

BEATY BIODIVERSITY MUSEUM

ANNUAL REPORT

2013-2014

A world where biodiversity is better understood, valued, and protected.



a place of mind

THE UNIVERSITY OF BRITISH COLUMBIA



CONTENTS

2	Director's Report
3	Collections and Research
3	Cowan Tetrapod Collection
4	Marine Invertebrate Collection
5	Herbarium
7	Spencer Entomological Collection
8	Fish Collection
9	Fossil Collection
10	Education and Outreach
11	Volunteers
12	Exhibits and Design
13	Administration
14	Operations
15	Donors

The Beaty Biodiversity Museum (BBM) has developed tremendously since opening in October 2010. The last year has been a particularly exciting one as we re-organized the leadership structure of the BBM; gained several new, enthusiastic, and very skilled staff members; launched a bright new website; and welcomed our 100,000th visitor! In fact, from the highly successful Alumni Weekend in May 2013 where we had more than 2,000 visitors in a single day, the BBM had its best year yet with over 35,000 visitors.

The mission of the BBM is to inspire an appreciation and understanding of biodiversity, in its myriad forms, through collections-based research, teaching, and public outreach. As you will see in the following pages there is a tremendous breadth of activity at the BBM. From research on the floral diversity of BC and the world, to providing web-based access to data (from DNA to song type) in birds, to welcoming hundreds of school groups, to hosting spectacular special exhibitions on biodiversity-related themes and issues, we take a multifaceted approach to conducting research, teaching, and communicating about biodiversity.

One of our key goals over the next year is to start to understand how our efforts are impacting our visitors' understanding and attitudes towards biodiversity. What are the key impressions our visitors have about biodiversity? How have such impressions changed after visiting the BBM? Do the exhibits and programs offered by the BBM influence attitudes towards biodiversity? Are we having an impact on everyday decisions that people make that may promote the persistence of biodiversity? These are some of the questions that we will try to find answers to over the next year or so such that we can gauge if we are fulfilling our mission and making progress towards our vision of a world where biodiversity is better understood, valued, and protected. Such information will be critical for the BBM to have in order to improve what we do and how we do it.

Finally, every now and then I browse through our visitors' comment book. Without fail, I am amazed at the overwhelmingly positive and enthusiastic comments I see (e.g., "...this place is AWESOME", "...I love the whale and its story", "...fantastic place"). Without question, the key reason why people consistently have a very positive experience at the BBM is because of the tremendous support that we receive. It is thanks to the commitment to the BBM by our dedicated volunteers, financial donors and those who donate specimens to our collections, and, of course, our many members, that we are able to do the research, education, and outreach work that we do. In addition, the BBM rests within a fantastic intellectual milieu and support system; the Faculty of Science, the Biodiversity Research Centre, and the Departments of Botany and Zoology continue to provide critical support to the BBM in so many ways. The diverse and enthusiastic support that we receive from all of you is sincerely appreciated and valued.



Dr. Eric Taylor
Director, Beaty Biodiversity Museum
Professor, Department of Zoology
Director, Fish Collection

COWAN TETRAPOD COLLECTION

SPECIMENS ACCESSIONED THIS YEAR: 306 BIRDS, 75 MAMMALS, 3 REPTILES, 5 AMPHIBIANS

RESEARCH VISITORS: 42 | POST-SECONDARY TEACHING LOANS: 7

GROUP LAB SESSIONS: 20 | DAYS OF GRADUATE STUDENT USE: 48

DAYS OF ARTIST VISITS: 43 | VOLUNTEER HOURS: 800

The Cowan Tetrapod Collection is the second-largest scientific collection of birds, mammals, reptiles, and amphibians in British Columbia.

Expanding access through databases

Our major focus this year was on modernizing and increasing global access to the Cowan Tetrapod Collection databases. We have now reached a major milestone: all the mammal, bird, reptile, and amphibian research specimens housed at the Beaty Biodiversity Museum (39,773 records total) can be searched online using the international multi-museum search engine VertNet.

We have also initiated a major new effort to photograph the Collection. When complete, photos linked to database specimen records will allow citizen scientists, students, and researchers around the globe to remotely view our diverse collection representing 72 per cent of the world's birds families, 95 per cent of British Columbia's mammals, and 83 per cent of British Columbia's amphibians and reptiles.

Developing OMBIRDS protocol

As part of this modernizing process, we have developed the OMBIRDS Protocol (Online Museum of Bird Images, Recordings, and DNA Samples). Much avian research uses catch-and-release approaches, and this protocol facilitates the databasing and archiving of collections of associated genetic material, images, and sound recordings. The protocol and database template can be used by individual researchers and institutions, and also streamlines the process of submitting records to international data repositories such as VertNet. By contributing OMBIRDS to the research community, we hope to encourage the collection of media along with genetic samples and to facilitate the archiving of these materials for use in future research.

Publications

In May 2014, this new initiative mentioned above was announced in the following journal article:

Szabo, I., S. Cavaghan, G. Hurley, and D.E. Irwin. 2014. A call for the preservation of images, recordings, and other data in association with avian genetic samples, and the introduction of a solution: OMBIRDS. *The Auk: Ornithological Advances* 131: 321–326.

Dr. Darren Irwin
Director

Ildiko Szabo
Assistant Curator of Birds

Chris Stinson
Curatorial Assistant of Mammals,
Reptiles, and Amphibians



MARINE INVERTEBRATE COLLECTION

SPECIMENS: OVER 500,000 | NUMBER OF SPECIES: 50,000

The Marine Invertebrate Collection includes all marine animals without backbones. Our collection has several hundred thousand specimens representing the major lineages of invertebrate animals.

The Collection is accessed extensively in the teaching of undergraduate invertebrate biology. Its holdings represent a broad range of marine creatures in an astonishing array of colours and forms.

Monitoring BC's marine ecosystems

This year, the Marine Invertebrate Collection accepted a donation of research specimens from Dr. Cathryn Clarke Murray's work on marine invasives in British Columbia. The specimens include examples of introduced crustaceans and molluscs, the monitoring of which will be critical to the future of BC's marine ecosystems.



Paul Bucci



Paul Bucci

Dr. Brian Leander
Director



Paul Bucci

HERBARIUM

The UBC Herbarium comprises several collections including the algae, bryophytes (mosses and relatives), vascular plants, fungi, and lichens.

Our collections continue to grow

- We received over 12,000 specimens as donations
 - 3,000 specimens of fungi from Observatory Hill, Vancouver Island, collected by BC Botany's prodigious husband and wife team, Drs. Oluna and Adolf Ceska (*at left in photo, below*)
 - 77 rare mosses from BC, including one that is a new species to Canada and 15 range extensions, which add to our knowledge of the flora
- Received a new species to science, a member of the sunflower family from northern BC.

Supporting teaching and research at UBC and beyond

This year, the Herbarium hosted 127 students and researchers, and 18 research articles and books cited the Herbarium as a supporting the published research. We also supported many UBC classes, who used the Herbarium to teach students about biodiversity and collections.

Plants and People (Biol 343)

Bryology (Biol 321)

Seed Plant Taxonomy (Biol 324)

Laboratory Investigation of Life (Biol 140)

Vascular Plants (Biol 210)

Mycology (Biol 323)

We supported eight UBC Work Learn students teaching the skills and knowledge needed for working in a natural history collection and in a public museum setting.

Numerous UBC graduate students rely on the Herbarium collections to support their research.

- Erin Fenneman (Ph.D. candidate, Graham lab) is studying evolutionary diversity of the vascular plants of southern British Columbia using DNA barcoding
- Jamie Fenneman (Ph.D. candidate, Whitton lab) uses the specimens to answer questions about the biogeography of the sunflower family of British Columbia

SPECIMENS: OVER 665,000 | ACCESSIONED THIS YEAR: 3,525
DATABASED RECORDS: 503,000 | NEW RECORDS THIS YEAR: 7,245
IMAGED SPECIMENS: 25,556 | NEW IMAGES THIS YEAR: 4,256
LOANS: 1,665 SPECIMENS | VOLUNTEER HOURS: 1,329

Dr. Jeannette Whitton
Director

Linda Jennings
Assistant Curator

Olivia Lee
Collections Manager

Saskia Wolsak
Database Manager



- Megan Bontrager (Ph.D. candidate, Angert lab) is measuring the floral traits of monkeyflower to better understand variation in the mating behaviour of the plants
- Anna Bazzicalupo, Jaclyn Dee, and Ludovic Le Renard (Ph.D. candidates, Berbee lab) are asking questions about the evolution of fungal diversity

Researchers from far beyond UBC also made use of our research collections and facilities. As part of the work for the Aleutian Moss Flora, a collaborative project involving UBC curator of bryophytes Dr. Judith Harpel, assistant curator Ms. Olivia Lee, and Stephen Talbot, Alaska US Fish and Wildlife, the bryophyte collection hosted world experts in mosses to help identify specimens.

Our online databases continue to grow, and now include 503,000 records (75 per cent of our holdings), including 7,245 records databased in the past year. Updates and refinements of specimen data occur nearly every time we touch a specimen.

Loans and database information are used in large collaborative projects like the Flora of North America, the Bryophyte Flora of North America, the Flora of the Pacific Northwest, and Oregon Flora project. We continue our long-standing data-sharing relationships with E-Flora BC, The Consortium of the Pacific Northwest Herbaria, Canadensys, and the Global Biodiversity Information Facility (GBIF). Our collections also support the numerous Federal reports on species at risk, and we work closely with the Ministry of Environment to keep an eye on new collections of rare or endangered plants species from British Columbia.

John Davidson 1913 collection of a tiger lily – UBC Herbarium



Presentations, workshops and exhibits

We organized three workshops to teach plant and moss identification. The 4th Schofield Bryophyte–Lichen foray was held at Wells Gray Provincial Park area in August 2013. *The private lives of mushrooms*, a Faculty of Science video, focuses on the research of Mary Berbee, curator of fungi (<http://science.ubc.ca/feature/mushrooms>).

Linda Jennings collaborated with Dr. Erica Wheeler of Royal British Columbia Museum Herbarium (V) on the presentation *The Present State and Future Directions of Botany Collections in BC and Yukon Herbaria* at the Canadian Botanical Association Meeting (June 2013). They surveyed the state of herbaria in BC, and suggested ways to increase access to remote collections for research.

Dana Cromie's *Remnants* exhibit at the Beaty Biodiversity Museum featured artwork inspired by rare and invasive specimens housed in our collection.

Grants and awards:

Over the past three years, support from UBC's Irving K. Barber Learning Centre BC History Digitization Program has allowed us to complete the imaging of our earliest plant specimens in the collection, dating back to 1885.

Volunteers

The UBC Herbarium has benefited from volunteer work from all parts of the community. Volunteer support is greatly needed and appreciated. Notable contributions come from Steve Joya, expert in B.C. mosses and UBC alumnus, who volunteered over 600 hours and Behereh Djavadi, taxonomist trained in the Iranian National Herbarium, who donated over 100 hours of her time in the past three years.

SPENCER ENTOMOLOGICAL COLLECTION

SPECIMENS: 600,000 | PHOTOGRAPHS OF SPECIMENS: 23,000

The Spencer Entomological Collection is the second-largest collection of insects and other arthropods in western Canada.

Expanding the Collection

The Collection had a busy year. Expeditions to Mexico and western North America yielded a few thousand jumping spider specimens, including at least ten species new to science. Local trips and two BioBlitzes (Whistler and Stanley Park) were also productive—even though the Whistler BioBlitz was in its 7th year, of the 120 species we catalogued in 24 hours, 49 were new to their invertebrate list.

Supporting learning

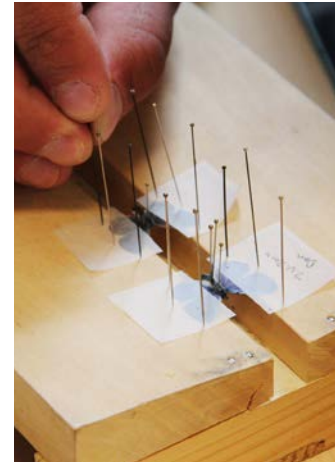
Outreach activities included a pond poke, talks, and providing specimens for exhibits. We have been lucky to welcome many volunteers in the Collection—currently nine, in total averaging 20 hours per week—and a Work Learn student at 600 hours over the year.

New insects added to the Collection

We were able to accession 10,000 insect specimens from a large private donation received several years ago, thanks to a Museums Assistance Program grant. A donation of over 10,000 nature photographs was received from Ian Lane's estate, and will provide a museum exhibit next year.

Increasing access through digitization

Digitization continued with 18,952 specimen records now uploaded and 7,225 specimens now photographed by Don Griffiths (*photo, near right*), soon to include one of almost every reliably identified species in the Collection. As an original member of Canadensys (www.canadensys.net), we are making our databases and photographs available to the larger scientific community and the public through their portal and the Museum's website.

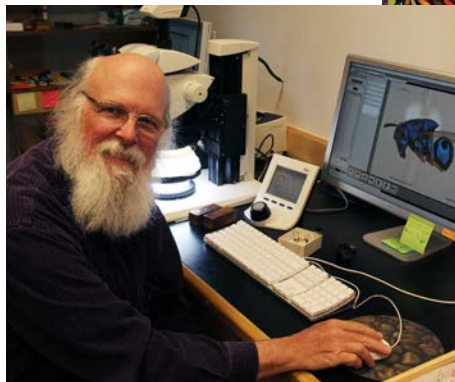


Paul Bucci

Dr. Wayne Maddison
Director

Karen Needham
Assistant Curator

Don Griffiths
Imaging Technician



Paul Bucci



FISH COLLECTION

SPECIMENS: 853,245 | DNA SAMPLES: 68,000 | TISSUE COLLECTIONS: OVER 1000

The UBC Fish Collection is the third-largest ichthyological collection in Canada and a major provincial, national, and international resource.

Documenting the Collection

The last year saw the completion of a large backlog of specimen cataloguing—we have added 905 new records in the Fish Collection. New specimens range from local species from throughout British Columbia to an African “pike” and several native fishes from Japan where M.Sc. student S. McNally spent four months in late 2013 conducting research.

Rare books donated

The Fish Collection also received a generous donation of rare books on fishes, a gift from the estate of the late Dr. Alex Peden, a UBC grad who worked for many years at the Royal BC Museum in Victoria.

Industry workshop

We hosted the first-ever BC Freshwater Fishes Identification Workshop at UBC for fisheries biologists in industry. The workshop was a great success with 15 enthusiastic participants brushing up on their identification skills for the upcoming field season.

Publication

Blanchfield, P.J., E.B. Taylor, and D.J. Watkinson. 2014. Morphological and genetic analyses identify a new record of a glacial relict; pygmy whitefish (*Prosopium coulterii*) from northwestern Ontario. *Can. J. Zool.* 92: 267-271.



Dr. Eric Taylor
Director



FOSSIL COLLECTION

SPECIMENS: 20,000 | SPECIMENS CATALOGUED: 3,783

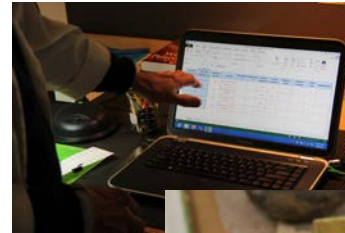
The Fossil Collection has 20,000 specimens that range from recent shells to early traces of cyanobacteria, called stromatolites that represent some of the oldest evidence of life on Earth. The Collection includes several of British Columbia's earliest natural history records and represents a comprehensive survey of BC's paleontological heritage.

Reorganizing the Collection

One of our main objectives this year was to initiate an extensive reorganization of the Fossil Collection—including re-cataloging all specimens (3,783 to date) in order to provide a consistent and retrievable database with information on each specimen. With five volunteers working part-time in the Collection cleaning, organizing, and cataloguing specimens, our team is steadily working toward the next step of collection modernization—a publicly-accessible online database including high-resolution images of each specimen in the Collection.

Collection highlights

A generous donation of Burgess Shale fauna from Parks Canada has been added to the collection. There is a current collaboration with the Ucluelet Aquarium to provide a grouping of marine fossils that will supplement their newly built aquarium on the West Coast of Vancouver Island.



Dr. Stuart Sutherland
Director

Dr. Kirsten Hodge
Curator



EDUCATION AND OUTREACH

MUSEUM TOURS DELIVERED: 764 | PUPPET SHOWS: 134 | NOON HOUR ACTIVITIES: 333
HOURS OF SCHOOL PROGRAMS DELIVERED: 313 | NUMBER OF PARTICIPANTS: 9,256 | PUBLIC LECTURES: 17

The Education and Outreach team shares the stories of the research collections with the public through school programs, daily tours, activities, special events, and partnerships.

This year, teachers and group leaders could choose from six different school programs, three children's programs and five tours. Our programs complement the BC curriculum, current biodiversity research, and offer students hands-on learning experiences with Museum specimens increasing awareness of evolution, ecology, conservation, and biodiversity.

Bringing the collection to life with programs and events

In May 2013, the Museum launched 'Extreme Adaptations', a year of thematic programming exploring amazing organisms through tours, puppet shows, story time, noon-hour activities, and a wide range of daily programming.

Special events this year included: Mushroom Walks with Botany faculty and graduate students, Hands-On Biodiversity during spring break, and FestEVOLVE—our annual celebration of Charles Darwin and evolution. Several public lectures were offered, including the popular Biodiversity Lecture Series and the monthly, family-friendly Way Cool Biodiversity series.

Reaching out to the community

The Education and Outreach team worked with several organizations to support community events. Through support from UBC Campus + Community Planning and work with the UBC Botanical Garden, the Museum was able to develop a monthly Nature Club for families on campus and a teacher/scientist partnership at University Hill Elementary. Event partnerships included:

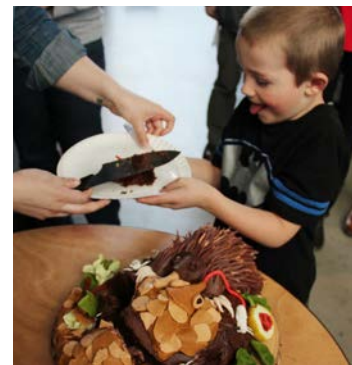
Night Quest with Metro Vancouver Parks, Barn Raising Celebration with the University Neighborhood Association, and FestEVOLVE with the Pacific Museum of Earth and the Vancouver Paleontological Society.



Jackie Chambers
Education and Outreach Manager

Nicole Balsdon
Education and Outreach Coordinator

Nancy Lee
Tanis Gieselman
Sabrina Cornish Shartau
Derek Jang
Sheila Byers
Museum Interpreters



VOLUNTEERS

TOTAL VOLUNTEER HOURS: 10,257.64 HOURS (OR 1.17 SOLID YEARS)

ACTIVE VOLUNTEERS: 125 | NEW THIS YEAR: 44

Over 100 active volunteers support the Education and Outreach team in sharing the stories of the research collections. Along with other members of the museum team, volunteers are identifiable in their red vests and are ready to answer questions and share stories with visitors. Volunteers also assist with events and special programming such as Spring Break drop-in activities, public lectures, UBC Alumni Weekend, and UBC Botanical Garden Apple Fest.

Our dedicated volunteers have an understanding and an enthusiasm for the museum which they readily share with visitors; this team of knowledgeable and friendly people adds a personal touch to the visitor experience and strengthens the connections between the Museum, the collections, and the community.



EXHIBITS AND DESIGN

MAJOR EXHIBITIONS: 3 | NUMBER OF ARTIST TALKS AND TOURS: 10

The Beaty Biodiversity Museum's gallery wall presents art exhibitions that offer visitors a novel way to view the natural world and our relationship with it. This year, the Museum presented three art exhibitions, each of which made the invisible visible.

[a]drift

Merging the worlds of art and science, artist Edith Krause showcased human life-sized images of microscopic marine creatures. The enlarged portraits conveyed their ecological importance, and revealed forms both unfamiliar and fantastic.

Invisible Portraits

Former and current Biodiversity Research Centre members Kevin Carpenter, Erick James, and Patrick Keeling presented microbial life refashioned as metal sculpture, wood carvings, and large-scale portraiture.

Remnants

Twenty-six detailed drawings by UBC Botanical Garden Artist in Residence Dana Cromie were letterpress printed, hand cut into 1,500 pieces, and glued into a series of five portraits that offered a view of the natural landscape over time, and the effect of human influence.

The Museum also presented a new initiative, *Researchers Revealed*, a series of panels that features the work of Biodiversity Research Centre researchers. So far, the new display panels have described work on topics such as migratory birds, tiny plant microfossils, and life in the intertidal zone. New research projects will continue to be presented between temporary exhibitions.



[a]drift



Invisible Portraits



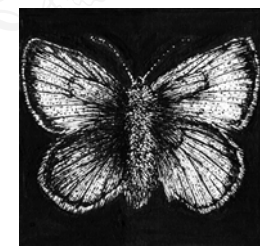
Remnants

Yukiko Stranger-Galey
Exhibits Manager (on leave)

Hana Dethlefsen
Exhibits Manager

Derek Tan
Digital Media Specialist

Lesha Koop
Mountmaker



Dana Cromie

This past fiscal year, the Beaty Biodiversity Museum experienced significant organizational and staffing changes to better position the Museum as the leader in the acquisition, care, and use of biological collections, and their information content and accessibility.

Long-term maintenance

Prior to opening, the Museum employed a large number of contracted consultants and temporary employees with specialized skill sets to work on a number of projects that were required to establish the Museum. As the Museum progressed through the first few years of operation, the need for such specialized workforce diminished and shifted towards staff that could maintain the operations inherent of a public facility focused on research and education. The Museum now has over six full-time staff, 16 part-time staff, and six part-time student staff all working towards ensuring the Museum achieves its vision of a world where biodiversity is better understood, valued, and protected.

Financial health

Through the support of the Faculty of Science, grants, donations, membership, and earned income, the Museum's financial health stayed strong throughout the fiscal year. Funding received and collected helped the Museum become a leader in the care and use of biological collections in research, public outreach, education, and exhibits to help people to understand and value their connection with the natural world and to live and act in ways that promote its sustainability.

Community gathering place

Through the strategic direction, operational oversight, and leadership provided by the Director of the Beaty Biodiversity Museum, the organization has made considerable strides towards becoming a community resource and gathering place to promote life-long learning and engagement in biodiversity.



Evan Hilchey
Administrative Manager

Mairin Kerr
Marketing, Communications,
and Events Coordinator

Katherine Ransom
Nancy Zhang
Elsome Tsui
Fidelia Lam
Mat Houlton
Front Counter Clerks



Beaty Biodiversity Museum Director, Dr. Eric Taylor (left) with the Graham family, collecting their 100,000th visitor prize package and tour

Through the support of the Faculty of Science, grants, donations, membership, and earned income, the Museum's financial health stayed strong in fiscal year 2013.

Budget

in thousands of dollars

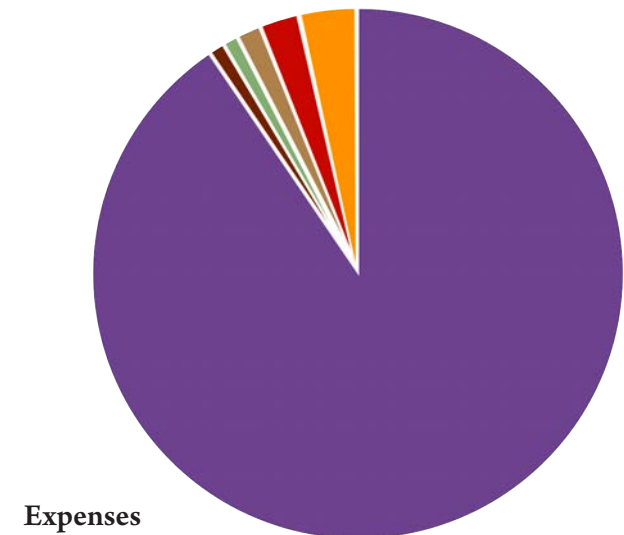
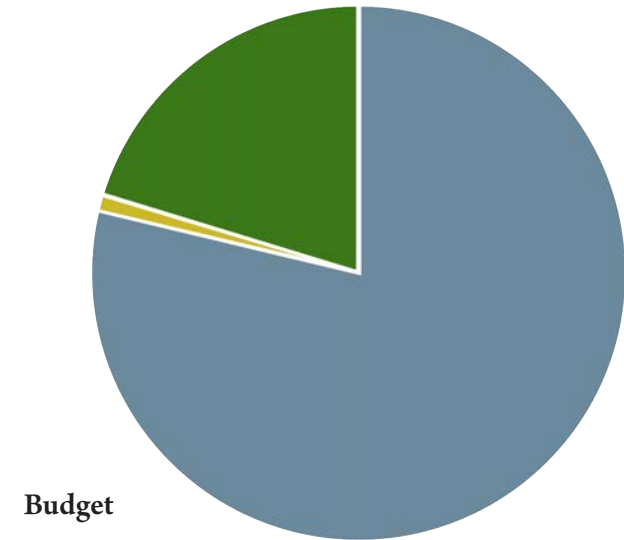
Faculty of Science Allocation:	804	
Earned Income:	207	
Grants, Donations, and Memberships:	11	

Expenses

Human Resources:	923	
Operations:	36	
Research and Collections:	25	
Marketing, Communications, and Events:	15	
Education and Outreach:	10	
Exhibits and Design:	10	

Change in Net Assets 2.3

Endowment 37¹



1. Endowment was not used in FY14

We are grateful to our founding donors who made essential contributions to the creation of this world-class facility for biodiversity research and community learning:

Ross and Trisha Beaty
The Djavad Mowafaghian Foundation
Dr. Allan Yap

2008

Aimee J.D. Pelletier
Allen Banner
Alvin Kumar
Amie M. Roman
Cameron H. Ainsworth
Carla C. Reyes
Carol Hsu
David K. Chan
Helen H. Chiu
John K. Jeffery
Marie K. Villanueva
Quirien Mulder Ten Kate
Robert A. MacKett
Rolf Dekleer
Sarah P. Otto
Stuart L. Iverson
Wayne Goodey

2009

Dorothy Janzen
John C. Le Nobel
Katherine Serrano
Quirien Mulder Ten Kate
Robert A. MacKett
Stephanie E. Lieblich
Timothy R. Parsons
Wayne Goodey

2010

Aaron S. Chang
Barbara L. Vincent
Ben H. Seghers
Bruce Alcock
Bruce Bennett
Cameron J. West
Caroline A. Jackson
Curtis Björk
Cynthia Crampton
Darren Luce
Edith M. York
Elizabeth (Betsy) A. Lane
Frank Lomer
Geoffrey Lau
Gordon and Iola Knight
Katherine Serrano
Kent M. Brothers
Laura Singletary
Leo Hathaway
Les Leighton
M. Terry Taylor
Melanie M. Medina
Monica Stewardson
Nathalie Djan-Chekar
Oluna Ceska
Paul Kroeger
Phyllis A. Butler
Plato S. Mamo
Quirien Mulder Ten Kate
R.G. Knight
Richard J. Krejsa
Sandra C. Lindstrom
Sheila W. Louie

Simon M. Peacock
Tamanjit Braich
Terry T. McIntosh
Trevor Goward
University Neighbourhoods
Association
Wayne Goodey
Yvonne Y. Chong

2011

Abby Schwarz
Anne Pound
Ben H. Seghers
Cameron H. Ainsworth
Cameron J. West
Curtis Björk
Darren Luce
David W. Jamieson
Deirdre Fitz-Gibbons
Erik Thorn
Frank Lomer
Helen Kennedy
Jennifer A. Webb
Jeremy DeWaard
John-Francis Lane
M. Terry Taylor
Patrick S. Williston
Paul Kroeger
R.G. Knight
Richard W. Vedan
Sandra C. Lindstrom
Sun Life Financial
Terry T. McIntosh
Trevor Goward
Wayne Goodey
Yuriy Shevchuk

And thank you to everyone who has supported us since.

2012

Bruce Bennett
Bryce Kendrick
Curtis Björk
Edith M. York
Elizabeth Molitor
Frank Lomer
G. Karen Golinski
Gary C. Olszewski
Gerald J. van de Wint
Helen Kennedy
Ian S. Burgess
Jamie Fenneman
Jean Kosar
John C. Le Nobel
M. Terry Taylor
Nathalie Djan-Chekar
Nishanta Rajakaruna
Oluna Ceska
Paul Kroeger
Plato S. Mamo
R.G. Knight
Robert Curtiss
Robert L. Heese
Sandra C. Lindstrom
Stephen Rea
Terry T. McIntosh
Trevor Goward
Wayne Goodey

2013

Angeleen E. Ramey
Ben H. Seghers
Brock C. Ramshaw

Bruce Bennett
Charles B. Paris
Donald J. Robinson
Edith M. York
Elizabeth Molitor
Frank Lomer
George D. Robinson
Ian S. Burgess
Jay Angert
Judith Harpel
Katherine Serrano
Matthew Robinson
Michael Hoebel
Nathalie Djan-Chekar
Oluna Ceska
P. Dawn Shaw-Biswas
Patrick S. Williston
Paul Kroeger
Quirien Mulder Ten Kate
Sandra C. Lindstrom
Sun Life Financial
Terry T. McIntosh
Virginia M. Skilton
R.G. Knight
Wayne Goodey

2014

Brock C. Ramshaw
Harry R. Carter
Ian S. Burgess
Jean Morley
Susanne J. Evans
Willow Grove Foundation
Wood Family



© Beaty Biodiversity Museum
Photography by Derek Tan,
unless otherwise noted.



Beaty Biodiversity Museum
2212 Main Mall
University of British Columbia
Vancouver, BC V6T 1Z4
phone: 604.827.4955
fax: 604.822.0686
email: info@beatymuseum.ubc.ca
beatymuseum.ubc.ca