

ORMA J. SMITH MUSEUM OF NATURAL HISTORY FY2021 Annual Report



A portion if the Gary Gier Lepidoptera collection. The morpho butterflies comprised of many species of Neotropical butterfly under the genus Morpho. This genus includes more than 29 accepted species and 147 accepted subspecies found mostly in South America, Mexico, and Central America.

(Photograph taken from the Caribou County Sun, Soda Springs, Idaho Thursday, November 12, 2020)



Director's Message

Well, we thought COVID-19 would wrap up last year, WRONG! It seems that the Museum Community has survived the virus and many of us have continued to work in the Museum during this past year. The Museum has been closed to the general public, following the actions of The College of Idaho. The College of Idaho has been closed for the most part, but had to remain open for international students, many who had no place else to go. The College is opening back up now, facilitated by those who are vaccinated against the virus. The College plans to be fully open for this fall semester (end of August-early September). The Museum will follow that lead and have our first live Museum Workday and Seminar on September 11 and will be fully open to the public following that date.

In spite of COVID, this past year has been very productive for the Museum. This is in no small part, due to the fantastic volunteers that we have. Our virtual Museum Workday Seminars have been interesting and available to a wider audience than our past seminars that were restricted to the Museum. The Entomology Section received two research grants: one by Dr. Ron Bitner for the study of bees of specialty crops in the area and one by Dr. James D. McIver for the curation of a large collection of SageSTEP invertebrates. Both of these grant projects have allowed the Museum to hire students and volunteers and to build our collections. The Museum has expanded by accepting several private collections, which may have been lost to science had we not stepped in. We broke previous records with the funds we took in during The College of Idaho Give Day. Volunteers and Friends of the Museum continue to add the Museum to their estates, which helps insure our future. The Museum made more progress with the identification of several groups in our collections (especially beetles and flies) which was done by experts. Some scientific research publications have resulted from our work. More details on these items can be found in this annual report and in the Museum.

We plan to move forward and continue to grow, help with the education of students, and provide a national resource for science.

William H. Clark. Director



2021 Annual Report

Cover: A portion if the Gary Gier Lepidoptera collection

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Museum Work Day Seminars for 2020-2021

Dr. Paul Castrovillo, Curator of Lepidoptera, Orma J. Smith Museum of Natural History, "What Do Butterfly Caterpillars Eat?" Butterfly count on July 12. July 11 August 1 Howard Emry, Curator of Paleontology, Orma J. Smith Museum of Natural History, "Pleitocene Deposits of the American Falls Formation, Southeastern Idaho. Dr. Luc Leblanc, Collection Manager, W.F. Barr Entomology Museum, University of Idaho "The Real September 7 Missionaries. October 3 Dr. Eric Yensen, Curator of Mammals, Orma J. Smith Museum of Natural History, "Rototillers with Jaws: The Ecology and Natural History of Badgers." Kirk Halford—Deputy Preservation Office/State Archaeologist Bureau of Land Management "What's the Digs on BLM Idaho Archeology." November 7 December 4 Gipson Honors Students "Museum Specimens and the Meaning of Things". William H. Clark, Director, Orma J. Smith Museum of Natural History, "Biodiversity in San Basillio, Baja California Sur, Mexico." January 9 Bill Nance, Curator of Ethnographical & Anthropological Collection, Orma J. Smith Museum of Natural History, "Archaeology of Middle America." February 1 Dr. Eric Yensen, Curator of Mammals , Orma J. Smith Museum of Natural History, "The Other Side of Gophers." March 6 Jan Summers Duffy, Curator of Archaeology, Orma J. Smith Museum of Natural History, "Treasures of the Tomb King Tut Exhibit." April 3 Dr. Ron Bitner, Research Assistant Entomology, Orma J. Smith Museum of Natural History May 1 The Bees of Southwest Idaho. F. Kirk Halford Deputy Preservation Officer/State Archaeologist Bureau of Land Management, Idaho State Office, "30 Years in the Dirt: A Retrospective of Preserving the Past for the June 6

Museum Board

Future.

Josh Andersen—Student Representative

Dr. Ron Bitner

Jack Cafferty—Treasurer

William H. Clark—Museum Director

Courtney Covolo—Student Representative

Dr. Barbara Ertter—Chair

Billie Ann Farley—Secretary

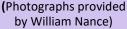
Dr. Kaitlin Maguire

Dr. James Tomey

Community and the Museum Near & Far









Ethnographical/Anthropological Curator William Nance visited Teotihuacan, Mexico in December. While he was there he delivered face coverings to some of the indigenous community, free of charge. In the middle picture above Bill shows what he will be delivering. The picture on the right is Bill passing out the face coverings. While there Bill was asked to be a part of a traditional wedding ceremony, pictured to the left.

Did you Know?

There is a Museum and Friends Club. This is a group of students interested in volunteering for the Museum and attending Museum events. This year they had a great turn out at the Involvement Fair with several new and enthusiastic members. They hope to better incorporate the Museum into the College of Idaho Experience for as many students as possible. The Museum would like to recognize Courtney Covolo, Josh Andersen, and Reina Watkins for their leadership in the club.

Museum Curator Lends A Hand to King Tut Exhibit

(Photograph taken from C of I website article by Will Hoenike)



Curator of Archaeology Jan Summers Duffy was approached by The Discovery Center of Idaho to consult on the traveling exhibit, titled Treasures of the Tomb King Tut Exhibit, which opened in July, 2020. Jan Summers Duffy worked as the onsite Egyptologist and curator during the year the exhibit was at The Discovery Center. The College of Idaho sophomore Regan Moore, who is Jan Summers Duffy's intern, worked regularly at The Discovery Center in Boise to make sure the exhibit was in proper order.

Inside the Museum

(Photographs and text provided by Misty Koeppen)



Craig Baird, Curator in Entomology, on the left, works with work study students Muna Warsaw and Sakhokuhla Littler.

Angela Lints, right, has been working on curating and identifying ants and spiders from the SageSTEP project.





On the left, Curator Craig Baird, looks at specimens with work study student Karine Sikapin Kambou.

Craig Baird, Curator in Entomology, reviews some of the specimens in the OJSM collection.



Although the Museum was closed to the general public, work in the Museum continued. Work study students helped bring a fresh look to the Museum by painting the display cabinets.







Photograph on the left: Tigran Abrahamyan and Sakhokuhla Littler. Students employed through the student work study program.

Center: Tigran Abrahamyan and Sangita Jimba.

Right: Sakhokuhla Littler

(Photographs provided by Misty Koeppen)

Community Outreach/Involvement



(Photograph provided by Misty Koeppen)

Community member David Gassel brought in this specimen for identification. Curator Nate Carpenter provided the following information on the specimen," I would guess it is a naturally occurring ferrosilicon. If you had a swamp deposit rich in carbon and iron that comes into contact with a high silica melt (rhyolite magma) you could get a high silica rock with increased iron concentration. I would have expected it to be slightly magnetic. I base this on appearance and the high specific gravity, which is greater than hematite."





The specimens shown above were brought to OJSM by Denise and Don Warner of Caldwell. The bones were found in Weiser, Idaho in the late 1950s. These bones were sticking out of a river/creek bank. Curator Nate Carpenter identified these as mammoth bones. (Photographs provided by Misty Koeppen)

This specimen was brought in by community member David Gassel for identification. It was identified by curator Nate Carpenter as a common geode.





Pollinator Celebration at Garden City Library, June 26, 2021

Pictured left to right

Batu Getachew Olang, Bill Clark, Barb Alexander, Dave Ward and Misty Koeppen

Community Outreach/Involvement Continued

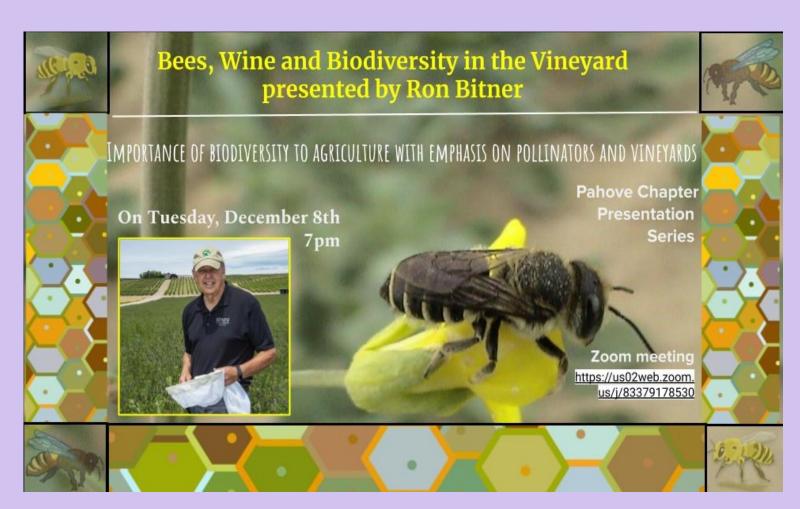






Brad Stokes, Extension Educator from the University of Idaho Extension, Elmore County sent in the photographs above for identification. Jerry Smith identified the specimen as left pharyngeal arch of a carp.

Dr. Ron Bitner, Research Associate in Entomology provided a Zoom presentation for the Pahove Chapter of the Master Naturalists.



Community Outreach/Involvement Continued

Orma J. Smith Night at the Museum 2020

Part of Homecoming & Family Week "What Idaho Tells us about the First Americans"





Dr. Loren G. Davis is a Professor of Anthropology at Oregon State University and is the Executive Director of the Keystone Archaeological Research Fund. His research focuses on the Pleistocene archaeology and geoarchaeology of western North America and on the topic of the early peopling of the Americas. Dr. Davis received his undergraduate and Master's degrees in Anthropology from Oregon State University and obtained a PhD in Anthropology from the University of Alberta.

Professional Publications

- Clark, W.H., and J.N., Zahniser. 2021. *Xerophloea foveolate* (Fieber) (Hemoptera: Cicadellida: Ledrinae) Reported from the Baja California Peninsula, Mexico, for the First Time. Proceedings of the Entomological Society of Washington, 123(2): 429-431
- Bouffard, S. 2021. Gem State Milestones, Spring and Summer, Heard Bird, URL: https://doi.org/10.4289/0013-8797.123.2.429
- Munguía-Ortega, K.K., E. López-Reyes, and F. Sara Ceccarelli. 2021. Testing the Accuracy of Vegetation-Based Ecoregions for Predicting the Species Composition of Blow Flies (Diptera: Calliphoridae). Journal of Insect Science, 21(1): 6; 1–9,
- Clark, W.H. 2020. Studies of Ants and Ant Guests at the INL Site. Pages 10-14 to 10-15; 10-22 to 10-23. *IN*: U.S. Department of Energy, Idaho Operations Office, Idaho National Laboratory Site Environmental Report, Calendar Year 2019. DOE/ID-12082(19)
- Fields, P.F. 2021. Resurrection of the Miocene Flannelbush as *Fremontodendron lobatum* (Malvaceae). Phytoneuron 2021-28: 1–6
- Delphia, C.M. 2020. First Records of *Xylocopa virginica* (Linnaeus) (Hymenoptera: Apidae) in Montana and Idaho; Journal of Kansas Entomological Society, 92(4): 655-659

Donors

Gary Johnson, Sue Carver, National Christian Foundation, William H. & Mary Clark, Teresa Vail, Loreli & Steve Bouffard, Ron Bitner, Ralph Stearly, Mark McGee, Michelle Wooten, Gregory Garlick, Elizabeth Greeley, Edward Hackett, Don & Judith Haagensen, Diana Dron, Geri Van Curen, Billy Farley & Stephen Smith, David & Peggy Schneider, Schwab Charitable Fund, Bill & Luana McCauey, National Christian Society, Dick & Judy Rogers, Sean Farley, Robert Beckwith, Alan & Patricia Gillogly, Roberta Johnson, James Ryan, Betty Sigler, Patricia Matthews, Cheryl M. & Mark Haugo, Beth & Robert Graves, Fidelity Charitable Fund, Leland Thames, Robert Ellis, David & Valerie Ward, Anonymous, Paul Blom & Gwen Hoheisel, Robert Ekin, Charles Barksdale, UI Extension Office, Jane Luther, Barb Alexander, Gary Gier.

Community Outreach/Involvement Continued

Butterfly Count

On July 12, 2020 the Museum sponsored the 30th Annual Boise Front 4th of July Butterfly Count. Many annual butterfly counts were cancelled in 2020 thanks to the threat of COVID, however, the Boise Count carried on, although, with some modifications necessitated by the pandemic. Because of social distancing restrictions the count was limited to six volunteers (usually masked) who spent 8.5 hours visiting five Boise-area locations to seek out and identify butterflies. Even with the reduced number of observers (a typical count brings out 25-35 attendees) 526 individual butterflies representing 40 different species were recorded. Most common butterflies included Variable Checkerspots (79), Boisduval's Blues (60) and Common Wood Nymphs (56). All data was submitted to the North American Butterfly Associ-



Butterfly-counters at work



Nymphalid Vanessa atalanta

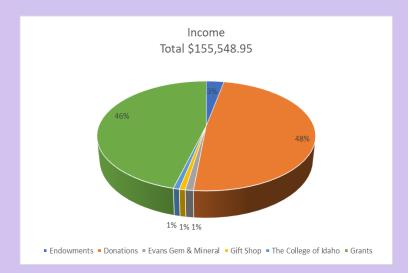


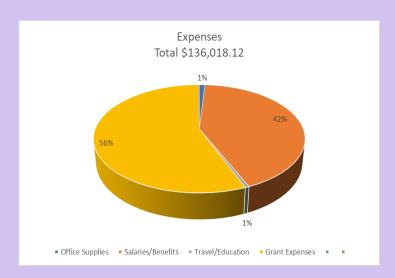
Stalking a Red Admiral

(Photographs and text provided by Paul Castrovillo)

Museum Financials FY 2020 July 1, 2020 – June 30, 2021

These figures summarize the Museum's income and expenses for the 2020-2021 Fiscal Year. Donations from individuals and corporations provided most of the income. Other sources of income included financial support from the Museum's gift shop, interest from endowments, the Evans Gem and Mineral Collection and The College of Idaho.





Guest Researchers



Pictured to the left are Dr. Art Gilbert and William H. Clark, Museum Director. While in the Museum, the two examined the Museum's Coleoptera collection, family Chrysomelidae (leaf beetles). Clark has known Dr. Gilbert for over 40 years. During this time the two have worked on identification of the Chrysomelidae of Baja California. Gilbert has also helped with identification of specimens in the Museum. Dr. Gilbert worked for the California Department of Agriculture as a taxonomic specialist, and is now retired. (Photograph provided by William Clark)

Pictured at the right is Dr. James D. McIver from Oregon State University. He is working on reconciling part of the SageSTEP spider project housed in the Orma J. Smith Museum at The College of Idaho. The project is funded by a grant received by Jim for the amount of \$5,000.00. He serves as the principal researcher for the grant.

SageSTEP is a long-term multidisciplinary experiment evaluating methods of sagebrush steppe restoration in the Great Basin. Sagebrush communities have been identified as one of the most threatened land types in North America, and as much as half of this land type has already been lost in the Great Basin. Many of the sagebrush communities that remain are in poor health. SageSTEP scientists are studying the effects of land management options to provide resource managers with improved information to make restoration management decisions with reduced risk and uncertainty. This project resulted in thousands of invertebrate specimens from the Great Basin now deposited in the Orma J. Smith Museum of Natural History.





Pictured to the left are Craig Baird and Skyler Burrows.

Craig is a Curator in Entomology and specializes in bees.

Skyler is a bee specialist who will be working in the Museum on the Snake River Bee Project.

(Photograph and text provided by Misty Koeppen)

Snake River Bee Project

Over the past year OJSM has been fortunate to be the recipient of a number of grants. One of those grants was the Snake River Bee Project. Dr. Ron Bitner is overseeing the research as the principal researcher. The total grant funding was \$87,709.00.

Below are the highlights from April through June 2021. The group has been setting traps and sampling bees weekly since April 7

- The group sampled in cherry & apple orchards, flax seed and turnip seed fields, and various locations with a mix of wild/cultivated flowers
 - They have been collaborating with folks from the Oregon Bee Atlas
 - Dr. Bitner participated in a pollinator education program at Peaceful Belly farm in May
- Skyler Burrows, a consultant, was hired to help with bee identification, spent a week in the Museum to identify bees (Photographs and text provided by Amy Dolan)







Gary Gier Makes Large Donation to OJSM

(Pictured below left to right Gary Gier, William H. Clark, Mary Clark, Luc Leblanc and Deovolente Mtui. The photograph on the right is another portion of the donation.)





(Photograph taken from the Caribou County Sun, Soda Springs, Idaho Thursday, November 12, 2020)

In November, the Museum received a generous donation from Gary and Rosli Gier, 18,000 butterfly and moth specimens. Gier was a biology teacher in the Soda Springs School District for 30 years before retiring. His collection includes specimens from Canada to Peru. Countries like Brazil, Ecuador, French Guiana, Malaysia, Vietnam, Europe, Mexico and other countries. The collection will be split between The College of Idaho Orma J. Smith Museum of Natural History and the University of Idaho W.F. Barr Entomological Museum in Moscow.

Mission Statement

The Orma J. Smith Museum of Natural History seeks to instill an awareness of the natural world through the educational program of The College of Idaho, provide public service, and serve the general and research public by holding in trust collections of zoological, botanical, paleontological, archaeological, anthropological, and other natural history objects for this and future generations. The Museum adds depth and intellectual development to the education of College of Idaho students by making the materials entrusted to it available for classroom, research, and other appropriate educational use. The Museum serves the students and general public by offering tours, interpretive displays, and other educational programs that foster life-long learning by all who visit.

Vision Statement

The Orma J. Smith Museum of Natural History will be the premier collections-based environmental education and natural history resource in our region. The Museum's programs and resources will be integrated into the educational programs of the College to help meet the needs of College of Idaho students and provide outreach to the general public.

Museum Staff

William H. Clark—Museum Director

Misty Koeppen—Museum Administrative Assistant (October 1, 2019—Present)

To the right is a photograph of Robert Ekin from Kuna. Robert recently donated his butterfly collection to OJSM.

(Photograph provided by Paul Castrovillo



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