

The case for filling the vacant Curator of Entomology position at the Royal BC Museum:

- The Entomology Collection of the RBCM is one of the **most active, intensely managed, and utilized collections** at the RBCM
- Insects and their terrestrial arthropod relatives make up approximately 80% of known animal species; to have this **immense diversity** unrepresented by a curator in our museum is a serious problem.
- Specifically, it is estimated that there are **35,000 insect species in BC. Yet fewer than half have been recorded.** We are still at a very early and exciting stage of discovery of new species in entomology in this region of the world.
- **Research** using the RBCM entomology collection involves describing new species and documenting the distribution, status, biology, and evolutionary histories of insects and other terrestrial arthropods. In addition to other significant public, scientific, and educational roles, this research supplies critical data to government management of our land and its resources.
- The **13 Research Associates** doing collection-based research in entomology require a curator sponsor for guidance and to act as an intermediary with management.
- Curators produce many of the museum's **publications**, from popular articles for the general public to scholarly research articles and books recognized at the international level.
- Curators **serve as a representative of the museum** at provincial, national, and international research conferences and a variety of societies and scientific, government and public committees.
- The lack of a curator significantly reduces the input of a wide variety of biological information to **public programming** and extension services. Lectures, talks, and workshops for children, the general public, university students, and others are reduced.
- Potential upgrades to exhibits, as well as the **creation of new exhibits**, will suffer. This problem will be particularly acute as soon as planning for new natural history exhibits begins.
- The information on the **RBCM website** with regard to entomology, its largest collection, will be diminished without the input of a creative curator.
- Entomology is **ALWAYS in the news** and interpreting entomological news to the public is a curator's job: declining bee populations, mosquito-vectored disease, invasive ants, the economics of the mountain pine beetle epidemic, Lyme disease, declining lady beetle populations, etc.
- **Public and government inquiries** in Entomology easily number more than **1,000** each year, and this level of interest is not easily handled by a single staff person. This extension activity is primarily a curatorial responsibility.
- A decision not to fill the vacant RBCM Curator of Entomology position **will harm the Royal BC Museum's provincial, national and international reputation** as a museum placing the highest priority on excellence in collections, research, and public education.

Summary

The Entomology Collection is one of the most dynamic, active, and growing collections in the Royal BC Museum holdings, and it requires much more staff support than it has presently. The Curator retired at the end of 2012; it is imperative that this position be filled. Although the Collection Manager is capably attempting to fill the void, dividing her time between both collection management work and Acting Curator means neither role can be adequately handled.

Background

Current collection information:

The Entomology Collection is by far the largest and most diverse collection in the RBCM holdings, containing approximately 600,000 specimens and specimen lots.

The Entomology **database** contains 243,903 specimens/lots. **Additional growth** since the 2008 conversion to the current database can be shown by the numbers of specimens accessioned in each of the years since – almost 90,000 additional specimens:

2013/2014 – 20,607
2012/2013 – 19,985
2011/2012 – 13,780
2010/2011 – 16,811
2009/2010 – 7,560
2008/2009 – 7,996

Note: Collection manager was only part time prior to 2010

A conservative estimate of the number of specimens still in unsorted samples that need to be identified and integrated into the collection: an additional 250,000 specimens.

Donations:

The importance of the Royal BC Museum as a central repository cannot be ignored, as evidenced by the extensive history of donations to the institution. It is unacceptable that our reputation may be diminished if we are seen to be short-staffed. Here is a summary of the past few years, to give an idea of the public, corporate, and government recognition of the museum as a sound choice for contributions:

2013/2014 – 2,300 specimens/ lots	2011/2012 – 6,500 specimens/ lots
2012/2013 – 6,000 specimens/ lots	2010/2011 – 3,500 specimens/ lots

Loans:

Collaboration with the scientific community extends well past the boundaries of this facility, as evidenced by outgoing loan activity in Entomology. During the last 5 years, **73 loans** of approximately 16,000 specimens have gone out to researchers - literally all over the world.

The Royal BC Museum Entomology Collection hosts visiting researchers regularly. Every visit is exciting for them and for us-: new records, new species - new discoveries. A few highlights:

- We have three Research Associates working with flies, including our former curator. Just in the last 2 years there have been at least 3 publications that included new species descriptions of flies found in British Columbia –a publication from a Finnish researcher, another from Ontario, and one from our very own Curator Emeritus. There are still significant opportunities for further research in this area of the collection.

- The bees and their relatives: a hot topic given reported bee declines throughout the world. There are 450 known bee species in the province and another 100 are thought to occur here. We currently have three volunteers specifically committed to documenting this diversity, and we are collaborating with a colleague at the Royal Saskatchewan Museum.
- The grasshoppers and their relatives only make up a small portion of British Columbia's insect fauna - ~120 species. But even in this relatively small and well-known group, a Research Associate, in partnership with the Barcode of Life lab at Guelph, is working out new species using DNA analysis on some very cryptic species.
- We estimate that there are approximately 1,000 species of spiders in British Columbia, and we are currently documenting their distributions through targeted fieldwork and relevant donations from other research going on in the province. The first BC checklist of spiders produced contained 212 species, by 2014 that number has more than tripled, and we are still finding new records. There is still plenty of work required on this important group, and many ways to engage an audience on the topic.

Additional Information

Link to the Royal British Columbia Museum website pages about the entomology collection:

<http://royalbcmuseum.bc.ca/nh-collections/entomology/>

Link to an article about the history of the Royal British Columbia Museum entomology collection:

<http://royalbcmuseum.bc.ca/staffprofiles/files/2014/06/Cannings-RBCM-Entomology-Collection-Biol-Survey-Newsletter-Fall-2010.pdf>

Below is the contact information for sending in comments and concerns about this vacant position.

Please consider writing a paper letter to the Royal BC Museum to encourage the hiring of an entomology curator to fill the present vacancy. Or, write an email letter using the following addresses. If possible, use institutional letterhead. Thank you!

Write to:

Prof. Jack Lohman
Chief Executive Officer
Royal British Columbia Museum
675 Belleville St,
Victoria, BC V8W 9W2
JLohman@royalbcmuseum.bc.ca

And send a copy to:

Peter Ord: Vice President, Archives, Collections, and Knowledge
POrd@royalbcmuseum.bc.ca