

Trevor Wong
April 25th, 2016

John W. Eastham: Biographic Details of a Little Recognized Plant Pathologist

Report prepared at the request of the University of British Columbia Herbarium, in partial fulfillment of Geog 429: Research in Historical Geography, for Dr. David Brownstein.

Abstract

This paper provides a historical account of the plant pathologist, entomologist, and botanist, John. W. Eastham (1878-1968). The research presented here will provide an account of Eastham's biographic details as well as a detailed survey of his professional and academic work focusing heavily on Eastham's life in British Columbia (1914-1968). I will argue the following; In the early 20th century the agricultural sciences were beginning to develop in Canada. However, the degree of knowledge production in agricultural Science was underdeveloped at the time. Eastham is worthy of significant praise and distinguished honor due to his substantial novel contributions to the fields of plant pathology, entomology, and botany within 20th century British Columbia; all of which were crucial in expanding Canada's agricultural knowledge.

Why Should we Care about Eastham?

Simply put, not much is known about J.W. Eastham but his mark on early 20th century agriculture is everywhere. For example, in the context of the UBC herbarium (a herbarium is a facility dedicated to the storage and archiving of dried plant specimen), Eastham's work is present in much of the materials in their collection. Look closely and you will find his name, comments, and identification remarks on many of their plant specimens. Eastham also donated a substantial collection of over 15,000 specimens to this herbarium and his collection is reportedly the second largest in their repository.¹ In this case, just by virtue of his botanical donations to

¹ Saarela, J. M., Lipsen, L., Sayre, C. M., & Whitton, J. Vascular Plant Type Specimens in the University of British Columbia Herbarium (UBC). *Journal of the Botanical Research Institute of Texas*, 1(1), 437–448. 2007 Retrieved from <http://www.jstor.org/stable/41971434>; R. H Estey. *Essays on the Early History of Plant Pathology and Mycology in Canada*. McGill-Queen's Press. 1994.

UBC's herbarium, he is an important figure in terms our understanding of British Columbian Flora.

However, Eastham was also responsible for other noteworthy feats. Eastham was one of the first people in Canada with formal training in entomology and plant pathology and he was responsible for identifying two novel cases of plant disease in British Columbia. He was also a dedicated educator who, according to Estey, an author who appears to be the authoritative guide on the history of plant pathology in Canada, was likely the first person to give formal lectures on the subject of Plant Pathology in British Columbia.² Eastham was also responsible for donating over 4000 books to the University of British Columbia in 1948.³

Early Life

J.W. Eastham was born in Liverpool England in 1879. Eastham considered Liverpool as a place that was “dirty and grimy”, however, he also carried a degree of respect for the city considering his birthplace as an “interesting centre of commerce”.⁴ When he was seventeen, Eastham attended Edinburgh University in pursuit of a Bachelors of Science Degree. During his time as an undergraduate he would go on to become a distinguished student winning the Wilson Memorial Prizeman, Hope Scholar, Stevens Scholar, and Gray Research Fellow awards. After

² Estey. 1994.

³ UBC Archives. Creative Giving, Endowments and Donations, Gifts, Grants, and Bequests. Vancouver: University of British Columbia. 1948.

⁴ UBC Archives. Letter to J.W. Winson. November 1st 1943. J.W. Winson Fonds. Correspondence with J.W. Eastham.

Graduating in 1899, Eastham spent the next year of his life as an assistant in the Chemistry Department at Edinburgh.⁵

After this point, the 20th century begins with Eastham encountering many professional roles and he began his career as an agricultural scientist. For the next nine years, Eastham would spend his life lecturing in Botany. From 1902 to 1906 he lectured at the Cheshire Agricultural College in England and from 1906 to 1911, he lectured at the Ontario Agricultural College (OAC).⁶

Ottawa

In 1906, Eastham moved to Ottawa. One could speculate that Eastham's move to Ottawa was part of a large recruitment scheme by the Canadian government. According to Anstey the period of 1906 to 1913 was a significant time of industrialization in the western world. As such, this led to substantial opportunities for work. Europe was also placing heavy demands on North America for raw materials adding additional needs to Canada's economy for new workers. To illustrate this, in 1896 Wilfred Laurier made an appeal to Europe and America advertising for foreigners to come work in Canada. In this appeal he advertised in 7000 American newspapers and sent multiple agents to Europe.⁷ It seems plausible that Eastham could have moved to Canada as a result of this heavy recruitment by the Canadian government.

⁵ UBC Archives. Information Services Fonds. J.W Eastham. Box 1-5.16.

⁶ UBC Archives. Information Services Fonds. J.W Eastham. Box 1-5.16.

⁷ Anstey, T.H. One Hundred Harvests: Research Branch, Agriculture Canada, 1886-1986. 1986. Ottawa: the Branch.

In 1907 Eastham spent a month with Professor G.F Atkinson, a mycologist at Cornell University. With the professor Eastham was studying fungi. Most importantly, during this month Eastham spent a substantial amount of time collecting agaricaceae and polyporaceae; these would become the nucleus of a herbarium at the OAC.⁸ Following this, in 1910, Eastham would begin his graduate study in Plant Pathology at Cornell University with no prior experience on the subject.⁹ In the same year Eastham was also appointed to the position of ‘chief assistant of botany’ for the Dominion of Agriculture. From 1911 to 1914, then, Eastham would serve in this position studying under the Dominion Botanist Güssow. As an assistant Eastham devoted a substantial amount of time to potato research.¹⁰

For Eastham, 1912 was a noteworthy year; Eastham would make the first of his two major discoveries in the field of plant pathology by diagnosing fireblight on transcendent crab-apples in British Columbia.¹¹ Eastham also published a work on slime molds titled, *The Myxomycetes of the Ottawa District - A Preliminary*. This work outlined descriptions of the Myxomycetes in Ottawa and made an appeal to the general public in hopes of encouraging public participation on botanical activities. As an aside, Eastham was very fond of encouraging public involvement in the study of botany and this was a theme present throughout his entire life. In 1912 Eastham also became a member of the Ottawa field naturalists club.¹²

⁸ R. H Estey. *Essays on the Early History of Plant Pathology and Mycology in Canada*. McGill-Queen’s Press. 1994.

⁹ A.F. Szczawinski, 1970, "Announcements: J.W. Eastham (1879-1968)", *Syesis*, 2: 265.

¹⁰ R. H Estey. *Essays on the Early History of Plant Pathology and Mycology in Canada*. McGill-Queen’s Press. 1994.

¹¹ A.F. Szczawinski, 1970, "Announcements: J.W. Eastham (1879-1968)", *Syesis*, 2: 265.

¹² OTTAWA NATURALIST; VOL. 26. NO.1 (APRIL 1912).

1914: The Move to British Columbia.

From this point onwards, at 35 years old, Eastham begins what is arguably the most important phase of his career; he is offered a job as British Columbia's official 'Plant Pathologist'.¹³ Eastham thus arrives to British Columbia on April 30th 1914 and establishes himself in Vancouver, taking up office at Vancouver's court-house. His office included a laboratory, work related equipment, and gas technology.¹⁴

Eastham finds himself taking over the position from an Entomologist named William H. Brittain. He, much like Eastham, was a man of multiple specializations.¹⁵ When Eastham arrived, instead of continuing the work of Brittain, he instead begins his own stream of work doing a large, general, survey of the province looking to make an account of various pests and study the extent of fireblight. Although Eastham was the chief of Plant Pathology, he was not alone in his job. Eastham had an assistant named Max. H. Ruhman. Ruhman lived in Vernon and, due to the considerable distance between the two, Ruhman would serve to be fairly autonomous attending to plant diseases matters within the Vernon area.¹⁶ Furthermore, 1914 also saw Eastham publish a

¹³ A.F. Szczawinski, 1970, "Announcements: J.W. Eastham (1879-1968)", *Syesis*, 2: 265.

¹⁴ Organization of Department. Province of British Columbia Eleventh Annual Report of the Department of Agriculture for the Year 1916. British Columbia Legislative Assembly. Victoria, BC. UBC Sessional Papers of the Province of British Columbia Collection. V 6.

¹⁵ R. H Estey. *Essays on the Early History of Plant Pathology and Mycology in Canada*. McGill-Queen's Press. 1994.

¹⁶ Eastham, J.W. Report of the Provincial Plant Pathologist. Province of British Columbia Tenth Annual Report of the Department of Agriculture for the Year 1915. British Columbia Legislative Assembly. Victoria, BC. UBC Sessional Papers of the Province of British Columbia Collection.

report titled *Powdery Scab of Potatoes (Spongospora Subterranea)*; a report on spray tests done at the Dominion Experimental Farm Stations.¹⁷

Eastham's Field (1914-1947): Plant Pathology

According to the government of British Columbia in 1916, Eastham's job was the following; investigating and researching "with the view of finding the best and most economical methods of control[ing] pests and diseases affecting field and horticultural crops".¹⁸ Eastham himself claimed that the majority of his time as a pathologist was spent conducting surveys of the province for plant diseases, dealing with individual inquiries with the growers of the province, traveling and communicating with district horticulturalists and inspectors, dealing with obscure cases of diseases and doing various field and spraying experiments all around the province.¹⁹ For the most part, Eastham would find himself doing these tasks for the majority of his career as a pathologist. Aside from his basic phytopathological duties, these years would also see Eastham doing yearly dominion plant disease surveys, furnishing abstracts for the *Botanical Abstracts* publication, teaching, and doing bacterial tests for Dairymen's Milk Association. Eastham was

¹⁷ Eastham, J.W. *Powdery Scab of Potatoes (Spongospora Subterranea)*. Dominion of Canada. Department of Agriculture. Experimental Farms. Division of Botany. Published by direction of Hon. Martin Burrell, Minister of Agriculture, Ottawa, Ont. 1916.

¹⁸ Organization of Department. Province of British Columbia Eleventh Annual Report of the Department of Agriculture for the Year 1916. British Columbia Legislative Assembly. Victoria, BC. UBC Sessional Papers of the Province of British Columbia Collection. V 6

¹⁹ Eastham, J.W. Report of the Provincial Plant Pathologist. Province of British Columbia Twelfth Annual Report of the Department of Agriculture for the Year 1917. British Columbia Legislative Assembly. Victoria, BC. UBC Sessional Papers of the Province of British Columbia Collection. N 56

also heavily involved in professional circles and was a member of the Canadian and American phytopathological societies.²⁰

In the wider context, the field of plant pathology was not well developed during the period of Eastham's employment. In fact, there were no professional pathologists teaching in universities prior to 1920 and much of the work in the field was being done by amateurs or those who did not particularly specialize in pathology. For example, much of the phytopathological work done in the late 19th and early 20th century was conducted by entomologists and horticulturalists.²¹ Therefore, the mere fact that Eastham was a professional pathologist in a period of limited knowledge on this subject, already makes him special.

Important Events from 1914-1920

In the period after Eastham's arrival, leading up to the 1920s, Eastham was fairly productive. Eastham did a series of assorted phytopathological projects and produced a collection of publications on plant disease matters. These seemed to come out almost every year up until 1920. This short but continuous succession of publications was likely due to there being little depth of written knowledge concerning phytopathological matters prior to Eastham's arrival. In other words, the literature was limited. Starting with his work in 1915, Eastham spent this year developing a systematic calendar for spray tests for various plants. Moreover, he also developed

²⁰ A.F. Szczawinski, 1970, "Announcements: J.W. Eastham (1879-1968)", *Syesis*, 2: 265.

²¹ R. H Estey. *Essays on the Early History of Plant Pathology and Mycology in Canada*. McGill-Queen's Press. 1994.

a comprehensive bulletin with information and instructions for local growers on methods to tackle diseases related problems without the help of a specialist. Eastham was keen on developing this piece to reduce the amount of inquiries and travel that he would have to do throughout the province.²² Furthermore, Eastham also began his teaching duties, lecturing for summer short courses in Kelowna and running botanical instruction for teachers during a summer school in Victoria.²³

In 1916, Eastham had another noteworthy year. As a personal accolade, Eastham marries a woman named Alberta Middleton.²⁴ He also made a publication this year titled *Diseases and Pests of Cultivated Plants*.²⁵ In 1917, in an attempt to have Eastham and Ruhmann focus their efforts towards purely plant disease related matters, the British Columbian government hired replacements to deal with all entomological related issues. This year also saw Eastham increase his teaching duties, giving lectures in Summerland in February, and a series of lectures at the University of British Columbia in January and November. Turning to other efforts, he would also go on to develop over 80 riker mounts (cases used for storage) on plant diseases. Developing riker mounts was an activity that would remain consistent throughout the rest of Eastham's

²² Eastham, J.W. Report of the Provincial Plant Pathologist. Province of British Columbia Tenth Annual Report of the Department of Agriculture for the Year 1915. British Columbia Legislative Assembly. Victoria, BC. UBC Sessional Papers of the Province of British Columbia Collection. R 76.

²³ *ibid.*

²⁴ Anon., "John William Eastham" *Proceedings of the Canadian Phytopathological Society* 37 (1970), 32.

²⁵ Eastham, J.W., Ruhmann, M, Hoy B. *Diseases and Pests of Cultivated Plants*. Department of Agriculture (Horticultural Branch). Printed by the Authority of the Legislative Assembly". Victoria, B.C. W.H. Cullin. 1916.

career. Finally, 1917 also marked the year that Eastham would begin to continually conduct tests for the Dairymen's Association yearly milk competition.²⁶

The following year, 1918, marked the last eventful year of the decade for Eastham from a publication standpoint. He published three pieces this year; *Apple Scab, Diseases of Stone Fruits in B.C., and Potato-Diseases*.²⁷ All three of these were produced for the horticultural branch of British Columbia.

Rounding out the decade in 1920, a large part of his year was spent investigating a Codling Moth outbreak in New Westminster. Although he was not technically supposed to be doing Entomological work anymore, Eastham was still called upon by his peers for his abilities. Clearly his specialization in entomology was a desirable talent.

1921-1922 Pine Blister Rust

These two years were the most important years of Eastham's career in terms of his contributions to the field of plant pathology. In 1921, Eastham identified and discovered white pine blister rust on the coast of British Columbia.²⁸ In a short summary of the episode, Eastham discovered the disease when a grower brought in set of abnormal looking black currants.

²⁶ J.W. Eastham. Report of the Provincial Plant Pathologist. Province of British Columbia Twelfth Annual Report of the Department of Agriculture for the Year 1917. British Columbia Legislative Assembly. Victoria, BC. UBC Sessional Papers of the Province of British Columbia Collection.

²⁷ Eastham, J.W. Apple-Scab. Province of British Columbia. Department of Agriculture (horticultural branch). Victoria, B.C.: W.H. Cullin. Originally issued in a series: Circular. New Horticultural Series/ British Columbia. Horticultural Branch; no. 44. 1918.; Eastham, J.W. Diseases of Stone Fruits in B.C. Province of British Columbia. Department of Agriculture (horticultural branch). Victoria, B.C.: W.H. Cullin. Originally issued in a series: Circular. New Horticultural Series/ British Columbia. Horticultural Branch; no. 52. 1918.; Eastham, J.W. Potato-Diseases. Province of British Columbia. Department of Agriculture (horticultural branch). Victoria, B.C.: W.H. Cullin. Originally issued in a series: Circular. New Horticultural Series/ British Columbia. Horticultural Branch; no. 50. 1918.

²⁸ A.F. Szczawinski, 1970, "Announcements: J.W. Eastham (1879-1968)", *Syesis*, 2: 265.

Eastham inspected the leaves of the plant and found elements of what he believed to be the early stages of the rust. Eastham then made his diagnosis and appealed for confirmation from a number of his colleagues across Canada. The fallout of the discovery led to an international conference on how to mitigate the problem and Eastham would find himself traveling to the West Kootenay District to scout for more traces of the disease.²⁹ In the following year, Eastham expanded his survey of the disease to a province wide level; he hoped to trace the full extent of the disease as well as find its source.³⁰ It should also be noted, from 1921-1923, Eastham also was more prolific in his teaching exploits; he was a guest lecturer in Plant pathology at the University of British Columbia in these years.³¹

1923-24

In contrast to the first few years of Eastham's employment, this period was relatively uneventful and Eastham appeared to publish next to nothing. However, there are a few interesting cases of entomological issues and the development of multiple Eastham related herbaria (places used for the storage and reference of dried plants) during these years.

²⁹ Estey. 1994. pp. 128, 129; J.W. Eastham. Report of the Provincial Plant Pathologist, Vancouver. Province of British Columbia Sixteenth Annual Report of the Department of Agriculture for the Year 1921. British Columbia Legislative Assembly. Victoria, BC. UBC Sessional Papers of the Province of British Columbia Collection.

³⁰ Estey. 1994. pp. 128, 129.

³¹ See Report of the Provincial Plant Pathologist for 1921,1922,1923.

In 1923, Eastham helped to broaden the professional infrastructure of plant pathology in BC. According to Eastham, much of this year was spent in the “revision of standards, training of inspectors, identification of diseases brought in by inspectors, and in actual inspection work”.³² As an aside, Eastham was also a possible member of the Canadian Seed Trade Association as of 1923 (see figure 1.1 for the only known photo of Eastham present to the public).

The following year, 1924, serves as another case example of Eastham’s skill and devotion to entomological matters. In June, Eastham received a telegram from Ashcroft which stated that “potato bugs” were rampant in that area. Eastham was extremely worried and rushed off to investigate in hopes that this was not a case of Colorado pine beetle.³³ In this case, Eastham’s degree of concern is commendable.

³² Eastham, J.W. Report of the Provincial Plant Pathologist. Province of British Columbia Eighteenth Annual Report of the Department of Agriculture for the Year 1923. British Columbia Legislative Assembly. Victoria, BC. UBC Sessional Papers of the Province of British Columbia Collection. I 43.

³³ Eastham, J.W. Report of the Provincial Plant Pathologist. Province of British Columbia Nineteenth Annual Report of the Department of Agriculture for the Year 1924. British Columbia Legislative Assembly. Victoria, BC. UBC Sessional Papers of the Province of British Columbia Collection. K 33.



Figure 1.1. Eastham on the Courthouse Steps (row 3, 3rd from the right).³⁴

Reference Herbaria (1925 and 1937)

In 1925, at the age of 47, Eastham began working on developing a reference herbarium in the city museum basement. The development of this herbarium seems to be the first foray that

³⁴ City of Vancouver Archives. 3rd Annual Convention B.C. Branch C. S. T.A. Vancouver, B.C. Mar. 22-23, 1923 [on the Court House Steps], Vancouver, B.C., March 1923, Stuart Thomson, City of Vancouver Archives, Stuart Thomson Fonds, AM1535-: CVA 99-3481, Box 175-A-9 (print) B&W Nitrate Negative, Photographer's negative #798.

Eastham would have (within British Columbia) towards developing a plant collection. However, in the same year, the herbarium was destroyed by beetles.³⁵

The period in-between 1925 to 1937 is relatively unknown regarding the events of Eastham's life. However, according to the available archival record, no substantial events occurred relating to Eastham. Continuing on the subject of herbaria, it took Eastham over a decade later to form his next reference herbarium. This herbarium was formed at his office in the court house, Vancouver, and his collection here would later serve as the basis for his massive donation to UBC in 1948. The herbarium itself was a collection for "grasses, weeds, poisonous plants" and things of immediate agricultural interest.³⁶ In 1937, Eastham was also made president of the Pacific Division Phytopathological Society.³⁷

1940 - 1952. Retirement and the Collecting Years

From 1940 until his death, Eastham's interests became decisively more focused on botanical collecting work. Spanning from 1945 to 1951, Eastham would produce his entire catalogue of botanical publications. In what follows, this section will provide a treatment of his efforts in these years and a direct look at some of his published works.

As discussed in various correspondences with his colleagues at the time, Eastham reports to have done a majority of his botanical collecting in the summers within British Columbia's interior. For example, from the years 1944 to 1947, Eastham spent his summers collecting in the

³⁵ UBC Archives. Letter to G.J Spencer April 6, 1937. George Spencer Fonds. Box 1. 33. Correspondence with J.W Eastham.

³⁶ UBC Herbarium. J.W. Eastham correspondence with H.A. Senn. Letter to Senn, Jan 23 1946.

³⁷ UBC Archives. Information Services Fonds. J.W Eastham. Box 1-5.16.

Cariboo, Chilcoton, and in the area around Latitude 54-55.³⁸ In 1945, Eastham published his first botanical work titled *Notes on Some Unrecorded or Little Known B.C. Plants*.³⁹ As a human, Eastham also appeared to be outwardly conscious of his impending death in this period. In a letter to his friend Mr. H. Gross in 1946, Eastham makes a remark stating that he hopes that Gross will be able to write his obituary. Fortunately for Eastham, he would see many years of life after this letter.⁴⁰

For Eastham, 1947 was an important year in several respects. This year coincided with his retirement from his job as a plant pathologist. At the same time, Eastham also published three original botanical works. The first, and most important, was his *Supplement to the "Flora of Southern British Columbia (J.K Henry) With Descriptions and records of some 450 Additional Species Varieties*. Arguably, this piece was Eastham's master work which built off of J.K. Henry's *Flora of Southern British Columbia* piece. According to Eastham, substantial developments had been made since the time of Henry's original publication such as the creation of new roads and railways. These allowed for travels to botanize in areas that were previously inaccessible.⁴¹

In terms of his own thoughts on the publication of the supplement, Eastham considered the experience to be quite stressful. Eastham thought that the development of the supplement was

³⁸ UBC Herbarium. Correspondence: J.W Eastham, Taxonomy Collection. Eastham Letter to Tisdale. January 30th 1947.

³⁹ Eastham, J.W. Notes on Some Unrecorded or Little Known B.C. Plants. Report of Provincial Museums, Victoria. 1945.

⁴⁰ UBC Herbarium. J.W Eastham Correspondence with H.A Senn Collection. Letter to Mr. H. Gross. June 8th 1946.

⁴¹ Supplement to 'Flora of Southern British Columbia' (J.K Henry) Comprising descriptions of additional species and varieties, significant extensions of range, and corrections by J.W Eastham. Special Publication No.1 BC provincial museum department of education. Victoria, B.C. 1947.

a chore which was due to lack of available supporting literature on the subject. Eastham was also worried that the supplement would be useless because the original work that it was supplementing (J.K. Henry) had actually gone out of print.⁴² However, since the supplement did manage to get published, we can assume that these issues were resolved. When the book was released, Eastham was kind enough to send several autographed copies to his contemporaries.⁴³ Later in the year, Eastham also released several small botanical reports titled *Notes on plants collected in 1947, chiefly in the Rocky Mountain Trench Between the Rocky and Selkirk Mountains of B.C., Observation on the Flora of the Southern Rocky Mountain Trench in British Columbia, and Adiantum Capillus-Veneris L. In British Columbia.*⁴⁴ To conclude this tremendous year, Eastham also donated a collection of materials to the University of British Columbia including seeds, nuts, a series of horticultural pamphlets of historical interest and some entomological literature to the department of Zoology.⁴⁵

Retirement Years 1948 - 1968

In 1948, Eastham has his herbarium collection moved to UBC. In a correspondence between two of his contemporaries the following sentiments on Eastham's collection are exchanged:

⁴² UBC Herbarium. J.W. Eastham Correspondence with H.A Senn Collection. Letter to Mr H. Groh. May 7. 1946.

⁴³ UBC Herbarium. J.W Eastham Correspondence with H.A Senn Collection. Letter to Eastham from Herbert Groh. November 17th 1947.

⁴⁴ Eastham, J.W. Notes on Plants Collected in 1947, Chiefly in the Rocky Mountain Trench Between the Rocky and Selkirk Mountains of B.C. Report of Provincial Museum. 1947; Eastham, J.W. Observation on the Flora of the Southern Rocky Mountain Trench in British Columbia. Transactions of the Royal Society of Canada. Vol 34. 1947; Eastham, J.W. Adiantum Capillus-Veneris L. In British Columbia. Canadian Field Naturalist 63: 112-114. 1949.

⁴⁵ UBC Archives. Creative Giving, Endowments and Donations, Gifts, Grants, and Bequests. Vancouver: University of British Columbia. 1948.

There is little need for me to emphasize to you that the value of this collection lies not only in its large number of specimens and the wide area represented, but also in the great care that Mr Eastham has taken in their preparation and mounting, together with the numerous annotations that appear on many of the sheets.⁴⁶

Clearly, Eastham's collection was, and still is, immensely valuable.

After Eastham's retirement, in 1953 Eastham would go on to become a volunteer and honorary curator at the UBC herbarium. While working there Eastham would act as the primary identifier, organizer and filler, of material and new botanical collections.⁴⁷ Eastham would go on to do this until 1968 when he developed a severe illness which eventually led to his death.⁴⁸

Suggestions for Future Research and Conclusions

For those looking to expand the story of Eastham's life, the BC archives in Victoria contains a major series of correspondence letters during the majority of Eastham's career in British Columbia that were inaccessible by the author. Such materials would be vital in expanding the knowledge gap on Eastham's life from 1925-1940. Moreover, future research into the benign details of Eastham's life would likely be interesting and informative in terms of developing a greater understanding of his personality.

In conclusion, the life of J.W. Eastham was one that was highly productive. In returning to the theme of suggesting to celebrate Eastham's life based off his accomplishments, several themes have emerged here. Eastham was a dedicated professional; he was always able to rise to

⁴⁶ UBC Herbarium. Correspondence Between J.B Munro and A.H Hutchinson. Nov 16th 1948. Correspondence. J.W. Eastham's Collections.

⁴⁷ Anon., "John William Eastham" *Proceedings of the Canadian Phytopathological Society* 37 (1970), 32.

⁴⁸ *ibid.*

the occasion and take on new challenges whether it be related to entomological issues or phytopathological work. Moreover, Eastham was a significant contributor to multiple specializations. Recall his work on fire blight, pine blister rust, and the 1947 Supplement to J.K. Henry. It seems that Eastham's life work is worthy of praise because he simply did so much.

Works Cited

Primary Sources

- City of Vancouver Archives. 3rd Annual Convention B.C. Branch C. S. T.A. Vancouver, B.C. Mar. 22-23, 1923 [on the Court House Steps], Vancouver, B.C., March 1923, Stuart Thomson, City of Vancouver Archives, Stuart Thomson Fonds, AM1535-: CVA 99-3481, Box 175-A-9 (print) B&W Nitrate Negative, Photographer's negative #798.
- UBC Archives. Creative Giving, Endowments and Donations, Gifts, Grants, and Bequests. Vancouver: University of British Columbia. 1948.
- UBC Archives. Information Services Fonds. J.W Eastham. Box 1-5.16.
- UBC Archives. G.J. Spencer Fonds. Correspondence with J.W. Eastham.
- UBC Archives. J.W. Winson Fonds. Correspondence with J.W Eastham.
- UBC Herbarium. J.W. Eastham Correspondence with H.A Senn.
- UBC Herbarium. J.W. Eastham Correspondence: Taxonomy.
- UBC Herbarium. J.W. Eastham Correspondence: Collections.
- Eastham, J.W. "The Myxomycetes of the Ottawa district - A preliminary list," *Ottawa Naturalist* 25 (1912), 157 - 63. See also *Annual Report of The Quebec Society for the Protection of Plants* 5 (1916), 66-71.
- Eastham, J.W. Report of the Provincial Plant Pathologist. Province of British Columbia Tenth Annual Report of the Department of Agriculture for the Year 1915. British Columbia Legislative Assembly. Victoria, BC. UBC Sessional Papers of the Province of British Columbia Collection.
- Eastham, J.W. Powdery Scab of Potatoes (*Spongospora Subterranea*). Dominion of Canada. Department of Agriculture. Experimental Farms. Division of Botany. Published by direction of Hon. Martin Burrell, Minister of Agriculture, Ottawa, Ont. 1916.
- Eastham, J.W., Ruhmann, M, Hoy B. Diseases and Pests of Cultivated Plants. Department of Agriculture (Horticultural Branch). Printed by the Authority of the Legislative Assembly". Victoria, B.C. W.H. Cullin. 1916.

Organization of Department. Province of British Columbia Eleventh Annual Report of the Department of Agriculture for the Year 1916. British Columbia Legislative Assembly. Victoria, BC. UBC Sessional Papers of the Province of British Columbia Collection.

Organization of Department. Province of British Columbia Eleventh Annual Report of the Department of Agriculture for the Year 1916. British Columbia Legislative Assembly. Victoria, BC. UBC Sessional Papers of the Province of British Columbia Collection. V 6.

Eastham, J.W. Report of the Provincial Plant Pathologist. Province of British Columbia Twelfth Annual Report of the Department of Agriculture for the Year 1917. British Columbia Legislative Assembly. Victoria, BC. UBC Sessional Papers of the Province of British Columbia Collection. N 56.

Eastham, J.W. Apple-Scab. Province of British Columbia. Department of Agriculture (horticultural branch). Victoria, B.C.: W.H. Cullin. Originally issued in a series: Circular. New Horticultural Series/ British Columbia. Horticultural Branch; no. 44. 1918.

Eastham, J.W. Diseases of Stone Fruits in B.C. Province of British Columbia. Department of Agriculture (horticultural branch). Victoria, B.C.: W.H. Cullin. Originally issued in a series: Circular. New Horticultural Series/ British Columbia. Horticultural Branch; no. 52. 1918.

Eastham, J.W. Potato-Diseases. Province of British Columbia. Department of Agriculture (horticultural branch). Victoria, B.C.: W.H. Cullin. Originally issued in a series: Circular. New Horticultural Series/ British Columbia. Horticultural Branch; no. 50. 1918.

Eastham, J.W. Report of the Provincial Plant Pathologist, Vancouver. Province of British Columbia Sixteenth Annual Report of the Department of Agriculture for the Year 1921. British Columbia Legislative Assembly. Victoria, BC. UBC Sessional Papers of the Province of British Columbia Collection.

Eastham, J.W. Report of the Provincial Plant Pathologist. Province of British Columbia Eighteenth Annual Report of the Department of Agriculture for the Year 1923. British Columbia Legislative Assembly. Victoria, BC. UBC Sessional Papers of the Province of British Columbia Collection. I 43.

Eastham, J.W. Report of the Provincial Plant Pathologist. Province of British Columbia Nineteenth Annual Report of the Department of Agriculture for the Year 1924. British Columbia Legislative Assembly. Victoria, BC. UBC Sessional Papers of the Province of British Columbia Collection. K 33.

Eastham, J.W. Notes on Some Unrecorded or Little Known B.C. Plants. Report of Provincial Museums, Victoria. 1945.

Eastham, J.W. Supplement to 'Flora of Southern British Columbia' (J.K Henry) Comprising descriptions of additional species and varieties, significant extensions of range, and corrections by J.W Eastham. Special Publication No.1 BC provincial museum department of education. Victoria, B.C. 1947.

Eastham, J.W. Notes on Plants Collected in 1947, Chiefly in the Rocky Mountain Trench Between the Rocky and Selkirk Mountains of B.C. Report of Provincial Museum. 1947.

Eastham, J.W. Observation on the Flora of the Southern Rocky Mountain Trench in British Columbia. Transactions of the Royal Society of Canada. Vol 34. 1947.

Eastham, J.W. Adiantum Capillus-Veneris L. In British Columbia. Canadian Field Naturalist 63: 112-114. 1949.

Eastham, J.W. Botanizing Along the Big Bend Highway, British Columbia. Report of the Provincial Museum, Victoria. 1951.

Ottawa Naturalist; Vol 26. No.1 April 1912.

Secondary Sources

A.F. Szczawinski, 1970, "Announcements: J.W. Eastham (1879-1968)", Syesis, 2: 265.

Anon., "John William Eastham" *Proceedings of the Canadian Phytopathological Society* 37 (1970), 32.

Anstey, T.H. One Hundred Harvests: Research Branch, Agriculture Canada, 1886-1986. 1986. Ottawa: the Branch.

R. H Estey. Essays on the Early History of Plant Pathology and Mycology in Canada. McGill-Queen's Press. 1994.

Saarela, J. M., Lipsen, L., Sayre, C. M., & Whitton, J. Vascular Plant Type Specimens in the University of British Columbia Herbarium (UBC). *Journal of the Botanical Research Institute of Texas*, 1(1), 437–448. 2007 Retrieved from <http://www.jstor.org/stable/41971434>;