

The Shackleton Scholarship Fund

Report on Scholarship awarded to Robin W Woods

1. Introduction

Since October 1995, I have visited the Falklands annually for ornithological and botanical fieldwork, often linked to projects organised by Falklands Conservation, of which I am a UK Trustee. In 1997 and 1998 I was fortunate to be given the task of coordinating the survey of breeding Striated Caracaras. This involved landing on about 50 mostly uninhabited and rarely visited islands, in the west and south of the archipelago. During these visits I also collected data on plants and took representative specimens for preservation and identification. My knowledge of Falkland plants therefore increased rapidly and I accumulated a collection in the UK. I believed that this collection should be housed in the Falklands where it could be of value to local people and visitors.

In late 1999, I discussed the plan to use my material as the foundation for a National Herbarium with Falklands Conservation colleagues in the UK and was encouraged to apply for a Shackleton Scholarship. My ideas on a National Herbarium were subsequently discussed by FC staff and Trustees in Stanley and were well accepted by them and by staff of the Department of Agriculture.

In February and March 2000, when applying for the Scholarship, I visited and obtained advice, information and addresses of suppliers from the Curator of Torquay Museum, where they have a substantial herbarium, bought *The Herbarium Handbook* published by the Royal Botanic Gardens, Kew and, after receiving several catalogues, started research on suppliers of herbarium materials. Later, I discussed requirements with David Broughton, the researcher from Queen's University of Belfast, who was working on a Darwin Initiative Project (DETR) to database and map records of plants in the Falklands. At a meeting of the Falklands Conservation Working Group on Plants in early June, several issues were discussed and action agreed, including the important question of where the Herbarium was to be located in Stanley. The Director of Agriculture had indicated that the Department would have office space available and Falklands Conservation agreed to meet the cost of materials and air freight. Further discussions were held with David Broughton in June, July and August, mostly by e-mail. David also researched and wrote a Manual for guidance on all subjects connected with establishing and maintaining a National Herbarium. I discussed transport costs and customs requirements with the Secretary of Falklands Conservation in UK and spent many hours sorting, listing and assessing my collection before it was packed for shipment to the Falklands.

2. The Award

The application to the Shackleton Scholarship Fund was made in March 2000 and I was awarded the sum of £3,000 in May. The expenses incurred in England, the Falklands and in travelling between the two countries are detailed on the attached spreadsheet.

Received 4/11

Thanked 20/11

Copied to Mrs Hill for full copying action.

3. Establishing the National Herbarium

Several hundred of my specimens were sorted and listed by localities before they were sent to the Falklands. Where identification was uncertain, the lists were marked for later checking in Stanley. David Broughton also sent his collection from 1999-2000 for inclusion and a small collection, mainly of grasses left by a former research student at the Department of Agriculture, Louise Amos, was also available.

4. Timetable of events and activities

I left UK on 5 October 2000 and travelled via Madrid, Santiago de Chile and Punta Arenas to Mount Pleasant, where I arrived on the afternoon of 7 October.

In Santiago, I spent half a day meeting the Curators of Botany and Ornithology at the Natural History Museum. I presented dried, preserved specimens of an unknown *Calandrinia* (a relative of the endemic Felton's Flower), collected on New Island in 1999, to Dr Melica Muños at the Botany Department for future reference. Dr Muños gave me the name of a molecular biologist at the University of Chile for a possible meeting when I returned in 2001.

In the Falklands, several tasks were carried out. I met David Broughton and we negotiated with the Department of Agriculture over the provision of working and storage space. While we were waiting for the mounting and storage materials and the specimens to arrive, we spent a week on Kidney Island. David and I recorded several new plant species for that island and carried out some joint ornithological field work that could not have been done without a second observer. After returning to Stanley, we flew to Weddell Island for a week at the invitation of the owners and made a preliminary survey of plants and birds to help with their developing tourism business. This resulted in a plant list of more than a hundred species, including the discovery of the largest known population of the endemic Silvery Buttercup *Hamadryas argentea* and a large number of the locally distributed Whitlowgrass *Draba funiculosa*. We also discovered a small number of a *Calandrinia*, not Felton's Flower, but probably the same species that was found on New Island in 1999.

During a short visit to Carcass Island, I collected many more plant distribution records for addition to the GIS database. A few days break was enjoyed on West Point Island, collecting further specimens of sub-fossil bird bones from the peat bog. Previous work and radio carbon dating has shown that these bones from about 20 species are more than 5,000 years old.

I returned to Stanley in early November to find that the mounting and storage materials had all arrived safely. David Broughton and I worked through all my specimens and sorted them into three categories. These were: 1) those of a high enough standard to be mounted as herbarium material for identification purposes; 2) specimens useful for comparative and educational purposes, often those mounted on sheets from one locality and, 3) specimens, usually only of small samples, which were valuable as records of occurrence but insufficient for use by people wishing to learn all the characteristics of particular species. The specimens in the latter two categories were labelled and stored in herbarium boxes but were not mounted on acid-free card. We spent most of the following working weeks until mid-December in mounting specimens, preparing data for the individual specimen labels and checking identities. We also took the opportunities available for a few botanical visits locally, including to Mount Challenger, Mount Longdon and Fitzroy settlement. I was fortunate to stay at Fitzroy for several days with friends and was therefore able to compile plant lists for a few one-kilometre squares.

5. Mounting and Presentation of Specimens

By the middle of December, about 100 species of Falkland plants had been mounted in acid-free, archival storage conditions. White neutral pH adhesive was used with the mounting sheets, data labels and herbarium boxes, which were all of the best quality available. The materials used were such that theoretically, the mounted specimens could survive for at least a century, if properly maintained. My laboratory work ceased in mid-December when I left for Chile, but David Broughton continued to mount specimens that we had collected. By the time of the official opening of the National Herbarium in mid-April, about 130 species were mounted and stored, which is more than one-third of the flowering plant species known to occur in the Falklands. The Herbarium has also benefited from the donation of a collection of seaweeds held by the F.I. Development Corporation and a few specimens contributed by other people.

6. The Falklands National Herbarium established

The establishment of the National Herbarium was made possible with the cooperation of Falklands Conservation and the Department of Agriculture. The award of the Scholarship funded my return fare and accommodation costs in the Falklands and allowed me to spend several weeks sorting, mounting and labelling specimens. I discussed the future status of the Herbarium with several interested Islanders and encouraged them to become active in the use or management of the collection.

David Broughton was able to contribute some time to the Herbarium until late March. The official opening on the evening of 11 April 2001 attracted about 50 people, including some members of Legislative Council and most of the local Trustees of Falklands Conservation. The opening ceremony was conducted by HE The Governor, Mr Donald Lamont, who spoke on the value of this reference collection that should allow present and future Islanders to learn more about Falkland plants.

7. Plans for future management and use

As fire is potentially the most hazardous accidental event that could occur, Falklands Conservation are investigating the possibility of obtaining fireproof storage cabinets for the herbarium boxes. These cabinets are very expensive and fundraising will be needed to provide safer storage conditions.

It is intended that this collection will be accessible to anyone with a genuine interest in Falkland plants. To achieve this, a small local support committee has been suggested, to discuss plans with the honorary Herbarium Manager. Lillian Kidd, currently Head Gardener at Government House, is keen to assume this role and it is hoped that she can be funded for training in herbarium management, preservation of specimens and plant taxonomy in England (possibly at Liverpool Museum) later this year. Falklands Conservation will continue to have a substantial interest in development of the Herbarium and I hope to be able to do more botanical field work in the coming southern summer season.

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