



**Teacher's Guide
For the Cheyenne Mountain Zoo
Docent Auxiliary
Classroom Safaris, Tours, and Programs
2018-2019**

The Cheyenne Mountain Zoo Docent Auxiliary is a group of dedicated and knowledgeable docent volunteers who take pride in taking teachers and students on an educational tour through the beautiful Cheyenne Mountain Zoo. Since 1969 docents have been providing classroom school safaris and tours designed to coincide with the Colorado Academic Standards and grade-level specific school curricula. The docents will enhance your student's course of study with a power point classroom "Safari" prior to your visit to the zoo. Many of the Docent Safari presentations are accompanied by animal bio-facts for the students to see and touch. A specific tour vocabulary list is provided to the teacher specific to the tour. Guided tours at the Zoo are Docent led to enhance student learning and permit active dialog as the students apply their science knowledge outside of the classroom.

A trip to the zoo allows students to connect learning of concepts from their curriculum that are linked directly to grade level specific Colorado Academic Life Science Standards. We have made the connection for you in how our classroom safaris and tours tie into the Colorado Academic Standards!

From Kindergarten to high school students, the Cheyenne Mountain Zoo Docent Auxiliary offers unique learning opportunities. Students can learn how they can positively impact the conservation and preservation of animals and their environments around the globe.

Don't delay! Give us a call and schedule a wonderful "outdoor classroom" learning experience for your students!

Suzanne Twohig
2nd Vice President Cheyenne Mountain Zoo Docent Auxiliary

Scheduling a Docent Classroom Safari and Docent Led Tour

Contact Person:

Suzanne Twohig, 2nd Vice President for the Docent Auxiliary

Email: Suzannetwohig@icloud.com (719) 338-5616

Tours & Safaris Offered: Monday, Tuesday, Thursday, and Friday throughout the school year. We will be as flexible as possible to accommodate your specific dates and times, and the availability of our Tour Docents. We want to ensure a productive learning experience for everyone during your tour and visit to the zoo.

Call to schedule as early as you can! Spring Tours (March through May) fill up quickly!

Classroom Safari: 45 min. power point presentation at your school with showing of biofacts to the students one week before docent led zoo tour. ****Not included in summer tours.**

Docent Led Tour: 60 minute tour (K and 1st Grades)

90 minute tour (2nd Grade and Up)

Please see the following pages for Tour Descriptions and Zoopeteer Programs.

Tour Requirements: One Adult Chaperone per group to supervise students during the Docent Led Tour. Students are to be supervised by their chaperone after the docent led tour and while on zoo grounds.

Cost: \$11.75 per student

(1 Chaperone and/or Teacher for each group: **\$0.75 each.**)

Additional Adults accompanying the docent led tour must prepay the teacher \$17.75 prior to the tour.

Adults paying at the front gate will pay the regular zoo admission and may NOT join the docent led tour. These adults will have to meet up with the groups at the drop off area after the tour. **Zoo Memberships do not apply to school led tours.

Booking Information Needed: Please leave your name, your school's name, as well as, your best contact phone number. Calls will be returned as soon as possible.

Confirmations will be sent when transportation dates have been secured and payment has been made one week prior to the tour.

Rescheduling: If you have a problem with your scheduled date, contact Suzanne Twohig (719-338-5616) as soon as possible to reschedule. Please contact Suzanne Twohig as soon as possible, if you need to change/cancel your tour and/or classroom safari. In the event of **inclement weather and/or late starts**, it is your responsibility to cancel the tour 24 hours in advance and reschedule your tour by calling Suzanne Twohig. The CMZ Docent Auxiliary does NOT cancel tours, only the schools can do this. By calling in advance, we can notify our Docents that the safari/tour has been cancelled. We will do our best to reschedule your classroom safari and/or tour.



Kindergarten Coats and Colors Tour

Colorado Life Science Standard 1:

Organisms can be described and sorted by their physical characteristics.

Essential Questions:

What do living things have in common?

What characteristics are useful for sorting and classifying organisms?

Description: The Kindergarten Coats and Colors Tour focuses on making connections with patterns in the natural world. Students will learn many ways to sort and classify organisms based on their **physical characteristics**. They will understand what makes an animal's covering important (protection, warmth, camouflage, attraction/identification, movement, and communication).

Classroom Safari: A 45 min. visit to your classroom by a CMZ Docent which includes a power point presentation, bio-facts and vocab list.

Docent Led Zoo Tour: 60 min. docent led tour, scheduled approximately 4-7 days after Classroom Safari

Ratio: 6-8 students per Docent Tour Group



First Grade Coats and Colors Tour

Colorado Life Science Standards (*Builds on Kindergarten Standard*):

Standard 1: *Offspring have characteristics that are similar to but not exactly like their parent's characteristics.*

Standard 2: *An organism is a living that that has physical characteristics to help it survive.*

Essential Questions:

In what ways do offspring resemble their parents?

What helps a specific animal survive?

Description: The First Grade Coats and Colors Tour focuses on offspring and their resemblance to parents. Students will learn to identify **physical characteristics** in order to compare and contrast animals and their babies. Students will understand how **adaptations** can increase an animal's chance for survival.

Classroom Safari: A 45 min. visit to your classroom by a CMZ Docent which includes a power point presentation, bio-facts and a vocab list.

Docent Led Zoo Tour: 60 min. docent led tour, scheduled 4-7 days after Classroom Safari

Ratio: 6-8 students per Docent Tour Group



African Rift Valley (ARV) Tour

Target Grade: Second Grade

Colorado Life Science Standards:

Standard 1: Organisms depend on their habitat's nonliving parts to satisfy their needs.

Standard 2: Each plant or animal has different structures or behaviors that serve different functions.

Content Area: Social Studies

Geography Standard 2: People in communities manage, modify and depend on their environment.

Essential Questions:

How do living things depend on their environment?

How can a single environment support a variety of living things?

How do available resources and their uses create change in a community?

Description: The focus of the African Rift Valley Tour is on the animals, their ecosystems, and their connection to the **Maasai** people of the Rift Valley. Students learn about the unique features of the valley, including **kopjes, baobab trees, water holes, soda lakes,** and the **savannah**, and how living things depend on their environment.

Classroom Safari: A 45 min. visit to your classroom by a CMZ Docent which includes a power point presentation, bio-facts and a vocab list.

Docent Led Zoo Tour: 90 min. docent led tour, with biofact stop stations; scheduled 4-7 days after Classroom Safari

Ratio: 6-8 students per Docent Tour Group



Amazing Mammals Tour

Target Grades: Third Grade & Up

Colorado Life Science Standard 1(4th Grade):

All living things share similar characteristics, but they also have differences that can be described and classified.

Colorado Life Science Standard 1 (5th Grade):

All organisms have structures and systems with separate functions.

Essential Questions:

How are individuals in a related species similar and different?

What different structures do animals use to carry out the same functions?

Description: This tour emphasizes mammalian characteristics, adaptations, basic needs and habitats around the world. Students learn about similarities and differences between mammals ~ what adaptations make a mammal arboreal, terrestrial, or aquatic? What are the structural differences between carnivores, herbivores and omnivores? What behavioral differences do we find between diurnal and nocturnal mammals? These questions and more will guide our exploration of mammals at Cheyenne Mt. Zoo.

Classroom Safari: A 45 min. visit to your classroom by a CMZ Docent which includes a power point presentation, bio-facts and a vocab list.

Docent Led Zoo Tour: 90 min. docent led tour, scheduled 4-7 days after Classroom Safari

Ratio: 6-8 students per Docent Tour Group



Life Cycles Tour

Target Grades: Third Grade and up

*Colorado Life Science Standard 1: **The duration and timing of life cycle events such as reproduction and longevity vary across organisms and species.***

Essential Questions:

How are life cycles from a variety of organisms similar and different?

How does an organism change during its life cycle?

Description: The Life Cycles Tour focuses on how life cycles among living **organisms** vary depending on the **species**, how they reproduce and how long they will survive/live in their environment. Students will learn to identify how living things grow, develop and change during their life time due to their genetic make-up and the environment in which they live. The tour will examine the life cycles of insects, fish, amphibians, reptiles, birds and mammals.

Classroom Safari: A 45 min. visit to your classroom by a CMZ Docent which includes a power point presentation, bio-facts and a vocab list.

Docent Led Zoo Tour: 90 min. docent led tour, with biofact stop stations; scheduled 4-7 days after Classroom Safari

Ratio: 7-10 students per Docent Tour Group



Colorado Life Zones Tour

Target Grades: Fourth Grade and Up

Colorado Life Science Standard 1: All living things share similar characteristics, but they also have differences that can be described and classified.

Colorado Life Science Geography Standard 1: Use several types of geographic tools to answer questions about the geography of Colorado.

Essential Questions:

How are individuals in a related species similar and different?

How are resources shared among organisms in a specific ecosystem or habitat?

How do non-living components of an ecosystem influence living components?

How are the regions of Colorado defined by geography?

Description: This tour compliments the fourth grade study of Colorado by stressing the life zones found in our great state. Students will identify and describe local regions (life zones) in Colorado, looking at the resources shared and by its living and non-living components. Many of these can be seen from the side of Cheyenne Mountain! Your class will get an up close look at many of Colorado's native plant and animal species in our fabulous Rocky Mt. Wild exhibit.

Classroom Safari: A 45 min. visit to your classroom by a CMZ Docent which includes a power point presentation, bio-facts and a vocab list.

Docent Led Zoo Tour: 90 min. docent led tour, with biofact stop station; scheduled 4-7 days after Classroom Safari

Ratio: 7-10 students per Docent Tour Group



Ecology—The Study of Our Environment

Target Grades: 4th Grade and Up:

Colorado Life Science Standard (5th Grade)

1: All organisms have structures and systems with separate functions.

Colorado Life Science Standard (6th Grade)

1: Changes in environmental conditions can affect the survival of individual organisms, populations, and entire species.

2: Organisms interact with each other and their environment in various ways that create a flow of energy and cycling of matter in an ecosystem.

Essential Questions for 5th:

How do plants and animals carry out processes necessary for life?

What different structures do plants and animals use to carry out the same functions?

What adaptations or characteristics help humans survive?

Essential Questions for 6th:

How do ecosystems changes affect biodiversity?

How does biodiversity contribute to an ecosystem's equilibrium?

Description: This tour is designed to be a custom fit for your class and its focus of study. Ecology examines structures and adaptations necessary for species survival at the lower grade levels and moves into biodiversity and energy flow as students master necessary concepts. We will discuss the needs of your students before the safari and tour to be sure your class masters the standards and learns about the concepts using real life examples at the zoo.

Classroom Safari: A 45 min. visit to your classroom by a CMZ Docent which includes a power point presentation, bio-facts and a vocab list.

Docent Led Zoo Tour: 90 min. docent led tour, scheduled 4-7 days after Classroom Safari

Ratio: 7-10 students per Docent Tour Group



Zoogeography Tour

Target Grades: 6th Grade and up

Colorado Life Science Standard (6th Grade)

1: Changes in environmental conditions can affect the survival of individual organisms, populations, and entire species.

Colorado Life Science Standard (7th Grade)

5. Multiple lines of evidence show the evolution of organisms over geologic time.

Description: This tour focuses on the worldwide distribution of animals by exploring their ecosystems. The tour addresses how animals change over time, that is, genetic change in population over time. Docents will discuss with students the influence of the earth's climatic conditions and help them make connections to the scientific principles that help to explain the factors that contribute to diversity and adaptation.

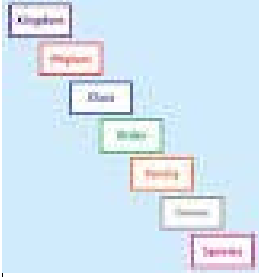
Classroom Safari: A 45 min. visit to your classroom by a CMZ Docent which includes a power point presentation, hands-on bio-facts, activities, and a vocab list

Docent Led Zoo Tour: 90 min. docent led tour, scheduled 4-7 days after Classroom Safari

Ratio: 7-10 students per Docent Tour Group

Specialized Docent Tours

Planning a “specialized” life science unit with your students? The CMZ Docent Auxiliary will work with you to adapt one of our tours and specialize it to fit your course of study.



ADVANCED MAMMAL BIOLOGY

Target Grades: 9th and Up

Colorado Life Science Standard (High School)

1: Matter tends to be cycled within an ecosystem, while energy is transformed and eventually exits an ecosystem.

2: The size and persistence of populations depend on their interactions with each other and on the abiotic factors in an ecosystem.

7: Physical and behavioral characteristics of an organism are influenced to varying degrees by heritable genes, many of which encode instructions for the production of proteins.

Essential Questions:

How does a change in abiotic factors influence the stability or progression of an ecosystem?

What happens when the cycling of matter in ecosystems is disrupted?

How do keystone species maintain balance in ecosystems?

How is the succession of local organisms altered in an area that is disturbed or destroyed?

Why is it possible for a cell from one species to express genes from another species as in genetic modification of organisms?

How is it possible to distinguish learned behaviors from instinctual behaviors such as imprinting etiquette, and suckling by mammals?

Description: As students visit some of Cheyenne Mountain Zoo's animals, docents will discuss physiological and structural systems in greater depth than in the Amazing Mammals Tour. Students learn about behavioral adaptations for survival in a variety of ecosystems and how the classification of animals into taxonomic groups is largely dependent on structural similarities. Students will hear about the advances of scientific research that steadily clarify the relationships of species to each other.

Classroom Safari: No safari available.

Docent Led Zoo Tour: 90 min. docent led tour.

Ratio: 7-10 students per Docent Tour Group

Zoopeteer Programs (Puppet Shows)

Description of Zoopeteer Programs: Want to have your students totally entertained and learn key science concepts about animals that are grounded in the Colorado Academic Standards? Then the Zoopeteer Programs are for your students!

The Zoopeteers introduce the exciting world of animals, their characteristics and habitats, through an entertaining and very educational puppet presentation by the Cheyenne Mountain Zoo Auxiliary performing troupe.

Targeted Audience: Kindergarten, First, and Second Grades

Colorado Life Science Standards

Kindergarten Standard 2: *Organisms can be described and sorted by their physical characteristics.*

First Grade Standard 2: *An organism is a living thing that has physical characteristics to help it survive.*

Second Grade Standard 2: *Organisms depend on their habitat's nonliving parts to satisfy their needs.*

Colorado Geography Standards

First Grade Standard 2: *Geographic tools such as maps and globes represent places.*

Second Grade Standard 2: *Geographic terms and tools are used to describe space and place.*

When Offered: Tuesday & Thursday; October through March with **limited availability. (No Wednesdays). Please schedule early as Zoopeteer Programs fill up quickly!**

Show Time: 35-45 minutes in length.

All shows are presented from a portable stage requiring 12 sq. feet of space plus sitting room, in **one location** for all presentations.

Charge: Free!!

Although there is no charge for these Zoopeteer Presentations (a public service of the Cheyenne Mountain Zoo Auxiliary), a donation to the program would be gratefully received to cover costs of the stage, props and puppets for our Zoopeteers.

To Schedule: Teachers should coordinate show times and select a presentation **at their grade levels. Zoopeteers prefer to present more than one show in a given day** and generally do not return to the same school during the performance season.

Contact the Zoopeteer Coordinator: Sue Sallee

Phone: 599-8758 or E-mail at zoodocentsallee@gmail.com

We look forward to having you book with the Zoopeteers!

Preschool & Kindergarten Programs

Presentation: *“Bear Cub is Lost”* Some animals invite a lost bear cub to share their homes and food.

Presentation: *“Hippo-NOT-umus”*

Children will laugh and learn watching this puppet show based on a story that tells how important adaptations such as the elephant’s trunk are to an animal’s life. Portly the hippo tries to be other animals but finds that his own life is best for him.

First Grade Programs

Presentation: *“What’s My Habitat?”*

This Zoopeteer Presentation discusses habitats and opens with three animals in the wrong habitats. After they find their correct habitats, they play a guessing game with clues about other animals and where they live.

Presentation: *“Home for Polar Bear”*

An unhappy polar bear magically visits various habitats and finally discovers that an Arctic home is best for him.

Presentation: *“The Arctic”*

Ms. Docent and Cheyenne, the giraffe, take a wrong turn while searching for other giraffes and end up at the North Pole where they discover some very different animals.

Presentation: *“The Waterhole”*

Ms. Docent and Cheyenne meet several animals at a waterhole in Africa (Kenya) and learn about these creatures and their surroundings.

Second Grade Programs

Presentation: *“The Brave Little Tree Frog”*

An adventurous tree frog, with help from his friends, journeys across South America to save the rain forests.

Presentation: *“Colorado Wild”*

Ms. Docent and Cheyenne visit the different life zones of Colorado learning about the animals and plants in each zone.

Call us today to schedule a wonderful educational experience for your students whether it be a Zoopeteer program at your school, or Classroom Safari and Docent Led Tour at our beautiful Cheyenne Mountain Zoo!

Suzanne Twohig

2nd Vice President Cheyenne Mountain Zoo Docent Auxiliary