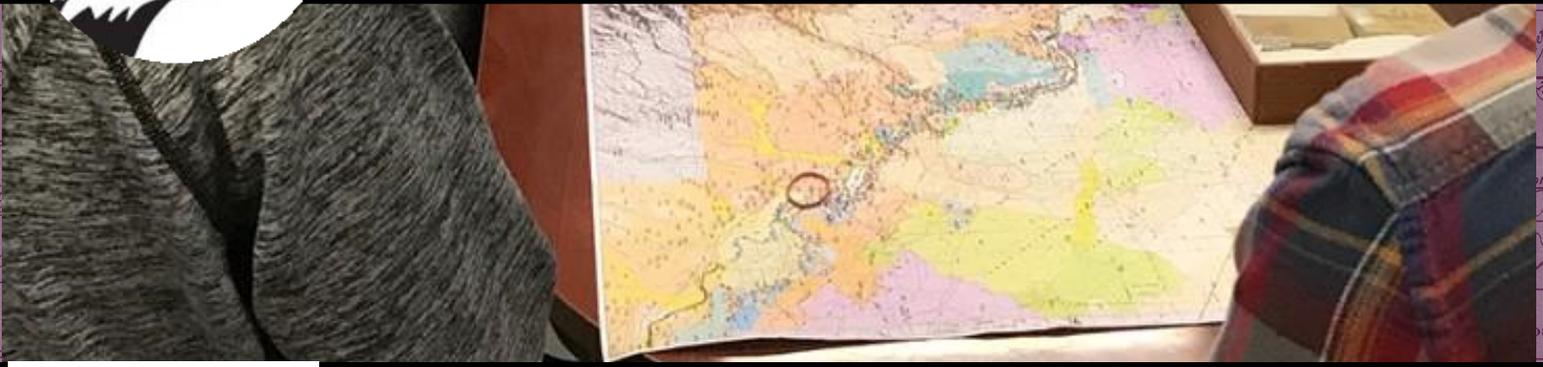
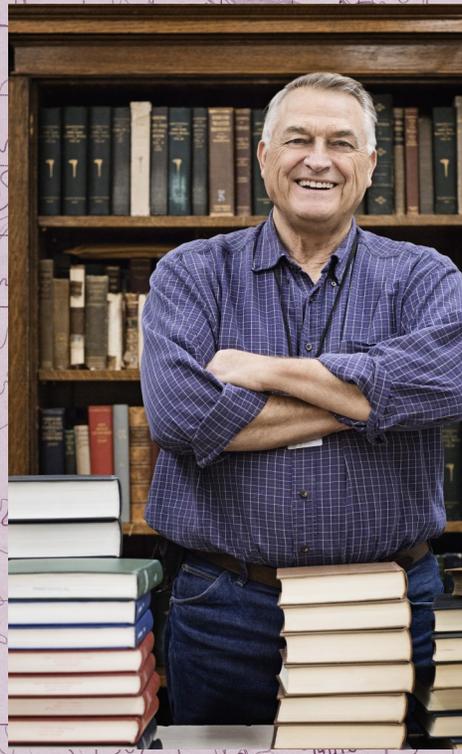




# ORMA J. SMITH MUSEUM OF NATURAL HISTORY 2018 ANNUAL REPORT





## *Mission Statement*

The Orma J Smith Museum of Natural History seeks to instill an awareness of the natural world through 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.

2018 Annual Report  
Produced by Orma J. Smith Museum of Natural History  
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Cover: Paleontology Curator, Dr. Kaitlin Maguire, preps The College of Idaho students prior to heading out on a nature hike to look for fossils

Photos provided by: Nathan Carpenter, Paul Castrovillo, William H. Clark, Aurora Cossairt, Barbara Ertter, Rochelle Johnson, Danielle Lewis, Kaitlin Maguire, Jan Summers Duffy, Dave Ward, Jr.

## Our Board

Dr. Barbara Ertter,

*Board Chair*

Billie Ann Farley,

*Secretary*

Jack Cafferty,

*Treasurer*

William H. Clark,

*Museum Director*

Dr. Ron Bitner

Dave Cannamela

Dr. Rochelle Johnson

Dr. Chris Walser

Dr. Eric Yensen

Randy Whipple

Aurora Cossairt,

*Student Representative*

*(June 2017– April 2018)*

## Our Staff

William Clark,

*Museum Director*

Diane Rice

*Museum Assistant (March 2017–  
January 2018)*

Danielle Lewis,

*Museum Assistant (February  
2018– )*

## Director's Message



Welcome to this year's Museum Annual Report. I hope you find it interesting and informative. I am happy to be able to report on some of the progress made in the Orma J. Smith Museum of Natural History over this past year. Physical progress includes an increased number of volunteers and volunteer hours donated to the Museum as well as the number of Cofl students using the Museum. Major donations of insect collections added to our holdings. The Evans Gem and Mineral

Collections was officially re-dedicated and is open to the public after a long period of unavailability. Our annual Homecoming Event in the fall showcased the significance of the Cofl Field Biology programs and trips to our lives and to the Museum. We added new staff, including a Museum Assistant and two new curators (in entomology and paleontology). Research progress is shown in a number of scientific publications and new discoveries made by our staff. We constantly strive to improve our integration into the College.

Please join us in celebration of the past field expeditions which helped shape the current Museum and move into the future by attending the College of Idaho Biology Department and Museum related field expeditions at Homecoming, September 13, 2019.

Don't forget to spread your love of the museum and invite someone new to visit in this upcoming year!

*William H. Clark, Director*

## Our Volunteers

Aimee Stocks, Al Gillogly, Alexa DiNicola, Amy Dolan, Anna Chase, Anna Clark, Anna Himler, Aurora Cossairt, Barbara Ertter, Becky Hanson, Betty Mallorca, Bill Clark, Billie Ann Farley, Bob Bashford, Bob Chehey, Brad Smith,

Carl Baker, Carol Prentice, Carolyn Whipple, Chris Walser, Craig Baird, Dale Rawson, Dave Cannamela, Dave Ward, Dawn Janney, Deborah Conner, Diane Rice, Don Dixon, Don Zaroban, Elizabeth Dickey, Eric Klein, Eric Yensen, Geri Van Curen, Hailey Palmer, Howard and Darlene Emry, Jack Cafferty, James Jarrett, Jan Summers Duffy, Jerry Wood, Jim Barbour, Jim Pike, Jim Ryan, John Lucas, John Sigler, Kaitlin Maguire, Kaitlyn Parks, Karl Klein, Kathleen Cookman, Kathleen Lucas, Ken Davis, Ken Grove, Kim Bashford, Leigh Wiemann, Leland Thames, Leta Wilson, Martha Jaimes, Mary Clark, Mary Klein, Matt Wierenga, Mike Mancuso, Mike Twitchell, Nate Carpenter, Neal Baronian, Patrick F. Fields, Paul Blom, Paul Castrovillo, Rachele Klein, Ralph Stearley, Randy Whipple, Rebecca Mills, Rex Hanson, Richard Salisbury, Rick Heathman, Robert E. Beckwith, Rochelle Johnson, Ron Bitner, Ross Winton, Sarah Hale, Stephanie Shank, Steve Bouffard, Susan Haynes, Taylor Klein, Teresa Tarifa, Tom Klein, Tom Trent, Val Ward, Virginia Klein, Wayne Lewis, Wieteke Holthuijzen, William James Nance

# IMPACT

*by the numbers*

**3258** people visited the Museum

**13** school groups **1** scout group

**53** MASSI students visited

**3** adult groups toured the museum

including 20 developmentally disabled adults

**106** students from The College of Idaho

*including classes, work study students, interns, and volunteers*

**15** Gipson Scholars studied in the Museum

**16** Art Students sketched in the Museum

## VOLUNTEERS DONATED

**5352** HOURS IN the Museum

**4914** HOURS OUTSIDE the Museum

Economic impact of volunteer hours is

**\$224,106.78**

*(per independentsector.org)*

**12** experts presented public monthly seminar topics



# COLLECTIONS *by the numbers*

~ 1, 263, 010

## TOTAL SPECIMENS & ARTIFACTS

1,015,800 Insect Specimens

10,300 Fossil Specimens

3,000 Mollusk Specimens

12,500 Mineral Specimens

20,000 Other Invertebrate Specimens

4,000 Plant Specimens

172,000 Fish Specimens

5,240 Cultural Artifacts

1,300 Amphibian Specimens

10,750 Research Library Holdings

1,100 Reptile Specimens

17 New Discoveries via research and within the collections

2,000 Bird Specimens

3,020 Mammal Specimens

*\* estimate based on catalogued and uncatalogued specimens*



## Thinking Through Things

For the second year, Gipson Honors students visited the museum several times in conjunction with their fall semester First-Year Seminar (FYS 110). For their final course project, each student chose an artifact or specimen from the museum and researched its meaning through geologic time and across human cultures. Their chosen specimens represented the diversity of the museum collections—a quartz crystal, a manatee skeleton, and a falcon mummy from ancient Egypt among them. In the end, students met the challenge of condensing their full research findings into a single sentence: *When you look at this [particular specimen], you see [something!]*. The students' insightful, pithy sentences allowed them to articulate their own sense of the significance of their specimen to the universe. Their work culminated in oral presentations in the museum, fully researched essays, a web site created for each specimen, and an exhibit on the first floor of Boone Hall. See their work at: <https://whenyoulook.wixsite.com/yousee/thinking-through-things-1>.



## CoI Students Hike with Experts



Inspired by a hike student board representative Aurora Cossairt took with Barbara Ertter and Jan Boles in the summer of 2017, the Museum launched a hiking series with The College of Idaho's Outdoor Program. Three hikes led students into the local area for hands-on experiences learning about paleontology, entomology, and botany. The students really enjoyed being able to ask highly knowledgeable curators questions while hiking the trails. The program is expected to continue.

## Field Trips and Homecoming

Held in mid-September, the Museum participated in a number of Homecoming activities. The annual Night at the Museum event featured a talk entitled "Adventures in Field Studies: The Legacy and Possibilities of Natural History Field Trips," which included an overview of The College of Idaho field trip legacy and how it has impacted the Museum, the College, and CoI students by William H. Clark, Rick Williams, and others. Volunteers Steve Bouffard, Wayne Lewis, and Nate Carpenter were honored for going above and beyond in their volunteer efforts. Dr. John Ottenhoff, former Dean and Vice President of Academic Affairs was also presented with the Faithful Museum Advocacy Award.

Additionally, a walking tour of the Luther A. Douglas sand paintings on campus was organized by the Museum. Conda Douglas, daughter of Luther, and Gil Douglas were present to help with the tours and provide additional information. New information and paintings came of this event.

A promotional poster for the "2017 Night at the Museum" event. The poster features a map of Idaho in the background. Text on the poster includes: "A College of Idaho Homecoming Event", "2017 NIGHT AT THE MUSEUM", "Adventures in Field Studies: The Legacy and Possibilities of Natural History Field Trips", "A collection of Oral and Visual Presentations featuring Dr. Pat Packard (with some of her students); Bill Clark, Dr. Don Mansfield, and Dr. Jamie Goode", "Friday, September 15 - 7 to 9 pm Boone Science Hall - Room 103", "Presentation of the Orma J. Smith Museum of Natural History Volunteer Awards", "Silent Auction", and "Dessert and Tours of the Museum in the Basement of Boone Hall following the program". There are several small inset photos showing people at the event.

# *Eighteen Years of Becoming a Bugologist*



Featuring three ladybug (ladybird beetle) releases, the 18th annual entomological extravaganza saw over 1700 people past the museum booths. The museum provided expert curators to demonstrate the major groups of insects from our collection with emphasis on groups that would be found in Idaho. Entomology curators and staff were on hand to answer questions from the public including making identifications of specimens that people brought. The Museum Gift Shop was present with tee shirts, bug nets, books, bug candy and toy bugs for sale. Kids could get their passports stamped by the Gift Shop /Exhibit Area to work towards their certificate in "bugology".

## *Museum Sponsors Budding Nature Enthusiasts*

For the second year in a row, the Museum has participated in the Deer Flat Master Naturalist program as a sponsoring cohort. The Idaho Master Naturalist Program aims to develop a corps of well-informed volunteers to actively work toward stewardship of Idaho's natural environment. Museum curators gave talks on a variety of topics, hosted a meeting, and provided volunteer opportunities for the enrollees. Idaho Master Naturalists are people who enjoy outdoor recreation, bird watching, identifying plants and animals, gardening, and supporting conservation through volunteerism. Weekly classes were held at the Refuge Visitor Center; natural history field trips were also included.



## *Through Rain and Shine, International Museum Day Connects*



Hosted at the World Center for Birds of Prey, board chair, Barbara Ertter, board secretary and outreach specialist, Billie Ann Farley, and volunteer Lindsay Woodruff, chaired a table at the Boise Museum Association's International Museum Day event. The event saw over 1200 people pass through, which was rather remarkable as the weather was less-than-favorable. Despite the Museum not being located in Boise, the BMA continues to extend invitations for the Museum to participate in local events such as this, which definitely raises the Museum's profile.

## *Generating Buzz for a New Pollinator Garden*

The Museum joined pollinator enthusiasts at the grand opening of the pollinator garden at the new Garden City Library. Curator Jim Ryan assisted on the pollinator walk, sharing his insights and expertise on pollinator insects, particularly bees. Meanwhile, Director Bill Clark and Assistant Danielle Lewis manned a museum table, sharing information about the museum, other insects, and even selling a few items. The event was attended by a few hundred people and is expected to continue to grow in the future.



## *Insect Collection Donated to Museum*

The Klein family donated 284 Schmitt boxes (small wooden storage and shipping boxes) of insects, mostly butterflies from Dr. Thomas Klein's years of collecting around the world. This collection includes 4,021 fully curated insects, mostly butterflies and beetles. In addition to the insects, collection and curation supplies and field notebooks were included in the highly organized collection. A very valuable aspect to this donation lies in the fact that many of the collections date back a few decades. This means that many of the collection sites are likely highly altered by human impact or gone all together. In other words, the collection localities and habitats no longer have some of these taxa present. So, the collections make a permanent record of part of the biodiversity of these areas and can be used for future research and study.



## *The Long-awaited Evans Collection Reveal*



On March 3, 2018, the Evans Gem and Mineral Collections were once more opened to the public. The collections include gem and mineral collections from the Owyhee Gem and Mineral Society, Mr. and Mrs. Earl M. Van Deventer, and Glen L. and Ruth Evans. The collections include educational materials, including rough rock and fossils, early local collection using primitive techniques, and a collection from over 100 countries and almost every state. Over 250 people attended the opening, including James and Richard Weed (whose father was the second curator of the collections), pictured to the left with current curator, Nathan Carpenter.

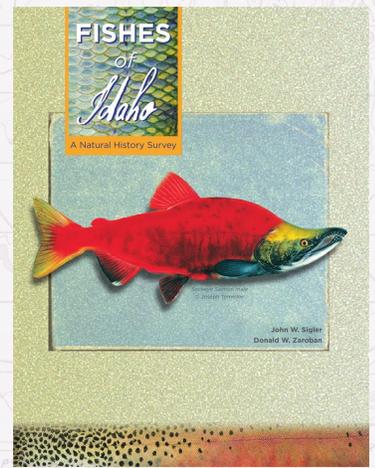
## *Sunny Days and nearly 1,000 Butterflies*

The 27th annual Boise Front 4th of July Butterfly Count was held on July 9, 2017 and was attended by approximately 40 butterfly observers/counters from the Orma J. Smith Museum and the general public. With a day of good weather, 987 butterfly individuals were recorded representing 50 different species. That's pretty typical for a "normal" count. Over 27 years the cumulative total now stands at 83 (more than half of Idaho's known butterflies), and the database includes the Western Tiger Swallowtail, which has been found on every count, as well as rare species like the Lustrous Copper, Green Comma and Arctic Skipper, which have each only been observed once. Two other Idaho butterfly counts were also attended by an O.J. Smith representative: one at Yellow Pine and one in the Seven Devils. Data from all of these counts was sent to the North American Butterfly Association which compiles data from about 400 counts throughout the country each year.



## *A New Tome Published for Fish Enthusiasts*

*Fishes of Idaho: A Natural History Survey* is the most recent and comprehensive study of the variety of fish species that inhabit Idaho's waters. An exhaustive natural survey of all species known to exist in the Gem State, this encyclopedic book provides biologists, naturalists, students, and anglers with the most complete reference of its kind. Produced by fish curator Don Zaroban and John Sigler. The book was even mentioned in an Idaho Statesman article.



## *New Assistant Hired at the Museum*



Born and raised in Boise, Danielle attended BSU where she earned a BA in the History of Visual Culture. During this time, she interned at the Boise Art Museum and decided that museums are where her heart is. She continued her studies at the University of Denver. Before receiving her MA in Art History & Museum Studies, she worked at the Denver Art Museum, the Wildlife Experience (now CU South), MCA Denver, and the Denver Museum of Nature and Science. Though she returned to Boise after finishing her coursework, her love for museums never abated and she headed to Los Angeles. After managing the Santa Monica History Museum for over two years, she returned to Idaho, always looking for the perfect museum fit, right here in her home state. She has over 15 years' experience in curatorial, education, visitor services, and museum administration.

## *Welcome New Curators: Kaitlin Maguire & Amy Dolan*

Kaitlin received her Ph.D. in Integrative Biology from UC Berkeley, an M.S. in Geology from Ohio University and her B.S. in Biology from George Washington University. Her research focuses on mammal paleoecology ranging from the Miocene to present but she has also studied flora from the Quaternary and modern landscapes. Her dissertation research focused on Miocene mammals from eastern Oregon, including Succor Creek. For her day job, Kaitlin works for the Idaho STEM Action Center providing professional development for teachers throughout Idaho. She is dedicated to improving STEM education and volunteers with various K-12 schools and secondary institutions inspiring the next generation of scientists.



Amy received her M.S. in entomology from Montana State University in 2016. She has a B.S. in biology from Wisconsin Lutheran College and a secondary science teaching certification. As an educator, she's taught in traditional middle schools, an outdoor education center, an Expeditionary Learning high school, and on mountain trails with the Montana Conservation Corps. She currently teaches middle school science at Heritage Community Charter School in Caldwell. As a curator at the museum, Amy has been working on identifying and databasing the *Bombus* collection, contributing to the PNW *Bombus* Atlas Project, sharing her love of native bees with the community, and brainstorming ways to use the museum to support K-12 natural history education in the Treasure Valley.

## *Museum's Sister Institution Celebrates 20 Years*

MUSEO DE ARTRÓPODOS DE CICESE turned 20 during the Fall of 2017 and David Ward, William and Mary Clark helped organize and attend the celebration in Ensenada, Baja California, Mexico. Bill and Dave hauled the first load of supplies (entomology cabinets, books, journals, lab and office supplies) to Centro de Investigacion Cientifica y de Educacion Superior de Ensenada (CICESE) the fall of 1997 and the following summer Bill and Mary Clark set the collection up in a room. The collection is now in the Department of Conservation Biology and is actively used by students and researchers and has a full time entomologist on site.

## ACADEMIC PUBLICATIONS

- Clark, W.H. Arthropod Museum at Cicese turns 19. February 2017. *Mediterraneanews*, no. 5, Ensenada, Baja California.
- Clark, W.H. 2018. Biodiversidad y panorama de la conservacion en la peninsula de Baja California. San Diego Natural History Museum, Sula Vanderplank and Michael Wall, Editors. [Invited Participant, Entomology Working Group.]
- Fitzpatrick, M.C., Blois, J.L., Williams, J.W., Nieto-Lugilde, D., **Maguire, K.C.**, Lorenz, D. 2018. How will climate novelty influence ecological forecasts? Using the Quaternary to assess future reliability. *Global Change Biology* 24(8): 3575-3586.
- Maguire, K.C.**, Shinneman, D., Potter, K., Hipkins, V. 2018. Intraspecific niche models for ponderosa pine (*Pinus ponderosa*) suggest potential variability in population-level responses to climate change. *Systematic Biology*.
- Maguire, K.C.**, Samuels, J.X., Schmitz, M.D. 2018. The fauna and chronostratigraphy of the Middle Miocene Mascall type area, John Day Basin, Oregon. *PaleoBios* 35:1-51.
- Nieto-Lugilde, D., **Maguire, K.C.**, Blois, J.L., Williams, J.W., Fitzpatrick, M.C. 2017. Multiresponse algorithms for community-level modeling: review of theory, applications, and comparison to species distribution models. *Methods in Ecology and Evolution* 9(4):834-848.
- Introgressive mtDNA transfer in hybrid lake suckers (Teleostei, Catostomidae) in western United States; **G.R. Smith, D.W. Zaroban**, B. High, J.W. Sigler, J. Schilling, T. J. Krabbenhoft, and T.E. Dowling. 2018. University of Michigan Museum of Zoology, Miscellaneous Publications 204, no. 3. Ann Arbor, MI.

## PUBLIC MONTHLY SEMINAR TOPICS

- |             |   |
|-------------|---|
| July 8      | Dr. Paul Castroville "ID and Biology of Idaho's Swallowtail Butterflies"                                |
| August 5    | Dr. Patrick Fields "The Scientific Method - A Quick Look at How Science Really Works"                   |
| September 9 | Kaitlin Maguire "Mammal fossil communities of eastern Oregon"   |
| October 7   | Steve Brittenham "Meteorite Origins and Meteorite Anatomy"  |
| November 4  | Dr. Eric Yensen "Are Piute ground squirrels, a keystone species, helped or hurt by rangeland seedings?" |
| December 2  | Amy Dolan "Bumble Bees in the West"   |
| January 6   | Dr. Paul Castroville "My Life Among the Ice Crawlers."  |
| February 3  | Dr. Luke Daniels "Science, Motorcycles, and Lessons Learned from a Fulbright exchange to Indonesia."    |
| March 3     | Nate Carpenter "Status of the Evans Gem and Mineral Collections."                                       |
| April 7     | Wieteke Holthuijzen "Turning Over a New Leaf: Restoration of Midway Atoll"                              |
| May 5       | Jan Summers Duffy "Archaeology: Discovery, Reassessment & Artifacts of The Warm Springs site #10AA612." |
| June 2      | Howard Emry "Fossil Hunting in the Green River Formation, A Lifetime Adventure."                        |



**MUSEUM**

BEGINNING BALANCE	19,077.72	
<b>REVENUE</b>	<b>FY18</b>	<b>FY17</b>
ENDOWMENT/TRUST DRAW	11,424.83	8,791.46
GIFTS	31,814.17	18,960.00
OTHER INCOME	2,688.67	1,280.50
<b>Total Revenue</b>	<b>45,927.67</b>	<b>29,031.96</b>
<b>SALARIES</b>		
<b>Total Salaries</b>	<b>13,152.11</b>	<b>677.57</b>
<b>EXPENSES</b>		
OFFICE EXPENSE/DEPT SUPPLIES	21,353.43	12,428.69
POSTAGE EXPENSE	469.95	364.99
PRINTING	475.77	- 677.65
ADVERTISING/PROMOTIONAL	0.00	0.00
BOOKS	1,134.91	0.00
EQUIPMENT PURCHASES	15,220.95	2,826.62
PROFESSIONAL SERVICES	2,906.80	81.00
TRAVEL/EDUCATION EXPENSE	51.75	126.75
MEALS/ENTERTAINMENT	45.25	120.00
MEMBERSHIPS	525.00	145.00
OPERATIONS & MAINTENANCE	210.86	0.00
INTDT TRANS COPIER CHARG	248.25	216.41
INTDT TRANSFER	0.00	- 5,000.00
<b>TOTAL EXPENSES</b>	<b>42,642.92</b>	<b>10,631.81</b>
<b>ENDING BALANCE</b>	<b>9,210.36*</b>	<b>19,077.72*</b>

**GIFT SHOP**

<b>REVENUE</b>	<b>FY18</b>	<b>FY17</b>
OTHER INCOME	2,890.42	1,616.80
<b>Total Revenue</b>	<b>2,890.42</b>	<b>1,616.80</b>
<b>EXPENSES</b>		
OFFICE EXPENSE/DEPT SUPPLIES	1,349.45	1,273.81
BOOKS	304.79	0.00
<b>Total Expenses</b>	<b>1,654.24</b>	<b>1,273.81</b>
<b>TOTAL PROFIT/LOSS</b>	<b>1,236.18</b>	<b>342.99</b>

**EVANS GEM & MINERALS COLLECTIONS**

<b>REVENUE</b>	<b>FY18</b>	<b>FY17</b>
ENDOWMENT/TRUST DRAW	811.33	625.93
GIFTS	9,100.00	2,850.00
<b>Total Revenue</b>	<b>9,911.33</b>	<b>3,475.93</b>
<b>SALARIES</b>		
<b>Student Salaries</b>	<b>0.00</b>	<b>900.00</b>
<b>EXPENSES</b>		
OFFICE EXPENSE/DEPT SUPPLIES	34.72	0.00
OPERATIONS & MAINTENANCE	6,016.18	0.00
INTDT TRANS MOTOR POOL	29.48	0.00
<b>Total Expenses</b>	<b>6,080.38</b>	<b>0.00</b>
<b>Total Profit/Loss</b>	<b>3,830.95</b>	<b>2,575.93</b>

**FINANCIALS****Donors****Up to \$250**

Robert & Marcia Beckwith, Ron & Mary Bitner, Stephen & Loreli Bouffard, Simon & Richard Boycott, Jack & Ashley Cafferty, Cynthia Clark, Ellen Clark, Roberta Coats-Bowles, Marilyn Devaney, Billie Farley & Stephen Smith, Sean Farley, Robert & Beth Graves, George Hall, Idaho Master Naturalists McCall Chapter, Roberta Johnson, Rochelle Johnson, Megan Mizuta, Georgianna Parkinson, Royal Puckett, James Ryan, Jennifer Sampson, Leland & Glenda Thames, James & Paraluman Washburn, Randy Whipple, YOURCAUSE LLC

**\$251– \$500**

Diana Dron, Alan & Patricia Gillogly, Rebecca & Rex Hanson, Roger & Mary Higdem, Nancy Weber

**\$501–\$1000**

Barbara Ertter, Tammy Roberts, David & Peggy Schneider

**\$1001+**

Nathan Carpenter, William & Mary Clark, Christopher Davidson, Karl & Rachele Klein, Eric & Mary Klein, Jane & Dale Luther, Stephanie Shank, David & Valerie Ward

*\* most money remaining at the end of the fiscal year is earmarked for expenses occurring later in the calendar year; therefore rolls from one fiscal year to the next*



Left & Right: Interns J. Younggren & K. Westhoven assist in Archaeology Center: The Cofl football team helps move exhibit cabinets



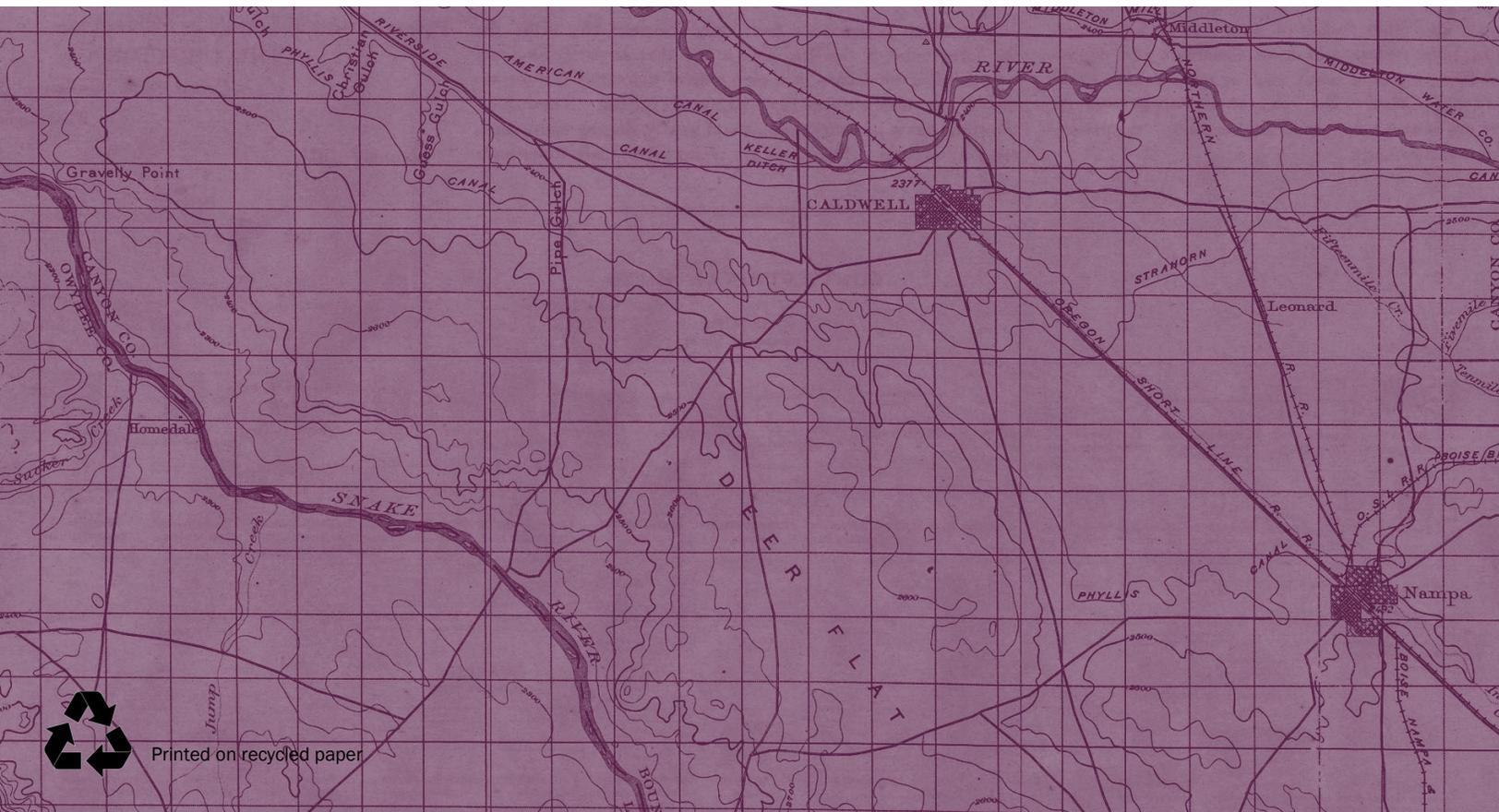
ORMA J. SMITH  
**MUSEUM OF  
NATURAL HISTORY**

THE COLLEGE  
of IDAHO



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