

John Fitz-Roberts: A little-known seventeenth century botanist

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ABSTRACT

Information is provided relating to the work and collections of the little-known botanist, John Fitz-Roberts of Kendal, who was active around the end of the seventeenth-century. Records, traceable from the literature of the day, preserved specimens, and letters sent to him by James Petiver, are discussed. Some of his records are cited as obscure polynomials and where possible these have been identified through reference to the early literature. Where localised, the current status of the recorded plant is briefly commented upon. Fitz-Roberts appears to have been one of the first, if not the first, to record *Sesleria caerulea* in Britain.

KEYWORDS: John Robinson, Kendal, Nicolson, Petiver, Plukenet, Ray, *Sesleria caerulea*, Wilson.

INTRODUCTION

Details of the life of the late seventeenth Kendal botanist John Robinson alias Fitz-Roberts are largely shrouded in mystery. He appears to have been active well before the 1690s and also later but published nothing himself. One of his contemporaries was the well-known Cumbrian botanist and Quaker Thomas Lawson (1630–1691) who mentioned Fitz-Roberts in his correspondence. What little is known of Fitz-Roberts originates mainly from those who knew him or with whom he corresponded directly. These included the Cumbrian botanist, William Nicolson (1655–1727) who was Archdeacon (later Bishop) of Carlisle, John Ray (1627–1705), James Petiver (1633/4–1718), and the Queen's Botanist, Leonard Plukenet (1642–1706). Nevertheless, James Newton (1639–1718) and Richard Richardson (1663–1741), both of whom sometimes botanised in Westmorland, appear not to have been known to him. In more recent times there have been cursory references to him by Martindale (1888–1889), Dandy (1958),

Desmond (1977) and Whittaker (1981, 1986). However, he is not mentioned by Raven (1947) in his review of the naturalists of around that period and has been completely overlooked by Flora writers covering the Kendal area, such as Baker (1885), Wilson (1938) and Halliday (1997).

No reason has yet been found for his change of name. Although Nicolson, in his diary entry for June 1690, refers to him as "Joh [John] Robinson", later he attributes two of his records to "J.F.R" (an abbreviation for John Fitz-Roberts). However, his name as Fitz-Roberts seems to have been established by the mid-1690s as evidenced by letters written to him around then by Petiver and records quoted by Ray (1696 *passim*). Petiver, in *Philosophical Transactions* (1710–1712), confirms his name change when describing him as "Mr John Robinson, alias Fitz-Roberts, a Curious Naturalist, sent up several of these Plants [*Osmunda Westmorlandica* = *Cryptogramma crispa*] from Kendal". Similarly, the relatively few surviving herbarium specimens he sent to Petiver (now in the Sloane herbarium, **BM**) are, except for one (a lichen), labelled in Petiver's hand in the name of Fitz-Roberts, not Robinson; similarly, Lawson (prior to his death in 1691) in a letter to Ray had already referred to him as Fitz-Roberts. All this contrasts with some of Nicolson's 1690 diary entries and it is possible he may have used both names for a while before Fitz-Roberts became finally accepted. His reason for the change may have been an attempt to avoid confusion with another contemporary Cumbrian naturalist, also a correspondent of Ray, Thomas Robinson, who was Rector of Ousby from 1672–1719 and author of *Natural History of Westmorland and Cumberland* published in 1709.

So far, the dates of Fitz-Roberts' birth and death are unsubstantiated, the Parish register for the Kendal area being lost around the time of his birth whilst that covering later years is

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still un-transcribed. However, a parish record confirms a marriage to have taken place in Kendal on 2 January 1682 between a Mr John Robinson and Anne King of Strickland Roger [Kendal Parish Register transcripts] which could refer to him. Prior to his death in 1691 Thomas Lawson had sent to Ray a drawing made by Fitz-Roberts of *Andromeda polifolia* (see below) which appears to place Fitz-Roberts as an experienced botanist by the 1680s, if not earlier. Nicolson in his diary for 1690 referred to him flatteringly as "Joh. Robinson (sutoris ultra crepidam docti)" again suggesting that he was well-established and well-known by that date. The botanist John Wilson (1696–1751), author of *A Synopsis of British Plants, in Mr Ray's Method* (Wilson 1744), also knew Fitz-Roberts and probably gained much of his early botanical experience from him (see *Gentianella amarella* below). Known as "Black Jack", Wilson was originally a Kendal shoe-maker, later becoming a baker and finally, a lecturing botanist and author as well as something of a local character (Nicholson 1832). The connection with Wilson suggests that Fitz-Roberts was botanising until at least the 1720s and probably later. If the recorded Kendal wedding of 1682 was indeed that of Fitz-Roberts, it would seem that his life span approximated to the years c.1655–c.1730. He was known to live at the Ghyll (Nicholson 1832) [SD50.92] which is just to the west of Kendal close to the Brigsteer and Levens roads and is ideally placed for access to the botanically-rich limestone countryside nearby. Although possibly not his actual home, Gill Cottage is shown at this location on a map published in 1859, with Gill Well only a field's distance away.

THE TOPOGRAPHY OF THE AREA AROUND FITZ-ROBERTS' HOME

John Fitz-Roberts appears to have been active mainly in the south of the old county of Westmorland (v.c. 69) and occasionally in "Lake Lancashire". Both areas are now within administrative Cumbria and lie to the north of the estuary of the River Kent. Even today, the area within a 10 km radius of his home is botanically-rich and it would have been even richer at the end of the seventeenth century. This is especially the case to the west and south, since much of the substrate is limestone, the major features being the long, steep outcrops of Cunswick and Scout Scars and

their associated open grassland. Lying below the scars is limestone woodland and the small Cunswick Tarn with its surrounding fen margin. Drained mossland separates this area from another major feature lying to the west, the limestone scar of Whitbarrow, whilst still further away to the west and south are the outcrops at Meathop, Kirkhead and Humphrey Head. By contrast, to the north and east of his home the substrate is largely acidic and so has a different, more restricted flora.

Fitz-Roberts is known to have botanised especially on the nearby escarpments as well as on the lower, wetter mossland, much of it nowadays given over to agriculture. Other records of his for more montane plants suggest visits to nearby acidic Silurian areas such as the valleys of Kentmere and Sleddale to the north-west of Kendal. So far there is nothing to indicate that he travelled much further afield and, surprisingly, there are no localised records of his for the Whitbarrow area. Even today the latter is still botanically-rich and it is possible that access over the intervening, now-drained, moss land would have been difficult and involved a long detour round higher ground (the so-called "landway"). However, he did visit Humphrey Head at least once, so he probably used this route on that occasion.

FITZ-ROBERTS' BOTANICAL RECORDS

A note in Nicolson's diary states that on 10 June 1690, he received a specimen of *Ophrys insectifera* from Fitz-Roberts "missa est mihi a Do. Robinson de Kendal, planta nostras perelegans *Orchis myodes*". In the following week Nicholson paid a visit to Kendal, perhaps to preach, and on 18 June visited Fitz-Roberts, noting in his garden a range of plants "horto Joh. Robinson (sutoris ultra crepidam docti) planta occurrebant sequentes Britannicae". These were described under their contemporary names, some of which are identifiable: *Acetosa Rotundifolia* West[morland] (*Oxyria digyna*), *Acorus verus*, *Betonica aquatica* (*Scrophularia aquatica*), *Conyza major* (*Inula conyza*), *Conyza media*, *Cotyledon Hirsuta*, *Geranium nodosum*, *Geranium fuscum*, *Geranium longius radicatii*, *Marrubium Aquaticum*, *Pentaphragma erectii* fol. *Argenteo* (*Potentilla argentea*), *Polygonatum* (*Polygonatum multiflorum* or *P. odoratum*, both scarce locally), *Ptarmica vulgaris* (*Achillea ptarmica*), *Serratula foliis o dissectis* (*Serratula tinctoria*) and *Tapsus Barbatus* (*Verbascum thapsus*).

On the following day (19 June) Nicholson and Fitz-Roberts together with two others made a small local botanical expedition. They went through the woods by the River Kent to the waterfall at Levens (i.e. downstream from Kendal) noting fossils in the dam on the river and found the scarce *Meum athamanticum* in fields near Kendal Castle and Euonymus Theophrasti (*Euonymus europaeus*) plentiful in hedgerows around the villages of Natland and Sedgwick. ["Do. Sutch M.B. medicus Kendaliensis, A Farrington Affinis meus peerdilectis, Joh. Robinson antedictus, et W.N. Inter sylvas et fl. Cantij cataractus, aestivo calare obrutio? Occurrebant Lapides Entrochi in una massam concreti. In ye mill-damm, above ye Force near Levens.....Meum. In ye fields near Kendal-Castle.... and Euonymus Theophrasti. Exceedingly plentiful in ye Hedges about Natland and Sedgwick"].

Working largely within the Kendal area, Fitz-Roberts was the first to report the presence of a number of interesting plants, specimens of some of which he had collected are now preserved in the Sloane herbarium (BM). Several of his records are also acknowledged in the works of Petiver and Ray. One, *Sesleria caerulea*, which, although classified as a nationally scarce plant (Halliday 1994), is exceptionally abundant on the northern limestones. It was first recorded by Fitz-Roberts (Ray 1696) as: "Gramen parvum montanum spica crassiore purpuro-coerulea brevi.....Ab amico optimo D. Fitz-Roberts accepi, qui alicubi in Cumberlandia collegit". This was a well-documented find since there is an excellent specimen (HS 150 f.118) in the Sloane herbarium (BM) collected by Fitz-Roberts (Fig. 1), Petiver's label stating "Mr Fitz-Roberts gathered this elegant grass at Hols-Fell Nabb ½ a mile from Kendall". Accompanying it is also the description taken from Leonard Plukenet's *Almagestum Botanicum* (1696).

Hols-Fell Nabb (Helsfell Nab) [SD5093] is only 1 km to the north of where Fitz-Roberts lived at the Ghyll and a little to the east of the long west-facing limestone escarpment of Cunswick Scar [SD4993-94] where *Sesleria caerulea* is still exceptionally abundant and where other much scarcer plants are found today, such as *Carex ericetorum* and *Helianthemum oelandicum*.

RECORDS IN CONTEMPORARY LITERATURE AND DIARIES

ACTAEA SPICATA L.:

This was recorded by William Nicolson in his manuscript as having been seen on the outskirts of present-day Kendal on 9 August 1691. The locality was Shaw Wood, Stainbank Green (SD5091) where it was described as abundant at that date and presumably in fruit. Whilst there is only circumstantial evidence that the record was originally Fitz-Roberts', this wood, nowadays no longer present, was only a few hundred metres from his home at The Ghyll and the *Actaea* was recorded at a period when Nicolson was known to be visiting him (see above). It seems inconceivable that such an interesting plant had not first been found there by Fitz-Roberts who then later showed it to Nicolson. *A. spicata* has not been recorded for this general area of south Westmorland for some considerable time, the closest being at two sites near Arnside where it was last seen in 2002. At Shaw Wood, Nicolson (cf. manuscript) also recorded *Filipendula vulgaris* which again would surely have been previously known to Fitz-Roberts and again, presumably shown to Nicolson at the same time as the *Actaea*. No Fitz-Roberts specimen of either plant has been traced.

ANDROMEDA POLIFOLIA L.:

Quoted by Ray (1696: 202) as "Ledum palustre nostras Arbuti flore. Rosmarinus sylvestre minus nostras Park.....Marsh Cistus, or wild Rosemary Flos, ut ex icone ejus ad vivum depicta à D. Joanne Fitz-Roberts; & à D. Tho. Lawson à me transmissa apparet.....". This illustration referred to as drawn by Fitz-Roberts will have been of a plant collected from either Brigsteer Moss (near to Fitz-Roberts' home) or one of the others close by which nowadays are mostly drained and "improved". However, the plant is still present on some of the mosses within the area.

CRYPTOGRAMMA CRISPA (L.) R. BR. EX HOOK.:

Petiver (1710–1712: 376) stated "Osmunda Westmorlandica, foliis tenuissimè dissectis, Mus. Petiver. "Mr John Robinson, alias Fitz Roberts, a Curious Naturalist, sent up several of these plants from Kendal, which were set in Chelsea Garden and elsewhere, but after a

winter or two, they often go off". From the polynomial and illustrations quoted by Petiver: i.e. Plukenet (1691, t.3, ic.2) and Morison [=Bobart] (1699, sect 14, t.4), the plant can be identified as *C. crispa*. This is still frequent on acidic scree and stone walls in the Kendal area, especially off the limestone to the north.

GENTIANELLA AMARELLA (L.) BOERNER:

Ray (1696: 156) recorded "*Gentianella fugax verna seu praecox*. Vernal dwarf Gentian. Found by Mr Fitz-Roberts on the Backside of Halse-fellnab [SD5093] near Kendal; as also in the Parks on the other side of Kendal, on the back of Birk-hag [SD5391]. Aprili mense floret ad Junium usque". The first site is where Fitz-Roberts also collected *Sesleria caerulea* (see above), that at Birk Hagg, nowadays farmland, is a little way to the east of Kendal. Both populations appear to have been flowering much earlier than normal. At the time, Ray considered it to be a new species but Wilson, who also knew the plant from where Fitz-Roberts had seen it, stated "Mr Fitz-Roberts told me he never gave any intelligence about it, only that he informed Mr Petever [sic], he had seen the Autumnal Gentian (which grows very plentifully in those places) flower sooner than common; and this probably caused the mistake" (Wilson 1744: 135). *G. amarella* still occurs on grazed limestone grassland around Kendal.

HELIANTHEMUM OELANDICUM (L.) DC. SUBSP. *CANUM* (L.) BONNIER:

Again, given by Ray (1696: 203) as: "*Chamaecistus seu Helianthemum alpinum folio Pilosellae minoris Fuchsij* J.B.....Hoary dwarf Mountain-Cistus with Coltsfoot Leaves..... At Buck-Barrow Bank Scar, betwixt Brigsteer and Conswick; also on the Rocks about Cartmel-Wells in Lancashire plentifully. Observed by Mr Fitz Roberts". A sheet in the Sloane herbarium (HS 152 f.277) on which an unidentified specimen bears Fitz-Roberts' name also contains specimens of what appears to be this plant which are very likely to have originated from him. The first locality mentioned is the southern part of the cliff now known as Scout Scar (SD4890–SD4892), the long limestone outcrop lying just to the south of Cunswick Scar, where both *Helianthemum oelandicum* (*H. canum*) and *H. nummularium* are frequent to this day. The second locality is the coastal limestone ridge of Humphrey Head (SD3973–SD3974) where the plant also survives together with other rarities.

MELICA NUTANS L.:

Ray (1696: 262) stated: "*Gramen Aven. locustis rubris montanum* C.B. locustis rubra J.B. Park. Mountain Oat-Grass with red husks. This was sent [to] Mr Petiver out of the north, and by him communicated to me". Later in the same publication he (Ray 1696: 325) specifically mentioned that it was sent to him by Fitz-Roberts from near Kendal. Also that he had also received what he described as 'most elegant' specimens of the same plant from Jacob Breynia (1637–1697, the well-known Polish botanist): "*Hoc à D. Fitz-Roberts circa Kendalium Westmorlandiae oppidum primarium collectum & ad me transmissum est, cujus etiam elegantissima specimina accepi à celebratissimo Jacobo Breynio*". Fitz-Roberts' plant is identified through the reference to John Parkinson (Park.) given above. In his *Theatrum Botanicum*, Parkinson (1640) provided an illustration of this plant, the central example clearly depicting the rather one-sided inflorescence of *M. nutans*. In his edited and posthumously published "*Concordia*" of grasses etc. Petiver (1767) re-confirms Fitz-Roberts as the original collector: "Mr Fitz-Roberts first observed this, about Kendale in Westmoreland". The plant is still quite frequent in light woodland over limestone on both sides of the Kent estuary.

OXYRIA DIGYNA (L.) HILL:

Petiver (1710–1712: 377) stated that Welsh Sorrell "*Acetosa Cambrobritannica Montana*" had been seen "by Mr Tho. Lawson and Mr John Fitz-Roberts, two other expert Botanists, in Westmorland...". Amongst various synonyms given by Petiver, it can be identified from the illustrations in Parkinson (1640: 745, fig 12) and Morison (1680: vol.2 sect.5, t.28, fig.10), both clearly of *Oxyria digyna*. A plant of damp mountain rocks and gullies, it still occurs in the central Lake District area from where they most likely saw it.

PULMONARIA OFFICINALIS L.:

Nicolson, in his manuscript, recorded "*Pulmonaria folis Echij, flore rubro*. Bugloss-Cowslips; or long-leav'd Sage of Jerusalem. Nigh Burnishead-Chapple [= Burneside, SD 50.95]. J.F.R. [Fitz-Roberts]"; this is also noted in Whittaker (1981). The plant had been grown in British gardens for centuries and became widely naturalised in scrub and woodland. Thomas Johnson (Gerard 1633) described and illustrated it, stating that it was first found by John Goodyer in the New Forest in 1620.

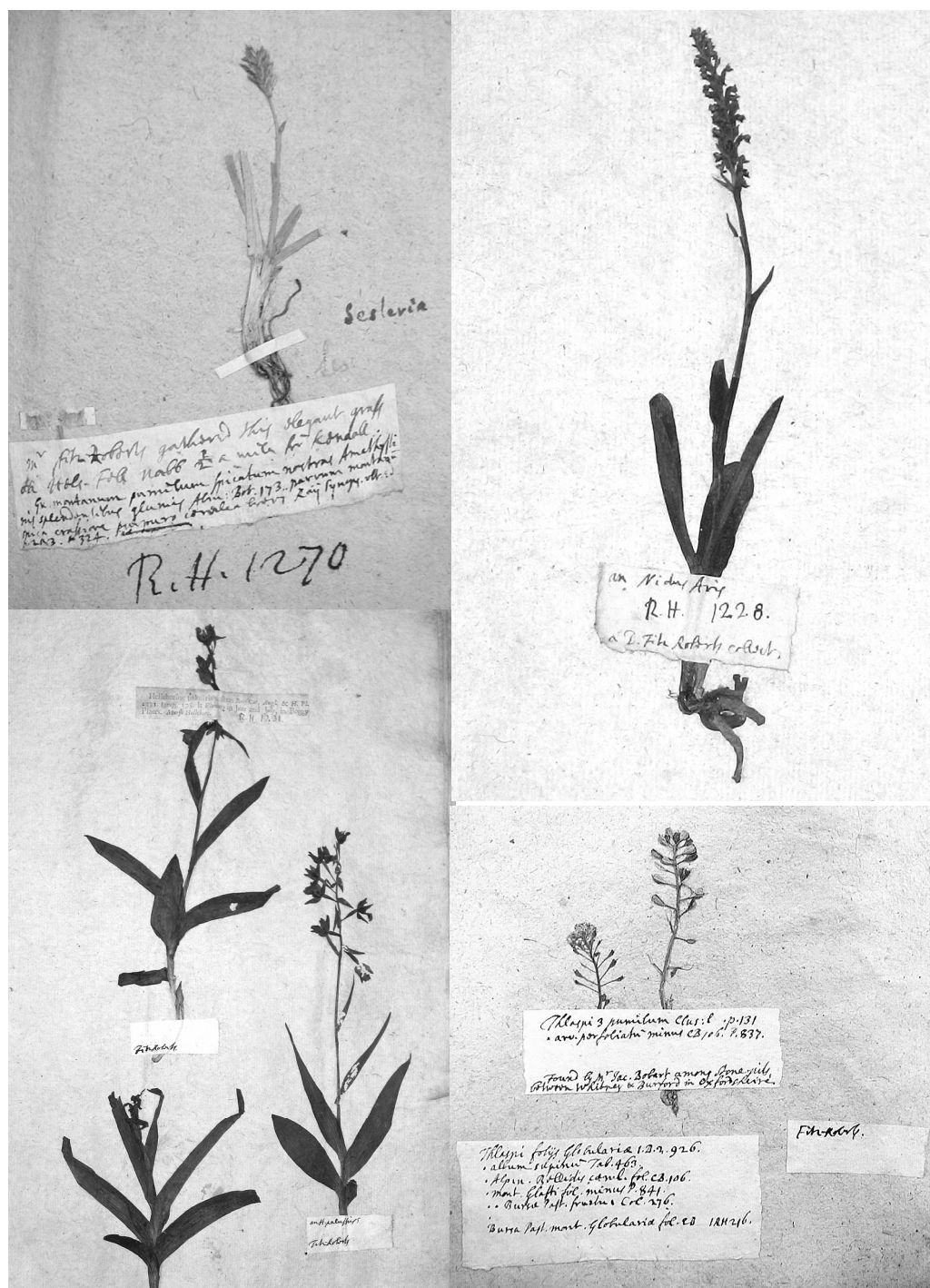


FIGURE 1. Fitz-Roberts' specimens: *Sesleria caerulea* (top left); *Pseudorchis albida* (top right); *Epipactis palustris* (bottom left); the Fitz-Roberts-Bobart specimen of *Thlaspi perfoliatum* (bottom right).

TRAGOPOGON PORRIFOLIUS L.:

A reference to the vegetable known as salsify is given by Ray (1696: 77): "Tragopogon purpureum in Anglia sponte provenire nobis affirmavit D. Fitz-Roberts" and had been introduced and become naturalised in Britain by this time. It seems that Fitz-Roberts considered it to be native contrary to Ray's earlier opinion that it was naturalised; however, Ray was correct. No precise locality was recorded by Fitz-Roberts although there is a much earlier (pre-1597) record from near Whalley (v.c. 59) probably originally assignable to Thomas Hesketh (1560–1613) (or his mother, Lady Hesketh) which is given in Gerard's "*Herball*" (Gerard 1597). From Nicolson's manuscript it is clear that he also knew the plant "in the fields about Carlisle [Carlisle]".

VERONICA SPICATA L.:

Nicolson, in his manuscript, also quoted a record for *V. spicata* at Humphrey Head which he attributed to Fitz-Roberts: "Veronica spicata. Quae vel – Major. On the rock above Cartmell-Well. J.F.R. [Fitz-Roberts]". This is also noted in Whittaker (1981). Even in those days Cartmel Well (or Holy Well) was a well-known spring under the west-facing limestone cliff of Humphrey Head and was reputed to have medicinal healing qualities. The spring and *V. spicata* are still there, the latter surviving as a small scattered population at several points along the cliff along with other local rarities. Fitz-Roberts appears to have been the first to record *V. spicata* in northern England. It can also be found a little to the east near Arnside (v.c. 69) in two very small populations.

FITZ-ROBERTS' HERBARIUM SPECIMENS

Further contributions made by Fitz-Roberts to the flora of his local area are represented by the small series of specimens which he sent to Petiver. These are usually mounted amongst others of different provenance on mixed sheets, randomly distributed in three folio volumes in Petiver's herbarium (Sloane, **BM**). Due partly to their age, several are poorly preserved and often difficult to identify. Petiver signified the Fitz-Roberts origin by placing small handwritten labels over, or adjacent to them, variously worded "Fitz-Roberts", "Fitz-

Robarts", "Fitz-R", etc. Unfortunately, not all the labels and specimens are directly attached to each other so that in some instances there is doubt about a genuine Fitz-Roberts connection and most of these have been excluded here. Altogether, seventeen specimens attributable to Fitz-Roberts are briefly described below. They are amongst some of the oldest surviving within the British Flora and in some cases may represent the earliest for Westmorland since, despite Lawson sending material to Bobart at Oxford and to Ray about this time, not all of these will have survived. On some of the sheets, Petiver has written "R.H." followed by a number, this a reference to what he considered to be that particular plant on that page in Ray's *Historia* (Ray 1686–1688). The specimen references given below (as HS) are those of the volume and page number in Sloane (**BM**).

CYPRIPEDIUM CALCEOLUS L.:

This is represented by specimen(s) at HS 152 f. 171. Long since extinct in the wild in the Kendal area and virtually so in Britain, the most recent records for this area are from the nineteenth century. These are Whitbarrow, where it was recorded by F. Clowes (Martineau (1855), "The Lyth" (which may be the same locality, since Whitbarrow lies immediately to the west of the Lyth valley) known from a fir plantation in the 1860s (*Anon*, **BM**!)), and Barrowfield [Wood], Scout Scar, a specimen from there having been transplanted into the garden at Levens Hall (1875, *herb. E. F. Linton*, **BM**!). This last locality, close to Fitz-Roberts' home is the most likely source for his specimens. Unfortunately, one of them (lower left on the sheet) lacks a flower. Plants from the Kendal area were also transplanted into the grounds of nearby Sizergh Castle.

EPIPACTIS PALUSTRIS (L.) CRANTZ:

This sheet (HS 152 f.174) comprises three specimens (Fig. 1) with the lower left having the inflorescence broken off. The others (both labelled "Fitz-Roberts" by Petiver) have been referred to *E. palustris* and would appear to comply. It was described by Wilson (1744) as being "In several marshy places about Kendal" but the locality from where Fitz-Roberts collected it would probably be the fen margins of Cunswick Tarn (SD4893) where it was later seen by Gough (Nicholson 1832) and thought to be last recorded there in 1952 (Halliday

1997). There are also records at two other nearby sites where Fitz-Roberts may have collected it: on Whitbarrow, known to W. Foggitt (Wilson 1938), and in Barrowfield wood [SD4891–SD4892] in 1908 (about 2 km to the south of Cunswick Tarn) (*Martindale*, **KDL**!). Today, the plant appears to be extinct in this general area (Halliday 1997). Two other species of *Epipactis*: *E. helleborine* and *E. atrorubens* occur on the wooded limestones of Cunswick and Scout Scars, and may well have been known to Fitz-Roberts.

ERIPHORUM VAGINATUM L.:

A plant of boggy ground on moorland and mountains, frequent in areas to the north of Kendal. However, it is also known from coastal mosses around the Kent from where Fitz-Roberts may have collected it (HS 150 f.183).

LOBELIA DORTMANNA L.:

Frequent at the shallow stony borders of the more acidic lakes and tarns away from the limestone areas and still fairly common to this day. Fitz-Roberts' closest site would probably have been to the west of Kendal towards Windermere. This specimen is on sheet HS 152 f.183.

PERSICARIA VIVIPARA (L.) RONSE:

Fitz-Roberts' specimen is at HS 151 f.28. This plant is currently found in hill pastures and mountain areas of Cumbria where it can be locally frequent. His closest locality was probably to the north on the limestone near Orton, a distance of c. 25 km from his home and somewhat outside his normal ambit.

PSEUDORCHIS ALBIDA (L.) A. & D. LOEVE:

Now very scarce in northern England this occurs only in upland pastures, usually off the limestone. However, there is an old record by Gough (Nicholson 1832) for Barrowfield Wood near Kendal. Although limestone woodland is a most unusual locality for *P. albida*, the site is only 2 km from Fitz-Roberts' home and is a place he would certainly have visited and from where he would surely have collected a specimen if he had found it. His specimen (Fig. 1) is on sheet HS 152 f.170. Whilst it is clearly *P. albida* (Fig. 1) there is further confusion in that Petiver had labelled it "An Nidus Avis...a D. Fitz Roberts collecta". The area close to Barrowfield Wood is where *Neottia nidus-avis* is still present to this day but *P. albida* is unknown. Nowadays not present in the Kendal area, *P. albida* was collected at

nearby Spy Crag, Staveley (*Martindale* & *Martindale*, **KDL**!) towards the end of the nineteenth century and also at Bannerrigg, Windermere (1886, *Martindale* (**KDL**!)).

SAXIFRAGA AIZOIDES L.:

The specimen is on sheet HS 152 f.101 and labelled "Kendall Fitz-R." and "Sedum montanū luteū minus nostras. R.C: An Sedū illecebra folijs oblongis. Mer. Pin. [Merrett's "Pinax" (Merrett 1666)]". Nowadays, the plant is frequent on wet rocks and flushes in the Lake District hills. The likeliest locality for Fitz-Roberts to have collected it would have been either to the north of Staveley or in Longsleddale, both places near Kendal and where it still occurs. At the latter site it was described as being "in the greatest plenty" by William Curtis in 1782 (Curtis 1855–1856: 111). As indicated on Fitz-Roberts' label (see above) it had been recorded some years earlier by both Ray and by Merrett from Ingleborough, both these records almost certainly attributable to Thomas Willisell. Lawson also sent a Westmorland specimen to Bobart at Oxford (Morison 1699) probably predating that of Fitz-Roberts. [Another plant of a similar habitat is *Sedum villosum*. This also has extant localities in the area north of Staveley, and it was from nearby Sleddale that Thomas Lawson recorded it in the late seventeenth century. Surprisingly, Fitz-Roberts doesn't appear to have known it].

SESLERIA CAERULEA (L.) ARD.:

This well-preserved specimen (Fig. 1) (HS 150 f.118) has already been discussed in some detail above. It is one of the few for which a precise locality is given.

THLASPI PERFOLIATUM L.:

The significance of this specimen (Fig. 1) in relation to Fitz-Roberts is uncertain but a label on the sheet suggests that it might at one time have come into his possession. A directly attached label states it to have been found by Jacob Bobart among stone pits between Whitney and Burford in Oxfordshire, an area towards the centre of its very restricted British range. Fitz-Roberts seems unlikely to have visited there himself but may have received the specimen from Jacob Bobart (the younger) who by then would have been in charge of the Oxford Botanic Garden. How it came into Petiver's possession is uncertain but the reference to Fitz-Roberts must have some significance.

Other specimens in Petiver's herbarium were sent to him by Fitz-Roberts but, because of their inadequacy or poor quality, they are almost impossible to identify with certainty. These are:

ALCHEMILLA SP.:

A poor fragmentary specimen (HS152 f.255), again difficult to identify, may be the ubiquitous *A. xanthochlora*. On the other hand Fitz-Roberts would have had easy access to other members of the genus and so by sending the specimen to Petiver, he may have regarded it as something more unusual.

COCHLEARIA SP.:

Well-labelled but poorly preserved, this specimen (HS 152 f.27) appears to represent the upper part of an inflorescence of a *Cochlearia* but, in the absence of the lower leaves, it is not possible to identify it further. Nowadays, the mainly coastal *C. anglica*, *C. danica* and *C. officinalis* are all known fairly close to Fitz-Roberts' home area whilst *C. pyrenaica* occurs inland on the nearby hills.

GERANIUM SP.:

Fitz-Roberts' specimen (HS 32 f.75) is towards the bottom left side of the sheet and is poorly preserved. It may be *G. pratense* or *G. sylvaticum*, both frequent in the meadows and woods of his local area. Alternatively, it may have been a non-native *Geranium* from his well-stocked garden.

NYMPHAEA L. CF. *ALBA*:

This is represented (HS152 f.182) by only a single leaf and fruit of what is probably *N. alba*, frequent in lakes, ponds and backwaters thereabouts. It was recorded at Cunswick Tarn, close to Fitz-Roberts' home by Gough in the early 1800s (Nicholson 1832) and is probably still there.

SAXIFRAGA OPPOSITIFOLIA L.:

A specimen of this is on the same mixed sheet (HS 152 f.101) as the clearly labelled Fitz-Roberts' specimen of *Saxifraga aizoides*. However, another label, "Kendal FitzR", is so placed as to make it uncertain whether it refers to another nearby undetermined specimen or to that of *S. oppositifolia* (or even is a second label for the *S. aizoides*). If *S. oppositifolia* was intended, the closest localities for Fitz-Roberts would have been in mountains of the central Lake District or on the Craven limestones.

VACCINIUM VITIS-IDAEA L.:

This specimen (HS 152 f.233) is merely a small fragment but is probably of this plant. Nowadays it is largely upland but in the past was frequent on the lowland mosses around the Kent estuary and still survives at Meathop Moss (Halliday 1997).

There is also a specimen of another ericaceous plant on the same sheet as the *Helianthemum oelandicum* (discussed above, HS 152 f.277). Unfortunately, it comprises only a small twiglet with few leaves and no flowers and is very difficult to identify. *V. oxycoccos* would have been frequent in the damp heathy ground west of Kendal and *Arctostaphylos uva-ursi* present further into the central Lake District hills. It is possible that one of these is represented.

Finally, there is a specimen (HS 150 f.66) of a poorly-preserved lichen. The label, difficult to transcribe, appears to state "Lichen cinereus [indecipher] subterus/subtius nigricans Nob. Kendall. J. Robinson". It is allotted the reference number R.H. 117 relating to the "*Lichen terrestris cinereus*. Ash-coloured ground Liverwort" of Ray (1686–1688). This is the only specimen traced where Petiver uses the name Robinson rather than Fitz-Roberts. The lichen appears to be a species of *Parmotrema*, possibly the fairly widespread *P. perlatus* (Huds.) Choisy (*Parmelia perlata* (Huds.) Ach.). One other Fitz-Roberts specimen, so far untraced, is in OXF.

LETTERS FROM JAMES PETIVER TO FITZ-ROBERTS

Other than the records shown above, there is little else to throw light onto Fitz-Roberts as either a person or as a botanist. Fortunately however, there are two surviving copies of letters to him written by Petiver which provide at least a modest insight. These are preserved in the Sloane manuscripts section of the British Library in a bound volume (ms. 3332) and are randomly distributed amongst a large number of other miscellaneous correspondence between Petiver and contemporary naturalists. Both letters are difficult to transcribe in places but Petiver's admiration for Fitz-Roberts expertise is clear to see.

In one, undated but written in the Spring of the early 1690s (Appendix 1), he refers to Fitz-Roberts' "moss cropping" [plant collecting] ability. (This term seems to have had local

origins since, Thomas Lawson, in a letter to John Ray, stated: "After it [*Eriophorum vaginatum*] turns white sheep are greedy after it; so it is called Moss-crops about... [Westmorland]" (Lankester 1848). Petiver's letter suggests that Fitz-Roberts was well-known to members of Petiver's botanical circle. This was especially so to Petiver's friend, the eminent Samuel Doody (1656–1706), curator of the Chelsea Physic Garden, who wanted Fitz-Roberts to collect for him. Although, Fitz-Roberts appears to rarely have travelled far outside his native Westmorland, Petiver's comment "I should be glad to hear that we might suddenly expect to see you in London....." suggests he might have visited the capital on at least one occasion.

The second letter is dated 17 September 1695 (Appendix 2) and opens rather quaintly with Petiver saying that he had sent (via a relation of a friend) a 12 penny token, and that this person would visit him and drink with him. A comment about the imminent publication of the second edition of Ray's "Synopsis" follows and then a further request is made for Fitz-Roberts to collect plant specimens. Petiver also asks for those of insects and suggests how they should be collected and preserved; he also encourages him to recruit others for the same purpose. In the postscript he reminds him of the shells and insects which he had sent "as a pattern for you to instruct others by, not doubting but you will very much add to them having far more opportunities than we have" (i.e. Petiver living in London). This is the only instance traced which suggests that Fitz-Roberts was in any way an entomologist but in those day anyone interested in botany would often be an all-round naturalist as well. Petiver also states that his "first century of Plants Insects Shells is not yet quite published" but nevertheless sends him uncorrected proofs. This is the first pamphlet in a series of ten "centuries", the first of which he published towards the end of that year (1695) in his *Musei Petiveriana* (Petiver 1695–1703). In the letter, Petiver indicates that a second one is to follow shortly and that he is willing to acknowledge any specimens Fitz-Roberts might send. However, an examination of these which were also posthumously re-published in *Opera Historiam naturalem spectantia* (Petiver 1767) provide nothing of further significance in relation to Fitz-Roberts. The reason why he didn't take up Petiver's offer is strange since they were apparently in close contact at this time.

There is no doubt more to be learnt about John Fitz-Roberts (alias Robinson) of Kendal but unless relevant, so-far undiscovered,

manuscripts or letters are found, a further search of the old herbaria may provide the only opportunity to gain additional information about him. Unfortunately though, in the late seventeenth century, herbarium specimens were rarely accurately labelled as to collector and locality so that whilst Petiver, Plukenet and Ray were quite ready in their published works to acknowledge Fitz-Roberts' contributions, they were less meticulous (Petiver being the exception) in noting the same in their private herbaria. It is quite likely that additional Fitz-Roberts' specimens are hidden anonymously in the herbaria of Doody, Ray and others. This situation also arose with Thomas Willisell, probably the most prolific plant collector of the early period, who provided a vast number of records and specimens for Christopher Merrett's "*Pinax*" (Merrett 1666; 1667). Merrett merely gave Willisell a cursory mention in his Introduction and abjectly failed to acknowledge any of the records for the many plants he had provided. Again, Willisell's specimens similarly lie unattributed and dispersed amidst Merrett's large personal collection (BM).

John Fitz-Roberts emerges as a highly respected and competent field botanist, held in high esteem by his colleagues. Mainly specialising in his local area of south Westmorland, it is very likely that he showed many interesting plants to Thomas Lawson, and that some of these, as well as others recorded by William Nicolson, were his original finds.

Herbarium acronyms given are as indicated by Holmgren *et al.* (1990); all the specimens originating from Fitz-Roberts (Sloane, BM) have been seen; the symbol (!) indicates that herbarium specimens from other sources have also been examined.

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APPENDIX 1

LETTER PETIVER TO FITZ-ROBERTS (UNDATED) (SLOANE MS 3332, F.27)

“Mr Fitz-Roberts, Being now entered upon the New year and find the verdant spring trying to show its early product, this is therefore to put you in mind of moss cropping as also to collect fair quantity to supply....Moss cropper you have formerly hinted to me ye have observed near ye in prime abt [about] this time I mean ye Schonoglaurus. Dear Friend Our Botanical Society have you in frequent remembrance but especially my own singular friend Mr Doody who particularly desires to have hishundred to ye and he begs ye would be mindfull of him in relation to wt roots ye could procure of ye choicest plants you have in ye Parts. I should be glad to hear that we might suddenly expect to see you in London if we cannot be so happy in ye interim let me enjoy a letter. All correspondence met will be very acceptable to him who is sincerely your Friend. J Petiver”.

APPENDIX 2

LETTER PETIVER TO FITZ-ROBERTS (LOND., SEPT 17, 1695) (SLOANE MS 3332, F.171V/F.172)

“Mr Fitz-Roberts, My good friend. I take this opportunity of letting you know that I have you, which let this 12 penny token to follow, which I have sent by a relation of a friend of mine to drink with you, as also that I have taken care to ye new Edition of Mr Ray's Synopsis which will now be very suddenly published. I hope this you have got plenty of specimens of ye Adiantum florum prolongans ye Polium and some other plants that I formerly gave you a catalogue of, which are rare with us. As also a collection of Insects formed glorious etc. Pray what plants you have by you as ye first return or if you prefer to give ye to this Gent he will send them to me or his Bro: which is all and I will gladly defray ye charges. I am very zealous in ye discovery of Insects which I desire yr assistance in and begg that will gather or collect so most of them shall come in your way or you can from others procure, I would have you in the Spring oblige some therefore to collect all ye Butterflies, Moths, Beetles and Boogs etc that he can catch, which he may stick through the back with a Pin having always a Pincushion in his pocket, for that purpose and those when caught he may stick within ye crown of his hat till he comes home, or into a small Pill box which he may carry in his Pocket. My first century of Plants Insects Shells is not yet quite published, but too let you see it is a doing I have inclosed sent you an uncorrected part of it. I do design to print another century before Christmas and would gladly have some communications from you insert therein and therefore pray fail not of something though never so small, which shall be justly acknowledged by kind friend...Yr most humble servant James Petiver.

P.S. I have sent you of Shells and Insects 3 or 4 of each as a pattern for you to instruct others by, not doubting but you will very much add to them having far more opportunities than we have... vale.

N.B. The Shells and Insects are Numbred according to my Century to wch I sd for you”.

