

Headwaters Current

Volume 18, Number 1, February, 2010



Flowing With the Current

Your Support is Critical!

Updates by Laddie Elwell

There's no question that 2009 was a tough year, but Headwaters Science Center made it through and served 400 visitors more than it did in 2008, for a total of over 29,000. Many nonprofits had tougher times, and some did not survive. Thanks to hard-working staff members, volunteers, the Board of Directors, generous donors, and visitors, the Center was able to stay open and even slightly expand its exhibits.

But 2010 holds new hopes and dreams for HSC users, and it will take foresight and energy to turn them into reality. It is time for a new director, and it is time for a new building. Unfortunately, these items translate into a need for higher levels of financing because our present director and financial officer have never drawn a salary, and our old building has been very economical, though it is now inadequate for needed expansion to serve the schools and populations of our region. Our intent is to make our new building as "green" as it can be, and we hope it will serve as a model for a well-built LEED-certified building in a northern setting. It will be located on the Mississippi River between Pamida and the Beltrami County History Center.

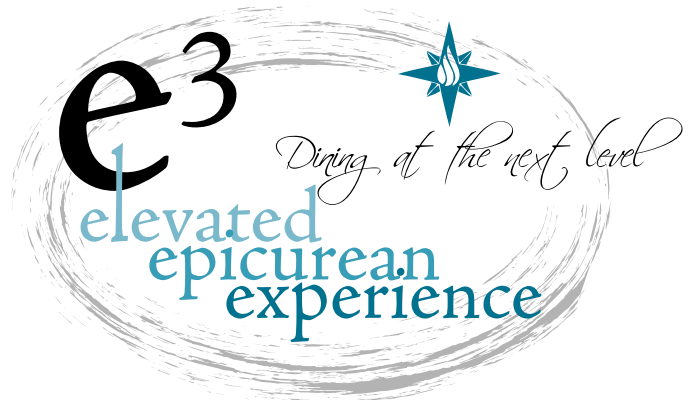
So, this year promises to be demanding: we hope to have a new director by the end of 2010, as well as a good start on the funding for the new building. We need your help now as we never have before, both to support HSC in this economic downturn and to help earn State support for the new building we need so badly! HSC's area representative to the Minnesota House of Representatives John Persell and State Senator Mary Olson have introduced companion bills into the Legislature in behalf of HSC.

Letters supporting HSC are essential to help win legislative backing, and if you are willing to write one, all of us at the Center would appreciate it very much! HSC will be one of the major issues during Bemidji Day at the Capital in March. Also, it will help if you contact your state House and Senate representatives to let them know that you recognize our need for more space. (Visit www.leg.state.mn.us) Letters from those of you who live in surrounding communities and counties will be especially valuable to help show that HSC is a regional attraction. Though we need adult letters, kids' letters are also very welcome!

Headwaters Science Center Support Letter: 2010

One-page letters explaining why you think HSC should receive support are most effective for both legislative support and fund raising: they are much more effective than template letters. If

(continued on page 2)



On Saturday, February 27, HSC will hold what we hope will be the first ANNUAL food extravaganza that we are calling **e³** (e-cubed). It will feature some of the best food you'll enjoy in 2010! We are going completely upscale, and up and down the stairs when all three floors will be filled with epicurean delights. Local restaurants and celebrity food artists will bring their cooking skills and a favorite dish to share in buffets that will amaze guests on all levels.

The schedule for the evening will look something like this:

- 5:30 - Social hour & cash bar
Touring of the buffets
Live jazz in "The Pub" (downstairs)
Silent Auction
Special program by guest physicist
Glenn Schmieg – *Playing with Food!*
- 6:30 - Dinner on the main floor and mezzanine
Live music - Bemidji Baroque Ensemble
Bemidji Symphony chamber groups
Magic Show with Joe d' Alessandro
HSC staff demonstration - *Cryogenics & Combustion*
(or *Food, Fried & Frozen!*)

- 7:30 - **e³** Exceptional Ending Extravaganza
(a dessert experience you won't forget!)

Food sponsors at press time are:

Julie Bengtson	Applebee's	Harmony Co-op
Sue Doeden	Backyard BBQ	Keg n' Cork
Pat Hurd	Brigid's Cross	Lueken's Village Foods
The "P.I.G.S."	Cabin Coffeehouse	Minnesota Nice Cafe
(Preparing Incredible Gourmet Sensations - John Cota, Dennis Doeden, Ken Howe, Gary Johnson)	Cattails	Peppercorn
	Dunn Bros	Raphael's Bakery
	Ground Round	Tutto Bene
	Hampton Inn/Green Mill	Wild Hare Restaurant

e³ is open to the public! Tickets are \$25 and may be purchased at the Science Center, RiverWood Bank, the Bemidji Chamber office, or 1st National Bank Downtown Express Bank. Recommended dress is "high-end casual," as HSC's atmosphere will be transformed into an elegant dinner setting for this special evening!



Paul Bunyan Telephone



(Flowing with the Current, continued from page 1)

appropriate, letters should be written on letterhead. Most effective are short letters that show HSC is unique and popular, that it provides science support for kids, schools, and families, and, only if it is true, how you use our services. Make sure to include your name and address on the letter and send a copy of it to your own legislators if you can. They will already have the following information to consider in their deliberations, but feel free to elaborate on one or two of these items in your letter if a certain program has been especially useful to you:

- ▶ We served over 29,000 visitors in 2009
- ▶ About one third of our visitation is composed of school groups
- ▶ Our budgets range around \$200,000-250,000 a year (higher with more grant activity)
- ▶ Schools from 23 northern Minnesota counties use our services
- ▶ We have 6 full-time staff, usually 3 part time, plus help from CEP, Experience Works!, high school, college and university volunteers and interns, and many local folks (without whom we would be lost: 80 to 100 folks each year fall into these categories)
- ▶ Our science activities and programs include:

Exhibit floor
 Programs of many different kinds (dozens)
 Science Club for kids aged 8-13
 Tots 'n' Science for preschool kids
 Gifted and Talented programs for Bemidji Middle School
 River Watch and other aquatic programs
 Preschool programs for Day Cares
 Home school programs and activities
 Science Fair support for kids and families; special engineering programs
 Collaboration with other nonprofits (e.g. Homeless Shelter, 4-H, Evergreen house, others)
 Outreach to schools and communities across north central and northwest Minnesota
 Birthday parties
 Provide science kits for teachers to rent

- ▶ We are very frugal
- ▶ We build most of our own exhibits
- ▶ HSC is the only Minnesota science center in a hundreds of miles-wide path between Winnipeg & the Twin Cities

Letters should be addressed simply To Whom It May Concern, dated, and dropped off at the Center or sent to:

Laddie Elwell
 Headwaters Science Center
 P.O. Box 1176
 Bemidji, MN 56619

The new building will lead to improved programs and exhibits that will help schools meet state science standards and provide our regional population with better science information and resources. HSC will be a greater attraction to regional residents and tourists; it is already a destination for many people now, but the new building will make it much more so!

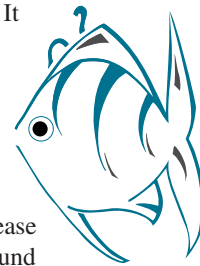


**Don't forget to
 pick up your
 tickets for e3!**

Reef News

The bubble tip anemone in our saltwater tank has split again. Where once there was one, now there are three! The colonies of purple clove polyps, the green star polyps and the pulsing xenias are expanding nicely. The cleaner shrimp are not quite as shy as they were; they can often be seen during the day as well as in the evening. As soon as the weather permits, HSC will place an order for a few more fish and invertebrates for the tank.

HSC would like to thank all those who contributed to the initial set-up fund for the salt water tank. It allowed us to set the tank up and purchase equipment, supplies and the first installment of livestock. Careful and consistent maintenance and monitoring are crucial to the long term success of a saltwater aquarium, whether it is managed for fish or as a reef tank such as ours. This is both time consuming and expensive. Please consider contributing to our ongoing saltwater fund by sponsoring a paper fish for display at the front counter.



WWW.HSCBEMIDJI.ORG Who Looks at the HSC Website?

Following is a report from our Webmaster showing activity on our website during 2009. This is always interesting because it shows not only the number of visitors and what they are mostly interested in, but where they come from.

In 2009 there were 734,226 "hits" with 46,103 unique visitors that downloaded a total of 89,689 pages from our website. This is a significant increase from 2008 (56,025 pageloads). The most frequent topics viewed were clearly the live animal pages, which accounted for 29,951 of the downloads. The next most popular pages were exhibits (7,921), demonstrations (3,532), fund raising (3,131), and teachers corner (2,171).

Most visitors were from the U.S. (not surprising), but a total of 26 countries were represented. In order of frequency, the five most common after the U.S. were Canada, Great Britain, Russia, China, and Australia.

A website is always a "work in progress," so we are always seeking ideas and suggestions on how to make it better. Please contact John Mathisen (rmath@paulbunyan.net or (218) 751-1780) if you have any suggestions.

Wish List –

- printer for 4x6 photos
- 4" plastic pots
- 20-30 cup coffee maker
- square kitty litter buckets with lids and handles
- healthy, live tropical fish
- live compost worms (red wigglers)
- metal or wood working tools
- commercial vacuum
- gallon jugs of Elmer's glue
- zip top bags (all sizes)
- raptor food (call for details)

Summer Programs

It's the middle of winter, so what better time to turn our attention to summer activities?! HSC will again be offering our lineup of summer youth programs.

⚙️ **Tots-n-Science** (ages 3-6) every Wednesday from 10-11

Tots and Discovery Science programs will offer stories, hands-on activities, and games to help children learn about things going on in their worlds. (No programs August 5.)

Cost for Tots:	Non-members	Members
Adult and child:	\$10	\$3
Additional child:	\$ 4	\$1

- Adults must accompany children.
- Call to pre-register by the day before the program.

⚙️ **Discovery Science** (ages 7-9) every Wednesday from 1-2

Cost:	Non-members	Members
Any five sessions:	\$45	\$40
Any twelve sessions:	\$85	\$75

Tickets must be purchased in advance. Sorry - no refunds for unused tickets.

- Adults need not accompany children.
- Pre-register by purchasing tickets. (Call 444-4472.)

⚙️ **Science Club** (ages 10-13) every Thursday from 2-4

Children will enjoy hands-on activities dealing with engineering, among other things. Experience and fun for all!

Cost:	Non-members	Members
Any five sessions:	\$50	\$40
Any twelve sessions:	\$95	\$75

- Adults need not accompany children.
- Pre-register by purchasing tickets. (Call 444-4472.)

Robotics Squad Tourney

Once again Headwaters Science Center's robotics squads competed in First Lego League's Robotics Tournament. This project is a growing collaborative effort between HSC and Beltrami County 4-H, a most excellent benefactor and overall supporter through their SET (Science Engineering and Technology) program.

Lego robotics has 3rd through 9th graders designing, engineering, building, programming, and running robots and collecting points on an obstacle course with a mission in mind. This year's challenge was "Smart Moves." In addition to robotic performance; students addressed local transportation issues and displayed their findings along with robotic solutions in presentations delivered to regional judges.

Our first-year team, "Pigs Might Fly," finished with silver medals in Division II with many Division I team members. Congratulations! Our returning team, "Off in the Woods," earned a first-place plaque

(Continued on page 4)

Home-school Science Days

On the third Friday of each month through May, HSC conducts a 2-hour class geared to homeschoolers. These classes are open to the public and anyone is welcome to attend. Call us or visit our website (www.hscbemidji.org) for additional information and prices.

February 19 - Elwah Dam models

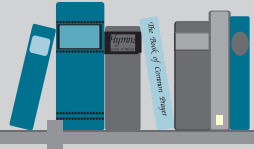
March 19 - Light & Sound

April 16 - Plants & plant collecting

May 21 - Bird watching/monitoring & binoculars

TAG - Talented and Gifted Program

Through the generosity of a Neilson Grant, every six weeks during this school year and next, we have been and will continue to host TAG (Talented and Gifted) workshops for Bemidji Middle School students. The first topic for our TAG tutorials has been Chemistry, where we explored unique properties of water, acids and bases, physical and chemical reactions, environmental chemistry, chemoluminescence, density and molecular modeling. Our emphasis is on lab-based learning with a very hands-on approach to discovery. Later this winter we shift our focus to Physics and Engineering, where again our explorations will be lab-based with firsthand experience through scientific experimentation. So far the program has been very successful, generating a lot of interest and enthusiasm from students, teachers, and the community.



the Book Nook

It looks like winter is going to be here for awhile—an excellent time to catch up on reading, from inside the house, where it's warm and cozy. Our winter book titles include the following:

For aid in identifying deciduous trees in winter: ***Winter Tree Finder*** by May Theilgaard and Tom Watts

For aid in identifying dry plants in winter: ***Winter Weed Finder*** by Dorcas S. Miller

Just for fun: ***A Guide to Feeding Winter Birds*** by Bob Waldon

Celebrating the father-child bond from a penguin's point of view: ***Without You*** by Sarah Weeks and Suzanne Duranceau

Exploring winter in the North Country: ***Winter Sign*** by Jim Dale Hout-Vickery

For the serious birder, a collection of studies: ***Waterfowl in Winter***, edited by Milton W. Weller

The inevitable, when winter goes wrong: ***Blizzard*** by Christopher Lampton

SCIENCE BITES



No matter it's size or thickness, no piece of paper can be folded in half more than 7 times.



(Robotics, continued from page 3)

for robotic performance, meaning their robot won in head-to-head competition with every other team in the Northern Minnesota Region. We are very proud of all their accomplishments and we salute their enthusiasm, for the "Off in the Woods" team has embarked upon an even greater challenge—deciding to build a robot from scratch! We can always use help with these blossoming endeavors in the form of parts and expertise, for we need a guidance system, a reliable power plant, small powerful motors, and a mission. The new robot has the potential to be exhibited at the Beltrami County Fair in July. Contact James Owens at 444-4472 if you can assist us in our efforts.



Camp Invention 2010 will feature the Camp INNOVATE program August 2-6, 2010. Look for more details in the May issue of *The Current*, or get information online at the Camp Invention website—www.campinvention.org.

Annual Memberships:

Individual - \$35 Family - \$60

Entry Fees for Non-Members:

Children ages 2-11 - \$3.00

Adults and youngsters 12 and over - \$5.00

Maximum charge per single household family - \$25.00

Children under 10 must be accompanied by a parent or guardian

Please inquire about fees for groups, birthday parties, or other special events that you might require!

Annual Membership benefits:

- *Free unlimited entry to the exhibit hall
- *Discount of 50 cents on every \$5 purchase
- *Reduction in many program fees
- *Admission to 322 other science centers or museums.

To become a member, stop in to pick up your membership cards, or print and mail the form from our website and we'll be happy to mail them to you!

Headwaters Science Center Personnel

Executive Director: Laddie Elwell

Financial Officer: Jim Elwell

Board of Directors:

Paul Swenson, President

Vange Anderson

Julie Bengtson

Denise Black

Wendy Greenberg

John Hawthorne

Frank Hazard

Barry Lyons

Greg Oja

Del Olson

Ryan Zemek

Floor Director: Chris Tolman

Store Manager: Peggy Nygaard

RiverWatch: James Owens

Programs: Kitura Main

Newsletter: Julie Bengtson

Collections: Anita Merritt

Other Staff: Richard Johnson, Lilly Main, Jaqi Main

Brooke Belcourt, David Garrett

If you are receiving *The Current* for the first time or are a new member of Headwaters Science Center and you would like more information about the Center, please call us at (218) 444-4472 or stop in at 413 Beltrami Avenue, Bemidji, Minnesota.

HOURS

Monday through Saturday • 9:30-5:30 Sunday • 1 - 5
(Closed on Thanksgiving, Christmas, New Years Day, & Easter)

Our Mission . . .

The Headwaters Science Center's mission is to provide intellectual stimulation and enjoyment for all children and adults in its northern Minnesota service area with scientific and technological interactive displays, exhibits, and programs otherwise unavailable in the region. The Center will work with regional educational organizations and relevant community entities to assure that exhibits and activities will enhance and supplement educational programs.