

# MISSOULA BUTTERFLY HOUSE AND INSECTARIUM NEWS



## THE BUZZ Change is in The Air

By Glenn Marangelo, Founding Board Member

Winter 2018

INSIDE...

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### OUR MISSION

The Missoula Butterfly House and Insectarium inspires an appreciation and understanding of insects and their relatives through educational programs and innovative science exhibits featuring live invertebrates.



*Autographa metallica taking advantage of late summer blooms in the Mission Mountains Wilderness.*

Heraclitus, a Greek philosopher, once wisely stated, “The only thing that is constant is change.” Another wise, and possibly better known, theorist more recently noted, “This is a new year. A new beginning. And things will change.” – Taylor Swift.

In regard to the Missoula Butterfly House and Insectarium and the year ahead, they could not be more right.

2019 will be a year of exciting change on nearly every front. For Insectarium visitors, teachers bringing classes for field trips, and attendees of our summer camps and special programs, in the first eight months of the year things will appear pretty much the same. But believe me ...behind the scenes, the approaching end of our lease in August will be setting a lot of other gears in motion.

The hunt for new office space will begin, for the humans as well as the bugs. And thanks to recent conversation with some of our partners, we already have some exciting opportunities to pursue.

We'll be revamping our education programs for the short-term, refocusing our efforts to create and take advantage of “off-site” opportunities by taking

our programs into local schools, exploring on-line distance learning opportunities for our friends a bit further away, coordinating with our partners on special programs and camps, and holding more of our popular after school bug clubs.

We'll also be getting back to our familiar roots by attending a variety of community events where we can show off some of our amazing animals and engage and inform community members about our exciting direction for the months ahead.

And last, but by no means least, we'll be gearing up to launch a capital campaign with our partners at the Missoula County Extension Office and Weed District to build a new home for our collective operations and programs at the Missoula County Fairgrounds. This new home will include our long-term dream of a larger facility featuring a tropical butterfly house.

Yes, Heraclitus and Taylor ...things will change. But this is the change we've been working toward for the past decade. So, bring it on. We couldn't be more excited.

Here's to the exciting New Year ahead! 🦋

### VISIT US!

218 E. Front St, Missoula  
406-317-1211

#### Admission:

\$4 for guests ages 4 and up  
FREE for members

#### Open:

Wednesday-Friday 11am-5pm  
Saturday 10am-5pm

HOURS ARE SUBJECT  
TO CHANGE. PLEASE CALL  
BEFORE YOU VISIT.



# INSECT INSIGHT Snow Flies



With winter settling in and insect activity at a low, it doesn't mean there's nothing to observe during your cold and snowy outings. You just need to know what to look for and where.

In addition to snow fleas and certain spiders that remain active during the winter, keep your eyes open for Snow Flies (genus *Chionea*), a wingless genus of Limoniid Crane Flies. Unlike other species of crane flies, these hardy insects are active during winter. They are typically observed in forested areas walking on top of snowbanks. Thanks to their ability to produce glycerol in their hemolymph (blood), they can avoid freezing to death.

Adult snow flies live for up to two months -- much longer than the species of winged crane flies we see in the summer, which only live 7 to 10 days. While they are known to drink water, they will go their entire adult life without eating since food particles can allow ice to form in their "winter ready" bodies. Females will lay eggs individually, with the eggs surviving the rest of winter. In late winter / early spring, the larvae will emerge, grow throughout the spring and summer, and pupate in the fall. The next generation of adults will once again emerge in the winter.

As an insect, waiting for winter to spend your adult life has its advantages. With no dragonflies, ants, frogs, and fewer predators like spiders and birds out and about; snow flies have less to worry about in terms of becoming dinner for something else.

Their lack of wings is likely attributed to the fact that it is very difficult to generate enough energy to maintain flight muscles at sub-freezing temperatures. Furthermore, since they crawl through the snow to lay their eggs in rodent burrows (their larvae feeding on rodent poop), wings would only get in the way. 🐛



BUG BIT

Notice the white ring around this snow fly's neck. This is an egg capsule of a species of nematode (roundworm) that are parasites of rodents. Since snow flies frequent rodent nests under the snow, the female nematode will lay her eggs around a snow fly's neck, using the fly as "nest to nest transportation" for her offspring.



CRAWL ON OVER TO OUR WEBSITE TO LEARN ABOUT MORE BUG FUN, LIKE FIELD TRIPS AND BIRTHDAY PARTIES!

KEEP ON TOP OF THE LATEST EVENTS AND ANNOUNCEMENTS:

Send an email to [info@missoulabutterflyhouse.org](mailto:info@missoulabutterflyhouse.org) asking to be added to our weekly email list and follow us on Facebook.



## TAKING STOCK

To "take stock" means to think carefully about a situation or event and form an opinion about it. We have ...and like us, you might think this is a great opportunity. We can now accept gifts of stock. Make a gift using appreciated stock and avoid paying any capital gains tax. What a great way to support our work and get additional tax benefits for your generosity. For more information on this new giving opportunity, please contact Glenn at [glenn@missoulabutterflyhouse.org](mailto:glenn@missoulabutterflyhouse.org) or 406-317-1211.





# VOLUNTEER

# FLOOD Spotlight



By Carolyn Taber, Museum Educator

For a small organization, I'm astounded just how much the Insectarium is able to offer the Missoula community. So much of this is thanks to our AMAZING crew of volunteers ...so many that instead of a Volunteer Spotlight, I'm providing this "Floodlight".

Our volunteers do everything from staffing the Encounter Area to taking care of our critters to scraping icing off the carpet after our Halloween celebration. Even the layout of this newsletter is thanks to an incredible volunteer. It's never a dull moment at the Insectarium. And our volunteers are right in the thick of it, helping make it all happen.

There are days I can't believe how lucky we've been in cultivating such an amazing team. They range in age from 12 to 70. Some are new to town and looking to make new connections while supporting a cause they love. Some have 'day jobs', but want to stay connected to the world of education and science. Others are students, homeschooling parents, and retired nurses. They come from various backgrounds, volunteer for different reasons, and have different skills and knowledge they bring with them. But they all have one thing in common ...their enthusiasm for our work, patience, and ability to connect with visitors of all ages. I can't help but think of Hannah Little (volunteer extraordinaire), whose spirit could not even be dampened by a cold, rainy morning of tabling at the Farmer's Market. Now that's dedication.

When visitors interact with that kind of enthusiasm, it leaves a lasting impression. All of a sudden that spider no longer looks so frightening, and you realize ...it's actually fascinating. You "warm" to the thought of a cockroach after meeting one of our Madagascan Hissers.

Having volunteers that are as excited about our work as I am helps us create that shift in how we all look at the world of creepy crawlies. To all of our incredible volunteers, THANK YOU! We literally could not do it without you. 🦋



## STAFF TRANSITIONS



Early this fall we said goodbye to two staff members who had been with us almost since the beginning. Madeleine Hull (Museum Interpreter) moved into a position with the Missoula Art Museum and Erin Gleason (Lead Animal Keeper) gravitated to working with animals that are a bit larger as a Vet Tech. Their enthusiasm, talent, and love for our critters played an important role in the Missoula Insectarium's growth and ability to offer such unique programs. Our best wishes for your success on this next journey.

Thanks to the amazing crew of volunteers we are so fortunate to have, we quickly had two individuals on an extremely short list for both openings. We're thrilled to welcome Brenna Shea as our Lead Animal Keeper and Allison Dehnel as our Museum Interpreter. No strangers to the Insectarium and our programs, they bring a lot of passion and knowledge about insects to our team. So, the next time you visit the Insectarium, be sure to welcome Brenna and Allison to the crew. 🦋



## MISSOULA BUTTERFLY HOUSE & INSECTARIUM STAFF

Allison Dehnel  
Museum Interpreter

Jen Marangelo  
Executive Director

Brenna Shea  
Lead Animal Keeper

Carolyn Taber  
Museum Educator

Glenn Marangelo  
Development Director

Rose Marchak  
Animal Care Intern

Quinn Staats  
Work Study Student

Karen Weaver  
Admissions Associate



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Missoula Insectarium





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COME LEARN ABOUT THE LITTLE THINGS THAT RUN THE WORLD!

## SPRING FIELD TRIPS!



### Spring Spiders

Everyone LOVES spiders, right? Never fear, this field trip covers everything from spider anatomy to how spiders digest their food. You'll learn to at least appreciate, if not love, our 8-legged friends.

### Bug Biomimicry

Biomimicry is what happens when humans take inspiration from the natural world to solve problems. We'll explore how insects have been the source of such inspiration and will even get to prototype our own inventions.

### Little Things, Big Jobs

Insects have lots of important jobs and during this field trip we'll explore three of them: pollination, predation, and decomposition.

### Pollinator Power

How does pollination work? Why is it important and why should we care? What about a pollinator's body makes it perfect for pollination? We'll discover the answers to all of these questions and more by using microscopes, playing games and exploring in the Insectarium.

### Missoula Butterfly House and Insectarium Board of Directors

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Glenn Marangelo  
 Development Director, Missoula  
 Butterfly House and Insectarium

Jen Marangelo  
 Executive Director, Missoula  
 Butterfly House and Insectarium

Megan Robson, *Vice-President*  
 Realtor, Berkshire Hathaway  
 HomeService Montana Properties

For more information or to inquire about a field trip go to [www.missoulabutterflyhouse.org/elementary/](http://www.missoulabutterflyhouse.org/elementary/) or contact Carolyn Taber at 406-317-1211 or [carolyn@missoulabutterflyhouse.org](mailto:carolyn@missoulabutterflyhouse.org).