



ORMA J. SMITH  
**MUSEUM OF  
NATURAL HISTORY**

THE COLLEGE  
*of* IDAHO

*How old was that tree?*



THE COLLEGE  
*of* IDAHO

**Annual Report July 1, 2021-June 30, 2022**



## On the front cover: Ready for display

This slab was cut from one of the majestic American elm (*Ulmus americana*) trees that formerly lined the streets on and near The College of Idaho campus. Elm limbs often stretched across the streets forming “tunnels.”

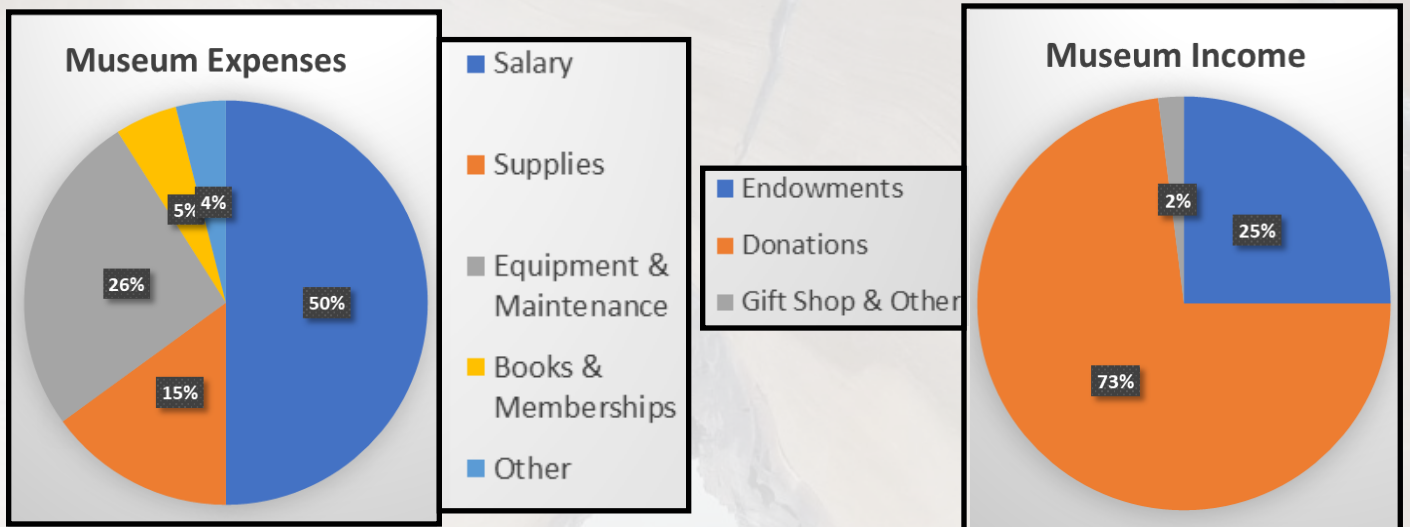
The trees were planted around 1920. Dutch Elm Disease, which arrived in Caldwell in the late 1970s, is caused by a fungus accidentally introduced from Asia. (Dutch researchers identified the fungus, hence the name “Dutch.”) The fungus eventually kills the tree. By the mid-1980s, our formerly beautiful elms were dying and the College had to cut them down.

This tree grew along 20<sup>th</sup> Street on the west side of campus. Museum volunteer Mary Post persuaded one of the tree cutters to cut several cross-section slabs from the base of the tree for the Museum. Volunteer Robert Hays took one of the better slabs to his shop in Meridian to cleanup, preserve, and prepare for eventual display.

Did you know that you can use the number of tree rings to determine the age of the tree? Each year the tree lays down wider, larger, thin-walled cells in spring and thicker, smaller, darker cells in summer. The alternating light and dark bands create the rings. Because rings are wider in good years and narrower in dry, cold years, they can tell us much about the weather of specific years during the tree’s lifetime. Rings of long-lived trees (e.g., bristlecone pines) can give us information on climates several thousand years ago. The science of using tree rings for dating events, past climates, environmental changes, and archaeological artifacts is called dendrochronology.

This exhibit was possible thanks to Mary Post for saving the tree section; Robert Hays for preparing the slab; and Jan Boles, Dr. Steve Maughan, and Bill Clark for information on the elm trees on campus.

-Created by the Museum Exhibit Committee: Dr. Eric Yensen (Chair); William (Bill) Clark; Jan Summers Duffy; Dr. Patrick Fields





**WELCOME BACK!** The Museum officially re-opened (from COVID-19) for Museum Workdays in September 2021 with an outdoor catered lunch provided by the Dean's Office. We were open for the public beginning in the Spring of 2022. Many of our Curators and Volunteers have continued to work in the Museum and on the Museum's collections during COVID-19, with proper distancing, air circulation, PPE, and common sense.

We have made significant progress in many areas of the Museum this past year; please take a look at this Annual Report for a summary of some of those activities. Major progress was made in Entomology during the year. We have received five research grants, the first of which allowed us to begin a research and curation project on local bee pollinators of specialty crops. Dr. Ron Bitner has spearheaded this project, with major help from Amy Dolan and Dr. Craig Baird. Skyler Burrows in Utah is helping with bee identifications. Several C of I students are assisting with the project. The project is based out of the newly remodeled Room B-14, adjacent to the main Museum. You are welcome to stop in to see the activity. Three grants were received to continue curation of the large SageSTEP collection donated to the Museum by Dr. Jim McIver (Curator of Entomology); he has also secured the grants to keep the curation moving along. Entomology volunteer, Angela Lints, has done most of the curation, with Dr. Al Gillogly helping out on beetles, and myself assisting on ants. In addition, I was able to secure a grant to allow us to purchase a top grade research stereomicroscope with camera as well as the equipment to allow us to barcode specimens. We are also working on a major grant for Entomology, Aquatic Macroinvertebrates, and other areas, headed up by Dr. McIver as well as others and myself. Stay tuned for news of this grant. If the grant is received, it will propel the Museum into the next level. The College Grants Office has been extremely helpful with the various grants. The Museum continues to collaborate with the University of Idaho and our sister Museum at CICESE in Ensenada, Baja California, Mexico.

Good progress has also been made in the Research Library, with many new volumes being added to the collection. Major progress continues to be made in the Fish Collection, the Paleontology Collections, the Mollusk Collection, and several other areas of the Museum.

The Museum again hosted the Gipson Honor Students (two classes) during fall semester, putting the Museum to great use. The College Museum Club has assisted with this class as well as many other Museum activities.

Any comments or suggestions for the next Annual Report or anything Museum related, please let Mandy or Bill know. We hope to see you in the Museum this next year.

Sincerely,  
William H. Clark, Director

## Stats for 2022

Due to mandatory shut downs, the Museum was not officially open until March for public viewing. Therefore, the numbers have been a little stunted this year, but it is still exciting to report the following:

### Over 614 visitors

The hours that have been spent in volunteer and work hours is amazing and certainly shows how much people enjoy coming and doing their part to make the Museum the great institution it is.

### Over 6185.75 hours of volunteer work



# WHO WE ARE

Museum Board Members pictured left to right:

Billie Farley, Secretary

Dr. Barbara Ertter, Board Chairperson

William H. Clark, Museum Director

Dr. Eric Yensen

Dr. Anna Himler

Courtney Covolo, Student Representative

Jack Cafferty, Treasurer

Dr. Ron Bitner (not pictured)

Dr. James Toomey (not pictured)

Amy Truksa (not pictured)

Dr. David Douglass, Provost (not pictured)



Here are some of our students and curators hard at work:



Left: Stephen Bouffard working in the OJS Research Library.

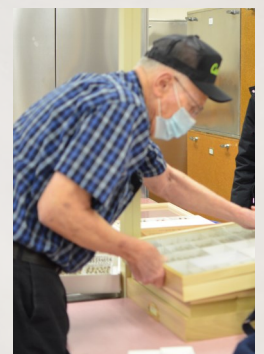


Right: Dr. Al Gillogly, Curator of Coleoptera.

Bottom Left: Regan Moore, an intern working with Jan Summers Duffy in the Archaeology area, ended her year with a 4.0! Regan will continue to work her fourth year with Jan this fall. We have several students who work and help around the Museum. Their work is priceless and very much appreciated.



Below: Kris Clark, one of our newest student workers, is learning "all things Bees" with her mentor, Dr. Craig Baird (below right).





# The Gipson Honors Program

This year (as in the past several), the Gipson honor students, led by Dr. Rochelle Johnson, chose artifacts from the museum to use as their semester project subjects. Those items included the Thief Ant, Agate, the Lined Seahorse, the Pink Mouth Murex, the Snowy Owl, and so much more. These wonderful articles are on display in Boone Hall, showing the history of these items and the students' innovative interpretations of that history. If you can not make the visit, they are available to read on the website:



<https://whenyoulook.wixsite.com/website-1/wondering-about-things>.

Below are a few pictures of the items that were studied for projects.



# Academic Publications

Pinto, J.D., and W.H. Clark. 2022. New records of Meloidae (Coleoptera) from the Baja California Peninsula, with description of a new species of *Lytta* Fabricius. *The Coleopterists Bulletin* 76(1): 45-53.

Clark, W.H., and J.N. Zahniser. 2021. *Xeropholea foveolata* (Fieber)(Hemiptera: Cicadellidae: Ledrinae) Reported from the Baja California Peninsula, Mexico, for the first time. *Proceedings of the Entomological Society of Washington* 123 (2):429-431.

Esperanza de Pedro, D. 2021. Riqueza y Distribucion de Abejas (Hymenoptera: Apoidea) en Baja California. Tesis, Centro de Investigación Científica y de Educación Superior de Ensenada, Ensenada, Baja California, Mexico. 81 pp.

Garduno Villasenor, L.A. 2021. Diversidad Genetica y Filogeografía de *Phidippus* (Araneae: Salticidae) en Baja California, Mexico. Tesis, Centro de Investigación Científica y de Educación Superior de Ensenada, Ensenada, Baja California, Mexico. 46 pp.

Munguia-Ortega, K.K., E. Lopez-Reyes, and F.S. 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):1-9.

Lopez Reyes, E., and F.S. Ceccarelli. 2021. En Busqueda de los Abejorros con Manos, Pies y Computadoras. *Mediterraneus* 6(22):26-29.

Ceccarelli, F.S., V.M. Aguilera-Molina, K.K. Munguia-Ortega, and E. Lopez-Reyes. 2022. Hyperparasitism in a Jeffrey Pine (*Pinus jeffreyi*) defoliator in the Sierra San Pedro Martir National Park, Baja California. Mexico. *The Southwestern Naturalist* 65(3-4):261-271.

Hernandez Salgado, L.C., D.R. Guerrero Fuentes, L.A. Garduno Villasenor, L. Castaneda Betancur, E. Lopez Reyes, and F.S. Ceccarelli. 2022. New Distribution Records of *Phidippus* (Araneae: Salticidae) for Baja California and Mexico: An Integrative Approach. *Diversity* 2022, 14, 159:1-13.



# What's New in the Museum

A shout out to Dave Ward for having the great idea to update our lighting to LED, and to Dave and Stephen Bouffard for helping to get them installed. Another big shout out to Bill and all of the donors of Give Day that made it possible! The LED lights look amazing and if you haven't seen them yet, it is worth the trip to experience the difference.



Below are some of the newest volunteers and workers around the Museum:

Janie Burns - paleontology volunteer

Don Dixon - Volunteer for the Evans Collections

Skyler Burrows - Bee Grant volunteer

Mandy Slack - Administrative Assistant for OJS Museum & Whittenberger Planetarium

Rob Plotnikoff - newest volunteer with Aquatic Macroinvertebrates

The Treasure Valley Bee Survey (aka "Bitner Bee Grant") is in its second year and the progress is exciting. The goals of this project, funded by a USDA specialty crop grant, are to survey and identify native bee species in the Treasure Valley, train students and citizen scientists, and educate the public on the diversity and conservation of native bee species in Idaho. Dr. Ron Bitner and Amy Dolan are leading this project with help and support from Dr. Craig Baird, Dr. David Ward, Bill Clark, Mandy Slack, and other Museum volunteers.

Project highlights & updates:

- Thousands of bees were collected in 2021 using blue vane traps, pan traps, and nets. These samples are still being processed by student workers in the museum.
- Room B-14, next to the museum, has been renovated as a Bee Grant project room with LED lights, new paint, and electrical outlets. New cabinets, drawers, unit trays, and microscopes were ordered for the project; these resources will be available for other museum projects in the future.
- Two C of I students (Batu Getachew Olana and Kristen Clark) and one C of I graduate (Kaden Youssef) have been trained to sort, pin, and label bees.
- Seventeen volunteers have enrolled in the Oregon State Master Melittologist program to be the first class of Idaho Bee Atlas volunteers! They are being trained to collect and prepare museum-quality bee specimens. The first field training for these enthusiastic volunteers was held in late June.

Special thanks to Tina Wilson, with Western Alliance Economic, who was a great help with the writing of the grant.



Left picture (LtoR): Dr. Craig Baird, Dr. Dave Ward, Tina Wilson and Bill Clark. Photo by Ron Bitner, October 2022 in newly renovated B-14.

Right picture (LtoR): Dr. Craig Baird, Dr. Dave Ward, Bill Clark, and Dr. Ron Bitner (Grant PI).





# Student Visits



To the left, Dr. Al Gillogly shows off the Museum's newly acquired specimen of the Giant Asian Hornet.



To the Right, Angela Lints shares some information on spider specimens. The kids LOVE those spiders!



In April, Lupe Galvan brought his College of Idaho art students to sketch artifacts in the Museum. Here are a few of those sketches; they are absolutely stunning!



The pictures here were sketched by students Jennifer Hernandez, Erica Kyle, and Noah Tamez.



Jan Summers Duffy (below), our Archaeologist, curator, Egyptologist and consultant on the Tutankhamun Tomb Exhibit, recently coordinated with a museum in Paris, France (MUSÉUM NATIONAL D'HISTOIRE NATURELLE) to exhibit a copy of a Luther Douglas Sandpainting (pictured to the right). Permission was graciously given by the artist's daughter, Conda Douglas, who is glad for this international collaboration. This helps encourage our worldwide connections for international students as well as others.



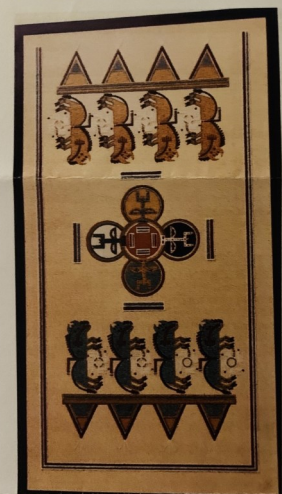
Jan has been busy writing a Forward (Preface) for a book by a well-known UK author on one of the first female Pharaohs, Sobekneferu.

She also was interviewed by CRW Productions for the upcoming 100<sup>th</sup> Anniversary of the Tomb of King Tut, KV62!

Jan's Archaeology Month Exhibit 2022 included some of our unusual, rare Pre-Colombian Effigy Vessels, currently on exhibit for the rest of the year.

To the left is a photo featuring Don Nelson of KIVI-TV news who interviewed Jan on Idaho's petroglyphs.

Annex n°1. Photo concerned by the transfer of rights  
« Home of the Buffalo People »  
LUTHER A. DOUGLAS  
(1919 -1976)





# From the Field

In early June, Dr. Jim McIver conducted a survey on insects and spiders on lupine at Pike Creek, Harney County, Oregon (base of the Steens Mt. and between the mountain and Alvord Desert). This is a part of a 30+ year ecological project, and the specimens collected will be split between OSU and our Museum. Also present for the field work was Angela Lints, Kacey Broderick, Bill and Mary Clark. (Photos by Courtney Loomis.)



Left: Surveying insects at Deer Flat NWR.

Right: One specimen case from the Deer Flat NWR Reference Collection.



Deer Flat National Wildlife Refuge, founded by President Teddy Roosevelt in 1909, is one of the oldest refuges in the National Wildlife Refuge System. It consists of the 9,000 acre Lake Lowell, located in Nampa, Idaho and approximately 1,600 acres of wetland, grassland, upland sage steppe and riparian forests surrounding the lake as well as 101 islands (an additional 800 acres) distributed along 113 miles of the nearby Snake River.

With a growing interest in understanding biological diversity, Deer Flat NWR held its first BioBlitz weekend in June of 2006 and invited the public to help document the plants and animals living on the refuge. Orma J. Smith Museum personnel became involved by generating the first list of insects found there and collecting a few representative samples which formed the nucleus of a Deer Flat insect reference collection. A partnership developed between the refuge and the Museum so that the Deer Flat NWR Insect/Arthropod Biodiversity Project Reference Collection/ Database expanded from an annual one-weekend-a-year BioBlitz survey to an ongoing study entailing approximately 15 insect sampling excursions every year.

The project is now entering its 17<sup>th</sup> year. The Deer Flat NWR Reference Collection currently consists of 3,021 individual specimens (primarily insects, but also including some related non-insect arthropods) representing 1,344 taxa, including 233 different families from 23 orders. Approximately 2,500 additional specimens from the Deer Flat surveys have been integrated into the main O.J. Smith entomology collection. Another 8,000 specimens that have been pinned and labeled are in the process of being identified and placed into the reference and main collections.

The specimens and database are valuable as museum holdings available to the scientific community for research purposes as well as to The College of Idaho faculty and students and the general public for viewing, learning, and research. The Deer Flat NWR Reference Collection has also been available and used outside the Museum for public outreach events showcasing the diversity of insect life found locally in southwestern Idaho. Many of the specimens have been photographed and placed on a Deer Flat-hosted iNaturalist website to give more exposure to the project and the Museum, thereby increasing the awareness of the research community to some of the Museum's entomological holdings.

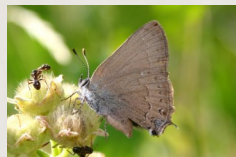
-Reported by Dr. Paul Castrovillo



# More from the Field

On July 11, 2021 the 31st annual Boise Front 4<sup>th</sup> of July Butterfly Count, sponsored by the O.J. Smith Museum of Natural History, took place. This event (one of the longest running counts in the country) brought together 27 observers and butterfly experts, as well as folks new to the field, to survey the butterfly fauna in the Boise area from habitats as diverse as Military Reserve Park (elevation approximately 2,500 ft) to the summit of Mores Mountain (approx. 7,000 ft). During nine hours spent in the field, 999 individual butterflies were recorded representing 49 different species (nearly one third of Idaho's known butterfly residents). One of the biggest surprises was observing 78 Hedgerow Hairstreaks (*Satyrium saepium*). This species has been found on about half of the previous counts, however, usually only in single digit quantities. All data was submitted to the North American Butterfly Association who archive and publish survey results from approximately 400 other counts across the US, Canada and Mexico.

- Paul Castrovillo



The Hedgerow Hairstreak butterfly (and ants)



The 2021 4J Count gang

*It is a very busy time of the year, and I am looking forward to another trip to Meso-america for study....so, I hope to drop by in the near future. This is me and a local Teotihuacan friend at his shop.*

- Bill Nance



In February there was a collection/research/camping trip to the Catavina area in Valle de los Cirios, Baja California, Mexico, by the Wards and Clarks. A few specific Coleoptera (beetle) collections were made, some pitfall traps were collected for later curation, and weather instruments were serviced as part of a long term study.

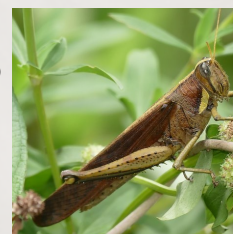
L to R: Val and Dave Ward, Bill and Mary Clark

Photo by: Dave Ward, February 19, 2022



Due to the efforts of Dr. Paul Castrovillo, the Museum recently acquired the Boise USDA insect collection, and it is especially rich in grasshopper specimens. The collection was assembled in the 1950s - 1960s, with species determinations made by experts of that time period. Dr. James Ryan is curating the grasshopper specimens.

Approximately 200 identified species are in this collection. For perspective, the current Museum collection holds only 34 identified species of acridid grasshoppers, and a large number of unidentified grasshoppers. Some of the significance of this collection comes from economic importance: grasshoppers can breed to populations dense enough to damage and even destroy crops. In the 1950s - 1960s the destructive potential of this group of insects led to funding research on the species found in North America, and this donated collection resulted from those efforts. Its scientific value may increase over time with climate and agricultural practice changes.





# What Happens in the Museum... ...Stays in the Museum



Saturday Work Day is a special time to get things done around the Museum. Lunch is especially important as all gather together to hear from the Monthly Seminar Speaker. If you are ever around the first Saturday of the month join us, you won't regret it! Check out the upcoming Work Days:



**July 9**—Paul Castroville, “Updates on Some of My Favorite Idaho Butterflies”

**August 6**— Barbara Ertter, OJSMNH, “New Discoveries and What’s Cool in the Boise Front”

**September 10**— Samuel P. Degrey, Salmon, Idaho – “Jumping Bristletails, Archaeognatha, and Microcoryphia: The Living Fossils Hiding Right under Your Nose”

**October 1**—Eric Yensen (A current research project)

**November 5**— Rick Williams, “Can Science Inform Recovery of Idaho and Columbia River’s Salmon and Steelhead?”

**December 3**—Gipson Scholar Student Presentations







*Tangentially, I don't know if you might have already heard that Idaho PTV is planning an Outdoor Idaho segment on wildflowers, and at my suggestion, decided to do some filming in the herbarium; photo attached. Afterwards, I took the crew downstairs for a brief introduction to the Museum, just as visitors, but with the suggestion that a future show on Idaho museums might be worth considering.*

*Doing my part . . .*

-Barbara Ertter, OJS Museum Chairperson and Harold M. Tucker Herbarium Research Associate.

In July of 2021, Mary and Bill Clark, along with his sister Jane Luther, attended a Memorial Service for Nancy Smith Weber (Orma J. Smith's granddaughter) in Corvallis, Oregon. Bill and Mary met her family and friends there. Bill gave a short presentation explaining Nancy's connection to and love of the Museum; she even included the Museum in her estate. Pictured to the right is Nancy's nephew; Marvin Weber, his wife Roxie Weber, and Bill Clark.



The Museum was well represented at The College of Idaho's annual Scholarship Gala in March, 2022. On the left, seated around the table were Mary Clark, Bob Beckwith, Courtney Covolo, Reina Watkins, Stephen Bouffard, Batu Getachew Olana, Mandy Slack, Jane Luther, Roberta Johnson, and taking the picture was Bill Clark. Records were broken throughout the auction that night and many gave to support this year's Scholarship Gala.

OJS Museum was honored to host a pre-seminar Meet & Greet with the Henberg Speaker, Dr. J. Drew Lanham. He was impressed with the Museum and the effort put into preserving history. Quite a few came, enjoyed snacks in the hall, and had plenty of time to walk through the Museum. Dr. Lanham was showered with Museum memorabilia and everyone seemed to thoroughly enjoy his visit.

## 2022 HENBERG ENVIRONMENTAL LECTURE

Tuesday, April 19, at 6 p.m. | Jewett Auditorium

*"Somewhere a Wild Negro Lurks:  
Considering Wildness Through a Southern Black Prism"*



**Dr. J. Drew Lanham**

J. Drew Lanham is an ornithologist, activist, and distinguished professor and master teacher of wildlife ecology at Clemson University, and the poet laureate of Edgefield County, South Carolina. He uses speaking and writing about birding as an inspirational vehicle for connecting people to the outdoors. He has spent decades writing and speaking about the experience of Black birders and has authored numerous essays on the connections between racism and extinction, continually working to make conservation more inclusive. Visit J. Drew Lanham at <https://milkweed.org/author/j-drew-lanham>



In May of 2022 the OJS Museum found itself front and center on the cover of *The Retort Newsletter* (Idaho Academy of Science & Engineering).

They used the information found in our previous year's Annual Report. This is a good way to get the word out, so if you have anything to add to next year's report just let the Administrative Assistant know. You can email Mandy Slack, any time, at [ojsmuseum@collegeofidaho.edu](mailto:ojsmuseum@collegeofidaho.edu).

A special thanks to all who contributed articles, pictures, ideas, and helped with editing to produce this Annual Report.



## Mission Statement

The Orma J. Smith Museum of Natural History seeks to instill an awareness of the natural world through the educational programs 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 exhibits, 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 The College of Idaho students and provide outreach to the general public.



Follow us on Social Media to keep updated on all things going on in the Museum:

<https://www.collegeofidaho.edu/about/campus-facilities/natural-history-museum>

Facebook: Orma J. Smith Museum of Natural History

Google Business: Orma J. Smith Museum of Natural History

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