

MISSOULA  
BUTTERFLY HOUSE  
AND INSECTARIUM

Winter Newsletter 2011



## 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.

## Our Thanks

Thanks to the Max and Betty Swanson Foundation and all our volunteers for making our 2011 outreach efforts a success.

## Connect Today!



Missoula Butterfly House

## The Buzz

To many of us, a year does not seem like a long time. But to a new organization embarking on a unique mission, it's a critical period for growth. Throughout the past year we introduced hundreds of friends to our mission, and our bug ambassadors, at nearly two dozen outreach events. We partnered with spectrUM Discovery Area, Montana Fish, Wildlife and Parks, the Montana Natural History Center and others to increase awareness and understanding of insects and their relatives. We forged critical relationships that have been instrumental in our search for a location for our future facility.

As winter takes hold and insect activity decreases outside, our

bug ambassadors are also taking a break as we focus on strengthening our organization for the exciting work ahead, planning our outreach and education efforts for the next year, beginning the preliminary design of our facility, and connecting with more friends like you—friends that are playing an important part in making this vision a reality.

We have much to be thankful for! Your support and enthusiasm for our mission is on top of the list. On behalf of all of us at the Missoula Butterfly House and Insectarium, best wishes for the holiday season. I look forward to sharing our progress and successes with you in the New Year!

## Why Your Membership Matters

As a supporter of the Missoula Butterfly House and Insectarium, your membership goes far beyond providing the financial support needed to further our mission.

It's your partnership in an exciting vision. It's your voice in a collective expression saying, "yes, we want this in our community." It's your

investment in what will prove to be a unique and valuable resource for western Montana. And, yes, it's the fuel that is needed to make this vision a reality. Butterfly House member Dale Woolhiser believes "this is one of the most exciting efforts underway for our community at this time."

If you are already a member, thank you for your confidence and support! If you are not a member, please consider joining us today.

Don't hesitate to contact us at [insecteducation@gmail.com](mailto:insecteducation@gmail.com) or 406-214-5036 if you have any questions or would like more information.





Western Conifer Seed Bug  
(*Leptoglossus occidentalis*)

Photo courtesy of Gallatin County, Montana

## Insect In-Sight

The holidays always seem to be busy with houseguests, some wanted more than others. One winter houseguest you may or may not want is the Western conifer seed bug. Western conifer seed bugs are true bugs. That means they are members of the order Hemiptera (hemi = half; pteron = wing), a group whose defining characteristic is actually a beak, or rostrum, that is usually used for piercing through the tissues of plants and sucking out liquids, like sap. As the name of the order implies, the forewings are typically hard at the base and membranous further out. The forewings on some insects, like beetles, are completely hard.

Western conifer seed bugs, like all hemipterans, are hemimetabolous – they don't go through complete metamorphosis. Instead, their life cycle consists of an egg stage, five nymphal stages (holometabolous insects, like butterflies, have larval stages), and an adult stage. The nymphs are “mini-me's” - except their wings aren't fully developed nor are they reproductively active. It's the adults that often make themselves at home in your home during the winter. They aren't eating anything – just looking for a warm

place to hang out. Western conifer seed bugs are frequently lumped together with “stink bugs” (stink bugs are actually a different family) because they also emit an odor when they are disturbed. **Let us know what you think they smell like on our Facebook page!**

These houseguests won't overstay their welcome though – they'll move out in spring. Females will lay eggs on the needles and leaves of the trees in your yard, and the cycle will start all over again. Western conifer seed bugs prefer pines, like Douglas-fir and other conifers, but they will feed on developing seeds and fruits of a wide variety of plants, including dogwood and sumac. The developing nymphs will feed throughout the summer, and by mid-August, nymphs in all stages of development and new adults may be observed feeding on the same cones. Once the nymphs reach adulthood, they will feed on ripening seeds until early fall. As the weather starts to turn cold, the adults will be looking for overwintering sites, including a move back inside. The best way to keep them out is to seal off cracks and other openings to your home. Or, you can spend the winter observing these fine houseguests that bring their own room freshener!

## Butterfly House new board members

We are thrilled to welcome three new members to the board of directors:

**Bryce Christiaens:** Bryce is a Montana native from the Rocky Mountain Front and is the founder/owner/farmer of Native Ideals Seed Farm; focusing on growing local, native wildflower seed for ecological restoration projects throughout the Northern Rocky Mountains. Bryce's interests include native plant and insect community conservation, native plant propagation, gardening, hiking, fishing, hunting and generally being outside enjoying Montana.

**Eleanor Morris:** Eleanor studied forestry and ecology at the University of Montana and now works on ballot measures and state policy across the West. She enjoys backpacking, biking and knitting. She is looking forward to her two nieces and nephews enjoying the Missoula Butterfly House when it opens!

**John Wells:** John is one of the founding partners of MacArthur, Means and Wells Architects. A Missoulian from the age of two, John is pleased and proud to have had the opportunity to build a career in his hometown. He and his lovely wife Leslie live in the university area and occasionally get to see their son Jay who is a student at the University of Montana. When not working they enjoy the wonderful outdoor opportunities in Montana - hiking, rafting, kayaking, snowshoeing, and huckleberry picking.

**Welcome to the  
Butterfly House family!**



# Kids' Corner - Dedicated to Byron Weber and the Young at Heart

## Winter Insect Wonderland

Ever wonder what insects do in the winter? It seems like they just disappear. Do they all die, or are they out there, just out of sight? Actually, different insects have different strategies for surviving the cold. Some insects do leave the area - migrating to warmer parts of the country. Others die, but they lay eggs that can survive the harsh conditions - especially if they are in a well-protected spot. The larvae of other insects burrow under rocks or into the soil, only to emerge as adults when conditions are right. Still other species survive in the seed heads of plants or by creating galls (galls are thick layers of plant tissue that look kind of like a ball). Underwater, larvae can survive in streams or in air pockets under ice-covered ponds. Some insects enter a state called diapause (similar to hibernation) in which their growth and development are temporarily suspended. Honey bees actually crowd together in the hive and move their bodies and wings to create heat.

Butterflies run the gamut of strategies. Some butterflies overwinter in Montana as caterpillars or pupa. A few winter as eggs. The Mourning Cloak (our state butterfly) builds up an antifreeze-like chemical in its body that enables it to overwinter in tree holes as an adult.

Go outside and explore your backyard. Look under rocks. Gently open up the seed heads of knapweed plants. Take a walk on a sunny day. You may be surprised at the diversity of insects you can find—even in winter!

## Board of Directors

- Bryce Christiaens
- Jennifer Marangelo
- Glenn Marangelo
- Eleanor Morris
- Alison Perkins
- Lisa Verlanic Fowler
- John Wells

**Imagine**  
a place in Missoula, MT where adults and kids alike can experience the wonder of tropical butterflies and a host of other insect species.

Help us create the experience.

**DONATE TODAY!**

[www.missoulabutterflyhouse.org](http://www.missoulabutterflyhouse.org)



Photo courtesy of the Butterfly Pavilion



Photo by Glenn Marangelo.

## “Bug” Ambassadors:

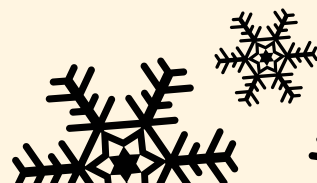
Our newest “Bug” Ambassadors are Blue Death Feigning Beetles (*Asbolus verrucosus*), members of the darkling beetle family (Family Tenebrionidae). They can be found in the wild in the southwestern region of the United States - in the Sonoran Desert - usually around areas of water. They eat decaying plant material in the wild, but here in Missoula, they are enjoying a variety of fruits and vegetables.

As their name implies, these beetles will pretend to be dead to avoid being eaten by predators. If a beetle feels threatened, it will roll over on its back with its legs up in the air. Its body will become rigid. The beetle will stay that way until it thinks the threat has passed - sometimes for several minutes. They are extremely convincing actors! We’ve even been fooled!

**Find more bug pics on facebook!**



Missoula Butterfly House



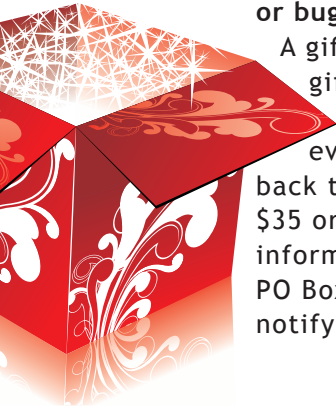
Creating a place for everyone to experience the wonders of insects.



## 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 send a letter notifying the recipient of your thoughtful gift!



Keep up to date on Butterfly House activities as well as local insect happenings, news, and trivia. Please "like" or "share" our page with your friends to help us get our message out!

## Join Us for First Night!

Ring in the New Year with our bug ambassadors at First Night Missoula, December 31st, 2011 at the University of Montana's University Center Atrium from 3:00 to 6:00 PM.



## 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. Go to [www.missoulabutterflyhouse.org](http://www.missoulabutterflyhouse.org) and click on "Please Donate Now!"

**Or mail your tax-deductible contribution to:**

Missoula Butterfly House  
and Insectarium  
PO Box 8885  
Missoula, MT 59807



### Website

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.

[www.missoulabutterflyhouse.org](http://www.missoulabutterflyhouse.org)

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