



The Buzz Almost Time to Celebrate!

By Jen Marangelo, Executive Director

Winter 2022

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Our Development Director working on his celebration dance moves during a construction tour.

Our Mission

The Missoula Butterfly House and Insectarium inspires an appreciation and understanding of insects and their relatives.

Join the Buzz!

We plan to open our doors next summer! For more information about our exciting future, go to Jointhebuzzmissoula.org or give us a call at 406-317-1211.

Some days I feel like I can't contain my excitement. We're so close to opening our new facility! Other days, I feel queasy just thinking about how much work we need to accomplish before we open our doors. But after chasing this dream for more than 16 years, I wouldn't want it any other way. What an extraordinary journey it's been ...and what an extraordinary year ahead it will be.

As we move through the remaining weeks of 2022, we're preparing to enter a milestone year. To put it in insect terms, the New Year will bring the final stages of the organizational metamorphosis we've been undergoing for more than a decade. Everything we've done over the years has ultimately led to this exciting stage. And when we open the doors to the new Missoula Butterfly House and Insectarium in 2023, we'll emerge as a bigger, more impactful version of our former self.

To make another bug analogy ...our progress in moving this vision forward is like a millipede. There have been many legs working together to make our momentum possible. Far too many

to list here, but plenty of room for more in the months ahead.

In the nonprofit world (and in life in general), it often feels like celebrations are short-lived. A few high fives shared between staff, board, and committee members and your focus quickly swings to the next goal. But in the year ahead, we plan to properly celebrate the progress and success friends like you have made possible.

However, after the last of the champagne is finished and the confetti swept up, the celebration will continue ...each and every time you and I walk through the doors of the incredibly unique destination we've created. I hope you are proud of what we're accomplishing, and will experience a jolt of excitement each and every time you visit.

We could not have accomplished this without the incredible community commitment and enthusiasm that has been expressed for this long-term dream. My sincere thanks to each and every supporter who has made this effort a success.

Best wishes for the holiday season ...and get ready for a very buggy New Year! 🐛

2022 US Ants / Citizen DNA Barcode Network



2022 was a stellar year for our community science program. Since 2020, we've partnered with the DNA Learning Center in Long Island, NY to develop Barcoding US Ants (part of the Citizen DNA Barcode Network) – a program aimed at engaging amateur naturalists in the science of DNA barcoding. Marking the first time we invited the public-at-large to participate in the program, the results were nothing less than outstanding! Throughout the past months, we actively engaged participants in every step of the process: ant collection; identification; DNA extraction; PCR; gel electrophoresis; and DNA analysis.

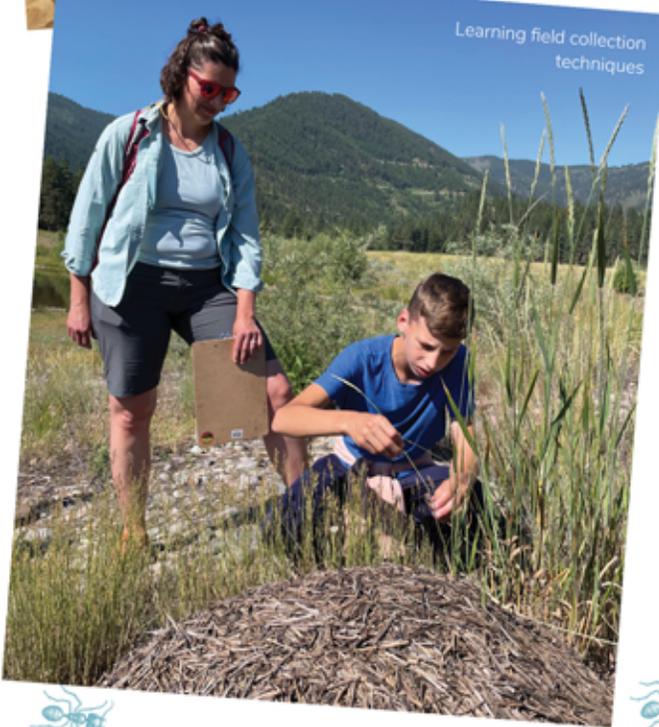
Organized and led by our staff member Brenna Shea (better known as Bug Wrangler Brenna), participants started by collecting ant specimens for identification. During the summer, Brenna led three field excursions to teach ant collection techniques. Several ants were collected during the field days, but participants took that enthusiasm home ...literally! In the weeks ahead nearly 20 species were collected from hiking trails, local parks, and even backyards.

After field collection, participants moved on to lab work. They learned how to identify their ants using classical taxonomic methods, documented their specimens, extracted DNA, and performed PCR and gel electrophoresis before sending their samples off for sequencing. After DNA sequences were returned, participants analyzed the results and identified their ants based on the DNA barcodes.

Our participants were not the only ones having fun this summer. Brenna traveled to Long Island, NY to take part in an educator workshop, learning directly from colleagues at the DNA Learning Center. There, she received in-depth training and learned how to best implement the program in a community setting.

While Barcoding US Ants is done for the year, plans for next year's program are already in the works. The project scope will expand to include beetles and mosquitos. Together with ants, these three groups of insects represent important bioindicators of environmental change. By identifying and mapping species' ranges, community scientists are providing valuable insight to insect biodiversity and how species respond to climate change and human influence.

Stay tuned to find out how you can be a part of the Citizen DNA Barcode Network next year! 🐜



Construction Update

Construction of our new facility continues to move ahead! Each time we visit the site, we're so excited to see the progress and see our long-term dream becoming a reality!

While our friends at Jackson Contractor Group have done an amazing job in navigating this project during particularly challenging times, unfortunately it's been impossible to completely avoid supply chain issues. Our hope is to open our doors in mid to late-summer. Having worked toward this dream for many years, waiting another month or two is no big deal!

If you have any questions, would like more information, or would like to make a last minute campaign gift, please contact Glenn at 406-317-1211 / glenn@missoulabutterflyhouse.org or visit our website at www.missoulabutterflyhouse.org.

Bugs at the Confluence

It's been 10 years since Five Valleys Land Trust protected the historic Corra Ranch at the confluence of Rock Creek and the Clark Fork River. To celebrate this anniversary, earlier this year FVLT approached us to help with a "bioblitz" to help document the variety of wildlife utilizing the property after years of restoration work. A chance to get out of the office and look for bugs? Of course we jumped on board.

Trying to document the insects utilizing this 300-acre property would be no small task. To make the job manageable as well as make the informal survey easily replicable, we restricted our search to the restoration area that converted an artificial pond (created by a former landowner / developer) into a shallow groundwater wetland. In 2017 FVLT planted native shrubs to help improve and restore this unique habitat.

As we like to say about native plants and insects, "Plant it, and they will come." While we are still finalizing the identification of all that we observed, each survey revealed about 50 individual species (just scratching the surface of what's actually out there). Even more

exciting, each survey featured a number of species our group of bug geeks had never seen before.

Our thanks to Five Valleys Land Trust for inviting us to join in on the celebration of this important conservation success. And our thanks to Kristi DuBois, Kelly Dix, Peter Lesica, and Shane Sater for your help in finding and identifying the host of amazing animals we observed. 🐛



Velvet Ant (*Dasymutilla bioculata*)
by Kristi DuBois



Yellow-legged Mud-dauber Wasp (*Sceliphron caementarium*)



Embossed Calligraphy Leaf Beetle (*Calligrapha verrucosa*)



We're Growing



Welcome Nicole!

In September, we were thrilled to have Nicole Toone join our Board of Directors. Born in Seoul, South Korea, Nicole was one of seven adopted children by a Montana couple. Her family moved to Missoula when she was twelve and she's lived under the Big Sky ever since, even receiving her bachelor's degree in Business Finance from the University of Montana. Nicole is currently a commercial lender at First Security Bank, and has been employed there for over 16 years. She is the mother of two, an avid runner, and loves to be outdoors.



Welcome Kasey!

In early November, Kasey Bader joined our team as our first Development Associate. Kasey grew up in Georgia near the foothills of the Blue Ridge Mountains. Soon after receiving her BBA from the University of North Georgia, she moved to southwest Colorado for a change of scenery and quickly discovered ranching at the intersection of her business background and love of the natural world. Ready to further her conservation and development interests, she joined the philanthropy and communications team at a land conservancy in the Inland Northwest before finally landing in Missoula. Outside of the office she can be found riding horses, skiing, attempting to ID birds (and now insects), and untangling knots in her fly line.

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Brenna Shea
Lead Animal Keeper

Carolyn Taber
Museum Educator

Morgan McNeill
Marketing Coordinator

Glenn Marangelo
Development Director

Kasey Bader
Development Associate

Karen Weaver
Interpretive Content Creator



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EXPLORING the little things that run the world.

It's a Wrap...almost.

For the past two and a half years we've been working with our campaign steering committee, board of directors, staff, and a growing swarm of donors to secure the funds needed to build our new home. While we've reached our original goal, we're still working to raise additional funds to address specific areas of increased expenses by the end of the year. If you've been considering a gift to our capital campaign or would like to make another contribution, each and every donation moves us closer to opening day!

If you have questions about our future home or would like to make a gift (stock gifts too), please contact Glenn at 406-317-1211 or glenn@missoulabutterflyhouse.org.



Western Tiger Swallowtail
(*Papilio ratalus*)

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