



ORMA J. SMITH
MUSEUM OF NATURAL HISTORY



THE COLLEGE OF IDAHO



Annual Report
Fiscal Year 2016
July 1, 2015 - June 30, 2016

From the Director

Fiscal Year 2016 was a great year for the Orma J. Smith Museum of Natural History! We are especially proud to be part of Best College Review's list of the "30 Most Amazing Higher Education Natural History Museums!"

The list also included museums at much larger universities including University of Michigan, University of Arizona, University of Wisconsin, Harvard, and Yale.

Other news includes the filming of an episode of Idaho Public Television's award-winning "Science Trek" in the Museum. Museum staff participated in archaeological projects in Egypt and Idaho, discovered a major new fossil location, and carried out numerous field and other research projects. Staff members were featured in newspaper articles and radio interviews.

The Museum welcomed two new Board members, a new Research Associate, and new volunteers and student assistants. I became a paid member of The College of Idaho administration. We carried out a major re-organization of the library and are continuing computerization of our specimen catalog. Museum staff members published a number of papers and presented their work at professional conferences. The Gift Shop began accepting on-line purchases and credit card payments. Increases in endowments and donations have provided added financial security and helped to enable sustained growth.

Collections grew as a result of donations and ongoing field research by Museum staff members. The Museum continued planning and installation of the Evans Gem and Mineral Collections, which include extensive collections of fossil wood, decorative rock spheres, and minerals.

Through these and other activities, the Museum has continued to focus on its Mission and Vision Statements:

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 educational needs of students at The College of Idaho and provide outreach to the general public."

"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 natural history objects for this and future generations. The Museum serves students and the general public by offering tours, interpretive displays, and other educational programs that foster life-long learning by all who visit."

Except for the Director and a small number of student interns, the Museum is an all-volunteer organization that relies on donations, grants, and contracts. Our needs are great. Please feel free to contact me if you would like to donate time, money, or goods and services. New volunteers are always welcome!

We hope you will visit us. The Museum is in the basement of Boone Hall on the campus of The College of Idaho (corner of Fillmore & 20th Streets, Caldwell, Idaho). We're open weekday afternoons from 1-5 pm, one Saturday a month (usually the first), and by appointment. Admission is free and tours are available on request. To learn more, visit our website (www.collegeofidaho.edu/about/campus-facilities/natural-history-museum) and like us on Facebook (facebook.com/OJSmithMuseum/)



Fiscal Year 2016 was a year of growth!

Growing recognition

- The Museum was included on Best College Review's list of the "30 Most Amazing Higher Education Natural History Museums!"
- Idaho Public Television's "Science Trek" program about insects was filmed in the Museum
- The Museum and its staff were featured in articles in the *Idaho Press Tribune*, *Idaho Statesman*, and *Star-News* (McCall, Idaho)
- Interviews with Museum staff were aired on KBSU (Boise State University Radio), KBRX (Boise Public Radio) and Freedomslips Radio



Bill Clark and Dr. Alan Gillogly with Joan Cartan-Hansen filming a "Science Trek" episode in the Museum

Growing staff

The Museum welcomed new Board Member Dr. Rochelle L. Johnson, new Board Member and Research Associate Dr. Julia T. Sankey, and new Research Associate of Paleontology Dr. Ralph Stearley



Gift Shop Manager Geri Van Curen welcomes in-person, on-line, and credit-card orders

Growing capabilities

- Library collections were re-organized for easier access
- Museum gift shop can now accept on-line and credit card purchases
- Computerizing Museum catalogs continues

Growing collections

- Large donations of insect collections and reference materials
- Planning for installation and display of Evans Gem and Mineral Collections

Growing exhibits

A new permanent exhibit about Idaho archaeology

Rotating exhibits:

- Baskets and Pottery (March-August 2015)
- Pollinators (September-November 2015)
- Winter Birds and Mammals (December 2015 -March 2016)
- Ocean Shells (April - December 2016)



Jump Creek Cave exhibit explains archaeology of southwestern Idaho

Selected research activities

Jan Summers Duffy (Curator of Archaeology & Egyptology) joined a team from Spain to study and restore a tomb in the Valley of the Kings, Egypt. She also participated in an excavation of the surgeon's quarters at Fort Boise, Idaho.



Jan Summers Duffy doing archaeological field work in Egypt

Dr Patrick Fields (Curator of Paleontology) and **Dr. Barbara Ertter** (Research Associate and Board President) discovered a new location with fossils of 16 million year old plants unlike those in nearby areas. Their research documents local variability in fossil plant communities.

Nate Carpenter (Curator of Paleontology and of the Evans Gem and Mineral Collections) and **Dr. Ralph Stearley** (Research Associate of Paleontology) collected vertebrate fossils and geological specimens in southern Idaho. Their research will help to understand the history of rocks and fossils in this area.



Dr. Patrick Fields and Dr. Barbara Ertter collecting fossils from a new locality they discovered in Ponderosa State Park, Idaho

Several Curators continued the Museum's chronological collections of insects from Deer Flat National Wildlife Refuge near Boise, Idaho. These collections represent more than ten years of continuous research and collecting, providing unique information about biological changes through time. Curators also collected insects from Texas, Idaho, and Baja California Sur, Mexico.

Bill Clark (Museum Director and Curator of Invertebrates) was an entomologist on an interdisciplinary expedition to assess the biodiversity of the site of a proposed open-pit gold mine in Baja California Sur, Mexico.



Dr. Paul Castroville (Curator of Lepidoptera) with some of the Museum's collection of insects from Deer Flat National Wildlife Refuge

Advancing science through collaboration

Curators and Research Associates collaborated with colleagues from the University of Idaho, United States Geological Survey, United States Department of Agriculture (Logan Bee Lab), United States Fish and Wildlife Service, Idaho Power Company, the University of New Mexico, and the Museo de Artrópodos de Baja California (at CICESE, the *Centro de Investigación Científica y de Educación Superior de Ensenada*, Baja California, México).



Paleontology field camp in mountains of southern Idaho

The Museum exchanged specimens with institutions and individuals including Washington Department of Agriculture, the University of Arizona, Arizona State University, the University of Idaho, Purdue University, Oregon Department of Agriculture, Smithsonian Institution, California Department of Food and Agriculture, Idaho Power Company, and the University of Georgia, and with private researchers in Oregon, California, and Utah.



Alan Gillogly and Bill Clark in Mexico

Researchers presented their work in publications and conference presentations

Selected publications:

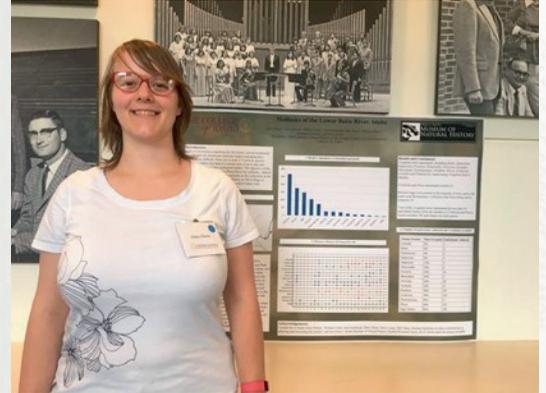
- S. Vanderplank, B.T. Wilder, E. Ezcurra, **William H. Clark**, et al. 2016, Arroya la Junta: Una joya de biodiversidad en la Reserva de la Biosfera Sierra La Laguna/ A biodiversity jewel in the Sierra La Laguna Biosphere Reserve. Botanical Research Institute of Texas, Next Generation Sonoran Desert Researchers, and UC MEXUS. 159 pages.
 - Richard L. Westcott and **William H. Clark** (2015), "*Chrysobothris lixa* Horn, 1886 (Coleoptera: Buprestidae) confirmed in Baja California, Mexico and newly recorded for New Mexico, U.S.A., with other notes on the species and the historical locality Catalina Springs, Arizona," *Pan-Pacific Entomologist*, 91(4):352-355.
 - Jan Summers Duffy**, "Pillows for a king—the headrests of ancient Egypt and tomb KV62," published in Proceedings of the 4th Eurasian Multidisciplinary Forum, EMF 2016, 27-29 April, Vienna, Austria (2016)
 - Jan Summers Duffy** "The Last Coffin," featured on cover of *Ancient Egypt*, December 2015/January 2016 issue
 - Barbara Ertter** and Sonia Nostratinia (2016), "A new variety of *Abronia mellifera* (Nyctaginaceae) of conservation concern in southwestern Idaho," *Phytoneuron* 2016-20:1-4, published March 3, 2016.
- John W. Connelly, Donald H. Mansfield, Roger Rosentreter and **Eric Yensen**. 2016. Our view--Greater Sage-Grouse habitat restoration: Sound science or wishful thinking? *Grouse News* 51: 5-12

Selected conference presentations:

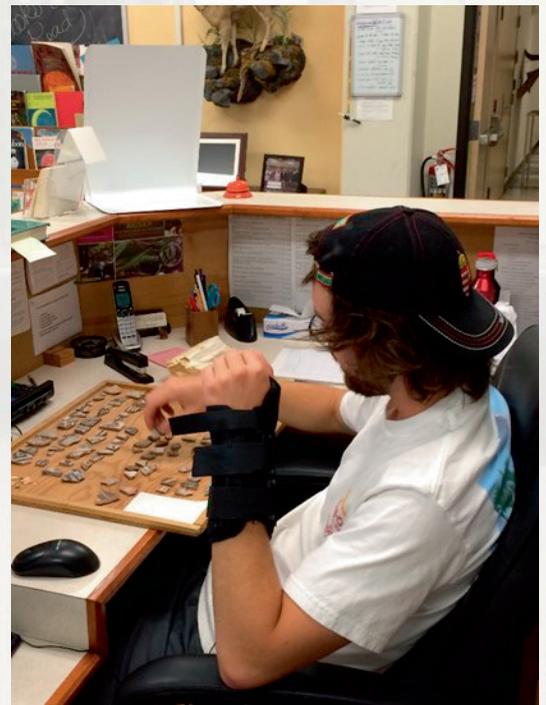
- Ralph Stearley**, **Gerald Smith**, and **Nate Carpenter**, Preservation of a diverse ichthyofauna in Miocene and Pliocene lakes on the western Snake River Plain, Idaho and Oregon, presented at the Annual Meeting of the Rocky Mountain Section of the Geological Society of America
- Nate Carpenter**, "Review of Neogene Formations of the Western Snake River Plain, USA," presented at the Annual Meeting and Symposium of the Idaho Academy of Science and Engineering.

Education is a high priority!

- Inaugurated a new **Museum Student Research Grants** program with an award to Anna Chase
- Helped The College of Idaho to recruit prospective students
- Sponsored a table at The College of Idaho Scholarship Gala
- Gave tours of the Museum for College staff members
- Hosted College classes and research by individual students
- Participated in the Math and Science Summer Institute (MASSI)
- Provided opportunities for student interns to gain experience with scientific research and Museum operations
- Installed rotating exhibits near science classrooms and laboratories
- Museum Director Bill Clark became an official member of the administration, Academic Affairs, of The College of Idaho
- Jan Summers Duffy judged the regional competition for **National History Day**
- Dr. Paul Castrovillo spoke to children about “bugs” as part of a program sponsored by **the City of Kuna**
- Researchers helped **Boy Scouts** earn merit badges
- Staff members gave tours to more than 300 elementary and middle school students from **Syringa Middle School, Anser School, Vallivue, Wilson Elementary School, Lewis and Clark School, and Nampa Heritage Community Charter School**



Anna Chase presenting her work at The College of Idaho Student Research Conference



Will Callahan (Student Member of the Museum Board and Museum intern) working with archaeological specimens from the Museum collections



Howard and Darlene Emry teaching Boy Scouts about geology and paleontology

Sharing enthusiasm and expertise

The Museum and Idaho Botanical Garden co-sponsored a day-long workshop on “**Bees and Blooms.**” Instructors included Museum researchers **Dr. Ron Bitner, Dr. Craig Baird, and Dr. Barbara Ertter.** Participants learned about bee behavior and identification.

More than 800 people attended “Bug Day,” an annual “entomological extravaganza” co-sponsored by the Museum and the Idaho Botanical Garden. Family-friendly events included butterfly releases and an “ask-an-entomologist” booth staffed by Museum researchers.

Thirty one people participated in the **25th Annual 4th of July Boise Front Butterfly Count**, sponsored by the Museum. Results of these butterfly counts are used to understand changes in butterfly populations and distributions over time.

Other activities included tours, presentations, and field trips for audiences from **Boise Chapter of the National Federation for the Blind, Foothills Learning Center, Othello Sandhill Crane Festival, Southwest Idaho Birders Association, Golden Eagle Audubon Society, a retired teachers association, Idaho Environmental Education Association, and Idaho Master Naturalists.**



Bees and Blooms Workshop participants learned how to choose bee-friendly plants for their gardens



Museum entomologists **Dr. Paul Castrovillo** and **Dr. Alan Gillogly** answered insect-related questions for members of the public at Bug Day



Butterfly Count participants found and identified butterflies from 44 species!

Lunchtime research talks (free and open to the public)

July 11, 2015:

Dr. Paul Castrovillo (Curator of Lepidoptera), “Selected Topics on Idaho Butterflies,” followed by training for the 4th of July butterfly count

August 1, 2015:

Dr. Patrick F. Fields (Curator of Paleontology), “A New Fossil Flora from the Middle of Payette Lake”

September 12, 2015:

Cyndy Bratz (Bratz Environmental Engineering), “Climate Change Impacts, Global and Local”

November 7, 2015:

Dr. Eric Yensen (Curator of Mammals), “Collapse of the sagebrush-steppe ecosystem”

December 5, 2015:

Dr. Alan Gillogly and **Dr. David Ward, Jr.** (Curators of Entomology), “Scarabaeoidology in Colombia”

January 9, 2016:

Shiann Johns (Boise State University), “Interdisciplinary Approaches to History: How STEM Fields Impact Historical Research”

February 6, 2016:

Sara M. Pourzamani (Boise State University), “Characteristics of Predator Visits to Burrowing Owl Nests”

March 5, 2016:

Dr. Barbara Ertter (Research Associate and Board President), “Treasures of the Boise Front”

April 2, 2016:

Jan Summers Duffy (Curator of Archaeology & Egyptology), “History, Archaeology & Recent Theory of KV 62, The Tomb of Tutankhamun And recap of my work with TT209 – Proyecto dos cero nueve; La Laguna University, Spain”

May 7, 2016:

David Valentine (Idaho Power Company), “Power to the People’s Pumps: History and Archaeology of High-Lift Pumping.” (This talk was an event for Idaho Archaeology Month.)

June 4, 2016:

William H. Clark (Museum Director and Curator of Invertebrates), “Biodiversity Survey Inside the Sierra La Laguna Biosphere Reserve in Baja California Sur, Mexico: The Los Cardones Project.”

Night at the Museum 2015

The Museum's Celebration of Homecoming at The College of Idaho

The evening began with a wine tasting and hors d'oeuvres, followed by Opening Remarks by **The College of Idaho President Dr. Charlotte Borst** and a lecture by College of Idaho Alumnus, Museum Board Member, Research Associate, and vintner **Dr. Ron Bitner**

Volunteer of the Year Awards were presented to **Dr. Alan Gillogly** and **Dr. James Ryan**

Mr. Bill Belknap was recognized with a Longtime Museum Advocate award

The **Houston and Clark Families** received a Legacy Award in recognition of substantial donations to the Museum Endowment Fund



Dr. Alan Gillogly, Volunteer of the Year



Dr. James Ryan, Volunteer of the Year



Mr. Bill Belknap (left) receiving a Longtime Museum Advocate award from Professor Eric Yensen



The Houston and Clark Families, Legacy Award Recipients

Concerned about bees?

Night at the Museum!

The Orma J. Smith
Museum of Natural History
The College of Idaho



Friday,
September 18, 2015
6:30 pm Wine Reception
7:00 Program
Boone 103

"Adventures of a College of Idaho bee biologist (or how did I get from bees to wine?)"
Dr. Ron Bitner
C of I alumnus, member of Board of Trustees, Museum Board member, wine maker, and noted bee expert



Museum awards & free refreshments!

The Orma J. Smith Museum of Natural History at The College of Idaho is the only natural history museum in Southwestern Idaho. It was recently included on Best College Review's list of the "30 Most Amazing Higher Education Natural History Museums."

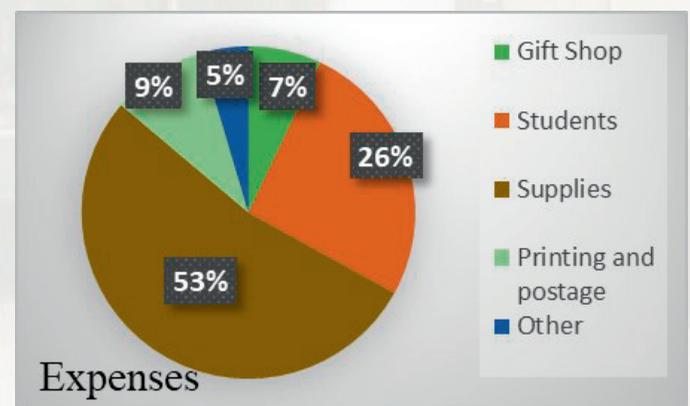
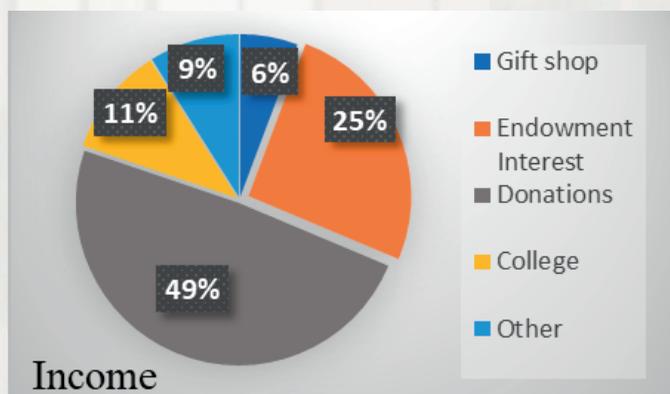
The Museum provides educational services and experiences (including internships and research grants) for students at The College of Idaho and other educational institutions throughout the area. It serves the public through outreach events. It serves researchers around the world with its unique reference collections. The Museum is open to the public and admission is free.

Fiscal Year 2016 was a year of growth, with significant increases in public recognition, capabilities, staff, and collections. Research activities included archaeological field work in Egypt and discovery of a new fossil area in southwestern Idaho as well as ongoing field work in subject areas including entomology and paleontology.

About 800 people visited the Museum in Fiscal Year 2016. This is far fewer people than visit other museums in the area. To expand visitor opportunities, the Museum needs a modern exhibit area, upgraded storage capabilities, better publicity and marketing, and funding for staff to care for collections and enhance public access to exhibits.

The Museum is supported by the community. Essentially all labor is provided by volunteers and student interns. Volunteers donated more than 3600 hours of labor in Fiscal Year 2016, with some volunteers traveling hundreds of miles to support the Museum.

Financial summary



These figures summarize the Museum's income and expenses based on a total income of ~\$21,000 and expenses of ~\$15,000 for Fiscal Year 2016. They do not include "in kind" donations such as specimens, literature, and supplies. Donations from individuals and corporations provided most of the income. Endowment interest became a significant source of income this year as a result of a large donation in prior years. Other sources of income included financial support from The College of Idaho and income from the Museum's gift shop. Major expenses were for supplies and equipment for curation and research, salaries and benefits for student assistants, and outreach activities. Income in excess of expenses in Fiscal Year 2016 was set aside to hire a part-time staff member in Fiscal Year 2017.

The Museum is particularly grateful to its volunteers and to the following donors: Charles M. Barksdale, Dr. Craig R. Baird, Bitner Vineyards, Gwen Blom, Stephen H. Bouffard, E.S. Boydston, Nathan Carpenter, Paul Castrovillo, William H. and Mary Clark, Dr. Peter L. Comanor, Howard and Darlene Emry, Barbara Ertter, Billie Ann Farley, Sean Farley, Dr. Patrick F. Fields, Norma Jean Fisher, Alan and Patricia Gillogly, Robert Graves, Idaho Botanical Garden, Idaho Department of Environmental Quality, Gary W. Johnson, Wayne Lewis, Dr. William P. Mackay, Ron McPeak, Carol Prentice, Dr. James K. Ryan, Julia T. Sankey, Stephanie G. Shank, Virginia Sorenson, Dave Stagliano, Gene Sullivan, Dr. William J. Turner, David Valentine, Geraldine Van Curen, Dave and Val Ward, Nancy Weber, Rick Westcott, William F. Barr Entomological Museum of the University of Idaho, Dr. Rick Williams, and Eric Yensen



Board of Directors, calendar year 2015: (left to right) **Dave Cannamela**, **Billie Ann Farley** (Secretary), **Dr. Barbara Ertter** (2016 Chair), **Dr. Eric Yensen**, **Dr. Ron Bitner**, **Bill Clark** (Museum Director), **Jack Cafferty**. Not shown: **Dr. Chris Walser** (2015 Chair)

Gift Shop Manager: **Geri Van Curen**

Outreach: **Kinga Britschgi** (Tour coordinator), **Jan Summers Duffy** (Facebook administrator), **Billie Ann Farley**, **Dr. Dawn E. Janney** (Webmistress)

Student Interns: **Will Callahan**, **Anna Chase**, **Rachel Dickey**, **Hannah Dixon**, **Caitlin Indart**, and **Shandee Tachick**

Curators And Research Associates: **Dr. Craig R. Baird** (Curator of Entomology), **Dr. Ron Bitner** (Research Associate of Entomology), **Dr. Paul Blom** (Research Associate of Entomology), **Stephen H. Bouffard** (Curator of Birds), **Nathan E. Carpenter** (Curator of the Evans Gem and Mineral Collections and Curator of Paleontology), **Dr. Paul Castrovillo** (Curator of Lepidoptera), **William H. Clark** (Museum Director and Curator of Invertebrates), **Mary Clark** (Curatorial Assistant of Entomology), **Janet L. Summers Duffy** (Curator of Archaeology and Egyptology), **Howard Emry** (Curator of Paleontology), **Dr. Barbara Ertter** (Research Associate), **Dr. Sean Farley** (Research Associate of Mammalogy), **Dr. Patrick F. Fields** (Curator of Paleontology), **Dr. Alan R. Gillogly** (Curator of Entomology), **Dr. David H. Gregor, Jr.** (Research Associate), **Dr. James B. (Ding) Johnson** (Curator of Entomology), **Wayne Lewis** (Library Director), **Bill Nance** (Curator of Ethnography), **James Pike** (Research Associate), **Dr. James K. Ryan** (Curator of Entomology), **Richard A. Salisbury** (Associate Curator of Mollusca), **Dr. Julia T. Sankey** (Research Associate), **Stephanie Shank** (Curator of Entomology), **Dr. Gerald R. Smith** (Curator of Fossil Fishes), **Dr. Ralph F. Stearley** (Research Associate of Paleontology), **Teresa Tarifa** (Research Associate of Mammals), **Leland Thames** (Facilities), **Dr. Chris Walser** (Associate Curator of Fishes), **Dr. David Ward, Jr.** (Curator of Entomology), **Gerald E. Wood** (Curator of Invertebrates), **Dr. Eric Yensen** (Curator of Mammals), **Dr. Donald W. Zaroban** (Curator of Fishes and Collection Manager of Herpetology)

Annual Report written by Dr. Dawn E. Janney with assistance from Museum staff members, the Museum Board of Directors, and The College of Idaho. Photographs by Hill Street Studios, Paul Castrovillo, Anna Chase, Bill Clark, Jan Summers Duffy, Barbara Ertter, Al Gillogly, Dawn Janney, Ralph Stearley, Dave Ward, and Spencer Wood

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

Like us on Facebook: [facebook.com/OJSmithMuseum/](https://www.facebook.com/OJSmithMuseum/)



Dr. Patrick Fields collecting fossils

Orma J. Smith Museum of Natural History
The College of Idaho
2112 Cleveland Boulevard
Caldwell, ID 83605 USA



Printed on recycled paper