



**MINNESOTA ZOO™**  
Changing how you see the world

**REPORT TO THE LEGISLATURE**  
**LEGACY AMENDMENT FUNDS**  
**REPORTING PERIOD JANUARY 15, 2010 – JANUARY 15, 2011**

**BACKGROUND**

Laws 2009, Chapter 172, Article 4, Section 2, Subdivision 5(f) states that:

All recipients of funds under this subdivision shall report to the legislature by January 15<sup>th</sup> of each year on uses of those funds.

The Minnesota Zoo entered into an interagency agreement with the Department of Administration on October 22, 2009 based on the following language in the bill:

Zoos. \$450,000 in 2010 and \$450,000 in 2011 are appropriated for the programmatic development of Minnesota's zoos. Three-quarters of this fund in any year shall be reserved in equal portions each for the Minnesota Zoo, the Como Zoo, and the Lake Superior Zoo. The remainder may be apportioned through a competitive grants process or may be allocated by the commissioner to zoos that are accredited by the Association of Zoos and Aquariums or that demonstrate to the commissioner a plan for working toward that accreditation during the biennium ending June 30, 2011.

The interagency agreement provides \$111,375 in Fiscal Year 2010 to design a Black Bear exhibit on the Medtronic Minnesota Trail with an emphasis on interpreting the history and place of black bears in the state. Funding of \$111,375 in Fiscal Year 2011 is to be used to pilot a Distance Learning program with an emphasis on Minnesota animals.

An interagency agreement between The Minnesota Zoo and the Department of Administration was entered into on June 22, 2010 to develop, design and produce a live theatrical performance that will help Minnesota Zoo visitors have a stronger understanding of the concept of biodiversity and its importance to wildlife and the natural world. The agreement proved \$41,266 as a discretionary grant for this purpose.

# **BLACK BEAR PROJECT**

## **INTRODUCTION**

The black bear is an iconic animal in Minnesota. Three years ago the Minnesota Zoo refreshed our Minnesota Trail exhibit, adding wolves and coyotes to an already comprehensive collection of Minnesota species, improving interpretation and providing enhanced spaces for both guests and the animals. At the end of the Trail is a wooded area that has not been developed. There has been a long-standing plan to develop that space into a habitat and interpretive exhibit area for black bears. While the recently-completed grizzly bear exhibit has exceeded our expectations, and led to record-breaking attendance and membership, we nevertheless receive regular comments from guests who strongly desire to see a black bear exhibit.

There are approximately 20,000 - 30,000 black bears living in Minnesota in the wild. At one time they could be found throughout the state, but are now found primarily in northern Minnesota. This funding will provide for the design of the exhibit and the conceptual design of the interpretive program. With these design packages in hand, we will be able to raise public and private funds for construction. We have collaborated with the Department of Natural Resources (DNR) and the Minnesota Historical Society.

## **ACTIVITIES TO DATE**

- The Minnesota Zoo has developed our internal work team, which has met throughout the project.
- The interpretive outline was developed in cooperation with staff at the Minnesota Historical Society.
- An RFP for design was let in July 2010.
- Design is near completion.
- Working with the Department of Natural Resources, we secured three orphaned black bears cubs which are on-site.
- Private funding secured to complete construction.

## **REMAINING FY2011 WORKPLAN**

- An RFP for construction will be let in April 2011.
- Utility work will begin in Spring 2011, taking advantage of work being completed for the Heart of the Zoo construction, thus saving on costs.

## **FUTURE**

- A design/build Request for Proposals will be developed for the graphics and interpretive program will be awarded in summer 2011
- Construction will occur throughout the summer, fall and winter.
- Exhibit opening in summer 2012.

# **DISTANCE LEARNING PROJECT**

## **INTRODUCTION**

Interactive videoconferencing is an exciting venue for expanding the reach of the Minnesota Zoo and fulfilling its mission of *connecting people, animals, and the natural world* through K-12 classrooms statewide. Through the Minnesota Legacy Amendment program, essential funds are allowing the Zoo to dedicate efforts to establish a successful distance learning program, grounded in best practices, Minnesota State Education Standards, teacher and student need, and ongoing stakeholder support.

## **RESEARCH AND DEVELOPMENT ACTIVITIES TO DATE**

### **Staff Support and Development**

- Hired distance learning specialist to shepherd program development and serve as on-camera instructor during pilot phase and into full launch.
- Participated in TIES educational technology conference which included a 2-day strand devoted to interactive videoconferencing in Minnesota K-12 schools.
- Joined and continue to participate actively in MILC (Minnesota Interactive Learning Collaborative) – a local group of interactive videoconferencing K-12 program providers. Through MILC, have developed relationships with regional technology cooperatives that facilitate distance learning programming in K-12 public schools statewide.

### **Program Design and Content Development**

- Compiled and reviewed formal and informal studies on effective interactive video conferencing for K-12 audiences to determine current best practices.
- Retained the services of Julia Shildmeyer-Heighway, a national consultant with the CILC (Center for Interactive Learning and Collaboration) for a 2-day consultation session to explore and identify unique Minnesota Zoo-specific resources and expertise that lend themselves well to K-12 interactive videoconferencing. Also explored current best practices, equipment and technology considerations, and standard program formats, elements and implementation issues to guide pilot program design.
- Reviewed existing local content providers and their program offerings, goals, and objectives as well as existing national content providers from like-institutions such as zoos, aquariums, etc. This information has been critical to establishing feasible goals and objectives for the Zoo's distance learning initiative as well as identifying areas of saturation and gaps in content amongst offerings currently available to the K-12 market.
- Identified initial program content areas – currently reviewing associated internal resources such as program animals, exhibits, biofacts, films/video/b-roll to support proposed content focuses.
  - MOOSE - Moose are an interesting and important part of the cultural and biological heritage of Minnesota. They are very interconnected and reliant on the north woods habitat that we as Minnesotans love, and both may be in jeopardy due to climatic and habitat changes. Feature the Zoo's Moose

exhibit, the Medtronic Minnesota Trail, and the Zoo's partnership with the DNR and the University of Minnesota to find ways to protect the moose and its habitats from decline.

- Biomes/ecosystems/habitat
- Adaptations and climate change,
- Mapping and tracking
- Nature of scientific research/solve the mystery of MN's disappearing moose
- Wildlife conservation
- AGRICULTURE - Highlight Minnesota's rich agricultural heritage through the Minnesota Zoo's Wells Fargo Family Farm
  - Farm animal husbandry
  - Farm products
  - Wild relatives (farm animals and wild counterparts around the Zoo)
  - Exotic breeds and genetics
- ANIMAL COMMUNICATION - Highlight unique vocalizations and non-verbal communication strategies of the Zoo's living collection. Focus on Minnesota State Science Standards, Strand 4. Life Science.
  - Reproduction (mating calls and behaviors; parenting techniques)
  - Predator/prey relationships (warning calls and behaviors, etc.)
  - Evolution and adaptation (why and how unique communication strategies evolved)
- Currently reviewing Minnesota and national education standards and current school improvement initiatives such as STEM (Science, Technology, Engineering, and Mathematics) education and 21<sup>st</sup>-Century Skill Development to ensure program relevancy.

### **Equipment and Technology**

- Surveyed current interactive videoconference technology requirements and commonly employed equipment both for content providers as well as end-users (schools). Met with and toured local content provider sites to review equipment needs, studio setup and operation.
- Have met with a variety of local vendors to identify available and appropriate equipment options to fill our unique needs that may include placing remotely operable pan-tilt-zoom cameras in or near external exhibit enclosures.
- In the process of determining appropriate internal location(s) for program delivery during pilot phase and for formal implementation.

### **Partnerships and Ongoing Support**

- Acquired gift from 3M that will provide continuing multi-year support for distance learning.
- Established partnership with Mayo Clinic filming unit for associated video project.

- Develop a library of short clips and b-roll footage of animals displaying key behaviors (so don't have to rely on them being awake and performing on cue during programs) for use in interactive videoconference programs.
- Develop short films for use in the Zoo's new indoor theater (Target Learning Center).

### **REMAINING FY 2011 WORKPLAN**

- Complete and release at least two 4-5 minute topical films and three to five 30-second to 1-minute PSAs (short ads featuring Minnesota Zoo conservation initiatives, current research and campaigns) through the Mayo Clinic partnership.
- Pilot three interactive videoconference programs for K-12 schools
  - Determine target grade levels for initial program offerings
  - Write program outlines and acquire/compile supporting digital media (through Mayo Clinic partnership), biofacts and props, and program animals.
  - Purchase and install equipment and establish primary studio space and potential secondary mobile delivery 'on-trail' locations.
  - Pilot programs with local schools; refine and revise program outlines as necessary.
  - Prepare marketing materials for formal launch, set for Fall 2011.
- Convene MN Zoo Board of Directors *Distance Learning Task Force* to increase stakeholder support.

### **FUTURE**

- Continue partnership with Mayo Clinic
  - Develop additional short films and PSAs for use in Target Learning Center indoor theater.
  - Compile additional footage specific to needs of distance learning programs.
- Develop and pilot additional interactive videoconference programs for K-12 audiences
  - Focus on 3M partnership goals of improving STEM education in Minnesota schools
    - Bioengineering/Wild engineering
    - Engineering the Modern Zoo/Exhibit Design
    - Careers at the Zoo
  - Feature the Zoo's newest animal exhibits – penguins, black bears, and others.
    - Genetics
    - Animal Behavior
  - Promote Conservation
    - Green practices
    - Wildlife conservation
- Explore alternate videoconferencing program formats and applications
  - Multipoint broadcasts of unique events like veterinary procedures, enrichment activities, etc.

- Teacher professional development and other training opportunities.
- Value-added onsite programs for general visitors.

## **THEATER IN THE WILD PROJECT**

### **INTRODUCTION**

With the opening of the new Target Learning Center Memorial Weekend 2011, the Zoo has worked with a theater company to develop, write and perform a 20 minute theatrical presentation throughout the summer, Fridays – Sundays. The production will explore the concept of biodiversity through the eyes of a young girl who takes a magical journey around the world visiting the tropical rainforest, a coral reef, the Minnesota northwoods and her own backyard

### **ACTIVITIES TO DATE**

- A Request for Proposal was developed, responses were reviewed and companies were brought in for interview.
- A contract was awarded in Summer 2010.
- Meetings to develop the storyline have taken place and story boards have been created. The production has been developed to include several key concepts, among which are food web, adaptations and the importance of interrelationships between living organisms.

### **REMAINING FY 2011 WORKPLAN**

- Rehearsals being in early May.
- First public performance Memorial Weekend
- Evaluation will occur in June 2011.

### **FUTURE**

- Performances will run several times each Friday, Saturday and Sunday, Memorial Day through Labor Day.
- Future of this production will be determined after evaluation
- Future programming use in the Target Learning Center is a continuing process of development, implementation and evaluation.

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