

MISSOULA
BUTTERFLY HOUSE
 AND INSECTARIUM
 Winter Newsletter 2012

Our Mission

The mission of the Missoula Butterfly House and Insectarium is to promote an appreciation and understanding of insects and their relatives in the Animal Kingdom through public education and the development of an invertebrate education facility.



Larry's sketch includes mountains and a river, the Wilma, the Carousel, Caras Park, Brennan's Wave and the Missoula County Courthouse. Without a doubt, it's a vision firmly rooted in Missoula. And so is the Missoula Butterfly House and Insectarium.

You, and our community, have responded enthusiastically to our vision. You've volunteered your time and your dollars to help this dream come alive, becoming part of the Butterfly House family. Thanks to your commitment and support, the Missoula Butterfly House and Insectarium will succeed and add to the rich array of community facilities, experiences, and opportunities that make Missoula such an incredible place to visit, live, work, and raise a family.

Larry's vision depicts a BIG dream and reminds me that big projects take time, patience, strategy, and perseverance. I feel our commitment and diligence have paid off. We've moved closer to finalizing a home for our facility. We've reached thousands of individuals through our outreach efforts, and we recently launched our school educational program. We've strengthened our Board of Directors and established a solid group of passionate, dedicated volunteers. And we've significantly increased our base of supporters.

While we have a lot of work ahead of us, Larry's sketch fills me with anticipation for opening day. You might not see a gigantic butterfly perched on the building, but without a doubt you will know you are entering a unique and special place made for Missoula by Missoulians.

The Buzz

When Larry Brehm, board member and architect, gave me a sketch of our future facility, it made me smile. But as much as I love Larry's vision, it is much grander than what we will actually build. Will we have a dome-shaped greenhouse, modeled after the Papiliorama butterfly house in Switzerland? Probably not. Turrets and flags like you might see in Disney World? Not likely. A two-story butterfly perched on top of the greenhouse? Definitely no.

But as time went on I realized that

while the sketch may not physically represent the facility we will build, it is accurate in other ways.

Our vision of a year-round butterfly house with live invertebrate exhibits providing hands-on learning opportunities will be a truly unique resource for our schools, our community, and for visitors to western Montana. In fact, you would have to travel 450 miles or more to find a similar experience. So will the Missoula Butterfly House and Insectarium be a unique and special destination as depicted in Larry's vision? Absolutely.



Membership Challenge Achieved

A BIG THANK YOU to all of our new members that helped us meet and surpass our \$5,000 challenge grant goal of 50 new members! Thank you Betsy for making this challenge possible.



Dispirited Tiger Beetle (*Cicindela depressula*). Photo by Aaron Schusteff.

Head of tiger beetle as seen through a scanning electron microscope. Notice the large mandibles. From our exhibit "Beetles: The Greatest Animals on Earth" on display at the Montana Natural History Center.

Insect In-Sight: Tiger Beetles

by Bryce Christiaens

One sunny spring day while out hiking, I came to a place where the receding snow had left a bare strip of disturbed soil. Along the edge of the snow, brightly colored insects flitted in front of me. They were tiger beetles - specifically *Cicindela depressula*, one of 25 tiger beetle species in Montana. As a *Cicindela*ophile, I was delighted to see the little insects.

Tiger beetles are easily recognizable by their bulging eyes and especially large mandibles (jaws). Adults are about ½ inch long, with long bodies and long thin legs, large heads, and markings of various shapes on the wing covers. Tiger beetles range in color from bright green to purple, blue, bronze, brown, and black. They have a metallic, iridescent sheen, especially on their undersides.

Adult tiger beetles are active predators that rely on sight and speed to catch prey. When hunting, the beetles run in short spurts, stop to look for moving prey, and then sprint in that direction. The frequent pauses are necessary because when tiger beetles run, they actually move too fast for their eyes to gather enough photons to create an image of the prey. In essence, they run blind! One species, *Cicindela tranquebarica*, can move at the amazing pace of 29 body lengths per second (that's 148 mph if you're a grizzly bear). During hot weather, tiger beetles ambush prey by waiting in shady spots and attacking passing flies, caterpillars, and other beetles.

Tiger beetles can be found practically everywhere in Montana, from the snowline along the

Bitterroot Divide to the central prairies and the badlands of Makoshika. The insects prefer open habitat where they can run down prey, such as sandy soils along rivers and lakes, open prairie, alkali flats, and disturbed areas. Trails are ideal habitat, so if you're out hiking between May and September, you're bound to see tiger beetles if you look closely.

For more information on tiger beetles, check out *Tiger Beetles of Alberta*, by John Acorn, and *A Field Guide to the Tiger Beetles of the United States and Canada*, by David L. Pearson, C. Barry Knisley, and Charles J. Kazilek, or visit the on-line field guide at <http://fieldguide.mt.gov>.

Kids' Corner - Nurturing "Natural Naturalists"

by Lisa Verlanic Fowler

Ahh... Fall is here and back to school. I try to head outside with my first graders for as many nature lessons as possible before the cold weather hits. Unfortunately smoky skies limited our time in the Outdoor Classroom at Florence Carlton School. It made me realize even more the importance of building the Missoula Butterfly House and Insectarium. No matter what the weather brings, children will be able to experience nature and learn with hands-on activities.

The teachers and students at Florence are quite fortunate to have an acre of land on our school campus for nature study. We can thank Byron Weber, "The Bug Guy" and a founding member of the Missoula Butterfly House for this amazing opportunity. He understood the importance of not only learning about our own backyards but also exposing students to creatures that aren't native to Montana. We will continue to work to realize his dream of a butterfly and insect facility in Missoula.

So I armed my class with clipboards, pencils, and bug collection jars, and we ventured out during the first week of school in search of beetles. We discussed what defines a beetle in comparison to

other insects. Beetles have two sets of wings; hardened forewings on the outside to protect the delicate hindwings folded underneath. As beetles fly, they use their forewings for balance and hindwings for movement. My students struggled to capture insects, and they caught only one small black beetle. They were excited though to see the striations on its forewings. One student did manage to trap a rather large spider.

But success was easy - despite the lack of insects on this smoky day, the children enjoyed going outside to explore and discover, and hopefully that learning experience will stick with them. I am constantly reminded that children are "natural naturalists". They are innately interested when experiencing our natural world and are thoroughly engaged in each lesson. Nature offers incredible discoveries, and in the Bitterroot Valley, it's pretty easy to get out there. But hidden treasures are everywhere, even in the cracks of a sidewalk. We just have to get our kids out there and looking. That reminds me of something else about Byron Weber. He nurtured the naturalist in all of us.

Photos by Lisa Verlanic Fowler

New Board Member Kris Paffhausen

Kris spent her childhood in the rural areas of New England and moved to Montana in 1977. She graduated from Montana Tech in Butte, MT and earned her CPA designation. Her career spans more than 25 years in Accounting and Financial roles.

She and husband Bob have two children who both graduated from the University of Montana and are grateful for their two absolutely adorable young grandsons who also live in the area.

She is passionate about children's healthy exposure to natural environments and is excited about the goal of the MBHI to provide a facility to help provide this very important education.

In recent years she has spent time learning photography with a more focused awareness of her surroundings. In addition, she enjoys all outdoor activity including fishing, rafting, hiking, golf, skiing, mountain biking, snowshoeing, and exploring all the National and State parks around the country.

Board Members

Larry Brehm
Lawrence K. Brehm, A.I.A., Architect

Bryce Christiaens
*Manager, County Weed District
Farmer and Owner, Native Ideals
Seed Farm*

Lisa Verlanic Fowler
Teacher, Florence Carlton School

Jen Marangelo
*Executive Director, Missoula
Butterfly House*

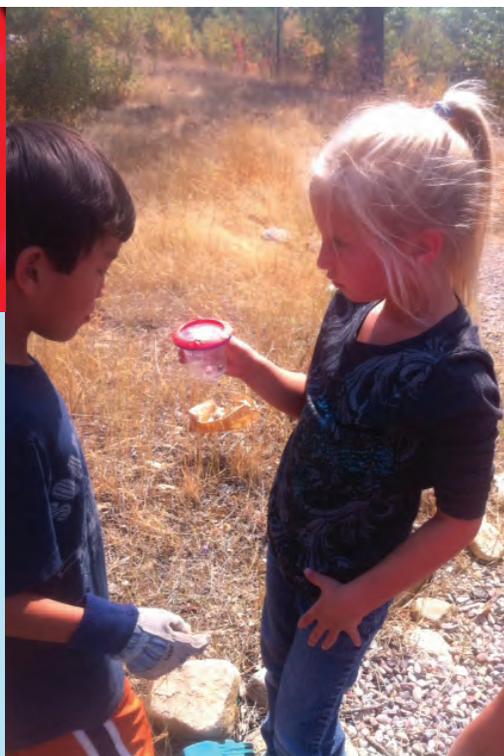
Glenn Marangelo
*Development Director, Five Valleys
Land Trust*

Eleanor Morris
*Senior Policy Representative,
The Nature Conservancy*

Kris Paffhausen
Vice President/Controller, Envirocon

Alison Perkins
Science Educator, University of Montana

John Wells
Architect, MacArthur, Means, and Wells



Teachers Imagine

the teachable moments that live invertebrates can bring to your classroom. Hissing cockroaches, giant millipedes, scorpions, tarantulas, and other species will develop your students' natural excitement to learn about these and other fascinating animals.

For more information or to schedule a visit please contact Sue at suebutterflies@gmail.com or go to missoulabutterflyhouse.org.

Creating a place for everyone to experience the wonders of insects.





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Holiday Gifts

Not sure what to get your nature buff or bug enthusiast for the holidays?

A gift membership in the Missoula Butterfly House is the gift that gives back throughout the year. In addition to receiving newsletters, updates, and invitations to events your gift strengthens a vision that will give back to the entire community. Simply mail your donation of \$35 or more along with the recipient's name and contact information to Missoula Butterfly House and Insectarium, PO Box 8885, Missoula, MT, 59807. We will notify the recipient of your thoughtful gift!



Help us take flight!

Become a member!

For a donation of \$35 or more, you can become a member of the Missoula Butterfly House and Insectarium. As a supporter of this exciting effort, we'll keep you up to date on our accomplishments. You can make your tax-deductible donation online using PayPal. Simply go to our website (www.missoulabutterflyhouse.org) and click on "Please Donate Now!"

Or mail your tax-deductible contribution to:

Missoula Butterfly House
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PO Box 8885
Missoula, MT 59807

Upcoming Events

Join Us for First Night!

Ring in the New Year with our bug ambassadors at First Night Missoula, December 31st, 2012 at the University of Montana's University Center, Third Floor Conference Room from 3:00 to 6:00 PM.



Connect Today!

Missoula Butterfly House

