Further notes on some of J. H. Penson's Scottish records

M. J. Y. FOLEY*

Faraday Building, Department of Biological Science, University of Lancaster, Lancaster LA1 4YA, U.K.

ABSTRACT

Entries in his field note-books suggest that J. H. Penson considered he had discovered several *Carex* taxa new to the British Isles. Until recently no specimens were known which supported this view but some have recently come to light and provide an opportunity to examine his assertion.

KEYWORDS: Carex hybrids, Carex bicolor, Carex capitata, Carex divisa, Carex livida, Cairngorms, Saxifraga caespitosa, Scotland, Veronica fruticans.

INTRODUCTION

In a previous paper (Foley 2006) an account was given to the background and botanical work of the previously little-known British botanist John Hubert Penson (1893–1979). Attention was drawn to some of his plant records of special interest and to others which appeared somewhat contentious, especially of *Carex* taxa. Since publication of the paper further specimens collected by Penson have now been located and examined.

Penson was a very thorough and enthusiastic botanist who usually worked alone and never published anything. Only rarely was he in contact with a few contemporary associates such as Robert Mackechnie, Alan Stirling and Basil Ribbons. His early life in government circles was spent in England, followed by a military period abroad during World War 1. Later, he was in America and Newfoundland on behalf of the British government and details of his time there is covered elsewhere (Foley 2006). During his early years he botanised in England but, following a move across the Atlantic in the 1930s, his interest transferred to the plants of the east coast of North America. Notes and specimens of his which are relevant to this period are retained in three major herbaria: the Herbier Marie-Victorin, Montréal (MT), the Smithsonian Institute, Washington (US) and the New York Botanical Garden (NY). These were considered by his contemporaries to be of major significance for the American flora. Around the mid-1950s, on his retirement from government work, he moved to Scotland and it was there that for the rest of his life his main botanical activities lay. Based in the Glasgow area and presumably aided by his new, itinerant type occupation (he was still described as a 'Sales Representative' on his (re-) marriage certificate at the age of 81), he spent much time exploring the plants of the Scottish mountains as well as other areas closer to his home.

Wherever Penson botanised, he was always on the look-out for rarities or for possible new additions to the British flora. However, apart from his relatively un-detailed notebooks, it has been difficult to substantiate his claims in respect to new records, as his modest collection of voucher specimens has become scattered in various locations, with many of them thought to be lost. Recently, following the discovery of an overlooked package in the Glasgow herbarium (GL), some of his claims regarding *Carex* taxa as possibly being new to the British Isles, have been examined.

PENSON'S MORE CONTENTIOUS CAREX RECORDS

All the specimens quoted below are currently held in **GL**. It is possible that ultimately these may be combined with his other material in **E**.

CAREX BICOLOR:

An abnormally small specimen of Carex atrata collected by Penson from Ben Heasgarnich, Mid-Perth (v.c. 88), at 3100 feet, on 5 July, 1973, is described on the sheet as "Carex sp. resembling C. bicolor". His note-book for that day also states: "Carex bicolor (?) (group of plants on rock and on open marshy ground at 3000', NE of summit, ½ mi, needs confirmation as fruits at early stage)". Apart from the specimen's size (which is similar to C. bicolor) it is clearly C. atrata. C. bicolor exhibits a much greater colour contrast between utricle and glume, a more compact inflorescence, and distinctly glaucous leaves. C. bicolor is not recorded for the British Isles other than the erroneous one resulting from Heslop-Harrison's infamous introduction on the Isle of Rhum (v.c. 104).

^{*}e-mail: m.foley@lancaster.ac.uk

CAREX CAPITATA:

Three sheets purporting to be C. capitata are all clearly referable to C. dioica. They were collected by Penson from the west side of Ben Hope, W Sutherland (v.c. 108) at an altitude of 700 feet on July 30, 1973. One sheet contains Penson's taxonomic notes in support of his determination whilst a letter from Penson to Basil Ribbons written a week later revised the site's altitude to 500 feet and gave the approximate grid reference as NC465512 (i.e. the same as for his "Carex livida" locality, see below). C. capitata is a readily-recognised plant, frequent in Scandinavia and elsewhere, but has not been reliably confirmed from the British Isles. The discovery of these specimens confirms the conclusion regarding their identity drawn previously (Foley 2006).

CAREX DIVISA:

There are two sheets which bear one and two specimens respectively collected by Penson from the shores of Loch Lomond at Balmaha, Stirlingshire (v.c. 86) on the 2, 16 & 30 June 1973. Both sheets are labelled "Carex divisa" by Penson who indicated that the population had been damaged by flooding soon after he had found it. His notebook for June 2 & 16 makes no mention of these collections but on 30 June he stated "Carex divisa [and also confirming] plants damaged in flood-water but 2 heads recovered and recognisable, generally confirmed". However, his specimens are in fact *C. disticha*.

CAREX LIVIDA:

There are five sheets collected by Penson, all of which he considered to be Carex livida. Four are collections from the western side of Ben Hope, the fifth contains two more Ben Hope specimens mixed with a collection from wet pine woods below Ben Dubhcraig, Mid-Perth (v.c. 88). The Ben Hope plants were collected on 12 September, 1973 at an altitude of c. 700 where they were described "abundant" (his notebook entry for that date also stating somewhat enigmatically "As before. C. livida (rather abundant)". On the herbarium sheets, one collection is said to be from an altitude of c. 400 feet whilst that on the mixed sheet, which also contains a specimen collected a year earlier (20 September, 1972), was from wet ground at c. 500 feet. No mention of C. livida is made in his notebook for the latter date. The Ben Dubhcraig plant were also collected in the previous year on 13 September, 1972 but again there is no mention made of *C. livida* in his notes. In a letter to Basil Ribbons (6 August, 1973) regarding his (erroneous) find of "*C. capitata*" (see above), Penson gave the approximate grid reference for that as being at NC465512, and stated that the *C. livida* locality is "almost the same".

C. livida is unknown in the British Isles but quite widespread in Scandinavia. It belongs to a species group containing C. panicea and C. vaginata and is morphologically quite close to the former. An examination of Penson's specimens ruled out C. vaginata since, amongst other characters, they lack the characteristic acuminate leaf tip of that species. Although showing a fairly close similarity to typical C. panicea, before dismissing them as such, they were compared with a limited number of preserved specimens of Scandinavian C. livida. This was still not totally conclusive, so images were sent to colleagues in Norway who know both species well. The resulting consensus was that Penson's plants were most definitely C. panicea and not C. livida. The latter is a less elongated and less slender plant, has stems which are shorter than the longest leaves, much denser, more contiguous spikes, and glumes with a very distinct whitish nerve. This is clearly not the case in Penson's material. In addition, C. livida is a plant of extremely wet mire pools, i.e. much wetter than perhaps can be inferred from Penson's simply ground".

CAREX SAXATILIS \times C. NORVEGICA (OR C. SAXATILIS \times ATRATA):

A collection (two specimens) which Penson referred to this hybrid was made in "Glen Fee, [alt.] 2200', 25 July, 1961". Again however, his notebook gives no indication of the find, nor of his having actually visited Coire Fee (v.c. 90) on that day although he had spent time on nearby Craig Rennet and the Dounalt recording *C. capillaris, C. vaginata* and others. The utricles of Penson's purported hybrid specimens appear flat and empty and the plants are small and immature. They show a distinct similarity to *C. atrata* and are probably that taxon, although, due to their immature state, it is not possible to be certain.

There are three further specimens on a single sheet which he collected as "perhaps hybrid saxatilis × norvegica L. (or saxatilis × atrata)" on Ben Heasgarnich, at 2400 feet, on 5 July 1973. However, his notebook for this date doesn't mention these, only recording 80–100

flowering spikes of C. norvegica at an altitude of 2400 feet. These were growing amongst rather long grass at a point one mile east of the summit of the mountain and 300 yards north of an 'erratic block'. There is no mention in the notes of any potential hybrid and even his note on the sheet appears to have been an afterthought. The utricles of the specimens appear to be well developed and exhibit no real evidence of hybridity although superficially resemble certain specimens of Scandinavian hybrids of this parentage (but in those cases the utricles were empty). The conclusion is that Penson's specimens are simply Carex saxatilis.

PENSON'S RECORDS FOR SAXIFRAGA CAESPITOSA AND VERONICA FRUTICANS IN THE CAIRNGORMS

In 1970, Penson made two visits to the Beinn A'an and Beinn a'Bhuird area of the Cairngorms. These must have been long, tiring days for a man approaching his eighties as he searched for the very scarce *Saxifraga caespitosa*. He, no doubt, would have obtained details of the plant's previously known localities from Robert Mackechnie who, along with Ted Wallace, had seen the plant there many years earlier. On September 24, 1970,

Penson, whilst searching for the saxifrage at Mackechnie and Wallace's 1930s site in Coire nan Clach (Beinn a'Bhuird), recorded Veronica fruticans there. His notebook states: "a few plants at 3400 ft". This plant is very scarce in the Cairngorms, apparently otherwise known only from Creag an Dhail Beag and, as with S. caespitosa, favours base-rich intrusions in the rock. Penson failed to find the latter in the coire but he did re-locate it near to the Sneck of Slochd Mhor, Beinn A'an, his notebook entries for August 7 and September 24, 1970, recording 5 and 18-20 plants respectively. No specimen of either of these species has been traced and it is unlikely that Penson collected any.

ACKNOWLEDGMENTS

I am grateful to Keith Watson (Glasgow) for drawing my attention to this group of Penson's specimens and for arranging loan. Also, to Mike Porter for useful discussions relating to the identity of some of the plants. Additionally, I thank the Tromsø botanists Torbjørn Alm and Torstein Engelskjøn, as well as Anders Often of the Norwegian Institute of Nature Research, for confirming the identity of Penson's putative *Carex livida* as being *C. panicea*.

REFERENCE

FOLEY, M. J. Y. (2006). J. H. Penson: mystery man and mystery record. *Watsonia* **26**: 171–178. (Accepted November 2009)