



Fig. 1. Detail. Vicinity of the Beechey Island graves, tent, and supposed garden sites (Pullen 1855: opposite 794, in Powell 2006:194).

September 1851 and De Bray (*The Illustrated London News* 1851a; De Bray 1992: 42) in having a hatched oval symbol of the garden at Pullen's tent site (Fig. 1).

As it was a common practice to bury messages north of cairns, the unidentified disturbed area (Hansen 2010: 198) at the ridge termination just northeast of the Franklin can cairn was probably created by Franklin searchers hoping, unsuccessfully, to find a buried message.

A new reference adds insight into the tent site discussed as site 4 (Hansen 2010: 197). Commander Pullen's proceedings from 14 August 1852 to February 1853 are given in the Arctic Blue Book series (Pullen 1854: 103–136). On 24 January 1853 Pullen started another careful search for records, especially under the pile of tins at the Franklin can cairn. On page 128, he states:

On the 28th we had dug over all those places that had been before examined, without finding any record to the direction of the missing ships have taken. A few broken tent pegs, bones, pieces of glass, shavings, &c., was all we got. By-the-by, in that place so imaginatively designated the garden, and what I should say was the site of a tent, was discovered most of the broken tent pegs, also scraps of brown paper and a solitary piece of tallow candle (mould). The cairn on the top of the island we have not yet found, although frequent have been the searches for it; however, we have plenty of time before us yet (Pullen 1854: 128).

Pullen also notes that he has begun a survey of the bay (Pullen 1854: 133). Thus it appears that Pullen studied the garden/tent site based initially on similar information as that available to Kane and De Bray. Presumably therefore the disturbed ground on the crest noted as site 3 (Hansen 2010: 197; Fig. 1) was

located later, as well as the summit cairn. It is not unreasonable to believe that Pullen consulted with Osborn regarding the garden location, as the latter was back in the Arctic during the period Pullen was making his map.

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## An historical document. Botanical observations on the Penny Highlands of Baffin Island

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## History of the book

This book (Schwarzenbach 2011) has a strange and remarkable history, which explains the fact that it has now been published in 2011, 58 years after the fieldwork on the project that was undertaken in the summer of 1953.

In 1962 I completed the final version of my botanical report on the 1953 expedition, written in German. The original is now archived as a typewritten text along with the original aerial photos of the Royal Canadian Air Force (RCAF), in the library of the ETH Zürich. There was not the possibility of publishing the book with a large number of photographs at that time.

A copy of an earlier version of this text was sent by me in 1970 to the botanist R. Beschel, director of the Fowler Herbarium at Queen's University, Kingston, Ontario. He had suggested that it would be valuable to translate the text and to look for a possibility of publishing an English translation in Canada. Unfortunately, Beschel died suddenly on 22 January 1971. I was not informed about his death and did not know therefore what had happened with the planned translation of my manuscript.

In the event, Doris Löve, a well known cytotaxonomist of Arctic plants, translated the text from German into English and added useful comments on the nomenclature of species as used in my text of 1962. For unknown reasons I was not informed about her translation of 1975.

The zoologist Adam Watson, a colleague on the expedition in 1953, sent me, during 2009, a reprint of a paper by J.T. Andrews and others published in 1980 (Andrews and others 1980). Realising that the authors had cited an English translation (Schwarzenbach 1975) of my 1962 report, Watson and I started to search for the cited translation. After some months, between us we tracked down J.T. Andrews. He generously helped by sending me a copy of the English translation.

### Botanical observations... 1953

This book comprises the author's botanical observations during the second Baffin Island expedition, in 1953, by the Arctic Institute of North America (Baird and others 1953). This international, interdisciplinary expedition concentrated on the scientific exploration of the Penny Icecap and the glaciated area in the centre of what became later the Canadian Auyuittuq National Park (designated 1972, opened 1976). The expedition comprised 11 scientists and two general assistants. Ten members had already finished their postgraduate academic studies, and seven had worked in the Arctic previously. P.D. Baird, then director of the AINA, was the leader of the expedition.

The botanical survey is based on lists of the vascular plants at 224 localities in five parts of the study area of the expedition. In the field I marked these sites on oblique aerial photos taken by the RCAF and used in the field for orientation because the available maps were too poor. The study includes 2512 records with 124 species of vascular plants. The collection of about 700 herbarium specimens was identified by A.E. Porsild from the Canadian National Museum in Ottawa, as no representative collection of plants from the Canadian Arctic archipelago existed in Switzerland. The collection was donated later to the Fowler Herbarium.

The book presents short descriptions of the five sub-areas, illustrated by reproductions of the original aerial photos with the localities as marked in the field. A catalogue of the 124 species of vascular plants, with a short comment on each species and a list of the places where the plant was found, forms the main part of the publication. Tables with descriptions of the 224 sites are added. Chapters dealing with the horizontal and vertical distribution of the species, with short descriptions of selected plant communities and their successions, complete the text. In the book the author does not discuss the wider implications of the results of his study, because he had planned earlier to include his full data from Baffin Island as part of a later comparison with his botanical studies in east and north Greenland (1948–1952, 1954 and 1956). Therefore, the book should be regarded

as a detailed survey of the horizontal and vertical distribution of vascular plants in the central part of the Canadian Auyuittuq National Park in the summer of 1953.

The book is illustrated with many original photographs from the expedition in 1953, including six reproductions of the original aerial photos used in the field.

### Reasons for publication

The report on the botanical survey of 1953 still forms a detailed basic contribution to the scientific literature of the Canadian Arctic and might serve as a base for comparisons with the current state.

The sites of plants visited in the summer of 1953 were marked in the field on aerial photos taken by the RCAF. Reproductions of these original documents are included in the book and would be helpful for re-finding the locations if botanists wish to compare the current or future distribution of plants in the Auyuittuq National Park with the situation nearly 60 years ago. Moreover, the book shows the methods of a botanical study in Arctic mountains in the 1950s. It may be ordered from the Verlag Books on Demand GmbH, Norderstedt (Germany) using the ISBN number 978-3-8423-1884-7 or may be bought on the internet.

This book is part of a set of four retrospective accounts of the Baffin Island expedition in 1953, produced recently by veterans of the expedition (Weiss 2008; Schwarzenbach 2008; Watson 2011).

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