Laws 2011, 1<sup>st</sup> Special Session, Chapter 6, Article 4, section 2, Subdivision 7, appropriates $1,500,000 in each year of the FY12-13 biennium to the Minnesota Zoological Board “for programmatic development of the Minnesota Zoo.”

**SUMMARY OF PROJECTS FUNDED**

The Zoo has developed programming in four areas: *Conservation in Minnesota, Conservation Education in Minnesota, Zoo Site Habitat and Landscape, and Minnesota’s Farming Heritage.*

**Conservation in Minnesota:**
Funding has allowed us to expand our partnerships with the University of Minnesota, the Department of Natural Resources, the United States Fish and Wildlife Service and non-profit organizations focusing on conservation of the heritage species of Moose and Prairie butterflies.

**Conservation Education in Minnesota:**
With over 1.3 million guests a year, state-wide outreach programs and a website visited by millions, the Zoo is in a unique position to strengthen Minnesotans’ awareness and understanding of wildlife, science and conservation. Programming has included presentations on-site for guests, web-based learning, and expansion of Zoomobile outreach. Methods have included innovative use of the arts and additional human interaction.

**Zoo Site Habitat and Landscape:**
With 485 acres – including nearly 100 acres of original oak woodland and 14 water bodies–the Zoo is using its stewardship of these resources to educate our guests on the heritage of conserving and caring for these resources.

**Minnesota’s Farming Heritage:**
The Wells Fargo Family Farm provides an opportunity for the Zoo’s 1.3 million guests to experience a working farm. Many of these guests are children who have not had the opportunity to spend time on a farm or appreciate agricultural food production. The Zoo was able to expand the farm season and increase special events at the farm.

**Contact Information**
Questions on the above programs may be directed to:

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For general information about the Minnesota Zoo, including information on the Legacy projects, visit the Zoo’s website.

www.mnzo.org

NOTES TO DETAILED REPORTS

The Minnesota Zoo received an appropriation of $1,500,000 in each year of the FY12-13 biennium. This report addresses projects paid for with these appropriations in FY13. The FY13 appropriation is available through FY14, or June 30th, 2014. Some of these projects will continue through all or part of FY14.

Several of the programs funded by the Legacy appropriation are an expansion of an existing program. Where an amount and source of additional funding or leverage is noted, it does not include funds in the baseline program – only funds that are expanding the existing programs or leveraging additional funding for a project.
CONSERVATION IN MINNESOTA

Love of the outdoors and the animals and plants that are native to Minnesota is part of our heritage. While the Minnesota Zoo has previously been involved in conservation on both a state and international level, work at the state level has been limited. It has been a strategic goal of the Zoo to increase our involvement with conservation at a state level in partnership with both government and non-governmental entities.

Legacy funds are providing support for the Zoo to work on projects involving the iconic moose and prairie butterflies.

Project Description: In partnership with the University of Minnesota Duluth’s Natural Resources Research Institute, scientists and veterinarians from the Zoo are tracking moose in northeastern Minnesota to better understand their habitat and habits. This project will result in management recommendations to enable Minnesota’s moose population to be sustained into the future.

In partnership with other conservation agencies and organizations, the Zoo aims to prevent the extinction of Minnesota’s native prairie butterflies. One aspect of the work includes a captive breeding program at the Zoo. We are also raising awareness among Zoo guests about the importance of prairie ecosystems and actions the public can take.

Legacy (Arts and Cultural Heritage) Funds

Fiscal Year 2012 (Actual): $148,463
Fiscal Year 2013 (Budgeted): $385,875

Other Funds or Support: Use of a vehicle for field work has been donated.

Total Full Time Equivalent Positions:

Fiscal Year 2013: 2.9 (over the full year)

Project Duration: This project is budgeted to continue until December of 2013.

Measurable Outcomes:

We will submit a minimum of two manuscripts on moose movements and habitat use in Minnesota to peer-reviewed scientific journals by the end of this project. Publication of these manuscripts will serve as a measure of success. We believe it is important that the findings of this research be made available to the scientific community and that these manuscripts are peer-reviewed.

By the end of the project, we will also submit a report to the Minnesota Department of Natural Resources, Superior National Forest, Cook, Lake, and St. Louis County Forestry/Land Departments, and Tribal resource management agencies. The report will...
summarize the findings of the project’s research and provide science-based management recommendations. The extent to which these recommendations are adopted, after the project has ended, may be used as a measure of longer-term success. Ultimately, this project will be successful if the management recommendations provided and adopted help stabilize Minnesota’s moose population numbers or at least slow their decline.

We will continue to increase Minnesotans awareness of the state’s moose populations, as well as the results of this project, by giving a minimum of three presentations to general audiences each year, providing information about the project on the Minnesota Zoo’s website, and writing at least one article per year in the Zoo’s newsletter. So far in FY12-13, we have conducted 3 presentations on moose conservation to general audiences, with a fourth presentation scheduled in February. Information on the moose conservation project is also available on the Zoo’s website and has been published in the Association of Zoo’s and Aquariums’ Connect Magazine. We will also incorporate this research project into the interpretive graphics at the Minnesota Zoo’s moose exhibit.

For prairie butterflies, we have created a captive breeding program, and are developing protocols for rearing and breeding. We will be conducting genetics laboratory work to investigate which existing populations of prairie butterflies might be appropriate for eventual reintroduction of the butterflies in Minnesota.

We will conduct and report upon research/field work with our partners that will lead to a better understanding of the distribution and population status of prairie butterflies in western Minnesota and the threats to their long-term survival.

We will increase Minnesotans’ awareness of the importance of prairie ecosystems and prairie butterflies by giving a minimum of three presentations to general audiences each year, providing information about the project on the Minnesota Zoo’s website and writing at least one article per year in the Zoo’s newsletter. So far in FY12-13 we have given 16 presentations total, six of which were for general audiences. Information on the butterfly project is also available on the Zoo’s website, and has been reported in the Minneapolis Star Tribune. We will also incorporate information about the Zoo’s prairie butterfly conservation program into the interpretive graphics at the Minnesota Zoo.
CONSERVATION EDUCATION IN MINNESOTA

Legacy funding has allowed the Zoo to expand our education programs, both at the Zoo and throughout the state. By expanding existing programs and developing new programs we are able to reach a broader audience. We are increasing offerings for all ages in many different ways. Public opportunities to interact with Zoo staff have increased, and continue to expand. We are able to offer new programing to our guests, taking advantage of the new Target Learning Center space. The arts are being used, including theater, sculpture, and other media.

Project Description: Outreach efforts include providing significantly more on-site interaction with guests by zookeepers, including new interpretation of animal enrichment activities. Our Close Encounters provides scheduled on-site animal demonstrations for guests each day.

The Zoomobile program has been expanded to provide additional staff for program presentation throughout the State of Minnesota. Limited scholarship funds are available to organizations which cannot fully fund a Zoomobile presentation. Legacy funds have also increased our scholarships available for low income Minnesota residents to attend Zoo Camp.

The new Target Learning Center is being utilized in a number of ways. The Bird Show programming has been expanded, and includes additional emphasis on Minnesota species. Funds have also increased our free adult lecture series, and support a concert series of local artists. Theater opportunities during the summer will include productions during the day and on some selected evenings.

Legacy funds supported the development, design, and production of a live theatrical performance Odessa’s Amazing Animal Adventure during the summer of 2012. The production focuses on the importance of biodiversity and the natural world. It was well received by both children and adults alike, and our FY13 appropriation will support the remounting of this production during the summer of 2013.

Funding will provide for additional sculptures on the Zoo grounds.

Previous Legacy funding provided for design of a new black bear exhibit at the end of the Minnesota Trail. Private funds provided for construction. These Legacy funds allowed us to provide interpretive programming and native Minnesota habitat within the exhibit. The funds provided the finishing touches on this beautiful new exhibit, which educates our guests about the Minnesota native black bear.

Teacher training is being expanded as well as improving on-site offerings to schools.

Legacy (Arts and Cultural Heritage) Funds

Fiscal Year 2012 (Actual): $586,393
Fiscal Year 2013 (Budgeted): $1,143,389

**Other Funds or Support:** A vehicle for the expanded Zoomobile program has been purchased with funds from a Zoomobile endowment.

**Total Full Time Equivalent Positions:**

Fiscal Year 2013: 7.0 FTE (over the full year)

**Project Duration:** Legacy funded project elements will all be complete by winter of 2013.

**Measurable Outcomes:**

Increase in the amount of “on exhibit” enrichment and human / animal interaction each day.

Number of new keeper-led programs (informal/random and formal/scheduled) developed.

Guest comments about programming.

Black Bear exhibit opened in the fall of 2012. The interpretive program elements creatively convey the connections between black bears and Minnesota cultural and natural history. *Measurement after exhibit is built as part of on-line teacher survey after classes have visited the zoo.*

Quantification of an increase in counties visited by Zoomobile.

Quantification of an increase in people served by Zoomobile.

Students and teachers that participate in the expanded education program pilots will be required to complete brief surveys regarding the quality of the programs, the extent to which the programs engaged their interest, and the effectiveness of the learning objectives for each program.

An average of 85 participants per session will attend the adult “Our World” Speaker Series.

35-45 low income students will participate in Zoo Camp and other Zoo education programming as a result of scholarship assistance.

Achievement of educational goals through theater programs will be measured through the administration of survey instruments developed by a contracted outside evaluator. An evaluation report will be produced outlining the effectiveness of the show at impacting the knowledge and attitudes of our audience connected to the concept of biodiversity as well as their overall satisfaction with the show.
o 75% of youth attendees (ages 6-12) that also complete the companion activity guide will demonstrate increased knowledge of biodiversity and the Zoo’s role in conservation.

o Attendance will average 1,000 visitors per show (96 shows) for a summer 2013 goal of 9,600 visitors.

**Moodle and Webinars** – Teachers will be engaged throughout the process; a team of teachers will be solicited to serve as advisors to this project, ensuring that the Zoo’s process and delivery meet their needs and those of their colleagues. Success will be measured by extent of participation in programs, feedback from program surveys, and hits and growth of members and activity within the Moodle community.

**Curriculum** – Curriculum and resources will be piloted by a team of local teachers and reviewed by experts at regular intervals for content integrity, age-appropriateness, standards-alignment, and overall effectiveness. Students from select pilot classrooms will participate in informal focus groups to gauge quality and effectiveness of material from the perspective of the end-user.

For new evening theater productions success will be measured by number of tickets sold for production; participants satisfaction with the production; and media coverage.
ZOO SITE HABITAT AND LANDSCAPE

Looking at Minnesota’s heritage of land stewardship, preservation and restoration, Legacy funding is allowing the Zoo to use our 485 acres to demonstrate these practices and educate the public.

Project Description: An overall site plan has been developed. We have accelerated our buckthorn removal on site. We are also in the process of developing a demonstration prairie plot which will provide the opportunity for Zoo guests to connect with this rare and important part of Minnesota’s natural history.

The prairie project is rehabilitating the mown, dysfunctional parking lot berms to represent one of the three biomes that covered pre-settlement Minnesota.

The Zoo prairie demonstrates plants of the short grass prairies. The prairie itself is largely in place, and will continue to develop over time. The Zoo will place graphics adjacent to areas where the visitors congregate as they approach the entrance. These signs will discuss prairie ecology, certain species of plants and animals in the prairie, the status of today’s prairie in Minnesota and the Midwest compared to their historical range, as well as discuss modern prairie conservation and the agencies/NGOs that are most active in this work. There will be a few paths for people to enter into the actual prairie without trampling the vegetation. These trails will allow visitors, especially children, to go further into the prairie. In the late summer, children can look up at the grasses and feel a sense of immersion in the prairie. The smallest and most inconspicuous species will be planted along the trail where they are easiest for the tours to see.

These trails will also be used by volunteers who are involved in some of the upkeep of the prairie plot during the growing season. Volunteers will be recruited from a variety of sources including the over 1100 Minnesota Zoo adult and teen volunteers, local Pheasants Forever chapters, the School of Environmental Studies, the Zoo’s Wildlife Conservation Club for teens and other organizations and clubs interested in volunteering to support conservation efforts at the Zoo. These volunteers will be coordinated by Zoo education staff and Zoo volunteers that are also Minnesota Master Naturalist volunteers.

Legacy (Arts and Cultural Heritage) Funds

Fiscal Year 2012 (Actual): $131,729
Fiscal Year 2013 (Budgeted): $116,576

Other Funds or Support: Private funding of $15,000 has been provided for buckthorn removal on the Zoo site.

Total Full Time Equivalent Positions:

Fiscal Year 2013: 0.5 FTE (over the full year)
**Project Duration:** Legacy funded project elements will all be complete by June 2013.

**Measurable Outcomes:**

A Zoo site plan has already been developed. In the long run, the steps that are called out in the Plan will be reviewed and a work plan put in place to aid restoration efforts across the Zoo.

With the plan, the Zoo will be able to leverage our restoration efforts with money from other sources, i.e. the DNR’s Woody Biomass project, which would help fund the removal of invasive species portion of the Plan. The Zoo will then concentrate on native plantings, and other aspects of restoring the landscape.

We will measure the number of volunteers recruited for the prairie project, and number of classes/tours using the prairie trails.

The Minnesota Zoo has existing partnerships with the US Fish and Wildlife Service (USFWS), the Department of Natural Resources (DNR), The Nature Conservancy (TNC), Pheasants Forever (PF), and the MN Prairie Chicken Society (MPCS). Each of these groups has a strong history restoring and/or enhancing grassland habitat across western Minnesota. These groups will be leveraged to assist the Zoo’s efforts to raise the public’s awareness of the importance of prairies and prairie wildlife.
MINNESOTA’S FARMING HERITAGE

In July 2000 the Minnesota Zoo opened the Wells Fargo Family Farm to focus attention on the past, present, and possible future of the Minnesota family farm. Since that time, millions have visited the farm to learn about our farming heritage.

**Project Description:** Legacy funding is allowing the Zoo to expand the season of the exhibit, improve work done off-season and increase programming at the Farm. The Zoo also launched a farmer’s market. The Zoo teaches and promotes sustainable agriculture practices such as our Farm to Fork program. The Farmers Market is another example of sharing these practices with the community.

A Harvest Festival was developed and launched in the fall of 2011, and continued in 2012. The Harvest Festival provides guests with a personal farm experience celebrating the importance of the fall harvest. The activities supporting these weekends included music, crafts, apple press demonstrations, cow milking demonstrations, butter churning, spinning/weaving demonstrations, and a hay maze for kids.

**Legacy (Arts and Cultural Heritage) Funds**

Fiscal Year 2012 (Actual): $170,457  
Fiscal Year 2013 (Budgeted): $228,500

**Other Funds or Support:** None at this time.

**Total Full Time Equivalent Positions:**

Fiscal Year 2013: 1.6 (over the full year)

**Project Duration:** The FY 2013 Legacy Fund appropriation will fund programs through June 2014.

**Measurable Outcomes:**

The number of visitors that are at the farm will be measured along with review of comments received. We have taken counts of tram riders during this October Harvest Festival to get a feel for the number of visitors at the farm.

The number of vendors and customers participating in the Farmers’ Market will be measured as will compost sales and positive feedback from customers, members and the media.
DIRECT EXPENSES AND ADMINISTRATION OF PROJECTS

Finance and Administration:

Fiscal Year 2012 (Actual): $29,010
Fiscal Year 2013 (Budgeted): $59,608

Time that is specifically spent on Legacy funded projects – hiring staff, setting up accounts, overall reporting – is tracked each day in the payroll system.

Fiscal Year 2013: 0.5 (over the full year)
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