

2001 Project Abstract

For the Period Ending June 30, 2003

TITLE: Connecting with Wildlife at the Minnesota Zoo

PROJECT MANAGER: Dr. Martha Caron, Ph.D., Research Scientist and Conservation Biologist

ORGANIZATION: Minnesota Zoo

ADDRESS: 13000 Zoo Boulevard, Apple Valley, MN 55124

WEB SITE ADDRESS: www.mnzoo.org

FUND: Minnesota Future Resources Fund

LEGAL CITATION: ML 2001, 1st Special Session, Ch. 2, Sec. 14, Subd. 10(f)

APPROPRIATION AMOUNT: \$230,000

Overall Project Outcome and Results

This integrated system of interpretive graphics and activities maximizes the educational impact of the Minnesota Zoo's natural areas and plant and animal collections to promote environmental literacy and stewardship. The *Connecting with Wildlife* project creates interactive educational experiences and provides increased opportunities for dynamic interaction with wildlife. The project provides environmental education opportunities to 1 million annual Minnesota Zoo visitors.

Minnesota Zoo visitors should better understand the significance of natural resources, sustainability, biodiversity and efforts to conserve animal and plant species. These interpretive displays also present ecological, zoological, botanical and cultural information to emphasize the interrelationships between people and nature and to encourage environmental stewardship.

Project Results Use and Dissemination

The *Connecting with Wildlife at the Minnesota Zoo* interpretive graphics are a primary way for an estimated 1 million annual Minnesota Zoo visitors to interact with conservation-related information and better understand the positive and negative environmental consequences of their daily choices.

A follow-up evaluation of visitor and tiger reaction to the changes in the tiger exhibits is on-going. Preliminary results indicate that the interactives are being used by many visitors. Viewing times spent at the improved exhibits range from 1.5-4.5 minutes/visitor group which based on previous average times of 30 seconds to a minute show that our improved educational message is engaging our visitors. The new exhibits have also raised over \$1500 to date for tiger conservation programs.

Other zoos across the country have shown interest in viewing photos and gleaning ideas about our new tiger interpretive displays for their own exhibits. A presentation on the new exhibits and preliminary results from the follow-up evaluation for tiger exhibits at the Minnesota Zoo was given to the Tiger Species Survival Plan meeting at the annual national meeting of the American Zoo and Aquarium Association in Fort Worth, TX in September of 2002.

Date of Report: June 3, 2003

LCMR Final Work Program Report 2003

FINAL REPORT JUN - 5 2003

I. PROJECT TITLE: Connecting with Wildlife at the Minnesota Zoo

Project Manager: Dr. Martha Caron, Ph.D., Research Scientist and Conservation Biologist

Affiliation: Minnesota Zoo

Mailing Address: 13000 Zoo Boulevard, Apple Valley, MN 55124

Telephone Number: 952-431-9206 **E-Mail:** martha.caron@state.mn.us **Fax:** 952-431-9452

Web Page address: www.mnzoo.org

Total Biennial Project Budget: \$230,000.00

\$230,000.00 LCMR Appropriation - \$230,000.00 Amount Spent = \$0 Balance

Legal Citation: ML 2001, First Special Session, Chapter 2, Section 14, Subd. 10(f)

Appropriation Language:

10(f) Connecting with Wildlife at the Minnesota Zoo \$230,000

\$230,000 is from the future resources fund to the Minnesota Zoo to design and develop interpretive environmental educational displays for trail exhibit areas.

II. and III. FINAL PROJECT SUMMARY

Overall Project Outcome and Results

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educational message is engaging our visitors. The new exhibits have also raised over \$1500 to date for tiger conservation programs.

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IV. OUTLINE OF PROJECT RESULTS

Result 1:

The Northern Trail tiger exhibit areas

The design, fabrication and installation of tiger exhibit interpretive elements was completed and the exhibit opened June 8, 2002. These exhibits were the focus of the Minnesota Zoo's summer 2002 public relations and marketing efforts.

The contract with the Science Museum is complete but the Science Museum has continuing responsibility for troubleshooting any problems that occur with the interactives and/or graphics.

Result 1:	LCMR Budget:	\$ <u>214,000.00</u>
	Expended:	\$ <u>214,000.00</u>
	Balance:	\$ <u>0</u>

Personnel: \$0.00

Equipment: \$0.00

Development: \$0.00

Acquisition: \$0.00

Other: \$214,000.00 (Professional/Technical Services for design and fabrication of interpretive graphic displays)

Completion Date: Complete March 30, 2003 with the completed installation of all interpretive graphic displays.

Result Status:

Result 1:

The initial project selected to benefit from the LCMR funding for this project was the Northern Trail tiger exhibit areas. The interpretive displays and graphics developed for the three viewing areas at the two tiger exhibits accompany physical exhibit improvements funded through non-LCMR sources. The new tiger exhibits were prominently featured in the Minnesota Zoo's summer 2002 marketing and public relations efforts. The scope of the tiger interpretive program increased greatly due to a \$150,000 gift from a private donor from which \$75,000 was used to match a portion of LCMR funds dedicated to this project. The same interpretive messages developed for the tiger exhibits were featured in a Star Tribune *Newspapers in Education* program for 4th – 8th grade classes in May 2002.

The interpretive program elements of the tiger exhibits focus on tiger biology and behavior and also management and conservation of tigers in the wild and at the Minnesota Zoo. Messages include comparisons of habitats and cultures in Asia and Minnesota that demonstrate drastic differences and surprising similarities. Other topics include Species Survival Plans, threats to tiger survival, tiger-domestic cat comparisons,

tiger-wolf comparisons, field research, behavioral enrichment, conservation efforts, umbrella species, ecosystems and biodiversity.

A team of Minnesota Zoo staff developed the interpretive content and messages and the Science Museum of Minnesota was contracted to design and fabricate the interpretive program elements. The development, design, fabrication and installation of the tiger interpretive program has been completed. Response to the new exhibits has been very positive.

Result 2:

Tropics Trail exhibit areas (sun bear, conservation wall, white-cheeked gibbon, and tapir/binturong)

The funds from LCMR were instrumental in leveraging additional private funds in the form of a matching gift to augment the interpretive program elements of the tiger and Tropics exhibits. The remaining \$75,000 from the \$150,000 gift from a private donor was used to supplement the portion of LCMR money dedicated to this portion of the project as well as a \$10,000 grant to the Conservation Breeding Specialist Group, one of our project collaborators for this portion of the project, from a private donor.

The Tropics Graphics Committee selected a design firm, Split Rock Studios, in September 2002 to design, fabricate and install the Sun bear and Conservation Wall exhibits and provide conceptual design work on the other selected exhibits along the Tropics trail. Interpretive graphics and interactives for the Sun bear exhibit were designed and fabrication and installation were completed for an exhibit opening November 30, 2002. The exhibit has received rave reviews.

The Conservation Wall exhibit at the top of the Tropics trail has recently been completed, with fabrication and installation taking place in early May 2003 and design work for the other exhibits chosen along the Tropics trail begun. The remaining \$16,000 of the \$230,000 LCMR appropriation not spent on the Northern Trail tiger exhibits has been spent on the design, fabrication and installation of the Conservation Wall exhibit interpretive graphics and interactives.

Result 2:	LCMR Budget:	\$ <u>16,000.00</u>
	Expended:	\$ <u>16,000.00</u>
	Balance:	\$ <u>0</u>

Personnel:	\$0.00
Equipment:	\$0.00
Development:	\$0.00
Acquisition:	\$0.00
Other:	16,000.00 (Professional/Technical Services for design and fabrication of interpretive graphic displays)

Completion Date: June 30, 2003 with the completed installation of all interpretive graphic displays and troubleshooting period.

V. DISSEMINATION:

The *Connecting with Wildlife at the Minnesota Zoo* interpretive graphic displays are a primary way for an estimated 1 million annual Minnesota Zoo visitors to interact with conservation-

related information and better understand the positive and negative environmental consequences of their daily choices. The effectiveness of the interpretive graphic displays is being evaluated and the project will be replicable in other contexts at the Minnesota Zoo and elsewhere.

A follow-up evaluation of visitor and tiger reaction to the changes in the tiger exhibits is still on-going. Preliminary results indicate that the interactives are being used by many visitors. Exhibit times spent at the new improved exhibits range from 1.5-4.5 minutes/visitor group which based on previous average times of 30 seconds to a minute show that our educational message is being heard. The new exhibits have also raised over \$1500 to date for tiger conservation programs through visitor donations at the exhibits.

Several other zoos across the country have been interested in viewing photographs and gleaned ideas about our new tiger exhibit interpretive displays for their own tiger exhibit developments. Our Conservation Director was invited to speak at Mill Mountain Zoo in Roanoke, Virginia about our tiger conservation work and then met with the architects who will be designing their new tiger exhibit sharing the work that we achieved through use of our LCMR funds.

A presentation on the new exhibit developments and preliminary results from the follow-up evaluation for tiger exhibits at the Minnesota Zoo was given to the Tiger Species Survival Plan meeting at the annual national meeting of the American Zoo and Aquarium Association in Fort Worth, TX in September of 2002.

VI. COOPERATION

Project Partners:

Dan Bodette, Principal, School of Environmental Studies (SES), ISD #196. Faculty and students at SES will evaluate existing interpretive signs, research and assist with the development of new interpretive graphics displays. No LCMR funds will be payable to SES.

Conservation Breeding Specialist Group (CBSG) partnered with us to provide partial funding for the Conservation Wall exhibit on the Tropics Trail as a way of telling the public about the Minnesota Zoo's Best Kept Secrets which are all of the conservation program partnerships occurring around the world that are facilitated by the zoo and mainly occur out of the public's eye.

VII. LOCATION: Minnesota Zoo, 13000 Zoo Boulevard, Apple Valley, Dakota County, Minnesota, Zip Code: 55124

X. RESEARCH PROJECTS: A follow-up evaluation of visitor and tiger reaction to the changes in the tiger exhibits is still on-going. Preliminary results indicate that the interactives are being used by many visitors. Exhibit times spent at the new improved exhibits range from 1.5-4.5 minutes/visitor group which based on previous average times of 30 seconds to a minute show that our educational message is engaging our visitors. The new exhibits have also raised over \$1500 to date for tiger conservation programs through visitor donations at our exhibits.