



MISSOULA
BUTTERFLY HOUSE
AND INSECTARIUM

Spring Newsletter 2013



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.

Local Businesses!

Please consider supporting our ever-growing group of Invertebrate Ambassadors! Our Invertebrate Ambassadors travel to schools, organizations, and events around Missoula, engaging kids of all ages in the fascinating world of insects and their relatives. We will proudly display your support, so that your business can travel with them! We have several sponsorship levels, everything from helping maintain our live invertebrate collection to supporting schools interested in our education programs. Please contact Alison Perkins (alison_perkins@q.com) for more information.

The Buzz

In our last newsletter, *The Buzz* featured a playful sketch drawn by Larry Brehm, board member and architect, of what the facility we are working to build could look like. This drawing sits on my desk and, in more ways than one, serves as a reminder of how far we've come.

About four years ago, we held our first "board meeting" to discuss the dream I had of building a tropical butterfly house and invertebrate zoo here in Missoula. Until that point, it had largely been a personal dream shared mostly with close friends and colleagues. Now, seeing Larry's sketch, I realize this personal dream has truly evolved into a shared vision - a vision that, as time goes on, is becoming part of our community.

Not a day goes by that I don't hear an expression of enthusiasm for our mission. And I could not agree more. The Missoula Butterfly House and Insectarium will prove to be an incredible and unique experience for our schools, for our community, and for visitors to western Montana. But we can't do it alone.

Consider this a call to action.

If you'd like to get involved, please contact us or fill out a volunteer survey on our website (missoulbutterflyhouse.org). If you are not already a member or have not renewed your membership, please consider doing so today. If you'd like to introduce this exciting vision to friends and colleagues, consider hosting a house party (we'll bring along some of our six, eight, and many-legged friends). If your business would like to sponsor our popular outreach events, please give us a call. There are dozens of ways you can turn your enthusiasm into action and leadership in helping move our mission forward. And believe me, your help is greatly appreciated!

There is still a great deal of work that needs to be done before we open our doors. But as we've seen with other visions our community has embraced, when we work together there's nothing we can't accomplish.





Ghost Mantid

Insect In-Sight: Amazing Mantids

by Glenn Marangelo

Maybe it's their alien appearance, their lightning fast strike, or the way they turn their head to look at you. Whatever the case, our praying mantids always draw a crowd at outreach events.

Worldwide, there are over 2,000 known species of insects in the order Mantodea. Found primarily in temperate and tropical regions, there are only about 20 species of mantids native to the US – none of which are native to Montana. Surprisingly, the most commonly found mantids are actually introduced from Europe and Asia more than a hundred years ago. And you can occasionally find mantids in Montana that have been released by gardeners as a natural way to reduce garden pests.

The majority of mantids are ambush predators, patiently

waiting for prey to move into striking range, rather than actively hunting. With the ability to rotate their head 180 degrees and eyesight that allows them to detect prey up to 50 feet away, a hungry mantis is a formidable predator. Utilizing two grasping, spiked forelegs to catch and securely hold prey, mantids primarily feed on other invertebrates but are known to tackle just about anything they can handle. They can eat frogs, lizards, and even small birds! The female mantid is infamous for eating the male after mating, but this tends to be the exception rather than the rule.

Praying mantids are masters of camouflage. The coloration of mantids not only helps them blend in with their surroundings, they've evolved to physically mimic leaves,

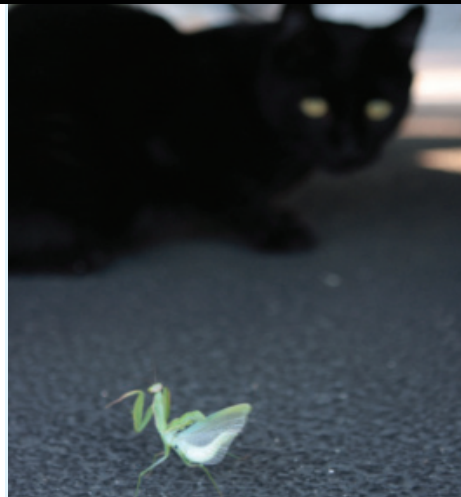
sticks, tree bark, blades of grass, flowers, and even stones. Most mantids sway from side to side as they walk. Combined with their camouflage, this motion makes them appear like a leaf or branch swaying in the wind - they even increase their swaying movement with increasing wind speeds!



Mantid Nymph

Mantids go through an incomplete life cycle: egg to nymph to adult - they don't go through complete metamorphosis. The nymphs are "Mini Me's", resembling a small adult without wings. Depending on the species, female mantids can lay up to four hundred eggs in a foamy liquid that solidifies to become a protective egg case (called an oothecae). When the eggs hatch and the nymphs emerge, their first meal is often one of their less fortunate siblings. The surviving nymphs will need to shed their exoskeleton (or molt) between 5 and 10 times to reach adulthood, emerging with wings only after the final molt. The life span of most mantids is between 8 and 12 months.

With the busy outreach season ready to start, we will soon add a new crew of praying mantids to our collection of invertebrate ambassadors. Be sure to visit us at an upcoming event to see these amazing animals for yourself.



If threatened, many mantids will assume a defensive posture (diemantic display), raising their wings and rearing back with the forelegs off to the side. Some species having eye spots on their wings to make them look like a much larger animal to a potential predator.

Mantid diemantic display.
Photo to the left by Ronni Flannery.

Outstanding Volunteer!



The day after Halloween - most children are worn out from a long night of trick-or-treating and candy eating. But the students at Florence Carlton Elementary

School couldn't wait to come to school. Scorpions, cockroaches and a millipede... oh my!

Thanks to wonderful support from parents, the first grade classes and first/second grade combo class raised enough money from a bake sale to have an insect program from the Missoula Butterfly House and Insectarium. Imagine the excitement as they gathered in a classroom filled with small terrariums, just anticipating what could be inside. Sitting in a circle, they waited patiently as Sue Martinsen, the outreach coordinator for the Butterfly House, grabbed a big blow-up insect and started the lesson.

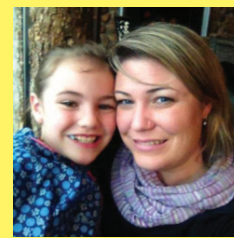
Flanked by her two assistants, Jesse Head, and Alison Perkins,

Sue explained to the students the characteristics of an insect. Everyone oohed and aahed as Sue, Jesse, and Alison brought different invertebrates around for all to see. The children would enthusiastically shout "insect" or "not an insect" as they compared what they learned about insects with the creatures in front of them.

It's obvious that Sue has been a classroom teacher for 30 years.

She captures the students' attention and is quick to laugh as they react to the creatures. Now retired from Florence Carlton School, she graciously agreed to be the Outreach Coordinator for the Missoula Butterfly House and Insectarium. The program she presents in schools allows students to get an up-close and personal view of the amazing world of invertebrates. Such an experience is priceless for the students in our community. Many thanks go out to Sue for being such an amazing volunteer and supporter!

New Board Member Erin M. Erickson



Erin was raised in Polson, Montana. She attended The University of Montana School of Law, and is

now a partner at the law firm of Bohyer, Erickson, Beaudette & Tranel, P.C.

Erin and her husband, George, enjoy spending time with their daughter Beatrice, 8, son Henry, 3, and elderly pug, Oliver. Erin and Bea have been life-long lovers of butterflies, flora, and walks in the woods. Bea is doing her best to pass along that love and interest to her little brother Henry. The Ericksons can be found trekking all over the Northwest, cross country skiing, gardening, biking, playing hockey, and attending figure skating competitions.

Erin is actively involved in the Missoula community. She served as a Board of Director for the Missoula Food Bank and currently serves on the Missoula Figure Skating Club. She also served served as pro bono counsel for Missoula's WORD - Women's Opportunity & Resource Development.

Board Members

Larry Brehm
Lawrence K. Brehm, A.I.A., Architect
Bryce Christiaens
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
Senior Policy Representative, The Nature Conservancy
Kris Paffhausen
Vice President/Controller, Envirocon
Alison Perkins
Science Educator, UM
John Wells
Architect, MacArthur, Means, and Wells

Teachers Imagine

For more information about our programs or to schedule a visit please contact insecteducation@gmail.com or go to missoulabutterflyhouse.org.



Follow us on Facebook!

Learn about a host of insects (local and exotic) as well as keep on top of the latest Butterfly House news. Share our page with your friends to help us get our message out!



Tell a Friend

Strong community support will be essential in making this vision a reality. Please help by sharing our mission with your friends, colleagues, and family. Consider *recycling* this newsletter by passing it along to someone else.

Upcoming Events

The Invertebrate Ambassadors will be out and about this summer! Stop by and see them at these events:

May 3 - First Friday at the Naturalist's Mercantile, 131 E. Main St., 5:00-8:00.

July 18 - Downtown ToNight, Caras Park, 5:30-8:30.

July 30 - Draught Works Chug for Charity, 915 Toole Ave., 5:00-8:00.

August 24 - River City Roots Festival, Caras Park, Noon-6:00.

To stay informed of additional events, please visit our website or follow us on facebook.

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!"

WEBSITE

We're online at www.missoulabutterflyhouse.org!

Our website has all kinds of useful information, including current activities, gardening tips, and copies of our newsletters. You can even join the Butterfly House and keep the buzz going with PayPal.