



EDUCATION PROGRAMS 2015 - 2016

Back by Popular Demand:

Bird Banding!

see back cover for more details



All of our programs are
aligned with Colorado
Academic Standards.

Visit www.natureandraptor.org
or call 719-549-2458 for more information

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Quotes by Richard Louv



“The findings are stunning: environment-based education produces student gains in social studies, science, language arts, and math; improves standardized test scores and grade point averages; and develops skills in problem-solving, critical thinking, and decision making.”



Welcome!

The Nature and Raptor Center of Pueblo (NRCP) is located in beautiful Rock Canyon on the banks of the Arkansas River, one mile west of Pueblo, Colorado. A delicate blend of aquatic, riparian, transition and semi-arid grassland habitats provide homes to a wealth of plants and animals. Our staff is pleased to welcome you to our facilities. We look forward to sharing our corner of Colorado with you through our educational offerings.

In addition to educational activities, NRCP also offers a variety of recreational pursuits. The paved 27 mile Pueblo River Trails System travels through the heart of our facility and offers opportunities for walking and biking and other non-motorized forms of travel. Additionally, there are miles of unpaved trails which provide walks through wooded, riparian and prairie environments.



Educational Philosophy

NRCP's programs are hands-on, science based and correlate to Colorado's Academic Standards for Science. Our programs emphasize the ecological concepts of interrelationships among animal, plant, and human communities. It is the goal of these programs to increase students' awareness of and appreciation for natural resources and biodiversity, and to help them understand that humans are an integral part of the natural environment, and not apart from it.

Registration Information

To schedule your group for a program, please call NRCP at **(719) 549-2458** or e-mail **shardesty@natureandraptor.org** at least 2 weeks before the date you would like to schedule. Please be prepared with the following information when you register: preferred dates and times, number of students, grade level, e-mail address and phone number.

On-site Programs

at the Nature and Raptor Center of Pueblo

Offered: Tuesday-Saturday, 9:00am-5:00pm

Length: 60 minute presentation.

Fees: \$60 per presentation per topic. Fees are payable on the day of the program unless other arrangements have been made. **Fees for presentations after 5:00 pm are doubled.**

Limit: 30 people per presentation. Larger groups can be divided and can rotate through up to three program topics or self-guided activities.

Picnic Areas: Program participants have **free** use of picnic areas. Prior reservation required. Picnic reservations should be made when you schedule your program.

Off-site Programs

at your School or Facility

Offered: Tuesday-Saturday, 9:00am-5:00pm

Length: 60 minute presentation

Fees: Within Pueblo County, \$80 per presentation. Outside Pueblo County, but within a 60 mile radius, \$200 for the first presentation, \$60 for each additional presentation. Areas more than 60 miles from Pueblo will be handled on a per case basis. Fees are payable one week in advance of program. Fees are based on same day, same site scenario. **Fees for presentations after 5:00 pm are doubled.**

Limit: 30 people per presentation. Arrangements for larger groups can be made.

Cancellation Policy: Cancellations must be made 1 week prior to your program. Late cancellations or no-shows will be charged full program fee.

Education Programs

All activities and vocabulary are age appropriate and are targeted to meet the education standards of the grade levels indicated. However, each program is available for any grade level. Participants should dress appropriately for these events by following the guidelines on page 9.

Multi-Age Programs

Birds of Prey

Available On-site or Off-site

Learn about hawks, owls, eagles, and falcons through a live bird of prey presentation. The naturalist will discuss bird of prey adaptations, predator/prey relationships, specific characteristics, natural history, personal histories of the live birds of prey presented, and our work to rehabilitate injured and orphaned birds of prey.

60 minute presentation, offered year-round.

Fee: On-site - \$60.00 per presentation: Off-site - call for price

Life Science Standards: Pre-K: 1, K: 1, 1st: 2, 2nd: 1, 3rd: 1, 4th: 1,3, 5th: 1, 6th: 1, 2, 7th: 1, 8th: 1,2, HS: 1,2,9

Owls of Colorado

Available On-site or Off-site

The diverse habitats of our state provide homes for several species of owls. Take a tour of Colorado habitats and meet the owls that call them home. The naturalist will discuss owl adaptations and characteristics, predator/prey relationships, natural history and personal stories of the owls presented. The hour long presentation includes at least two owl species. **60 minute presentation, offered year-round.**

Fee: On-site - \$60.00 per presentation: Off-site - call for price

Life Science Standards: Pre-K: 1, K: 1, 1st: 2, 2nd: 1, 3rd: 1, 4th: 1,3, 5th: 1, 6th: 1, 2, 7th: 1, 8th: 1,2, HS: 1,2,9

Bird of Prey Pellet Dissection

Available On-site or Off-site

When birds of prey eat their dinner, they ingest every part of the animal. Many parts of the animal, such as bones and fur, cannot be fully digested and are regurgitated by the bird in the form of a pellet. Pellet dissection is a fun and interesting way to investigate predators and prey. Everything for the investigation is provided (pellets & equipment). **60 minute presentation, offered year-round.**

Fee: On-site - \$60.00 per presentation: Off-site - call for price

Life Science Standards: Pre-K: 1, K: 1, 1st: 2, 2nd: 1, 3rd: 1, 4th: 1,3, 5th: 1, 6th: 1, 2, 7th: 1, 8th: 1,2, HS: 1,2,9

Nature Discovery Walk

Available On-site Only

Let us guide your class on an experiential discovery walk along the Arkansas River at NRCP. Stops and props along the trail will be used to illustrate the various adaptations of plants and animals in the riparian life zone. **60 minute hike, offered March - November**

Fee: \$60.00 per presentation

Life Science Standards: Pre-K: 1, 2, K: 1, 1st: 1, 2, 2nd: 1,2, 3rd: 1, 4th: 1,3, 5th: 1, 6th: 1, 2, 7th: 1,4,5, 8th: 1, 2, HS: 1,2,4,9

Preschool & Kindergarten

Nature Explorers

Available On-site Only

Explore the sights and sounds of nature using all your senses and investigate how weather affects the world.

60 minute presentation,
offered March - November

Fee: \$60.00 per presentation

Life Science Standards: Pre-K: 1, 2, K:1.

Earth Science Standards: Pre-K: 2; K: 1



"Nature deficit disorder describes the human costs of alienation from nature, among them: diminished use of the senses, attention difficulties, and higher rates of physical and emotional illnesses."

First, Second & Third Grade

Prickly Prairie Plants

Available On-site Only

The short grass prairie surrounding NRCP is a distinctive habitat. Students will explore the plant life that characterizes this life zone and learn about the special adaptations they possess for survival.

60 minute presentation, offered March - November

Fee: \$60.00 per presentation

Life Science Standards: 1st: 1; 2nd: 1, 2; 3rd: 1

Rockin' with Rocks

Available On-site Only

Rocks and minerals provide us with the natural resources for many of the objects we use in our daily lives. Examine rock characteristics and explore the Rock Cycle.

60 minute presentation, offered year-round

Fee: On-site - \$60.00 per presentation; Off-site - call for price

Earth Science Standards: 1st: 1; 2nd: 1; 3rd: 1;

Physical Science Standards: 3rd: 1;

Life Science Standards: 2nd: 1;

Third - Fifth Grade

Arkansas River Life

Available On-site Only

Explore the basic ecology of river life and its interrelationships, from the plant sunlight energy trappers to the animals that eat them (aquatic insects, snails, fish, birds). Hands-on experience with water and river rock to view live specimens, and construction of a food web with help from students.

60 minutes, offered year-round. Fee: \$60.00 per presentation

Life Science Standards: 3rd: 1; 4th: 1,3; 5th: 1

Weather Wonders

Available On-site or Off site

There are many different factors that determine what the weather will be like. We will study and observe weather patterns and learn to predict the weather using special instruments.

60 minute presentation offered year-round

Fee: \$60.00 per presentation Earth Science Standards: 5th:1,2,3

Field Program - 4th-8th Grade

Where Prairie & River Meet

Available On-site Only

Ready for a full day of learning. We've put together a full day of activities studying the ecology of short grass prairie and riparian ecosystems. Students will learn about plant and animal adaptations, predator/prey relationships, food webs, water cycle and precipitation, geology and more. The day starts in the prairie, wanders to the river, and finishes at the Raptor Center for a bird of prey presentation.

Full day field outing, Offered March -November

Fee: \$200.00 per group

Life Science Standards: 4th: 1, 3; 5th: 1; 6th: 1, 2; 7th: 1, 4, 5; 8th: 1

Earth Science Standards: 5th: 1, 5; 6th: 2, 3; 7th: 2; 8th: 1

Field Program - Middle & High School

Watershed Studies

Available On-Site Only

A set of lessons and inquiry based field investigations to help students understand the integrated concept of a watershed. This field program consists of three separate, two hour investigations; sampling chemical and biotic factors of the Arkansas River for a water quality overview, performing a forest quadrat study to get an understanding of the surrounding riparian woodland, and students participate in a role playing activity to better understand the positive and negative effects of making changes to a watershed. **Fee: \$100 per presentation**

3 separate 2 hour presentations, offered March - November.

Life Science Standards: 6th: 1; 7th: 1; 8th: 1; HS: 1, 2, 9

Earth Science Standards: 6th: 1, 2, 3; HS: 5, 6, 7

Homeschool Fridays

We welcome homeschool groups to choose from any of the programs in this guide, or if you have a different topic you would like to cover, give us a call and we can create a program to fit your needs.

We are setting aside Fridays exclusively for homeschool groups! Call 719-549-2458 or email shardesty@natureandraptor.org for upcoming homeschool topics and dates.

Girl and Boy Scouts

We also offer workshops for Boy Scouts and Girl Scouts to earn a variety of badges. Our knowledgeable staff and the many unique resources available here at NRCP combine to make earning a badge fun and educational. You may join us during one of our special badge days or schedule your own program.



Self-Guided Kits

Ages: 1st-6th grades
Fee: Daily Rental - \$20.00

Aquatic Discovery Kit

Includes nets, magnifying lenses, aquatic organism ID charts, curriculum guide and more. Equipment is provided for a class of 30.



Eco-games Kit

A variety of nature related games and activities with curriculum guide. Enough for a class of 30.

Pellet Dissection Kit

Pellet dissection is a fun and interesting way to investigate predators and prey. Everything for the investigation is provided (15 pellets) for a class of 30. Additional pellets are \$.50 each.

“As one scientist puts it, we can now assume that just as children need good nutrition and adequate sleep, they may very well need contact with nature.”

On-site Program Guide

Clothing: All students should dress to be outdoors. We suggest good walking shoes (no sandals), comfortable clothing, and a jacket/ raincoat if necessary. We also recommend a water bottle, hat and sunscreen.

Restrooms: Public restrooms are located behind the Café in the Riverfront Building, and portable restrooms are available on the Nature Center grounds and at the Raptor Center. You may want to arrive early to allow time for a restroom break before your program begins.

Later Arrivals: If you are running late, please notify our office. Groups that arrive late run the risk of a shortened program schedule or cancellation due to other facility and program obligations.

Name Tags: Please provide your students with name tags. Name tags allow our staff to call on school aged children by name. This helps provide a more personal contact, and easy reference for safety.

Picnic Areas: Picnic tables are available for eating lunch before or after your programs. The area reserved for your group will be highlighted on a NRCP facility map in your confirmation packet. Reservations for group picnic areas are required. All groups are responsible for picking up after themselves.

Bus Drop Off/Parking: Please park buses in the area(s) highlighted on the facility map that will be included in your confirmation packet. One teacher should meet the naturalist for instructions while children wait on the bus. Children will be dispersed to their programs from there. Please leave all lunches on the bus until the lunch period. Due to parking congestion in the areas adjacent to the picnic grounds, Nature Center office and Café, all busses and large vans are requested to park in the lot at the Raptor Center, or in the overflow parking lot which is located halfway down the entrance road between the Raptor Center and the main office. See the map on page 11.



Using Our Facilities On Your Own

NRCP is committed to providing our natural areas to students and educators to extend their classroom experience through hands-on, personal interactions with the prairie and riparian habitats. We feel that the outdoor classroom can help students realize the importance of diverse, well-balanced ecosystems to the overall health of our planet and its inhabitants. Even if you are not able to use one of the programs in this guide, we would like to encourage educators to use NRCP for other environmental education activities and projects.

To preserve the riparian and shortgrass prairie life zones that are found within and around our grounds, we are providing the following guidelines to help make your experience safe, educational, and resource friendly.

Facility Use, Reservations and Fees

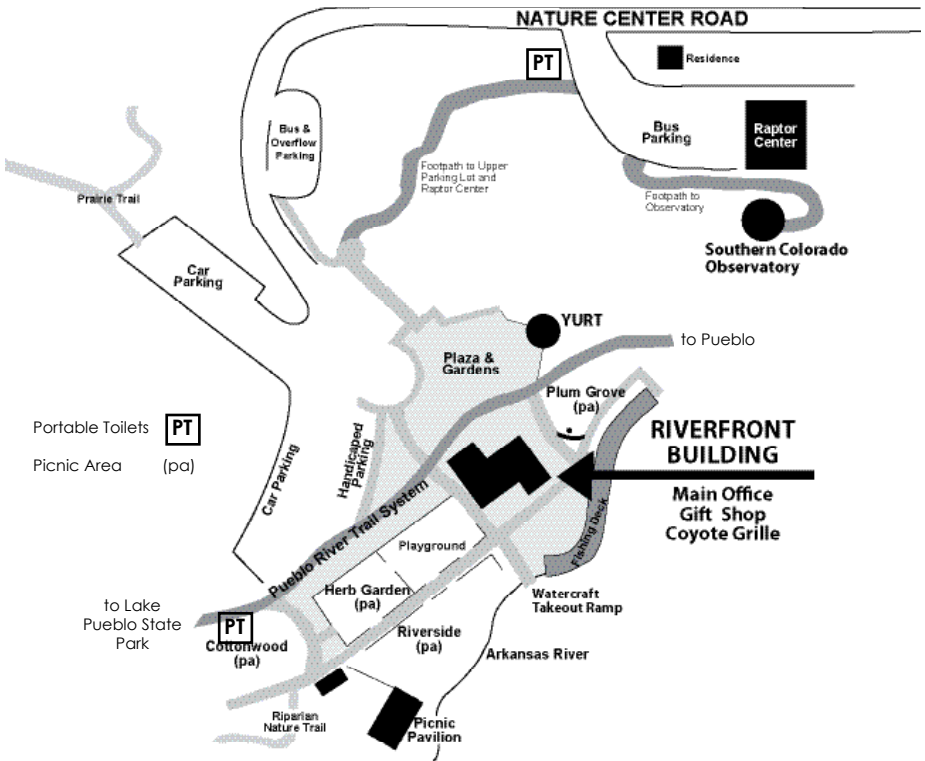
If you want to use the NRCP grounds for your own program, field trip, or research, call us at 719-549-2414 and tell us the date, time, and nature of your visit. Groups wanting to reserve a picnic area must pay a group user fee of \$20.00. This fee permits us to maintain our facilities. If you have a resource project that involves any potential changes to the area, it must be submitted in writing and approved by our staff. **All groups must sign in at the NRCP office. This provides our staff with vital information in the event of an emergency.**

General Considerations:

- Please stay on the trails along the river and in prairie areas.
- The slopes of bluff and cliff areas are off-limits.
- Collection of specimens, whether they be rocks, fossils, plants or other living creatures, is not permitted.
- Please clean up your trash and deposit it in our waste receptacles or recycle bins.
- Please do not introduce any non-native species to the NRCP grounds.



Facility Map

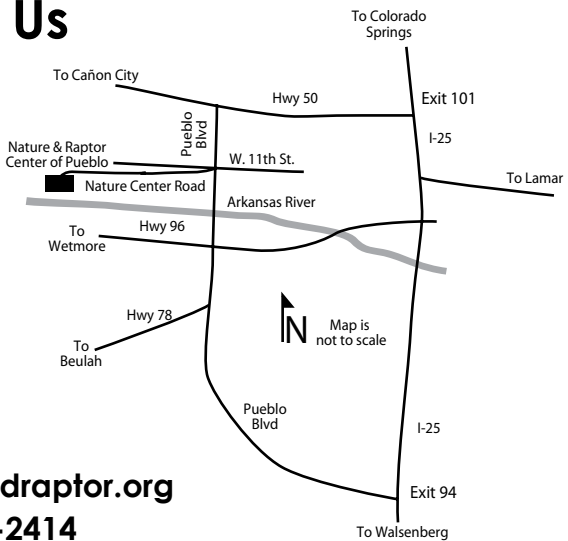


How to Find Us



The Nature and Raptor Center of Pueblo is a member supported non-profit facility.

www.natureandraptor.org
719-549-2414



Bird Banding

You won't want to miss this opportunity to see resident and migratory birds up close, as birds are caught in mist nets and banded for the purpose of research. Bring your class and see how the birds are measured, weighed, examined, and fitted with a light-weight band with a unique number on it. The birds are then released, unharmed, back into the wild. All this information is used by the scientific community to learn more about birds' longevity, travel patterns, health, and much more. Join CSU-Pueblo staff as they share their skills and knowledge of the world of birds.

**60 minute hands-on
learning experience**
**Fee: \$60.00 per
presentation**
Available On-site Only
**Recommended for 4th
grade and older**

**Available in September,
October, & May**



*Our mission is to provide unique experiences
in education, conservation and recreation that
inspire responsible environmental stewardship.*

www.natureandraptor.org
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