

# MISSOULA BUTTERFLY HOUSE AND INSECTARIUM

# NEWS

Fall 2016

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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.

## 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.

## THE BUZZ Flying High!

By Glenn Marangelo, Founding Board Member

While this is not quite a *State of The Union* address, the Missoula Insectarium has now been open for over a year. And that's certainly something worth talking about.

Opening any new business is like going from zero to 60 in a new car – you're not sure how all the controls work or how it will perform at high speed, but your foot is still firmly on the gas pedal. Thanks to a lot of hard work from our amazing staff, board of directors, and volunteers our first "test drive" was incredibly successful.



Our tarantula feedings are always a hit!

Since opening our doors in June of 2015, we have welcomed over 130 classes for field trips; greeted almost 20,000 visitors through our doors; packed our classroom for 8 evening lectures; engaged visitors through dozens of special programs (including our popular tarantula feedings); held 9 school's out day camps and three week-long summer camps; and much more. Thanks to the enthusiastic response from our many visitors, it's been an incredible year of sharing and learning.

The past months also allowed us to make improvements within our facility, strengthen our operating procedures and practices, and test our ability to handle the unexpected – most notable being a flood in the museum, lab, and classroom (luckily none of our animals were harmed). With plans for additional improvements and new exhibits in the months ahead, we're continuing to expand the reach and impact of our education efforts.

Thanks to the support and dedication of friends like you, over the past 16 months we've created, and continued to build momentum for, what has proven to be an impactful and truly unique resource for our schools and destination for our community. We've begun a journey that will become even more exciting in the months and years ahead.

But don't just take my word for it. Visit us to learn about a host of amazing animals, join us for an upcoming lecture, arrange for a class field trip, or celebrate a birthday with us.

Thanks for making our first year so incredible. I look forward to seeing you at the Missoula Insectarium soon! 🦋



Since June of 2015  
we've greeted almost  
**20,000 visitors!**



Follow us on Facebook!  
Missoula Insectarium

Fall | 2016



## INSECT INSIGHT

# Ichneumon Wasp



**Now that's a big wasp!** From head to the tip of the "tail," Ichneumon wasps in the subfamily Rhyssinae can range between 3 to 4 inches in length. Despite their large size and what appears to be a massive stinger, they are totally harmless.

That "stinger" is the female's ovipositor, which is used for laying eggs. The ovipositor of the giant ichneumon wasp is the longest egg-laying organ known among biologists. And there's good reason. These impressive wasps have a big job ahead of them when it comes to laying an egg.

This wasp is parasitic, laying its eggs onto another living animal for their offspring to eventually consume. While that may not sound too different to how other parasitic insects make a living, Rhyssinae's specific host is not so easy to get to. Specializing on the larvae of wood wasps or horntail wasps, the ichneumon wasp needs to first locate and then lay an egg on a larva that lives inside wood.

Using her sensitive antennae, the female ichneumon wasp feels for vibrations indicating that a host larva is present. Once she's located a larva, the work begins. She'll raise her long abdomen into the air, trying to position her ovipositor directly above the larva that is up to two inches under the surface of the wood. Then, she'll begin to "drill" her ovipositor through the wood, making corrections along the way if needed, to reach the larva. This drilling process can take between 30 minutes to an hour. Once successful, she'll transport a single egg through the ovipositor and onto the host larva. The ichneumon wasp's egg will soon hatch and begin to feed upon the horntail wasp larva. Next spring, an adult ichneumon wasp will emerge and begin this amazing process again. 🐛

### BUG BIT

Inspired by the ovipositor of the giant ichneumon wasp, researchers are developing a flexible, steerable needle that can be used for invasive surgical procedures for delicate tissues such as the brain.



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.

## BECOME A MEMBER

Membership includes free admission (for the number shown for each level) for one year, discounts on special presentations and birthday parties, and invitations to exhibit openings and special events. Sustainer's membership includes a bonus personal, behind-the-scenes tour for up to 6.

**INDIVIDUAL (1): \$35   PAIRS (2): \$55   FAMILY (3-5): \$65-\$100   SUSTAINER (6): \$250**





# PROGRAMS AND UPCOMING EVENTS

WE OFFER PROGRAMS FOR  
A VARIETY OF AGE RANGES!

## THERE IS SOMETHING FOR EVERYONE AT THE MISSOULA INSECTARIUM!

Between our weekly programs, tarantula feedings, our early childhood program: Lil' Bugs, our popular Bugs & Brews lecture series, and more, *there's always a lot happening at the Missoula Insectarium!*



### Animal Encounter Cart

AGES: ALL

Whenever we are open, a museum interpreter is available to answer questions and introduce you to some of our bug ambassadors. With over 40 species in our lab, you never know whom you will meet!

### Monthly Themes

AGES: ALL

Each month we pick a different theme to explore so there is always something new to learn and do at the Missoula Insectarium. The themes influence our scavenger hunts, weekly activities, microscope stations, and more.

**NOVEMBER:** Insects and Food

**DECEMBER:** Where do insects go for winter?

### Weekly Events

AGES: ALL

Every Thursday from 3-5 and Saturday from noon-2 continue exploring our monthly theme with drop-in style craft or science activities.

### Tarantula Feedings

AGES: ALL

Have you ever seen a hungry tarantula eat a cricket? Come to the Insectarium during one of our regular feedings and you'll see a Chilean Rose Hair Tarantula eat a live cricket and learn how "Rosie" captures and digests her prey!

**THURSDAY:** 3:30pm **FRIDAY:** 4:00pm **SATURDAY:** 1:00pm and 2:30pm

### Early Childhood Education Programming:

#### Lil' Bugs

AGES: 2-5

Lil' Bugs introduces kids ages 2-5 to the wonderful world of insects and their relatives. Through story time, hands on interactions with Bug Ambassadors, and fun games, kids and their parents will play and learn together about a new topic each visit.

**TIME:** 11:00-noon

**DATES:** Every second and fourth Thursday

**COST:** Free with regular admission to the Insectarium. Children 3 & under are free.

### School's Out Day Camps

AGES: K-5

No School? No Problem! School's Out Day Camps at the Missoula Insectarium are for any young bug lover that wants to keep exploring when school is out. Kids in grades K-5 will explore the Insectarium, play fun games, interact with live Bug Ambassadors and more. Keep the learning going when your kids are off from school by signing them up for School's Out Day Camps at the Insectarium.

**TIME:** 9:00 am - 4:00 pm

**DATES:** 11/11, 1/16, 2/20, 3/17, 4/24

**COST:** \$50 per student, \$45 for members

### Bugs & Brews

AGES: ADULT

What happens when you mix after-hours access to the Insectarium, local beers, and a fascinating expert lecturer? You get the Insectarium's monthly evening lecture series: Bugs & Brews! Our November lecture features Scott Debnam who will tell you everything you want to know about honeybees.

**TIME:** Doors open at 6:30 and speaker starts at 7:10. The insectarium will be open for exploration before the speaker and after, until 8:30.

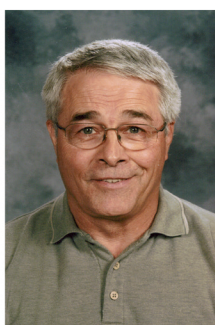
**DATE:** 11/15 (Check [www.missoulabutterflyhouse.org](http://www.missoulabutterflyhouse.org) for upcoming lectures.)

**COST:** Lecture costs \$5 and includes two complementary drink tickets. Must be 21 or over for alcohol.

**COME LEARN ABOUT THE LITTLE  
THINGS THAT RUN THE WORLD!**

## DEDICATING THE THE BYRON WEBER CLASSROOM

When we opened the Missoula Insectarium we decided to wait on something very special because we wanted to “do it right.” On April 22, 2016 we were honored to dedicate our classroom in memory of Byron Weber. Byron was one of the founding board members of the Missoula Butterfly House and Insectarium. He had a way about him that quickly conveyed his passion and knowledge of the natural world to his students, colleagues, friends, and our community. As it says on the plaque that is now outside our Byron Weber Classroom, “He nurtured the naturalist in all of us.”



**“He nurtured  
the naturalist  
in all of us.”**

### Missoula Butterfly House and Insectarium Board of Directors

**Marcy Allen, Vice-President**  
*Independent Consultant*

**Jen Boyer**  
*Certified Registered  
Nurse Anesthetist*

**Larry Brehm**  
*Architect, L.K.Brehm, A.I.A.*

**Bryce Christiaens, President**  
*County Weed District Mgr.,  
Owner, Native Ideals Seed Co.*

**Lisa Verlanic Fowler, Secretary**  
*Teacher, Florence Carlton School*

**Jen Marangelo, Executive Director**  
*Missoula Butterfly House  
and Insectarium*

**Glenn Marangelo,**  
*Development Director*  
*Missoula Butterfly House  
and Insectarium*

*Non-Profit Consultant, Place  
Based Nonprofit Consulting, LLC*

**John Wells, Treasurer**  
*Architect, MacArthur,  
Means, and Wells*



### NOT SURE WHAT TO GET YOUR BUG ENTHUSIAST FOR THE HOLIDAYS?

Day passes to the Missoula Insectarium make great stocking stuffers! Or, if you want to give a gift that gives back all year long, consider a gift membership. Members receive free entrance for one full year!

### DO YOU HAVE AN EVENT OR PARTY COMING UP?

Would you like to hold it in a unique space? The Insectarium is now available for after-hours events.

**PLEASE CALL 317-1211 OR EMAIL [info@missoulabutterflyhouse.org](mailto:info@missoulabutterflyhouse.org)  
TO FIND OUT MORE.**

