



Highland Natural History: a guide to recording

Flowering plants and ferns

1. Introduction. Highland is a huge area and information about its natural history is not always readily accessible. This information sheet is the first of a series. They aim to provide a summary of what is known, who is involved in recording and to suggest what someone new to the area or an interest may usefully contribute. To keep the information up-to-date and relevant, please let the compiler have any comments or corrections.

2. Recording areas. The current local authority area of **Highland** is the largest in the United Kingdom. It comprises all of three former counties, Caithness, Sutherland and Nairn, the mainland parts of Ross & Cromarty and Inverness, and smaller parts of Moray and Argyll. When the HBRG was formed in 1986, it took the whole of Highland as its recording area, together with the northern part of Moray (which is in Grampian, strictly speaking)

For biological recording purposes, **Highland** is divided into **nine vice-counties**. This system, giving areas of roughly equal size, was set up in 1859 by the botanist H.C. Watson and is based on the county boundaries at that time. Although there have been changes in local authority boundaries since, the system provides continuity in recording and is still used by botanists, entomologists and others.

An outline map of the Highland vice-counties is shown alongside, with a 100 and 10 km grid super-imposed. They are numbered 95-98 and 104-109. Inverness, Ross & Cromarty and Sutherland were split into halves, West and East. Skye and the adjacent islands form the odd-named North Ebudes. Only a small part of vc 98 (Main Argyll) lies within Highland, to the south of Loch Leven and the Black-water Reservoir, but it does contain most of Rannoch Moor and Glen Coe. For details of a CD ROM with the vice-county boundaries at 1:10,000 scale, see the NBN web-site (www.nbn.org.uk).



95	Moray	105	West Ross
96	East Inverness and Nairn	106	East Ross
97	West Inverness	107	East Sutherland
98	Main Argyll	108	West Sutherland
104	North Ebudes	109	Caithness

3. Recorders. The recording of flowering plants and ferns in the British Isles is co-ordinated by the **Botanical Society of the British Isles**. They have a network of **Vice-county Recorders**, who organise recording in and hold the records for their areas. The current Recorders are:

VC 95 (Moray): Mr I.P.Green, 19 Bogmoor Road, Bogmoor, Spey Bay, Fochabers, Morayshire, IV32 7PA (01343.820293; bogmoor19@aol.com).

VC 96 (East Inverness and Nairn): Sarah Smyth.

VC 97 (West Inverness): Dr I.Strachan, Seileach, Upper Inverroy, Roybridge, Inverness-shire, PH31 4AQ (01397.712566; ian.strachan@jncc.gov.uk) and Mr.I.R.Bonner.

VC 98 (Main Argyll): Mr G.P.Rothero, Stronlonag, Glenmassan, Dunoon, Argyll, PA23 8RA (01369.706281; gprothero@aol.com).

VC 104 (North Ebeudes): Dr S.J.Bungard, Ceòl-na-Mara, West Suisnish, Isle of Raasay, Kyle, IV40 8NX (01478.660248; suisnish@waitrose.com).

VC 105 (West Ross): Duncan Donald.

VC 106 (East Ross): Drs B.R. and C.B.Ballinger, 5 Shaftesbury Park, Dundee, DD2 1LB (01382.669727; brian@garrickwood.org.uk) and also Upper Station Flat, Fearn Station, by Tain, Ross-shire, IV20 1RR (01862.832012).

VC 107 (East Sutherland): Mrs M.E.Murray, Davoch, Rogart, Sutherland, IV28 3XD (01408.641365).

VC 108 (West Sutherland): Mrs P.A.Evans, Calltuinn, Nedd, Drumbeg, by Lairg, Sutherland, IV27 4NN (01571.833241; pandieevans@aol.com).

VC 109 (Caithness): Mr J.K.Butler, Seaside Cottage, Thurso East, Caithness, KW14 8HN (01847.893549).

4. Published information. The only comprehensive source of information about the current distribution of plants in the Highland area (and the rest of the British Isles) is the *New Atlas of the British and Irish Flora*, edited by C.D.Preston, D.A.Pearman and T.D.Dines (2002), published by Oxford University Press. It maps known occurrence by 10 km square, in three date classes (the most recent 1987-1999) and two categories of status (native and introduced), with a useful text on every species, and further information on a CD ROM.

Published Floras, at county, vice-county or local level exist for most of the Highland area. Some are fairly recent, others less so, and they vary greatly in how much detail they contain. Most have useful accounts of features of the topography, geology and land-use that affect the distribution of

plants and the history of botanical recording in their areas. They are all available at Inverness Museum and Art Gallery, and local reference libraries or through the Vice-County Recorders. They are:

Vcs 95 and 96 (Moray and East Inverness): *Flora of Moray, Nairn and East Inverness*, by Mary McCallum-Webster (1978); published by Aberdeen University Press. 10 km distribution maps of 326 species, with detailed records and location of herbarium material.

Vcs 96 and 97 (East and West Inverness): *Map Flora of Inverness-shire*, edited by Geoffrey Radley (1985); published by the Botanical Society of Edinburgh and B.S.B.I. 5km distribution maps of nearly all species, but the area mapped omitted Ardnamurchan, Morvern and Ardgour in vc 97 and Nairn in vc 96.

Vc 98 (Main Argyll): *An annotated checklist of the flowering plants and ferns of Main Argyll* by G.P.Rothero and B.H.Thompson (1994); published by the Argyll Flora Project; pp.132.

Vc 104 (North Ebeudes): *The botanist in Skye and adjacent islands* by C.W.Murray and H.J.B.Birks (3rd edit. 2005). Annotated checklist, with a summary of frequency, distribution and habitats; colour section; includes Raasay and The Small Isles.

Vc 105 (West Ross): *Annotated Checklist of the Flora of West Ross* by D.M.Henderson (2nd edit. 1992), privately published. Records the status of the species, with a list of the 10 km squares in which they had (or had not) been recorded; pp.67, map. For a classical account see *The Flora of West Ross* by G.C.Druce (1929); published by Buncle of Arbroath; pp.112 + xxvii.

Vc 106 (East Ross): *Flora of East Ross-shire* by Ursula Duncan (1980); published by the Botanical Society of Edinburgh; pp.272 + xxix. Brief introduction followed by species accounts with first records, list of the 10 km grid squares from which the commoner ones are recorded and full details of the rarer ones.

Vcs 107 and 108 (East and West Sutherland): *John Anthony's Flora of Sutherland*, edited by J.B.Kenworthy (1976); published by the Botanical Society of Edinburgh; pp.201. Comprehensive introduction, followed by species accounts showing from which of the 8 + 5 large parishes in each vice-county the commoner species have been recorded, with details for the rarer ones. There is also the recent *Flora of Assynt* by P.A.Evans, I.M.Evans and G.P.Rothero (2002); published privately; pp. 283, coloured figures and plates. Maps all species by 2 km square, with an extensive introduction and a substantial section on the bryophytes of this large West Sutherland parish.

Vc 109 (Caithness): *The wild flowers of Caithness* by Elaine Bullard, J.K.Butler, J.M.Gunn and V. Hewison (1977); published by the Caithness Field Club. A simple checklist.

5. Other sources of information. There are a number of other publications on Scotland as a whole which contain useful information on the flora of Highland. Examples are:

Wild Orchids of Scotland by Brian Allan and Patrick Woods (1993). Published by the Royal Botanic Gardens (Edinburgh) and H.M.S.O. Excellent photographs of all species.

The Vice-County Census Catalogue of the Vascular Plants of Great Britain edited by C.A.Stace et al. (2003); published by the B.S.B.I. Lists all taxa recorded from each vice-county, indicating if there is a post-1969 record and their status (native, archaeophyte, neophyte, casual).

The **Local Biodiversity Action Plans** produced by Highland Council contain lists of key plant species important at both local and national level. More details are available from the Biodiversity Officer, Planning and Development, Highland Council, Glenurquhart Road, Inverness, IV3 5NX (01463.702274).

Inverness Museum and Art Gallery has an extensive library and small herbarium. Contact them at Castle Wynd, Inverness, IV2 3SE (01463 237114).

Local Field Clubs operate in Assynt, Caithness, Inverness, Moray, South-West Ross, Tain and Ullapool. Their members may be a useful source of information about their local flora. Contact details are available from the HBRG or the compiler of this information sheet.

Besides operating the Vice-County Recorder Scheme, the **Botanical Society of the British Isles** also publishes identification guides, a Newsletter and the journal *Watsonia*, arranges field meetings and has a system of expert referees. Talk to your Vice-County Recorder about the benefits of membership.

6. Identification guides. The indispensable work in this category is the *New Flora of the British Isles* by Clive Stace (2nd edit. 1997), published by Cambridge University Press. Guides to 'difficult' groups such as pondweeds, sedges, umbellifers, willows and poplars are published by the BSBI, and there is a profusion of well-illustrated books for beginners. Get some advice on the last, since their geographical scope often extends well outside the British Isles.

7. What can I do; what is worth recording? Highland is a large and sparsely-populated area, with only a few resident botanists. There was good overall coverage at 10 km square level for the recent *Atlas*, with all mainland squares scoring between 100 and 300 species, and at least one (near Inverness) over 600. This coverage masks the fact that there are substantial areas, especially away from the coast and other 'honey-pots', that have probably never been visited by a botanist. So far as casual recording is concerned, Vice-county Recorders will certainly be interested in new 10 km square records for any species, and in recent records from squares for which there is nothing post-1986. Please provide basic details, i.e. locality name, 6 or 8 figure grid-reference, date, finder, with notes of habitat and abundance if possible. Similar information is useful for any species that are listed as uncommon or rare in a county Flora. The locality may be known to the Recorder or it may be quite new.

If you want something more challenging, especially in parts that may be little visited, then make a complete list for a small area. Choose an area that has boundaries recognisable on the ground (not so easy in much of Highland) and ensure that these boundaries do not cross significant grid-lines. A sketch map of the area covered or route followed will be useful to posterity. From experience, the thorough listing of 1 sq.km is a day's work and even in remote areas a list should ideally be restricted to a single tetrad (2 km square). One further point; if you are using a recording card designed for the whole of Scotland, bear in mind the importance of detailed records for locally uncommon species. If in doubt, give full details of any species that seem to fall into this category. Best of all, have a word with the Vice-county Recorder before setting out. They will have valuable suggestions about where to go and what to look for and may also have special projects with which you can help (e.g. Rare Plants Registers).

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Illustration of Scottish primrose on p.1 from *A New Illustrated British Flora* by R.W.Butcher (1961).