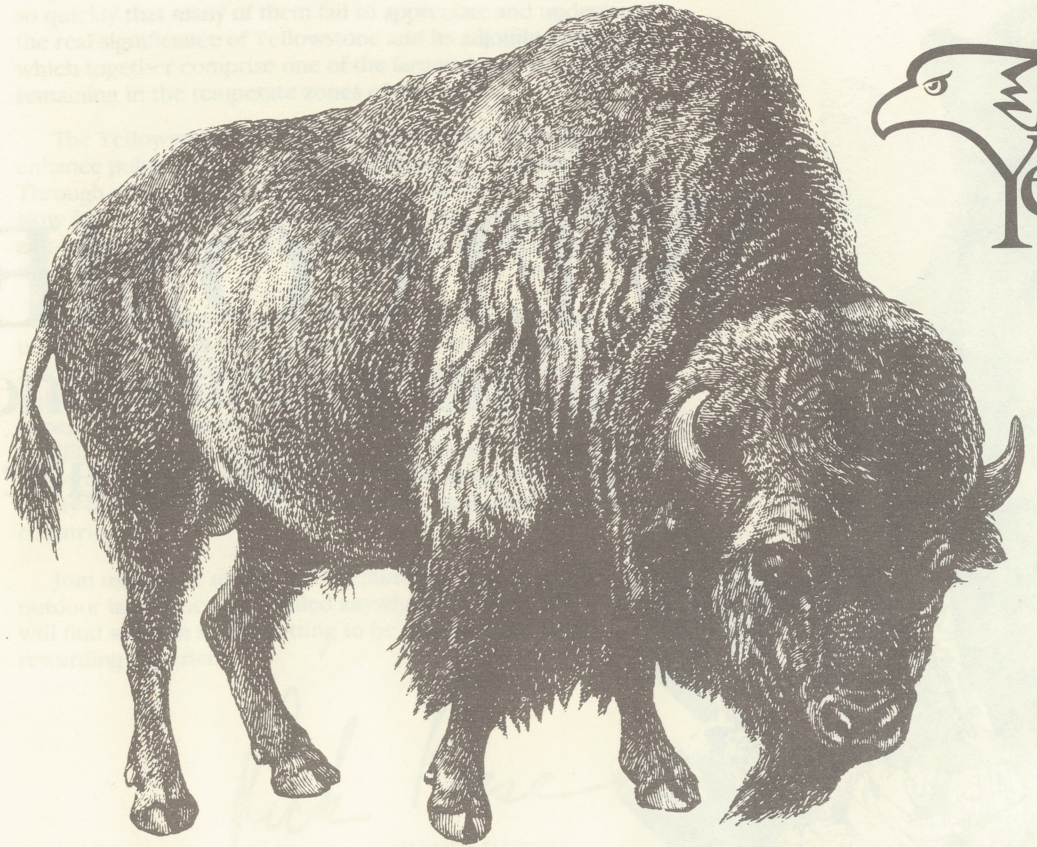
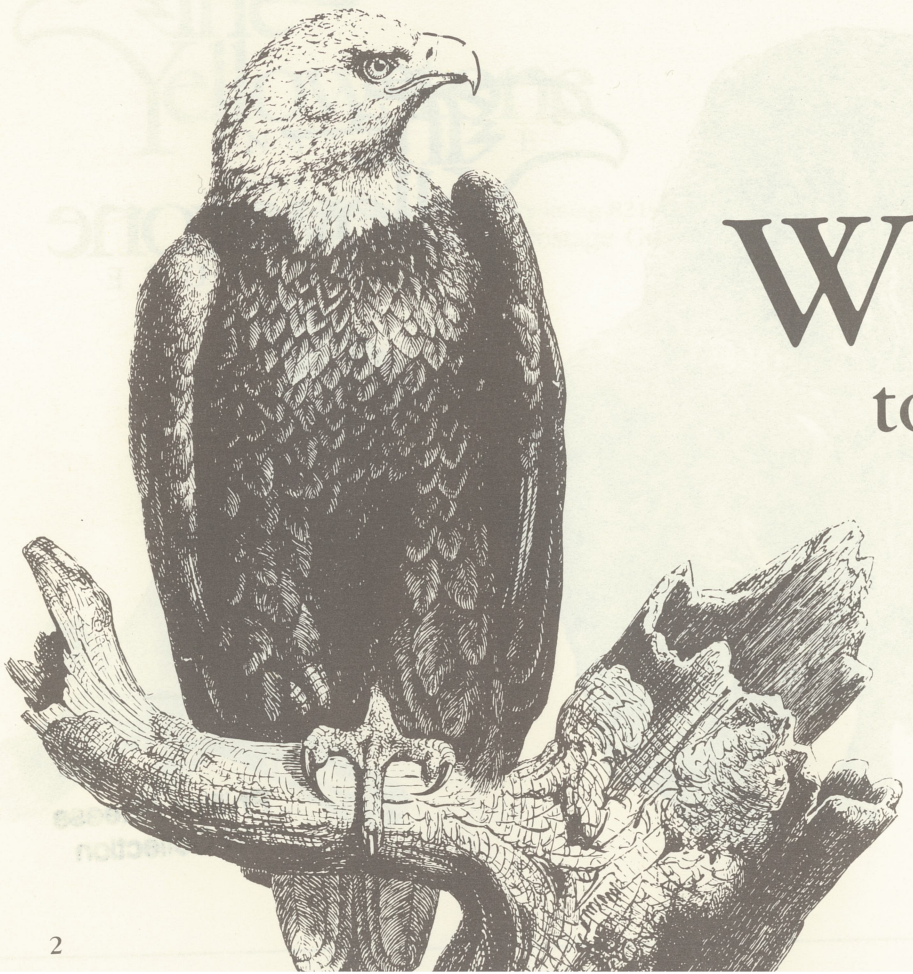
RR 1984



The Yellowstone INSTITUTE

Phillips / Reese
YI Collection



WELCOME

to the Yellowstone Institute!

The vast majority of visitors to Yellowstone confine themselves to roads and automobiles and pass through the park so quickly that many of them fail to appreciate and understand the real significance of Yellowstone and its adjoining wildlands, which together comprise one of the largest intact ecosystems remaining in the temperate zones of the earth.

The Yellowstone Institute was created nine years ago to enhance public understanding of Yellowstone National Park. Through our program of some fifty field seminars, we seek to slow folks down a little and get them to take time to understand and appreciate where they are and what is going on around them.

Operating in conjunction with the National Park Service and under the auspices of the Yellowstone Library and Museum Association, a non-profit tax exempt organization, the Yellowstone Institute helps hundreds of people each year experience the natural wonders of this area — its abundant wildlife, fabulous thermal features, rich history, and expansive wilderness. Past participants have ranged in age from seven to eighty-three and have come from all fifty states and many foreign countries.

Join us for one of our 1984 seminars and participate in an outdoor laboratory unexcelled anywhere on earth. We think you will find study in such a setting to be a unique and highly rewarding experience.

Rick Reese

RICK REESE
Director





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I'll never look at Yellowstone in quite the same way again.

—Joyce Cullen
Putnam Valley, NY, 1982

General Information

TUITION AND REGISTRATION

Tuition fees are listed in the description of each course and cover tuition only. Additional fees for cabin accommodations ($5 per night) and college credit will be charged for persons who select those options. Unless otherwise specified, the tuition fee does not include lodging, meals, transportation or cost of course materials if any.

Registration is made by completing and mailing the attached registration form along with the tuition fee (and cabin fee if applicable) to the Yellowstone Institute. It is advantageous to register early, since upon receipt of registration forms and fees, the Yellowstone Institute will mail students a Yellowstone National Park entrance fee and campground waiver, a list of equipment to bring, and pre-course study materials and reading lists. All courses are limited to fourteen participants unless otherwise specified.

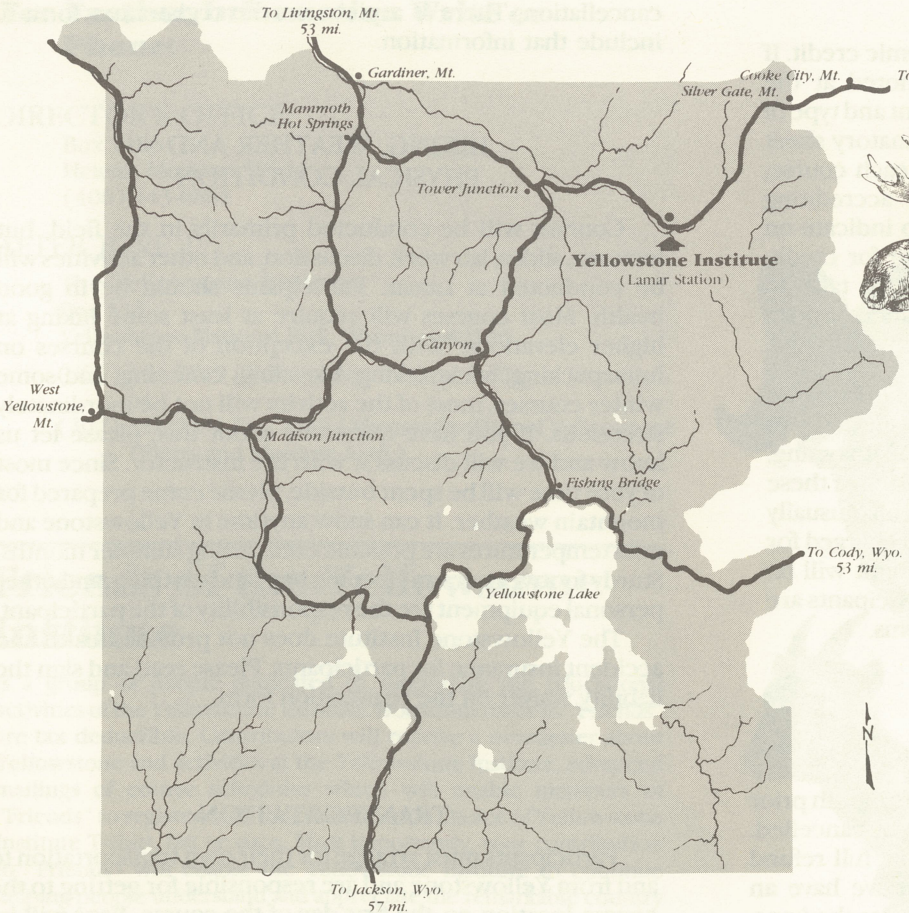
Participants who cancel their registrations at least two weeks prior to the opening date of a course will receive an 80% refund of the tuition fee and a full cabin refund. Cancellation less than two weeks before the course will not be refunded unless we are able to fill the vacancy from our waiting list.

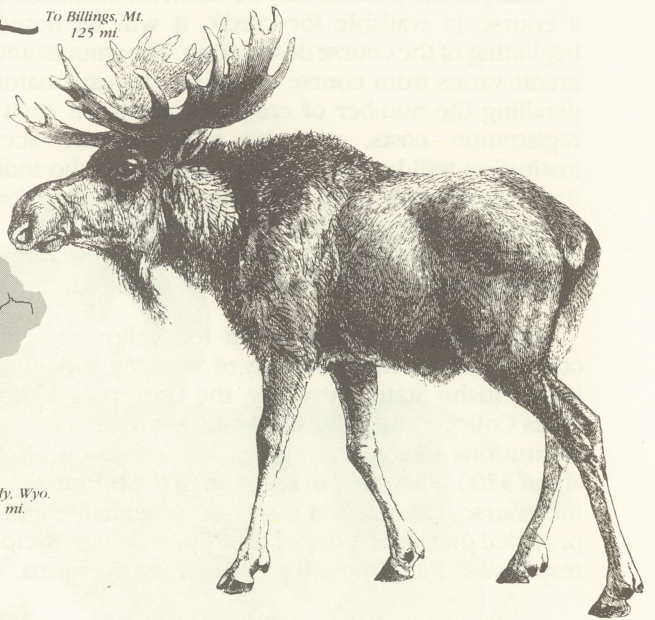
LOCATION AND ACCOMMODATIONS

Unless otherwise noted, courses are conducted out of the National Park Service facility at the historic Buffalo Ranch adjacent to the Lamar Ranger Station in the beautiful northeast portion of Yellowstone National Park. (Sign on road says "Lamar Station", see map.) There are fourteen sleeping cabins and a separate building which contains kitchen facilities, classrooms, bathrooms and showers. The facility, though clean and quite adequate, is fairly simple and life there has been affectionately described by former participants as "indoor camping." There are two beds in most cabins, others have three, and one has four; they have no plumbing and are unheated. Each person must provide his/her own sleeping bag. The main building, located next to the cabins, is heated, has modern bathrooms and showers, and a modern kitchen where people do their own cooking. Please reserve cabin space when you register (including space for the night before and/or night after if desired). The cabin fee is $5 per night. For part of the season cabins may be available without reservations, but this cannot be guaranteed and will be on a first-come basis. Cabin space for family members of course participants may be available. If you want to request such space, please indicate that on your registration form and we'll send you a notice regarding our policy. Although residency at Lamar is optional, participants and instructors from past years have found that this living situation contributed significantly to their learning experience. If you plan to stay at Lamar please do not bring pets.

Unless otherwise specified, participants must provide their own food. Basic cooking and eating utensils are provided. There are stoves and refrigerators in the kitchen but space is limited and people are asked to keep meals fairly simple.

For those who choose not to stay at Lamar, the closest motel or cabin facilities are at Roosevelt Lodge (11 miles), Silver Gate (19 miles), Cooke City (23 miles), and Mammoth and Canyon (both about 30 miles). Park campgrounds are also available at Pebble Creek (9 miles east) and Slough Creek (7 miles west). Participants who stay in park campgrounds will have user fees waived, but campsites cannot be reserved and campgrounds often fill early each day. Camping and recreational vehicles are not allowed on the grounds at the Yellowstone Institute facility. (List of nearby lodging facilities will be sent on request.)


To Livingston, Mt.
53 mi.
Gardiner, Mt.
Mammoth
Hot Springs
Cooke City, Mt.
Silver Gate, Mt.
To Billings, Mt.
125 mi.
Tower Junction
Yellowstone Institute
(Lamar Station)
Canyon
West
Yellowstone,
Mt.
Madison Junction
Fishing Bridge
To Cody, Wyo.
53 mi.
Yellowstone Lake
N
To Jackson, Wyo.
57 mi.



COLLEGE CREDIT

Many of the courses may be taken for academic credit. If a course is available for credit, it will be noted at the beginning of the course description. The amount and type of credit varies from course to course. An explanatory sheet detailing the number of credits available for each course, registration costs, and the name of the accrediting institution will be sent to all participants who indicate on their registration form that they are enrolling for credit. Persons enrolling for credit may be required to take an exam, submit field notes, or both. In some instances, a post-course paper or field work may be required.

Institutions granting credit for Yellowstone Institute courses include the University of Montana, the University of Idaho, Idaho State University, the University of Wyoming, Ricks College, and Brigham Young University. Each of these institutions charges a registration fee to enroll (usually about $20). This fee is in addition to the tuition charged for the course. Registration forms for academic credit will be provided on the first day of the course, and participants are responsible for completing and mailing the forms.

COURSE CANCELLATION POLICY

If fewer than eight persons are enrolled one month prior to the opening date of a course, the course may be cancelled. Participants will be notified immediately and a full refund will be promptly mailed. It is essential that we have an address and a phone number where you can be reached one month prior to the course so we can notify you in case of a cancellation. There is a place on the registration form to include that information.

HIKING, WEATHER AND PHYSICAL CONDITION

Courses will be conducted primarily in the field, but lectures, slides, lab work, discussion, and other activities will be conducted at Lamar. Participants should be in good health. Most courses will require at least some hiking at higher elevations. With the exception of the courses on horsepacking, backpacking, bicycling, canoeing, and some winter courses, most of the activity will not be inordinately strenuous. If you have questions about this, please let us know and we will discuss it with the instructor. Since most of your time will be spent outside, please come prepared for mountain weather. It can snow anytime in Yellowstone and cold temperatures are possible even during summer months. Sturdy footwear, warm sleeping bags and clothing, and other personal equipment are the responsibility of the participant.

The Yellowstone Institute does not provide health and accident insurance for participants. Please read and sign the liability waiver on the registration form.

TRANSPORTATION

Participants must arrange for their own transportation to and from Yellowstone and are responsible for getting to the course location on the first day of the course. Vans will be provided for all travel associated with the courses.

For Further Information Write or Phone:

DIRECTOR'S OFFICE:

Box 1186
Helena, Montana 59624
(406) 443-0861

AFTER JUNE 1:

The Yellowstone Institute
Box 515
Yellowstone National Park, Wyoming 82190
(307) 344-7749 (Yellowstone Institute facility at Lamar)
or
(307) 344-7381 Ext. 2349 (Mammoth office of Yellowstone Library and Museum Assn.)

Friends of the Yellowstone Institute

is a group of people dedicated to supporting the educational activities of the Yellowstone Institute. Donations made to "Friends" are tax deductible. Contributors will receive a newsletter about Yellowstone and activities at the Yellowstone Institute, advanced mailings of course schedules which will enable members of "Friends" to register early for courses, and a choice of Yellowstone Institute T-shirt, hat or visor. Most importantly, your contribution to "Friends" will enable the Yellowstone Institute to continue helping people understand and appreciate the remarkable country we call Yellowstone. Won't you be our friend?



ZOOLOGY

Grizzly Bear Biology, Ecology, and Management

Z-1 June 11-15
$185
College credit available. (1 semester or 2 quarter hours)

This course will deal with a variety of considerations relating to the ecology and management of grizzly bears in the Yellowstone ecosystem. Primary emphasis will be on management, but other subjects include history, reproduction, behavior, population characteristics, food habits, home range, denning, habitat use, management guidelines, recovery plan, and bear-man conflicts. Approximately equal time will be spent in classroom and field studies.

Steve Mealey *is Forest Supervisor of The Shoshone National Forest and holds degrees in forestry, fish and wildlife management, and political science. During the 70's he was deeply involved in grizzly habitat research including work on the Border Grizzly Project and the Yellowstone Interagency Grizzly Bear Study. He has written and published a number of papers including Habitat Criteria for Grizzly Bear Management, Food Habitats of Free-Ranging Grizzly Bears in Yellowstone, Guidelines for Management Involving Grizzly Bears in the Greater Yellowstone Area, and participated in the preparation of the Grizzly Bear Recovery Plan.*

Large Mammals of Yellowstone

Z-2 June 11-15
$185
College credit available. (1 semester or 2 quarter hours)

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, *Ph.D., is Professor of Wildlife Ecology at the University of Idaho. He has spent the past 13 years conducting research, directing graduate students, and teaching. Large mammal ecology and the ecological aspects of animal behavior are his special interests, which have led him to study a wide variety of species in East Africa, Wisconsin, Texas, Idaho and Yellowstone.*

Birds of Yellowstone

Z-3 July 2-6
$185
College credit available. (1 semester or 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.*

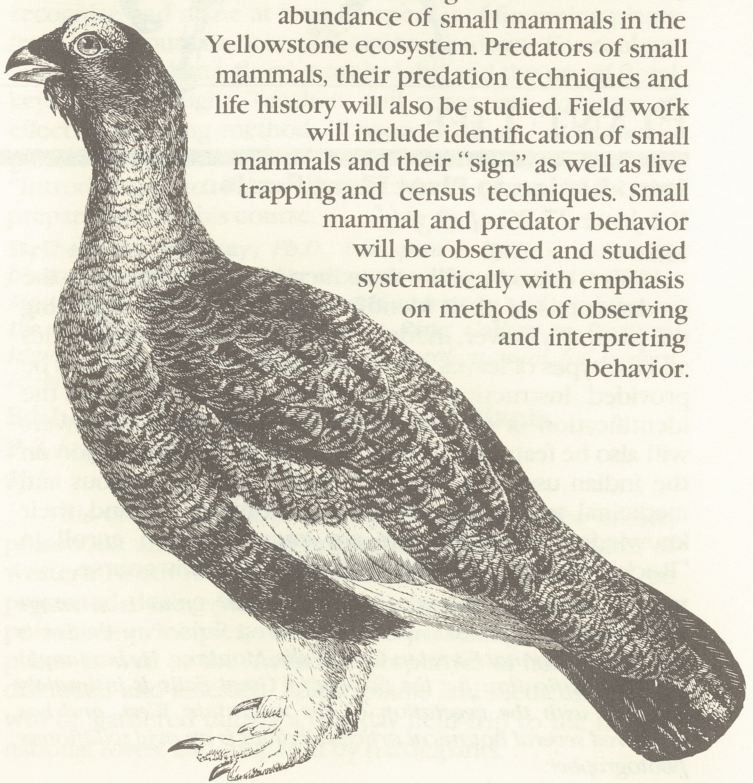
Small Mammals of Yellowstone

Z-4 July 15-19

$185

College credit available (1 semester or 2 quarter hours)

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 history 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. His teaching ezperience includes courses in zoology, mammalogy, ornithology, wildlife management and science education. Before receiving his doctorate he was a wildlife manager and instructor in Wisconsin. His research interests include ground squirrel behavior and ecology. He has taught courses for the National Audubon Society and conducts environmental education workshops for teachers.*

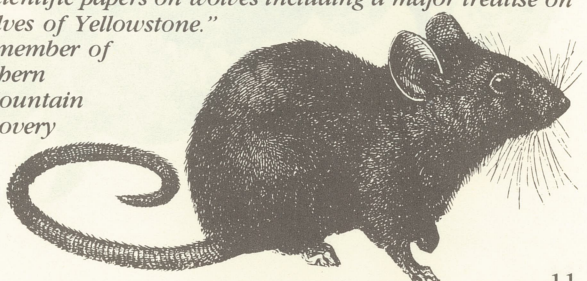
Wolves of Yellowstone: The Missing Link

Z-5 August 4-5

$50

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 key wolf habitats in the park. The course will also explore the issues, options and strategies associated with restoration of wolves to Yellowstone.

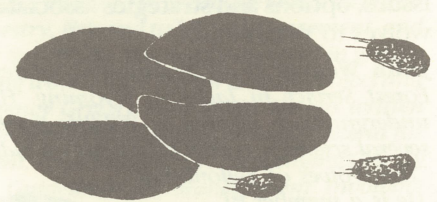
John Weaver *is an Endangered Species Biologist for the U.S. Forest Service in Jackson, Wyoming. He holds graduate and undergraduate degrees in Wildlife Science and has published several scientific papers on wolves including a major treatise on "The Wolves of Yellowstone." He is a member of the Northern Rocky Mountain Wolf Recovery Team.*

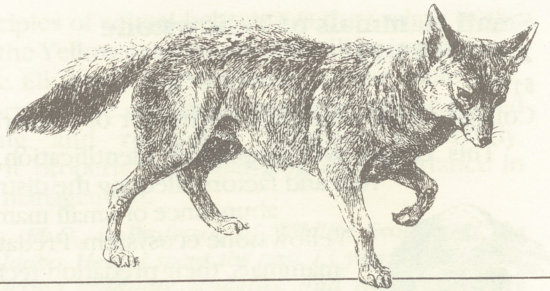


Animal Sign — Tracks, Scat, Hair, Feathers and Galls
Z-6 July 17-19
$95
College Credit Available (1 quarter hour)

Animals are elusive in the wild and much of what we learn about them comes from our ability to detect and read their sign. Participants in this course will learn to observe and interpret animal sign and will explore the legacy of the great naturalists and their abilities to observe. Time will be spent in field observation, background lectures and laboratory work. (See also related course H-2, "The Ways of the Mountain Men").

Jim Halfpenny, *Ph.D., is director of the University of Colorado Mountain Research Station and Coordinator of the CU Long-Term Ecological Research Program. His major interests are mammalogy, winter-extreme environment and long-term ecology, and natural history. He has taught for fourteen years in the greater Yellowstone Ecosystem.*





PLANT LIFE

Introduction to Plant Identification
P-1 June 27-29 1984
$95

This course will introduce participants to the fundamentals of plant identification. Instruction regarding the parts of a flower, inflorescences, fruiting characteristics and the types of leaves, stems and underground parts will be provided. Instruction in the use of botanical keys and the identification of numerous trees, shrubs, and wildflowers will also be featured. There will be additional discussion on the Indian uses of plants and their edible, poisonous and medicinal properties. Persons wanting to expand their knowledge of wildflowers are encouraged to enroll in "Rocky Mountain Wildflowers" following this course.

Wayne Phillips *has a degree in forestry and is a range management specialist with the U.S. Forest Service on the Lewis and Clark National Forest in Great Falls, Montana. He has taught plant identification for the College of Great Falls, is intimately familiar with the vegetation of the mountain West, and has authored several botanical articles. Phillips is an avid wildflower photographer.*

Rocky Mountain Wildflowers

P-2 July 2-6 1994

$185

College credit available. (1 semester or 2 quarter hours)

Field trips to the northern and central portions of Yellowstone National Park will help students learn to recognize and name at least 75 species of flowering plants from intermountain deserts to alpine meadows. The ecology of flowering plants, floral morphology, and the use of floral keys will be taught. Teachers will appreciate coverage of effective teaching methods. Persons with no botany background are encouraged to take the three-day course on "Introduction to Plant Identification" (June 27-29) as preparation for this course.

Delbert W. Lindsay, *Ph.D., has spent a lifetime collecting, photographing, and teaching about flowering plants of the Rocky Mountains. Winters find him teaching botany and working on the 11,000-specimen herbarium at Ricks College in Rexburg, Idaho. He is presently preparing a floral manual for eastern Idaho.*

Edible, Poisonous and Medicinal Plants

P-3 August 16-18

$95

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 to the nearby national forest and prepared by participants.

Wayne Phillips *has a degree in forestry and is a range management specialist with the U.S. Forest Service on the Lewis and Clark National Forest in Great Falls, Montana. He has taught plant identification for the College of Great Falls, is intimately familiar with the vegetation of the mountain West, and has authored several botanical articles. Phillips is an avid wildflower photographer.*



GEOLOGY

Geology of the Yellowstone Country

G-1 June 18-22

$185

College credit available (1 semester or 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 numerous field courses in Yellowstone and Glacier National Parks and has served as a 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 and the South Pacific.*



Energy Resources in the Greater Yellowstone Area

G-2 June 25-29

$195

College credit available (1 semester or 2 quarter hours)

This course will examine the energy resources of the greater Yellowstone area, assess the potential impacts of their development, and attempt to place them in a context of world, U.S., and regional energy resource and consumption trends. The course will include a look at oil and gas, hydro power and geothermal resources, coal, and uranium, and will include four field trips to energy resource sites near Yellowstone. No geology background is necessary.

Arnold Silverman, *Ph.D., is chairman of the Department of Geology at the University of Montana where he specializes in energy resources. He has served on the National Academy of Sciences Board of Energy and Mineral Resources and on the National Materials Advisory Board.*

Volcanoes and Fossil Forests

G-3 June 30-July 1

$50

This course will introduce the participant to the unique petrified forests of Yellowstone. There will be a discussion of the theory that repeated episodes of volcanic activity buried living forests in ash and mudflows, and mineral-bearing hot water slowly petrified them. The first day of the course will involve a field trip by van 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.

John Good *was chief naturalist of Yellowstone National Park for six years. During his distinguished career in the National Park*

Service he has 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.

Calderas and Hydrothermal Systems

G-4 August 15-20
$325
Enrollment limit: 18
College credit available. (2 semester or 3 quarter hours)

This seminar will be a technical discussion of volcanic rocks (emphasizing ash flow tuff volcanism), caldera cycles and hydrothermal systems. The Yellowstone caldera will be used as a lecture and field example. The evolution and hydrothermal systems of other calderas will also be discussed. The structural, geochemical, and hydrologic relationships of hydrothermal systems to calderas, and the spectrum of hydrothermal systems, including geysers, will be discussed. A background, equivalent at least to an undergraduate degree in geology, will be assumed.

Dennis L. Nielson *received his Ph.D. from Dartmouth College specializing in igneous and metamorphic petrology and structural geology. He had five years experience in massive sulfide and uranium exploration before joining the Earth Science Laboratory at the University of Utah Research Institute. There he has been involved in mapping geothermal resource areas and developing geothermal exploration techniques.*

Duncan Foley *received his Ph.D. from Ohio State University where he studied the igneous petrology, structural geology, geochemistry, and age dating of a volcanic center in western Nevada. He has done research in geologic aspects of land use planning. His specialty at the Earth Science Laboratory is regional assessment of geothermal resources.*

EXPERIENCING YELLOWSTONE

Wilderness Horsepacking

E-1 July 23-27
E-2 July 30-August 3
$275
Enrollment limit: 12

The major theme of this course will be 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. A four-day ride through the Yellowstone backcountry will provide participants with experience handling packstock. *Fee includes horses, special equipment and food.* Participants must provide their own sleeping bags. This course takes place in the Bechler country of Southwestern Yellowstone.

Richard Clark, *Ph.D., is a native of the upper Snake River Valley and has spent eleven years as a professional guide and outfitter in the Tetons and Yellowstone. He is a faculty member at Ricks College in Rexburg, Idaho. 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.*

Learning Outdoor Photography

E-3 June 16-18
$95

This course is geared to those who want to develop their skills in outdoor photography. No previous photography

Canoeing the Lakes of Yellowstone

E-7 August 13-17
$250
Enrollment limit: 12
Academic credit available (1 semester hour)

This six-day canoe trip across Lewis Lake and into magnificent Shoshone Lake will provide instruction in such canoeing skills as strokes, portaging, safety and tripping (how to pack a canoe). Low impact backcountry camping techniques will be discussed and practiced and interpretation of the lake environment will be provided. American Red Cross canoeing certification may be earned by those who want it. *Fee includes all canoeing equipment, group camping gear, and food.*

David J. Thompson *is Supervisor of the Family and Youth Outdoor Program at Ricks College in Rexburg, Idaho. He has a degree in recreation and ten years experience in the recreation field. He is the former State Trails Coordinator for the State of Idaho and is a certified Red Cross canoe instructor trainer. He will be accompanied by an experienced assistant.*

Fly Fishing the Catch-and-Release Way

E-8 August 3-5 less experienced
E-9 August 7-9 more experienced
$100

Both sessions of this course will emphasize the special nature of Yellowstone fishing — its fabulous abundance of native fish and the very special regulations and fishing philosophies which have enabled park managers to protect and maintain a superb 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. Approximately half the course time in this first session will be spent away from the water practicing casting and other techniques.

The session for the more experienced persons is for those 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 primarily in morning and evening groups.

Please note that a one day course on fly tying (see below) is scheduled on the day between these Fishing Courses.

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



Fly Tying the Yellowstone Patterns

E-10 August 6
$35

This course will cover fly tying in a one-day intensive program. Participants must provide their own materials and tools, a list of which will be sent upon registration.

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

Yellowstone on Foot: Backpacking the Parklands Wilderness

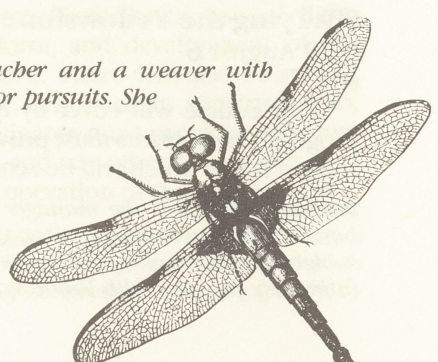
E-11 July 23-27
$195

Enrollment limit: 10

This course, conducted by a husband-wife team, will provide participants with a thorough introduction to backpacking in Yellowstone. Items of discussion will include camping ethics, equipment, bear precautions, navigation and map reading, food selection and preparation, and sanitation. Participants will actively practice the skills they learn as they hike for five days through Yellowstone's backcountry. *Fee includes all food and group camping gear.* Participants must bring sleeping bag, pad and pack.

Stewart Aitchison *is a field biologist with thirteen years experience in the western United States. He has authored over fifty scientific and popular articles as well as the book* Oak Creek Canyon and the Red Rock Country of Arizona *and* A Naturalist's Grand Canyon Hiking Guide. *He has taught courses for the Museum of Northern Arizona, University of California, and Florida Southern College. He has a degree in zoology from Northern Arizona University.*

Ann Kramer *is an art teacher and a weaver with a wide experience in outdoor pursuits. She hikes, jogs, runs rivers, and delights in the Yellowstone wilderness.*



Bicycling Yellowstone

E-12 September 5-8
$140
Enrollment limit: 10

This course will feature four separate one-day bike tours with three nights at Lamar and one night in a developed campground. Touring technique and safety will be stressed along with interpretation of the natural history of Yellowstone.

Most of Yellowstone's "Grand Loop" plus areas northeast and northwest of the park will be covered. Participants should have at least moderate experience and be capable of cycling 50 miles a day at a slow pace in mountainous terrain.

Bill Schneider *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 editor of* Wild America, *published by the American Wilderness Alliance, and author of* Where the Grizzly Walks. *He is an avid bicyclist and publisher of the* Bicyclist's Guide to Yellowstone National Park.

Hiking and Camping in Grizzly Country

E-13 June 23-24
$50

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 weekend will involve an overnight hike into the Yellowstone backcountry where camping

techniques will be demonstrated and discussion will continue about the current status of the great bear and its uncertain future. Participants must provide their own backpacking gear and food.

Bill Schneider *has authored* Where the Grizzly Walks, *the* Hiker's Guide to Montana, *and two dozen feature articles on grizzlies including recent articles in* Backpacker *and* Montana Magazine *on hiking in grizzly country. 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. Bill also teaches the Yellowstone Institute courses on bicycling.*

Finding Your Way with Map and Compass

E-14 June 30-July 1
$50

Proper use of map and compass is an essential outdoor skill, not only for safety, but also as a means of opening otherwise unknown backcountry to a person. Participants in this course will learn to read a topographic map, use a compass, and combine both skills to find their way across unfamiliar terrain. Maps and compasses are provided.

Jim Lenertz *has been a seasonal park naturalist in Yellowstone since 1967 and has been instrumental in developing National Park Service compass and backpacking programs. He has a master's degree in biology and has served on the faculty of Arizona Western College for the past 19 years.*

Yellowstone's Night Skies

E-15 August 23-26
$95

This course is designed for people with no previous Astronomy knowledge but will also be enjoyed by those with some training in the subject. During the four days and three nights of the course, topics covered will include constellation and star study, learning to tell time by the sun and moon, planetary motion, birth and death of stars, fundamental understanding of such concepts as Einstein's Theory of Relativity, black holes, and others. In addition to astronomical observations under the dark, unspoiled skies of Yellowstone, instructional techniques will include color slides and movies (including footage from space), and lecture and discussion sessions. Some equipment will be provided, but participants who have binoculars and small telescopes are encouraged to bring them.

Bob Berman *is director of the Catskill Astronomical Research Society and the author of the* The Night Sky, *a popular weekly column which has appeared for nearly a decade in New York and Massachusetts newspapers. He teaches college astronomy courses in central New York and has also taught at Empire and Burlington colleges in Vermont.*

Aesthetics in the Natural Environment

E-16 July 24-27
$150

This course will explore the relationship between two seemingly disparate aspects of American culture; an appreciation of natural systems (including wildlands and wildlife), and the development of a uniquely American musical experience — jazz and blues, a musical form that relies heavily on spontaneous improvisation based on the feelings, mood, and the physical setting of the artist. In this course we will try to engage the student in a greater appreciation of both through performances by the instructor using various saxophones and through the active participation of the class using voice, hand drums, and simple wind instruments such as kazoos and penny whistles.

The first day will be at Lamar where we will discuss the history of jazz, delve into some of the connections between aesthetics and the natural environment, and listen to both live and recorded music. The next three days and two nights will be spent in a remote back-country location which will be reached by boat. All transportation, including boats, will be provided. Participants must provide their own food and camping equipment. A musical background is not necessary for enrollment in the course.

Wilbur Rehmann *is the former executive director of the Montana Wildlife Federation and has been actively involved in conservation in the West. He currently serves on the staff of the Greater Yellowstone Coalition. He is a professional jazz musician who has performed with Dizzy Gillespie, Arnett Cobb, Jack Walrath, Cheap Cologne, and the Big Sky Mudflaps.*



HISTORY

The Flight of the Nez Perce Through Yellowstone — 1877

H-1 July 28, 29
$50

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 currently editor of* Montana the Magazine of Western History *in Helena, Montana. 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.

The Ways of the Mountain Men

H-2 July 31-August 2
$95

Survival for the early trappers and mountain men of the Rocky Mountain West depended upon their skills as a hunter, trapper, craftsman, botanist, cook, meteorologist, diplomat and psychologist. 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. (See also related course H-3 "On the Trappers' Trail" which is conducted just after this course, and Z-6 "Animal Sign: Tracks, Scat, Hair, Feathers and Galls").

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.*

On the Trapper's Trail

H-3 August 4-8
$175
Enrollment Limit: 10

A hundred and fifty years ago the furs of the American west lured trappers and mountain men to the Yellowstone country. One of them, Osborne Russell, left a rare and detailed account of his wanderings across the Yellowstone plateau. During this course we will follow a portion of Russell's routes of 1837 and 1839. Using Russell's journal, we will read his description of the terrain, compare them with our own observations, attempt to develop an appreciation of the trappers' way of life, and learn of the international fur trade and its historic effect on the Yellowstone country. Participants will backpack an average of 7-8 miles a day both on and off trails and should be in good physical condition. Participants must provide their own food and backpacking equipment. (See also related course "The Way of the Mountain Men" which is conducted just prior to this course.)

Bill Lang *Ph.D., is currently editor of* Montana the Magazine of Western History *in Helena, Montana. 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.

History of Yellowstone by Bicycle

H-4 August 24-26
$120

This course will feature three one-day bicycle tours through parts of Yellowstone. Each day participants will cycle to sites of special historical significance and spend several hours with historian Bill Lang discussing and interpreting the area. Each day will be in a different area of the park and routes will not be repeated. There will be a support vehicle provided for carrying equipment, food, and tired cyclists. Participants must provide their own food and cycling equipment and should be capable of cycling 40 miles a day at a slow pace.

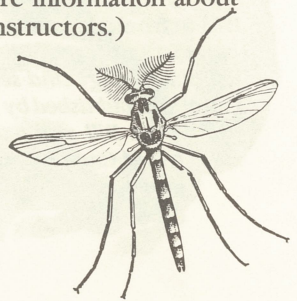
Bill Lang, *Ph.D., is an avid cyclist and editor of* Montana the Magazine of Western History *in Helena, Montana. He has served on the history faculty of Carroll College, the University of Montana and Montana State University. He has written numerous journal articles on the history of Montana and is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

Bill Schneider *is an accomplished cyclist and publisher of the Bicyclist's Guide to Yellowstone National Park. He has a degree in wildlife biology and served for nine years as editor of* Montana Outdoors, *published by the Montana Department of Fish, Wildlife and Parks. Bill also teaches the Yellowstone Institute course on Hiking and Camping in Grizzly Country.*

YELLOWSTONE AND ITS NEIGHBORS

The Yellowstone-Teton Connection: Two Parks, One Ecosystem
Y-1 August 11-18
$395
College credit available. (2 semester hours)
Enrollment limit: 20

Though dramatically different in some aspects, these two parks are also intimately interrelated as we will see exploring the natural history, geology, and human history of these two special areas. Participants will spend four days in Yellowstone at the Yellowstone Institute followed by four days in the heart of Jackson Hole at the Teton Science School. This popular course is heavily field-oriented, combining the instructional expertise and resources of both organizations. Participants should be prepared to hike several miles each day. *Fee includes food, lodging and transportation.* (Write or call for more information about complete course agenda, topics and instructors.)



ENVIRONMENTAL EDUCATION

Interpreting Yellowstone with "Ranger Ted"
T-1 July 16-17 (optional additional day on 18th)
T-2 August 6-7
$50
College credit available. (1 semester hour)

Participants in this course will join the instructor in five different environmental education nature walks and programs. Special themes which will be developed include the kinship and interdependence of all life, predator-prey relationships, and wilderness ecosystems. Educational goals and techniques will be discussed and demonstrated, and participants will learn first-hand how to provide effective field instruction for children. The course will be especially appropriate for teachers of kindergarten through eighth grade. Children of course participants are welcome to attend the nature walks for no charge, but the total group size will be limited to forty and children's places will be allotted on a first-come basis. Advance registration is suggested. If you register for the July 16-17 session, please note if you want to sign up for the additional day on July 18th. This will be a day hike to Avalanche Peak and will cost an additional $25.

Ted J. Parkinson *has served 37 seasons as a ranger-naturalist in Yellowstone and has delighted countless thousands of children with his informative and inspiring nature walks. As a special*

faculty member at Brigham Young University, Ted has taught environmental biology and natural history. He is the author of the "Ranger Ted" conservation programs which have been presented throughout the schools of northern Utah.

Environmental Education for Teachers

T-3 July 23-27

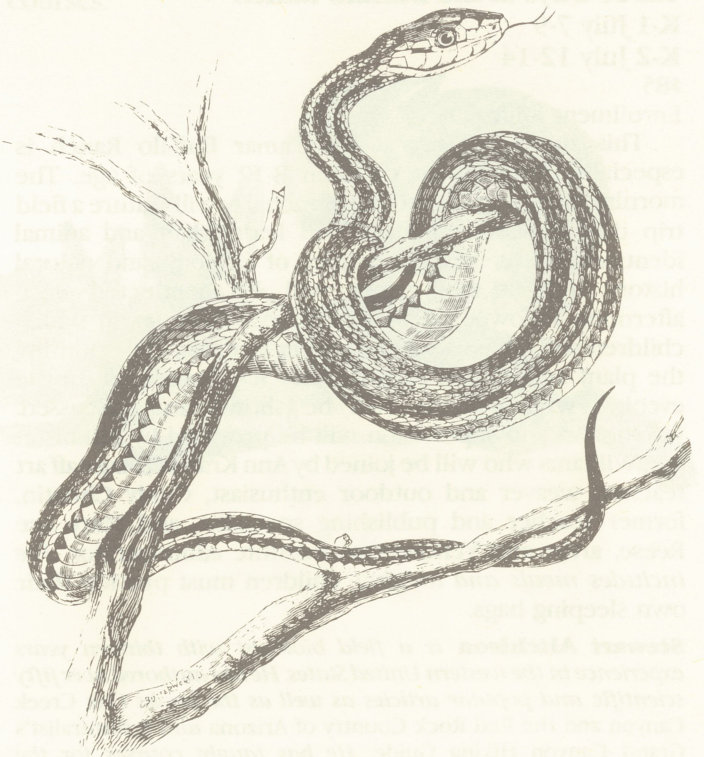
$185

College credit available (1 semester or 2 quarter hours)

The primary intent of this course is to involve participants in environmental education investigations in Yellowstone. The investigations will be applicable to most grade levels and will demonstrate techniques that can be used in many educational settings. Participants will experience curricula such as OBIS, Project Learning Tree, USFS Field Investigations, Project WILD and Energy and Man's Environment. Other activities will include techniques involving analysis of Yellowstone habitats, field identification of plants and animals, and other appropriate experiences. This course is for all teachers who are interested in planning and implementing outdoor activities in their instructional programs.

Don Streubel, *D.A., is an Associate Professor of biology at Idaho State University. He teaches a variety of courses including biology teaching methods. He has taught for the National Audubon Society Ecology Camp in the West and at the annual Alpine Environmental Education workshop in Alpine, Wyoming. For the past three years he has taught a course on the Small Mammals of Yellowstone for the Yellowstone Institute.*

Jane Streubel, *M.S., has 12 years of teaching experience at the elementary and Junior High levels. She has planned and conducted numerous outdoor experiences for students and has participated in a variety of environmental education activities. She is a regional representative for the "Energy and Man's Environment" program.*



CHILDREN'S COURSES

Three Days at the Buffalo Ranch

K-1 July 7-9
K-2 July 12-14
$85
Enrollment limit: 20

This three-day stay at the Lamar Buffalo Ranch is especially designed for children 8-12 years of age. The morning and early afternoons of each day will feature a field trip during which children will learn plant and animal identification, general principles of ecology, and natural history. Educational games will be conducted each afternoon followed by supervised art activities in which children will be assisted in drawing, painting and sculpting the plant and animal subjects they have observed. In the evening wildlife films will be shown and discussed. Instruction and supervision will be provided by Aitchison and Williams who will be joined by Ann Kramer, Flagstaff art teacher, weaver and outdoor enthusiast, Cindy Christin, former teacher and publishing specialist, and Mary Lee Reese, artist and Yellowstone Institute administrator. *Fee includes meals and lodging;* children must provide their own sleeping bags.

Stewart Aitchison *is a field biologist with thirteen years experience in the western United States. He has authored over fifty scientific and popular articles as well as the books* Oak Creek Canyon and the Red Rock Country of Arizona *and* A Naturalist's Grand Canyon Hiking Guide. *He has taught courses for the Museum of Northern Arizona, University of California, and Florida Southern College. He has a degree in zoology from Northern Arizona University.*

Bill Williams *is a junior high teacher and has a degree in environmental studies. He has had considerable experience teaching in outdoor education programs for elementary and junior high age children and has been very successful in introducing children to natural history.*

Youth Backpack

K-3 July 19-22
$95
Enrollment limit: 8

This three night, four day backpacking course is designed to introduce children age 12-14 to backpacking in a wilderness environment. The "low impact" camping ethic will be stressed, and participants will learn about equipment, sanitation, backpacking food, safety, bear precautions, navigation with map and compass and camping etiquette. Daily mileages will average about four miles. All food and tents are provided, but participants must bring backpack, sleeping bag and pad. (We will provide these items for a small fee for those who do not have them, but this must be arranged in advance).

Bill Williams *is a junior high school teacher and has a degree in environmental studies. He is experienced in outdoor education and has been very successful in introducing children to natural history in backcountry settings. He is an accomplished cyclist, cross country skier and river runner. This is Bill's fourth year at the Yellowstone Institute.*

NOTE: The course "Interpreting Yellowstone with Ranger Ted" listed under Environmental Education on p.22 is highly recommended for children accompanied by an adult. Children of enrolled course participants may attend for no charge provided there is space.

WINTER IN YELLOWSTONE

Winter Photography
W-1 December 28-31, 1983
$245

Yellowstone's Thermal Basins in Winter
W-2 February 11-14, 1984
$325

Introduction to Winter Camping
W-3 February 18-21, 1984
$245

Following Yellowstone's First Winter Explorers
W-4 February 24-28, 1984
$275

Avalanches and Mountain Weather
W-5 February 17-20, 1984
$245

Winter Ecology in Yellowstone
W-6 March 2-6, 1984
$275

Northern Yellowstone on Skis
W-7 March 8-11, 1984
$245

Please write or call for more information on these courses.





The intelligent American will one day point on the map to this remarkable district with the conscious pride that it has not its parallel on the face of the globe. —Ferdinand V. Hayden, 1872

1984 REGISTRATION FORM

Name _____ ☐ Male ☐ Female Date _____

Address _____ ☐ Please check here if this address is different from where we mailed brochure

City _____ State _____ Zip _____ Phone _____

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

If staying in cabins, please specify which nights _____

How did you find out about the Yellowstone Institute? _____

Please enroll me in the following courses:

Course Number	Course Title	Dates	Tuition Fee	Are you enrolling for credit?

Release and Assumption of Risk

I am aware that during the courses that I am participating in under the arrangements of the YELLOWSTONE INSTITUTE 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 INSTITUTE 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.

Date _____ Your Signature: _____

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

Total Tuition Fee _____

Cabin Fee at $5 per night per person _____

Total Enclosed _____

Detach and mail to: The Yellowstone Institute
Box 1186
Helena, Montana 59624

After June 1: Box 515
Yellowstone National Park, WY 82190

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