on and off the beaten path, including Norris, Old Faithful and West Thumb. Field trips will be paced for a family experience and will allow ample time to enjoy all of Yellowstone's natural history, including wildlife and botany. Crier watching at dawn will be an option. An evening campfire storytelling session will introduce the mythology and folklore of the Yellowstone country.

Class will be based at the Madison Campground. Families must secure their own campsites early in the day, the cost is \$8 per night, and provide their own camping equipment and food, including field lunches. Children in this course should be at least six years of age. Class begins at 9:00 am on August 2. Participants will carpool for field trips.

Sandy Nykerk, see write-up under "Family Days at Pebble Creek."

Jim Garry, see write-up under "Bears: Folklore & Biology."

Horsepacking: Nez Perce Alternate Route: 802

August 2-6 (see description on pages 10-11)

Interpreting Yellowstone with Ranger Ted: 803

August 3-5 (see description on page 9)

Experiencing the Spirit in Nature: 804

August 3-5

\$115 (Member's fee \$105)

After the biologist, geologist, physicist, and ecologist have probed as deeply as they can into nature, we still have unanswered questions; we want to know more about the mystery that remains. Is a rock, a geyser, a glacier, an elk only what we see and measure, or is it possible to go beyond rational science and continue to learn from the mystery we intuit at the heart of all existence? Seeking answers to this may be necessary if we are to be instrumental in healing the environment. Many people desire to drawn into a deeper relationship with nature. Our goal is to become deeply aware of all that surrounds us by taking time to see, question, and reflect. This will enhance our personal connection with nature and, hopefully, lead to a better articulation of our values as planetary citizens. We will listen to what the rock, the tree, the stream, the sky, the mountain, the elk and the buffalo has to say to us, using techniques developed by the instructor through 40 years of experience in the Greater Yellowstone area. Our classroom is the outdoors with day hikes of moderate intensity to areas that have a special "sense of place," with frequent pauses. Discussions will take place in a lightly structured atmosphere.

John Kirsch has been a rancher, big game biologist and priest in Montana during the past 40 years. He has a M.S. in Wildlife Management and trained for the priesthood at John XXIII Seminary in Boston. For seven summers he taught a course on "Eco-Theo" (ecology and theology) at Carroll College in Helena, MT. He has conducted trips for several years to enhance awareness of nature in the Yellowstone Ecosystem.



Yellowstone's Wayside History: 805

August 3-5

\$115 (Member's fee \$105)

Students in this course will examine sites and evidence of Yellowstone's human history along or near the park roads. It will consist of day-long field trips from the Institute and several off-road hikes (none exceeding three miles, round trip), with explanation of the significance of the places visited, both at the site and while traveling between them. Discussions will cover the whole range of human activity from the prehistoric to the modern uses of the park area. At some locations, the visual perception will be augmented by the use of early photographs.

Aubrey L. Haines, is a retired National Park Service historian and is author of a two volume history, The Yellowstone Story, and a number of other books and articles on the park. His working familiarity with the area covered the period from 1938 to retirement in 1969. He has previously taught history courses for the Yellowstone Institute.

Characters of Yellowstone: 806

August 6-7

\$80 (Member's fee \$70)

From the days before the creation of Yellowstone National Park in 1872 and well into this century, the Yellowstone Plateau attracted a cast of peculiar characters that matched the region's natural wonders. Some of them stayed only a season or two, while others decided to make Yellowstone their home. Some had heroic adventures and left their names on the landscape, while others sought solitude or sanctuary from civilization. This course will introduce students to the biographies of a dozen or more of these characters and visit places they frequented or made famous in Yellowstone.

Bill Lang, Ph.D., is research director of Center for Columbia River History in Vancouver, Washington. He has taught at Carroll College, the University of Montana and Montana State University. He has written many articles on Yellowstone history and is co-author of Montana: Our Land and People and editor of The Centennial West.

Fly Fishing the Catch-and-Release Way

August 7-9 less experienced: 807 Limit: 8

August 14-16 more experienced: 813 Limit: 9

\$150 (Member's fee \$140)

Both sessions of this course will emphasize the special nature of Yellowstone fishing—its abundance of native fish and the special regulations and fishing philosophies which have enabled

park managers to protect and maintain a sport fishing resource. The course for less experienced persons will concentrate on the basics and is intended for those who have progressed far enough to purchase their own equipment but who have not spent much time actually fly fishing. About half the course time in this first session will be spent away from the water practicing casting and other techniques. During the second and third days, the instructor will work with half of the group each day on the stream. He will be available each evening for discussion. The limited enrollment will allow time for the instructor to work with each person one-to-one. Students should be aware the Yellowstone lies above 7,000 feet in altitude and neither its stream banks nor their approaches are flat. Some hiking will be required.

The session for the more experienced is for persons who have mastered the basics and will focus almost exclusively on fishing Yellowstone's waters. The instructor will act primarily as a resource person in assisting participants in polishing their skills. Most instruction will be on an individual basis or in small groups. During the two days you are not having the intensive instruction, you will practice on your own and meet with the group for morning and evening discussions.

Richard Parks, see write-up under "Fly Fishing the West Side."

Horsepacking: Washburn Expedition Trail: 808

August 7-11 (see description on pages 10-11)

The Flight of the Nez Perce Through Yellowstone-1877: 809

August 8-9

\$80 (Member's fee \$70)

This course will trace the path of the fleeing Nez Perce as they raced to sanctuary in Canada. Pursued by the army in the summer of 1877, they passed through some of the roughest terrain in Yellowstone Park. Readings, slides, and on-site visits to historic points along their route will be included in the course.

Bill Lang, see write-up under "Characters of Yellowstone."

Yellowstone Streams Through the Eyes of a Trout: 810

August 10-12

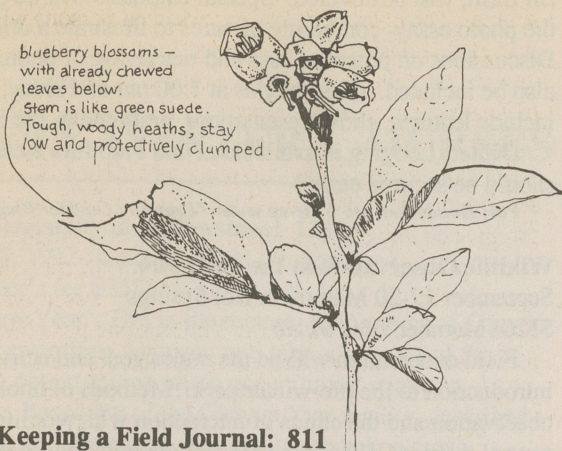
\$115 (Member's fee \$105)

Limit: 12

Credit available (U or G, 1 semester hour, ID State U)

Designed for experienced anglers and others interested in aquatic systems in Yellowstone, this course will help you gain a better understanding of the behavior of stream-dwelling trout and the ways in which they are adapted to their environment. Discussions will focus on diet, habitat use, and sensory perception of trout in Yellowstone streams and will include life histories of the species important in the park and factors affecting their populations. A field trip to the Firehole River will provide a chance for students to don wet suits and snorkel and directly observe fish behavior. This is not a "how to fish" class, but rather a "trout appreciation" class.

Jack Griffith, Ph.D., is professor of biological sciences at Idaho State University. His research specialty is the ecology of trout in streams such as Idaho's Henry's Fork and Silver Creek and in the park, the Yellowstone and the Firehole Rivers.



The Art of Keeping a Field Journal: 811

August 11-14

\$160 (Member's fee \$150)

This course is for the student of nature who wants to deepen his or her outdoor experiences by keeping a journal. During this four day workshop we will explore the sublimity of Yellowstone's rich ecosystems, drawing and writing in the field. We will work both on quick recording and on more extended, reflective studies. By observing the works of some of the great naturalists and artists, we will learn about their techniques and intentions. The emphasis of this course will be less on amassing information and more on finding methods of discovery.

Hannah Hinchman has kept an illustrated journal for 22 years. She has a B.F.A. from Portland School of Art, Maine, and shows her watercolor "illuminated journal pages" at various galleries. She is a columnist for Sierra magazine and her book, A Life in Hand: Creating the Illuminated Journal, published by Peregrine Smith Press appeared in the fall of 1991. She has lived in the West for 10 years.

Backpacking the Beartooths: 812

August 11-15 Beartooth Mountains (Shoshone Nat'l. Forest)

\$200 (Member's fee \$190)

The Beartooth Plateau, just northeast of the park, is more than a vital part of the Yellowstone ecosystem—it is also a paradise for hikers. Almost a million acres of high altitude wilderness dotted with hundreds of pristine lakes, much of which is included in the spectacular Absaroka-Beartooth Wilderness.

This five day excursion into the Beartooths is lead by our seven year veteran instructor of *Hiking and Camping in Grizzly Country*, Bill Schneider. In addition to the principles of backpacking, the course will cover, in the ultimate classroom, many resource issues related to Yellowstone: grizzly bear management, wolf reintroduction, and fire ecology. There will also be discussions on alternatives to high-tech backpacking equipment. Hikes will be 6-9 miles per day at high elevations. Participants should be in good physical shape. Students are responsible for providing their own equipment and food. A complete equipment list will be sent in the student packet. Teenagers accompanied by adults are welcome.

Bill Schneider, see write-up under "Hiking & Camping in Grizzly Country."

Fly Fishing: More Experienced: 813

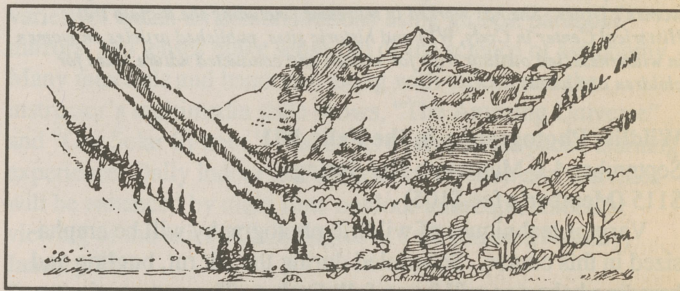
August 14-16 (see description on page 18)

Discovering Yellowstone Through Drawing & Painting: 814

August 17-21

\$200 (Member's fee \$190)

The focus of this class is drawing and painting the Yellowstone landscape. Participants will primarily be working outdoors, and begin with pencil and pen & ink sketching. Students will draw the close-up detail of a flower or tree, then consider the distant landscape of a valley or mountain range. Elements of form, texture, light and shadow will be covered in the drawing and painting portions of the course. Next, we will focus on outdoor watercolor sketching, toward a goal of painting larger, finished landscapes. The Institute classroom is available to use as a studio, in case of rain or for those wanting extra painting time. There will be individual and group critiques, as well as drawing and painting demonstrations.



Karmen Thompson has a BFA from the University of Colorado and has been drawing and painting since she was 5. She prefers a sketchbook to a camera and always draws when she travels. The landscape, especially the western landscape, has always been a fascinating subject for her. Presently, children's book illustration is her main interest, with watercolor being her preferred media. She illustrated Meet the Orchestra, which was published in 1990 by Harcourt Brace.

Finding Your Own Voice:

A Wilderness Writing Workshop: 815

August 17-21

\$160 (Member's fee \$150)

This four day workshop is for anyone who loves nature and likes to write. The course goals are to increase powers of observation, improve descriptive writing skills, deepen personal trust and confidence, and stimulate creativity. Designed to expand our awareness of the natural world in Yellowstone as well as deepen our appreciation of the wildness within ourselves, this class will combine writing and experiential exercises, both indoors and outside, with group interaction and guided field trips. We will spend time at an active geothermal area not often found by the average visitor, explore animal habitats and spend most of a day at a burn site created by the fires of 1988. There will be ample time to write and encouragement to share and learn from each other. Class begins at 7:00 pm, August 17.

Deborah M. Bond, Ph.D., is a wildlands enthusiast, psychotherapist, and free lance writer. She has been an affiliate professor at the University of Montana. Her poetry has appeared in a number of publications. A collection of her short stories "Earth Stories" appeared in Snowy Egret, oldest independent nature journal in the U.S.

Dorothy Hinshaw Patent, Ph.D., is the author of more than fifty science books for children. She is a recipient of the Eva Gordon Award (American Nature Study Society), Golden Kite Award (Society for Children's Book Writers) and Golden Kite Honor Award. Most of her books have been selected as Outstanding Science Trade Books for Children.

Horsepacking: Two Ocean Pass: 816
August 18-22 (see description on pages 10-11)

Women & Yellowstone—A Historical Perspective: 817
August 22-23
\$80 (Member's fee \$70)

This course examines Yellowstone as seen by women in the late 19th and early 20th centuries. Using diaries, letters, photographs and other historical resources, the group will discover the variety of experiences encountered by women residents and visitors to the park during its early years. Day hikes will include exploring old tourist sites, cemeteries, and natural features which encourage an understanding of how women interacted with Yellowstone. Day hikes of 2-4 miles can be expected.

Karen Krieger has her masters degree in American Studies from Utah State University and works in the Fife Folklore archives at USU researching women's issues. She has worked in museums (including the Buffalo Bill Historical Center in Cody, WY) and historic sites, published articles on women in wilderness, led outdoor trips for women and conducted nature hikes for children and adults.

Wildlife Photography in the Fall: 901
September 4-6 Mammoth Hot Springs
\$115 (Member's fee \$105)

Various techniques of wildlife photography will be emphasized in this course. Scheduled during the elk rut, bugling and breeding behavior will be on full display. The opportunity to photograph other members of Yellowstone's diverse wildlife populations are always present. The course will also cover wildlife behavior, including human behavior in the presence of wildlife, and the ethics of wildlife photography will be continually stressed.

Tom McBride, see write-up under "Wildlife Photography."

Autumn Photography in Yellowstone: 902
September 8-10 Mammoth Hot Springs
\$115 (Member's fee \$105)

This course will spend three days exploring the many photographic opportunities of a Yellowstone autumn—from bugling elk and rutting pronghorn, to the subtle and delicate colors of the changing landscape. Designed for photographers of all levels, there will be class time to review basic photographic principles and discuss the ethics of field photography, exposure control, composition, and film and lense selection. Most of the time will be spent in the field for "hands-on" learning and shooting and exploring the possibilities for capturing on film the essence of fall in Yellowstone.

Sandy Nykerk, see write-up under "Family Days at Pebble Creek."

Autumn Scenic Photography in Yellowstone: 903
September 11-13 Old Faithful Area
\$115 (Member's fee \$105)

Fall, rich in wildlife and color, peacefully uncrowded, is a favorite time for photographers in Yellowstone. This class will headquarter in the Old Faithful area and is designed to give the more experienced photographer the opportunity for an autumn exploration—from vast scenics to intriguing close-ups. Techniques in equipment use, from wide angle lenses to macros, to

fill flash, will be covered. Special emphasis will be placed on the photo essay—combining pictures to illustrate a unified theme. Discussions on potential uses and marketing of photography will also be included. Class begins at 1:00 pm on Friday. Activities include lectures, slide presentations, and time in the field.

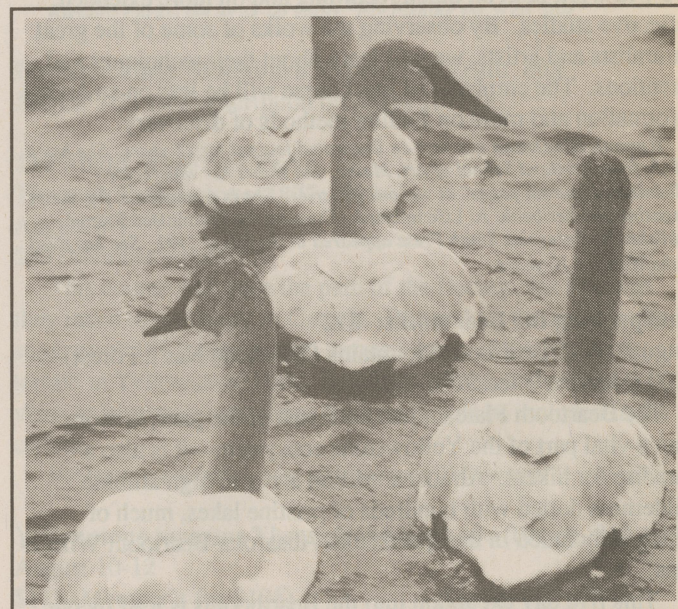
(Note: Lodging is available at Old Faithful. Reservations should be secured early.)

Pete Houdeshel, see write-up under "Learning Outdoor Photography".

Wildlife Observation in the Fall: 904
September 17-20 Mammoth Hot Springs
\$120 (Member's fee \$110)

Field observation will be the major goal and activity of this introduction to the pre-winter park. Methods of unobtrusive observation and the ethics of interaction with wildlife will be central themes. The informal schedule will feature early morning and evening field trips, short midday hikes and interviews with researchers. Other topics will include bison, elk, rutting behavior, bears, photo tips, and optics. The course will headquarter in the Mammoth/Gardiner area and begin at 6:00 pm on September 17.

Gene Ball, see write-up under "Wildlife Observation in the Spring."



Swan Identification and Ecology: 905
October 30-November 1 West Yellowstone, MT
\$100 (Member's fee \$90) Limit: 10

Late October is a unique time of year when large numbers of swans concentrate in the Greater Yellowstone Area. It is not uncommon to observe over 1,500 trumpeter and tundra swans during this time. The course will examine a wide variety of subjects, such as identification, habitat requirements, life history/ life strategy, populations, migration, environmental threats, and conservation. Field trips are an important component of the course. Areas visited will include Yellowstone Park, Red Rock Lakes National Wildlife Refuge, Harriman State Park and Hebgen Lake. The course will headquarter in West Yellowstone and begins at 7:00 pm on Friday, October 30.

Terry McEneaney, see write-up under "Ecological Relationships of Birds."

1992-93 WINTER COURSES

Winter Photography in Yellowstone: 121

December 31, 1992-January 3, 1993 Canyon Area
\$365 (Member's fee \$355) Limit: 10

Spend New Year's Eve in the remote, deep snows of Canyon Village. For over three days you will take advantage of the unique photo opportunities which occur during winter in Yellowstone. Based out of the Canyon Yurt facility, described on the next page, this course will involve travel on cross-country skis, allowing the group to photograph frozen falls, "ghost trees," the Grand Canyon of the Yellowstone and wildlife in this winter fairy land. Emphasis will be on the practical applications of photography rather than technical and will deal primarily with winter photography problems and techniques.

It is helpful for participants to have introductory level cross-country ski experience. Informal lessons will be provided as necessary. Ski rental is available at Mammoth and Canyon. You must provide your own photographic equipment.

The course fee covers tuition, all meals, three nights lodging at the yurt facility (see page 22), round-trip snow coach transportation between Mammoth and Canyon and shuttle service throughout the course.

Tom McBride, see write-up under "Wildlife Photography."

Backcountry by Ski: 101

January 15-18 Fawn Creek, YNP Backcountry
\$205 (Member's fee \$195) Limit: 10

Winter in the backcountry provides a challenging yet intensely beautiful and rewarding experience. The first night of this course will be held in a large cabin near West Yellowstone, MT, allowing you to get organized as a group. The next morning you depart by ski into the Fawn Creek backcountry for two days and two nights. A wide range of winter skills will be taught in the outdoor setting, including travel over snow, food preparation, shelter building, cold weather clothing, and the hazards of cold environments. Pre-trip readings, detailed equipment lists and personal contact with the instructor combine to make this course fun and safe. Ski experience is recommended, but not required. Due to the cold, good physical condition is required. *The following is provided as part of the course fee: lodging in the cabin the first night, skis, boots, poles, packs, sleepingbags, pads, tents, and food. You may provide your own equipment, if approved by the instructor.*

Scott Wood, see write-up under "Lakes of Yellowstone by Canoe."

Yellowstone's Night Skies: 102

January 28-31, 1993 Mammoth Hot Springs Area
\$120 (Member's fee \$110) Limit: 15

Yellowstone's clear night skies, free of urban light pollution, combined with a winter crescent moon make for an exciting time for a course on observational astronomy. Many hands-on projects, games, and constellation stories from around the world introduce the student to 14 basic constellations. Student projects include a constellation viewer, sundial, and moon craters. A variety of hands-on demonstrations using globes, parabolic mirrors, and lenses make sense out of the science of astronomy. Many materials and handouts, along with videos and the instructor's multimedia slide shows, "The Amazing Universe" and "Our Solar System," make this course a fast-paced learning experience. Daily indoor and outdoor instruction and activities will be enhanced by night time outdoor telescope/binocular viewing of the skies. Class begins at 7:00 pm on Thursday, January 28.

Starshine has a doctorate in Reading Education and has been teaching in the public schools for over 20 years. Her area of interest and expertise is in observational astronomy. She writes a weekly newspaper column on astronomy and has conducted numerous workshops, including ones for the National Audubon Society and Elderhostel.

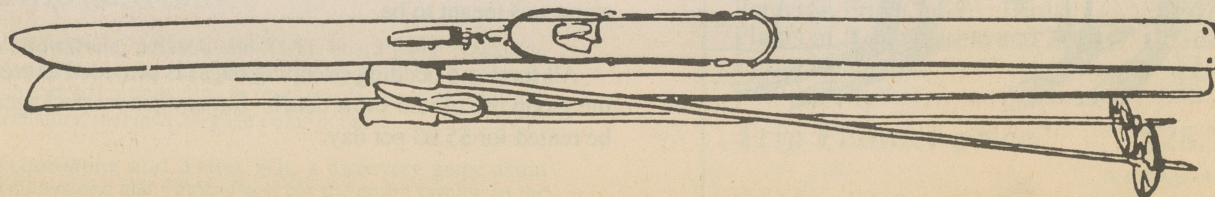
Yellowstone's Winter World: 201

February 12-15, 1993 Canyon Area
\$375 (Member's fee \$365) Limit: 10

Based out of the remote Canyon Yurt facility described on the next page, this course is a detailed introduction to the field of snow ecology. Through "classroom" discussions and ski excursions you will learn about snow as a substance and how it affects the lives of animals, how and where it develops, how it evolves over time, how avalanches influence backcountry travel, and how to maintain human comfort in winter climates. Most of each day will be spent on skis in the field in a hands-on approach to learning with some unstructured time for exploring and skiing on your own.

It is helpful, but not necessary, for participants to have introductory level cross-country ski experience. Informal lessons will be provided as necessary. Ski rental is available at Mammoth and Canyon. *The course fee covers tuition, all meals, three nights lodging at the yurt facility, round-trip snow coach transportation between Mammoth and Canyon and throughout the course.*

Don Nelson, see write-up under "Natural Science at Buffalo Ranch."



GENERAL WINTER INFORMATION

The winter season in Yellowstone is unique in both its beauty and harshness, offering the visitor rewarding experiences that relatively few people ever have. At the same time there can be challenges that do not exist at other times of the year. Winter field courses can always be counted on to be invigorating, both mentally and physically. The Institute's goal is that your educational experience be stimulating, fun, safe, and full of the camaraderie that comes naturally with winter trips. The following information is intended to help achieve this goal. Please read the additional information on page 5.

Location No winter courses are held at the non-winterized Lamar facility. Courses may occur at various locations including Mammoth Hot Springs and Canyon Village. Please read each course description for details.

Food and Preparation Depending on the course location, meals may be included with the tuition fee. When food is not included, it may be purchased at park dining facilities or in nearby towns.

Accommodations Lodging may be included in the tuition fee. When it is not included arrangements can be made through TWR Services.

Weather Winter conditions in Yellowstone create needs for human comfort that don't exist in other seasons. Complete equipment lists and other pre-trip information is provided to assure that your stay is safe and comfortable. Don't hesitate to contact us if you have questions.

Other Winter Classes may be added to this schedule. Contact registrar closer to the winter season for a complete listing.



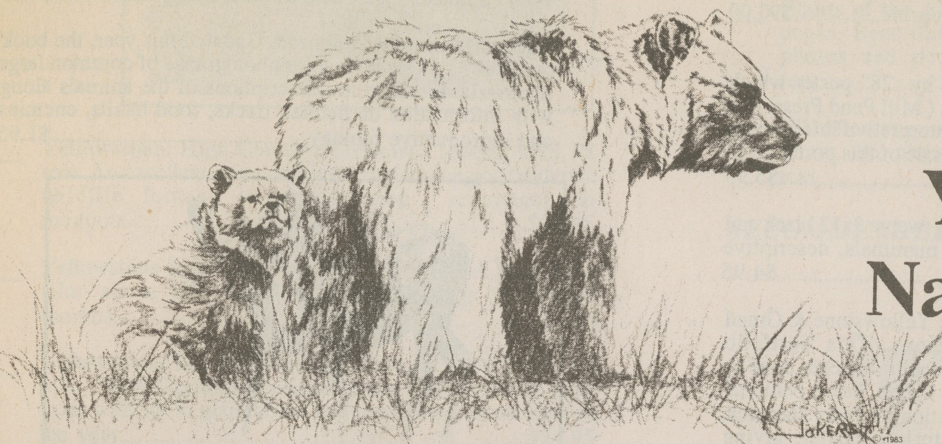
Canyon Yurt Facility The Yellowstone Institute will be conducting two of its winter courses, "Winter Photography" and "Yellowstone's Winter World," in a very unique setting and situation at Canyon Village, near the center of Yellowstone National Park. During the summer months the Canyon area is one of the busiest in the park, attracting hundreds of thousands of people to the Grand Canyon of the Yellowstone and the magnificent Upper and Lower Falls of the Yellowstone River. In the winter, however, without numerous or luxury accommodations available, the area becomes a quiet and peaceful haven for winter enthusiasts.

In conjunction with Yellowstone Expeditions, this extraordinary experience begins with a 35 mile snow coach ride from Mammoth Hot Springs, in the northwest area of the park, to Canyon Village. At the destination you will find your rustic lodging and eating accommodations. The kitchen and dining facility consists of two heated, 15 foot diameter yurts, a rigid, yet portable shelter used by nomadic people. Sleeping units for two people are simple, yet comfortably heated wooden and canvas structures on platforms. There is a heated pit toilet and a simple shower arrangement. There is also a park restroom with running water one-fourth mile away.

We feel that with remote accommodations of this nature you will be able to experience true Yellowstone winter in a rustic, cozy, and intimate environment. This is what winter in Yellowstone was meant to be.

All food and bedding (sleeping bags) is provided as well as the group use of the snow coach. Ski equipment packages can be rented for \$5.00 per day.

BOOKS, MAPS and PAMPHLETS



about Yellowstone National Park

Wildlife drawing above and those throughout brochure are from *Western Wildlife Portfolio* by James Jokerst and are available under POSTERS AND PRINTS on the following page.

GENERAL

Guide/Picture Books

- **National Parkways**, Yandell, large color pages with maps. A photographic and comprehensive guide to the park.
 Yellowstone, 80 pages.....\$5.95
 Grand Teton, 68 pages.....\$5.95
- **Hamilton's Guide**, Lystrup, 160-page guidebook to Yellowstone with information on facilities and services. Color photos and maps.....\$3.95
- **The Story behind the Scenery**, Crandall, 48 color pages, photographs of geologic features and wildlife with informative text.
 Yellowstone.....\$5.95
 Grand Teton.....\$5.95
- **Yellowstone In The Eagle's Eye**, Mayer. Published in 1991 this book contains beautiful aerial photographs of Yellowstone. These photos give the reader a totally different perspective on the park. Descriptions of the pictures are included in four different languages. 95 pages.....\$14.95
- **Yellowstone / Grand Teton Road Guide**, Schmidt and Fuller, 96 pages with easy to use strip maps and side by side commentary. Tells you where to see elk, deer, bear, and other wildlife. Also gives you information on scenic overlooks, side trips, geology, and a special section on the 1988 fires.....\$4.95

EDUCATIONAL GAMES

- **Yellowstone**, deGolia and Zarki, board game created in Yellowstone, for ages eight to adult, 2 to 4 players; Educational introduction to problems facing wild herds and predators, includes 28-page color booklet.....\$9.95
- **Yellowstone and Teton Wit**, a discovery game about Yellowstone and Teton. Facts for the entire family, in the format of a deck of cards.....\$6.95

HIKING AND CAMPING

- **Day Hiking**, Carter. Complete descriptions of 20 great short hikes, including history, geology and wildlife facts, some maps. 80 pages.....\$3.75
- **Yellowstone Trails: A Hiking Guide**, Marschall, 120-page backcountry guide covering over 1000 miles of park trails. Contains useful information on backcountry use rules and how to hike through bear country.....\$4.95
- **Teton Trails**, Harry, 56 page guide to the hiking trails of Grand Teton National Park, including illustrations and maps.....\$1.95
- **Short Hikes and Easy Walks in Teton National Park**, Hayden and Freilich. Contains 14 hikes with large clear easy to read maps.....\$1.00
- **Trail Leaflets**, Set of six leaflets describing the following areas of interest in Yellowstone: Canyon, Fountain Paint Pots, Mud Volcano, Upper Geyser Basin, Mammoth Hot Springs, and Norris Geyser Basin.....\$1.50

Deluxe Trip Planner

Unsure about what to order? We've put together a Trip Planner package at a special price which will give you the information you need to plan your trip and understand what you're seeing once you're here. The Trip Planner includes:

Nat'l. Parkways-YNP	\$5.95
Yellowstone Trails-A Hiking Guide	\$4.95
Yellowstone Park Map North	\$3.00
Yellowstone Park Map South	\$3.00
Peterson First Guides: Birds	\$4.95
Plants of Yellowstone and Teton	\$6.95
Large Mammals	<u>\$1.95</u>
Regular price (if purchased separately)	\$30.75

Trip Planner price **\$25.75**

A savings of \$5.00

Mail order only. Indicate "Trip Planner" \$25.75 on order form.

POSTERS AND PRINTS

- **We Are All One Family**, Buchfink, striking images of wolf, American Indian and dragonfly symbolizing the circle of life and the link between lifeforms. 32.55in. x 22.25in.
Poster.....\$15.00
Signed, limited edition print.....\$90.00
- **Close To Mom** is a dramatic 22" by 28" poster which includes a painting by Carl Brenders (Mill Pond Press) of a grizzly and three cubs along with interpretive information about the bear. The profits from the sale of this poster go to Bear Research in Yellowstone.....\$5.95
- **Western Wildlife Portfolio**, Jokerst, twelve 9x12 black and white wildlife prints, major park mammals, descriptive text.....\$4.95
- **Moran Portfolio**, Published by the Yellowstone & Grand Teton Natural History Associations. This portfolio contains eight reproductions of watercolor sketches done by Thomas Moran in Yellowstone & Grand Teton National Parks. Also included is an introduction by Peter Hassrick, Director of the Buffalo Bill Historical Center, giving background information on Moran.....\$9.95

FISH AND FISHING

- **Freshwater Wilderness: Yellowstone Fishes and their World**, Varley & Schullery, color illustrations, 132 pages. A beautiful award-winning publication designed for anglers and non-anglers alike who want to know the history of Yellowstone's fishes and how management affects what we see today.....\$12.95
- **Yellowstone Fishing Guide**, Charlton, 104 pages. An accurate and comprehensive book on fishing the waters of Yellowstone National Park. Good for the novice who wants to fish close to the car as well as for those who want to hike into the backcountry.....\$9.95
- **Fly Patterns of Yellowstone**, Mathews & Juracek. Written by the owners of Blue Ribbon Flies in West Yellowstone, MT, this book contains over 40 fly patterns. Not only are you given excellent directions on tying, but also information on where to use the finished product in the Yellowstone area. 84 pages.....\$14.95

MAPS

- **Yellowstone Maps**. General purpose maps, each covering half the park. Maps include highways, trails, campsites, boat launches and fishing information.
Yellowstone Map North.....\$3.00
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- **Yellowstone Trail Map**, outdoor, waterproof, illustrated topo map. (1:168,500).....\$6.95
- **Teton Trail Map**, outdoor, waterproof, illustrated topo map. (1:78,000).....\$6.95
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- **U.S.G.S. Topo Map**, 15 min. series, scale 1:62500. There are 28 maps, so identify areas of interest when ordering.....\$2.50
- **Geologic Map of Yellowstone**, US Geologic Survey in cooperation with NASA and the National Park Service. Large map with major deposits, ash and lava flows indicated by color. Fascinating for those with an interest in geology or as a colorful wall display.....\$3.60

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Mammals

- **Wildlife of Yellowstone and Grand Teton**, Scott. 64 pages, includes mammals, birds, fish, reptiles and amphibians. With complete up-to-date checklist.....\$4.95
- **Large Mammals**, Craighead. Updated this year, the book contains 31 pages with color photographs of common large mammals. Included are descriptions of the animals along with information on habitat, tracks, food habits, enemies and reproductive biology.....\$1.95



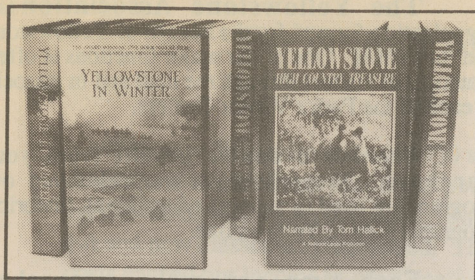
Birds

- **Birds of Yellowstone and Grand Teton**, Follett, descriptions and habits of 64 of the region's most common species, color photos, 73 pages.....\$6.95
- **Birds of Yellowstone**, McEneaney. Written by Yellowstone's leading bird biologist, this is a practical guide to the birds here and where to find them. 171 pages.....\$10.95
- **Birds of Yellowstone - Checklist**, Zarki and Follett, 16 pages. Handy 5 1/2 x 8 1/2 in. listing. A must for birders in Yellowstone.....\$0.50

GEOLOGY

- **Roadside Geology of the Yellowstone Country**, Fritz, 149 pages. Covers geologic formations along all roads in Yellowstone and all major roads leading to the North, East, and West entrances to the park.....\$9.95
- **The Geysers of Yellowstone**, Bryan, 225 pages. Black and white photos and maps. Comprehensive guide to over 400 of the park's geysers and geothermal features.....\$14.95
- **Guide to Geyser Gazing**, Rinehart, 64-page book on geysers, how they function, locations and other interesting facts.....\$1.40
- **Story of Old Faithful**, Marler, 48 pages, color photographs and illustrations. Facts and figures about the famous Yellowstone geyser; charts on frequency of eruptions, height of eruptions, earthquake effects, and more.....\$2.50
- **Geologic Map of Yellowstone**, US Geologic Survey in cooperation with NASA and the National Park Service. Large map with major deposits, ash and lava flows indicated by color. Fascinating for those with an interest in geology or as a colorful wall display.....\$3.60
- **Geysers: What They Are and How They Work**, Bryan, 23 pages. This is a book of "hows." After establishing just what geysers are, the book will develop the current understanding of how they work, how they differ, and how they change through the passage of time. Ages 8 through adult.....\$5.95

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— **Yellowstone in Winter**, Bayer, 60 min. VHS. A fascinating film about life in Yellowstone during the frigid months.....\$24.95

— **Yellowstone: The First National Park**, Reader's Digest, 60 min., VHS. Captures the beauties and oddities of the Park from wildlife to geothermal features during all seasons of the year.....\$24.95

— **Yellowstone : The Unfinished Song**. Shown for the first time in the summer of 1990, this 20 minute video presents the story of the fires and the park's natural recovery. The film has extraordinary scenes of animals adapting to the fires. We also see the new diversity of life the fires created. Wonderful video for teachers and parents.....\$19.95

— **Catch Me If You Can**, Trailwood-Landis Productions. In this video you see excellent footage of young animals (predators & grazers) playing. You learn that play actually teaches and sharpens the skills these animals will need for adult life. A great gift for children. 46 minutes.....\$24.95

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The Yellowstone Story, Haines, two-volume history classic on Yellowstone Park with black and white photos.

— **Volume I** traces the buildup of knowledge of the Yellowstone area gained from Indians, fur trappers, prospectors and explorers. Covers the enactment of federal legislation to establish the world's first national park. Paperback...\$11.95

— **Volume II** is a record of the first hundred years of the park. Traces construction of park roads and facilities, visitor activity and experiences from stagecoaches and tents through autos and hotels. Paperback...\$11.95

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— **Mountain Man & Grizzly**, Gowans, 210 pages. An illustrated collection of early observations and stories about the great bear.....\$11.00

— **Chief Joseph's People and Their War**, Josephy Jr., 21 pages. This book tells of the flight of Chief Joseph and the Nez Perce from Oregon through Yellowstone National Park to their surrender in the Bear Paw Mountains of Montana.....\$1.25

— **Roadside History of Yellowstone National Park**, Blevins, 106 pages. Learn about the Indians who lived around Yellowstone, the mountain men and the government explorers. This easy to read guide with photographs allows you to begin your visit at any park entrance and follow the park's history as you follow the road.....\$7.95

PLANT LIFE

— **Plants of Yellowstone and Grand Teton**, Shaw, 160 pages of color photos and descriptions of park vegetation from trees to flowering plants.....\$6.95

— **Plants of the Alpine Tundra**, Marinos and Marinos, 64 pages. Beautifully illustrated alpine plant guide. Color photos and pen and ink drawings with descriptive text.....\$6.95

— **Wildflowers of Yellowstone and Grand Teton**, Shaw, 56 pages with color photos and descriptive text.....\$5.95

RECOMMENDED FOR CHILDREN



— **Yellowstone: A Children's Guide**, Balthis, 32-page guide for children with pictures to color.....\$2.75

— **Park Ranger! Hoofnagle & Dunmire**, 32-page coloring book telling what park rangers do, with strong environmental message.....\$1.95

— **Family Fun in Yellowstone National Park**, 49 pages, an informative guidebook for the entire family..\$2.95

— **Young People's Guide to Yellowstone National Park**, Tawney, guidebook to be used by the entire family, 143 pages.....\$7.95

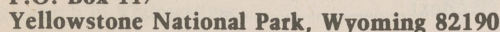
— **Expedition Yellowstone: A Mountain Adventure**, Robinson, 190 pages. A fantasy adventure book for children grades 4, 5 and 6. Fascinating tales of early Yellowstone.....\$9.95

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With over 70 classes and over 750 students each year, the Yellowstone Institute has a diversity of needs. Each year many people have generously supported the Institute by donating various items that we have needed. But, we continue to develop new needs as equipment wears out and new classes are established. The Yellowstone Institute is non-profit, and in fact, our costs exceed our income in most years. Therefore, your gifts and donations are important and greatly appreciated. Donations to our general scholarship fund are always welcome and enable students to attend who may not otherwise be able.

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invitation
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When you become a member of the Yellowstone Association you will have a role in a non-profit, educational project which began in 1933. The Association was founded to serve Yellowstone National Park and its visitors through support of educational, scientific, and historical programs.

To acknowledge your interest and support as a member, you will be entitled to the following benefits:

- * A family membership (covering donor, spouse, and children through age 20)
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- * Invitations to special members' activities
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- * Association with other individuals with similar interests
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For Natural Science, History & Education, Inc.

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| ☐ Sponsor. | \$500 |
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| ☐ Sustaining. | \$100 |
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Make check to "Yellowstone Association" or
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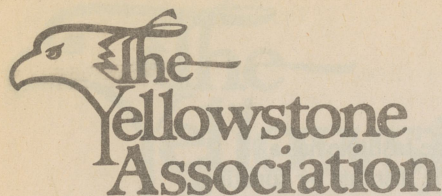
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Yellowstone National Park, WY 82190



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Institute Office 307-344-7381 ext. 2384

Duplicate this form for multiple registrations if necessary

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(Note: Cancellation Policy on page 5)

Name(s) _____ [] Male [] Female

Address _____ Please list names & ages of children for family classes

City _____ State _____ Zip _____ Wk Phone () _____ Hm Phone () _____

Where can you be reached one month prior to the course? Address _____ Phone () _____

How did you find out about the Yellowstone Institute? _____

[] Check here if you are a current member of the Yellowstone Association or are joining now. (Memberships begin at \$25)

Course Title and Number

Dates

Tuition

Lodging:

[] I want to stay at the Institute cabins at Lamar the following nights at \$8/night. Dates _____

[] My class does not meet at the Lamar facility. See my attached note regarding need for information.

[] I will make my own lodging or camping arrangements.

Release and Assumption of Risk

Total Tuition Fee(s) _____

Cabin Fee at \$8 per night _____

Membership (optional) _____

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Yellowstone Park, WY 82190

I am aware that during the courses or activities that I am participating in under the arrangements of the YELLOWSTONE ASSOCIATION and its agents or associates, certain risks and dangers may occur, including but not limited to the hazards of traveling in rough terrain, water, and thermal feature areas; accident or illness in areas remote from medical facilities; the forces of nature; and travel by automobile, bus, air or other conveyance. In consideration of and as part payment for the right to participate in such courses or other activities, I have and do hereby assume the risks and all legal responsibility for injury to myself or loss of my property resulting from participation in these courses or other activities, and do hereby hold the YELLOWSTONE ASSOCIATION harmless from any and all liability, actions, causes of action, debts, claims and demands which I now have or which may arise in connection with my participation in these courses or other activities. The terms hereof shall serve as release and assumption of risk for my heirs, personal representatives, executors, administrators, and for all members of my family. I affirm that my general health is good and that I am not under a doctor's care for any condition which will endanger my health or the health of other participants. In case of injury and/or illness, I will bear the cost of any evacuation procedures such as ambulance, helicopter, rescue team, and professional medical care. I understand that I must provide my own health and accident insurance. My participation in the Yellowstone Institute course(s) and attendant activities, including photographs for future publicity in which I may appear, is entirely voluntary.

Date _____

Signature(s) _____

(Signatures for all participants required)

If under 21 years of age, parent or guardian must sign

If under 21, give age _____