

# ACADEMIC CREDIT

Rocky Mountain Nature Association, Inc. — in cooperation with the National Park Service, Colorado State University, and the University of Northern Colorado invites you to participate in the summer seminar program at Rocky Mountain National Park. Continuing a tradition begun in 1962, these week-long sessions are professionally taught and are offered for college credit. Emphasis is on outdoor exploration of the Rocky Mountain environment: long and strenuous field activities are complemented by occasional indoor sessions. Each seminar is limited to 20 participants.

Artist: Herb Thomson

Credit is offered for most courses from the following institutions:

Center for Continuing Education Colorado State University Fort Collins, Colorado 80523 - two semester hours of undergraduate or graduate credit per week

Center for Non-Traditional and Outreach Education University of Northern Colorado Greeley, Colorado 80639 - three quarter hours of undergraduate or graduate credit per week A project or some form of concrete evaluation will be required by each instructor for credit. Specific requirements will be sent before each seminar. Rocky Mountain Nature Association, Inc. will process all credit applications the first day of each seminar. At this time \$30.00 tuition per weekly seminar will be collected. Tuition is in addition to the regular registration fee and is subject to the provision that the University reserves the right to change off-campus tuition, fees, and other charges without notice. As with all state-supported institutions, the rates are affected by legislative action and mandated by the Colorado Commission on Higher Education.

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# DESCRIPTION OF COURSES AND INSTRUCTORS

### DEVELOPING AWARENESS THROUGH DRAWING Herb Thomson June 11-16

(undergraduate credit only)

All phases of the art of drawing will be explored, including recording what is seen through allowing inspiration to take place while in the natural environment, and developing an awareness by asking: "What has this experience done to me and how can I best express my feelings through drawing?"

MR. HERB THOMSON has developed his career as a professional artist since 1965, through which he has shared with others his impressions and feelinas for our natural world. His art work has been widely exhibited in the Colorado area. Mr. Thomson was formerly a public school teacher and in 1962 established the Estes Park School of Art where classes in drawing and painting were conducted for adults. Born and raised in Colorado and a graduate of the University of Denver, Mr. Thomson now owns an art studio in Estes Park.

## BIRD ECOLOGY Dr. Richard Beidleman

June 18-23

Field identification, population, and ecological studies of northern Colorado Rocky Mountain birds, ranging from the high plains to the tundra but with emphasis on montane species. The course will include lectures, field trips (especially), and research projects.

DR. RICHARD G. BEIDLEMAN is Professor of Biology, Colorado College. He was formerly associated with the University of Colorado and Colorado State University. He is a consultant and interpretive planner for the National Park Service and served as a commissioner on the Commission on Undergraduate Education in the Biological Sciences. He has written extensively in the fields of biology and the history of science in America.

NATURAL RESOURCE MANAGEMENT June 25-30 Dr. Dale Hein

Problems and practices in management of natural resources will be studied. Discussions and lectures will supplement field trips. Wildlife will be emphasized, but forestry, range, water, and recreation resources will be included. Topics will include goals, conflicts, strategies, techniques, and evaluation of management in natural communities of the region. Field trips require good physical condition for short hikes at high elevation.

DR. DALE HEIN is Professor and Chairman of Wildlife Biology Major at Colorado State University. He teaches field courses at CSU Forestry Summer Camp and various courses on campus in ecology and management of wildlife and natural resources. His recent research includes population dynamics, biometrics, fire ecology, and wildlife management. He worked two years for U.S. Fish & Wildlife Service. Dr. Hein participates in many professional organizations and advisory groups for management of wildlife and natural resources.

**ROCKY MOUNTAIN ECOSYSTEMS** Dr. Richard Beidleman

An ecological survey of the ecosystems that occur in Rocky Mountain National Park and its environs will be made by means of group and individual field investigations. Considerations will be made of ecological concepts which are illustrated on the Rocky Mountain scene as well as in the biosphere at large. The course will include lectures, field trips, and individual and group research projects.

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July 2-7

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### PLANT IDENTIFICATION Dr. Douglas Gilbert

July 9-14

The fundamentals of taxonomy and use of appropriate keys to identify plants in the prairie, foothills, montane, subalpine, and alpine life zones. Students will gain knowledge of taxonomic terminology and concepts of species, genera, and families. The class will be divided into small groups, each group working on plant identification with close instructor supervision. An ecological approach will be stressed.

DR. DOUGLAS GILBERT is Professor and Head of the Department of Fishery and Wildlife Biology in the College of Forestry and Natural Resources at Colorado State University. He was formerly associated with the Colorado Division of Wildlife; Montana State University; and Cornell University. In addition to natural resource management courses, he has taught numerous courses in botany and ecology. The most noteworthy of his writings is the book Natural Resources and Public Relations published by The Wildlife Society. He is on the board of directors for the National Wildlife Federation and the Public Lands Institute.

### MOUNTAIN ECOLOGY Dr. Joyce Greene

This course is designed to acquaint students to features of mountain ecosystems. First the effects of such abiotic factors as slope, altitude, wind, snow accumulation and substrate upon ecosystem formation and development will be examined. Then we will look at biotic factors such as influence of elk, gophers, beaver, and man on ecosystems. Major emphasis will be on describing different ecosystems and the major factors influencing their development and maintenance. Techniques of collecting field data will be demonstrated and used in individual projects.

DR. JOYCE G. GREENE teaches high school biology, botany, and ecology at Boulder High School in Boulder, Colorado. Her background includes 14 years of residence and field activities at the University of Colorado's Mountain Research Station, with current residence at 9,400 feet in Colorado's Front Range. Her research activity includes a study of the distribution and ecology of aspen on the east slope of the Front Range.

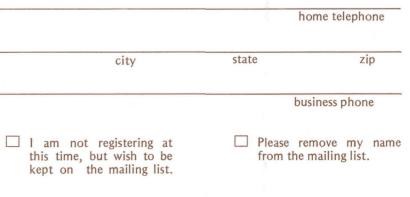
AUDREY D. BENEDICT will assist in teaching this course.

July 16-21

Name Address street Profession . Enclosed is my registration fee for the seminar(s) indicated on the opposite side.

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### **REGISTRATION AND MAILING UPDATE FORM**



I enclose herewith my check to Rocky Mountain Nature Association, Inc. in the amount of \$\_\_\_\_\_\_ for full payment of registration fees for:

Developing Awareness Through Drawing (June 11-16)
Bird Ecology (June 18-23)
Natural Resource Management (June 25-30)
Rocky Mountain Ecosystems (July 2-7)
Plant Identification (July 9-14)

Mountain Ecology (July 16-21)
Alpine Ecology (July 23-28)
Mountain Geology (July 30 - August 4)
Nature Photography (August 6-11)

I intend later to register for credit with:

Colorado State University University of Northern Colorado I will probably stay at:

reserved Park campground
Estes Park accommodations
other

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