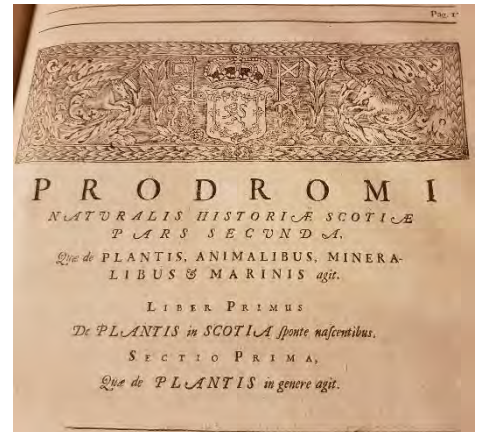


Report on the Scotia Illustrata: pre-Industrial Scotland Project

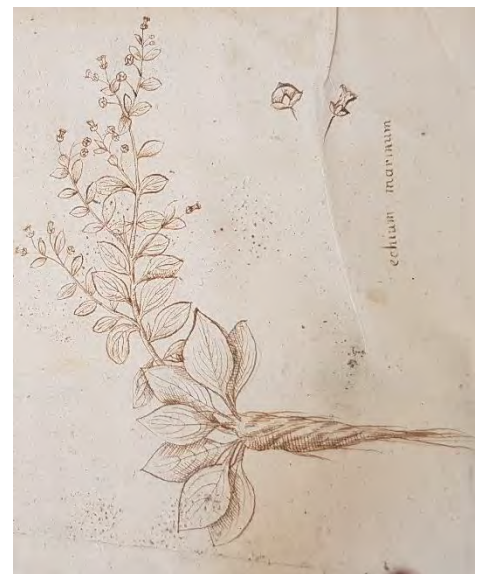
Introduction

The Alice McCosh Trust has been kind enough to sponsor another phase of my Scotia Illustrata: pre-industrial Scotland research project. My project is a study of the seventeenth century *Scotia Illustrata*, a book published by Robert Sibbald in 1684, based on a questionnaire sent to naturalists across Scotland 350 years ago. The book has several chapters describing the plants, animals, geography, geology and diseases in Scotland. Over the second half of last year (2019) I was focused on translating and interpreting Part 2, Book 1 of *Scotia Illustrata*, which is called 'The Naturally Occurring Plants of Scotland'. Just like with the first phase of the project, I am publishing my translation as a book, and I will be sending a copy of the book to the Alice McCosh Trust after it has been printed later this year.

The project has been a great success. I was able to translate the whole of the 'Naturally Occurring Plants of Scotland', and also (importantly) interpret the names of the plants, so that we can know exactly which species of plant were commonly reported in the seventeenth century. This is so important because it gives us fantastic evidence about what has changed. For example, henbane (*Hyoscyamus niger*) and stinking chamomile (*Anthemis cotula*) were described in the text as common, but today they are both classed in Britain as Vulnerable to Extinction and are rare in Scotland. The change is most likely to have come as a result of changes in land-use – most probably the intensification of agriculture and increased use of herbicides in the twentieth century. Stories like these can help scientists explain and put into context the current threats facing nature today.



The front page of *Scotia Illustrata* II:3, *The Naturally Occurring Plants of Scotland*, which has been the focus of my research this year.



This plate taken from *Scotia Illustrata*, depicts the oysterleaf (*Mertensia maritima*) which is now classified as Near Threatened in Britain.

STATS	Number	%	Conservation Status	%
Total species in text	567		WL	0%
Total identified	563	99%	LC	81%
Total IDs with three sources	406	72%	NT	4%
ID'd by Robertson (2001)	149	26%	VU	3%
ID'd by Adamson (1803) & N. (1803-4)	31	5%	EN	1%
ID'd by Pennecuik (1715)	11	2%	CR	1%
ID'd by Oswald & Preston (2011)	367	65%	EX	0%
ID'd by Withering (1776)	379	67%	neophyte	2%
ID'd by Stokes (1812)	248	44%	casual	2%
ID'd by Kemp	493	87%	no data	6%

Summary tables showing how many of the wild plants mentioned in the text I have been able to identify, and how rare some of them are! (LC=Least Concern, NT=Near Threatened, VU=Vulnerable, EN=Endangered, CR=Critically Endangered)

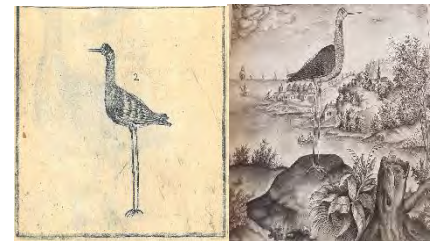
Expenditure

The biggest expense of Phase 2 of the project was a week-long research trip to Edinburgh. On this trip I was able to visit and view the research holdings at three major institutions:

1. Sibbald co-founded the Royal College of Physicians of Edinburgh (RCPE), and I was able to make an official visit to the library there. The library still has a copy of the minutes of the very first meetings of the College (around 350 years ago!) and to my surprise I found a record in there that one of the first acts of the college was to establish a free pharmacy, to help the poor of Edinburgh by providing them with free herbal remedies: a local seventeenth century precursor to the NHS?
2. Sibbald also co-founded the Royal Botanic Garden Edinburgh. The library there did not have any useful seventeenth century material, but the "Sibbald" archive was filled with work by one of the previous curators William D. Kemp. Kemp was very interested in the work of the founders of the Garden, and the archives held an unpublished dictionary by him. In this dictionary he attempts to identify many seventeenth century plants. The Royal Botanic Garden was kind enough to send me photocopies of this dictionary, and to my delight Kemp has provided an identification of 87% of all the species names listed in the *Wild Plants of Scotland!* This has been a major boon to the project, and has meant I have been able to tentatively identify of 99% of the 567 pre-industrial plants mentioned by Sibbald!
3. Finally, I also visited the National Library of Scotland. Here I was able to access several unpublished seventeenth century manuscripts, including one hand-written by Robert Sibbald (The *Atlas Scotorum*) and one which contained the originals of the plates used in *Scotia Illustrata*. I was shocked to find that some of the original plates contained in this manuscript are of far higher quality than the versions actually printed in *Scotia Illustrata*. The National Library has given me permission to publish these for the very first time in my translation later this year.



The author, alongside the bust of Robert Sibbald in the Physic Garden at the Royal College of Physicians of Edinburgh.

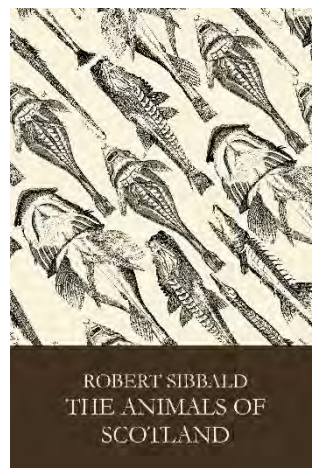


The image on the left is a black-winged stilt (*Himantopus himantopus*) printed with *Scotia Illustrata* (1684), the image on the right is the much more detailed original version of the plate, created by Anne, Countess of Erroll.

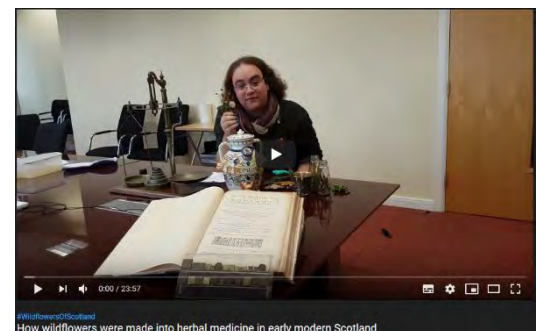
Research Outputs



People interested in learning more about the project can search for #WildflowersOfScotland on Twitter, where I shared some of the successes of the project as it was running



My translation of The Wild Plants of Scotland will be published alongside the existing translation of Animals of Scotland later this year.



A surprising aspect of the original text was the utilitarian focus on wild plants as medicines. I have produced a YouTube video describing some of these uses, and how herbal medicines were prepared, with help from the Turner Collection at Cardiff University. The video is called 'How wildflowers were made into herbal medicine in early modern Scotland'.



I have been invited to submit an analysis of my findings to the peer-reviewed journal of British and Irish botany, and if accepted, the article should be out this autumn