



Grimmia updates

David Long reports on some of the more significant new *Grimmia* records that have come to light following a revision of Edinburgh (E.) herbarium material by Eva Maier.

Over the past decade Eva Maier has been studying specimens of *Grimmia* housed in the Edinburgh herbarium, at first Asiatic material, which resulted in a revision of Himalayan *Grimmia* (Maier, 2002b) and more recently specimens from Britain and elsewhere. The records listed below result from the latter studies, particularly on *G. trichophylla* and related taxa. Most recently, her study included a number of undetermined *Grimmia* specimens from the herbarium of the late Alan McGregor Stirling which have been curated by David Chamberlain; this has revealed interesting new specimens of *G. muehlenbeckii*. Not all her determinations are included, those listed below are the more significant ones and include some new vice-county records.

New vice-county records are indicated by an asterisk; where these are pre-1960 they are in parentheses. The name under which the voucher specimen was formerly filed is appended to each record. Grid references in square brackets are those added by me. All specimens are housed in E.

67.1 *Coscinodon cribrosus* (Hedw.) Spruce

83: dry rock, Arthur's Seat, Edinburgh [NT27], iv 1940, U.K. Duncan (as *G. stirtonii*).

This is the earliest known record of *Coscinodon* on Arthur's Seat.

Grimmia montana, *G. sessitana* & *G. alpestris*

This trio of species has been much confused, but they can be distinguished by using the keys of Blockeel (2006) and Maier & Geissler (1995); in the latter publication, *G. alpestris* is described and illustrated under the synonymous name *G. sudetica* Schwägr. The two specimens below

△ *Grimmia ovalis*. David Holyoak

◁ *Coscinodon cribrosus*. Fred Rumsey

now confirmed as *G. alpestris* were originally identified as *G. montana* Bruch & Schimp, whereas the old *G. alpestris* specimens from v.c. 90, 92 and 93 are now considered to be *G. montana*; however, in the past they have also been published as *G. sessitana* by Greven (1995) and determined as *G. ungeri* by A.J.E. Smith. *G. ungeri* Jur. must be removed from the British checklist (Blockeel & Long, 1998).

69.5 *Grimmia montana* Bruch & Schimp.

*52: on very exposed rock outcrop (siliceous), Carmel Head, Anglesey [SH2992], 8 iii 1952, R.E. Parker & D.A. Ratcliffe (as *G. subsquarrosa*).

*85: Norman's Law [NO3020], 29 iii 1924, D.R. Robertson (as *G. trichophylla*).

90: Little Culrannuch, Clova [NO2177], vii 1886, W. Smith (as *G. alpestris*)

92: near Ballater, 1872, J. Fergusson (as *G. alpestris*); Ballater, no date, J. Fergusson (as *G. alpestris*); Khoil, Ballater [NO3391], vii 1912, W. Smith (as *G. alpestris*); dry serpentine rocks, Coyles of Muick near Ballater [NO3391], vi 1966, A.McG. Stirling & U.K. Duncan (as *G. alpestris*).

69.6 *Grimmia sessitana* De Not.

*75: dry rocks, Byne Hill, Girvan [NX19], vi 1966, A.McG. Stirling (as *G. orbicularis*?).

This is apparently the first and only confirmed British record of this species.

69.6A *Grimmia alpestris* (F. Weber & D. Mohr) Schleich.

*82: Traprain Law [NT57], vii 1925, J.B. Duncan (as *G. montana*).

*90: Dry basalt rocks, Hare Craigs, West Ferry near Dundee [NO43], iv 1954 U.K. Duncan (as *G. montana* det. AJES).

The only other confirmed British record of this species is from v.c. 48 (Werner & Smith, 2004)

and confirmed by Eva Maier. Smith (2004) re-identified two other Welsh specimens identified by J. Muñoz as *G. alpestris*, as *C. cribrosus*.

69.9 *Grimmia elongata* Kaulf.

*73: rocks on E side of Scree Hill [NZ7855], 24 ix 1957, A.C. Crundwell (as *G. funalis* forma).

90: on dry unstable cliffs, S-facing cliffs at head of Caenlochan Glen NO178773, 850 m, 13 vii 1985, D.G. Long & B.M. Murray 12816 (as *G. funalis*).

69.10 *Grimmia longirostris* Hook.

*90: mountain rocks, Juanjorge, Glen Clova [NO27], 12 vi 1965, U.K. Duncan & A.C. Crundwell (as *G. trichophylla*).

69.11 *Grimmia ovalis* (Hedw.) Lindb.

73: Little Kenmure, New Galloway [NX67], ix 1899, J. McAndrew; by River Ken, New Galloway [NX67], ix 1899, J. McAndrew; Bennan Loop, New Galloway [NX67], ix 1899, J. McAndrew (all as *G. subsquarrosa*).

*87: Hill near Alva [NS89], 3 v 1897, W. Evans; head of Kirkton Glen, Balquidder [NN52], 21 viii 1902, W. Evans (both as *G. trichophylla*).

69.16 *Grimmia orbicularis* Bruch ex Wilson

83: dry rocks, Arthur's Seat near Duddingston Loch NT280 726, 1 x 1971, D.G. Long 1736 (as *G. subsquarrosa*); dry rocks, Arthur's Seat, NT278727, 12 x 1971, D.G. Long 1818a (as *G. trichophylla*); on dry rocks, Arthur's Seat, NT277727, 20 xii 1972, D.G. Long 2137 (as *G. trichophylla*).

69.18 *Grimmia funalis* (Schwägr.) Bruch & Schimp.

*93: serpentine rocks, Craigs of Succoth, S of Edinglassie, Upper Deveron Valley [NJ4336], 6 iv 1975, A.McG. Stirling (as *G. trichophylla* var. *robusta*).

69.19A *Grimmia muehlenbeckii* Schimp.

104: Isle of Skye, cliff of Carn Dearg, Suishnish NG51, 14 viii 1968, H.J.B. Birks; boulder below small basalt cliff, S end of Beinn Tianvaig NG53, 15 viii 1968, H.J.B. Birks; on dry sun-exposed basalt boulders, The Quirang, Isle of Skye NG46, 18 viii 1968, H.J.B. Birks; on peridotite, An Sgumain, Isle of Skye NG41, 19 viii 1968, H.J.B. Birks (all as *G. decipiens* var. *robusta*).

H40: on basalt boulders in block litters below cliffs, Benbradagh near Dungiven [C71], 12 ix 1968, H.H. Birks, R.D. & J.W. Fitzgerald (as *G. decipiens* var. *robusta*).

Porley & Maier (2007) confirmed the presence of *G. muehlenbeckii* in the above four Skye localities and one new locality discovered in 2006, though they cited only one of the four original Birks' collections made in 1968. The following additional records have now come to light from the McGregor Stirling herbarium.

***75:** Straiton [NS30], 8 xi 1964, A.McG. Stirling (as *Grimmia* sp.).

***86:** Basalt crags, Lennoxton [NS67], 14 vi 1990, A.McG. Stirling (as *Grimmia* sp.).

***93:** on serpentine, Craigs of Succoth, Bridgend [NG4336], 6 iv 1975, A.McG. Stirling (as *Grimmia* sp.).

***94:** Ailnack [NJ11], 21 vi 1969, A.McG. Stirling (as *Grimmia* sp.).

***98:** Andesite rocks, Loch Feochan, Knipoch [NM8523], 2 i 1965, A.McG. Stirling; Loch Melfort [NM81], 15 iv 1965, A.McG. Stirling; Loch Feochan, Knipoch [NM8523], 1 vii 1966, A.McG. Stirling; Ben Cruachan [NN03], 15 v 1967, A.McG. Stirling (all as *Grimmia* sp.).

***101:** Kintyre, Stronefield [NR7274], 24 ii 1968, A.McG. Stirling (as *Grimmia* sp.).

104: dry basalt rocks, hillside S of Glen Brittle P.O. [NG42], 19 viii 1968, A.McG. Stirling & E.C. Wallace (as *Grimmia* sp.).



◁ *Grimmia lisae*
on Arthur's Seat,
Edinburgh.
David Long

69.20A *Grimmia lisae* DeNot.

A new revision of this and related species has been submitted for publication by Eva Maier; it will include *G. retracta* Stirt., *G. subsquarrosa* Wilson, *G. robusta* (Fergusson) Braithw. and *G. britannica* A.J.E. Smith as synonyms of *G. lisae* (E. Maier, unpublished). *G. retracta* and *G. subsquarrosa* were already treated as synonyms by Greven *et al.* (1994). Records have been confirmed by Eva Maier from the following vice-counties: 1, 2, 3, 4, 34, 42, 43, 45, 48, 49, 50, 52, 69, 70, 73, 75, 81, 82, 83, 84, 85, 86, 88, 89, 90, 92, 93, 96, 97, 98, 99, 101, 102, 103, 104, 105, 108, H1, H2, H3, H16, H35 and C. Those listed below are considered to be new vice-county records; only the most recent record has been included for each vice-county. A full list of confirmed *G. lisae* specimens is available from the author and BBS Recorder for Mosses (see inside front cover). The species may be distinguished from *G. trichophylla* and other related species by using the keys published by Maier (2002a), Porley (2004) and Blockeel (2006).

G. lisae shows a wide spectrum of substrates and habitats; these may be broadly grouped into two types. First, moist rocks and boulders, sometimes silt-covered, in the splash zone by rivers and lakes—many of these specimens were in the past labelled *G. retracta*. Second, in much drier habitats on exposed sea cliffs and other rock outcrops from low to high elevations, more rarely on boulders, walls and in old quarries. These specimens have

often been identified as *G. trichophylla* and *G. subsquarrosa*. Recorded rock types include granite, andesite, basalt, schist, serpentine and Old Red Sandstone. The recorded altitudinal range is from sea level (numerous records) to 600 m (Glen Fee, Angus).

***4:** rocks by roadside near Lee Bay near Ilfracombe [SS4846], 20 ix 1959, J. Appleyard (as *G. subsquarrosa*).

***34:** on Old Red Sandstone slab near the Suckstone, Staunton, Wye Valley [SO5414], 30 vii 1955, C.C. Townsend (as *G. trichophylla*).

***43:** on sloping slabs in open space in woodland, Stanner Rock, 5 km WNW of Kington [SO2658], 220 m, 9 ix 1977, C.C. Townsend 771547 (as *G. trichophylla*).

***48:** rocks by Llyn y Gafr, Cader Idris [SH7114], 26 ix 1982, S. Jury & F. Rumsey (as *G. trichophylla* var. *robusta*).

***49:** rocks on sea cliffs, Trwyn Maen Melyn, near Gwyddel, Llyn Peninsula, SH137252, 3 iv 1970, D.G. Long 964 (as *G. subsquarrosa*).

***50:** detritus-covered rocks, N bank of River Dee near Llangollen SJ202434, 12 iv 1960, J.A. Paton 1102 (as *G. retracta*).

***52:** on boulders at about water level, Llyn Traffl, Anglesey [SH37], 28 vi 1952, R.E. Parker & D.A. Ratcliffe (as *G. retracta*).

***69:** rocks by R. Brathay, Skelwith Force [NY3403], 29 iii 1947, F.J. Taylor (as *G. retracta*).

***70:** dry basic rocks at ca 1,300 ft facing E,

Shoulthwaite Gill, Vale of Naddle [NY2920], 19 iv 1959, D.A. Ratcliffe (as *G. trichophylla*).

***73:** dry calcareous rocks at 1,200 ft, Cairnaber, Millfore near New Galloway [NX4876], 8 iv 1953, D.A. Ratcliffe (as *G. decipiens* var. *robusta*).

***75:** andesite rocks, Craig Hill, Straiton [NS30], 5 xi 1964, F.G. Rodway & A.McG. Stirling (as *G. decipiens* var. *robusta*).

***81:** rock outcrop on river bank, near copper mines, Whitadder Water, Elba NT786603, 125 m, 1 ii 1992, D.G. Long 21666 (as *G. trichophylla*).

***82:** dry rock in ravine, Kate's Cauldron, Linn Dean NT465597, 255 m, 18 vi 1990, D.G. Long 18251 (as *G. trichophylla*).

***83:** rock face, Agassiz Rock, Blackford Quarry NT259702, 80 m, 13 iii 1978, D.G. Long 6543 (as *G. trichophylla*); 6544 (as *G. trichophylla* var. *subsquarrosa*).

***84:** shaded rocks, E side of Cockleroy Hill, S of Linlithgow [NS9874], 17 ii 1974, D.F. Chamberlain (as *G. subsquarrosa*).

***86:** on boulder on shore, Rowchoise, Loch Lomond [NN3304], 19 ix 1978, A.C. Crundwell (as *G. retracta*).

***88:** silt-covered rocks by Loch Tay, Carie Wood near Lawers Village [NN6536], 10 viii 1988, D.F. Chamberlain (as *G. retracta*).

***89:** Pitroddie, Perth [NO22], 1865, F.B. White (as *G. subsquarrosa*).

***90:** on exposed rocks, W end of Juanjorge Cliffs, Glen Clova, 500 m, NO2679, 17 v 1994, D.G. Long & G.P. Rothero 25330 (as *G. trichophylla*).

***92:** serpentine rocks, Coyles of Muick near Ballater [NO3391], vi 1966, U.K. Duncan (as *G. decipiens* var. *robusta*).

***93:** serpentine outcrops, Towanreef Hill near Rhynie [NO4524], 29 viii 1959, D.A. Ratcliffe (as *G. trichophylla*).

***96:** boulder on shore of Loch Ness below

- Abriachan NH572344, 25 m, 18 vii 1987, D.G. Long & P.J. Lightowlers 14196 (as *G. retracta*).
- *98: dry andesite rocks, Deadh Chomaidh, Glen Lonan, near Oban [NM9428], v 1966, A.McG. Stirling (as *G. decipiens* var. *robusta*).
- *99: rocks on shore of Loch Lomond near Gartocharn [NS48], 6 i 1974, A.C. Crundwell (as *G. retracta*).
- *101: rocks near shore, near Stronefield, Loch Caolisport [NR7274], 24 ii 1968, A.McG. Stirling & A.G. Kenneth (as *G. subsquarrosa*).
- *102: boulders on shore of Loch an t-Siob, Isle of Jura [NR5173], 5 vii 1953, A.C. Crundwell (as *G. retracta*).
- *103: on soil on basalt outcrop on cliff, Carsaig Bay, Isle of Mull [NM5321], v 1968, U.K. Duncan (as *G. decipiens* var. *robusta*).
- *104: on boulders by outflow stream from loch, W end of Loch Fiachanis near Harris, Rum NM35549477, 195 m, 29 vi 2004, D.G. Long 33274 (as *G. cf. lisae*).
- *(105): boulders by stream between Loch Lurgainn and Loch Bada na h-Achlaise, N of Ullapool [NC0808], 29 v 1959, A.C. Crundwell (as *G. decipiens* var. *robusta*).
- *H1: on boulder on lake shore, Lough Caragh, near Lough Beg, V7190, 24 m, 25 vii 1983, D.G. Long 11692 (as *G. retracta*).
- *(H2): rocks by the Upper Lake, Killarney [V98], viii 1911, D.A. Jones & J.B. Duncan (as *G. retracta*).
- *H3: rock on shore, W side of Adrigole Harbour, V8049, 31 viii 1979, J.A. Paton & A.C. Crundwell 2427 (as *G. trichophylla*).
- *H16: on boulder on lake shore, near quay on E side of Lough Inagh L8552, 20 m, 4 iv 1988, D.G. Long 14893 (as *G. retracta*).
- *H35: rock, shore of Loch Maam, 1,200 ft, N side of Slieve Snaght, Derryveagh Mountains [B9215], 4 ix 1962, A.C. Crundwell (as *G. trichophylla*).
- *C: sea cliffs, Icard, Guernsey, 18 v 1976, A.G. Side (as *G. subsquarrosa?*).

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