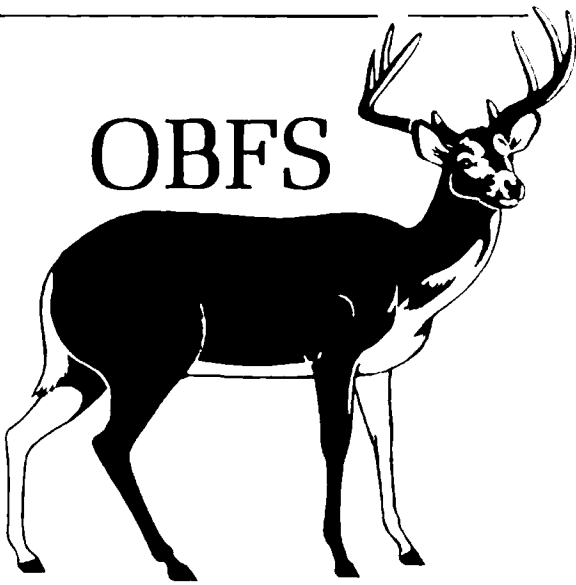


**Organization of
Biological Field Stations**

**Newsletter
No. 36
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OBFS



Newsletter

NUMBER 36

SUMMER 1983

Newsletter Editor

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1983 OBFS ANNUAL MEETING
THE UNIVERSITY OF COLORADO
MOUNTAIN RESEARCH STATION
SEPTEMBER 22 - 25, 1983

TRAVEL: The Mountain Research Station (MRS) is located 41 km (25 mi) west of Boulder, Colorado in the Front Range of the Colorado Rocky Mountains. Vans will meet OBFS participants at the Denver International Airport at 1300 and 1700 hours on Thursday and Friday (September 22,23). If arriving by private car we will mail you travelling information.

CLIMATE: The Station is located at 2,910 m (9600 feet) and during September the aspen will be changing colors and temperatures can be cool. Snow often falls during September, so bring plenty of warm clothes. Also, please bring along a sleeping bag as the Station does not provide linens.

COSTS: Meals- \$ 40.00 includes banquet on Friday night and three meals per day.

Lodging- \$ 15.00= total cost. Members will be housed in rustic cabins located at 10,000 feet elevation.

Transportation- \$20.00 is the roundtrip cost of travel from the Denver International Airport to the Station and return.

Social Hour Fee- \$ 5.00

TOURS: All day and half-day tours of the alpine tundra will be provided on Thursday and Friday. Also, guided tours of the plains and Front Range for those flying into Denver will be offered.

MEALS: Participants will dine in the main dining room of the Station located in the center of camp.

Detach and mail to Jim Halfpenny no later than September 1, 1983.

PRE-REGISTRATION FORM 1983 OBFS MEETING

From: Name: _____

Organization: _____

I will be accompanied by:

Flight information:	ARRIVAL	DEPARTURE
Airline	_____	_____
Date	_____	_____
Time	_____	_____
Flight #	_____	_____

I plan to drive to the Mountain Research Station. My date of arrival is _____.

University of Colorado

MOUNTAIN RESEARCH STATION

(Institute of Arctic and Alpine Research)

Scientists, students, and members of the public have studied and contemplated the unspoiled alpine and subalpine environments of the University of Colorado's Mountain Research Station (MRS) for almost 60 years. MRS offers special opportunities for study to those interested in learning more about the Colorado Mountains. The staff of the Mountain Research Station would like to invited the members of the Organization of Biological Field Stations to join us for the fall colors here at MRS.


The Mountain Research Station, located in the Colorado Front Range, is an interdisciplinary field research and teaching facility managed by the Institute of Arctic and Alpine Research (INSTAAR) and devoted to the advancement of the study of high mountain ecosystems. The Institute of Arctic and Alpine Research was established in 1951 by the Board of Regents of the University of Colorado. INSTAAR and the Mountain Reserach Station are part of the Graduate School. They receive academic contributions from the departments of Environmental, Population, and Organismic Biology (EPO Biology); Geography; and Geological Sciences on the Boulder campus. In addition to the activities of the University of Colorado scientists, studies are conducted by research associates with various specialities.

The Mountain Research Station, a small, self-contained settlement, is located in the lodgepole pine forest on the flank of Niwot Ridge. The Station is 41 km (25 mi) west of Boulder and 5 km (3 mi) east of the Continental Divide. Surrounded by 4,000 m peaks, MRS has a view to the east which encompasses foothills and hogbacks bordering the western edge of the high plains, 1.5 km above sea level. The Station is an 80-hectare parcel of University-owned land, surrounded by a large research area administered by the United States Forest Service. The University-owned portion is bounded by Niwot Ridge on the North, Colorado highway 72 on the east, and the Boulder city Watershed on the south and west. The research area has been designated an Experimental Ecological Reserve, Biosphere Reserve, and Long-Term Ecological Research site. Rocky Mountain National Park and its gateway town of Estes Park are one-hour drive north.

Researchers at MRS specialize in studies of the alpine tundra. These studies include glacial and periglacial features, atmospheric chemistry, acid rain, climate, flora and fauna. Emphasis is placed on elucidating the patterns and processes of the cold dominant tundra, especially on a long-term basis. Field trips will be conducted to alpine tundra study sites overlooking the southern-most glaciers in the United States.

The Station is located at 2,910 m (9,600 ft) and during September the aspen will be changing colors and temperatures can be cool. Snow often falls during September, so bring plenty of warm clothes. Rustic cabins provide housing and dining facilities. Please bring your sleeping bags. We will pick you up in Denver and give you a guided tour from the plains to the foothills. If you are arriving by private car, we will mail you a small, self-guided tour booklet.

We are looking forward to your comradship here in the Colorado mountains! See you in September.


Jim Halfpenny
Field Director

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WINTER ECOLOGY COURSE OFFERED IN NORTHERN VERMONT

In January when most animals have moved south or begun hibernation, Joseph Merritt, migrates north to Wolcott, Vermont, to join Peter Marchand and Clair Buchanan at the Center for Northern Studies (please see attached flyer). The three team up to teach an intensive winter ecology course for upper division undergraduate and graduate students. With a large component of field and laboratory work, the course covers physiological, anatomical, and behavioral adaptations of polar plants and animals to winter and seasonal conditions in both terrestrial and aquatic ecosystems. Through observation, radio-telemetry, tracking in snow, and live-trapping under the snowcover, the population densities of mammals and their daily activity patterns, habits, food sources and social and predatory behavior are studied.

The students become research assistants to their professors who are not merely repeating previous experiments, but are pursuing their individual research interests with the participation of the 12-20 students. Research results from previous winter ecology courses taught at the Center (since 1974) have been included in articles by Marchand and Merritt in such journals as *Journal of Wildlife Management* (April 1982) and publications of the Carnegie Museum of Natural History.

For information and applications on the course, contact the Center for Northern Studies, Wolcott, Vermont 05680.

Marchand and Merritt are members of the OBFS.

TYSON RESEARCH CENTER

In the spring of 1982 the Tyson Research Center began a most preliminary effort to help broaden the education of urban youth to include an understanding of their natural heritage. With the help of the Partnership Program of the St. Louis City School District, a part-time educational coordinator was hired for half a year. This person effectively organized a series of field trips at Tyson. In addition the Partnership Program selected the participating teachers and classes, and provided logistical support and transportation.

Rather than being merely a day in the out-of-doors, each field trip focused on a particular theme in significant depth. Subject areas covered included: geology, the ecology of oak-hickory forest, bird banding, salamanders, Missouri water ways, spring wild flowers and art in the natural landscape.

Before each trip to Tyson there was a visit by the Tyson staff to the classroom. On this occasion, the students were told what to wear and bring, what to expect in an environment which was, in many cases, quite new to them, and were given a preliminary exposure to the subject on which the field trip would focus.

On the day of their visit, the Tyson host met the class in its school bus at our entry and traveled with them to the several parts of our tract which were used as an outdoor laboratory. In the field the students had direct, hands-on exposure to organisms, techniques and simple equipment.

At the end of the day there were follow up questions and a questionnaire to assess our success in educating these young people. From these and the comments of the students, the teachers and the staff of the Partnership Program, it was abundantly clear that the field trips at Tyson were successful. The young people learned more about the natural landscape and the science on which the trip focused. A variety of fears had become dispelled and apprehensions dissipated. Some learned that there were neither tigers nor pythons in our area, others had their first encounter with a cardinal or a dutchman's breeches. They learned to use a dip-net and a hand lens. There was an opportunity to consider the diet of a bird and examine his bill and feet. These experiences were enjoyed in a natural setting which provided a resource and a context not normally available in the classroom or in the vicinity of an urban school.

As Missourians these young people are already paying the sales tax which supports the Design for Conservation. Before long they will be paying income and other taxes. They will be electing public officials and some of them will be writing letters to the editor. We are convinced that it is very important that the growth of these young people include learning and experiences of the sort which Tyson is ideally suited to provide.

In addition to the single class visits described above, we also conducted quite a few field trips in which a class drawn from a city school was combined with one from a school in St. Louis County. After thorough mixing this larger group was divided again in halves which undertook parallel experiences in the woods. On these occasions the students learned more about each other as well as about themselves. Thus we assisted the school system in addressing social problems which confront our society.

Now we wish to continue this activity. As is widely known, the St. Louis City Schools are experiencing extreme financial duress. The Partnership Program, like so many others, has been cut way back. Nevertheless, our project was so successful and of such high quality to them that they have provided essentially the same level of funding as last year. Also of great importance, they are able to again provide logistical support and transportation for their groups visiting Tyson. In comparison, for many other school districts funds for field trips were virtually eliminated years ago.

Not long ago a group called "Friends of Tyson" was formed. Among its purposes is to serve as a channel for communication between Tyson and the community of persons in the St. Louis metropolitan area who are interested in nature study in its many ramifications.

Recently this group decided to land assistance to the Partnership Project described above. The Friends of Tyson is contacting individuals and organizations to ask for their contributions of time as volunteers and for donations of money to help retain the educational coordinator and to buy a few supplies. This would permit us to continue rendering this valuable service to future generations of Missourians.

Submitted by Dick Coles

NSF FUNDS RECEIVED FOR CEDAR CREEK--

Cedar Creek was recently awarded \$100,000 from Biological Research Resources division of NSF, \$35,000 from University of Minnesota, and \$25,000 from Minnesota Freshwater Foundation. Funds will be used for an addition to the Lindeman Laboratory and a housing unit for post-doctoral researchers.

Submitted by David Parmelee