

IMLS MUSEUMS FOR AMERICA GRANT PROPOSAL

NOVEMBER 1, 2008

I. STATEMENT OF NEED

Heritage Museums & Gardens (HMG) is Cape Cod's largest cultural institution, comprised of 3 museums and Cape Cod's only arboretum and display garden in a 100-acre woodland landscape. Heritage Museums & Gardens' mission is to "foster lifelong learning by preserving and sharing the history, industry, art and horticulture of America. We offer each of our visitors a range of experiences from quiet contemplation to active exploration." In 2006, the HMG Board of Trustees determined that the gardens were their greatest under-utilized asset, and developed a strategic plan to advance HMG's horticultural mission. A summary of that plan is attached. The plan was developed by staff, Board, and a community Horticultural Advisory Committee over 18 months, and adopted by the Board in two stages at Board retreats held in May, 2006 and May, 2007. The plan is to be implemented by 2011. Implementation is ahead of schedule on all 8 goals, and in the winter of 2009 staff and Board will begin a new round of institutional strategic planning.

The Heritage gardens have been superbly maintained from 1969 to the present, but they were determined to be relatively stagnant and underdeveloped in terms of cataloging and education. The 8 point strategic plan contains specific goals to address these needs, and remarkable progress has been made in the past 2 years. In 2007 Heritage was reaccredited by AAM, and received a federal grant to fund a new CAP assessment for museum and living collections. In 2008, these assessment reports were received along with an additional external assessment of the arboretum at Heritage. Also in 2008, Heritage was awarded a two year IMLS Museums for America grant to fund a living collections cataloging project for 4,000 trees and plants.

The primary garden educational initiative for 2008-2009 is the development of a new multi-generational, interactive feature called Hidden Hollow Family Adventure Garden. After institutional review of several locations, a 2-acre site was chosen for development of Hidden Hollow to enhance public access to major living collections, expand institutional capacity for outdoor education, and directly serve Heritage's growing audiences of families and youth groups. The concept for Hidden Hollow is adapted from an educational template developed jointly by the National Arbor Day Foundation in Nebraska and the Dimensions Educational Research Foundation. These organizations are promoting and certifying "Nature Explore Classrooms" to advance the understanding and appreciation of the natural world and to provide children with meaningful and positive experiences with nature. Certified Nature Explore Classrooms are outdoor learning spaces designed to bring nature into the daily lives of children and to help educators better utilize the outdoors as a part of children's learning. Hidden Hollow will be the first certified Nature Explore Classroom in New England. HMG is requesting an IMLS grant of \$148,193 over a two year period of time for outdoor education programs for Hidden Hollow. The garden itself will be funded separately (\$100,000 already raised).

In the broadest sense, Hidden Hollow is Heritage's response to a widely recognized national need as delineated in Richard Louv's Last Child In The Woods. Louv's study of 3 generations of 9 year olds found that the boundaries of children's lives have been shrinking at an alarming rate in terms of free choice physical space and physical activity. Children are rarely able to roam free as individuals, thereby diminishing their connection with their physical world. Architect Simon Nicholson of Cambridge makes a similar case in terms of his "loose parts theory" which posits that in any

Heritage Museums & Gardens

environment the degree of inventiveness and creativity, and the possibility of discovery, are proportional to the number and kind of variables in that environment. Other recent research by John Falk and the Institute for Learning Innovation has placed great importance on both free-choice learning and multi-generational learning. Hidden Hollow seeks to embody these learning principles in an outdoor education space with learning stations as defined by the Nature Explore model. Hidden Hollow will be situated in a Cape Cod geological feature called a “kettle hole.” These physical depressions on Cape Cod were formed by glacial retreat. Heritage’s 2-acre site forms a 25 foot deep depression surrounded by hillsides of native hardwoods with an understory of rhododendrons, Heritage’s signature collection. At the ground level, we will feature a major collection of New England ferns separating the educational stations.

Hidden Hollow has 4 primary objectives to better serve all audiences to Heritage:

1. To create a nature-based outdoor adventure garden for multi-generational learning.
2. To provide an outdoor space devoted to discovery and free-choice learning.
3. To insure a safe, stimulating environment for interaction with authentic, natural materials.
4. To provide an outdoor garden to teach Cape Cod natural history and emphasize the horticultural collections of Heritage.

Two audience studies conducted in 2002 and 2004 by outside consultants, internal audience evaluation conducted in 2006-2007, and actual attendance at education department programs over the past 3 years all confirm a growing interest in Heritage education programs for regional families and youth groups. Interest remains strong among public and private school teachers as well, but there are many economic and political factors working against school group visits at this time. Overall Heritage attendance has risen steadily over the past 3 years (to 82,000 in 2007, and up 10% in 2008) largely due to the diversity of museum and outdoor offerings, and the marketing of Heritage as a family experience center. The local Sandwich community is comprised of a high percentage of young families, with 24% of the town’s population under the age of 15. Education programs are regularly booked to capacity, with waiting lists, and Heritage staff have difficulty meeting the demand by independent youth organizations for more customized activities. Hidden Hollow will boost institutional capacity for these demonstrated audiences. It will also provide a new space for family and youth discovery and exploration on a self-guided basis for at least 30,000 youth and family visitors, and open up new opportunities for scheduled programming which will enhance and complement the self-guided experience. The Hidden Hollow experience will not be limited to these target groups, but will be accessible to all Heritage visitors.

As Heritage staff gained familiarity with the above-referenced research in the field and observed deficits in the youth participating in programs currently conducted for children, they conducted an informal needs assessment through a series of conversations with members of a local Mom’s Club, Girl Scout and Boy Scout leaders, and staff at community organizations such as the Boys and Girls Club, YMCA, Cooperative Extension and the Community Partnership for Children. These consultations pointed to the need for an outdoor education resource, and prompted Heritage to engage the services of a consultant who will perform formal research to assess audience needs. HMG members, family program participants, Mom’s Club members and others will be surveyed from November 2008 – April 2009 to assess what community members would be interested in experiencing in Hidden Hollow, and to receive feedback on the overall concept. The goal of this research is to learn as much as possible during the planning and conceptual design phase about the interests, attitudes, expectations, motivations and knowledge of our audiences so we may best meet their needs through the design and implementation of the educational programs in Hidden Hollow.

This front end evaluation will be conducted by Heritage staff under the guidance of the consultants selected for this grant proposal, with costs borne by HMG.

II. PROJECT DESIGN

The physical development of Hidden Hollow will take place in 2009. HMG has chosen a previously undeveloped and inaccessible 2-acre kettle hole within its public gardens, partially cleared the floor of the site, and hired an environmental engineering firm to design an ADA accessible route into the kettle hole. A landscape architect has volunteered his time to assist staff in designing the layout of activity areas and learning stations within Hidden Hollow. A staff planning team from the Education and Horticultural Departments is selecting the outdoor education features for Hidden Hollow in consultation with the National Arbor Day Foundation. Construction will be ongoing throughout 2009, with completion scheduled for the fall of 2009. Fund-raising has begun with a lead gift of \$100,000. Hidden Hollow is a component of a larger capital campaign called Foundation for the Future which went public on October 15, 2008. In the winter of 2009, the Heritage staff planning team will shift its focus from physical layout to preliminary planning and front end evaluation for educational programs for Hidden Hollow.

The central feature of Hidden Hollow will be a 2-story tree house built by nationally recognized designer Pete Nelson of Treehouse Workshops Inc. of Seattle, Washington. Mr. Nelson has been contracted to move into the design development stage of his work, and HMG has started the process of seeking appropriate permits from the town of Sandwich, MA and the Commonwealth of Massachusetts. The tree house structure must be designed by a licensed structural engineer, and the deck of the tree house must be universally accessible. The tree house will be 8 x 16 feet set on a larger deck, with two means of vertical access, namely, by staircase from the ground, and from the rim of the kettle hole by a bridge to the tree house deck.

A second important feature of Hidden Hollow is the music arts area that will consist of a 4 part outdoor instrument designed by Being:Art of Memphis, TN that consists of chromatic and pentatonic marimbas, a diatonic bass marimba and diatonic upright bass chimes. Designed to be played by multiple people, the instrument is made from durable and weather-resistant ipe wood, making it a long-lasting tool that gives children a chance to create their own music and rhythms. Being:Art was founded by artists and teachers Sean Murphy and Anne Wike who, in addition to building custom-designed, hand-crafted instruments for outdoor spaces, are consultants to the Dimensions Educational Research Foundation and develop and teach Nature Explore music and movement workshops.

In addition to the Tree House and outdoor instruments, Hidden Hollow will include all other areas required for certification as a Nature Explore Classroom, including an entry feature, an open area for large motor activities, a climbing and crawling area, a building area, a nature art area and an amphitheater. The Hidden Hollow design, and a complete list of educational features, is included in the supplementary materials to this application.

The proposed IMLS grant will not be used for construction of Hidden Hollow. The Hidden Hollow Education Program grant will be used to plan, develop and evaluate both self-guided experience and supervised education programs for the new outdoor exhibit/classroom. IMLS funds will assist with audience research and evaluation before the public opening of Hidden Hollow in April 2010, and throughout the rest of the 2 year grant period. IMLS funds will partially undergird the salary of a new Heritage employee – a specialist in outdoor education – and assist with the development and

Heritage Museums & Gardens

evaluation of educational programs and materials in appropriate media for targeted audiences. The Outdoor Education Specialist will also work to connect target audiences with Hidden Hollow's educational resources by developing promotional literature and Internet content, and by conducting outreach to local community youth groups and families electronically and through direct contacts. The Hidden Hollow outdoor education programs will be available initially to the public in the museum's 2010 season. Based on IMLS supported evaluation discussed more fully in the Project Impact section, revisions and improvements will be made in 2011 and thereafter. Hidden Hollow will be available to Heritage's annual visitation of more than 82,000 people, but its target audiences are the nearly 30,000 youth who participate in school, youth and family programs each year.

HMG has hired 2 outside professional consultants to assist Heritage staff with design and development of the Hidden Hollow educational programs. They are the firm of Reach Advisors of Belmont, MA, and Marilyn Cruickshank of Needham, MA. They will work with staff on a limited volunteer basis throughout 2009 prior to the IMLS grant period. During the grant period, each consultant will have separate but complementary tasks to shape the education programs.

Reach Advisors, an audience research and strategy firm described in the Project Resources section, will conduct a wide-ranging study to determine the needs and desires of area families, particularly in relation to outdoor recreation needs, and to identify community and educational needs. Their research subjects will include a wide sample of parents and grandparents across Cape Cod and the South Shore area from which HMG draws the bulk of its visitors. Reach Advisors audience research will extend to the constituents of cultural organizations on the South Shore and provide access to a regional data base that HMG would not be able to access on its own. This expanded sample will provide information that expands beyond current HMG visitors to potential future visitors. Reach Advisors' research presentation and written report will be interpreted in concert with their other proprietary national and industry-wide research. Participating area organizations will also benefit from the results of Reach Advisors' findings.

The second consultant is Marilyn Cruickshank, an independent education consultant described in the Project Resources section, will assist Heritage staff in late 2008 and early 2009 to assess the needs of current museum users. During the grant period beginning in October of 2009, Marilyn will assist staff in conducting discussions which include community members in the preliminary planning and front end evaluation of program offerings and content.

Data and information provided by these consultants will allow HMG to build educational programming for Hidden Hollow that will meet our target audiences' needs. A major role of the new Outdoor Education Specialist position funded by IMLS will be to work with Marilyn Cruickshank from October, 2009 to April, 2010 to define clear program outcomes to meet the needs defined in the planning stage. Together they will determine what inputs are needed (volunteer and paid staff, materials, equipment, website capacity, horticultural information, etc.), what activities HMG needs to carry out, what outputs should be tracked in design and delivery, and what services need to be delivered to the targeted audiences to bring about the desired results. Once Hidden Hollow's educational programs are in place, both consultants will work with staff to evaluate their effectiveness. As is described more fully in the Project Impacts section, Reach Advisors will evaluate the experience of general museum visitors and will conduct follow-up interviews and surveys with the sample studied in their needs assessment research, and Marilyn Cruickshank will evaluate visitor participation in formal family or youth group programs.

Heritage Museums & Gardens

The overall educational philosophy behind the Hidden Hollow project design is based on years of research and field testing by the National Arbor Day Foundation and the Dimensions Educational Research Foundation with children from preschool through 10 years of age. Their work has drawn in experts in fields such as architecture, landscape architecture, music, art, science, mathematics and neuropsychology. The guiding principles of the Nature Explore Classroom philosophy have been implemented at Arbor Day Farm, the Missouri Botanical Garden, and at numerous public and private schools, principally in the Mid-West.

HMG has already conducted considerable research into the national trend of building children's gardens in nature centers, arboreta, and botanic gardens. Grace Chapman, a recent graduate of the Longwood Program in Public Horticulture, spent two days in the spring of 2008 in consultation with Heritage staff to report on her national research into children's gardens. Her 190 page Master's thesis reported on a national survey which she conducted in cooperation with the American Horticultural Society, Huntington Museum and Gardens, Winterthur Museum and Gardens and Longwood Gardens. Heather Mead, HMG's Director of Education and Public Programs, attended a professional workshop in 2008 conducted at the National Arbor Day Foundation in Nebraska, and studied the design and operation of the first Nature Explore Classroom at the Arbor Day Farm site.

III. PROJECT RESOURCES: TIME, PERSONNEL, BUDGET

TIME: HMG is requesting a two-year grant period to complete the Hidden Hollow Education Project, from October 1, 2009 through September 30, 2011.

PERSONNEL:

Dr. Scott T. Swank - Executive Director, HMG - Dr. Swank will be the Project Director, providing overall administration and coordination with all Heritage departments, and outside consultants, and serving as liaison to the Heritage Board of Trustees and Horticultural Advisory Committee. He will sign all report forms and contracts, monitor budgets, and approve expenditures through the Heritage Business Office. Dr. Swank holds a doctorate from the University of Pennsylvania and has held senior administrative positions at three different institutions over his 34-year museum career. He has written and administered federal, state, municipal and private foundation grants throughout that same period. He began his museum career as Director of Education at the Winterthur Museum and Gardens, and has been actively engaged with educational research, programming and evaluation since 1974. Heather Mead – Director of Education, HMG – Heather Mead will serve as the Assistant Director of the Hidden Hollow Education Project. Her chief responsibility will be the content and structure of the educational programming, working in concert with the Heritage Horticulture Department and the outside professional consultants. She will coordinate program development, testing and evaluation, and will have final authority for content and implementation of the various phases of the project. Heather has been employed at Heritage for 15 years, and has been Director of Education since 2000. She received her MA in Education and CAGS in Museum Studies from Tufts University. Heather is a member of AAM's Standing Professional Committee on Education and NEMA's Education Professional Affinity Group (PAG) and served as PAG chairperson and liaison to the NEMA Board for 8 years.

Jeanie Gillis - Director of Horticulture, HMG – Jeanie Gillis will have supervisory responsibility for all living collections in Hidden Hollow and will be accountable for horticultural content of all Hidden Hollow education materials. She will be a member of the planning team throughout the grant period. Jeanie Gillis is a graduate of the University of Massachusetts with a BS in Horticulture, and has been the chief horticulturalist at Heritage for 31 years.

Heritage Museums & Gardens

Kristen Hoeker – Manager of Family and Community Programs, HMG – Kristen Hoeker will collaborate with the consultant and Outdoor Education Specialist to develop formal education programs for families and community youth groups, self-guiding materials for these groups, and interpretive strategies for family audiences. She will also present programs and conduct evaluation of all programming in Hidden Hollow. Kristen holds a BA in Anthropology with a concentration in Museum Studies from Central Michigan University, and has six years of experience in museum education. In a prior position, she was responsible for presenting environmental science-based programming at a nature center. Kristen has worked closely with HMG's family and community audiences for over two years.

Amanda Meyer – Manager of School and Youth Programs, HMG – Amanda Meyer holds a Master's degree in Arts Administration from Boston University, and is a new staff member at Heritage with experience in developing and managing educational programs. She will be primarily responsible for developing all school group programs for preschool through grade 3, and she will also present programs and conduct evaluation of all programming in Hidden Hollow. Amanda will be part of the team developing programming in Hidden Hollow for HMG's youth day camp program. New staff member - Outdoor Education Specialist, HMG – This is a new position which would be funded by IMLS (100% in year one; 50 % in year two; Heritage funding after 2011). A position description is included in place of a resume. The Outdoor Education Specialist will be part of a team developing, implementing and evaluating Hidden Hollow programming in the first 2 years; beyond 2011 this staff member will have primary responsibility for the ongoing program.

Jillian Groth – Plant Recorder, HMG – Jillian will assist Jeanie Gillis with the content of horticultural education programs and with garden maintenance. She will offer education programs and workshops in Hidden Hollow. Jillian holds a BS in Environmental Horticulture and Turfgrass Management from the University of Rhode Island and has been employed at Heritage since June, 2008.

Gary Childs – Arborist, HMG – Gary has 30 years experience as an arborist. During the season, he will be responsible for maintaining the safety of the trees on the 2-acre site, and will be responsible for routine safety checks and repairs to the tree house. If major tree removal is required, he will be responsible for scheduling and managing that activity.

Reach Advisors – Consultant – Reach Advisors is an audience research and strategy firm serving community-driven enterprises. A growing segment of their work focuses on the needs of museums ranging from the Smithsonian Institution, to the AAM's Center for the Future of Museums, to leading regional museums and museum service organizations. Their work combines innovative quantitative and qualitative research methodologies, probing analysis of demographic and consumer behavior data, and strong strategic and tactical grounding. Their work typically covers audience definition and gap identification, audience demographics, psychographics and segmentation and program definition and integration with community characteristics. They will study the needs of a wide sample of Cape Cod and South Shore families, conduct follow-up interviews and surveys with this same sample after the Hidden Hollow education program is in place, and will evaluate the experience of general museum visitors to Hidden Hollow. The principal project consultant will be Susie Wilkening. Her supervisor is James Chung, CEO of Reach Advisors.

Marilyn Cruickshank – Consultant - Marilyn Cruickshank is an independent education consultant providing services to museums and other non-profit organizations since 2000. She has over 20 years of experience in working with non-profit institutions and is the winner of the AAM's Nancy Hanks Memorial Award for Professional Excellence. She is committed to assisting museums in fulfilling their programmatic goals. Her work includes a strong multidisciplinary focus, as she has consulted with organizations of all sizes and types throughout New England. Marilyn will assist staff with the development and evaluation of formal family and youth group programs with input from these audiences.

BUDGET: The total grant project budget is \$347,436. The grant request from IMLS is \$148,193, with \$199,243 in matching funds from Heritage Museums & Gardens.

IV. PROJECT IMPACT

Evaluation is built into every stage of this project, and success will be defined by measurable changes in program participants brought about by their participation in a program. Both outside consultants will assist staff in articulating measurable indicators of outcomes and determining the best method of data collection. Each will draft and test visitor intercept interview and timing and tracking instruments, and provide training to HMG staff to conduct evaluation by March of 2011. Marilyn Cruickshank will develop a visitor intercept instrument and feedback forms for visitors who participate in formal family or youth group programs. Reach Advisors will evaluate the experience of general museum visitors who engage with staff providing interpretation or who use the site in a self-guided manner through visitor intercept interviews and by performing timing and tracking observations. These evaluations will be conducted between April and August of 2011. Reach Advisors will also conduct follow-up interviews and surveys with both HMG's core visitors and with the wider sample studied in their needs assessment research between May and August of 2011. Both consultants will analyze the collected evaluative data and prepare a written report of their findings. The results will demonstrate what difference Hidden Hollow has made on the lives of participants by tracking program outcomes, or changes in individuals' knowledge, skills, attitudes and behaviors. Modifications and improvements will be made to the structure of Hidden Hollow and the content and mechanics of the educational programs on an on-going basis as a result of this evaluation.

In addition to the positive impact that this project will have on its audiences, it will also provide tangible benefit to the museum, strengthening HMG's connections to the communities it serves and increasing the museum's value to these communities. Hidden Hollow will enhance public access to major living collections. The programs built through this process will result in the development of curriculum for formal programs and printed materials such as self-guides or parent/caregiver resources, and will directly serve HMG's growing audience of families and youth groups. Funding from IMLS will expand the institution's capacity for outdoor education and build staff capacity through training in evaluation methods that, along with the valuable information gained through the audience research, will transfer to other education initiatives.

The creation of Hidden Hollow Adventure Garden is a centerpiece of Heritage Museums & Gardens Foundation for the Future major gifts campaign, and a tangible expression of HMG's successful transition over the past three years from an inward looking, collections based institution to a community based educational institution. Museum education programs are well-developed and highly successful, and long-range planning has determined that the most critical current need is to further develop the significant Heritage gardens, and to develop outdoor education programs which utilize the landscape and living collections. The high priority of the Hidden Hollow Education Program is understood by the entire Heritage community, from Trustees to staff, and the work of this grant will dramatically increase institutional capacity to serve both target and general audiences to Heritage.

BUDGET FORM: Section B, Summary Budget

	\$ IMLS	\$ Cost Share	\$ TOTAL COSTS
1. Salaries and Wages	\$53,025.00	\$131,128.00	\$184,153.00
2. Fringe Benefits	\$13,256.00	\$32,782.00	\$46,038.00
3. Consultant Fees	\$48,000.00	\$0.00	\$48,000.00
4. Travel	\$0.00	\$0.00	\$0.00
5. Supplies and Materials	\$5,880.00	\$1,500.00	\$7,380.00
6. Services	\$13,120.00	\$15,720.00	\$28,840.00
7. Student Support	\$0.00	\$0.00	\$0.00
8. Other Costs	\$1,440.00	\$0.00	\$1,440.00
TOTAL DIRECT COSTS (1-8)	\$134,721.00	\$181,130.00	\$315,851.00
9. Indirect Costs	\$13,472.00	\$18,113.00	\$31,585.00
TOTAL COSTS (Direct and Indirect)	\$148,193.00	\$199,243.00	\$347,436.00

Project Funding for the Entire Grant Period

1. Grant Funds Requested from IMLS	\$148,193.00
2. Cost Sharing:	
a. Applicant's Contribution	
b. Kind Contribution	\$199,243.00
c. Other Federal Agencies*	
d. TOTAL COST SHARING	\$199,243.00
3. TOTAL PROJECT FUNDING (1+2d)	\$347,436.00
Percentage of total project costs requested from IMLS	42.6 %

*If funding has been requested from another federal agency, indicate the agency's name:

YEAR ONE: OCTOBER 1, 2009 THROUGH SEPTEMBER 30, 2010

PROJECT TASK	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT
Conduct audience study survey: Reach Advisors compiles subjects, designs and tests instrument, conducts survey, analyzes data, reports findings	X	X	X	X	X	X	X	X	X	X		
Conduct audience study interviews: Reach Advisors designs and tests instrument, conducts interviews, analyzes data, reports findings										X	X	X
Outdoor Education Specialist is hired; contributes to project			X	X	X	X	X	X	X	X	X	X
Work with audiences to plan and build formal education programs for families and youth groups: Marilyn Cruickshank and HMG team	X	X	X	X	X	X	X					
Develop interpretation strategy and self-guiding materials: Marilyn Cruickshank and HMG team	X	X	X	X	X	X	X					
Open Hidden Hollow to the public							X					
Test formal education programs, self-guides and interpretive strategy: Marilyn Cruickshank and HMG team							X	X	X	X	X	X
Maintain Hidden Hollow; replace educational materials							X	X	X	X	X	X

YEAR TWO: OCTOBER 1, 2010 THROUGH SEPTEMBER 30, 2011

PROJECT TASK	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT
Conduct audience study interviews: Reach Advisors designs and tests instrument, conducts interviews, analyzes data, reports findings	X	X	X									
Conduct general visitor evaluation: Reach Advisors designs and tests instruments, trains HMG staff, conducts on-site evaluation, analyzes data, reports findings				X	X	X	X	X	X	X	X	
Conduct audience study follow-up: Reach Advisors designs and tests instruments, conducts interviews and surveys, analyzes data, compiles final report							X	X	X	X	X	X
Develop formal education program evaluation: Marilyn Cruickshank develops and tests visitor intercept and feedback instruments, trains HMG staff			X	X	X	X						
Launch Hidden Hollow Education Program							X	X	X	X	X	X
Evaluate formal education programs: Marilyn Cruickshank and HMG team conduct evaluation of family and youth group programs on-site; Marilyn analyzes data, reports findings							X	X	X	X	X	X
Outdoor Education Specialist contributes to project	X	X	X	X	X	X	X	X	X	X	X	X
Maintain Hidden Hollow; replace educational materials							X	X	X	X	X	X