

1987

The Yellowstone Institute

1987
Course Catalog

Phillips / Reese
YI Collection

Field Courses In Yellowstone

Unique Nature Study
Vacations

Experience Yellowstone
With the Experts

Choices For All Ages
Options For Academic Credit

The Twelfth Annual Yellowstone Institute
Presented By The Yellowstone Association
Yellowstone National Park

THE YELLOWSTONE ASSOCIATION

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*Cover: Dick Follet's "Birds of
Yellowstone" class in the Lamar
Canyon*

Photos by Gene Ball

CALENDAR

June 2-5	Animal Observation
June 6-7	Bears: Their Nature & Interaction with People
June 8-10	Bears: Folklore and Biology
June 11-12	Elk of Yellowstone: Biology & Ecology
June 13-14	The Hayden Yellowstone Expedition, 1871
June 13-15	Outdoor Skills
June 15-19	Large Mammals of Yellowstone
June 20-21	Indians of the Yellowstone
June 20-21	Yellowstone's Birds of Prey
June 20-21	Horsepacking: "Around the Corrals"
June 22-24	Horsepacking "Practicum"
June 22-26	Lakes of Yellowstone by Canoe
June 22-26	Geology of the Yellowstone Country
June 27-28	The Flight of the Nez Perce through Yellowstone
June 27-28	Women & Wilderness: Introduction
June 29-30	Women & Wilderness: Overnight
June 29-July 2	Small Mammals
June 29-July 3	Birds of Yellowstone
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July 5-8	Wildlife Photography
July 6-10	Ecology of Greater Yellowstone
July 7-8/9	Interpreting Yellowstone with "Ranger Ted"
July 9-12	Learning Outdoor Photography
July 11-13	Edible, Poisonous and Medicinal Plants
July 13-17	Backcountry Photography
July 14	Close-up Photography
July 14-18	Horsepacking: The Washburn Expedition Trail
July 15-16	Alpine Wildflowers
July 15-17	Fire, Ice and Fossil Forests
July 16-17	Artists in Yellowstone
July 18-19	Wildflowers of Mountain Meadows and Forests
July 20-22	Three Days at the Buffalo Ranch (For ages 8-12)
July 20-22	People and the Land
July 23-24	Wilderness Hiking & Camping in Grizzly Country
July 24-26	Three Days at the Buffalo Ranch (For ages 8-12)
July 24-26	Antelope of Yellowstone
July 27-29	The Ways of the Mountain Men
July 27-31	Horsepacking: The Nez Perce Trail
July 28-31	Session I: The Yellowstone Caldera
July 30-Aug. 2	Mammal Tracking: Interpreting Tracks, Scat and Other Sign
August 1-2	Wolves of Yellowstone: The Missing Link
August 1-2	Wilderness Women Session I: Women in Yellowstone's Past
August 1-5	Horsepacking: Exploring the Old Faithful-Bechler Trail
August 2-4	Star Trails West
August 2-5	Session II: Hydrothermal Systems
August 3-4	Wilderness Women Session II: Adventurers, Writers and Women in Yellowstone Today
August 5-9	History of Yellowstone National Park
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August 6-9	Nature Painting: The Challenge of Yellowstone
August 10-11	Family Days at the Buffalo Ranch
August 10-14	Backcountry Photography
August 12-13/14	Interpreting Yellowstone with "Ranger Ted"
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August 14-16	Fly Fishing: Less Experienced
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DIRECTORY

For General Information about
Yellowstone National Park
campgrounds and opening and
closing dates contact:

Visitor Services 307-344-7381
Box 168 Ext. 2283
Yellowstone National Park, WY
82190

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

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

For travel information from states
surrounding Yellowstone contact the
following:
Wyoming Travel Commission
Frank Norris Jr. Travel Center
Cheyenne, WY 82002

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

Montana Travel Promotion Bureau
Department of Commerce
Helena, MT 59620

The Yellowstone Association for
Natural Science, History & Education, Inc.
is a non-profit, tax-exempt organization
founded in 1933 to support educational,
historical, and scientific programs in
Yellowstone National Park which aid
interpretation and related visitor service
activities.

The Yellowstone Association
P.O. Box 117
Yellowstone National Park,
Wyoming 82190

Phone: 307-344-7381

Extension 2349 Business Office
Extension 2384 Director's
Office & Institute Registrar

GENERAL INFORMATION

Tuition Unless otherwise specified, the tuition charge 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. Memberships are tax-deductible.

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

Most courses are limited to fifteen participants. Early registration is advised.

Several weeks before class begins, each student will be mailed a Yellowstone National Park entrance and campground fee waiver plus a list of equipment to bring, course study materials, and recommended readings if applicable.

Cancellation Policy Enrollees who cancel at least one month in advance will receive an 80% refund. Members receive full refund minus a \$5-per-course cancellation fee. For less than one month notice, refunds will be given (at the above rates) only if the vacancy can be filled. In all cases, cancellation fees may be applied toward tuition for another course during a one year period.

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 immediately and will receive a full refund.

Location Courses are held at various locations within the park. Most are conducted out of a National Park Service facility known as the old Buffalo Ranch, which is located in the beautiful Lamar Valley between the Northeast Entrance and Tower Junction. The road sign simply reads "Lamar Station," see map in this section.

Facility The Institute log building is heated and has two classrooms, three bathrooms with showers, and a kitchen where people do their own cooking. The facility, though clean and adequate, is fairly simple.

Food and Preparation Unless otherwise specified, participants must provide their own food. There are stoves and refrigerators in the kitchen, but space is limited. Basic cooking and eating utensils are provided. Food preparation should be kept rather simple.

Cabins There are thirteen multiple-occupancy cabins. Most have two or three single beds. They have no plumbing, heating, or electrical outlets. Everyone must bring a sleeping bag. Life there has been affectionately described as "indoor camping." Cabin reservations should be made when

registering for class. The fee is \$6 per person per night. Space is limited. Cabin rental for family members of participants may be allowed if space is available. A copy of the Institute policy regarding accompanying family members will be mailed on request.

Pets, RVs, and Camping Pets are not allowed at the Institute, and there are no provisions for camping and recreational vehicle use on the grounds at the Yellowstone Institute facility.

Lodging for Courses 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 office is ready to assist or advise.

For classes which meet at Mammoth, Canyon, and Old Faithful, rooms are reserved through TW Services at a special rate for Institute participants. Due to demand for these rooms, early reservation is essential. Contact the Institute office for assistance and details.

Other Accommodations and Camping For those who choose not to stay at Lamar, other nearby sites in the park include campgrounds at Pebble Creek (9 miles east) and Slough Creek (7 miles west) or lodging at Roosevelt Lodge (11 miles west), Mammoth Hotel (29 miles west), 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). A list of nearby facilities will be sent on request.

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

Call the Institute office for advice on air or bus transportation to Yellowstone.

Weather Much class time will be spent outdoors. Students should be prepared for a variety of mountain weather conditions and some cold temperatures.

Physical Condition Participants should be in good health for these courses which are conducted primarily in the field. Most will require at least some hiking at higher elevations. Classes which involve backpacking, horsepacking, and canoeing will be more demanding. Be sure to ask in advance if you have any questions on this matter.

Insurance and Liability Participants must provide their own health and accident insurance. Read and sign the liability waiver on the registration form.

Academic Credit Courses for which academic credit is available are so designated in the course descriptions. An explanatory sheet detailing number of credits, type of credit, registration costs, and the address of the accrediting institution will be sent to registrants who indicate they are enrolling for credit.

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, University of Idaho, Idaho State University, Brigham Young University, and Ricks College. Registration forms for academic credit will be provided on the first day of the course. Students will be responsible for completing and mailing forms and paying the necessary fee for credit enrollment (usually about \$30).

Students may also seek to enroll through their own university under a plan for independent study. Cooperation from Yellowstone Institute personnel may be requested through the director's office.

Teacher Recertification Credit Many teachers have enrolled in Yellowstone Institute courses to meet requirements set by state and local school agencies for recertification credit or professional growth. School districts often have guidelines for individual study projects which can be approved locally. In other cases a request must be submitted to the State Department of Education.

Institute personnel will lend assistance to any teacher who wishes to pursue the matter and will provide the necessary documentation of attendance. There is no extra charge for this credit or service.

Wyoming Teachers . . . write for details on obtaining Professional Growth credits through the Wyoming State Department of Education.

Funding 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.

Humanities courses offered by The Yellowstone Institute were partially funded by grants from the Wyoming Council for the Humanities and the Association for the Humanities in Idaho in 1985 and 1986.

Yellowstone Institute
P.O. Box 117
Yellowstone National Park WY 82190

Institute Office at Mammoth
8:00 a.m.—4:30 p.m. MST (For registration information)
307-344-7381 ext. 2384

Institute Facility at Lamar
(June—August) 307-344-7749

Unless otherwise stated, classes meet at the Institute facility at the Lamar Station (the old Buffalo Ranch).

The Yellowstone Association was 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:

- * Donated research library to park in 1967 and provides continued support through purchase of books and periodicals and hiring of part-time librarians
- * Operates book sales outlets in Visitor Centers throughout the park
- * Founded The Yellowstone Institute in 1976 and serves as its sponsoring organization
- * 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
- * Prints schedules of naturalist programs for visitors
- * Administers grants and gifts received for designated projects in Yellowstone
- * Funded Yellowstone's first braille trail
- * Contributed funds for museum exhibits and research equipment

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

Dear Reader,

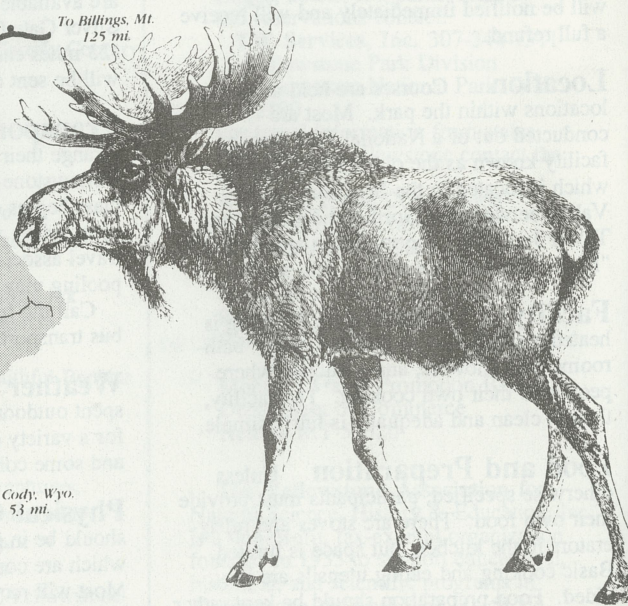
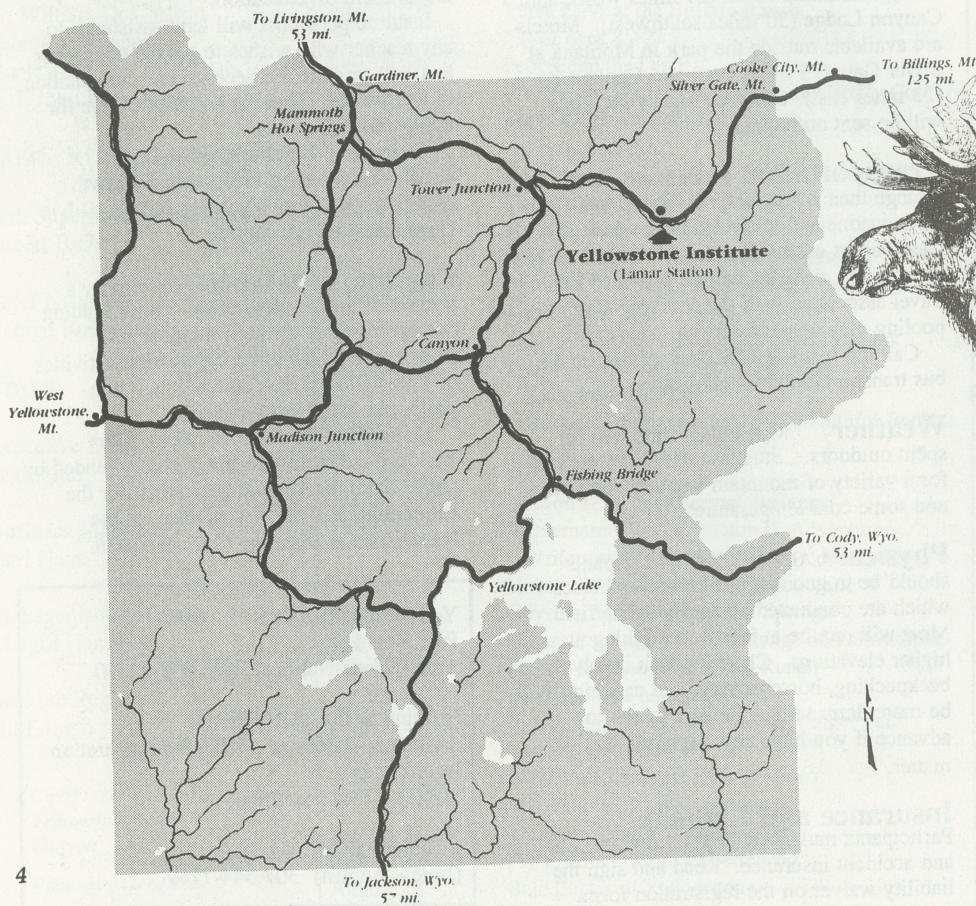
The Yellowstone Institute is a noble project and a grand way for you to see and appreciate Yellowstone. Whether you're seeking a new educational experience, a serene rejuvenation, a backcountry adventure, an unusual and economical vacation, or academic credit, the Yellowstone Institute can be your source.

Of those who travel each year to this restless but enduring land, only one in ten thousand discovers and participates in the Yellowstone Institute. Through the Institute you can explore the secrets of Yellowstone, learn about the wonders of the land and its life forms, enjoy a distinctive experience, meet people with similar interests, and learn from top-notch instructors who are knowledgeable, sensitive, and perceptive about their subjects.

Enrich yourself with views of magnificent vistas and abundant wildlife. Make the natural world of Yellowstone part of your life.

Join us at the Yellowstone Institute.

Sincerely,
Gene Ball
Gene Ball, Director



Lamar Station ... Yellowstone Institute
19 miles west of Silver Gate, Montana
11 miles east of Tower Junction
Elevation 6560 feet

1987 SUMMER FIELD COURSES

THE TWELFTH ANNUAL
YELLOWSTONE INSTITUTE

Animal Observation

June 2-5

\$95 (Members fee \$75)

Field observation will be the major goal and activity of this class. The informal format will feature early morning and evening field trips with afternoon programs on related topics such as large mammals, birds, observation techniques, and optics.

Gene Ball, Yellowstone Institute director, will be the coordinator for the course which will include several presentations by persons involved with wildlife studies in the park. A member of the Bushnell Sports Council, outdoor photographer and writer Bill McRae, will be on hand to discuss optics.

Bears: Their Nature & Interactions with People

June 6-7

\$65 (Member's fee \$55)

Bears are big, sexually dimorphic (adult males average 1.4 to 2 times as heavy as females), occasionally aggressive, normally solitary (except when accompanied by young), reproductively conservative, curious, opportunistic and a great challenge to manage. Why? The answer should help in understanding bears, and this understanding combined with information regarding where to expect to find bears at different times of the year and knowledge of their behavior should help explain the rare aggressive encounters. The dangers of bears to people, and people to bears, will be made clear, as will techniques for protecting both people and bears.

Stephen Herrero is Professor of Environmental Science and Biology at the University of Calgary. He has studied bears for 20 years, is author of Bear Attacks: Their Causes and Avoidance, and is president of the International Association for Bear Research and Management.

Bears: Folklore and Biology

June 8-10

\$105 (Member's fee \$95)

This class will combine two disciplines and 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, coauthored 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.

Elk of Yellowstone: Biology and Ecology

June 11-12

\$65 (Member's fee \$55)

Elk are the most abundant herbivore in the Yellowstone system, and as such, exert a major influence on the environment and its other inhabitants. Emphasis will be placed on population dynamics, feeding ecology, migratory patterns, mortality factors, interaction with other herbivores, special management concerns, and current research. The instructor recently completed 4 months of intensive field observations for a behavioral comparison of the Yellowstone elk populations at Lamar, Mammoth, and Madison-Firehole.

Ernest Ables, Ph.D., is Professor of Wildlife Ecology at the University of Idaho. He has spent the past 20 years conducting research, directing graduate students, and teaching. His special interest in large mammal ecology and the ecological aspects of animal behavior has led him to study species in East Africa, Wisconsin, Texas, Idaho and Yellowstone.

The Hayden Yellowstone Expedition, 1871

June 13-14

\$65 (Member's fee \$55)

In June 1871, the Hayden Survey of the Territories (named after the colorful naturalist and geologist Ferdinand V. Hayden), made its historic tour of the Yellowstone country. With Hayden were photographer William Henry Jackson and landscape artist Thomas Moran. Jackson's photographs, Moran's paintings, and Hayden's flair as a promoter were among the factors that influenced Congress to establish Yellowstone as the first national park in 1872. Copies of the original survey maps and slides of the magnificent Jackson photographs and Moran paintings will be linked with field trips to enable the class to explore the route followed through Yellowstone by the historic Hayden Survey.

Ralph E. Ehrenberg of the Geography and Map Division of the Library of Congress is author of Mapping America, and Herman J. Viola of the Smithsonian Institution is the author of Magnificent Voyagers and Exploring the West, a Smithsonian Book.



Bears class photographing newborn elk calf in foreground.

Outdoor Skills

June 13-15

\$105 (Member's fee \$95)

A full range of topics pertaining to outdoor activities will be covered in this course: minimal impact camping in Yellowstone, basic survival skills, cooking and nutrition, environmental hazards, outdoor clothing, equipment, and land navigation. The goal is to learn more about outdoor subjects to enhance experiences in the natural world.

David J. Thompson is chairman of the Recreation Education Department at Ricks College in Rexburg, Idaho. He has a Masters in recreation management and 14 years experience in the recreation field. He is the former Idaho State Trails Coordinator and a certified Red Cross canoe instructor trainer. He has taught backpacking, survival, and winter camping for the past seven years.

Large Mammals of Yellowstone

June 15-19

\$195 (Member's fee \$185)

Credit available (U or G, 1 semester hour)

The principles of animal behavior as they relate to the ungulates of the Yellowstone ecosystem will be investigated in this course. Elk, bison, bighorn sheep, moose, mule deer, and pronghorn will be observed. Emphasis will be placed on observing and recording behavior accurately, interpreting it properly, and analyzing its importance in ecology and management.

Ernest Ables, see write-up under "Elk of Yellowstone."



Indians of the Yellowstone

June 20-21

\$65 (Member's fee \$55)

This class will offer 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.

Jeanne M. Eder was born on the Fort Peck Indian reservation in Montana, is an enrolled member of the Sioux tribe, and is assistant professor and coordinator of Native American studies at Eastern

Montana College. She has recently completed work on the use of the Star Quilt among Sioux and Assiniboine women and produced a one-hour monologue on a traditional Hidatsa woman named Waheenee, Buffalo Bird Woman.



Yellowstone's Birds of Prey

June 20-21

\$65 (Member's fee \$55)

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. The course will also examine conservation and management problems unique to this group of birds.

John W. Martin, is currently a regional fish and wildlife biologist for the Bureau of Reclamation. His research leading to an M.S. in Wildlife and Range Resources was based on Northern Harrier habitat utilization.

Jedediah Smith Wilderness Horsepacking Seminar

June 20-21 Part I "Around the Corrals"

\$65 (Member's fee \$55)

June 22-24 Part II "Practicum," A 3-Day Wilderness Ride

\$125 (Member's fee \$115)

This course has been designed for people who have access to riding horses and/or pack animals and want to learn more about how to use them for wilderness trips. (Rental horses and tack are available at \$25 per day for those who do not have their own.)

Part I will be spent "around the corrals" at the instructor's Fox Creek Pack Station west of the Teton Range near Driggs, Idaho. With emphasis on environmental concerns and low-impact techniques, enrollees will study all aspects of horsepacking: equipment, knots, ties, splices, selecting a pack string, hobbling and picketing, weighing and balancing the load, trip planning, and more.

For those who want to follow up with a practical application, Part II will be a trip (meals included) into the Jedediah Smith Wilderness on the west slope of the Tetons to reinforce and

build on the topics studied in Part I.

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.

Lakes of Yellowstone by Canoe

June 22-26

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

Credit available (U or G, 1 semester)

This five-day canoe trip across Lewis Lake and into magnificent Shoshone Lake 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. Fee includes all canoeing equipment, group camping gear, and food.

David J. Thompson, see write-up under "Outdoor Skills."

Geology of the Yellowstone Country

June 22-26

\$195 (Member's fee \$185)

Credit available (U or G, 2 quarter hours)

This course, conducted in the natural field laboratory of Yellowstone Park, will concentrate on the geological evolution of the area. Topics to be covered include 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 an associate professor of geology at the University of Wyoming. He has taught field courses in Yellowstone and Glacier National Parks and served as co-instructor in a National Science Foundation course for science teachers. His research interests are crustal evolution and structure which he has studied in Europe, Canada, the northwest Pacific Ocean, and the Rockies.

The Flight of the Nez Perce Through Yellowstone—1877

June 27-28

\$65 (Member's fee \$55) Credit available for teachers—call.

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, Ph.D., is editor of Montana the Magazine of Western History. He has served on the history faculty of Carroll College, the University of Montana and Montana State University. He has written numerous journal articles on the history of Montana and is author of Montana: Our Land and People.

Women and Wilderness

June 27-28 Session I: An Introduction

June 29-30 Session II: Overnight Backpacking Trip

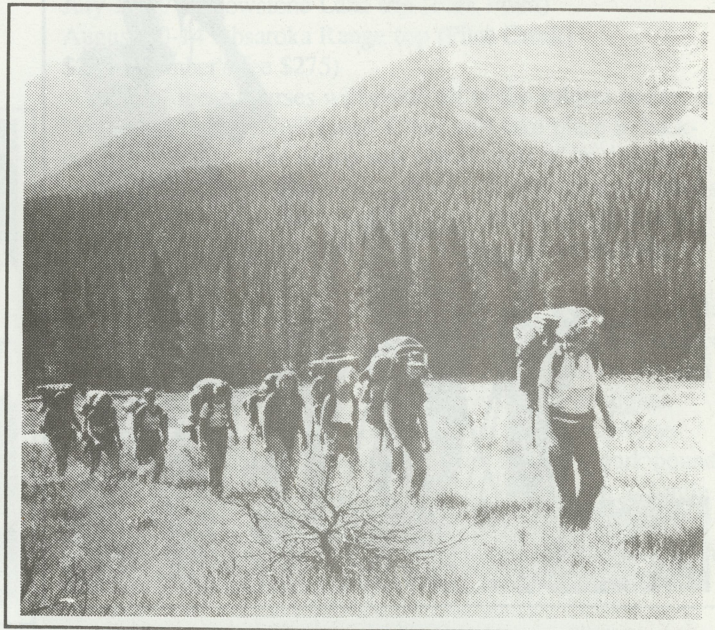
\$65 per 2-day session (Member's fee \$55)

Interested women may enroll for either or both of these two-

day sessions.

The first session is for women of all backgrounds including those with little or no previous outdoor experience and will provide an introduction to the basic practical skills for wilderness travel and camping. Moderate day hikes will incorporate information about the flora and fauna of the Yellowstone ecosystem, discussions of psychological and physical conditioning for wilderness travel, and an emphasis on low-impact camping.

The second session is designed as an optional follow-up to the first for those who want more experience learning the essentials of backpacking: how to pack, food selection, check-



lists, hazards, and low impact techniques. The overnight trip will provide an opportunity for practical applications and to pursue discussion of topics related to women and wilderness. Participants must provide their own backpacking gear and food.

Cynthia L. Andrus is a participant in year-round outdoor sports and nature interpretation with a degree in elementary and outdoor education. She has spent several years in the outdoor-gear retail business and leading tours in the U.S. and Canada. She has certifications in first-aid, CPR, campcraft, and nature interpretation.

Small Mammals of Yellowstone

June 29-July 2

\$140 (\$130)

Credit available (U or G, 1 semester hour)

This course will emphasize identification, ecological role and factors affecting the distribution and abundance of small mammals in the Yellowstone ecosystem. Predators of small mammals, their predation techniques and life histories will also be studied. Field work will include identification of small mammals and their "sign" as well as live trapping and census techniques. Small mammal and predator behavior will be observed and studied systematically with emphasis on methods of observing and interpreting behavior.

Donald P. Streubel, holds a Doctor of Arts degree, and is an associate professor of biology at Idaho State University. He has taught courses in zoology, mammalogy, ornithology, wildlife management and science education. His research interests include ground squirrel behavior and ecology. He has taught for the Audubon Society and conducts environmental workshops for teachers.

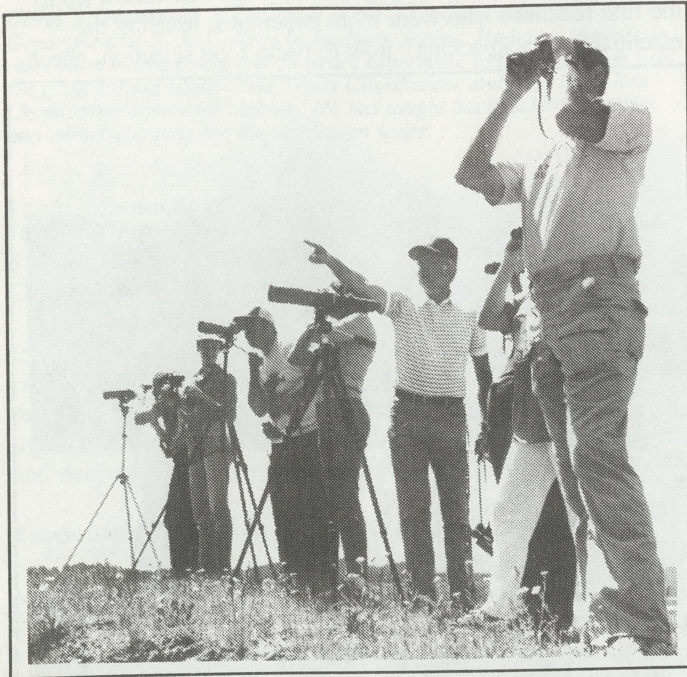
Birds of Yellowstone

June 29-July 3

\$195 (Member's fee \$185)

Credit available (G or U, 2 quarter hours)

This introductory ornithology field course will emphasize field identification and ecological relationships of birds in the Yellowstone ecosystem. Food chains, adaptations to hydrothermal environments, effects of fire on birds, and habitat selection will be among the many topics discussed during visits to a



variety of habitats. Amateur birders as well as teachers, undergraduate and graduate students will find this course extremely informative. Participants must bring binoculars.

Richard F. 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.

Yellowstone's Night Skies

July 2-5

\$135 (Member's fee \$125) Credit available for teachers—call.

Participants will explore the wonders of the universe from the magnificent, unspoiled skies of Yellowstone during four days and three nights. Topics range from ancient and timeless observation techniques (such as telling time by moon or sun, keeping track of the planets, and predicting eclipses) to the mind-boggling concepts of the present (black holes, the slowing of time, where the universe ends). Special visual presentations, such as color movies taken in space by astronauts and by spacecraft arriving at various planets, supplement the indoor sessions and outdoor observing periods. The course is designed for people with no previous astronomy knowledge but will also be enjoyed by those with some training in the subject. Class begins in the late afternoon of July 2.

Bob Berman is director of the Catskill Astronomical Society and author of hundreds of articles on astronomy, including The Night Sky, a popular weekly column which has appeared for over a decade in New York and Massachusetts publications. He teaches astronomy in central New York.

Wildlife Photography in Yellowstone

July 5-8

\$155 (Member's fee \$145)

With Yellowstone as the focus, this course will emphasize the practical applications of photography rather than technical theory and assumes at least moderate experience. It will cover widely varying climatic and temperature zones and will approach outdoor photography as art. Techniques, use of light, equipment, composition, form, and development of the creative eye will be discussed. 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.

Tom McBride is recognized throughout the West as a photographer and multi-media producer. He has been commissioned by the Library of Congress for still photography; by United Artists for cinematography; and by Stephen Cross for films released by the British Broadcasting Corp. His photographs have been featured in numerous magazines and he was judged Photographer of the Year by the Montana Professional Photographers Association.

Ecology of Greater Yellowstone

July 6-10

\$195 (Member's fee \$185)

Credit available (U or G, 1 semester)

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—wildlife management, threatened and endangered species, and surrounding forest lands. The course is designed for beginners as well as advanced students.

Tim W. Clark, Ph.D., is currently a visiting assistant professor at Yale and on the adjunct faculty at Idaho State. He is the author of Ecology of Jackson Hole, Wyoming and over 100 articles for technical and popular publications. In 1985 he received the Chicago Zoological Society's Presidential Award for outstanding work in conservation.

Interpreting Yellowstone with "Ranger Ted"

July 7-8 (optional day on 9th)

August 12-13 (optional day on 14th)

2-Day Course \$60 for one adult and one child plus \$20 per additional family member (Member's fee \$55 for adult and child plus \$15 per extra family member)

3-Day Course \$85 for adult and child plus \$25 per extra family member (Member's fee \$80 plus \$20 per extra family member)

Credit available (UG, 1 semester hour)

Participants will be introduced to the wonders and dilemmas of Yellowstone by a retired ranger-naturalist. His series of programs and nature walks will encompass themes such as park history, environmental issues, personal reminiscences, kinship and interdependence of life forms, predator-prey relationships, and wilderness ecosystems. Activities will include short hikes, a visit to a bear den, wildlife observation, and plant identification. Educational goals and techniques for effective field

instruction of youngsters will also be discussed.

The third day, for those who select the 3-Day Course, will be a wilderness hike to Avalanche Peak for a spectacular view across Yellowstone. The pace will be moderate with plenty of opportunities to stop to discuss the flora and fauna and other topics relevant to Yellowstone.

(Note: This class will meet in the Fishing Bridge area. A site will be reserved for group camping. Information about other lodging and camping options will be sent to registrants.)

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.



Learning Outdoor Photography

July 9-12

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

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 the award-winning New Worlds Magazine and has a special interest in discovering how to present scenes with imagination and clarity. He flies jets for Western Airlines when not out with a camera.

Edible, Poisonous and Medicinal Plants

July 11-13

\$105 (Member's fee \$95)

Credit available when taken in conjunction with "Wildflowers of Mountain Meadows and Forests" or "Alpine Wildflowers."

(U, 2 quarter hours)

This course will introduce participants to the edible, poisonous, and medicinal properties of the native plants of western North America. Identification techniques will be presented during field trips and classroom sessions. The

poisonous principles, toxicity and poisoning symptoms of plants as well as the medicinal properties of herbs will be discussed and assessed. Edible plants and medicinal herbs will be gathered during a one-day field trip outside the park and prepared by participants.

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.

Backcountry Photography

July 13-17 Yellowstone Lake trip (Park Point)

August 10-14 Absaroka Range trip (Pilot Creek)

\$285 (Member's fee \$275)

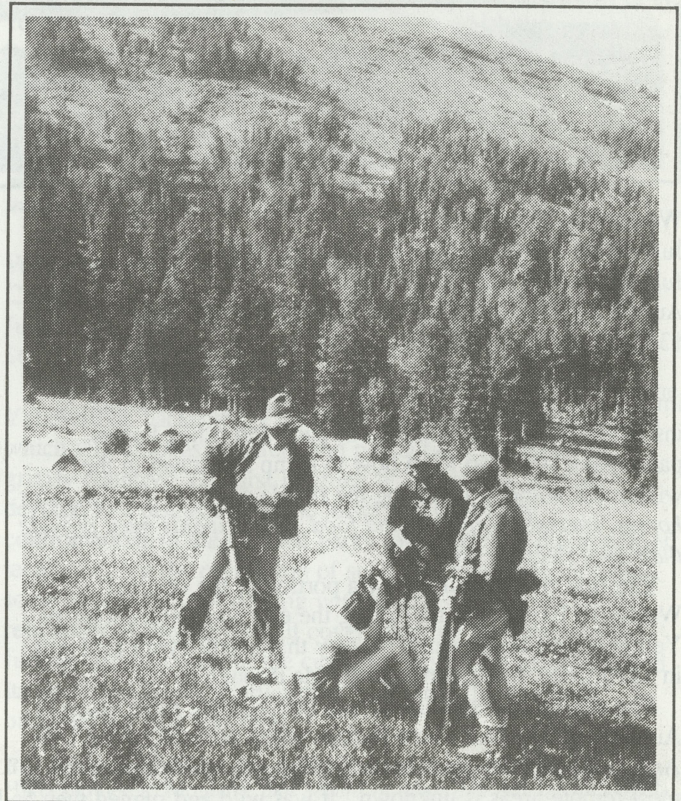
Each of these courses will cover all of the subject matter in "Wildlife Photography" (page 8) but will take place in backcountry settings. The group will spend most of its time in remote locations shooting infrequently viewed scenes. Outings will involve moderate hiking with light packs. Group equipment, food, and other heavy items will be moved by camp outfitters.

The July trip will begin with a day and night at a Bridge Bay campsite. The following morning the group will be transported by charter boat to a backcountry site at Park Point on the east shore of Yellowstone Lake for four days and three nights.

For the August trip, camp gear will be taken by a horse-packer to a wilderness campsite near the northeast park boundary. Participants will accompany the instructor on a 6-7 mile hike to the site.

Each person must provide sleeping bag, pad, and pack. *Fee includes group equipment and food.*

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



Close-up Photography in Yellowstone

July 14

\$30 (Member's fee \$25)

This workshop will emphasize the basics of close-up and macrophotography and will assume a working knowledge of photographic principles and equipment. Topics include the ethics of nature photography; macro basics; film and equipment selection; composition; depth of field; making the most of natural light; shooting with flash in the field and controlling it for a natural effect; and marketing images. Time will be allowed for a field session with teacher supervision. A suggested list of equipment will be forwarded on receipt of registration.

Sandy Nykerk is an award-winning freelance photographer and naturalist. She has taught photo workshops in Illinois, Wisconsin, and Montana; lead photo tours in Yellowstone; and serves on the board of the Greater Yellowstone Coalition.



Wilderness Horsepacking

July 14-18 The Washburn Expedition Trail

July 27-31 The Nez Perce Trail

August 1-5 Exploring the Old Faithful-Bechler Trail

\$345 per session (Member's fee \$335)

Along with its historical theme, each course will stress low-impact use of pack stock in the backcountry. In addition to instruction in the use and care of pack and riding horses, participants will also learn 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.*

The first 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 second 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 route through one of Yellowstone's most remote areas is unknown. It was wild and rugged then and

remains so today.

The final course takes place in the seldom traveled Bechler Canyon country between Old Faithful and the southwest corner of the park.

Richard Clark, Ph.D., see write-up under "Jedediah Smith Wilderness Horsepacking Seminar."

Alpine Wildflowers

July 15-16

\$65 (Member's fee \$55)

Credit available, see "Edible, Poisonous and Medicinal Plants."

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, lake 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 "Edible, Poisonous and Medicinal Plants."

Fire, Ice and Fossil Forests

July 15-17

\$105 (Member's fee \$95)

This course will introduce participants to the unique petrified forests of Yellowstone and to the Ice Age history of the park. 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 first day of the course will involve a field trip to observe and discuss the volcanic history of Yellowstone and the Absaroka and Beartooth Mountains. The second day will be devoted to an all-day hike on Specimen Ridge. The third day includes 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.



Artists in Yellowstone

July 16-17

\$65 (Member's fee \$55) Credit available for teachers—call.

The course will survey 19th and early 20th century American painting with focus on the artists who visited and observed the Yellowstone area. The instructor will pay special attention to Thomas Moran and Albert Bierstadt, their lives and work. In addition to slide-illustrated lectures, the class will feature a field trip to view scenic locations which inspired works of art.

Mammoth Hotel will be class headquarters for the night of July 16. Early lodging reservations are essential. Write or call for Institute assistance. Fee does not include lodging.

Peter H. Hassrick, director of the Buffalo Bill Historical Center in Cody has written numerous books and exhibition catalogs on artists and art history of the American West including The Rocky Mountains: A Vision for Artists in the Nineteenth Century, The Way West: Art of Frontier America, and Treasures of the Old West.

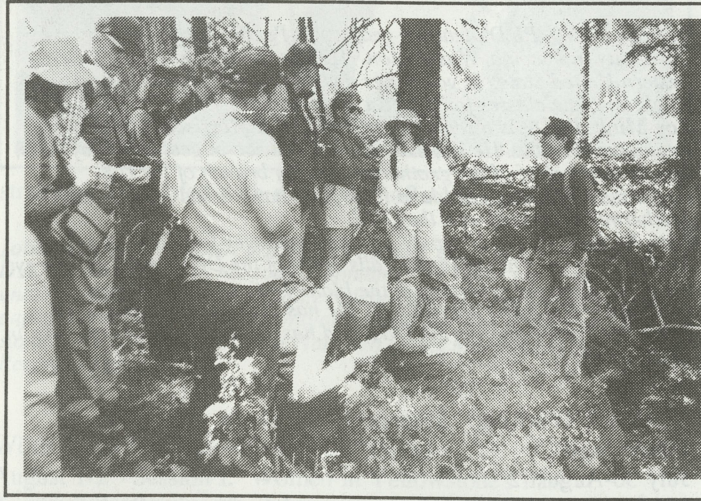
Wildflowers of Mountain Meadows & Forests

July 18-19 Canyon

\$65 (Member's fee \$55)

Credit available, see "Edible, Poisonous and Medicinal Plants."

Within the upper subalpine zone is a region of meadows and forests growing together in a mosaic pattern of great floral diversity. The wildflowers, trees, and shrubs growing between these contrasting ecosystems will be the focus of this course. The first day's activities will include a brief review of field identification techniques, followed by a botanical hike along the



meadows, streams and forest edge of the Cascade Lake trail. Plant ecology, photography, and other topics of interest to the participants will be discussed. The second day will be spent among the mountain wildflowers on the slopes of Dunraven Peak and Mt. Washburn. (Note: Canyon Village will be class headquarters for the night of July 18. Early lodging reservations are essential. Write or call for Institute assistance. Fee does not include lodging.)

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

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

July 20-22 First Session

July 24-26 Second Session

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

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. Afternoons are devoted to supervised art projects such as making masks, books, murals, clay sculptures and t-shirts. 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, canteens, and day packs.*

Parents' Note: Classes for adults have been scheduled to coincide with the children's courses to give parents a class option. See write ups for "People and the Land," July 20-22 and "Antelope of Yellowstone," July 24-26.

Cynthia L. Andrus, see write-up under "Women and Wilderness." Louise Bruce has a degree in recreation management and is a resident of Yellowstone. 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. Fred Donaldson, see "The Ways of the Mountain Men." Laura Johnston, see "Wilderness Women—Past and Present."

People and the Land

July 20-22

\$75 (Member's fee \$65)

Day hikes to various locales in the Mammoth area will enable this class to explore the land as a source of sustenance, economic opportunity and personal inspiration for humankind. Distinguishing different ethical approaches will illuminate land use conflicts such as those between agriculturalists and environmentalists, preservationists and developers, and the many taxpayers as opposed to the fewer users of public lands. Discussion topics will include the ownership philosophy and varying management schemes regulating public lands, what private lands have meant in America's past and will mean in the future, and the values and value conflicts which are a part of human presence on the land. (Note: See schedule tie-in with "Three Days at the Buffalo Ranch" for children, July 20-22.)

Charlie Blatz, Ph.D., of the philosophy department of the University of Wyoming, directs Wyoming's Critical Thinking Project and has taught and written in both theoretical and applied ethics, including environmental ethics.

Wilderness Hiking and Camping in Grizzly Country

July 23-24

\$65 (Member's fee \$55)

Moderate hikes of 5-6 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 in the national parks followed by a discussion of techniques for the prevention of such confrontations including some 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. Participants must provide their own backpacking gear and food.

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

Department of Fish, Wildlife and Parks' Montana Outdoors for nine years. He is currently editor of Wild America, published by the American Wilderness Alliance.

Three Days at the Buffalo Ranch

July 24-26 (See description on page 11)

Antelope of Yellowstone

July 24-26

\$75 (Member's fee \$65)

Antelope are one of the few indigenous big game species in North America. Their management from near extinction in the early part of the century demonstrates how humans can successfully interact and manage wildlife resources. This course will examine the history of this success story and look at management of this species today. There will be day trips for field observations plus examinations of antelope anatomy and structure using specimens provided by the instructor. This class will meet from late morning on July 24 till early afternoon on July 26 and will headquarter at Mammoth Hot Springs. Early lodging reservations are essential. Contact the Institute office for assistance. Fee does not include lodging. (Note: See schedule tie-in with children's class, "Three Days at the Buffalo Ranch," July 24-26.)

Bill Edwards, Ph.D., is a science professor at Laramie County Community College. His master's thesis at the University of Wyoming was on antelope, and he is currently studying antelope near Cheyenne, Wyoming.

The Ways of the Mountain Men

July 27-29

\$105 (Member's Fee \$95)

Survival for the early trappers and mountain men of the Rocky Mountain West depended upon their skills as hunters, trappers, craftsmen, botanists, cooks, meteorologists, diplomats and psychologists. This course will introduce participants to the "Old Ways" of the mountain men. Demonstration, field work and discussion will be utilized to help participants develop an understanding and appreciation of the skills, crafts, tools and social psychology of these remarkable pioneers.

Fred Donaldson has a Ph.D. in geography and has taught a wide variety of courses on Native American studies, beading and tanning, tracking and stalking, and environmental education. He has authored articles on the mountain men and is a member of the Beartooth Mountain Men.

Horsepacking: Nez Perce Trail

July 27-31 (See description on page 10)

Hydrothermal Systems & the Yellowstone Caldera- Part I & II

July 28-31 Session I: The Yellowstone Caldera

August 2-5 Session II: The Hydrothermal Systems

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

Credit available (U or G, 2 quarter hours per session)

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 mud pots. Part I will emphasize the geology of the caldera. Lectures will include discussions of volcanic rocks, caldera cycles, and development of geologic structures that influence the location of hydrothermal systems. Field trips will visit the many types of



rocks produced during several stages of the Yellowstone caldera. Part II will emphasize the hydrothermal systems. Lectures will cover the geology of geothermal features and the chemistry of thermal waters. Field trips will visit both famous areas and unusual features that are off the beaten path.

Sessions I and II are independent but will be well coordinated. They may be taken in sequence or individually. 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., teaches geology at Pacific Lutheran University in Tacoma, Washington. He has worked throughout the western United States in volcanoes and geothermal systems and has taught Institute classes for the past eight years.

Roy Mink, Ph.D., is a senior hydrologist with Morrison-Knudsen Engineers in 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.

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 and has been a seasonal naturalist in Yellowstone.

Mammal Tracking: Interpreting Tracks, Scat, and Other Sign

July 30-August 2

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

Credit available (U, 1-quarter hour)

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 will teach enrollees the joys of interpreting natural history from mammal signs. 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 laboratories will introduce concepts of gaits and speed. Field sessions will

aid in learning to trail and read stories in tracks. (The fee includes approximately \$20 in course materials for each enrollee.)

Jim Halfpenny, Ph.D., is coordinator of the University of Colorado Long-Term Ecological Research Program and a research associate of the Institute of Arctic and Alpine Research. He has taught for sixteen years in the greater Yellowstone ecosystem and is the author of Mammal Tracking in Western America. Most recently he has returned from a study including tracking the endangered mammals of the Tibet-Qinghai Plateau of China.

Wolves of Yellowstone: The Missing Link

August 1-2

\$65 (Member's fee \$55)

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 will 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.

John Weaver is national grizzly bear habitat coordinator for the U.S. D.A. Forest Service in Missoula, Montana. He holds graduate and undergraduate degrees in Wildlife Science and has published scientific papers on wolves including a major treatise on "The Wolves of Yellowstone." He is a member of the Northern Rocky Mountain Wolf Recovery Team.

Wilderness Women—Past and Present

August 1-2 Session I: Women in Yellowstone's Past

August 3-4 Session II: Adventurers, Natural History

Writers and Women in Yellowstone Today

\$55 per 2-day session (Member's fee \$50)

Participants may enroll for either or both of these two-day sessions. Park Headquarters at Mammoth will be the site for the classes. Information about nearby lodging and camping options is available on request.

For the August 1-2 session, the voices of early Yellowstone women will be given life via old diaries, letters and journals as the group hikes and explores in their footsteps. Day hikes will be a feature of each session with up to 4 miles of walking per day.

For Session II, an inspiring look at women who pursued outdoor adventures from the early 1900s to the present will be interwoven with readings from women natural history writers and discussions of how their perceptions differ from and relate to

those of women today. The final day will explore the active roles present-day women play in Yellowstone. The jobs and life styles of professional researchers, writers, rangers, interpreters, and conservationists will be profiled.

Laura Johnston will serve as seminar leader. She has worked on wilderness trail crews, as a biological researcher, as a forestry technician, and as leader of environmental education and conservation programs for the Youth Conservation Corps in Alaska. She currently lives and teaches in Yellowstone National Park.

Horsepacking: The Old Faithful-Bechler Trail

August 1-5

(See description on page 10)

Star Trails West

August 2-4

\$65 (Member's fee \$55)

This class will study early explorations of the West and the use of astronomy for navigation and map making. Emphasis will be given also to Native American astronomy and sky mythology and to the history of early American astronomy. Discussion will be augmented by three nights of observation in the clear, dark skies of the Lamar Valley, from a location on the old Bannock Indian trail through Yellowstone. The class begins the evening of August 2 and concludes about midnight on the 4th.

Robert C. Hoyle has taught astronomy and served as observatory director at Lenoir Rhyne College and Catawba College and as a visiting lecturer at the University of North Carolina. He has trained Park Service personnel in Native American sky interpretation and is the author of "Watchers of the Sky," a Native American sky mythology program produced by Morehead Planetarium.

Hydrothermal Systems & the Yellowstone Caldera Session II

August 2-5

(See description on page 12)

Wilderness Women Session II

August 3-4 (See previous description on this page)

History of Yellowstone National Park

August 5-9

\$195 (Member's fee \$185)

Credit available (U or G 2 quarter hours)

This seminar will trace the history and development of Yellowstone Park, from cultural roots in antiquity to the present, with particular emphasis upon its influence as a pilot model where problems of park management were solved to the benefit of a future national park system. Problems considered will include those involving administration, access, wildlife, facilities and public use; all requiring some degree of solution to validate the "national park concept." Also covered will be Indian trails, the Army period, pioneer hotels, and place names.

Aubrey L. Haines, M.S., is a former Yellowstone National Park historian who has published a documentary study and a two-volume history of the park since his retirement in 1969. He has also served as a consultant on historical research for the National Park Service and the Bureau of Outdoor Recreation.

Yellowstone Fact

The boundaries of Yellowstone National Park enclose a total of 2,221,776 acres, over 95% of which is still backcountry.

Geysers, Mudpots, and Hot Springs

August 6-8

\$85 (Member's fee \$75)

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 at noon on Thursday and then proceed to the Old Faithful area for a full day of geyser gazing on Friday. Norris Geyser Basin and other sites will be visited on Saturday, and class will end in early afternoon. No background in geology is required. (This class will headquarter at Old Faithful. Early lodging reservations are essential. Contact the Institute office for assistance. Fee does not include lodging.)

Duncan Foley, see write-up under "Hydrothermal Systems of the Yellowstone Caldera."

Nature Painting: The Challenge of Yellowstone

August 6-9

\$275 (Member's fee \$265)

Painting in the field, daily demonstrations by the artist, and informal evening critiques will be the primary activities of this art workshop. Emphasis will be on watercolors and acrylics, field sketching, and use of design and color to capture an emotion and create a statement about the subject. The instructor will discuss his approach to planning a work and his combining of both representational and abstract elements.

Morten E. Solberg has been featured twice in American Artist magazine and was commissioned in 1986 to do a painting for their American Artist Collection. He is listed in Who's Who in American Art, is a member of the American Watercolor Society, and receives national distribution of his work through Mill Pond Press.

Family Days at the Buffalo Ranch

August 10-11

\$75 for one parent and one child plus \$20 each additional family member (Member's fee \$65 plus \$15 for additional family members) Limit: 7 families

Participants in this family course will have two days and nights at the old Buffalo Ranch in the Lamar Valley. Moderate day hikes and trips to selected park areas will provide the format for introductions to a sampler of Institute subjects such as geology, meteorology, wildflowers, nature photography, animal behavior, and Yellowstone history. Evenings will feature programs on wildlife film and video, astronomy, and Indian sky mythology. Topics will be geared for a variety of age groups.

Fee includes one cabin per family for nights of August 9 and 10.

Bob Hoyle, see write-up under "Star Trails West."

Blair Hoyle has served as a seasonal ranger in both the Interpretive and Resource Management Divisions of Grand Teton National Park since 1975 and has a degree in medical technology.

Backcountry Photography

August 10-14 (See description on page 9)

Interpreting Yellowstone with "Ranger Ted"

August 12-13 (See description on page 8)

Nature Film Festival

August 14 Canyon Visitor Center Auditorium

Session 1: 2:00-5:00 p.m. Session 2: 7:30-10:00 p.m.

Fee per session: \$2.00 Adults \$1.00 Students

Filmmaker Bob Landis will be the host for this selection of recent award-winning films with emphasis on Yellowstone and the Rocky Mountain West. No advanced registration required. Seating will be on a first-come-first-served basis.

Wilderness Images: Telling the Story with Film and Video

August 14-16

\$85 (Member's fee \$75)

This course will give emphasis to obtaining good results, both in terms of image quality and validity of behavior or scenes recorded, and to telling a complete story. Topics include sequence shooting, developing themes, script writing, notes on animal behavior, choice locales, technical tips, equipment, and editing. The ethics of wildlife film making and the mutual advantages of a nonintrusive approach will also be addressed. Field work to film sequences will be followed by a session to analyze and plan toward a final film or tape story. Participants will need to bring video or movie equipment.

(Note: Following a morning session on the first day, participants will be Bob's guests for his afternoon and evening film festival at Canyon.)

Bob Landis is an educator and professional cinematographer whose wildlife scenes have appeared in National Geographic specials, New Wilderness, and Wild America. His film Song Dog, about coyotes in Yellowstone, was a multiple award winner, and his latest film, Trumpeter Blues, is due for release in '87.

Fly Fishing the Catch-and-Release Way

August 14-16 less experienced

August 22-24 more experienced

\$125 (Member's fee \$115)

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 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. Both courses are limited to twelve persons. The instructor will work intensively with four persons each day. During the other two days of each course, instruction will be limited to morning and evening discussions.

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.



Tracking: Earth as Manuscript

August 22-23

\$65 (Member's fee \$55)

This course is designed to be an intensive two-day field study on observing and interpreting animal sign. Minimal time will be spent in formal lectures. Field trips will be along the Lamar River and surrounding areas. Emphasis will be placed on acquiring the skills necessary to learn the art of animal tracking.

Gerry Green is currently a field ecologist for the Interagency Grizzly Bear Study Team. He is a member of the Northwest Pacific Trackers Association, has a degree in Wildlife Biology from the University of Montana, and has studied tracking under Tom Brown, Jr.

NEEDS LIST

Among the several thousand readers of this brochure are some who may be able to easily help acquire certain needed items for the Institute classes.

Below is a description of a few such objects. Anyone who has a surplus item or a suggestion regarding a possible source is invited to contact the director's office.

Gifts are, of course, tax deductible.

- set of nested camp cookware (stainless steel)
- "dry bags" (waterproof duffle bags) 3-4
- large camp coffee pot
- two-way radios (2)
- extension control cable for Kodak Carousel
- light pointer (battery type)
- large outside door mat
- 16-20 passenger vehicle
- overhead projector
- video monitor (or large screen portable TV)
- auto-focus Kodak Carousel slide projector
- zoom lens for Kodak Carousel
- stackable arm chairs for classroom (20-30)
- dissecting microscopes, stereo (2-3)
- folding classroom tables (4-6)
- extra 16-mm projector
- Hard Disk for Macintosh
- small tool kit
- duffle bags (3-4)
- dust buster
- misc. hand tools (saw, hammer, wrenches, etc.)
- throw rugs (2'x3') for cabins
- small copy machine
- small fire extinguisher
- panniers (2-3 sets)
- quality knives (2)

Membership

The principal reason for contributing to any organization is to demonstrate interest and support. For Yellowstone Associates there are benefits provided as acknowledgment of that interest and support.

- * Discounts on class fees
- * A 15% discount on books sold by The Yellowstone Association (in Visitor Centers or by mail)
- * An informative newsletter
- * Discounts on Institute products
- * Institute course information sent by First Class Mail
- * Invitations to special activities
- * A family membership covering donor, spouse, and children through age 20
- * Opportunity to support scientific, educational and historical programs in Yellowstone National Park
- * Association with other individuals with similar interests
- * A tax deduction
- * Discounts at many association bookstores in other national parks.

Creating Boards & Committees That Work

August 25-26

Developing Long-Range & Short-Term Plans

August 27

The Yellowstone Association will sponsor these two workshops at Mammoth for non-profit organizations, boards, committees, task forces, advisory groups, and commissions whose concerns are natural history and the environment. Write for details on fees, lodging, schedule, and attendant activities.

Bald Eagles of Yellowstone

August 28

\$10 (Member's fee \$5)

This program will be a joint effort with the Bald Eagle Working Group for the Greater Yellowstone Ecosystem. Included will be a field trip to a nesting site plus discussion of nesting behavior, population trends, and research methods. Presentations will also cover bald eagle biology, habitat status, management, threats to recovery, banding programs, and a summary of the Group's latest research reports for the present season completed the day before this session.

Program schedules will be mailed to registrants at least 4 weeks prior to the seminar date. The location will be determined by the number of preregistrations.

Included among the speakers will be Bald Eagle Working Group members Bob Oakleaf, Bob Jones, Al Harmata, and Craig McClure. Oakleaf is a non-game coordinator for the State of Wyoming and a member of the National Recovery Team. Jones is a wildlife biologist for the BLM Medicine Lodge Resource Area with seven years experience in all aspects of bald eagle management. Harmata, a raptor biologist, eagle specialist, is an adjunct assistant professor at Montana State University involved with current research on bald eagles of the Yellowstone ecosystem. McClure is the North District Resource Management Coordinator in Yellowstone.

MEMBERSHIP FORM

Please enroll me as a member of The Yellowstone Association.

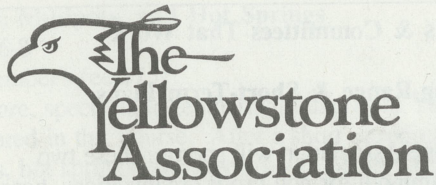
Associate\$ 25_____
 Contributing 50_____
 Sustaining 100_____
 Patron 250_____
 Sponsor 500_____
 Benefactor 1000_____

Name _____
 Address _____
 City _____
 State _____ Zip _____

Identify other family members for whom membership cards are desired

Make checks payable to
 "The Yellowstone Association."
 Charge to [] Visa [] MasterCard
 Number _____
 Expiration date _____
 Signature _____

Mail to: The Yellowstone Association
 P.O. Box 117
 Yellowstone National Park, WY
 82190



P.O. Box 117
Yellowstone National Park, Wyoming 82190

Non-Profit Organization
U.S. POSTAGE PAID
Permit No. 104
Livingston, MT 59047

ADDRESS CORRECTION REQUESTED

Please help by sharing your
Institute Catalog with a friend.

Institute Office 307-344-7381 ext. 2384

REGISTRATION FORM

Name _____ Male Female
 Address _____ Check if different from address on Institute mailing list.
 City _____ State _____ Zip _____ Office phone _____ Home phone _____
 Where can you be reached one month prior to 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 and include immediate family.)

Course Title	Dates	Tuition	Are you enrolling for:	
			a. academic credit?	b. teacher recertification credit?
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Lodging

- I want to stay in the Institute cabins at Lamar the following nights at \$6 per person per night. Dates _____
 My class does not meet at the Lamar facility. See my attached note regarding need for lodging or camping reservations, dates, etc.
 I will make my own lodging or camping arrangements.

Total Tuition Fee _____
 Membership or donation (optional) _____
 Total Enclosed _____

Charge to Visa MasterCard

Number _____
 Expiration Date _____
 Signature of Cardholder _____

Detach and mail to: Yellowstone Institute
 Box 117
 Yellowstone National Park, WY
 82190

Release and Assumption of Risk

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 _____

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

Inform me about winter courses.

If under 21 years, give age: _____ years