

MISSOULA
BUTTERFLY HOUSE
AND INSECTARIUM

Winter Newsletter 2013



Future residents of the Missoula Insectarium.
Left to Right: Frog Beetle, Excited Guests, Pink Katydid. Insect pictures provided by Zack Lemann.

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.

The Buzz

For the past three years our insect education programs and traveling exhibits have created a buzz within our community. We've steadily moved our vision for a tropical butterfly house and insect museum forward while working to strengthen our organizational capacity. And we've made hundreds of friends, like you, along the way that share our enthusiasm.

It's time. I'm thrilled to announce that the Missoula Butterfly House and Insectarium is taking an exciting step forward.

In 2014 we plan to open the Missoula Insectarium. As the

first phase of our long-term vision, this facility will offer an interactive museum and insect zoo for children and adults to explore the amazing world of insects and their relatives. With live animal exhibits and a classroom for field trips, community programs, and special events, the Missoula Insectarium will provide a unique way to learn about "the little things that run the world."

We're currently in the process of finalizing a location that will be central to downtown. In the weeks and months ahead, our focus will turn toward exhibit design and construction, securing the necessary permits to house and obtain an exciting array of critters, expanding our staff and ramping up our crew of volunteers ...and of course, securing the remaining funds needed to make all of this happen.

For those of you that are already supporters, I can't thank you enough for your visionary support that has made our progress possible. For those of you that have followed our efforts with interest and enthusiasm, there's never been a

better time to lend your support. And for those of you that have just recently learned of this exciting effort, I encourage you to jump aboard. It's going to be an exciting ride!

Wishing you and yours the best of the holiday season. I look forward to seeing you at the Missoula Insectarium in 2014!

MISSOULA
INSECTARIUM

DONATE TODAY!

www.missoulabutterflyhouse.org

406.317.1211

PO Box 8885

Missoula, MT 59807



Follow us
on Facebook!





A guest at the Missoula County Fair with Milton, our Giant African Millipede.



Tiger Centipede. Photo provided by Matt Reinbold.

Insect Insight: Milli or Centi?

by Glenn Marangelo

Out of all of our Bug Ambassadors, Milton (our Giant African Millipede) and Cedric (our Tiger Centipede) create the most confusion. “Is that a millipede or a centipede?”

Lending to this confusion, both millipedes and centipedes can be found world wide, occupying an array of terrestrial habitats from tropical rainforests to deserts. In regard to size, species of each animal can range from a fraction of an inch up to a foot long, so habitat and size are of little to no help in answering the “milli or centi” question.

The easiest way to identify a millipede from a centipede is the number of legs per body segment. Millipedes usually have long

cylindrical bodies with two pairs of legs on most body segments. Centipedes have a more flattened body structure with only a single pair of legs per segment. And while it is commonly believed that the total number of legs lend to the identification, neither millipedes or centipedes have 1,000 or 100 legs respectively. The record holder for millipedes has a mere 750 legs. And while certain species of centipedes can have close to or over 100 legs, they always have an odd number of leg pairs, so they can never have exactly 100.

Diet and behavior can also help with identification. Millipedes are detritivores, feeding on and breaking down dead plant or animal matter. They have no

need for speed and slowly forage for their food. Unable to outrun their predators, if disturbed a millipede will roll into a tight coil, protecting its softer underside and legs. Since millipedes can’t bite, if further threatened some species emit a foul-smelling (and tasting) chemical from stink glands (called ozopores) along the sides of their body. These chemicals may burn or blister your skin.

In contrast, centipedes are fast moving and impressive predators that feed on just about anything they can handle, ranging from insects, lizards, frogs, and even small rodents. They are built for speed. In capturing prey, they use pincer-like appendages (modified front legs) called gnathopods to inject venom into their prey, usually wrapping themselves around their prey to wait for the venom to take effect. Centipedes can inflict a painful bite to humans, which could be fatal under severe allergic reactions (similar to wasp or bee stings).

Board Members

Larry Brehm

Lawrence K. Brehm, A.I.A., Architect
Bryce Christiaens, President
County Weed District, Native Ideals Seed Farm

Erin M. Erickson

Lawyer, Bohyer, Erickson, Beaudette & Tranel, P.C.

Lisa Verlanic Fowler

Teacher, Florence Carlton School

Jen Marangelo

Executive Director, Missoula Butterfly House

Glenn Marangelo

Development Director, Five Valleys Land Trust

Eleanor Morris, Vice-President

Senior Policy Representative, The Nature Conservancy

Kris Paffhausen, Treasurer

Vice President/Controller, Envirocon

Alison Perkins

Science Educator, UM

John Wells, Secretary

Architect, MacArthur, Means, and Wells



Left to Right: Sunburst Diving Beetle, Walking Leaf Insect, Thorny Devil Stick Insect
All insect pictures provided by Zack Lemann.

Insectarium Insight

Opening the Missoula Insectarium in 2014 is an exciting step forward. And while we've been preparing for this over the past few years, as you can imagine, there are many bases to cover, lots of details to attend to, and still much to learn.

Luckily, we don't need to figure all of this out by ourselves or reinvent the wheel.

Thanks to the connections we've made by attending the annual Invertebrates in Education and Conservation Conference over the past years, in September we spent two days behind the scenes at the Audubon Butterfly Gardens and Insectarium in New Orleans. This trip provided a hands-on opportunity to learn what's worked and not worked within North America's largest

museum devoted to insects and their relatives.

While we've cared for over 20 species of insects and invertebrates over the years, the Audubon Butterfly Gardens and Insectarium's husbandry practices are on a much larger scale, involving many species we plan to exhibit but have not had in the past. Learning how they care for their many invertebrate species and what exhibit designs / features have worked best, things that are often learned through trial and error, was invaluable. To acquire many of the amazing species we plan to exhibit, we will need to secure special permits from the US Department of Agriculture. Learning how Audubon has met the USDA's requirements will make our permitting process that much easier in the months ahead.

Equally important, thanks to this trip we gained valuable insights into how to keep our invertebrate species happy and healthy while providing the best possible experience for visitors. We can't wait to start putting this new knowledge into practice.

A big "thanks" goes out to Zack Lemann (Chief Entomologist), Jayme Necaie (Insectarium Director), Cokie Bauder (Insect Rearing Facility) and Elise Rome (Butterfly House), and the rest of the staff for sharing your knowledge, experience, and enthusiasm.

Pictured above are some Bug Ambassadors from the Audubon Butterfly Gardens and Insectarium. You might meet them at the Missoula Insectarium!



A big "thanks" to Liquid Planet for selecting us as their Cuppa Community Program partner for November 2013 and to Dave Bell/Dave Bell Photo, Sara Kauk/Design Missoula, Dr. Doug Emlen, and Dr. Cerisse Allen for helping us with promotional materials for our Cinnamon Walking Stick Mocha.

Another big "thanks" to our friends at Roothead Studios for putting on the 1st Annual Missoula Haunted House and for donating a portion of the proceeds to our efforts! What a scary-good time. rootheadstudios.com





MISSOULA
BUTTERFLY HOUSE
AND INSECTARIUM
Missoula Butterfly House and Insectarium
PO Box 8885
Missoula, MT 59807

NON-PROFIT ORG.
U.S. POSTAGE

PAID

MISSOULA, MT 59801
Permit No. 569

Upcoming Events

December 8 - holiday MADE fair, UM Adams Center,
11:00 am - 6:00 pm

For the first time, this popular alternative arts and crafts fair has invited local organizations to provide interactive activities for both adults and children. Visit with our Bug Ambassadors, do some holiday shopping, and consider buying a gift membership to the Missoula Butterfly House and Insectarium for the bug enthusiast in your life.

December 31 - First Night Missoula, MCT Lobby,
200 N. Adams, 3:00 pm - 6:00 pm

Ring in the New Year with the Missoula Butterfly House and Insectarium and our live Bug Ambassadors.

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, helping support our efforts to open the Missoula Insectarium in the New Year. If you'd like to become a member or make a donation specifically for the facility, send your tax-deductible donation to: Missoula Butterfly House and Insectarium, PO Box 8885, Missoula, MT 59807. You can also donate on-line from our website at www.missoulabutterflyhouse.org.

Tell a Friend/Give a Gift

Strong community support will be essential in making our vision a reality. Please help by sharing this newsletter with your friends, encouraging your Facebook friends to "Like" our page, or by giving the holiday gift that gives back -- a gift membership in the Missoula Butterfly House and Insectarium. Please contact us at 406-317-1211 or info@missoulabutterflyhouse.org for more information.