

“Attractive to Strangers and Instructive to Students.” The McCullochs’ 19th Century Bird Collection in Dalhousie College

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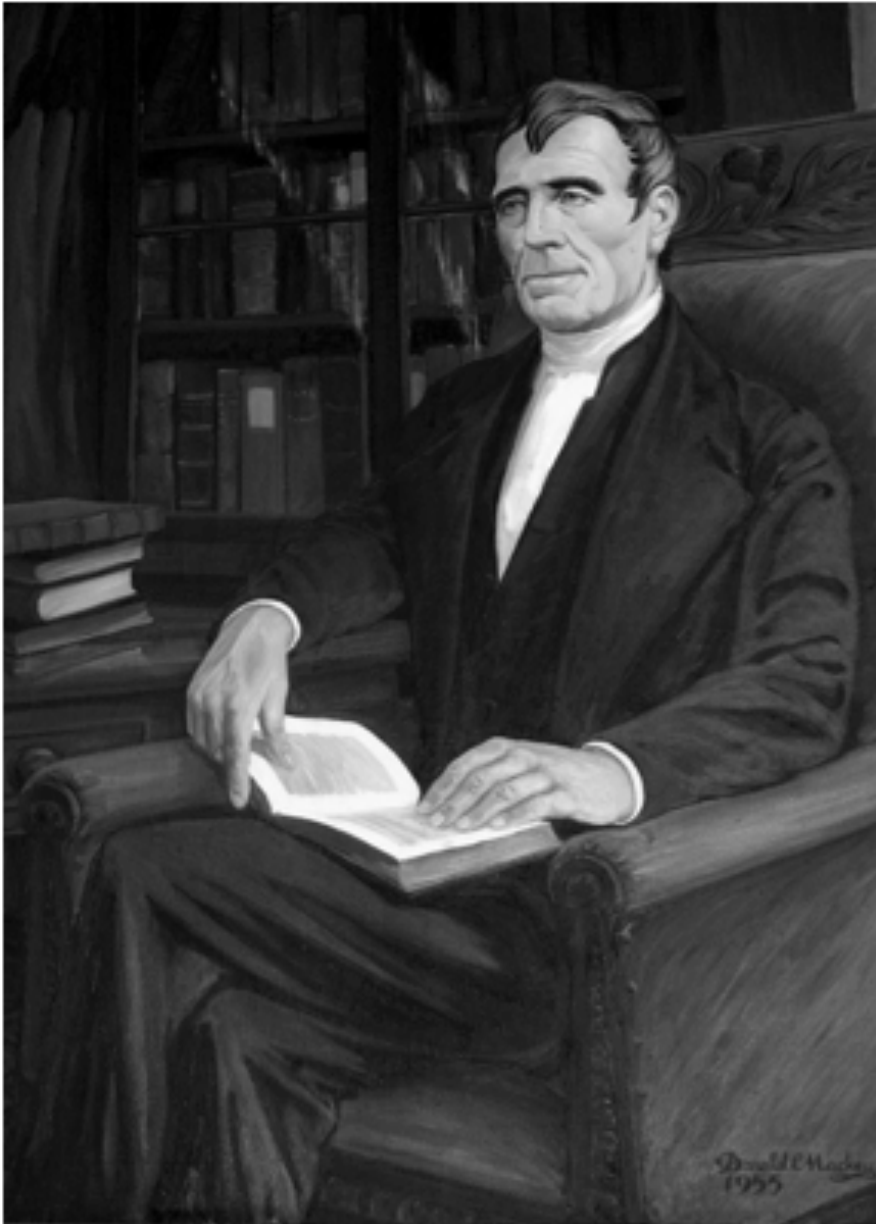
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Article abstract

Thomas McCulloch, Presbyterian minister and educator, founder of Pictou Academy, first President of Dalhousie College 1838-1843, established a museum in Pictou, NS, by 1828, including a bird collection. To McCulloch, the order of the natural world instilled in students principles of a liberal education and a model of society. His first collections were sold, but when McCulloch came to Dalhousie in 1838 he started a new collection, hoping to make it the basis of a provincial museum. In this he was aided by his son Thomas, who had been trained as a taxidermist. The younger McCulloch kept and expanded the collection until his death, after which it passed to Dalhousie College. The current McCulloch Collection, mainly the work of Thomas McCulloch junior, seems to exemplify purposes and practices of 19th century natural history. But research shows that the collection has a hybrid origin and must be viewed with great caution as an historical artifact. This is a case study in the difficulty of interpreting 19th century natural history collections without careful examination of their history.

Thomas McCulloch (1776-1843) as President of Dalhousie College in Halifax.



*Source : Portrait in University Hall, Dalhousie University, 2012.
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“Attractive to Strangers and Instructive to Students.” The McCullochs’ 19th Century Bird Collection in Dalhousie College*

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Abstract : Thomas McCulloch, Presbyterian minister and educator, founder of Pictou Academy, first President of Dalhousie College 1838-1843, established a museum in Pictou, NS, by 1828, including a bird collection. To McCulloch, the order of the natural world instilled in students principles of a liberal education and a model of society. His first collections were sold, but when McCulloch came to Dalhousie in 1838 he started a new collection, hoping to make it the basis of a provincial museum. In this he was aided by his son Thomas, who had been trained as a taxidermist. The younger McCulloch kept and expanded the collection until his death, after which it passed to Dalhousie College. The current McCulloch Collection, mainly the work of Thomas McCulloch junior, seems to exemplify purposes and practices of 19th century natural history. But research shows that the collection has a hybrid origin and must be viewed with great caution as an historical artifact. This is a case study in the difficulty of interpreting 19th century natural history collections without careful examination of their history.

* Much of the research in this paper is based on work in the Dalhousie University Archives (DUA) and the Nova Scotia Archives (NSA). Karen Smith, Dalhousie University Special Collections Librarian, provided information and an enthusiasm for this project for which I am especially grateful. Andrew Hebda of the Nova Scotia Museum of Natural History was an unending source of information on 19th century collections in the province. I also thank Elwin Hemphill of Pictou, NS, Ken McKenna of Stellarton, NS, the staff of the McCulloch Heritage Centre, Pictou, NS, and Anne Mills for their contributions to this study. Martine Dufresne kindly prepared the résumé. The quotation in the title, referring to the first McCulloch collection, comes from William McCulloch, *Life of Thomas McCulloch, D.D. Pictou* (Truro, NS : privately printed, 1920), 145.

Résumé : Thomas McCulloch, ministre de l'Église presbytérienne et enseignant, fondateur de l'école Pictou Academy, premier président du collège Dalhousie 1838-1843, a établi un musée à Pictou (Nouvelle-Écosse) avant 1828, incluant une collection d'oiseaux. De l'avis de M. McCulloch, l'organisation de la nature inculque chez les élèves les principes d'une éducation libérale et un modèle de société. Ses premières collections ont été vendues, mais lorsque M. McCulloch est arrivé à Dalhousie en 1838, il en a commencé une nouvelle, souhaitant faire d'elle le point de départ d'un musée provincial. Son fils Thomas, taxidermiste qualifié, l'a aidé dans ce sens. La collection a été conservée et élargie par le jeune McCulloch jusqu'à son décès, puis est passée au collège Dalhousie. La collection McCulloch actuelle, en majeure partie l'œuvre de Thomas McCulloch junior, semble illustrer les objectifs et les pratiques de l'étude de l'histoire naturelle au 19^e siècle. La recherche révèle cependant que la collection est d'origine hybride et doit être examinée avec prudence à titre d'artefact historique. L'article qui suit est une étude de la difficulté à interpréter les collections d'histoire naturelle du 19^e siècle sans en examiner aussi leur histoire avec soin.

Museums, and especially bird collections, are increasingly rare in university science departments. But the Biology Department at Dalhousie University maintains one, centered on the McCulloch Collection of birds, usually attributed to the university's first president, 1838-1843, Thomas McCulloch (1776-1843).¹ Housed in a special room with other displays, the bird collection has an antique air at odds with the more modern collections and displays around it. Past interpretations have placed it in the context of nineteenth century liberal education in Nova Scotia and linked it with nineteenth century traditions of bird collecting and the "Audubon style" of illustration and display.² But in general, the McCulloch Collection falls outside the ambit of previous histories of natural history in nineteenth century Canada.³

1. On the on-again off-again early history of Dalhousie College (now University), see P.B. Waite, *The Lives of Dalhousie University*. Volume One. 1818-1925 (Montréal-Kingston : McGill-Queens University Press, 1994).

2. <http://biotype.biology.dal.ca/museum> and links. Accessed 7 January 2013.

3. There is a fleeting reference to the elder McCulloch in Carl Berger, *Science, God, and Nature in Victorian Canada* (Toronto : University of Toronto Press, 1983), 3, an otherwise essential reference to the role of natural history in early Canadian history. Suzanne Zeller, *Inventing Canada: Early Victorian Science and the Idea of a Transcontinental Nation* (Toronto : University of Toronto Press, 1987) deals with "inventory sciences" as the foundation of the Canadian identity, not with the moral value of natural history, and Kirsten Greer, "Placing Canadian ornithology: imperial ambiguities in Upper Canada, 1791-1841," *Scientia Canadensis* 31, 1-2, (2008) : 85-112, does not deal with Nova Scotia, although her discussion is valuable for understanding the ways natural history entered into military and civilian life in nineteenth century Canada as a whole. The only synoptic publications on the history of Canadian ornithology

There is no doubt that the McCulloch Collection gives us a view into several aspects of nineteenth century life and thought in Nova Scotia that have not been considered elsewhere. But close historical analysis shows that it a complex entity rather than an unambiguous historical artifact and that, while acknowledging its value in interpreting the uses of natural history in nineteenth century Nova Scotia, it must be used with caution as an historical artifact.

The Principles of an Educator

Thomas McCulloch came to Nova Scotia in Scotland in 1803 as a Presbyterian clergyman, settling in Pictou, where he remained for 35 years.⁴ In a town poised on the brink of expansion, he soon established a training school for ministers in his house, and became involved in a campaign to establish a college in Pictou.⁵ Pictou Academy was incorporated and granted a charter in 1816. In the autumn of the following year, McCulloch began classes for the first students in the Academy, basing the curriculum on a passionately-held philosophy of education.

Education beyond the grammar school level in early nineteenth century Nova Scotia was dominated by the Anglican King's College, which opened at Windsor in 1789. It received a Royal Charter in 1802 and the following year excluded as students anyone not professing the Thirty-nine Articles of the Church of England. Thus, when McCulloch arrived in Pictou from Scotland in 1803, any level of higher education in Nova Scotia was barred to Dissenters. This he found abhorrent, not only because it was anti-democratic but because the curriculum at King's was based mainly on what its masters brought from the English Universities, especially Oxford, the *literae humaniores* tradition of studying classical

mention McCulloch only in passing : see Marianne Gosztonyi Ainley, "From Natural History to Avian Biology : Canadian Ornithology, 1860-1950," Ph.D thesis, McGill University, 1985, 31-32; and "The emergence of Canadian ornithology—an historical overview to 1950" in *Contributions to the History of North American Ornithology*, eds. W.E. Davis, Jr. and J.A. Jackson, *Memoirs of the Nuttall Ornithological Club* 12 (Cambridge, MA : Nuttall Ornithological Club, 1995), 286.

4. Susan Buggey and Gwendolyn Davies, "McCulloch, Thomas," *Dictionary of Canadian Biography* 7 (1988) : 529-541 give biographical detail and a helpful account of schisms in the 19th century Presbyterian Church. See also Marjory Whitelaw, *Thomas McCulloch : His Life and Times* (Halifax : Nova Scotia Museum, 1985) and W. McCulloch, 1920 on these topics.

5. Small when McCulloch arrived, Pictou began to prosper based in the timber trade, shipping, and eventually coal. See Whitelaw, 8-12, 18, and B. Anne Wood, *Pictou Academy in the Nineteenth Century* (Pictou, NS : Pictou County Genealogy and Historical Society, 1997) : vii-viii, x-xi.

languages and ancient history.⁶ Such an education, in itself, he believed, was inappropriate for students growing and learning in colonial Nova Scotia.

In 1818, McCulloch expressed his educational philosophy during an exchange on that subject in Halifax newspapers.

If I might hazard an opinion, I would say that a system of education adapted to the present state of this province, would be that whose principal force was directed to bear upon the active purposes of life. I would not be understood as disregarding classical literature. An acquaintance with Latin and Greek is essential to a good education. Every scholar should possess a moderate knowledge of these languages. But after all, they are merely the bricks and mortar of education : after they have been provided, the fabric must be reared ...

For a long time, few cases will occur among us in which a critical knowledge of the learned languages will be of great importance; and none of those persons who receive a regular education, have the prospect of spending their days in literary retirement. They must look forward to the discharge of duties, high and important to the interests of the community. Upon these duties; therefore, the system of education should be made to bear; and in order to this end, instead of enabling them to display their pedantry by interlarding Latin and Greek phrases with the chit chat of life, it would be more profitable to give them an accurate acquaintance with the operations of their own minds, to teach them to classify their knowledge, and communicate their sentiments and to furnish them with those just views of the various social relations and duties, and that knowledge of mathematical and physical science, which would be every day useful to community and honourable to themselves.⁷

McCulloch's approach to education has been described succinctly by Anne Wood :

McCulloch elaborated on his concept of liberal education in his inaugural address, "The Nature and Uses of a Liberal Education", at the opening of the new Pictou Academy building in November 1818. In typical Scottish commonsense fashion McCulloch began with an analysis of the human mind. The principle of curiosity was its prominent and characteristic feature. Thus the human mind was designed for intellectual and moral improvement. In nature man was surrounded by a multitude of objects which could excite his curiosity and lead him to knowledge and social action. These endeavours, in turn, helped to form his character.⁸

Furthermore,

For McCulloch, the object of education was not merely knowledge, but science. From individual objects and circumstances, man first induced the materials of

6. B. Anne Wood, "Thomas McCulloch's use of science in promoting a liberal education," *Acadiensis* 17 (1987) : 60-62, and Wood 1997, 1-15.

7. Quoted in D.C. Harvey, "Dr. Thomas McCulloch and liberal education," *Dalhousie Review* 23, 3 (1943) : 357-358.

8. Wood, 1987, 63-64.

knowledge ... and then proceeded to a knowledge of an abstract truth or principle ... Facility in ordering the flux of human experience as well as natural phenomena into general principles of understanding, classification or social action, became the characteristic mark of a liberally educated person.⁹

Within this deeply held philosophy of education and human personality, a museum displaying the order and moral content of the natural world soon came to play an important role at Pictou Academy and in the lives of Thomas McCulloch and his son Thomas.

The Origin and Development of a Museum

Within the first year of its operation, McCulloch began to purchase "philosophical equipment"—apparatus for chemical and physical demonstrations—for the Academy.¹⁰ This contributed to the regular curriculum of the Academy under McCulloch and also played a part in public lectures that he gave as far afield as Halifax, Charlottetown, Saint John, and Newcastle.¹¹ The record of these talks, and of his classes at the Academy, show that his lectures encapsulated many contemporary ideas and concepts in early to mid nineteenth century British and European physical science, although always with a generous dash of Christian theology.¹²

Natural history appears to have taken hold more slowly in the Academy. Finding it difficult to introduce field science to his Academy students, McCulloch began to collect insects with his family about 1821. Within the year they had a substantial collection, and it was sent to the Hunterian Museum of McCulloch's alma mater, the University of Glasgow in 1822. Other insect specimens were sent in exchange to some of McCulloch's correspondents in the Old Country and to the Literary and Philosophical and Antiquarian Societies of Newcastle-upon-Tyne.¹³ Birds

9. Ibid., 65. The most comprehensive examination of the evolution of McCulloch's liberalism is Stanley Edward McMullin, "Thomas McCulloch : the Evolution of a Liberal Mind," Ph.D. thesis, Dalhousie University, 1975.

10. Wood, 1987, 66-67. On the equipment and curriculum, see Susan Sheets-Pyenson, "Sir William Dawson : the Nova Scotia roots of a geologist's world view" in *Profiles of Science and Society in the Maritimes Prior to 1914*, ed. Paul A. Bogaard (Sackville, NB : Acadiensis Press, 1990), 87-93. Upon McCulloch senior's move to Halifax in 1838, some of this equipment was transferred to Dalhousie College, where it was used in teaching. See W.J. Chute, *Chemistry at Dalhousie : a History of the Department of Chemistry, Dalhousie University* (Halifax, NS : Dalhousie University, 1971), 3, 9-10, and Wood 1987, 73 n5.

11. Wood, 1987, 72.

12. Ibid., 70-71.

13. Ibid., 67; Jack C. Whytock, "Thomas McCulloch's quest to educate : societies, collections and degrees," *Papers of the Canadian Society of Presbyterian History* 24

soon followed, probably beginning in 1824, and a substantial collection began to accumulate from the combined efforts of his sons, particularly his third son Thomas (1809-1865), who learned modern techniques of taxidermy and became his father's main support in ornithology. Thomas junior's younger brother William (1811-1895) described the early days of the first McCulloch museum in Pictou : "[o]ne circumstance that drew his attention in this direction [of a substantial collection and museum] was the skill exhibited by his son Thomas, both as a collector and as a taxidermist. To him was committed the management of the embryo museum. At every spare moment some of the family were off to the woods with the guns, which were generally kept loaded in case of a stray visitor to the trees around the house. Soon the collection came to be the talk of the countryside, and many a rare bird found its way to the house."¹⁴

By 1833, the McCulloch's bird collection was substantial, and John James Audubon (1875-1851), on his way home to New York from "Labrador" (actually the north shore of the Gulf of St. Lawrence) made a point of going to Pictou to see it. There he was entertained by the McCullochs, was given a number of specimens, and began a professional relationship and friendship with Thomas McCulloch junior that lasted until his death in 1851.¹⁵ But within a year, that first collection, admired by Audubon in Pictou, was gone, dispersed among some of the great collections of Europe.

When Pictou Academy was established, Thomas McCulloch had hoped that it would routinely receive funding from the Nova Scotia legislature. Opposition to the Academy from the Anglican establishment, even some factions among Presbyterians, and McCulloch's own inability to treat his enemies kindly, meant that this never happened and that the Academy was perennially short of funds, struggling from one annual appropriation to the next. One way to make money was to sell his collections, and this is what happened to the first bird collection. Thomas junior took it to England (where he met Audubon again) and sold it in

(1999) : 30, 32ff, 42. The elder McCulloch does not seem to have corresponded with any Scottish natural history societies, the majority of which, in any case, were founded late in his life or after his death. See Diarmid A. Finnegan, *Natural History Societies and Civic Culture in Victorian Scotland* (London : Pickering and Chatto, 2009).

14. W. McCulloch, 145-147.

15. Maria R. Audubon, *The Life and Adventures of John James Audubon, the Naturalist* (London : Sampson, Low & Marston, 1897), 435-444; Harrison F. Lewis, "Some Canadian Audubonia," *Canadian Field-Naturalist* 47, 9 (1933) : 164-165; W. McCulloch, 148. A fictionalized account of Audubon's summer of 1833 is Katherine Govier, *Creation : a Novel* (Toronto : Random House, 2002).

1835, much to Edward Stanley, 13th Earl of Derby. Derby's collections eventually formed the basis of the Derby Museum in Liverpool (now World Museum Liverpool), where a few McCulloch specimens have been identified.¹⁶ A few cases of specimens remained behind in Pictou, likely those used in teaching at the Academy, where a few still survive in the McCulloch House Museum, in Halifax and other places, and possibly in private hands.¹⁷

A Second McCulloch Bird Collection

At a time of terrible difficulty for Pictou Academy, Thomas McCulloch senior was offered the presidency of Dalhousie College, which, although founded by George Ramsay, 9th Earl of Dalhousie (1770-1838) while Lieutenant Governor of Nova Scotia in 1818,¹⁸ had been largely moribund for twenty years. He arrived in Halifax in October 1838 to take up the reins and begin teaching as Professor of Logic, Rhetoric, and Moral Philosophy.¹⁹ He also began collecting birds anew, aided by Thomas junior, with a new aim in mind, the foundation of a provincial museum with their collection as its basis.

McCulloch had written in 1835 to Lord Dalhousie, then in retirement in Scotland, suggesting the foundation of a provincial museum, perhaps partly to avoid the fate of his first collection, then being sold in England, but probably also to advance his educational aims.²⁰ Dalhousie, infirm and far from Nova Scotia, could give no assistance. The immigrant zoologist Andrew Downs (1811-1892) had arrived in Halifax in 1825 and was soon collecting specimens, including birds, for sale and for the British Museum. He also contributed specimens to the Halifax Mechanics Institute, founded in 1831, and promoted the idea of a museum in competition with the McCullochs. In March 1841, in response to the

16. W. McCulloch, 149; Whytock, 45-47; Kirsten Greer, personal communication 14 November 2012.

17. Eric L. Mills, "Evidence for a *Reddish Egret* (*Egretta rufescens*) in Nova Scotia during the nineteenth century and its association with the McCulloch Collection of birds," *Canadian Field-Naturalist* 126, 4 (2012): 328-332. A few identifiable McCulloch specimens, in distinctive original cases, are in the collections of the Nova Scotia Museum of Natural History in Halifax (information from Andrew Hebda).

18. Peter Burroughs, "Ramsay, George," *Dictionary of Canadian Biography* 7 (1988): 722-733; René Villeneuve, *Lord Dalhousie: Patron and Collector* (Ottawa: National Gallery of Canada, 2008): 18-25.

19. Jack C. Whytock, "Thomas McCulloch and the rhetoric of piety," *Papers of the Canadian Society of Presbyterian History* 28 (2003): 83.

20. Carla Elizabeth Morse, "Nova Scotia's Museum Makers: Individual and Collective Attempts Toward Establishing Museums Prior to 1868," MMS thesis, University of Toronto, 1992, 32.

McCullochs' request for financial support for a museum collection, a select committee of the legislature visited them, examined their collection, and recommended that they be granted £250. After political manoeuvring, at least partly by Downs, the grant was put in the hands of the Lieutenant Governor for disposal rather than being given directly to anyone. Downs responded by establishing his own zoological garden while maintaining his connection with the Mechanics Institute as assistant curator and curator from 1845 onward.²¹ For their part, the two McCullochs resolved to proceed with their new collection, keeping it to themselves if they could not get support to make it a provincial one.

The complexity of the political situation surrounding natural history collection in Nova Scotia and the McCullochs response to it was described in 1841 in a letter from Thomas McCulloch senior to his long time friend and correspondent in Scotland, James Mitchell.

For several years Thomas, for the sake of his health, has been persuaded to work on a museum for this city ... By means of friends a grant of £250 was passed to enable us to collect whatever belongs to the province. But old political grudges are at work, and whether we may obtain it is still uncertain. Neither Thomas nor I are easily put down, and we have been laboring like slaves upon the business. He has been traversing the province in one direction, and I in another. A few days ago I returned from a four weeks excursion, and tomorrow I again sail in a Government vessel to scour the coast. None in the province can manage the business scientifically except ourselves, and our object is by our exertions to render the disposal of the grant in any other channel impracticable. Those who are hostile to us contrived that the grant was left at the disposal of the Governor, and they have been earnestly recommending that a part of it at least should be expended upon the purchase of birds from a stuffer here who does not profess to know anything of Natural History²² ... In the meantime we are straining every nerve to make our collection as extensive and splendid as possible.²³

For the next five years the two McCullochs collected assiduously all over Nova Scotia. As William McCulloch reported, “[f]rom the time of his removal to Halifax till his death the summer holidays were occupied in making excursions to different places, preaching as he had opportunity, and indulging his taste for scientific investigation. He spent some time on

21. Susan Buggey, “Downs, Andrew,” *Dictionary of Canadian Biography* 12 (1990) : 268; C.B. Fergusson, “Montezuma’s successor : Andrew Downs of Halifax,” *Dalhousie Review* 27, 3 (1947) : 262-265; Harry Piers, “Sketch of the life of Andrew Downs, founder of the first zoological garden in America,” *Proceedings of the Nova Scotian Institute of Science* 10, 4 (1903) : cii-cviii.

22. He was referring—ungenerously—to Andrew Downs. See Fergusson, 262, and [http :// cec.chebucto.org/ClosPark/Downs.html](http://cec.chebucto.org/ClosPark/Downs.html). Accessed 7 January 2013.

23. W. McCulloch, 189.

Sable Island, and in company with one of his old pupils ... examined the surroundings of the Bay of Fundy."²⁴

All this effort came to naught, when, after a summer's collecting in western Nova Scotia in the summer of 1843, Thomas McCulloch senior died, probably of typhus, shortly after returning to teaching in the autumn.²⁵

Thomas McCulloch Junior and the Second McCulloch Collection

For many years, Thomas McCulloch junior (Figure 1) had been his father's mainstay as collector and taxidermist. With the death of his father he took charge of what had been for some years his collection in fact if not in name. It is at this point that the story of the collection becomes uncertain, for no one has located the bulk of the unmarried Thomas junior's papers, if any have survived.²⁶ Born in Pictou in 1809, Thomas junior attended his father's Pictou Academy, travelled to Scotland with his sister Helen in 1824-25 (apparently to better their health), went into business in Pictou in the 1830s, and formed a lasting and influential friendship with Audubon in 1833. It was he who his father entrusted with the sale of the first bird collection in England during a trip to the Old World in 1834-35. In 1837 he travelled to continental Europe for several months, apparently mostly to France and Belgium,²⁷ and was appointed a corresponding member of the Wernerian Natural History Society of Edinburgh in 1843.²⁸ Upon the elder McCulloch's death in 1843, the younger McCulloch was appointed Professor of Moral Philosophy, Logic and Rhetoric at Dalhousie, teaching classics, mathematics and natural philosophy. Dalhousie's grant from the legislature was not renewed in 1845, and Thomas junior moved on in 1848 to take up the position of professor in the West River Theological Seminary in Durham, Pictou County. During the brief revival of Dalhousie (as a collegiate school, not a college) from 1849 to 1854 he served as its headmaster.²⁹ In 1851 he

24. There is no record of the trip to Sable Island in McCulloch's papers nor in the Superintendent's report on Sable Island (in NSA), which is incomplete for 1842, probably the year the visit took place.

25. W. McCulloch, 190-193; Waite, 67.

26. There are a few letters, but nothing substantial, in the NSA. Some of the correspondence cited by Lewis 1933 which originated with Isabella and Jean McCulloch, Thomas junior's nieces, is in DUA (copies in NSA). The nieces probably had all of Thomas junior's correspondence after 1865, but apart from the fragments mentioned by Lewis nothing is known of its fate.

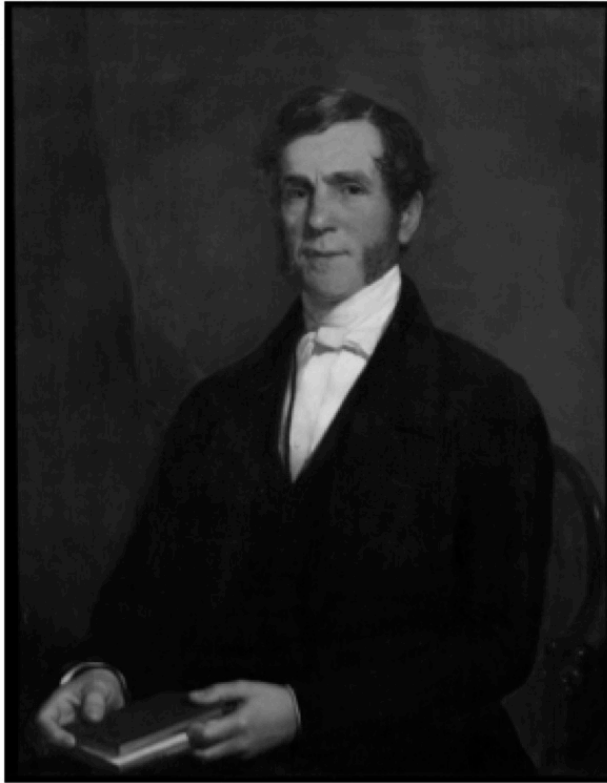
27. His French visa is in DUA, MS-2-41 B1.

28. B. Anne Wood, *God, Science and Schooling: John William Dawson's Pictou Years, 1820-1855* (Truro, NS: Nova Scotia Teachers College, 1991), 63; DUA, MS-2-40 A-3.

29. Wood 1997, 86

was again in Europe, probably during a summer vacation, attending Henri Milne Edwards's lectures in Paris and lectures on medicine in Lyon. In 1852 he was appointed a corresponding member of the Montreal Natural History Society,³⁰ and travelled in the United States between about August and February of the following year.³¹ According to his obituary, he took a "protracted" tour of Europe in 1854, the year he was appointed again to the West River Seminary, teaching natural philosophy and mathematics there until 1863.³²

Figure 1. Thomas McCulloch junior (1809-1865), probably from the period 1845-1849. Attributed to William Valentine (1798-1849).



Source : Dalhousie University Art Gallery. With permission of Dalhousie University.

30. DUA, MS-2-41

31. NSA, MG 1 vol. 552, #129.

32. "Obituary," *Presbyterian Witness*, 1865, 17 (10), first page; R. Sheldon Mackenzie, "The West River Seminary 1848-1958," *Papers of the Canadian Society of Presbyterian History* 17 (1992) : 19; R. Sheldon Mackenzie, *Gathered by the River. The Story of the West River Seminary and Theological Hall 1848-1858* (New Glasgow, NS : R. Sheldon Mackenzie, 1998), 39-41; Waite, 108.

In 1860, the union of the Presbyterian Church of Nova Scotia with the Free Church enabled unity on the question of education and laid the groundwork for the reopening of Dalhousie College, which took place in 1863 under the influence of Charles Tupper, Conservative politician and provincial secretary, and Joseph Howe, influential editor and Liberal premier 1860-1862.³³ Thomas McCulloch junior was appointed Professor of Natural Philosophy, a position he held until his death in March, 1865.³⁴ Where the bird collection was during these peregrinations and if it was expanded after 1843 is unknown, although it almost certainly followed Thomas McCulloch junior from West River to Truro (with the move of the West River Seminary) and then to Halifax in the early 1860s. But it took another twenty years after 1865 before it became definitely and permanently associated with Dalhousie College.

The McCulloch Collection at Dalhousie College

Thomas McCulloch's will stated that his collection of birds was to be offered to the Presbyterian Seminary (which by 1865 was in Halifax), or if it refused the bequest the collection was to pass to his brother William, a Presbyterian clergyman in Truro.³⁵ The Board of the Seminary did decline the collection, which was accepted by William, although it seems unlikely that it was taken into his home in Truro, occupied by William, his wife, and two unmarried daughters, Jean and Isabella. Perhaps the collection stayed in Dalhousie College, which until 1887 was located in a building at the north end of the Grand Parade in downtown Halifax.³⁶

Wherever it was in the interim, and whatever its condition after 1865, William McCulloch, through his daughters, offered the collection to Dalhousie College in March, 1884. It was accepted by the College's Board of Governors in May of that year, and, according to a memorandum of agreement dated October 1887, "placed in possession of" the Board.³⁷ The terms of the agreement stated that "the collection

33. Mackenzie, 1998, 52; W. McCulloch, 175; Waite, 82-88, 97 ff. See also B. Anne Wood, *Evangelical Balance Sheet: Character, Family, and Business in Mid-Victorian Nova Scotia* (Waterloo, ON: Wilfrid Laurier University Press, 2006), 82. On the complexity of Dalhousie's resurrection, see Buggie and Davies, 535-536.

34. Thomas McCulloch junior had frequent periods of illness beginning in his mid teens. They coincided with his taxidermic work on birds, which continued throughout his life, and which undoubtedly involved the relatively new (in the 1820s) use of arsenical soap as a means of cleaning and preserving bird skins. His obituary mentions "congestion of the liver" as a contributing cause of death, certainly a diagnosis that could mean many things, but it is at least consistent with chronic arsenic poisoning.

35. NSA, Estate Papers # 19360 (236).

36. It was on the site of the current Halifax City Hall.

37. DUA, President's Office Correspondence (POC), UA3, Box 309.7.

shall be known as the ‘Thomas McCulloch Museum’ ” and that “it shall be kept separate and not be broken up or mixed with other collections so as to lose its identity.”

This acquisition by the College coincided nicely with a spacious new home for the collection in the new Dalhousie College building (Figure 2) on Halifax’s South Common, now known as the Forrest Building.³⁸ There the collection remained until the expansion of Dalhousie westward to its Studley Campus, when it was transferred to the new Macdonald Memorial Library (Figure 3), probably late in 1915. The aim then was to make the collection part of a university museum.³⁹

Figure 2. The Forrest Building, Dalhousie University, in 1900. Dalhousie College moved into this building in 1887. The McCulloch Collection was housed here 1887-1915 and 1953-1971.



Source : Sketch by Arthur Lismer. With permission of Dalhousie University.

The McCulloch Collection gathered dust, literally and figuratively, in what became the attic of the Macdonald Library, until it was removed and refurbished in 1924 but then returned to its home in the attic. In 1953 rescue took place, the remainder of the collection was restored to its original home in the Forrest Building, and its importance began to be

38. After John Forrest, President 1885-1911, under whom the College expanded greatly. The President of Dalhousie at the time of the transfer was James Ross (1811-1886), presiding from 1863 to 1885, and a friend of William McCulloch since Ross’s tenure as Principal of the West River Seminary from 1848 to 1863. See Allan C. Dunlop, “ Ross, James,” *Dictionary of Canadian Biography* 11 (1982) : 772-773.

39. It was around this time that the word “University,” associated with the College in 1863, came into common usage.

appreciated. With the opening of Dalhousie's Life Sciences Centre in 1971, the McCulloch Collection was transferred there and became the centerpiece of a small museum attached to the Biology Department. And there it remains, relatively secure, in 2013.

Figure 3. *The Macdonald Memorial Library in 1919. It housed the McCulloch Collection from late in 1915 until 1953.*



Source : Sketch by Arthur Lismer. With permission of Dalhousie University.

A Tangled History

A part of the surviving McCulloch Collection in Dalhousie University would be familiar to the two Thomas McCullochs. An example of this is the case of shorebirds (waders) illustrated in Figure 4, which shows little sign of disturbance and has well preserved specimens, although they are a little faded. Some of these have attracted attention, particularly the two specimens of now extinct Eskimo Curlews (*Numenius borealis*).⁴⁰ Also noteworthy in the collection that came to Dalhousie in 1887 was a “pair” of Labrador Ducks (*Camptorhynchus labradorius*), a species extinct since

40. Paul Hahn, *Where is that Vanished Bird? An Index to the Known Specimens of the Extinct and Near Extinct North American Species* (Toronto : Royal Ontario Museum, 1963), 182, 186. The McCulloch Collection specimens are listed by Hahn, along with one in the Nova Scotia Museum of Science (now Nova Scotia Museum of Natural History), one from Pictou, NS, located in the Liverpool City Museum (now World Museum Liverpool—still there in December 2012 according to Kirsten Greer (personal communication), and one in the Royal Scottish Museum (now National Museum of Scotland) taken in Pictou in 1847. All of these specimens undoubtedly originated with the McCullochs.

about 1875.⁴¹ Although the female of this pair proved to be a Black Scoter (*Melanitta americana*), the male, indubitably a Labrador Duck, proved to be too valuable and liable to theft to leave at Dalhousie : it was transferred to the National Museum of Canada (now Canadian Museum of Nature) in Ottawa in 1968.⁴² Although several of the remaining cases contain birds that are less distinguished than Eskimo Curlew and Labrador Duck, they have the appearance of well-prepared specimens dating from the mid nineteenth century and can be attributed plausibly to the McCullochs' second collection.

A significant reason for the state of the surviving collection was the skill of Thomas McCulloch junior as a taxidermist.⁴³ It is not known when he first learned taxidermy, or where, but it was probably about 1824 when the McCulloch family began collecting for the first permanent museum established in Pictou Academy. Judging by the long life of the specimens, he used the most up to date techniques, including arsenical soap for degreasing and protection from insects, an innovation dating from France in the 1770s and introduced into Britain in 1820, becoming widely used thereafter.⁴⁴ The close connection of his father to scientific life in Britain, particularly in Scotland, probably enabled young Thomas (he was nineteen in 1828) to learn about the most recent continental techniques about the same time they were adopted in Britain.⁴⁵ By the time the McCullochs began their second collection in 1838 the use of arsenical

41. Hahn, 341; W. Dutcher, "The Labrador Duck : a revised list of the extant specimens in North America with some historical notes," *The Auk* 8 (1891) : 212-213. Dutcher attributes the specimens to the elder Thomas McCulloch on the basis of a statement by the Halifax taxidermist Thomas Egan.

42. Hoyes Lloyd, "The duck specimens recorded as Labrador Duck in Dalhousie College, Halifax, Nova Scotia," *Canadian Field-Naturalist* 34, 8 (1920) : 155-156; DUA, POC, "Museum 1914-1960", UA3, 286.6 MS 1-3 p.783; DUA, POC, "Museums. Duck, Labrador-1916-68", UA3, 163.8. Some of this correspondence makes the assertion that this Labrador Duck was the model for Audubon's depiction of the species. This is incorrect according to Audubon himself. See J.J. Audubon, *The Birds of America*, with a New Introduction by Dean Amadon (New York : Dover, 1967), vol. 7, 329, in which he states that the specimens were obtained for him by Daniel Webster on "the Vineyard Islands," Massachusetts, on an unspecified date.

43. W. McCulloch, 145-6, 147.

44. Paul Lawrence Farber, "The development of taxidermy and the history of ornithology," *Isis* 68, 4 (1977) : 550-566; P.A. Morris, *A History of Taxidermy : Art, Science and Bad Taste* (Ascot : MPM Publishing, 2010), 25-34; L.C. Rookmaaker, P.A. Morris, I.E. Glen and P.J. Mundy, "The ornithological cabinet of Jean-Baptiste Bécœur and the secret of the arsenical soap," *Archives of Natural History* 33, 1 (2006) : 146-158; Jessie M. Sweet, "The collection of Louis Dufresne (1752-1832), *Annals of Science* 26, 1 (1970) : 33-71.

45. They could have learned about it from the USA, where the use of arsenical soap began in 1818 (Morris, 28).

soap (a mixture of powdered white arsenic, soap, salt of tartar, camphor, and powdered lime) was standard practice.⁴⁶ No doubt this accounts for the survival and good condition of many of the specimens. But examining the archival record soon confuses any easy interpretation of what the original collection was like and how it was prepared.

Figure 4. Case of waders from the second McCulloch Collection in the McCulloch Museum, Dalhousie University. Two Eskimo Curlews are housed top center.



Source : Photo by author, 2011.

When the select committee of 1841 examined the McCullochs' collection it consisted of about 400 bird specimens.⁴⁷ At present, the McCulloch Collection consists of about 200 specimens housed in 22 wooden cases, labeled with the phrase "MACCULLOCH COLLECTION" and space for a number (Figure 5). The misspelling is significant, for the collection, practically derelict in the attic of the Macdonald Library, was refurbished and housed in new cabinets in 1924 by the Dartmouth taxidermist Lancelot Purcell, who reported that :

46. Farber, 561. In Note 34, I suggested that Thomas McCulloch's ill health could have resulted from chronic arsenic poisoning. Morris (27-33) is skeptical about the dangers of arsenic. All I can say is that Thomas McCulloch junior's ill health could be related plausibly to life-long exposure to arsenic but that the case is open.

47. Fergusson, 263.

I examined the collection of birds & etc. and find they would take a lot of fixing up. . . Most of the heavy birds were on top of the smaller ones, crushing them. I could make the stands for them here and stain them, have them all ready to put the birds on, it would take about a week to put the eyes, stands, and glue the broken parts, some have to be gone over with poison, like the fox, the moths got in bad there, the sea birds would have to their natural color, feet and bills.

I can finish them and put them on top of the cases in families. The price would be about \$75.00.⁴⁸

Clearly in 1924 the collection contained mammals as well as birds. This is borne out by a catalogue of the Dalhousie “museum” printed in 1900 which lists 19 large cases of birds (plus 14 representing the orders of birds) along with fish, amphibians, reptiles and mammals.⁴⁹ The bird collection, apparently 33 cases in 1900, was listed as containing only 193 specimens in a typescript list of the contents of the Dalhousie Museum dated 15 April 1915, apparently due to losses or misplaced specimens during the decade and a half after 1900.⁵⁰ The collection does not seem to have diminished further in 1924 when Purcell rehabilitated many of the specimens and re-housed them in several new wooden cases, purpose-built and mislabeled, and still in use.⁵¹ In March 1929, an annotated list of the Dalhousie “museum” listed 18 cases attributable to the McCullochs. Of these, all but one is still the collection in 2013. Notably absent from the collection as it exists in 2013 are ten cases that in 1929 contained most of the passerine groups, a number of waterfowl and seabirds, some sandpipers and their relatives, some owls and corvids, and some raptors.⁵² What became of these is unknown, nor is it known if they were part of the original McCulloch Collection or represented additions from other sources, although I believe that it was the latter that accounts for the inconsistency.

48. DUA, POC, “Dalhousie Museum; 1924-1960,” UA3, 286.6, MS 1-3, p. 783.

49. A. Halliday, *Catalogue of the Zoological Department of the Museum of Dalhousie College* (Halifax, NS : Nova Scotia Printing Company, 1900).

50. DUA, POC, “Museum 1924-1960,” UA3, 286.6, MS 1-3. Also included were plants, archaeological and geological specimens, and a variety of animals in addition to the birds, coming from “... the McCulloch, Patterson, and Honeyman collections, and ... used for college teaching.”

51. A part of the preceding record (Note 50) contains correspondence in April-May 1924 between the Dalhousie Business Manager and a woodworking firm in Bridgewater, NS, also a paint and varnish firm in Halifax, about the construction and finishing of 16 new wooden cases.

52. Typescript, “CONTENTS OF MUSEUM Top Floor, Macdonald Memorial Library, Studley”. 6 pages. DUA, POC, “Dalhousie Museum; 1924-1960”, UA 286.6 MS 1-3. The missing McCulloch case, Number 18, contained Red-shouldered and Broad-winged Hawks and a “Marsh Harrier” (certainly a Northern Harrier).

Figure 5. Case label from the 1924 refurbishing of the McCulloch Collection. The misspelling of the McCulloch name was a primary clue to the re-housing of the collection.



Source : Photo by author, 2011.

Archival records show that the McCulloch Collection was supplemented by private collections from Halifax residents donated in 1928 and 1930.⁵³ But of greater significance, and presenting more historical puzzles, is the incorporation of specimens from the Halifax taxidermist, sporting goods merchant, and militia officer Thomas J. Egan (1842-1914). Little biographical information on Egan is available, but it is known that by the 1860s he was an accomplished taxidermist and preparer of bird displays. He received a gold medal for a series of mounted birds submitted to the Paris International Exposition of 1867.⁵⁴ It

53. In 1928 Mrs. W.L. Brown donated a collection of waterfowl and in 1930 Mrs. R.O. Bayer donated a collection of seabirds (DUA, POC, Correspondence August 1928 and January 1929; Halifax Herald, 14 February 1929, p. 16). Both collections are easily identified in the present day McCulloch Collection.

54. Egan's shop at 177 Lower Water Street, Halifax, was destroyed by fire in September 1904, but it is not known how many specimens were lost. See [Http : //www.gov.ns.ca/nsarm/virtual/halifax/archives.asp?ID=146](http://www.gov.ns.ca/nsarm/virtual/halifax/archives.asp?ID=146). Accessed 13 August 2012. On the exhibition displays and the Egan family, see online under the Mount Saint Vincent University Art Gallery, "Alice Egan Hagen (1872-1972) Nova Scotia Woman Ceramicist," following the link "Stories. Chapter A. Early Years and Studies." Some of

appears that at least some of his mounted birds came to Dalhousie after his death, but the only mention of this in the archival record is a letter from the Dalhousie zoologist F. Ronald Hayes to President A.E. Kerr dated 16 April 1953 in which he mentions 19 cases of McCulloch specimens plus 15 cases of birds and one of mammals from the Egan collection. Hayes suggested “supplementing” the McCulloch Collection with specimens from the Egan collection and offering the rest to the Provincial Museum.⁵⁵ Apparently some were used in the McCulloch collection, where it is possible to identify specimens from Egan among the McCulloch birds (Figure 8). And it was Hayes who suggested the restoration of the McCulloch Collection to the Forrest Building, where it remained until the opening of Dalhousie’s Life Sciences Centre in 1971.

The new location of the McCulloch Collection would have eased the conscience of at least one Dalhousie President. Writing to Laurence Vail Coleman of the American Association of Museums on 18 November 1942, Carleton Stanley said,

The tucking away of our bird collection in an attic (It reminds one, does it not, of Samuel Butler’s “Oh, God, Oh Montreal!”) I have steadily referred to as a scandal and a disgrace. For generations, the Governors of Dalhousie University have failed to act as proper custodians for it, though they seem gladly to have accepted it in the first place.⁵⁶

“Attractive to Strangers and Instructive to Students”

Throughout its history, the McCulloch Collection lay well outside the evolution of scientific ornithology during the nineteenth century. As Paul Farber has claimed, the big ornithological collections that were begun in the late eighteenth century and expanded in the nineteenth, mainly in the metropolitan museums of continental Europe, depended on the reliable preservation of specimens. This he calls “a key technical achievement” enabling a change of emphasis in ornithology, allowing new “interesting questions” about bird taxonomy and distribution to be asked. These could

Egan’s birds are shown in <http://museum.gov.ns.ca/imagesns/html/40767.html> (accessed 27 March 2012) and there is an extensive series of photographs of the 1867 cases in the Nova Scotia Museum of Natural History (Courtesy of Andrew Hebda, NSMNH, 27 March 2012).

55. DUA, POC, “Museum 1924-1960”, UA3 286.6, MS 1-3.

56. DUA, POC, “Museums—General Correspondence 1927-1948”, UA3, 286.7. The original agreement for transfer of the collection in 1887 included \$1400 plus interest (a total of \$1600) from Thomas McCulloch junior’s estate to be used to maintain the collection. This was lost sight of until in the early 21st century an alert curator of the collection was able to reinstitute the fund and use it to maintain the McCulloch Museum.

be tackled during the period that the McCullochs were collecting birds.⁵⁷ But there is not a trace of this revolution in scientific ornithology—apart from the taxidermy practiced by Thomas McCulloch junior—in any of their surviving writings and despite their close connection with old world naturalists and especially with Audubon. They were following a different agenda.

The first McCulloch collection, sold in London in 1835, had both pedagogic and practical use in support of teaching at Pictou Academy, and was sacrificed with reluctance to support the Academy financially.⁵⁸ The second collection, at least part of which is preserved in the McCulloch Museum at Dalhousie, had another function, to serve as the basis of a provincial museum, a project espoused with local rather than ornithological aims during the late 1830s and until his death in 1843 by Thomas McCulloch senior. This provides a clue to the lack of attention received by the collection after the death of both McCullochs and its virtual invisibility to scientists and historians until quite recently.

It has been puzzling that the second McCulloch collection, one of the best private collections in mid nineteenth century Canada, is not mentioned in the ornithological literature of the era. For example, in 1857, the British Army officers Thomas Blakiston and R.E. Bland, members of the Halifax garrison, made no mention of it in their list of the birds of Nova Scotia. Andrew Downs, who certainly knew of the collection, made no mention of any McCulloch specimens when his catalogue of Nova Scotian birds was published in 1888. Nor is there a mention in Montague Chamberlain's *Catalogue of Canadian Birds* (1887) or in John Macoun's similarly named synoptic publication of 1900.⁵⁹ Although there is no direct evidence, Thomas McCulloch senior's bitter competition with Andrew Downs for provincial funding led him to extraordinary efforts to

57. Farber, 1977, 562-566; Farber, "The development of ornithological collections in the late eighteenth and early nineteenth centuries and their relationship to the emergence of ornithology as a scientific discipline," *Journal of the Society for the History of Natural History* 9, 4 (1980) : 391-394; Farber, *The Emergence of Ornithology as a Scientific Discipline : 1760-1850* (Dordrecht : D. Reidel, 1982), esp. 59-158.

58. Whytock 1999, 36-37, 47. Whytock emphasizes the importance of specimens, which enabled Thomas McCulloch to "barter" for publications, instruments, and in one case academic degrees, in the Old World.

59. T. Blakiston and R.E. Bland, "A list of the birds of Nova Scotia, as far as ascertained, compiled mostly from actual observations, in the years 1852-3-4 and 5. Waterbirds," *The Naturalist* [London] 7 (1857) : 103-106; Montague Chamberlain, *A Catalogue of Canadian Birds with Notes on the Distribution of the Species* (St. John, NB : J. & A. MacMillan, 1887); Andrew Downs, "A Catalogue of the birds of Nova Scotia," *Proceedings of the Nova Scotian Institute of Science* 7, 2 (1888) : 142-178; John Macoun, *Catalogue of Canadian Birds* (Ottawa : S.E. Dawson, 1900-1904).

expand the collection and to keep it to himself until the competition could be resolved. The solitary Thomas McCulloch junior, moving about from post to post after his father's death, never publishing on birds, also kept the collection to himself, and it only emerged as important much later, after his death, when its rarities, like the Labrador Duck and Eskimo Curlews, began to attract attention.

The "Thomas McCulloch Museum", or more accurately the McCullochs' second collection, which was never a part of a museum during its owners' lifetimes, has now emerged from the shadows, a modest precursor of the late nineteenth century museums that Susan Sheets-Pyenson called "Cathedrals of Science".⁶⁰ But what is left to us of the collection is simultaneously a historical resource and a chimera. Superficially unitary, the existing McCulloch Collection has proved to be a hybrid, made up only in part of specimens dating from the two Thomas McCullochs between 1838 and about 1865.⁶¹ It was refurbished in the style of the past, mainly in 1924, no doubt mimicking what the taxidermist knew of nineteenth century practices, even retaining many of the mounts and the plants surrounding them.⁶² This gives us an intriguing glimpse of a nineteenth century bird collection. But as my analysis has shown, we lack knowledge of the real state of the McCullochs' second collection. Time, neglect, losses, rehabilitation, additions, re-housing, and misinterpretation have affected what we can learn of and from it. So, although the collection in its present location is now much better known and is "attractive to strangers and instructive to students," as was the first McCulloch collection in the early nineteenth century, it presents us with historical puzzles that may prove difficult or impossible to solve.

60. Susan Sheets-Pyenson, *Cathedrals of Science: the Development of Colonial Natural History Museums during the Late Nineteenth Century* (Montréal and Toronto: McGill-Queen's University Press, 1988). A useful account of the varied origins of 19th century museums in England (but not Scotland) is given by Samuel J.M.M. Alberti, "Placing nature: natural history collections and their owners in provincial nineteenth-century England," *British Journal for the History of Science* 35, 3 (2002): 291-311.

61. There is no documentary evidence that Thomas McCulloch junior continued to collect after the death of his father in 1843, although he almost certainly did.

62. Mills, 2012, 329-330 mentions the use of mosses in establishing links between McCulloch specimens.

The relationship between objects in a museum and the culture in which they exist, including changes in purposes and expectations of the displays, is sensitively explored in Samuel J.J. Alberti, "Objects and the museum," *Isis* 96, 4 (2005): 559-571.