

**WILDLIFE SURVIVAL: THE YELLOWSTONE
ENDANGERED SPECIES PROJECT (MONTANA)**

**Meeting Place: Bozeman, MT
(Time & location determined later)**

June 27- July 11, 2010

4 semester system units (equivalent to 6 quarter system units)

Program Fee \$ 1195 plus \$150 Application Fee

Thank you for your interest in our Yellowstone Endangered Species Project. Our field work will take place in the wild mountains and valleys of the Greater Yellowstone Ecosystem, biologically diverse wildlands that provide critical habitat for Grizzly Bear, Grey Wolf, Bison and other majestic but threatened wildlife populations. Our field study takes place in and around Yellowstone National Park at the heart of the largest intact wilderness region in the temperate zones of the earth. Much of our fieldwork will take place in wild forest backcountry and watersheds, prime locales for Yellowstone's endangered wildlife.

Not only does Yellowstone provide crucial wildlife habitat, it is also North America's premier locations for observing and studying wildlife and multi-species interactions. Thus, it has become an immense natural laboratory presenting unparalleled opportunity for field work. While our primary focus on this project will be the Grey Wolf, our wide-ranging explorations will allow us to investigate everything from butterflies to bison.

BACKGROUND INFORMATION

The Greater Yellowstone area is a highly complex and biologically diverse ecological system. It is one of the last ecosystems with its entire pre-European compliment of species in the lower 48 states. Some of the biological components that are most emblematic of Yellowstone's high ecosystem integrity, such as wolves and bears, are continually shrouded in controversy. Complex issues addressing these fragile resources present difficult management problems with few easy decisions.

Extirpated in the 1920s, and restored in 1996, wolves remain Yellowstone's most controversial species. Every year thousands of people come to Yellowstone hoping for the chance to see a wolf in the wild. At the same time, record numbers of people are lining up for the chance to hunt wolves in Idaho and Montana. Thus, in addition to examining wolf ecology and behavior, we will also address the controversial issues of reintroduction and management.

Team members will participate in a firsthand investigation of major Yellowstone wildlife/habitat issues in and around the nation's first national park. With Yellowstone's Northern Range as our base, we will undertake field studies in and around the park to conduct wildlife observations. This will include both day hikes and a multi-day backpacking trip. Our hands-on field activities will be augmented by information exchanges with wildlife management experts and conservation community leaders as we explore the ecology of our study species and the complex management issues and controversies surrounding them.

PROJECT GOALS & ACTIVITIES

1) **Gray wolf reintroduction:** Gray wolves (*canis lupus*) were restored to Yellowstone under the Endangered Species Act, in one of the first attempts to introduce a large carnivore to former habitats. The recovery has been tremendously successful and has been hailed as one of the greatest conservation victories of the century. Among the results are a population of 300 plus wolves, unprecedented opportunities to observe and study these top predators, and widespread public acceptance. However, the efforts and achievement are not without critics including local sportsman and livestock growers whose opposition has challenged managers to work with difficult situations. This summer, we will examine onsite the successes and failures of the wolf recovery project, as well as ongoing obstacles to the full realization of long term goals of restoring wolves to the West.

One of our goals will be to understand wolf ecology, habitat use, and the impact of wolves upon other wildlife. Bear in mind that there are approximately 300 wolves spread over a landscape nearly as large as the state of Maine. While we will likely discover physical evidence of wolf presence (tracks, scat, etc.) and/or hear wolves, actually seeing illusive wolves in the wild remains a quite fortunate event, not a certainty. Together we will also examine how other land uses such as livestock grazing, logging and recreational development has influenced and affected the wolf reintroduction process. In addition to exploring the role of wolves in the ecosystem, we will also discuss the human relationship with wolves, historically as well as the current management issues.

2) **Grizzly bear recovery:** The grizzly bear (*Ursus arctos horribilis*) is another top predator that is listed under the Endangered Species Act. The current population of grizzlies in the greater Yellowstone area, about 500 bears, face many impediments to recovery. As a population, these bears are slow-growing, reproducing infrequently. They require large areas to meet their ecological requirements, yet shrinking habitat through roads and other human developments has left fewer places for bears to exist. Many sources of food are unreliable and face a questionable future as do the bears themselves. We will examine bear habitats, actively search for signs of their presence and investigate firsthand the distribution and recolonization success of bears in Yellowstone. As with wolves, summer bear sightings should be considered fortunate. Today, research is being conducted to determine the extent to which bears are utilizing expanded wildland habitats, habitats that if found to be critical to bear survival, could be excluded from human development options that would otherwise fragment the wilderness and jeopardize continued Great Bear habitation (road construction, timber harvesting, mining, etc.). Key areas need to be identified before they are lost forever. Through our explorations, we will attempt to gain knowledge of the distribution, behavior and recolonization success of bears in Yellowstone wildlands.

3) **Bison migration:** Yellowstone National Park hosts the last free-ranging bison (*Bos bison*) herd in North America. They are managed under a policy of natural regulation which allows for natural process to determine the size and health of the herd. But when bison leave The Park and enter the state of Montana they are hazed, captured, or killed for fear of transmission of the disease brucellosis to livestock. However, transmission of the disease requires conditions that rarely, if ever, occur. The park, as well as outraged protesters, have fought the practices of the state in an on-going debate over the future of bison management. We will view several bison herds on their summer range in Yellowstone, talk with stakeholders in this debate and explore areas where bison management takes place.

By the end of the summer, each of us will have gained firsthand knowledge of Yellowstone's environments, threatened wildlife populations, and controversial management challenges. **All field methods and data collection techniques will be taught on-site. No prior research experience is required**, but we expect participants to arrive excited and prepared for a rewarding and challenging field study experience. We hope you can join us for exciting and rewarding wildlife field studies.

ACADEMIC CREDIT

Students will receive 4 semester units (6 quarter units) awarded through California State University Monterey Bay Extended Education. While students usually encounter no difficulties in transferring credit to their home campus, applicants should check with their advisors prior to enrolling. Our staff will be happy to explain the program in further detail to the applicant's advisor, if necessary. The Yellowstone field studies program gives credit in one course: ENVS 370, Environmental Wildlands Studies (4 semester system units)

Team members wishing academic credit will be evaluated on their field journals, the quality of their fieldwork, and participation in seminars/discussions.

Team members are expected to conduct themselves in a mature and responsible manner. Wildlands Studies reserves the right to require any student to withdraw from the program if their conduct is detrimental to or incompatible with the interests, safety, or welfare of any course participants.

TEAM LOGISTICS

We will first meet in Bozeman and then establish base camps in our Greater Yellowstone Ecosystem study areas. From these bases, we will go on daily fieldstudy explorations, which can involve early morning departures and long hours of sitting and waiting for wildlife. For much of the program we will undertake both short and long day hikes from base camps. We will be backpacking for several days through a selected study site as well. Therefore, physical conditioning, adequate equipment, and preparation are imperative.

Supplies will be purchased during the project. When team members arrive in Bozeman, we will break into cook groups and do most of our shopping for the project. There will also be time during the project to purchase supplies in small towns with limited selections. Any special foods that you would like for the latter part of the project should be bought on the first day of the project in Bozeman. Plan on bringing \$150-200 for food and misc. expenditures. For those of us on a budget, costs can be reduced by careful meal planning and restrictions on free-time expenditures. Also, each participant's share of campsite/park entrance and permit fees will total approx. \$100. Transportation and fuel costs are projected to be \$60 per person.

Later this spring, once you have enrolled, you will receive further program information, including a detailed equipment list, a reading list, and travel suggestions. We will determine a plan for sharing tents and stoves when you arrive in Bozeman. Summer weather in Montana can be extremely variable, with anything from 90 degree days to cold nights and an occasional snow squall. Be prepared for field work in each condition. Rain gear is required and should be of higher quality than the easily torn vinyl type. Two water bottles per person are essential as are **well broken-in boots**. Pre-program hiking/backpacking is highly recommended. Bring a water

purifier if you have one. You may consider purchasing one for this project as they are a worthwhile investment for future trips. A field notebook (preferably waterproof) and binoculars are needed. Wildlife is often viewed at long distances. Those who can should bring a spotting scope, tripod, and camera gear. Please feel free to contact the project leader if you have any questions or need assistance in planning.

Bozeman is accessible by car, plane, or bus. Please indicate on the Enrollment Form if you plan to bring a car. Team transportation will be by instructor and participant carpooling with costs shared equally. The team will need 4-5 participant cars and vehicle availability will be taken into consideration as applications are reviewed. Expect to drive 400 miles during the project, and plan on bringing \$60 for your share of carpool gas costs.

PROJECT COSTS

Program Fee:	\$1195 plus \$150 Application Fee. Program fee due May 25, 2010 Enrollment on a space-available basis after the fee due date until the program is full.
Estimated On-site Expenses:	\$200 per person share of transportation and fuel, camping, field activities/permits
Food in Yellowstone:	\$200
Personal Spending Money:	\$100 (this varies according to taste - but don't be caught short)

Students should inquire at the financial aid office of their home campus regarding the use of their loans or grants for this course. CSU Monterey Bay Extended Education/ Wildlands Studies are not responsible for non-refundable airline or other tickets or payments or any similar penalties that may be incurred as a result of any course cancellation or changes.

PRE-PROGRAM PLANNING

Detailed information regarding gear/food, meeting plans, and academic preparations will be sent to all team members in a subsequent logistics letter about 8-10 weeks before the project initiates. Between now and August stay in good shape and get ready for an exciting wildlife project.

PROJECT LEADER

Greg Gordon has taught university and field study programs since 1992, focusing on U.S. conservation policy and wilderness education. He has also worked for the U.S. Park Service in Alaska, Utah and Washington backcountry ecosystems. Greg leads three projects for Wildlands Studies in Montana and Central America.