

BUFFALO ZOO

**2009-2010 SCHOOL YEAR
EDUCATOR'S GUIDE**

The **mission** of the Buffalo Zoo's Education Department is to educate, unite, and encourage people to become involved in the conservation and preservation of our natural world. In doing so, we offer a variety of educational programs to reach children of all ages!

NYS Learning Standards Correlations: All programs meet many of the Key Ideas in MST Standards 1, 2 & 4 and/or ELA Standards 1 & 4 (and others as indicated). For a more complete listing of relevant Standards, please refer to the learning standards page.

National Science Standard Correlations: Life Science, Science in Personal and Social Perspective, Science and Technology, and Science as Inquiry. For a more complete listing of relevant Standards, please refer to the learning standards page.

The following guide covers our:

- Zoo admission
- Guided tours
- On-site school programs
- Outreach Programs
- Distance learning programs
- Teacher professional development

Zoo Admission

A WILD variety of affordable, enjoyable and educational possibilities are available for your next visit to the Buffalo Zoo! To enhance your zoo adventure or to help students fulfill learning standards, we recommend that you arrange for your group to experience one of our many exciting educational programs. By involving our highly trained staff and volunteers in your next zoo visit, you will be sure to maximize your group's learning adventure.

Discount admission rates are available for your school or community group. In order to receive the 25% discount, **all orders must be placed and paid for at least three weeks in advance** to allow for processing and postal delivery. To obtain the Discount Admission Form, please call (716) 837-3900 ext 181 or download from our website at www.buffalozoo.org. A 15% discount is available for schools who cannot prepay. The 15% discount form must be completed and handed in with payment on your zoo visit date. This form is

For all field trips, **one chaperone per every 10 students is required.**

25% Discount (Payment must be received 3 weeks in advance):

Adults (19-62)	\$7.25
Youth (2-18)	\$4.50
Seniors (63+)	\$5.25
Zoo Members	FREE
Under 24 months	FREE

15% Discount (Pay at the gate for groups of 10 or more):

Adults (19-62)	\$8.25
Youth (2-18)	\$5.25
Seniors (63+)	\$6.00
Zoo Members	FREE
Under 24 months	FREE

Here is how it works: after your order has been processed you will receive a packet prior to your scheduled visit which will include self-adhesive badges and a list of friendly reminders. These badges must be worn by each and every member of your group. Anyone not wearing a badge will be required to pay the regular admission rate. It is the responsibility of the group leader to have everything organized for their Zoo visit. **BADGES ARE ONLY VALID FOR YOUR SCHEDULED DAY.**

Terms for Discount Admission

- IN ORDER TO RECEIVE THE 25 PERCENT DISCOUNT, **ALL ORDERS MUST BE PLACED AND PAID FOR AT LEAST THREE WEEKS IN ADVANCE** TO ALLOW FOR PROCESSING AND POSTAL DELIVERY.
- One chaperone per every 10 students is required.
- Zoo Members must show their membership card along with a second form of I.D.
- **Purchase Orders** are only accepted at full **Zoo admission rates:**
Adults = \$9.50, Children = \$6.00, Seniors = \$7.00. Zoo members and Children two and under are free. Purchase orders must be submitted to cashier upon arrival.
- Prices are subject to change.
- Once your presale admission form has been fully processed, **NO ADDITIONAL PERSONS/CHILDREN** will qualify for the discounted rate. Those in your group not having made presale arrangements will be charged full rate before entering the zoo.
- **NO REFUNDS ON DISCOUNT ADMISSION**
- For payment we accept checks, money order, Visa, Discover and Mastercard.
- Canadian patrons must use Visa, Discover, Mastercard or a bank draft made out in US Funds.

As you are planning your field trip, please keep the following in mind:

The Zoo will be **closed** on Mondays and Tuesdays, in January and February.

The construction of the new Heritage Farm Children's Zoo will continue through the Spring of 2010. This construction may close some pathways and hinder some animal viewing opportunities.



Guided Tours

Would you like to learn more about the Zoo's animals during your visit? You can do just that by scheduling a Guided tour led by our Docent educators. Tours are free, but you must place your reservations at least eight weeks in advance, because they fill up quickly! For more information, call (716)-995-6128.

Guided Tours

(grades 1-12, adults)

Before bringing your group to the Zoo, be sure to call and request a guided tour to ensure a fulfilling experience! Our most popular tour addresses the questions and interests of Zoo visitors ages six and up. Get the inside scoop on the animals as our trained Docents guide your group through a 1&1/2 hour tour of the major exhibits, with brief interpretive talks along the way. With advanced notice, our Docents will even customize the tour to the topics covered by your school or special interest group.

Kinder Tours

For your group of tikes in upper pre-school or Kindergarten, we offer Kinder Tours. This tour is a great one-hour introduction to wildlife and zoos in general. We step up to the needs and energy of the younger zoo-goer with age appropriate language, definitions, and important rest room stops.

Self-Guided Tours

Self-Guided Tours require a minimum three-week advance reservation to secure the reduced admission rates and are available to groups of 10 or more people.

On-site School Programs

If you are looking for a way to enhance a class visit to the Zoo, our on-site school programs can encourage students to learn more about the natural world! Classes are offered at elementary, intermediate and commencement levels. Students have the opportunity to observe animals in our classroom with instruction by Zoo staff, followed by animal exploration activities that will take them to focal animal sites throughout the Zoo. Class size is limited to 20-25 students for maximum interactivity and program quality. For more information, please call the Education Department at (716) 995-6143.

Cost for all programs: \$85 unless otherwise specified

Program Length: 45 minutes

Dazzling Defenses: grades K-2

Why is a poison dart frog so brightly colored? Why does a porcupine have such sharp quills? Students first explore *their* five senses through a variety of sensory “experiments,” and then make the connection between senses and animal defenses. Live animal demonstrations will reveal how animal senses differ from our own, and allow students to discover the ways that animals defend themselves and find food. The lesson culminates with a visit to an exhibit on Zoo grounds to learn about more dazzling defenses.

Rainforest Adventure: grades K-4

More than half of the plant and animal species in the world make the rainforest their home. Uncover the basics of these tropical treasures by exploring rainforest layers, investigating animal adaptations, and discovering the forests’ abundant resources. Following a classroom introduction, students will search for clues in the Zoo’s *Rainforest Falls* exhibit to become experts in this biome of biodiversity!

Aquatic Antics: grades K-4

Water, water, everywhere! Why is water so important for both people and wildlife? What types of animals live in or near water? How do they keep warm? Students will become ocean animals and discover how they are adapted to their aquatic homes. Then explore aquatic animals at the Zoo in depth by observing the antics of our river otters and sea lions!

Food Web Exploration: grades 3-5

How do desert foxes keep cool in such a hot, dry place? Discover how plants and animals are linked as components of food chains and food webs within major biomes. Students will create their own food web by exploring how the animals at the Zoo are interconnected. *Also meets Key Ideas in Social Studies Standard 3.*

Conservation Investigators: grades 5-8

How do scientists save endangered species? Students will become Conservation Team Investigators to uncover reasons why animals are endangered and to find out how research can help protect species. Use tools of a field biologist to learn how they find clues to locate animals in the wild. Then investigate conservation issues at the Zoo’s modern research field station exhibit: Ecostation!

Taxonomic Trek: grades 6-8

Mammals, birds, and reptiles, oh my! How do scientists classify animals into groups? Investigate taxonomy at the Zoo using the Buffalo Zoo's special dichotomous key. Then embark on a *taxonomic trek* around the Zoo to learn about more animals and their adaptations and characteristics. *Also meets Key Ideas in MST Standard 6.*

Animal Behavior: grades 9-12

Why do zoologists and psychologists study animal behavior? Find out why, learn about different types of animal behavior, and how to make observations. Students then have the opportunity to "become" scientists as they investigate animals throughout the Zoo and record their observations. *Also meets MST Standards 1 & 2.*

Custom Programs: adaptable grade level; \$100 for classes under 30 students; \$125 for classes of 30-50 students

Do you have a topic in mind that would be perfect to culminate your visit to the Zoo? Call us to see if arranging a custom program for your class is possible!

Cancellation Policy

Cancellations must be received at least 48 hours in advance. The Buffalo Zoo will then make every reasonable attempt to reschedule your program. If the program cannot be rescheduled, the Buffalo Zoo will issue a refund. The refund will be assessed one administrative charge of \$25. If a cancellation is made less than 48 hours before the scheduled program, the full program fee will still be charged.

In the event of weather related zoo or school closings, the Buffalo Zoo will make every reasonable attempt to reschedule your program. If the program cannot be rescheduled, the Buffalo Zoo will issue a full refund.

Outreach Programs

People of all ages enjoy the unique hands-on learning experience offered by our Outreach Programs. Traveling to schools and community centers across Western New York, we use live animal representatives, touchable biofacts and props to teach about a wide variety of topics. Whether a group is studying a specific topic or just seeking to learn more about wildlife, we have just the program to fit anyone's needs.

Zoo Trunk: grades pre-K – K; 30 min.; \$50; 10% discount for multiple presentations in the same day

The Zoo Trunk is the Buffalo Zoo's unique outreach program designed for preschool or kindergarten-aged children and is intended to foster early understanding and appreciation of animals and their way of life. This program, taught by the Zoo's Docent educators, helps children recognize the unique characteristics of mammals, birds, and reptiles. A trunkful of age-appropriate activities and a touchable live animal keep eyes and smiles wide! Class size is limited to 20 students, and consecutive presentations are available.

For more information, please call the Education Department at (716) 995-6128.

For the following programs, mileage fees of \$0.40/mi, round-trip will be applied. Please call our Outreach Programs Specialists at (716) 995-6123 for bookings and more information.

Classic Zoomobile: adaptable grade level; 90 min.; \$125

Students learn adaptations and characteristics of three different classes of animals (mammals, birds, and reptiles). Environmental and conservation topics are also discussed in relation to the animal classes. Hands-on experience is vital to the success of this program therefore, small class size is preferred. Students are split into three groups that rotate among the stations. There is one live animal ambassador from each animal class and assorted biofacts to enhance this learning experience. One and/or two other animal classes (arthropods, amphibians) can be added for an additional fee of \$40 per station.

Biomes of the World: adaptable grade level; 90 min.; \$125

Students learn the major biomes of the world, Coniferous forest (Taiga), Deciduous forest, Rain forest, Desert, Grassland, Tundra, Marine, and Freshwater. At each station two biomes (of the teacher's choosing) are defined covering location, climate, plant life, and animal life. One live animal will accompany each station and the role (niche) it plays within its biome will be discussed. *Also meets Key Ideas in Social Studies Standard 3.*

Endangered Species: adaptable grade level (upper grades); 60 min.; \$125

This program defines what threatened, endangered, extirpated and extinct species are. It also shows a cross-section of animals on the endangered species list, the reasons they are in danger, and preventative measures that have arisen over the years to help save these wonderful creatures. A look at the illegal pet trade, animal hunting/exploitation for merchandise, and habitat destruction delivers a solemn message of the plight of these animals, while a look into the protective laws and conservation/preservation efforts of zoos and nature preserves offer hope for the future. A final look will be given to individual solutions, group awareness, education, and recycling.

Habittrekking: adaptable grade level; 90 min.; \$125

Students will learn a new appreciation for their local environment through hands-on activities (such as journal writing and a school grounds field trip). Pre-program and post program activities provide a well-rounded introduction to the deciduous forest. This program is set up as two stations. The first station will include biofacts as well as live, local animals and the second will be spent exploring school grounds for signs of nature. **30 student maximum.**

Tropical Treasures: adaptable grade level; 60 min.; \$125

This program imparts knowledge about tropical rain forests using definitions, descriptions, audience participation, and live animal presentations. Topics covered during the presentation include conservation, preservation, biodiversity and ways people can help save the rain forests.

A Touch of Class: adaptable grade level; 60 min.; \$125

Investigate and learn about birds, mammals, reptiles, arthropods, and amphibians. Characteristics of each class will be discussed using biofacts and live animal representatives. This program is a shortened alternative to the Classic Zoomobile, and therefore only basic characteristics are covered.

World Safari: adaptable grade level; 60 min.; \$125

Combine interesting animal facts with seven geographic locations for a global understanding of the animal kingdom. Live animal representatives from many continents will help to illustrate the world's colorful and exotic biodiversity. *Also meets Key Ideas in Social Studies Standard 3.*

Predator vs. Prey: adaptable grade level; 60 min.; \$125

This program helps students distinguish between predator and prey animals. Explore the interdependence between these species, showing why each needs the other to survive. Food chains and food webs are discussed using interactive activities. For the older audience the effect of pesticides on a food chain comes into play. Live animals will be used to visualize relationships.

Magnificent Mammals: adaptable grade level; 60 min.; \$125

Experience a fun-filled program devoted entirely to our fellow mammals (including marsupials and monotremes). Learn what it takes to be classified as a mammal, what adaptations help them survive, what they eat, where they live and how they move about and why. Hands-on interaction with live mammals and biofacts make this program an excellent learning opportunity.

Excellent Ectotherms: adaptable grade level; 60 min.; \$125

Enter a world of reptiles, amphibians and arthropods. This program is crawling with snakes, toads, spiders and much more. Explore the existence of our world's most primitive living terrestrial animals through hands-on interaction with biofacts and live animals.

Winged Wonders: adaptable grade level; 60 min.; \$125

From chickens to owls, learn about the amazing adaptations of our feathered friends. Natural histories, predator-prey interactions, and the ability of flight will be discussed. While witnessing some of nature's most secretive birds along with some common everyday species, students learn the value of avian life in today's world.

Sensory Safari: *adaptable; 60 min.; \$125*

This hands-on program is especially designed for senior facilities as well as centers for the physically and mentally disabled. The focus of this program is sensory enrichment via touch, sight, and sound with both exotic and domestic animals.

Customized: *Choose your own topic; 60 min.; \$135*

Are you a teacher interested in relating a specific wildlife/nature topic to a Zoomobile visit? Are you an organization or club that wants to learn more, but don't see the topic you want listed above? Please call us at 995-6123 to discuss your goal, and together we will try to build a program to your specifications.

Special Events: *Large events; 1-hr minimum/ 4- hr maximum: \$125/hr*

The Buffalo Zoomobile can be booked for picnics, block parties, fairs, carnivals, lawn fetes, conventions, and other functions. The program consists of 4-7 live animals and many touchable biofacts (turtle shells, animal skins/pelts, etc.). Many of the animals are able to be touched as well.

NEW PROGRAMS!

I Love Nature: *pre-K – 1st grade; 45-60 min; \$75*

Young children are introduced to the wonders of nature and encouraged to safely and respectfully explore the outdoors. Basic concepts of natural interrelationships and their own role in nature are discussed. One half of the program is spent outdoors exploring the environment, after which their "discoveries" are discussed indoors. This program also includes one live animal ambassador.

Senior Safari: *Adults; 60 min; \$125*

This interactive program is geared toward seniors in retirement communities, senior centers and well-elderly facilities. A history of the Buffalo Zoo (and zoos in general), little known animal facts, and zoo memories are presented in a fun game-like atmosphere. This program includes one live animal ambassador.

Fabulous Felines: *adaptable grade level; 45-60 min.; \$150*

This program focuses specifically on cats! A variety of biofacts and a live serval (an African cat) will be our guide through this program that focuses on the adaptations of wild cats and the conservation issues affecting them. As this program is performed by keepers from our animal department, only limited dates and times are available.

Cancellation Policy

The Zoomobile reserves the right to cancel any program due to customer violation of program policies. If a program is cancelled for this reason, the customer will be charged for the full program, plus mileage.

If a customer makes every attempt to follow the program policies and informs Zoomobile staff in advance that they cannot meet every requirement, it is left to the discretion of the Zoomobile staff to decide if the situation is appropriate enough for the presentation/program to take place.

The customer must inform the Zoomobile of program cancellations the day before the program is to take place or earlier. Cancellations on the day of the program will still be charged the program fee, unless previously discussed with Zoomobile staff. (*This policy does not apply to cancellations due to inclement weather).

If a program has been cancelled and the zoo has not been contacted, the customer will be charged both the program fee and the mileage fee for coming out to the intended site.

In the event that the Buffalo Zoo must cancel a program, an available alternative date or full refund will be issued.

Distance Learning Programs

Distance learning programs offer a unique opportunity for students in Western New York and throughout the country to see live interactive footage of exhibits, animals, and staff at the Buffalo Zoo without leaving their classrooms! For more information please call the Education Department at (716) 995-6143.

**Currently all programs will be conducted through IP.*

**Grade levels listed are recommendations only*

Who's at the Zoo?: grades K-3; 45 min.; \$100

Zoos are places to observe animals from all over the world...like polar bears, parrots, and pythons! In this program, students will encounter a variety of animals with body coverings of fur, feathers and scales. They will explore how zoos meet the basic needs of wild animals for food, water, shelter, and space. The program will also relate the characteristics and needs of zoo animals to the critters more encountered by students: pets and backyard wildlife.

Habitat Explorers: grades 3-8; 45 min.; \$100

Take an adventure around the world while visiting the Buffalo Zoo! Students will explore the American Southwest Desert, New World Rainforest, Australian Scrub Forest and Arctic Tundra to uncover adaptations that enable animals to survive in extreme environments! Discover how scientists study animal adaptations and ecosystem relationships to protect diverse biomes around the world.

SENSE-sational Animals: grades K-6; 45 min.; \$100

Can you imagine a world where you could taste with your feet (like a butterfly) and smell with your tongue (like a snake)? Animals have developed amazing adaptations like these to allow them to survive in their environment. Students will explore how animals sense the world differently than we do, and discover what it might be like by doing some "sensory experiments."

Behavior Basics: grades K-8; 45 min.; \$100

Playing, grooming, stalking...slithering, basking, and walking!! Students will discover how we can better understand animals by observing their physical characteristics and behavior. They will also learn how zookeepers design enrichment for animals based on their natural behaviors. As an extension activity, students will observe behavior of an animal and design an enrichment project for it.

Animal Enrichment: grades K-12; 2 sessions; \$200 for non-local schools; \$250 for local schools which includes culminating trip to zoo

Let your students become scientists as they learn about animal behavior and animal enrichment in zoos! As the highlight of the program, students learn how to make specific enrichment items for designated species of animals at the Buffalo Zoo. This two-session experience culminates in a free trip to the Zoo where students get the opportunity to give their enrichment items to the animals and observe their behavior (non-local schools receive a "virtual field trip" to culminate program). Also meets Key Ideas in MST Standards 5 & 6.

Q & A: grades K-12; \$75 for 30 minutes; \$100 for 45 minutes

Get all of your burning questions answered by the experts at the Buffalo Zoo during a question and answer session! Topics are set by the interested school, class, or community group in conjunction with the Buffalo Zoo. Students prepare questions ahead of time and are able to "interview" zoo staff. You may choose from a 30-minute or 45-minute session. Example topics: Insects, Mammals, etc.

The Rainforest Experience: grades 1-7; 45 min.; \$100

Where in the world can you hear parrots squawk, monkeys howl, insects buzz AND also smell bananas, orchids, and cinnamon? In the tropical rainforest, of course! Students discover the importance of the rainforest and the



Photo courtesy of Kristine Robbins

consequences of its destruction by covering the layers, sounds, smells, and animals of these vanishing rainforests. Students will also learn what they can do to help save this vanishing habitat. Also meets Key Ideas in Social Studies Standard 3.

Conservation Connection: grades 4-12; 45 min.; \$100

Why are all animals important to an ecosystem, even cockroaches and poison dart frogs? During this experience students explore the interconnectedness of the natural world by discussing food webs, endangered species, and zoo conservation. Students will study animals that are locally and globally endangered and will be encouraged to start a conservation project of their own. Also meets Key Ideas in MST Standards 6 & 7.

Gorilla Quest: grades 5-12; 45 min.; \$100

Did you know that gorillas are peaceful primates? In this program students will embark on a Gorilla Quest to learn about gorillas and their behavior, discover behind-the-scenes requirements and missions of modern zoos, and unearth reasons why gorillas and other animals are endangered. This cross-curricular program was developed with a team of middle school teachers, and includes a comprehensive teacher's guide to use in the classroom. Also meets Key Ideas in MST Standard 3, CDOS Standard 1.
Recommended for grades 5-12

Teacher Workshop: teachers; 30 min.; \$75

Would you like to introduce teachers at your school to videoconferencing and "virtual field trips" as an exciting and interactive learning experience? The Buffalo Zoo can be a part of your teacher training by providing a 30-minute workshop that demonstrates various aspects of our videoconferencing programs. The Zoo educator will briefly review the content of our distance learning programs and incorporate live animals, live cams, and a Q & A segment into the session.

WILD Winter Animals: grades K-3; 45 min.; \$100

How do animals prepare for the winter and seasonal changes? How do polar bears survive in the harsh Arctic environment? Students will observe animals and explore how they use clever winter survival strategies such as migration, hibernation and other amazing adaptations. This program includes opportunities for movement activities as the students focus on the seasonal adaptations of animals.

Cancellation Policy

Cancellations must be received at least 48 hours in advance. The Buffalo Zoo will then make every reasonable attempt to reschedule your program. If the program cannot be rescheduled, the Buffalo Zoo will issue a refund. The refund will be assessed one administrative charge of \$25. If a cancellation is made less than 48 hours before the scheduled program, the full program fee will still be charged.

If a school encounters technical problems on the scheduled date of a program, the Buffalo Zoo will wait approximately 15 minutes after the program start time to determine if the problem can be resolved. If not, the program will be cancelled for that date. The school then has the option to reschedule the program. If the school chooses not to reschedule, or if the technical issues cannot be resolved for another program date, the full program fee will still be charged.

In the event of weather related zoo or school closings, the Buffalo Zoo will make every reasonable attempt to reschedule your program. If the program cannot be rescheduled, the Buffalo Zoo will issue a full refund.

Teacher Professional Development

Zoos are not only a place to delight in observing animals...They are also an excellent place to learn! Enjoy a teacher workshop in a unique classroom setting and living laboratory...at the Buffalo Zoo! For more information or to register your teacher group, please call (716) 995-6143.

Customized Workshops

Learn to use the Zoo as an educational resource through customized training designed to meet your specific needs and learning standards. Topics may include animal adaptations, animal habitats, conservation, behavior and more! Days, times and lengths of workshops are arranged to fit with your teaching schedule. Workshops are half-day (usually 3 hours).

Fee: Material fees per person are \$25.00

Group Size: The minimum number of participants per session is 10, maximum is 25.

Teacher Center Workshops

Zoo workshops on a variety of topics can be scheduled and coordinated in conjunction with teacher centers in districts around Western New York. If you would like more information on which teacher centers are included, or if you would like your teacher center to get involved, please contact us!