

# FRIENDS OF THE PHILIP L. WRIGHT ZOOLOGICAL MUSEUM

FALL-WINTER 2022 (No. 40)

## FROM THE CURATOR

As we noted in the spring newsletter this year, 2022 marks the celebration of **two big anniversaries in the UMZM!** In the last issue, we looked at some of Dr. Wright's background and early years in the UMZM with the help of his children, and in this issue we'll travel further back in time for a peek into the first years of the museum under Dr. Morton Elrod. Read on to learn more about this history, and more about what we've been up to 125 years on!

## DEDICATION : 25 YEARS

**Dr. Phil Wright** arrived at UM in 1939 and assumed leadership of the collections. An avid birder and researcher focused on delayed implantation and reproduction of mustelids, his collecting focused on birds and mammals of western Montana. Under his guidance, this part of the museum grew rapidly (for a while, over 1,000 specimens were added annually!), building the foundation of what the UMZM is able to offer the scientific community today and into the future.

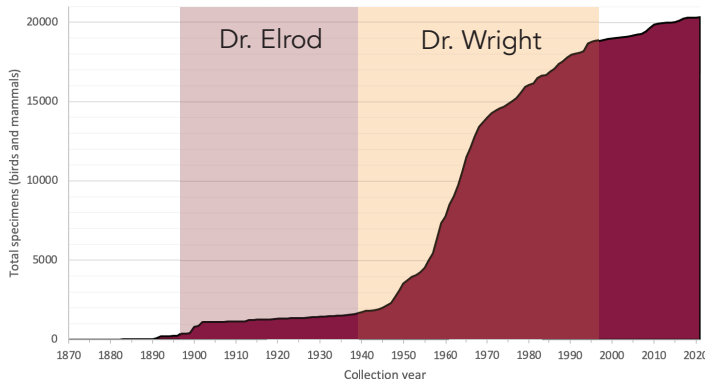
Read more about Dr. Wright:

[Spring 2022 newsletter](#)



ABOVE: Dr. Wright measuring a specimen in the 1967 UM Sentinel Yearbook.

BELOW: Accumulation curve of specimens in the bird and mammal collections, showcasing Dr. Elrod's early contributions (1897-1939) and especially growth under Dr. Wright's guidance (1939-1990s).



## FOUNDING : 125 YEARS

**Dr. Morton Elrod** is credited with founding the UMZM, as he brought our first (and many of our oldest) specimens to Missoula for use primarily in teaching. These were the days



ABOVE: Dr. Elrod in his office (ca. 1920, photographer unknown).

BELOW: Biology students on Mt. Sentinel (1903, Morton Elrod).

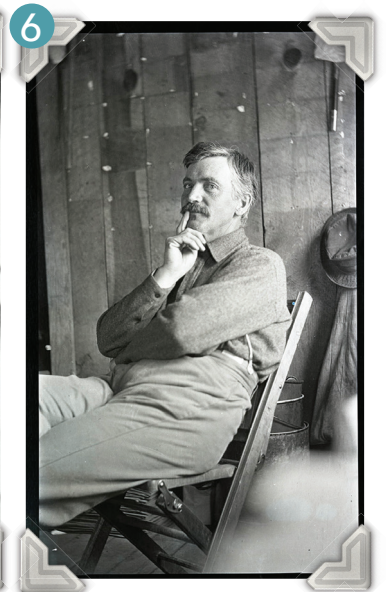
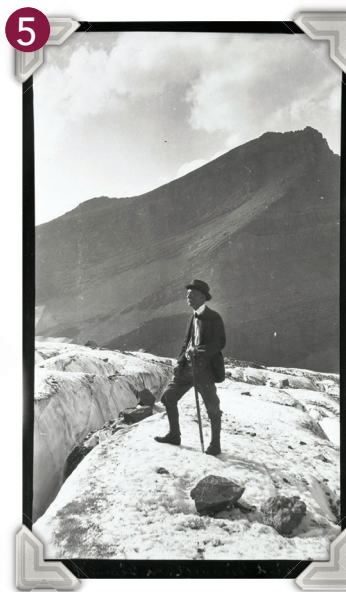
well before color photography or field guides were available or widespread, so specimens played a critical role in the basic education on Earth's biodiversity. Growth of the museum in this period was focused on breadth, with records of incoming fish, plants, marine inverts, minerals, and more. In addition to being a scientist, Dr. Elrod also founded Flathead Lake Biostation, helped to start the UM student newspaper, and was an avid photographer, giving us many early images of western MT.

Both photos courtesy of the University of Montana Mansfield Library Archives & Special Collections and the Montana Memory Project.



## THE FIRST YEARS OF UM MUSEUMS

In the early years of the UMZM, all of UM's natural history collections—and more collections since gifted to other institutions—were part of the same museum. We have little written history from that time specific to the zoological collections, since our paper records tracking accessions and loans don't go back that far. But, we do have a few general reports and many of Dr. Elrod's photos. We share a few of the latter on this page, and recommend the Mansfield Library Archives & Special Collections for those seeking more! We also recommend the book *Montana's Pioneer Naturalist: Morton J. Elrod* published in 2016 by former UM president **George Dennison**, for those interested in learning more and Dr. Elrod's broad-ranging work and influence in western Montana and at UM.



Unless otherwise noted, all photos were taken by Morton Elrod and are courtesy of the University of Montana Mansfield Library Archives & Special Collections and the Montana Memory Project.

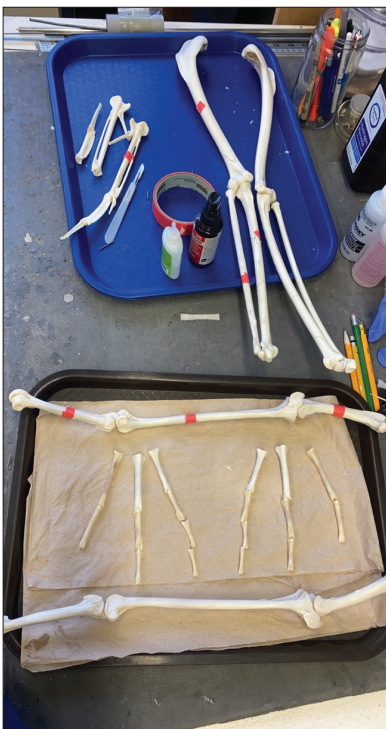
1. One of Elrod's earliest Montana specimens, today (UMZM, 2022).
2. Elrod with his insect collection (ca. 1904), since transferred to Montana State U.
3. Mary Elrod, daughter of Morton, examines materials in a lab (ca. early 1900s).
4. Biology students in a lab (ca. early 1900s).
5. George Bird Grinnell atop his namesake Grinnell Glacier at Glacier NP (1920).
6. Elrod poses for a portrait (ca. 1920, photographer unknown).
7. Elrod photographing glaciers in Glacier NP (1911).



## BIRD PUZZLES WITH LARRY

**Kelsey Miller**  
Wildlife Biology '23  
UMZM Volunteer

I have been volunteering with the zoological museum here at UM for a couple years now. As a wildlife biology student, getting involved with museum projects and Carcass Club have provided wonderful opportunities for hands-on learning within my field of interests. While volunteering over the summer, I met **Larry DePute**, UMZM's resident skeleton articulation expert. He was working on a small owl, and I expressed an interest in learning more about the process of assembling a skeleton. Pretty soon, we were meeting once a week for a crash course in the art of skeleton articulation. After finishing the owl, Larry announced that he had a surprise for me—it was the bones of a little sharp shinned hawk, my first project.



TOP: Kelsey with her completed sharp-shinned hawk articulation.

MIDDLE: Trumpeter swan bones in progress.

BOTTOM: Larry makes adjustments on one of his owl articulations.



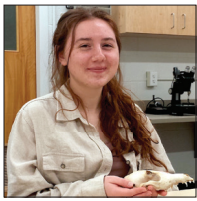
ABOVE: Kelsey looks on as Larry shows her how to sort bones for her sharp-shinned hawk articulation.

Week by week Larry guided me through the process. I whitened the bones in peroxide, separated left from right, learned which glues and epoxies to use and how to mix them, pieced together the wings and legs, threaded wire through the vertebrae to attach the head, sorted out tiny toe bones and talons, and finally attached it all together and onto a perch. The little hawk now sits in the UMZM's display case on the first floor of HS, and I'm starting on my next articulation project, a chukar.

While I work on the chukar I'll also get to help with Larry's current bird, a trumpeter swan. The bird is large enough that it must be articulated by drilling small holes in the ends of each bone and placing a stiff wire and glue into the attachment points. The massive swan had shattered wing bones which Larry carefully pieced back together like a puzzle, filling in the missing shards using a mixture of epoxy and baking soda. The swan will be assembled flying, and even without feathers, the outstretched wings are nearly as long as a human arm.

Larry DePute is a wealth of knowledge, and a fascinating character. After living in Alaska for thirty-nine years, he and his wife, **Connie**, moved to Missoula, where they began joining various local groups to make friends and meet others with similar interests. Both avid birders, they joined the Audubon Society and have traveled throughout the US on birding trips. Though their interests, they got involved with the Montana Natural History Center (MNHC).

While on a return trip to Alaska for halibut fishing, Larry found the remains of a raptor on the beach. He placed the bird under a nearby spruce tree, and during his next trip in the winter, it was still under the tree, having been reduced to bones. Larry contacted the MNHC and they were interested in it, so he cleaned up the bones and brought them back. They sat in a box in Missoula for a few months until he found a set of instructional books by an author from Homer, Alaska, containing directions on how to articulate bird skeletons. While working on the articulation in a classroom at the MNHC, he met UMZM curator at the time **Paul Hendricks**, who invited him to work at the zoological prep lab at the University of Montana. Larry finished the raptor, which is still on display at the MNHC, and Hendricks offered up many no-data bird specimens for Larry to use in articulation projects. Over the nine years since finding the eagle, he has articulated over thirty birds, many of which are on display at the MNHC, the UMZM and UM campus, or are used for owl and osprey outreach.



## iDigBio SUMMER INTERNSHIP REPORT

Marissa Italiano  
Ecology & Organismal Biology '23  
UMZM Undergrad Curatorial Asst.

*Our long-term curatorial volunteer, Marissa, was one of just ten students nationwide selected for an iDigBio Summer Internship in 2022. This program provides training and mentorship, professional development seminars, and funding to attend next summer's meeting of the Society for the Preservation of Natural History Collections in San Francisco. We are thrilled that Marissa got to expand her museum experience from the UMZM to the UMMZ!*

Hello everyone, my name is Marissa Italiano. I have had the privilege of volunteering at the UMZM for the past two years, with my fascination with natural history and zoology specimens leading me into curator **Dr. Angela Hornsby's** hands. In the collections I work with our online database, Arctos, to enter specimen data. I mainly catalog, osteoscribe, and file bird and mammal specimens. On occasion I also check for unwanted pests, wash skeletons coming out of the dermestid beetle colony, and deal with new accessions. When Angela asks what I'd like to do in the museum each day, I often tell her, "whatever needs to be done." She saw how interested I was in learning about museum work, so she brought up the iDigBio summer internships and encouraged me to apply.

iDigBio—the Integrated Digitalized Biocollections—is an open online source of museum specimen data. Through their internship program I was placed at my first choice, the University of Michigan's Museum of Zoology where I worked with ichthyology collections manager **Dr. Randy Singer**. I was excited to work in the fish department because I previously had no experience with wet collections (specimens housed in jars of 70% ethanol). At the UMMZ I was trained and then graciously thrown into the collection with no leash attached. I spent days walking through shelves filled with hundreds of thousands of fish. The labels are as recent as last year and as old as the mid 1800s. Localities ranged from a few miles from my apartment in Ann Arbor to the tropical streams of Belize. I packed and unpacked loans from several museums including the American Museum of Natural History in New York. I also got to poke around the entomology, mammalogy, ornithology, and herpetology collections for fun.

My experience with this internship made me more confident in my abilities to manage and work with zoology specimens. I'm very grateful to Randy, and to the ladies who help run the iDigBio internship program: **Molly Phillips, Jeanette Pirlo, and Alisa Luthra**. And a particular thanks to Angela for supporting my museum studies.



TOP: Marissa in the UMMZ ichthyology collections.

MIDDLE: Workstation at the UMMZ — jars, fish, and data!

BOTTOM: A fish out of fluid, from southwest Michigan dating to 1859.

## MUSEUM MEMORIES

### DON PATTIE ON THE BEARTOOTH

We learned recently that **Don Pattie** passed away last year at the age of 87. He contributed close to 500 specimens to the UMZM and co-authored the *Key to the Mammals of Montana* with **Bob Hoffmann**, which was used by students and professionals in and around the museum for decades.



RIGHT: Nico Verbeek (left) and Don Pattie (right) in their field camper on Beartooth Plateau in 1964.

LEFT: Don Pattie releasing a marked yellow-bellied marmot.



Don spent several summers in the 1960s on Beartooth Plateau outside of Yellowstone studying the ecology of alpine small mammals for his Ph.D. He lived in a small 12-foot trailer with **Nico Verbeek**, who was studying the life history of the water pipit. **Mike Kinsella** recalls visiting with his new wife in June of 1964... while on their honeymoon! Believe it or not, they stayed in that trailer overnight with Don and Nico, and both agree it's one of their favorite memories. Thanks to Mike for sharing these photos and stories!

## FIELD NOTES

### 2022 MARMOT MADNESS REPORT

Our second year of Marmot Madness saw better weather, and more hoary marmot sightings. Our continuing goal is to resurvey locations where hoary marmots (*Marmota caligata*) were historically collected or sighted in this region, with most of those old records (late 1800s and on) coming from our own UMZM specimens. As climate continues to change, the southern reach of the species range here in western Montana is the first place we expect this cold- and alpine-loving species to disappear.

Thanks to **Paulinha Assis, Madeline Williams, Jim Semmelroth, Kate Wasem, Bill & Leo Tozzo, Maci MacPherson, Krys Standley, and Mike Young** for their support and interest this year. Special thanks to **Becka & Steve Barkley**, who not only have the best track record of any of our surveyors (two successful hoary sites in two years), but who also picked up a fecal sample for us this year! And thanks of course to **Alden Wright** for his initial interest and funds that got this project started. We're looking forward to keeping up momentum, learning more along the way, and setting up for more in-depth future research!

ABOVE RIGHT: Marmot Madness survey progress (2021 & 2022)—much done, and much left to tackle or resurvey.

RIGHT: Leo and Bill made it up to Werner Peak in search of marmots. No luck on this trip, but at least they got some nice Montana summer weather—and a view!



Whether you do an official Marmot Madness survey or not, you can always contribute data by loading your marmot sightings to iNaturalist.



ABOVE: 2022 Graslie Curiosity Intern Oren Jaffe shows Emily Graslie some live critters in Doug Emlen's lab.

## WHO'S IN THE MUSEUM

**GRAD STUDENTS:** Anthro Ph.D. students **Holli McDonald** and **Lacy Hazelwood** keep churning through condition checks on our ungulate skulls and skeletons—they find lots of interesting stuff, which all goes into our database so researchers can find specimens that may be useful for their work. Another awesome Anthro Ph.D. student, **Haley O'Brien**, was most recently seen degreasing pig bones in the prep lab, while EE Ph.D. student **Taylor Gold Quiros** continues to process fish she collected for her work. **Ryan Mahar** continued measuring fur traits in a variety of UMZM specimens for his research on altitude adaptation, and **Nicole Lopez** joined Carcass Club to prep her first ever bird. And, **Nat Herrera** successfully defended his Ph.D. work on chipmunks, specimens, and genomics!

**UNDERGRAD VOLUNTEERS:** **Marissa Italiano** and **Kevin Niehaus** worked on specimen cataloging, labeling, and filing, and our rotating cast of Carcass Club volunteers keeps churning out specimens to keep them busy. **Sawyer Vozka** was able to finish up his magnum opus badger prep, and **Sierra Fleischmann, Luke Johnson, Oren Jaffe, Kyle Wonders, Sierra Lee, and Ivie Carvo** put in tons of hours preparing new specimens in the last six months. **Kelsey Miller** took Larry up on his offer to learn bird skeleton articulation—read more about Kelsey and Larry's work on the previous pages!

**FRIENDS & VISITORS:** Our über-volunteer **Sam Getty** continues to help keep the museum running—she even changed her work schedule around so she could come in each Friday to lead prep lab activities. Parasitologist **Mike Kinsella** has continued to ID all the helminths we can supply him with, and **Kara Cromwell** got a small grant to support her continued work screening Taylor's fish specimens for parasites. Of course **Larry DePute** was around working on bird skeletons—we've got him occupied on a big project now, a trumpeter swan that will hang in the museum classroom. Finally, we welcomed a lot of visitors recently, including the **Wright family**, several researchers from the US and Canada, Open AIR artist **Gunhild Lien**, MTFWP Montana WILD educator **Ryan Schmalz** and Americorps intern **Laura Collins**, and over 350 other visitors in tours and open houses.

## MISCELLANY

In September, we teamed up with the **Montana Environmental Education Association** to host a talk by standout UMZM alum **Emily Graslie**. We always know we'll have lots of fun when Emily is in town!

UMZM curator Angela Hornsby got to participate in the search for the new UM Herbarium curator—we are excited for **Giovanna Bishop** to bring her skills and energy to UM!

We've been in the news! In celebration of our 125th anniversary, the UMZM and our Carcass Club were featured in an article in the **Missoulian** on Halloween.



ABOVE: Emily had some extra time while she was in town, so of course she came to hang out with students in the UMZM! L-R: Sawyer Vozka, Marissa Italiano, Kyle Wonders, Oren Jaffe, Emily Graslie, Sam Getty, Sierra Fleischmann, Kevin Niehaus.

## CONNECT WITH US



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Want to catch up on old newsletters? You can read them all at: <http://hs.umt.edu/umzm/newsletters.php>



ABOVE: A nycteribiid ectoparasite from one of our bat specimens, found by Sam Getty and IDed by Mike Kinsella. Would you have guessed this was a flightless dipteran (fly relative)?



PHILIP L. WRIGHT  
ZOOLOGICAL MUSEUM

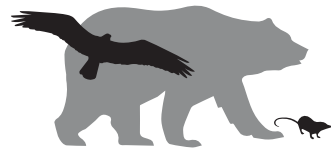
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Curator: Dr. Angela Hornsby  
Director: Dr. Jeff Good

## OUR MISSION

The Philip L. Wright Zoological Museum, a unit of the Division of Biological Sciences of the University of Montana, is committed to the collection and preservation of zoological specimens for the purposes of research, education, and community outreach. The UMZM works for both current and future generations, sustaining these irreplaceable resources representing our natural heritage in Montana and beyond.



**FRIENDS OF THE  
PHILIP L. WRIGHT  
ZOOLOGICAL MUSEUM**

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