

Midlothian

Vice-county 83

Scarce, Rare & Extinct Vascular Plant Register



Silene viscaria
(© Historic Scotland Ranger Service)



Vicia orobus
(© B.E.H. Sumner)



Asplenium ceterach (© B.E.H. Sumner)

The records for this *Register* have been selected from the databases held by the Botanical Society of Britain and Ireland.

These records were made by botanists, most of whom were amateur and some of whom were professional, employed by government departments or undertaking environmental impact assessments.

This publication is intended to be of assistance to conservation and planning organisations and authorities, district and local councils and interested members of the public.

Acknowledgements

My thanks go to all those who have contributed records over the years, and especially to Douglas R. McKean and the late Elizabeth P. Beattie, my predecessors as BSBI Recorders for Midlothian. Their contributions have been enormous, and Douglas continues to contribute enthusiastically as Recorder Emeritus. Thanks also to the determiners, especially those who specialise in difficult plant groups. I am indebted to David McCosh and George Ballantyne for advice and updates on *Hieracium* and *Rubus fruticosus* microspecies, respectively, and to Chris Metherell for determinations of *Euphrasia* species. Chris also gave guidelines and an initial template for the *Register*, which I have customised for Midlothian. Heather McHaffie, Phil Lusby, Malcolm Fraser, Caroline Peacock, Justin Maxwell and Max Coleman have given useful information on species recovery programmes. Claudia Ferguson-Smyth, Nick Stewart and Michael Wilcox have provided other information, much appreciated. Staff of the Library and Herbarium at the Royal Botanic Garden Edinburgh have been most helpful, especially Graham Hardy, Leonie Paterson, Sally Rae and Adele Smith. Thanks to Historic Scotland Ranger Service for the photograph of *Silene viscaria* on the front cover of the *Register*. Addy Pope of EDINA is thanked for creating the map of Vice-county 83, against a background of Local Authority areas. I am indebted to Douglas McKean for checking the draft *Register*, and making suggestions which have guided the revisions. Finally, thanks to Jim McIntosh for answering many queries and checking the revised *Register*.

Contents

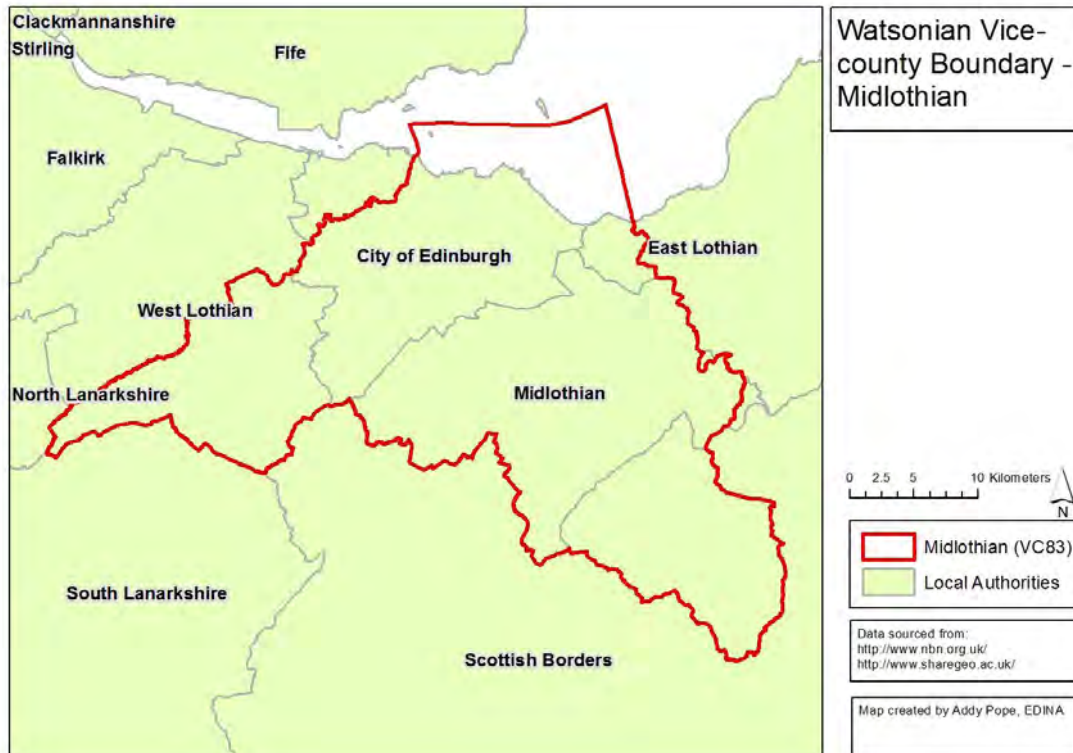
| | Page |
|---|------|
| Abbreviations | 1 |
| Introduction | 2 |
| Criteria for inclusion in the <i>Register</i> | 3 |
| International Criteria | 3 |
| National Criteria..... | 3 |
| Local Criteria | 4 |
| Exclusions | 4 |
| Confidentiality | 5 |
| Updating | 5 |
| The Records | 6 |
| Overview | 6 |
| Selected Literature References..... | 8 |
| Selected Websites | 10 |
| Extant Species | 11 |
| Extinct Species..... | 140 |

Abbreviations

Agg. – aggregate of closely related taxa
 Anon. – recorder unknown
 BSBI – Botanical Society of Britain and Ireland
 BSS – Botanical Society of Scotland
 CITES – Convention on International Trade in Endangered Species of Wild Fauna
 and Flora
 CUP – Cambridge University Press
 ENHS – Edinburgh Natural History Society
 EUP – Edinburgh University Press
 HSRS – Historic Scotland Ranger Service
 IUCN – International Union for the Conservation of Nature;
 Least Concern (LC); Data Deficient (DD); Extinct (EX); others on page 3
 JNCC – Joint Nature Conservation Committee
 LBAP – Local Biodiversity Action Plan
 O.S. – Ordnance Survey
 OUP – Oxford University Press
 RBGE – Royal Botanic Garden Edinburgh
 RSNC – Royal Society for Nature Conservation
 SAC – Special Area of Conservation
 SBL – Scottish Biodiversity List
 s.l. – *sensu lato*; s.s. – *sensu stricto*
 sp. – species; subsp. - subspecies
 SNH – Scottish Natural Heritage
 SPNC – Society for the Promotion of Nature Conservation
 SSSI – Site of Special Scientific Interest
 SWT – Scottish Wildlife Trust
 TWIC – The Wildlife Information Centre for the Lothians and Borders
 UK BAP – United Kingdom Biodiversity Action Plan
 VCCC – Vice-county Census Catalogue
 WACA: Sch. 8 – Wildlife and Countryside Act: Schedule 8

Introduction

This *Register* is intended to record details of the occurrence of rare plants in Vice-county 83, Midlothian. It has been produced as part of a national initiative based on the Botanical Society of Britain and Ireland (BSBI) vice-county system. Vice-county 83 includes the Local Authority administrative areas of Midlothian and most of the City of Edinburgh, with Cramond Island (a tidal island) and the offshore islands of Inchmickery and Cow & Calves. Parts of the administrative areas of West Lothian, East Lothian and the Scottish Borders are also in Vice-county 83, as shown below.



Watsonian Vice-county data sourced from the National Biodiversity Network. The data provider and the NBN Trust bear no responsibility for any further analysis or interpretation of the data. O.S. OpenData basemap. The maps contain Ordnance Survey data © Crown Copyright and database right.

From the coast through the city to the Pentland and Moorfoot Hills, Midlothian is a vice-county of contrasting habitats and hence a varied flora, described most recently by Smith *et al.* (2002). The biological and geological value of the habitats has been recognised nationally and internationally by the creation of thirty Sites of Special Scientific Interest (SSSIs), three of which are also Special Areas of Conservation (SACs). Arthur's Seat, the extinct volcano in the city of Edinburgh, is probably the best known SSSI in the Vice-county, and is managed by Historic Scotland. Some biologically rich sites are managed as nature reserves by various bodies, including the Scottish Wildlife Trust (SWT). A few woods are reserves run by the Woodland Trust. Some woods are managed for forestry by public or private bodies, but with an eye for nature conservation. Some have become community woodlands, run by local communities. There are several country parks in Midlothian, and a regional park in the Pentland Hills, managed for nature and recreation by the Local and Water Authorities. Sensitive landowners and managers, and enthusiastic groups of volunteers, all contribute to the care of nature and the environment in the Vice-county. Successful care of a biological site requires knowledge of which species are present and how they are faring. Are they scarce or rare, and are they increasing or

declining? Recording and continued monitoring are essential to gain this knowledge. If you enjoy going on walks listing any vascular plant species you see, your local vice-county recorder would be most grateful for a copy of your list(s), to add to the BSBI knowledge base and update the resource (e-mail: bsvc83-mail@yahoo.co.uk).

The BSBI recording strategy is focused on recording cycles (date classes) of ten years, the last complete cycle finishing on 31st December, 2009. Since then recording has continued and the database has been updated to the end of 2013. This *Register* is intended to provide a snapshot of the distribution of rare plants from 1st January, 1970, to 31st December, 2013. It must immediately be said that many of the older records, and even some of the newer ones, are at low resolution (10km or 5km). However, it was considered important to provide a document at this stage, partly to provide a springboard for further recording. As well as the 1970-2013 data, historical information is provided where available, to put the more recent records into perspective.

Two main uses are envisaged for the *Register*. First, to indicate and provide information on those species which may be at risk and requiring protection; second, to provide a baseline so that, as detailed surveying increases over the Vice-county, changes in the occurrence and distribution of these plants over time can be ascertained.

The botanical and common names are those used by Stace (2010), except for the microspecies of *Hieracium* agg., which follow McCosh and Rich (2011, based on Sell and Murrell, 2006), *Rubus fruticosus* agg., which follow Edees & Newton (1988), and *Taraxacum* agg., which follow Dudman & Richards (1997).

Species are arranged in alphabetical order.

Criteria for inclusion in the *Register*

The principal criteria used for inclusion in the main portion of the *Register* are:

International Criteria. Native and archaeophyte vascular plant species which are currently internationally rare. These are species which:

- Are endemic to Britain (a list is available in Cheffings & Farrell, 2005);
- Are of restricted distribution internationally. These are as listed/occurring in EC Habitats and Species Directive Annex IIb, IVb or Vb; or Appendix I of the Bern Convention or Appendix I or II of CITES;

National Criteria. Native and archaeophyte vascular plant species which are currently scarce or rare in Britain. These are species which:

- Are listed in Schedule 8 of the Wildlife and Countryside Act, 1981;
- Are listed as occurring in IUCN categories CR (Critically Endangered), EN (Endangered), VU (Vulnerable) and NT (Near Threatened) in the British Red Data Book for vascular plants (Cheffings & Farrell, 2005, updated on the JNCC website);
- Are nationally rare, occurring in 15 or fewer 10km squares in Britain;

- Are nationally scarce, occurring in between 16 and 100 10km squares in Britain;
- Are on the Scottish Biodiversity List (SBL). The SBL also notes whether species are rare in Scotland (occurring in fewer than 6 Scottish 10km squares), and whether they show “significant decline” in Scotland. The latter is a decrease of 25% or more in 25 years, in the number of 10km squares containing the species in Scotland.

Local Criteria. Native and archaeophyte vascular plant species which:

- Are rare - present in 3 sites or fewer in the Vice-county (from 1st January, 1970, to 31st December, 2013) and do not fall into the above categories. In this context a ‘site’ is a discrete area within a movable kilometre square, which seems at first glance to be slightly vague but in general is fairly easy to apply in practice;
- Are scarce - present in 4-10 sites in the Vice-county (from 1st January, 1970, to 31st December, 2013) and do not fall into the above categories. Here there has been a degree of selection, necessary because of the small number of records overall, and the limits, particularly the upper limit, have not been strictly adhered to;
- Are extinct in the Vice-county.

Taxa which are scarce or rare locally, but are not listed on the JNCC website as having been assessed for national scarcity or rarity, or as having been assigned a threat category by the IUCN, are marked as “Not designated” in this Register. These taxa are all hybrids.

“Native” has been taken here to mean “native in the UK”, not necessarily in Midlothian. This has meant the inclusion of some species, native elsewhere in the UK, which may have been introduced to the Vice-county and are now self-sown and established in the wild. However, it has not meant the inclusion of species which are garden throw-outs, or which have been deliberately planted. See “Exclusions” below.

“Archaeophytes” are alien species introduced to the UK before A.D. 1500.

Exclusions

Alien species introduced to the UK more recently than A.D. 1500 are known as “neophytes” and are not eligible to be included in this *Register*.

Introduced species which are short-lived (i.e. do not persist for more than 5 years) and do not become naturalised, are known as “casuals”. Even if they are established archaeophytes in the UK as a whole, species known to behave as casuals in Midlothian have been excluded from the *Register* unless they are significant in some way, either scientifically or culturally. For example, *Centaurea cyanus* is an archaeophyte which is casual in Midlothian, but is included in the *Register* because of its conservation status.

Some native species are known to be short-lived in Midlothian and have been excluded from the *Register* for that reason, unless they have conservation designation.

Hybrids between native and alien species have been excluded, unless the alien species is an archaeophyte. Sterile hybrids of annual parents have also been excluded, owing to the short-lived nature of the hybrid.

In most cases records which definitely or apparently refer to planted specimens have been excluded. The only exceptions are in cases where species have been planted on reserves or in other similar, controlled situations and the species is, or has been, known in the wild in the Vice-county. In such cases the records have been included to record the fact of the planting. An appropriate note has been made in the species account.

Recent taxonomic revisions have made some older field and literature records difficult to interpret, and the older records have had to be excluded. However, if voucher specimens have been collected, and re-determinations have been possible, the data from recently authenticated specimens have been included in the *Register*. Some microspecies of *Hieracium* agg., *Rubus fruticosus* agg. and *Taraxacum* agg. are examples in this category.

DNA analysis is leading to much taxonomic change, e.g. among *Epipactis* species (Hollingsworth *et al.*, 2006). *E. youngiana* (formerly a WACA, Schedule 8 species) is now regarded as conspecific with *E. helleborine*, which is not scarce in Midlothian, and is not of conservation concern nationally. Therefore, *E. helleborine* (including the former *E. youngiana*) has been excluded from this *Register*. On the other hand, *E. muelleri* (a former SBL species) is now regarded as conspecific with *E. dunensis*, which is rare in Midlothian, and also nationally rare. Therefore, *E. dunensis* (containing the former *E. muelleri*) has been included in the *Register*.

Confidentiality

Restriction of access to rare plant records is an issue which has caused much debate over the years. If detailed locations are given, plants may be at risk from collectors or even from those who simply wish to photograph them but may damage the plants by trampling. On the other hand, many more plants are at risk from neglect of habitats or potential development of sites. If the plant locations are unknown their conservation becomes more difficult, if not impossible. In general the policy in this *Register* is to give information up to 6-figure grid references, if possible. Further information may be available from the author on request.

All users of this *Register* are requested to respect the information provided, and to realise that many rare and scarce plants grow on private property. Many are also found on nature reserves where visitor pressure can be an issue. Courteous requests to landowners are often met with sympathy, and national and local conservation organisations are often pleased to show visitors plants of interest, if asked in advance.

Updating

As has already been pointed out, this *Register* is intended to provide a snapshot of available records up to the end of 2013. To become an effective conservation tool the rare plant registers must be kept up to date. As further records become available, they will be entered into the BSBI databases and used in future editions of the *Register*. If you see interesting plants on your walks, please let your local vice-county recorder know, so that the records can be validated and used in the updating process (e-mail: bsvc83-mail@yahoo.co.uk).

The Records

The records are those for Midlothian held in BSBI databases up to the end of 2013, as stated above. Most of the records are direct field observations. In addition, there are records of voucher specimens in local and national herbaria, especially in the Herbarium of the Royal Botanic Garden Edinburgh. There are also records gleaned from the literature (Abbott *et al.*, 1983; Abbott & Forbes, 2002; Balfour & Sadler, 1863; Ballantyne, 2004; Beattie, 1967; Brown, 1792-3; Colvin, 1845; Greville, 1824; Hope, 1765 & 1768; Horne, 1839; Learmonth, 1841; Lusby, 1996; Martin, 1927 & 1934; Maughan, 1809; McKean, 1988 & 1999; Smith *et al.*, 2002; Sommers, 1843; Sonntag, 1894; Torrence, 1843; Woodforde, 1824; Wright, 1839). Many more records may be awaiting discovery, to be incorporated during the updating process.

The table of records for each extant species shows the most recent record from each site. In some cases this may be the only record from the site, but in other cases there may be earlier records. First records from sites (which might be modern or historic) are also shown in the table, if enough details are available. Otherwise, historical information is included in the text.

Some historic records pre-date the Ordnance Survey (O.S.), and have site names but no O.S. grid references. Where a site name is unique in the Vice-county, and not repeated at several locations, an O.S. grid reference can often be deduced at hectad (10km) resolution. Since the establishment of the O.S. grid reference system, species have been recorded at 10km, 5km, 2km, 1km or 100m resolution. Recently, scarce and rare species have sometimes been recorded at 10m or even 1m resolution (8- or 10-figure grid references). In this *Register* these have been lowered to 100m resolution (6 figures) for space reasons, and a symbol (§) inserted to show that fuller information is available from the author on request. In a few cases the resolution has been lowered to 1km (4 figures) for reasons of sensitivity or public safety, and the symbol inserted.

Site names are given to assist in providing an overall picture, and to assist location if the grid reference is not at high resolution. A high-resolution grid reference provides the most accurate location.

Recorder names are provided where known. Further information on sources is available from the author on request.

The records of species are split into two sections. The first section consists of accounts of those species which are still extant (or may possibly be so) in the Vice-county. This is followed by a section of extinct (or presumed extinct) species. For each species, details of the national status and distribution are from the literature (Cheffings & Farrell, 2005; Dudman & Richards, 1997; Edees & Newton, 1988; McCosh & Rich, 2011; Preston *et al.*, 2002; Stace, 2010). Midlothian details are from the sources listed in the first paragraph of this section.

Overview

The total list of vascular plants in Vice-county 83 (VC 83) contains approximately 1928 taxa (mostly species) but is increasing all the time, especially with neophytes. Natives and archaeophytes number approximately 1043 taxa, of which about 912 are native and 131 are archaeophytes.

The overall number of natives and archaeophytes included in this *Register* is 448, of which 334 are extant and 114 extinct. This approaches a quarter of the total flora of the Vice-county. The table below summarises the number of taxa in each international or national conservation category. Some taxa have more than one designation. For some species, it is a particular subspecies which is of conservation concern. Only two hybrids in the *Register* have conservation designation; the remainder have been listed below as “Not designated”.

| Conservation Designation | EXTANT in VC 83 | | | EXTINCT in VC 83 | | |
|------------------------------|-----------------|--------------|------------|------------------|--------------|------------|
| | Native | Archaeophyte | Total | Native | Archaeophyte | Total |
| HabDir-Annex II, IV or V | 2 | 0 | 2 | 1 | 0 | 1 |
| Bern-A1 | 1 | 0 | 1 | 1 | 0 | 1 |
| WACA: Sch. 8 | 1 | 1 | 2 | 2 | 2 | 4 |
| IUCN:CR | 0 | 1 | 1 | 0 | 3 | 3 |
| IUCN: EN | 3 | 3 | 6 | 5 | 9 | 14 |
| IUCN: VU | 10 | 13 | 23 | 14 | 1 | 15 |
| IUCN: NT | 21 | 3 | 24 | 8 | 1 | 9 |
| IUCN: LC | 202 | 33 | 235 | 52 | 7 | 59 |
| IUCN: DD | 5 | 0 | 5 | 0 | 0 | 0 |
| IUCN: Waiting List | 1 | 1 | 2 | 1 | 0 | 1 |
| IUCN: EX | 0 | 0 | 0 | 0 | 1 | 1 |
| Nationally Rare | 5 | 0 | 5 | 5 | 3 | 8 |
| Nationally Scarce | 21 | 8 | 29 | 12 | 7 | 19 |
| UK BAP, 2007 | 11 | 4 | 15 | 15 | 10 | 25 |
| SBL | 32 | 24 | 56 | 25 | 4 | 29 |
| Total designations | 315 | 91 | 406 | 141 | 48 | 189 |
| Total designated taxa | 242 | 54 | 296 | 80 | 22 | 102 |
| Not designated | 38 | 0 | 38 | 12 | 0 | 12 |
| Total taxa | 280 | 54 | 334 | 92 | 22 | 114 |

The table below summarises the number of taxa in each local status category.

| Local Status | Native | Archaeophyte | Total |
|--------------------------|------------|--------------|------------|
| Rare | 160 | 28 | 188 |
| Scarce | 114 | 19 | 133 |
| Almost Scarce | 2 | 1 | 3 |
| Not Scarce | 4 | 6 | 10 |
| Extinct (or presumed so) | 92 | 22 | 114 |
| Total taxa | 372 | 76 | 448 |

Loss of suitable habitat is a major factor in the decline of many formerly widespread wild plant species in the Vice-county. Urban expansion, coastal development, and improvements in coastal defences, have all been at the expense of natural habitats. Felling of trees, drainage of wetlands and intensification of farming have changed

habitats, leading to changes in their flora. Improved purity of agricultural seed has led to the decline of arable weed species, among which are some long-established archaeophytes. All these changes have been good for people, but a challenge for wild plants. However, set-aside schemes now improve biodiversity on farmland. UK BAP and LBAP schemes are in progress to restore particular species and habitats. Certain sites of local value have been designated as Local Biodiversity Sites, to be taken into account when planning applications are being considered. These sites are in addition to nature reserves and the nationally and internationally protected SSSIs and SACs. With protective measures, it is hoped that the wild plants of Midlothian will thrive and proliferate, developing diverse communities, creating more habitats and micro-habitats for wild animals, and enriching ecosystems.

Selected Literature References

Abbott, R.J. and Forbes, D.G., "Extinction of the Edinburgh lineage of the allopolyploid neospecies, *Senecio cambrensis* Rosser (Asteraceae)", *Heredity*, 88 (2002), 267-269.

Abbott, R.J., Noltie, H.J. and Ingram, R., "The origin and distribution of *Senecio cambrensis* Rosser in Edinburgh", *Trans. Bot. Soc. Edinb.*, 44 (1983), 103-106.

Balfour, J.H. and Sadler, J., *Flora of Edinburgh*, Edinburgh: A. & C. Black (1863).

Ballantyne, G., "Brambles in the Lothians: a supplementary note to the flora of 2002", *BSS News*, No. 82 (March 2004), 20-25.

Beattie, E.P., "A contribution to the flora of the Islands of the Firth of Forth", *Transactions of the Botanical Society of Edinburgh*, 40, issue 3 (1967), 251-267.

Brown, R., *Extracts from manuscript descriptions of plants in the Edinburgh Botanic Garden, or found in the Neighbourhood, May 1792 to October 1793*, manuscript in RBGE Library.

Cheffings, C.M. and Farrell, L. (Eds.), *The Vascular Plant Red Data List for Great Britain*, Peterborough: JNCC (2005).

Colvin, W.L., *Statistical Account of the Parish of Cramond* (1845).

Crook, C.S., "Vice-county Rare and Threatened Plant Registers. Recommended species selection criteria for the British Isles", *BSBI News*, 77 (1997), 11-13.

Dudman, A.A. and Richards, A.J. *Dandelions of Great Britain and Ireland*, BSBI Handbook No. 9, London (1997).

Edees, E.S. and Newton, A., *Brambles of the British Isles*, edited by D.H. Kent, London: The Ray Society (1988)

Greville, R.K., *Flora Edinensis or A description of plants growing near Edinburgh*, Edinburgh: Blackwood; London: Cadell (1824).

Hollingsworth, P.M., Squirrell, J., Hollingsworth, M.L., Richards, A.J. and Bateman, R.M., "Taxonomic complexity, conservation and recurrent origins of self-pollination in *Epipactis* (Orchidaceae)". In: Bailey, J.P. and Ellis, R.G. (Eds.), *Current Taxonomic Research on the British and European Flora* (2006), 27-44, London: BSBI.

Hope, J., 1765, "List of plants growing in the neighbourhood of Edinburgh, collected in flower", *Notes from the Royal Botanic Garden Edinburgh*, 4 (1907), 18.

Hope, J., *A Catalogue of British Plants in Dr. Hope's Hortus Siccus*, bound manuscript in RBGE Library (1768).

Horne, D., *Statistical Account of the Parish of Corstorphine* (1839).

Leach, S.J., "The Vascular Plant Red Data List for Great Britain: Year 1 Amendments", *BSBI News*, 104 (2007), 19-21.

Leach, S.J., "The Vascular Plant Red Data List for Great Britain: Year 2 Amendments", *BSBI News*, 113 (2010), 43-44.

Leach, S.J. and Walker, K.J., "Vascular Plant Red Data List for Great Britain: a summary of year 5 amendments, covering years 3, 4 and 5 (2008-10) of the annual amendments process", *BSBI News*, 116 (2011), 51-56.

Leach, S.J. and Walker, K.J., "The vascular plant Red Data List for Great Britain: a summary of amendments in years 6 and 7 (2011-2012) of the annual amendments process", *BSBI News*, 123 (2013), 17-21.

Learmonth, W., *Statistical Account of the Parish of West Calder* (1841).

Lusby, P., "Practical conservation of *Lychnis viscaria* L. in Scotland", *Botanical Journal of Scotland*, 48 (1996), 167-177.

Martin, I.H. (Ed.), *The Field-Club Flora of the Lothians*, Edinburgh: Blackwood (1927 and 1934).

Maughan, R., "A List of the Rarer Plants observed in the neighbourhood of Edinburgh", *Memoirs of the Wernerian Natural History Society*, vol. 1, for the year 1809 (1811), 215-248.

McCosh, D.J. and Rich, T.C.G., *Atlas of British and Irish Hawkweeds (*Pilosella* L. and *Hieracium* L.)*, London: BSBI (in association with the National Museum of Wales, Cardiff) (2011).

McKean, D.R., *A Checklist of the Flowering Plants and Ferns of Midlothian*, Edinburgh: Botanical Society of Edinburgh (1988 and 1999).

Perring, F.H. and Farrell, L. (Eds.), *British Red Data Books: 1. Vascular Plants*, Lincoln: SPNC (1977).

Perring, F.H. and Farrell, L. (Eds.), *British Red Data Books: 1. Vascular Plants*, 2nd edn., Lincoln: RSNC (1983).

Preston, C.D., Pearman, D.A., Dines, T.D. (Eds.), *New Atlas of the British & Irish Flora*, Oxford: OUP (2002).

Robertson, T., Simpson, J.B. and Anderson, J.G.C., "The Limestones of Scotland", *Special Reports on the Mineral Resources of Great Britain*, vol. XXXV, Edinburgh: HMSO (1949).

Sell, P.D. and Murrell, G., *Flora of Great Britain and Ireland*, volume 4, Cambridge: CUP (2006)

Smith, P.M., Dixon, R.O.D. and Cochrane, M.P. (Eds.), *Plant Life of Edinburgh and the Lothians*, Edinburgh: EUP (2002).

Sommers, J., *Statistical Account of the Parish of Mid-Calder* (1843).

Sonntag, C.O., *A Pocket Flora of Edinburgh and the Surrounding District*, London and Edinburgh: Williams and Norgate (1894).

Stace, C.A., *New Flora of the British Isles*, 3rd edn, Cambridge: CUP (2010).

Stewart, A., Pearman, D.A. and Preston, C.D. (Eds.), *Scarce Plants in Britain*, Peterborough: JNCC (1994).

Torrence, A., *Statistical Account of the Parish of Glencross* (1843). (N.B. Glencross is now known as Glencorse.)

Wiggington, M.J., *British Red Data Books: 1. Vascular Plants*, 3rd edn, Peterborough: JNCC (1999).

Woodforde, J., *A Catalogue of the Indigenous Phenogamic Plants growing in the neighbourhood of Edinburgh; and of certain species of the Class Cryptogamia: with reference to their localities*, Edinburgh: John Carfrae, London: Longman *et al.* (1824).

Wright, T., *Statistical Account of the Parish of Borthwick* (1839).

Selected Websites

Botanical Society of Britain and Ireland: www.bsbi.org.uk (links to this *Register*)

Botanical Society of Scotland: www.botanical-society-scotland.org.uk

British Pteridological Society: www.nhm.ac.uk/hosted_sites/bps.htm

Historic Scotland: www.historic-scotland.gov.uk

Joint Nature Conservation Committee: www.jncc.gov.uk (links to downloadable lists of conservation-designated taxa and UK BAP species)

National Biodiversity Network: www.nbn.org.uk

National Trust for Scotland: www.nts.org.uk

Pentland Hills Regional Park: www.pentlandhills.org

Plantlife Scotland: www.plantlife.org.uk/scotland

Royal Botanic Garden Edinburgh: www.rbge.org.uk

Scottish Biodiversity Forum: www.biodiversityscotland.gov.uk (links to downloadable versions of the SBL and its criteria)

Scottish Natural Heritage: www.snh.gov.uk

Scottish Wildlife Trust: www.scottishwildlifetrust.org.uk

The Wildlife Information Centre for the Lothians and Borders (TWIC):

www.wildlifeinformation.co.uk

Woodland Trust: www.woodlandtrust.org.uk

Extant Species

Agrimonia eupatoria L.

Agrimony

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

This native perennial is frequent through much of Britain in grassy fields and hedgerows. In Midlothian it is infrequent in scattered locations, in rough grassland, among rocks or in disused quarries, on verges and banks beside roads and railways, or in hedgerows. Arthur's Seat and Linhouse Glen are SSSIs. In 1768 the species was recorded by the Water of Leith and at Dalkeith, and in 1824 in fields near Stockbridge, in Holyrood Park and in the Pentland Hills.

| Location | Grid Ref | Date | Recorder |
|-------------------------|-----------|------------|------------------------------|
| Arthur's Seat | NT27 | 1955 | Beattie, E.P. |
| Gorebridge | NT36 | 1956 | Beattie, E.P. |
| Middleton | NT35 | 1976 | Beattie, E.P. |
| Stow | NT44 | 1977 | Beattie, E.P. |
| Goodtrees | NT1565 | 1981 | BSS Surveyor |
| Gorebridge | NT36 | 1982 | McKean, D.R. |
| Bell's Mains | NT3460 | 1982 | Stewart, O.M. |
| Linhouse Glen | NT06 | 1982 | Stewart, N.F. |
| Ratho, west of | NT128709§ | 25/07/2012 | Sumner, B.E.H. & Merrick, D. |
| Newbridge to Kirkliston | NT126736 | 15/08/2013 | McKean, D.R. |

Agrostemma githago L.

Corncockle

National Status: See below; IUCN: Waiting List.

Midlothian Status: Rare.

This annual archaeophyte was formerly scattered through much of Britain as a common cornfield weed, but is now rare and casual. In addition, the plant has recently appeared in wildflower seed mixtures, which are not from British stock. IUCN categorisation has been deferred until evaluation can be carried out. In Midlothian the three records since 1970 are all thought to be from wildflower plantings, along the city by-pass and in landscaped areas around new buildings. In 1824 the plant was common in cornfields near Merchiston Castle, beyond Liberton and elsewhere. In 1863 records came from Corstorphine and Roman Camp (near Dalkeith). In 1934 the species was recorded at Leith, the Braids and Dalkeith.

| Location | Grid Ref | Date | Recorder |
|-------------------------------|----------|------------|--------------|
| City by-pass | NT26 | 1992 | Dixon, C. |
| Water of Leith, Juniper Green | NT1968 | 2007 | Badenoch, C. |
| Little France | NT293702 | 31/05/2012 | Milne, R.I. |

Agrostis x bjoerkmanii Widén (**A. capillaris x A. gigantea**)

National Status: Not designated; IUCN: Not designated.

Midlothian Status: Rare.

This spontaneous native hybrid of the native species, *Agrostis capillaris*, and the archaeophyte, *A. gigantea*, is a sterile pentaploid with few, scattered records in Britain. In Midlothian the two records have been from a field margin and grassland in the south-east of the Vice-county, where both parents were found.

| Location | Grid Ref | Date | Recorder |
|---------------|----------|------|---------------|
| Stow | NT4745 | 1988 | Learmonth, R. |
| Haltree Rings | NT4051 | 1990 | Learmonth, R. |

Alisma lanceolatum With.

Narrow-leaved Water-plantain

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Rare.

Nationally this native water-plantain of still water and slow rivers is said to be frequent in England but rare in central Scotland. In Midlothian it has been found by still water at two sites, one of which is historic. Duddingston Loch is a SSSI.

| Location | Grid Ref | Date | Recorder |
|-----------------------|----------|------------|----------------|
| By Lochend, Edinburgh | NT27 | 1839 | Knapp, J. |
| Duddingston Loch | NT2872 | 29/07/1969 | Muirhead, C.W. |
| Duddingston Loch | NT2872 | 1985 | Steven, G. |

Alopecurus myosuroides Huds.

Black-grass

National Status: Not Scarce; IUCN: LC; SBL: >25% decline.

Midlothian Status: Scarce.

Nationally this annual archaeophyte is frequent in the south, centre and east of England, but is scattered and often casual elsewhere. It is decreasing in Britain as a whole and in Scotland, and the decline is recognised on the SBL. The species is an arable weed, also found on waste ground. In Midlothian the recent records have been from waste-ground sites, scattered from the coast to the south-west and south-east of the Vice-county. Before 1934 the species was recorded at Balerno, Slateford, Leith, Musselburgh and Portobello.

| Location | Grid Ref | Date | Recorder |
|---|----------|------------|----------------|
| Leith Docks, west of Chancelot Flour Mill | NT27 | 01/07/1965 | Beattie, E.P. |
| Seafield | NT27 | 05/07/1977 | Beattie, E.P. |
| Livingston | NT0668 | 1981 | BSS surveyor |
| Newhaven | NT2577 | 30/06/1984 | Stewart, O.M. |
| East of Torsonce | NT4743 | 1984 | Nield, P. |
| North of Heriot Cleugh | NT3755 | 14/09/1994 | McKean, D.R. |
| Granton | NT2477 | 29/05/1996 | Anderson, E.M. |
| Musselburgh Race Course | NT347734 | 29/10/2007 | Jackson, E.H. |

Ammophila arenaria (L.) Link

Marram

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this perennial native grass is a well-known stabiliser of mobile coastal sand-dunes and is common or even dominant in some locations around Britain. In Midlothian since 1950 the only sites for this species have been at the extreme east and west ends of the coastline, on beaches, dunes and adjacent grassland. Historically the species spread along more of the coast, from Granton to Cramond (1824 and 1863) and at Portobello (1824). The shore of the Firth of Forth is a SSSI.

| Location | Grid Ref | Date | Recorder |
|-----------------------------|----------|------|---------------|
| Musselburgh | NT37 | 1956 | Beattie, E.P. |
| Musselburgh, east of R. Esk | NT37 | 1957 | Jack, J.R. |
| Cramond Island | NT1978 | 1985 | McKean, D.R. |
| Cramond | NT1977 | 1998 | McKean, D.R. |

Anacamptis pyramidalis (L.) Rich.

Pyramidal Orchid

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native species of orchid is found on calcareous grassland and dunes, and is locally frequent in Britain, but rare in Scotland. In Midlothian the species has only been recorded from one site, at the edge of a flattened spoil heap (bing) from a former coal mine (Monktonhall Colliery, near Millerhill). The plant was first spotted and determined by R. I. Milne in 2007, and confirmed by D. R. McKean. Subsequently the plant developed two flower spikes (2010) and then three (2011), which were still present in 2012. However, in 2013 works for the Borders Railway cut through the edge of the bing and the current status of the orchid is uncertain. A search is planned for 2014.

| Location | Grid Ref | Date | Recorder |
|-----------------------------------|-----------|------------|----------------|
| Monktonhall bing, near Millerhill | NT321706 | 2007 | Milne, R.I. |
| Monktonhall bing, near Millerhill | NT321706§ | 12/07/2010 | McKean, D.R. |
| Monktonhall bing, near Millerhill | NT321706§ | 04/07/2012 | Sumner, B.E.H. |

Anagallis arvensis L. *subsp. arvensis*

Scarlet Pimpernel

*National Status: Not Scarce; IUCN: LC; SBL: >25% decline.**Midlothian Status: Scarce.*

This native subspecies (formerly species, *Anagallis arvensis*) is usually annual, and is found in open or waste ground and arable fields through most of Britain, though it is rare in northern Scotland. The plant has shown significant decline in Scotland, recognised by the SBL. In Midlothian the Scarlet Pimpernel has mostly been recorded as the species, *Anagallis arvensis*. For these records *subsp. arvensis* is assumed. *Subsp. arvensis* is scarce (only four records since 1970) but found slightly more often than *subsp. foemina*. The habitats since 1950, where recorded, have been waste ground, a railway tip, rough grass and a canal bank. In 1824 *Anagallis arvensis* was recorded in fields near Caroline Park and on the Braid Hills. In 1921 this species was recorded at Leith Docks and in 1934 at Tynehead.

| Location | Grid Ref | Date | Recorder |
|-------------------------------|----------|------------|---------------|
| Levenhall | NT37 | 1955 | Beattie, E.P. |
| Borthwick Bank | NT3660 | 06/07/1960 | Beattie, E.P. |
| Leith Docks | NT27 | 1963 | Beattie, E.P. |
| Union Canal, Sighthill | NT1870 | 10/07/1963 | Beattie, E.P. |
| Granton | NT27 | 06/05/1972 | Beattie, E.P. |
| Easthouses | NT3465 | 01/09/1994 | McKean, D.R. |
| Bawsinch | NT2872 | 1999 | Maxwell, S.A. |
| Millerhill, waste ground near | NT322700 | 19/07/2011 | Sumner, A.T. |

Anagallis arvensis L. **subsp. foemina** (Mill.) Schinz & Thell.

Blue Pimpernel

National Status: Scarce; IUCN: LC.

Midlothian Status: Rare.

Nationally this archaeophyte, which is usually annual, is scarcer than the native Scarlet Pimpernel (*Anagallis arvensis* subsp. *arvensis*). Subsp. *foemina* (formerly species, *Anagallis foemina*) is scattered in Britain as far north as central Scotland, and is usually found in arable ground. In Midlothian subsp. *foemina* is a rare casual. It is included in this *Register* because of its national scarcity. The only record since 1970 has been of a single plant on waste ground at Craigmillar in 1999 (see below). Previous records were from high land south of Currie in 1878 (below), Leith Docks in 1904, an old quarry at Slateford in 1908, and Leith, Portobello and Slateford in 1934.

| Location | Grid Ref | Date | Recorder |
|------------------|----------|------------|---------------|
| Currie, south of | NT16 | 1878 | Reid, J.R. |
| Craigmillar | NT289715 | 17/08/1999 | Maxwell, S.A. |

Andromeda polifolia L.

Bog-rosemary

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Rare.

This native species is a small, straggly shrub, locally common in peaty wetlands from central England to central Scotland. In Midlothian the species has only been recorded at one site, a peaty moss, some of which is protected as a SSSI.

| Location | Grid Ref | Date | Recorder |
|------------------|----------|------------|----------------|
| Auchencorth Moss | NT25 | 1895 | Godfrey, R. |
| Auchencorth Moss | NT196563 | 06/07/1971 | Badenoch, C.M. |

Antennaria dioica (L.) Gaertn.

Mountain Everlasting

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

Nationally this native perennial is commoner in the north of Britain than the south, and is found on heaths, moors and mountains. In Midlothian it is also a hill species, but scarce. All the sites in the table below are in or near SSSIs. In addition to the recent records there are 19th century records from Arthur's Seat, the Pentland Hills,

Dalmahoy and Tynehead (1863). In 1934 the species was reported from Kaimes Hill, which is adjacent to Dalmahoy Hill.

| Location | Grid Ref | Date | Recorder |
|----------------------|----------|------------|--------------------|
| Carlops | NT15 | 04/07/1976 | Bonner, I.R. |
| Arthur's Seat | NT27 | 1989 | Saville, R. |
| The Kipps (west of) | NT2949 | 1993 | Dixon, C. |
| Gladhouse (south of) | NT298505 | 1994 | Dixon, C. |
| Fairliehope | NT157565 | 1995 | Dixon, C. |
| Carlops area | NT1556 | 31/05/2003 | Muscott, J. & ENHS |

Anthemis arvensis L.

Corn Chamomile

National Status: Not Scarce; IUCN: EN.

Midlothian Status: Rare.

Nationally this annual or biennial archaeophyte is locally frequent in southern and central Britain, but is rarer and more casual in the north. It is found on arable, waste and rough ground, especially if calcareous. It also occurs as an alien in grass-seed mixtures. In Midlothian the species has been found in only two sites since 1970, and so is a rarity. It is also casual, but is included in this *Register* because of its conservation status. The 1956 record (below) was from a railway tip, but the other records in the table have been from waste ground. In 1824 the plant was found in lanes around Roslin and Lasswade. Fields also yielded records in the 19th century. In 1934 *Anthemis arvensis* was recorded at Leith, Slateford, Prestonhall, Lasswade and Roslin.

| Location | Grid Ref | Date | Recorder |
|----------------|----------|------------|---------------|
| Leith Docks | NT27 | 20/06/1903 | Fraser, J. |
| Borthwick Bank | NT3660 | 01/08/1956 | Beattie, E.P. |
| Leith Docks | NT27 | 31/07/1958 | Beattie, E.P. |
| Leith Docks | NT27 | 1963 | Beattie, E.P. |
| Sighthill | NT17 | 1963 | Beattie, E.P. |
| Livingston | NT0668 | 1981 | BSS surveyor |
| Russell Road | NT233729 | 1988 | Stewart, O.M. |

Anthemis cotula L.

Stinking Chamomile

National Status: Not Scarce; IUCN: VU.

Midlothian Status: Rare.

Nationally this archaeophyte is found on arable, rough and waste ground on heavy soils. It is said to be commoner than *Anthemis arvensis*, but distributed similarly. In Midlothian *Anthemis cotula* has become rare, having been recorded in only one site since 1970. Most records, including the post-1970 record, have been from waste ground, but in 1934 the plant was recorded in a grassy field at Craigmillar Castle. In 1934 records also came from Roslin, as well as from the historic sites at Leith and Slateford.

| Location | Grid Ref | Date | Recorder |
|----------------|----------|------------|--------------------|
| Colinton, near | | 12/07/1878 | Evans, W.W. |
| Leith Docks | NT27 | 30/06/1885 | Craig Christie, A. |
| Barnton | NT17 | 14/08/1893 | Craig Christie, A. |

| | | | |
|--------------------|--------|------------|---------------|
| Slateford Quarry | NT27 | 05/07/1904 | Evans, W.E. |
| Craigmillar Castle | NT27 | 13/06/1934 | Sinclair, J. |
| Borthwick Bank | NT3660 | 06/06/1959 | Beattie, E.P. |
| Leith Docks | NT27 | 07/1963 | Beattie, E.P. |
| Sighthill | NT17 | 07/1963 | Beattie, E.P. |
| Russell Road | NT2372 | 1988 | Stewart, O.M. |

Anthriscus caucalis M. Bieb.

Bur Chervil

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native annual is not uncommon, and is found on waste and open ground or hedgerows on sandy soils or shingle, especially near the coast. In Midlothian it is scarce and found at various sites in Holyrood Park around Arthur's Seat (SSSI), where it was also found in 1824. Bawsinch is an SWT nature reserve.

| Location | Grid Ref | Date | Recorder |
|------------------------------|----------|------|------------------------------|
| Bawsinch | NT2872 | 1975 | Stewart, O.M. |
| Windy Gowl, Holyrood Park | NT2772 | 1986 | McKean, D.R. |
| Duddingston Golf Course | NT2872 | 1992 | Muscott, J. |
| Bawsinch | NT2872 | 1993 | Muscott, J. |
| Samson's Ribs, Holyrood Park | NT274724 | 1998 | Maxwell, S.A. & McKean, D.R. |

Apium nodiflorum (L.) Lag.

Fool's-water-cress

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native species is common from the south of England up to southern Scotland, but dwindles to local further north. It is found in ditches and marshes and at the edges of lakes and rivers. In Midlothian the species is rare, found at two sites around Duddingston Loch (SSSI), Edinburgh. Bawsinch is an SWT nature reserve on the southern shore of the loch. In 1934 this plant was not only recorded at Duddingston but also at the Braids. In the past, owing to grazing, *Apium nodiflorum* has been confused with *A. repens* (D.R. McKean, personal communication).

| Location | Grid Ref | Date | Recorder |
|--------------------------------|----------|------------|--------------------------|
| Duddingston Loch | NT2872 | 1932 | Taylor, G. |
| Bawsinch | NT2872 | 1969 | McKean, D.R. |
| Duddingston Loch (north shore) | NT281725 | 13/07/2007 | Ronse, A. & McKean, D.R. |
| Duddingston Loch | NT2872 | 2013 | Stewart, N.F. |

Arabis hirsuta (L.) Scop.

Hairy Rock-cress

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

This biennial-to-perennial native species of limestone rocks, walls and bare ground is locally common throughout the British Isles. In Midlothian it has been found in similar

habitats, but is scarce, with only seven sites since 1970. The Habbie's Howe site (SSSI near Loganlea) was known in 1809 and 1824, and the Blackford area in 1894. Further sites in the 19th century were Holyrood Park, Salisbury Crags, Colinton, Dalmahoy, Auchendinny and Tynehead.

| Location | Grid Ref | Date | Recorder |
|--------------------------------------|----------|------------|----------------|
| Habbies Howe, Pentland Hills | NT1861 | 20/07/1954 | Muirhead, C.W. |
| Borthwick Mains (near) | NT3660 | 18/05/1959 | Beattie, E.P. |
| Esperston | NT3357 | 01/06/1963 | Beattie, E.P. |
| Blackford Hill | NT27 | 15/05/1969 | Stewart, O.M. |
| Blackhall | NT2174 | 1983 | McKean, D.R. |
| Niddrie | NT37A | 1987 | McKean, D.R. |
| Levenhall | NT3673 | 22/08/1988 | McKean, D.R. |
| Brick Works (west of Roslin) | NT2663 | 1991 | Longstaff, M. |
| Cranstoun Riddel | NT3865 | 20/08/1994 | McKean, D.R. |
| Blackford Glen | NT2570 | 02/06/2004 | Muscott, J. |
| Blackford Glen | NT2670 | 21/05/2010 | Muscott, J. |
| Blackford Glen | NT2570 | 25/06/2010 | Muscott, J. |
| Union Canal, Wilkie's Basin to Ratho | NT127708 | 23/08/2013 | McKean, D.R. |

Armeria maritima (Mill.) Willd.

Thrift

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Rare.

Nationally this native perennial is common at the coast on saltmarshes, coastal grassland and rocks, and also inland on mountains and, increasingly, beside salted roads. In Midlothian the species is rare, recorded since 1970 from only two coastal sites and one inland. In 1764 and 1824 it was frequent along the coast and there was one record from the summit of Arthur's Seat. In 1934 no Midlothian sites were reported. The shore of the Firth of Forth is a SSSI.

| Location | Grid Ref | Date | Recorder |
|----------------------------|----------|------------|----------------|
| Cramond Island | NT1978 | 06/05/1958 | Beattie, E.P. |
| Musselburgh Links | NT349732 | 07/06/1975 | Stewart, N.F. |
| Saughton Prison (opposite) | NT2174 | 2000 | Argent, G. |
| Cramond Island | NT1978 | 08/06/2011 | Sumner, B.E.H. |

Artemisia absinthium L.

Wormwood

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

Nationally this perennial archaeophyte is frequent in England but scattered in Scotland, and found in rough and waste ground and on waysides. In Midlothian similar habitats have been noted. Only two of the seven post-1970 sites have been outside the city of Edinburgh. In 1934 there were records from Murieston, Swanston, Slateford, Leith, Portobello and Levenhall. Hallyards Castle yielded records in both 1934 and 1941 (see table).

| Location | Grid Ref | Date | Recorder |
|--|----------|------------|--------------|
| Hallyards Castle (west of Edinburgh Airport) | NT1273 | 12/06/1934 | Sinclair, J. |

| | | | |
|--|----------|------------|---------------|
| Hallyards Castle (west of Edinburgh Airport) | NT1273 | 30/07/1941 | Evans, W.E. |
| Leith West Dock | NT27 | 1959 | Beattie, E.P. |
| Trinity Cycleway | NT27 | 18/08/1962 | Beattie, E.P. |
| Goodtrees | NT1565 | 1981 | BSS surveyor |
| Granton Harbour | NT2377 | 1981 | Stewart, O.M. |
| South-east of Newhaven (Water of Leith) | NT2676 | 1982 | Stewart, O.M. |
| Smeaton | NT3569 | 03/10/1982 | Stewart, O.M. |
| Lochend Pond | NT275748 | 26/08/1988 | McKean, D.R. |
| Warriston | NT2575 | 19/02/1988 | McKean, D.R. |
| Chancelot Mill (south-east of) | NT264768 | 10/11/1989 | McKean, D.R. |
| Smeaton | NT3569 | 1990 | Stewart, O.M. |
| Warriston | NT2575 | 1990 | Bell, C.M. |

Asplenium ceterach L.

Rustyback

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native spleenwort (formerly *Ceterach officinarum*) is commoner in the west and south of Britain than the east and north. It is found in base-rich crevices in rocks and walls. Only one site is known for this species in Midlothian, where it has been found in an old lime-mortared kirkyard wall at Heriot Kirk, Halheriot, continuing along the garden wall next door.

| Location | Grid Ref | Date | Recorder |
|-------------|-----------|------------|----------------|
| Halheriot | NT389525 | 1973 | Kerr, A.J. |
| Heriot Kirk | NT390526§ | 22/07/2013 | Sumner, B.E.H. |
| Halheriot | NT389526§ | 22/07/2013 | Sumner, B.E.H. |

Asplenium x murbeckii Dörf. (**A. ruta-muraria x A. septentrionale**)*National Status: Rare; IUCN: VU.**Midlothian Status: Rare.*

Nationally this native hybrid between two native parents occurs in Cumberland, and historically in central Scotland. In Midlothian the three records have all been from the same site in the SSSI at Arthur's Seat, showing long occupation of the rocks there.

| Location | Grid Ref | Date | Recorder |
|------------------------------|-----------|------------|--------------------------|
| Arthur's Seat, Holyrood Park | NT2772 | 1850 | Anon. |
| Arthur's Seat, Holyrood Park | NT277726 | 11/03/1999 | McKean, D.R. & Soden, D. |
| Arthur's Seat, Holyrood Park | NT276725§ | 22/05/2012 | Young, G. et al. |

Asplenium septentrionale (L.) Hoffm.

Forked Spleenwort

*National Status: Scarce; IUCN: NT.**Midlothian Status: Rare.*

Nationally this native spleenwort is very local in acid areas of west and north Britain, inhabiting crevices in rocks. In Midlothian the species inhabits basaltic rocks in two

main areas, Holyrood Park (Arthur's Seat SSSI) and Blackford Hill (see table below). In Holyrood Park in 2012 five discreet colonies were found around Arthur's Seat, near the grid reference shown in the table. Both the current areas were known in 1824, when Woodforde said the species was on the basaltic columns and "frequent" at many other places in King's Park (Holyrood Park). It was also "abundant" on rocks on the south side of Blackford Hill, and present at Braid Hermitage.

| Location | Grid Ref | Date | Recorder |
|------------------------------|-----------|------------|------------------|
| Samson's Ribs, Holyrood Park | NT2772 | 1952 | Beattie, E.P. |
| Blackford Hill | NT2570 | 1972 | Stewart, O.M. |
| Holyrood Park | NT2772 | 1988 | McKean, D.R. |
| Blackford Hill | NT254704§ | 07/10/2010 | McHaffie, H. |
| Arthur's Seat, Holyrood Park | NT276725§ | 22/05/2012 | Young, G. et al. |
| Samson's Ribs, Holyrood Park | NT274724§ | 24/09/2013 | Sumner, B.E.H. |

Astragalus danicus Retz.

Purple Milk-vetch

National Status: Not Scarce; IUCN: EN; UK BAP, 2007; SBL: listed.
Midlothian Status: Scarce.

Nationally this native perennial is local, and has been one of the species studied in the BSBI "Threatened Plants Project". It is found in calcareous grassland, usually in short grass. In Midlothian the recent records of this species have been from short, limey sward around Edinburgh and at the coast, and also from a railway track at Granton. Between 1778 and the present day the chief sites for this species have been in Holyrood Park (Arthur's Seat SSSI) and at the coast (Musselburgh, Leith, Granton and Cramond Island). In 1886 there was a record from Blackford Hill, where it was also found in 1999 and 2013 (below).

| Location | Grid Ref | Date | Recorder |
|---|-----------|------------|--|
| Cramond Island | NT1978 | 01/07/1957 | Beattie, E.P. |
| Easter Craiglockhart Hill | NT2370 | 1970 | Stewart, O.M. |
| Lower Granton Road | NT2477 | 1981 | Hobson, E. |
| Newington | NT2672 | 1981 | Stewart, O.M. |
| Duddingston Golf Course (Loch & Bawsinch) | NT2872 | 1992 | Muscott, Miss J. |
| Powderhouse Corner | NT272726 | 19/06/1998 | Maxwell, S.A. & McKean, D.R. |
| Blackford Hill | NT2570 | 1999 | Muscott, J. |
| Wester Craiglockhart Hill | NT229701 | 2007 | McKean, D.R. |
| Holyrood Park | NT269729§ | 05/05/2011 | Kenicer, G., McHaffie, H.S. & McKean, D.R. |
| Blackford Hill | NT254706 | 11/06/2013 | Sumner, B.E.H. |
| Powderhouse Corner | NT271727§ | 14/06/2013 | Sumner, B.E.H. |

Astragalus glycyphyllos L.

Wild Liquorice

National Status: Not Scarce; IUCN: LC.
Midlothian Status: Rare.

Nationally this native perennial has a scattered distribution, and prefers calcareous grassland and scrub. Since 1970 the species has been recorded at only one site in Midlothian, and this was on a railway track about 2km inland from the coast. In 1778

the plant was found in Colinton Woods. Between 1809 and 1894 there were records from the banks of the Water of Leith between Coltbridge and Saughtonhall, from Woodhall and Currie, and from the coast at Cramond. From 1904 to 1934 only coastal sites were reported (Leith and Cramond).

| Location | Grid Ref | Date | Recorder |
|-----------------------|----------|------------|----------------------------|
| Near Woodhall, Currie | NT16 | 13/06/1846 | Anon. |
| Lochend | NT275748 | 21/04/1988 | McKean, D.R. & Staples, M. |

Atriplex glabriuscula Edmondston

Babington's Orache

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

This native annual straggles along beaches around Britain, but is apparently rare in places, even though not designated as nationally scarce. In Midlothian it has been recorded at various places along the shoreline from the east to almost the west of the Vice-county. The species was also recorded near Granton (Caroline Park) in 1863. The shore of the Firth of Forth is a SSSI.

| Location | Grid Ref | Date | Recorder |
|-------------------------------|----------|------------|------------------|
| Leith Docks | NT27 | 1959 | Beattie, E.P. |
| Levenhall | NT37 | 1963 | Beattie, E.P. |
| Leith, Edinburgh | NT280766 | 06/11/1977 | Taschereau, P.M. |
| Granton Harbour | NT2377 | 1981 | Stewart, O.M. |
| Granton (west of) | NT2177 | 1982 | McNab, W.R. |
| Fisherrow | NT3473 | 1982 | Jackson, E.H. |
| Fisherrow Links & Goose Green | NT3473 | 12/09/1987 | Jackson, E.H. |
| Musselburgh | NT3573 | 22/08/1988 | McKean, D.R. |
| Fisherrow Harbour | NT3373 | 1994 | Learmonth, R. |

Atriplex laciniata L.

Frosted Orache

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Rare.

Nationally this native annual grows on most coasts of Britain, low down on sandy beaches, often along the strandline. In Midlothian the recent records are from the strandline at the eastern and western ends of the Vice-county. There were previous records from Fisherrow in 1809 and 1824, and from Musselburgh in 1863. In 1824 the species also occurred at Newhaven and on the beach at Caroline Park (near Granton). Seafield was added as a site for this species in 1863. The latter three sites were more central along the coastline. The shore of the Firth of Forth is a SSSI.

| Location | Grid Ref | Date | Recorder |
|--------------------------------------|----------|------------|---------------|
| Musselburgh | NT37 | 28/07/1957 | Jack, J.R. |
| Cramond | NT1977 | 05/08/1962 | Tait, W. |
| Fisherrow | NT3473 | 1982 | Jackson, E.H. |
| Fisherrow & Goose Green, Musselburgh | NT37 | 26/08/1988 | Jackson, E.H. |
| Fisherrow Harbour | NT3373 | 1994 | Learmonth, R. |

Atriplex littoralis L.

Grass-leaved Orache

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native annual maritime species is found around most coasts, but with an eastern bias. It also occurs as a casual along salted roadsides. In Midlothian, so far, this appears to be a coastal species and has not yet been spotted beside salted roads. In 1824 the species was found at the eastern end of Caroline Park (near Granton). The shore of the Firth of Forth is a SSSI.

| Location | Grid Ref | Date | Recorder |
|-------------------------------|----------|------------|------------------------------------|
| Cramond | NT1877 | 1960 | Beattie, E.P. |
| Seafield | NT2875 | 02/09/1967 | Beattie, E.P. |
| Leith, Edinburgh | NT280766 | 06/11/1977 | Stewart, O.M.; Taschereau, P.M. |
| Granton Harbour | NT2377 | 1981 | Stewart, O.M. |
| Granton (west of) | NT2177 | 1982 | McNab, W.R. |
| Fisherrow | NT3473 | 1982 | Jackson, E.H. |
| Cramond Island | NT1978 | 1985 | McKean, D.R. |
| Fisherrow Links & Goose Green | NT3473 | 26/08/1988 | Jackson, E.H. |
| Granton | NT236776 | 08/06/1989 | McKean, D.R. |
| Fisherrow Harbour | NT3373 | 1994 | Learmonth, R. |
| Seafield | NT2876 | 1996 | Dixon, C. |
| Levenhall Links | NT3473 | 29/07/2011 | Sumner, B.E.H. |
| Levenhall Links | NT3573 | 29/07/2011 | Sumner, B.E.H. |

Atriplex prostrata Boucher ex DC.

Spear-leaved Orache

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native annual is found on waste, cultivated and saline habitats inland and at the coast. In Midlothian the species has been found mostly on the shore at the coast, both on the mainland and on an offshore island (Inchmickery). However, it has also been recorded inland on waste ground, and a long way inland at a roadside south of Fala. The shore of the Firth of Forth is a SSSI.

| Location | Grid Ref | Date | Recorder |
|-----------------|----------|------------|-------------------|
| Cramond | NT1877 | 1960 | Beattie, E.P. |
| Inchmickery | NT2080 | 1967 | Beattie, E.P. |
| Seafield | NT27 | 1967 | Beattie, E.P. |
| Millerhill | NT3269 | 1981 | BSS surveyor |
| Granton Harbour | NT2377 | 1981 | Stewart, O.M. |
| Fisherrow | NT3473 | 1982 | Jackson, E.H. |
| Inchmickery | NT2080 | 08/1982 | Brandt, N. |
| Niddrie | NT37A | 1987 | McKean, D.R. |
| Sheriffhall | NT3267 | 1992 | Pankhurst, R.J. |
| Clermiston | NT1974 | 1992 | Pankhurst, R.J. |
| Fala, south of | NT439607 | 18/10/1997 | Braithwaite, M.E. |
| Millerhill | NT3269 | 12/08/1999 | Maxwell, S.A. |

Baldellia ranunculoides (L.) Parl.

Lesser Water-plantain

*National Status: Not Scarce; IUCN: NT.**Midlothian Status: Rare.*

This native species is scattered in Britain, and is found in or beside still or running, shallow water. In Midlothian there has been only one recent site for this species, in a loch and lochside SSSI. Historically it was also found at Myreside in 1764 (Hope, 1765) and Hunter's Bog in 1824, both marshy sites.

| Location | Grid Ref | Date | Recorder |
|------------------|----------|------|---------------|
| Duddingston Loch | NT2872 | 1960 | Roger, J.G. |
| Duddingston Loch | NT2872 | 1975 | Stewart, O.M. |

Ballota nigra L.

Black Horehound

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

This plant is a perennial archaeophyte, common in England, but more local in Scotland. It grows in rough ground, on waysides and in hedgerows. In Midlothian recent records of the species have been from rough grassland, waste ground and roadsides, in various city and country sites. In 1768 the species was found in Leith Walk and on the west side of the Castle bank, and in 1824 on the north side of Duddingston Loch. In 1934 Arthur's Seat, Blackford Hill, Newhailes, Levenhall and Leith were reported as sites for this species. The Holyrood Park site is within Arthur's Seat SSSI.

| Location | Grid Ref | Date | Recorder |
|--------------------------------------|----------|------------|--------------------|
| Borthwick Bank | NT36 | 1957 | Beattie, E.P. |
| Calton Hill | NT2674 | 01/08/1960 | Beattie, E.P. |
| Holyrood Park | NT27 | 1965 | Beattie, E.P. |
| Fisherrow | NT3373 | 1967 | Beattie, E.P. |
| Craigmillar Castle | NT2870 | 1975 | Stewart, O.M. |
| Fisherrow | NT3473 | 1982 | Jackson, E.H. |
| Bell's Mains | NT3460 | 1982 | Stewart, O.M. |
| Fushiebridge (near farm steading) | NT349602 | 26/06/1982 | Stewart, O.M. |
| Holyrood Park | NT277727 | 1986 | McKean, D.R. |
| Fisherrow & Goose Green, Musselburgh | NT37 | 26/08/1988 | Jackson, E.H. |
| Levenhall | NT3673 | 22/08/1988 | McKean, D.R. |
| Craigmillar Castle | NT2870 | 31/10/1997 | Watson, K. |
| Calton Road | NT2674 | 1998 | Maxwell, S.A. |
| Mavisbank, near Polton | NT2864 | 02/06/2004 | Muscott, J. & ENHS |
| Edinburgh Castle | NT2573 | 05/07/2010 | Muscott, J. |
| Little France | NT2870 | 15/06/2011 | Muscott, J. |

Berula erecta (Huds.) Coville

Lesser Water-parsnip

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

This native perennial is common in England but rare in Scotland, growing in and beside still and running water. In Midlothian the species has been recorded in a

marsh near a loch (Duddingston Loch SSSI), and beside a pond and a burn, in two widely separated districts. It was also recorded at Duddingston before 1934.

| Location | Grid Ref | Date | Recorder |
|----------------------|----------|------------|---------------|
| Dalmahoy | NT1467 | 09/09/1956 | Beattie, E.P. |
| Dalmahoy Golf Course | NT1467 | 09/09/1956 | Beattie, E.P. |
| Duddingston Loch | NT2872 | 1960 | Roger, J.G. |
| Duddingston Loch | NT2872 | 1975 | Stewart, O.M. |
| Dalmahoy Golf Course | NT1468 | 1982 | Campbell, C. |

Beta vulgaris L. **subsp. maritima** (L.) Arcang.

Sea Beet

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Rare.

This native maritime perennial occurs around the coasts of Britain but is rarer from central Scotland northwards. It grows on waste ground as well as on the shore. In Midlothian the one post-1970 record (see table below) was from a seashore site between Granton and Silverknowes. Coastal defences have recently been improved, and a search along the coast in 2013 failed to re-find the plant at that location. However, more extensive searches are planned. Historically the records were from the Cramond area (1824, 1845, 1863 & 1934). The shore of the Firth of Forth is a SSSI.

| Location | Grid Ref | Date | Recorder |
|------------------|----------|------|-------------|
| Granton, west of | NT2177 | 1982 | McNab, W.R. |

Betonica officinalis L.

Betony

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

This native perennial (formerly *Stachys officinalis*), which is common in England but local in Scotland, grows on light soils in grassland and hedgebanks, and on heaths. In Midlothian this species has been found recently in grassy or wooded habitats and on verges, at sites scattered through the Vice-county. From 1809 to 1934 the species was also recorded at Colinton and Auchendinny. Nowadays the species is included in some wildflower seed mixtures, which may confuse the natural distribution.

| Location | Grid Ref | Date | Recorder |
|--------------------------------|-----------|------------|------------------------------|
| Trinity | NT2476 | 1981 | Hobson, P.M. |
| Almondell | NT0969 | 1982 | Stewart, N.F. |
| Hope (1 mile south of, on A68) | NT4162 | 2001 | Moffat, B. |
| Blackford Glen | NT2670 | 02/06/2004 | Muscott, J. |
| Ratho, west of | NT128709§ | 25/07/12 | Sumner, B.E.H. & Merrick, D. |

Bidens cernua L.

Nodding Bur-marigold

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

This native wetland species, which is an annual or a short-lived perennial, is locally common in the south of Britain but scattered in the north. It grows in marshes and ditches, and beside still and running water. Recently in Midlothian this plant has only been found at points around Duddingston Loch (SSSI), of which Bawsinch (on the southern shore) is a nature reserve run by the SWT. In 1768 the species grew generally in stagnant water around Edinburgh and in 1824 it was recorded at Lochend.

| Location | Grid Ref | Date | Recorder |
|---|----------|------------|---------------|
| Duddingston Loch | NT2872 | 1957 | Beattie, E.P. |
| Duddingston Golf Course (Loch and Bawsinch) | NT2872 | 1992 | Muscott, J. |
| Duddingston Loch | NT279724 | 24/07/2003 | Maxwell, S.A. |

Botrychium lunaria (L.) Sw.

Moonwort

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native fern is mostly an upland species, found in dry grassland throughout Britain but especially in the north and west. In Midlothian the recent records have been from short, upland grassland, heaths and woodland, at sites shown in the table below. From 1824 to 1863 the plant was recorded at Caroline Park (near Granton) and Roman Camp (near Dalkeith). In 1824 additional sites were Craiglockhart Hill, Dalhousie Woods and the Pentland Hills, and in 1863 Currie and Prestonhall were also reported.

| Location | Grid Ref | Date | Recorder |
|----------------------------------|----------|------------|---------------|
| Bonaly Reservoir | NT2666 | 30/05/1966 | Beattie, E.P. |
| Middleton | NT35 | 10/06/1970 | Crow, M. |
| Cobbinshaw | NT0158 | 12/07/1978 | Beattie, E.P. |
| Hermant House | NT0263 | 1982 | Stewart, N.F. |
| Hermant Quarry & adjacent fields | NT028635 | 05/07/1982 | Stewart, N.F. |
| Bonaly Reservoir | NT2166 | 1985 | McKean, D.R. |
| Gladsmuir | NS919572 | 1992 | Muscott, J. |
| Kitchen Rig | NS9157 | 1992 | Muscott, J. |
| North Esk Reservoir | NT1557 | 1996 | Crowther, N. |

Bromopsis erecta (Huds.) Fourr.

Upright Brome

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

This perennial species (formerly *Bromus erectus*) is native and common in much of Britain but is introduced in northern England and Scotland. It grows in dry, especially calcareous, grassland. In Midlothian the species has been found on grassy banks. The recent locations are widely scattered. In 1809 and 1863 the species was recorded in Holyrood Park.

| Location | Grid Ref | Date | Recorder |
|---------------------------------|----------|------------|------------------------|
| South of West Harwood | NT0159 | 1981 | BSS surveyor |
| Granton | NT238769 | 03/06/1982 | Stewart, O.M. |
| East of Rosewell (Shiel Bridge) | NT3062 | 1995 | Miller, I. & Broom, A. |

Bromus secalinus L.

Rye Brome

National Status: Scarce; IUCN: VU; SBL: rare & >25% decline.

Midlothian Status: Rare.

This annual archaeophyte, a weed of cereal fields, marginal and waste ground, was decreasing nationally, but has recently been increasing as a contaminant of grass seed. In Midlothian there has been only one recent record, from rough grass in amenity grassland. In 1934 the species was recorded at Leith, Musselburgh, Slateford and Roslin.

| Location | Grid Ref | Date | Recorder |
|---------------------|----------|------|-------------|
| Balerno High School | NT1666 | 1984 | Smith, P.M. |

Calamagrostis canescens (F.H. Wigg.) Roth

Purple Small-reed

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Rare.

Nationally this native perennial is scattered in fens, marshes and open wet woods from the south of England north to Midlothian. In Midlothian this grass is at the northern edge of its range and had not been recorded since 1870, when W.W. Evans found it in the woods at Penicuik. The species was considered extinct in Midlothian, but then, in 1998, the site was re-discovered and a small colony was growing there, in a patch of swampy ground in riverside woods.

| Location | Grid Ref | Date | Recorder |
|-----------------|-----------|------------|----------------|
| Penicuik woods | NT25 | 1870 | Evans, W.W. |
| Penicuik Estate | NT223593§ | 1998 | Watson, K. |
| Penicuik Estate | NT223594§ | 24/08/2009 | McHaffie, H.S. |

Calamagrostis epigejos (L.) Roth

Wood Small-reed

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Rare.

This native perennial is scattered through much of Britain in damp woods and wood-edges, ditches, fens and dune-slacks. In Midlothian the species was thought to be extinct, last recorded in a marsh at Myreside in 1765. However, in 2013 the species has been recorded in two new sites, in damp waste ground near the Union Canal, and in wet ground beside young woodland in a partly re-claimed industrial area. In the latter site the colony (about 10m x 4m) looks well established and might have been there for some time.

| Location | Grid Ref | Date | Recorder |
|----------------------------------|-----------|------------|--------------|
| Newbridge brownfield site | NT116724§ | 22/08/2013 | McKean, D.R. |
| Union Canal, east of Lift Bridge | NT247729 | 18/09/2013 | Muscott, J. |

Calamagrostis x gracilescens (Blytt) Blytt (**C. canescens x C. stricta**)

National Status: Rare; IUCN: VU.

Midlothian Status: Rare.

Nationally this native hybrid occurs by a canal in south-east Yorkshire where *C. stricta* is also present. In Midlothian there has been only one record of this hybrid grass, from a marsh between a road and a burn.

| Location | Grid Ref | Date | Recorder |
|----------|----------|------------|-------------|
| Cockmuir | NT263551 | 04/07/2007 | Muscott, J. |

Callitriche hermaphroditica L.

Autumnal Water-starwort

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

Nationally this annual native is scattered from Lincolnshire northwards, submerged in lakes and rivers. In Midlothian the species is scattered around the Vice-county, in the canal, lochs, reservoirs and a burn. The three loch sites (below) are SSSIs. The species was recorded at West Calder in 1863 and Duddingston Loch in 1934.

| Location | Grid Ref | Date | Recorder |
|----------------------------------|----------|------------|---------------|
| Duddingston Loch | NT2872 | 1975 | Stewart, O.M. |
| Harburn House Woods | NT044609 | 23/07/1982 | Stewart, N.F. |
| Dunsapie Loch | NT2873 | 08/11/1988 | McKean, D.R. |
| St. Margaret's Loch | NT2773 | 08/11/1988 | McKean, D.R. |
| Quarrel Burn Reservoir | NT1858 | 22/09/1993 | McKean, D.R. |
| Harburn | NT0460 | 1994 | McKean, D.R. |
| Union Canal, Ratho (west of) | NT1370 | 22/08/1995 | McKean, D.R. |
| Glencorse Reservoir (west end) | NT211635 | 14/09/1996 | McKean, D.R. |
| Threipmuir Reservoir (upper end) | NT1663 | 2013 | Stewart, N.F. |
| Duddingston Loch | NT2872 | 2013 | Stewart, N.F. |

Callitriche platycarpa Kütz.

Various-leaved Water-starwort

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Rare.

Nationally this native species is found in still and flowing water, and is thought to be widespread throughout Britain, though there may be some confusion with *C. stagnalis*. In Midlothian the species has been found at only one site since 1970, Duddingston Loch, where it was also recorded historically. Duddingston Loch is a SSSI. In the table below, King's Park is the present-day Holyrood Park (now a SSSI). In 1863 the species was also recorded at Tynehead and Penicuik.

| Location | Grid Ref | Date | Recorder |
|---------------------------|----------|------------|---------------|
| Edinburgh, King's Park | NT27 | 02/05/1834 | Anon. |
| Duddingston | NT27 | 01/09/1871 | Anon. |
| Glencorse Reservoir, near | NT26 | 09/1878 | Evans, W.W. |
| Duddingston Loch | NT27 | 04/07/1902 | Evans, W.E. |
| Duddingston Loch | NT2872 | 1975 | Stewart, O.M. |

Carex acuta L.

Slender Tufted-sedge

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native sedge is locally frequent at watersides and in marshes from the south of Britain to central Scotland. In Midlothian the species has been found in only one kilometre square recently, beside the Breich Water. In 1824 it was recorded at Duddingston Loch and in Roslin Woods. In 1934 the species was recorded at Arniston and Ravelrig.

| Location | Grid Ref | Date | Recorder |
|---------------------|----------|------------|--|
| South of Rashiehill | NS9560 | 1985 | Rutherford, A., Stirling, A.McG., McKean, D.R. |
| Breich | NS9560 | 17/06/1994 | McKean, D.R. |

Carex arenaria L.

Sand Sedge

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native sedge is found around the coasts of Britain on bare or grassy sand-dunes, and locally in sandy sites inland. In Midlothian the species is purely maritime and nowadays found at the extreme east and west ends of the Vice-county. In 1824 it extended along more of the coastline, being found not only at Fisherrow and Musselburgh Links, but also at Figgate Whins and between Granton and Cramond. Greville said the species was "plentiful" between Caroline Park and Granton. In 1863 it was at all these sites except Figgate Whins. The shore of the Firth of Forth is a SSSI.

| Location | Grid Ref | Date | Recorder |
|-------------------|----------|------------|----------------|
| Cramond Island | NT1978 | 1957 | Beattie, E.P. |
| Fisherrow | NT3473 | 1982 | Jackson, E.H. |
| Musselburgh | NT3573 | 22/08/1988 | McKean, D.R. |
| Musselburgh | NT37 | 1990 | Jackson, E.H. |
| Cramond Island | NT1978 | 1994 | McKean, D.R. |
| Fisherrow Harbour | NT3373 | 1994 | Learmonth, R. |
| Fisherrow | NT3473 | 07/08/2013 | Sumner, B.E.H. |

Carex x boeninghausiana Weihe (**C. paniculata** x **C. remota**)*National Status: Not designated; IUCN: Not designated.**Midlothian Status: Rare.*

Nationally this native hybrid sedge is scattered over the British Isles. In Midlothian the only post-1970 record of this hybrid has been from a bog below Crichton Castle, where it has long been known. Crichton Glen is a SSSI. Historically the sedge was also recorded by J.H. Balfour at Borthwick Castle, and by C.J.F. Bunbury near Edinburgh, but the dates were not given.

| Location | Grid Ref | Date | Recorder |
|-----------------|----------|------------|---------------|
| Crichton Castle | NT36 | 07/1830 | Balfour, J.H. |
| Crichton Castle | NT3761 | 01/08/1977 | Stewart, O.M. |

Carex diandra Schrank

Lesser Tussock-sedge

*National Status: Not Scarce; IUCN: NT.**Midlothian Status: Scarce.*

Nationally this native sedge is found in acid wetlands, ditches and scrub, scattered through the British Isles but rarer in England. In Midlothian it has been found in a few marshes. Before 1863 the species was also found at Ravelrig.

| Location | Grid Ref | Date | Recorder |
|---------------------|----------|------------|--------------------|
| Longmuir Rig | NT4750 | 16/07/1988 | McKean, D.R. |
| Crosswood Reservoir | NT063575 | 1996 | Longman, G. |
| Rosebery Reservoir | NT308557 | 28/07/1997 | Dixon, C. |
| Longmuir Moss | NT4651 | 15/07/2000 | Muscott, J. et al. |

Carex distans L.

Distant Sedge

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

This native sedge is found around the coasts of Britain in brackish and fresh-water marshes and among wet rocks. In southern Britain it is also frequent inland. In Midlothian the species has been found at only one site recently, but was said by Greville to be "common" in the Pentlands in 1824. In 1934 this sedge was recorded in Holyrood Park. The shore of the Firth of Forth is a SSSI.

| Location | Grid Ref | Date | Recorder |
|----------------|----------|------|-----------|
| Cramond Island | NT1978 | 1995 | Dixon, C. |

Carex divulsa Stokes **subsp. leersii** (F.W. Schulz) W. Koch

Many-leaved Sedge

*National Status: Not Scarce; IUCN: LC; SBL: rare.**Midlothian Status: Rare.*

This native sedge is locally distributed in Britain, as far north as Midlothian. It grows in rough grassy places, woodland edges and hedgerows, preferring lime. In Midlothian, the northern edge of its range, only one site is known for this subspecies, but the species, *Carex divulsa*, was recorded at Black Hill in the Pentland Hills in 1934.

| Location | Grid Ref | Date | Recorder |
|-----------------|----------|------------|--------------------------|
| Newbattle Woods | NT330662 | 25/07/1977 | Jackson, H. & Winham, J. |

Carex x fulva Gooden. (**C. hostiana x C. lepidocarpa**)

National Status: Not designated; IUCN: Not designated.

Midlothian Status: Rare.

Nationally this native hybrid sedge is frequent through much of the British Isles, where both parents occur. In Midlothian the the only post-1970 record of this hybrid has been from a marsh, near a reservoir which is a SSSI.

| Location | Grid Ref | Date | Recorder |
|---------------------|----------|------------|-----------|
| Ravelrig Bog | NT1566 | 1835 | Knapp, J. |
| Gladhouse Reservoir | NT296502 | 16/08/1977 | Dixon, C. |

Carex laevigata Sm.

Smooth-stalked Sedge

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

This native sedge is scattered through Britain and found in damp shade on heavy soils. In Midlothian it has been found in several wooded glens, three of which are SSSIs (Roslin, Crichton, and Bilston Burn). In 1934 the species also grew at Prestonhall, Arniston, Mavisbank, Caerketton and the Pentland Hills.

| Location | Grid Ref | Date | Recorder |
|---------------------|----------|------------|---------------|
| Roslin Woods | NT26 | 1983 | Stewart, O.M. |
| Borthwick | NT35 | 1984 | Anon. |
| Roslin Chapel | NT276629 | 27/05/1994 | McKean, D.R. |
| Crichton Glen | NT3860 | 1996 | Muscott, J. |
| Dryden Mains/Polton | NT283643 | 1997 | Dixon, C. |
| Dryden Mains/Polton | NT284642 | 1997 | Dixon, C. |
| Dryden Mains/Polton | NT284644 | 1997 | Dixon, C. |
| Bilston Burn | NT26 | 1998 | Watson, K. |
| Penicuik Estate | NT2158 | 1998 | Watson, K. |

Carex muricata L. **subsp. pairae** (F.W. Schulz) Čelak.

Prickly Sedge

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

Nationally this native sedge (formerly *C. muricata* subsp. *lamprocarpa*) is frequent in dry, open, acid grassland from southern Britain north to Easternness. In Midlothian it grows in several grassy sites around Arthur's Seat SSSI and on other hills in Edinburgh, but is said to have been formerly more widespread (Smith *et al.*, 2002).

| Location | Grid Ref | Date | Recorder |
|---|-----------|------|---------------|
| Arthur's Seat | NT2772 | 1959 | Milne, J. |
| Hermitage | NT2570 | 1988 | Elston, D. |
| Blackford Hill | NT2570 | 1988 | Elston, D. |
| Windy Gowl, Holyrood Park | NT2772 | 1992 | Muscott, J. |
| Duddingston Golf Course (Loch and Bawsinch) | NT2872 | 1992 | Muscott, J. |
| Bawsinch | NT280725 | 1993 | Muscott, J. |
| Blackford Hill Observatory | NT2570 | 1994 | Maxwell, S.A. |
| Arthur's Seat | NT271728§ | 1994 | Maxwell, S.A. |

| | | | |
|--------------------------------|-----------|------------|---------------|
| Arthur's Seat | NT270728§ | 1995 | Maxwell, S.A. |
| Braid Hills | NT257703 | 1995 | Maxwell, S.A. |
| Blackford Hill Observatory | NT2570 | 1997 | McKean, D.R. |
| Salisbury Crags, Holyrood Park | NT267731 | 22/07/2002 | Muscott, J. |

Carex otrubae Podp.

False Fox-sedge

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native sedge is frequent through much of Britain but rare in the far north. It grows in wet, heavy soils but is often coastal in Scotland. In Midlothian this plant has been recorded at nine sites since 1970, of which only one is coastal (on a tidal island within the Firth of Forth SSSI), but in 1878 it grew on the coast at Musselburgh and at the Figgate Burn, Portobello.

| Location | Grid Ref | Date | Recorder |
|-------------------------------|-----------|------------|----------------|
| Cramond Island | NT1978 | 1957 | Beattie, E.P. |
| East of Crookston South Mains | NT4352 | 1980 | MacInnes, D. |
| East of Torsonce | NT4743 | 1984 | Nield, P. |
| Heriot House | NT4054 | 1989 | Learmonth, R. |
| Shoestanes | NT3954 | 1990 | Learmonth, R. |
| Shoestanes | NT3954 | 27/07/1991 | Learmonth, R. |
| Stow | NT44 | 1992 | Learmonth, R. |
| Cramond Island | NT1978 | 1994 | McKean, D.R. |
| Mavisbank | NT296656 | 1994 | Dixon, C. |
| Cockmuir | NT2655 | 1997 | Crowther, N. |
| Cockmuir (north of) | NT265552§ | 25/06/2012 | Sumner, B.E.H. |
| Newbridge brownfield site | NT116723§ | 22/08/2013 | McKean, D.R. |
| Newbridge brownfield site | NT116724§ | 22/08/2013 | McKean, D.R. |

Carex riparia Curtis

Greater Pond-sedge

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native sedge is common in southern Britain but more scattered further north. It grows in marshy ground and beside still and running water. In Midlothian the species is scattered in the north-eastern quarter of the Vice-county, but in 1824 it was a common species. In 1934 the plant was recorded at Arniston and Duddingston. Duddingston Loch is a SSSI, and Bawsinch a nature reserve (SWT).

| Location | Grid Ref | Date | Recorder |
|--------------------|----------|------------|----------------------|
| Duddingston | NT27 | 1956 | Beattie, E.P. |
| Currie Mains | NT3759 | 1981 | BSS surveyor |
| Carberry Tower | NT3669 | 27/04/1988 | Steven, G. |
| Bawsinch | NT2872 | 1993 | Muscott, J. |
| Vogie Country Park | NT3862 | 22/04/2006 | Crowther, N., et al. |
| Duddingston Loch | NT2872 | 2013 | Stewart, N.F. |

Catabrosa aquatica (L.) P. Beauv.

Whorl-grass

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally, this native perennial is scattered through lowland Britain, growing in wet meadows, marshy ground, and beside water. In Midlothian the species was recorded in two areas of Edinburgh until 1957, but there have been no more recent records. However, this plant is easily overlooked and may still be extant (D.R. McKean, personal communication). Duddingston Loch is a SSSI.

| Location | Grid Ref | Date | Recorder |
|------------------|----------|------|--------------|
| Craigentenny | NT27 | 1934 | Martin, I.H. |
| Duddingston | NT27 | 1934 | Martin, I.H. |
| Duddingston Loch | NT2872 | 1957 | McNab, W.R. |

Catapodium rigidum (L.) C.E. Hubb.

Fern-grass

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

This small, stiff, grass is a native annual and is locally common from the south of Britain northwards to central Scotland. It grows on dry, bare and stony or limey ground, sand and walls, inland or by the sea. In Midlothian the few sites are scattered, and range from an inland lime heap to rocks, walls and coastal turf. Salisbury Crags is in the Arthur's Seat SSSI. At the beginning of the 20th century the plant also grew at Blackford Hill and Levenhall Quarry tip.

| Location | Grid Ref | Date | Recorder |
|---|-----------|------------|--|
| Musselburgh Race Course (near car park) | NT347732 | 08/07/1975 | Stewart, N.F. |
| Salisbury Crags, Holyrood Park | NT2673 | 1990 | Stewart, O.M. |
| Eyre Place/Brandon Street | NT2574 | 1995 | Anderson, E.M. |
| Esperston, north-east of | NT341575 | 08/07/2012 | Maxwell, S.A., McKean, D.R. & Sumner, B.E.H. |
| Salisbury Crags, Holyrood Park | NT269730§ | 14/06/2013 | Sumner, B.E.H. |

Centaurea cyanus L.

Cornflower

*National Status: Not Scarce; IUCN: LC; UK BAP, 2007; SBL: rare.**Midlothian Status: Not Scarce.*

Traditionally this annual archaeophyte with the well-known blue flower became naturalised in cornfields throughout Britain. Today it is mostly a garden escape, bird-seed alien, or ingredient of wildflower seed mixtures, and it is difficult to distinguish the natural population from the escapes and plantings. It is casual and more scattered than it was traditionally. In Midlothian the local trend has mirrored the national trend. The sites since 1970 have not been scarce, but may be more the result of garden escapes and wildflower plantings than natural self-sown populations. The species has been found on rubbish tips and roadsides, as well as in arable fields. It is included in this *Register* because of its conservation status, but only post-1970 records are shown below. The record from Roslin Glen Country Park is

definitely planted. In 1768 the species grew all around Edinburgh.

| Location | Grid Ref | Date | Recorder |
|-------------------------------------|------------|------------|----------------------------|
| North Middleton | NT3559 | 20/08/1985 | Biagi, J. |
| Sheriffhall | NT319679 | 23/08/1985 | Biagi, J. |
| Gogar Park | NT1772 | 1989 | McKean, D.R. |
| Hermiston | NT185702 | 1992 | Maxwell, S.A. |
| Sighthill | NT185704 | 01/07/1995 | Dixon, C. |
| Pilton | NT2276 | 1997 | McKean, D.R. & Smith, F. |
| Wester Hailes | NT2070 | 13/10/2002 | Mill, R.R. |
| Niddrie | NT312715 | 21/07/2003 | Maxwell, S. |
| Ingliston | NT145725 | 06/06/2004 | McKean, D.R. |
| Whitburgh Mains, Pathhead | NT407632 | 23/05/2006 | Gaskill, L. |
| Water of Leith, Powderhall | NT25397548 | 28/08/2011 | Sumner, B.E.H. |
| Roslin Glen Country Park - Car Park | NT272628 | 27/09/2011 | Muscott, J. & Clarkson, M. |
| Little France | NT293702 | 31/05/2012 | Milne, R.I. |

Cerastium x pseudoalpinum Murr (**C. arvense** x **C. fontanum**)

National Status: Not designated; IUCN: Not designated.

Midlothian Status: Rare.

Nationally, this native hybrid has been recorded with the parents in rough grassland in south Lincolnshire and County Durham. In Midlothian there has been only one record, from a disused railway embankment.

| Location | Grid Ref | Date | Recorder |
|----------------|----------|------------|---------------|
| Borthwick Bank | NT370602 | 16/08/1997 | Stewart, O.M. |

Cerastium semidecandrum L.

Little Mouse-ear

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

Nationally, this native annual is frequent except in north-west Scotland. It grows in dry, open, sandy or calcareous ground. In Midlothian the plant is rare inland, but common locally at the coastal sites. Arthur's Seat is a SSSI. Historically the species was recorded at Holyrood Park and Leith Links in 1792, and on walls around Holyrood Park in 1809 and 1824. In 1824 Arthur's Seat was also listed, and in 1863 Salisbury Crags were added. Further sites in 1863 were Granton and Roslin.

| Location | Grid Ref | Date | Recorder |
|---------------------|----------|------------|---------------|
| Arthur's Seat | NT27 | 1955 | Beattie, E.P. |
| Balerno | NT16 | 1955 | Beattie, E.P. |
| Ninemileburn | NT15 | 1955 | Beattie, E.P. |
| Cramond Island | NT1978 | 1955 | Beattie, E.P. |
| Duddingston | NT27 | 1956 | Beattie, E.P. |
| Inchmickery | NT2080 | 1967 | Beattie, E.P. |
| Musselburgh Lagoons | NT3473 | 06/05/1974 | Stewart, O.M. |
| Granton Harbour | NT2377 | 1981 | Stewart, O.M. |
| Fisherrow | NT3473 | 1982 | Jackson, E.H. |
| Selm Muir Wood | NT0864 | 11/07/1992 | Robertson, S. |

| | | | |
|-------------------|--------|------|---------------|
| Fisherrow Harbour | NT3373 | 1994 | Learmonth, R. |
| Cramond Island | NT1978 | 1996 | McKean, D.R. |

Ceratophyllum demersum L.

Rigid Hornwort

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

This native species is a submerged aquatic perennial of still and slow waters, and is scattered in England, but rare in Scotland. In Midlothian the sites have been few. Duddingston Loch and Dunsapie Loch are both within SSSIs. In 1764 the species was recorded at Myreside. From 1809 to 1824 the species was recorded in Canonmills Loch and said by Greville to be "abundant" there. Vouchers were collected from Duddingston Loch at intervals from 1825 to 1884 and the species is still there. Since 1970, three other sites have emerged, but the species is still scarce.

| Location | Grid Ref | Date | Recorder |
|---------------------|----------|------------|---------------|
| Union Canal | NT2472 | 1977 | Murphy, K.J. |
| Dunsapie Loch | NT281732 | 08/11/1988 | McKean, D.R. |
| Cammo Pond, Cramond | NT1774 | 2005 | SWT Survey |
| Duddingston Loch | NT2872 | 2013 | Stewart, N.F. |

Chelidonium majus L.

Greater Celandine

*National Status: Not Scarce; IUCN: LC; SBL: >25% decline.**Midlothian Status: Scarce.*

This perennial archaeophyte is found in marginal habitats throughout Britain, often near dwellings. In Scotland the plant has shown significant decline, recognised by the SBL. In Midlothian the post-1970 sites have been scattered in or not far outside Edinburgh and, where recorded, the habitats have been railway embankments or waysides. The species was recorded at Ravelston in 1768, in the ruins of Corstorphine Castle in 1824, and at Dalhousie and by the Water of Leith in 1863 and 1894. None of these sites is on the post-1970 list, though the Colinton record of 1961 might be by the Water of Leith.

| Location | Grid Ref | Date | Recorder |
|---|----------|------------|---------------------------------|
| Colinton (1st Mill above) | NT26 | 27/07/1961 | Beattie, E.P. & McClintock, D. |
| Hardengreen | NT3265 | 1981 | BSS surveyor |
| Duddingston Golf Course (Loch and Bawsinch) | NT2872 | 1992 | Muscott, J. |
| Swanston | NT2467 | 1993 | Ellis, N. |
| Wardie | NT245763 | 11/04/1993 | McKean, D.R. |
| Granton (Caroline Park) | NT2277 | 23/06/1999 | Pilling, E., Muscott, J. et al. |
| Wardie | NT2476 | 1999 | McKean, D.R. |
| Blackford Glen | NT261702 | 13/05/2008 | McKean, D.R. & McHaffie, H. |

Chenopodium bonus-henricus L.

Good-King-Henry

*National Status: Not Scarce; IUCN: VU; SBL: >25% decline.**Midlothian Status: Almost Scarce.*

This perennial archaeophyte is scattered and locally common in much of Britain, but rare in northern and western Scotland. In Scotland the plant has shown significant decline, recognised by the SBL. It grows in nitrogen-rich places, in pastures and by farm buildings and roadsides. In Midlothian since 1970 this species has been recorded in twelve sites, which is just above scarcity, but it has been included in this *Register* because of its conservation designation. Only post-1970 sites are shown in the table and they have been scattered through the Vice-county. The habitats have been roadside verges, field edges and grassland. The species has been recorded previously at Monktonhall (1934) and several times previously at Craigmillar (from 1863). Other 19th and early 20th century sites were Merchiston Castle, Holyrood Park, Currie, Colinton, Slateford, Leith, Musselburgh, Braid Hills, Swanston, Loanhead, Roslin, Gorebridge, etc.

| Location | Grid Ref | Date | Recorder |
|--------------------------------|----------|------------|---------------|
| Guildie Howes, North Middleton | NT3558 | 13/09/1975 | Beattie, E.P. |
| Woolmet | NT36 | 1975 | Beattie, E.P. |
| Newbridge | NT1273 | 1981 | BSS surveyor |
| Kingsknowe | NT2170 | 1981 | BSS surveyor |
| Cousland | NT384682 | 1982 | McKean, D.R. |
| East of Torsonce | NT4743 | 1984 | Nield, P. |
| Old Clapperton Hall | NT0868 | 1984 | Robertson, S. |
| Monktonhall | NT3371 | 29/10/1989 | McKean, D.R. |
| River Esk, Inveresk | NT347715 | 29/10/1989 | McKean, D.R. |
| Saughton Prison & Stenhouse | NT2171 | 11/08/1999 | Maxwell, S. |
| Niddrie | NT37A | 06/08/2004 | McKean, D.R. |
| Craigmillar Castle | NT2870 | 2007 | Chaney, P. |

Chenopodium murale L.

Nettle-leaved Goosefoot

*National Status: Not Scarce; IUCN: VU.**Midlothian Status: Rare.*

Nationally this annual archaeophyte is a scattered casual in most of Britain, found in cultivated and waste ground, often coastal. In Midlothian the species is a rare casual, found inland or at the coast, in waste ground or gardens, but only once since 1970. Although casual, it is included in this *Register* because of its conservation status.

| Location | Grid Ref | Date | Recorder |
|---------------------|----------|------------|---------------|
| Fillyside, Seafield | NT2975 | 18/06/1934 | Horwood, A.R. |
| Comely Bank | NT27 | 27/08/1960 | Green, P.S. |
| Leith Docks | NT279764 | 05/11/1987 | Stewart, O.M. |

Chenopodium polyspermum L.

Many-seeded Goosefoot

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

This annual archaeophyte of cultivated and waste ground is common in the centre and south of Britain, but local or rare in southern Scotland. In Midlothian the species has been found only once since 1970, on a rubbish tip. Historically, vouchers were collected from Leith in 1893 and Slateford in 1904 (see table) and both these sites were reported again in 1934.

| Location | Grid Ref | Date | Recorder |
|-----------------------|----------|------------|------------|
| Leith Walk, Edinburgh | NT27 | 1893 | Brodie, J. |
| Slateford | NT27 | 19/09/1904 | Fraser, J. |
| Hailes rubbish tip | NT2070 | 1971 | Anon. |

Chenopodium rubrum L.

Red Goosefoot

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this annual native goosefoot is frequent in much of England but local or rare elsewhere. It is found on waste and cultivated ground. In Midlothian recent records have been infrequent. All have been from waste ground and one was from a railway tip at Borthwick. In 1809 this species was recorded at Restalrig, and on the west side of the Earthen Mound in Edinburgh. Presumably the latter was the forerunner of The Mound in the present-day centre of Edinburgh. In 1934 the plant was recorded at Newhailes and Leith.

| Location | Grid Ref | Date | Recorder |
|-----------------|----------|------|---------------|
| Borthwick | NT3760 | 1957 | Beattie, E.P. |
| Leith West Dock | NT27 | 1958 | Beattie, E.P. |
| Granton Harbour | NT2377 | 1981 | Stewart, O.M. |
| Leith | NT268767 | 1987 | Stewart, O.M. |
| Holyrood Park | NT270727 | 1989 | Saville, R. |
| Granton | NT2377 | 1990 | McKean, D.R. |
| Greenhall Farm | NT3462 | 1993 | Garrod, R. |

Chenopodium vulvaria L.

Stinking Goosefoot

*National Status: Scarce; IUCN: EN; UK BAP, 2007; WACA: Sch. 8.**Midlothian Status: Rare.*

This annual archaeophyte used to be frequent on rather bare coastal ground in southern Britain, but is now a scarce casual of waste ground in central and south Britain. In Midlothian there has been only one record since 1970, near the coast. In 1768 the species was frequent near Kirkbraehead. Then it was found at Fisherrow (1809 to 1863), Musselburgh (1809 to 1934) and Leith, Portobello and Slateford (1934).

| Location | Grid Ref | Date | Recorder |
|------------------------|----------|---------|----------------|
| Netherby Road, Trinity | NT2476 | 08/1996 | Anderson, E.M. |

Cichorium intybus L.

Chicory

*National Status: Not Scarce; IUCN: LC; SBL: >25% decline.**Midlothian Status: Rare.*

Nationally this perennial archaeophyte is locally common in southern Britain but scattered elsewhere. In Scotland the species has shown significant decline, recognised by the SBL. It grows on roadsides, and rough and waste ground, especially if calcareous. In Midlothian this plant is a casual, but has been included in this *Register* because of its conservation status. With only two records since 1970, the species is now rare in the Vice-county. It has been found mostly on waste ground and tips, but during the 1960s the plant was grown in fields for pigs. In 1824 the plant was recorded as common. In 1863 there were records from Granton and Holyrood Park, and in 1934 the species was recorded at Portobello, Slateford, Comiston and Hailes.

| Location | Grid Ref | Date | Recorder |
|------------------------------|----------|------------|---------------|
| Leith West Dock | NT27 | 1956 | Beattie, E.P. |
| Levenhall | NT37 | 1958 | Beattie, E.P. |
| Hailes Quarry Tip | NT2070 | 1959 | Beattie, E.P. |
| Lauriston Castle | NT1976 | 1962 | Brown, E. |
| Cramond Bridge | NT1775 | 1967 | Mackie, M.P. |
| Musselburgh | NT3573 | 22/08/1988 | McKean, D.R. |
| Brick Works (west of Roslin) | NT2663 | 1991 | Longstaff, M. |

Circaea x intermedia Ehrh. (C. lutetiana x C. alpina)

Upland Enchanter's-nightshade

*National Status: Not designated; IUCN: Not designated.**Midlothian Status: Scarce.*

Nationally this native hybrid is locally frequent in north and west Britain, sometimes without one or both parents. It grows in shady places, wooded or rocky. In Midlothian this plant is scattered around the Vice-county in wooded sites. Bilston Burn and Crichton Glen are SSSIs. The R. North Esk at Hawthornden is at present within the Roslin Glen SSSI, but the 1876 record below pre-dates the SSSI designation.

| Location | Grid Ref | Date | Recorder |
|------------------------------------|-----------|------------|------------------------------|
| R.North Esk, Hawthornden | NT2863 | 08/08/1876 | Webb, F.M. |
| Rosebank, south-west of Livingston | NT0365 | 1994 | Muscott, J. |
| Kirknewton Estate | NT1166 | 16/06/1994 | McKean, D.R. |
| Kirkhill, near Gorebridge | NT335618 | 18/08/1994 | McKean, D.R. |
| Bilston Burn | NT2664 | 1998 | Watson, K. |
| Bilston Burn | NT2764 | 1998 | Watson, K. |
| Shandon | NT2371 | 1999 | Muscott, J. |
| Crichton Glen | NT3761 | 24/04/2004 | Muscott, J. & ENHS |
| Bonaly | NT211673 | 11/09/2012 | McKean, D.R. |
| Kirknewton Estate | NT114663§ | 14/08/2012 | Sumner, B.E.H. |
| Kirknewton Estate | NT122666§ | 15/06/2012 | Sumner, B.E.H. |
| Crow Wood & Kierhill Pond | NT160696§ | 29/08/2013 | McKean, D.R. |
| Greenburn Wood to Hatton Bridge | NT123666§ | 03/09/2013 | McKean, D.R. & Maxwell, S.A. |

Cochlearia micacea E.S. Marshall

Mountain Scurvygrass

*National Status: Scarce; IUCN: Waiting List; UK BAP, 2007; SBL: listed.**Midlothian Status: Rare.*

This native perennial is found in central and northern Scotland, mostly on micaceous schists, on mountains above 600 m. Taxonomic work is ongoing, into the species and its subspecies, before threats to its survival can be assessed. In Midlothian the species (confirmed by T.G.C. Rich) was recorded at intervals from 1878 to 1966, by a streamside and in a flush near the source of the Medwin Water in the Pentland Hills. The area falls within the Craigengar SSSI and SAC, and is periodically surveyed, but no records have been obtained since 1966. However, the fruits are eaten by sheep, making it difficult to identify, so the species may still be extant in the Vice-county (D.R. McKean, personal communication).

| Location | Grid Ref | Date | Recorder |
|--------------------------|----------|------------|---------------|
| Medwin Water (source of) | NT0754 | 10/09/1878 | Webb, J.M. |
| Medwin Water (source of) | NT0754 | 15/05/1936 | Sinclair, J. |
| Medwin Water (source of) | NT072542 | 05/07/1966 | Beattie, E.P. |

Coeloglossum viride (L.) Hartm.

Frog Orchid

*National Status: Not Scarce; IUCN: VU; UK BAP, 2007; SBL: listed.**Midlothian Status: Rare.*

Nationally this native orchid of calcareous grassland is locally frequent throughout Britain, but has become extinct in various places, including southern Scotland. In Midlothian there has been only one recent record, beside a small river in a calcareous district. In the 19th century there were records from the Pentland Hills (including Habbie's Howe, near Loganlea), Ravelrig Toll Moss, Caroline Park, Cramond Island, Holyrood Park, Dalmahoy, Newbattle and Roman Camp. In 1841 the species was abundant in the drier ground in the parish of West Calder.

| Location | Grid Ref | Date | Recorder |
|-----------------|----------|------------|-----------|
| Fullarton Water | NT282562 | 17/08/1997 | Dixon, C. |

Cryptogramma crispa (L.) R. Br. ex Hook.

Parsley Fern

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this small native fern is locally frequent among rocks on acid mountains in Scotland and parts of England. In Midlothian it has been recorded at only three sites since 1970, which suggests it is rare. In 1934 the species was recorded at Carnethy Hill, Habbie's Howe (near Loganlea) and Heriot.

| Location | Grid Ref | Date | Recorder |
|----------------------------------|----------|------------|----------------|
| Caitha Hill, Gala Water | NT461408 | 20/11/1976 | Corner, R.W.M. |
| West side of Broadlaw, Moorfoots | NT343541 | 02/10/1979 | Corner, R.W.M. |
| Edgelaw | NT2958 | 24/10/1985 | McKean, D.R. |

Cynoglossum officinale L.

Hound's-tongue

*National Status: Not Scarce; IUCN: NT.**Midlothian Status: Rare.*

Nationally this native biennial is locally frequent on open ground as far north as central Scotland. In Midlothian there has been only one recent record. In 1824 the species was recorded at Rosslyn Castle and in 1934 at Roslin.

| Location | Grid Ref | Date | Recorder |
|------------------------------------|----------|------|-----------|
| Polton (west of Springfield House) | NT287647 | 1995 | Dixon, C. |

Dactylorhiza x formosa (T. & T.A. Stephenson) Soó
(D. maculata x D. purpurella)
*National Status: Not designated; IUCN: Not designated.**Midlothian Status: Rare.*

Nationally this native hybrid may be the commonest hybrid orchid in northern Britain and Ireland. In Midlothian there have been only two records, from marshy and wooded ground in the west of the Vice-county.

| Location | Grid Ref | Date | Recorder |
|-------------------------------|----------|------------|---------------|
| West Torphin Birchwood, SW of | NT022606 | 1982 | Stewart, N.F. |
| West Torphin Woods | NT025606 | 02/07/1982 | Stewart, N.F. |

Dactylorhiza incarnata (L.) Soó

Early Marsh-orchid

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

This native species of orchid is very variable, and divided into subspecies, among which those of the *incarnata* group require more research before they can be assigned a threat category by the IUCN. Subsp. *incarnata* is said to be the only subspecies to have been found in Midlothian. Nationally, *D. incarnata* subsp. *incarnata* is locally frequent in England but very scattered in Scotland. It grows in neutral or basic marshes and wet meadows. In Midlothian *Dactylorhiza incarnata* is now scarce, but between 1824 and 1900 there were records from the Pentland Hills, Dalmahoy, Ravelrig Bog, Balerno, Comely Bank, Craiglockhart Hill, Hunter's Bog, Duddingston Loch, Newbattle and Roslin.

| Location | Grid Ref | Date | Recorder |
|------------------------------|----------|------------|--------------|
| North of Fountainside | NT2957 | 1981 | Rangeley, A. |
| Edgelaw Reservoir (south of) | NT2957 | 1985 | Rangeley, A. |
| North Middleton | NT3559 | 18/06/1992 | McKean, D.R. |
| Bellyford Burn | NT3869 | 1999 | Dixon, C. |

Dactylorhiza x venusta (T. & T.A. Stephenson) Soó
(**D. fuchsii x D. purpurella**)

National Status: Not designated; IUCN: Not designated.
Midlothian Status: Rare.

This native, possibly endemic, hybrid is sometimes partly fertile. It is mainly a northern orchid, as is *Dactylorhiza purpurella*. In Midlothian this hybrid has been found in only two sites, one of them historic. The recent record was from scrub.

| Location | Grid Ref | Date | Recorder |
|-----------------|----------|------------|----------------------------|
| Gorebridge | NT36 | 1886 | Anon. |
| Marchbank, near | NT1664 | 20/07/1999 | Muscott, J. & Tebble, M.O. |

Descurainia sophia (L.) Webb ex Prantl

Flixweed

National Status: Not Scarce; IUCN: LC.
Midlothian Status: Scarce.

This archaeophyte (annual or biennial) is found through much of Britain in rough or waste ground and at roadsides. In Midlothian there have been only four records since 1970, in waste ground, agricultural set-aside and a car park. In 1764 the species was recorded at Stockbridge and through the 19th century there were many sites both within and outside the city.

| Location | Grid Ref | Date | Recorder |
|----------------------|----------|------------|---------------|
| Leith Docks | NT27 | 07/07/1956 | Beattie, E.P. |
| Borthwick | NT36 | 01/08/1956 | Beattie, E.P. |
| Blackford Quarry | NT2570 | 02/08/1956 | Beattie, E.P. |
| Blackford Quarry | NT2670 | 02/08/1956 | Beattie, E.P. |
| Granton | NT27 | 06/07/1957 | Beattie, E.P. |
| Musselburgh | NT37 | 1958 | Beattie, E.P. |
| Leith Docks | NT2876 | 1982 | McKean, D.R. |
| Loanhead | NT26 | 1999 | Maxwell, S.A. |
| Roslin Glen Car Park | NT276627 | 11/08/1999 | Muscott, J. |
| Stagehall Farm | NT448440 | 25/08/2000 | Gaskell, L. |

Dianthus deltoides L.

Maiden Pink

National Status: Scarce; IUCN: NT.
Midlothian Status: Scarce.

This small native perennial grows in dry grassy areas and is scattered and decreasing nationally. In Midlothian the species grows wild in rough grassland, sandy areas and on basaltic rocks, but has become scarce. Historically the plant was recorded at Lasswade in 1768. In July, 1792, Robert Brown (discoverer of Brownian movement) said the plant was “abundant” on Blackford Hill, and it was repeatedly recorded there until 1936. From 1809 the species was recorded at Holyrood Park, where it is still found growing wild today within the Arthur’s Seat SSSI. The Pentland Hills, the Braid Hills and the banks of Lochend were further historic sites, no longer extant. There is currently a Species Action Plan for *Dianthus deltoides* under the Edinburgh LBAP. Under this scheme plantings were carried out

at five sites in Holyrood Park on 09/10/2013, of which one is shown at low resolution in the table below. The aim of the scheme is to augment the existing wild population there and encourage this scarce species. The plant has also appeared in planted wildflower areas, as at Polton in 2010 (see table below). Of the other sites in the table below, Wester Craiglockhart Hill is a SSSI and Bawsinch is a nature reserve (SWT) within the Duddingston Loch SSSI.

| Location | Grid Ref | Date | Recorder |
|---|-----------|------------|--------------------|
| Blackford Hill | NT27 | 27/07/1936 | Collins, B.M. |
| Arthur's Seat | NT2772 | 01/08/1956 | Beattie, E.P. |
| Arthur's Seat | NT2772 | 1988 | McKean, D.R. |
| Haltree | NT4152 | 1990 | Learmonth, R. |
| Heriot Water (near) | NT411527§ | 27/08/1991 | Learmonth, R. |
| Duddingston Golf Course (Loch and Bawsinch) | NT2872 | 1992 | Muscott, J. |
| Wester Craiglockhart Hill | NT228702 | 1992 | Wright, J. |
| Holyrood Park | NT280725 | 1993 | Muscott, J. |
| Rosebank, West Calder (south of) | NT034658 | 1994 | Muscott, J. |
| Craigmillar Golf Course | NT2870 | 01/11/1994 | Clarkson, M. |
| Wester Craiglockhart Hill | NT227701 | 1997 | Wright, J. |
| Wester Craiglockhart Hill | NT226700§ | 1997 | Mclaughlin, J. |
| Bawsinch | NT2872 | 1999 | Muscott, J. |
| Polton | NT2864 | 30/08/2010 | Sumner, B.E.H. |
| Holyrood Park | NT2873§ | 09/10/2013 | Coleman, M. et al. |

Diphasiastrum alpinum (L.) Holub

Alpine Clubmoss

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

Nationally, this native clubmoss is locally common on mountains and moors. In Midlothian it is scarce and found in hill grassland, heath/scree, or forestry clearings. In 1824 the species was recorded in the Pentland Hills and Woodforde remarked that it was "not frequent". In 1863 the clubmoss was found on Black Hill in the Pentland Hills.

| Location | Grid Ref | Date | Recorder |
|----------------------------|----------|------------|--------------|
| Huntley Cot Hills | NT3151 | 1983 | McKean, D.R. |
| Mauldslie Hill | NT316518 | 1992 | Dixon, C. |
| Brunstane Castle, Penicuik | NT208583 | 1994 | Dixon, C. |
| Newtongrange | NT3364 | 1994 | Dixon, C. |
| The Kipps (west of) | NT295492 | 15/06/1995 | Dixon, C. |

Drosera anglica Huds.

Great Sundew

National Status: Not Scarce; IUCN: NT.

Midlothian Status: Rare.

Nationally this native perennial has a local distribution in wet peaty areas. In Midlothian there is only one known site, a peaty moss near Penicuik, just to the west of the area protected as a SSSI.

| Location | Grid Ref | Date | Recorder |
|-------------------------|----------|------------|----------------|
| Auchencorth Moss | NT199552 | 07/07/1972 | Badenoch, C.M. |
| Auchencorth Moss (west) | NT1955 | 18/05/1990 | Mackintosh, J. |

Dryopteris affinis (Lowe) Fraser-Jenk.

Golden-scaled Male-fern

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

This native fern (represented by subsp. *affinis*) occurs through most of Britain except in the extreme south-east of England. It is found in ditches, hedgebanks, woods and mountains. In Midlothian *Dryopteris affinis* s.s. appears to be scarce, but up to now it has seldom been distinguished from *Dryopteris affinis* agg., so it is possible that it might be commoner than recognised, and that records might increase in the future. The records below were from acid scree, streamside and woodland. The sites are within SSSIs.

| Location | Grid Ref | Date | Recorder |
|---------------------------------|----------|---------|--------------|
| Glentress Burn, near Mount Main | NT3748 | 08/1988 | McKean, D.R. |
| Ladyside, near Heriot | NT3650 | 08/1988 | McKean, D.R. |
| Windy Knowe | NT3649 | 1988 | McKean, D.R. |
| Roslin Glen | NT278629 | 1995 | Dixon, C. |

Dryopteris borrieri (Newman) Newman ex Oberh. & Tavel

Borrer's Male-fern

*National Status: Not Scarce; IUCN: LC for D. affinis.**Midlothian Status: Scarce.*

This native fern (formerly *Dryopteris affinis* subsp. *borrieri*) occurs throughout Britain in ditches, hedgebanks, woods and mountains. In Midlothian the species appears to be commoner than *Dryopteris affinis* s.s., but still scarce. However, up to now it has seldom been distinguished from *Dryopteris affinis* agg., so it is possible that it might be commoner than has been recognised, and that records might increase. The records below were from woodland, riverside woodland, a shady ravine and an upland streamside. Roslin Glen, Maggie Bowies Glen and south of Ladyside are SSSI areas.

| Location | Grid Ref | Date | Recorder |
|---------------------------|----------|------------|-------------------------------|
| Bavelaw Wood | NT16 | 17/07/1902 | Evans, W.E. |
| Balerno | NT16 | 30/12/1972 | Dyer, A.F. |
| Pathhead (1 mile west of) | NT3864 | 10/1974 | Page, C.N. |
| R. North Esk, Carlops | NT15 | 10/10/1975 | Page, C.N. & Blair, F.M. |
| Ladyside (south of) | NT3649 | 08/1988 | McKean, D.R. |
| Outerston (near Temple) | NT3257 | 1992 | Broom, A. |
| Corsehope Farm (south of) | NT3850 | 1992 | McKean, D.R. |
| Roslin Glen | NT278629 | 1995 | Dixon, C. |
| Penicuik Estate | NT217584 | 1995 | Dixon, C. |
| Penicuik Estate | NT229594 | 1995 | Dixon, C. |
| Maggie Bowies Glen | NT3960 | 16/05/2010 | McKean, D.R. & Sumner, B.E.H. |
| Maggie Bowies Glen | NT3860 | 16/05/2010 | McKean, D.R. & |

| | | | |
|-------------------------|--------|------------|---|
| | | | Sumner, B.E.H. |
| Water of Leith, Balerno | NT1666 | 15/07/2012 | McKean, D.R., Sumner, B.E.H. & TWIC |

Dryopteris cambrensis (Fraser-Jenk.) Beitel & W.R. Buck Narrow Male-fern

National Status: Not Scarce; IUCN: LC for D. affinis.

Midlothian Status: Rare.

This native fern (formerly *Dryopteris affinis* subsp. *cambrensis*) is represented by *Dryopteris cambrensis* subsp. *cambrensis* through much of Britain, but is absent from much of southern and eastern England. In Midlothian the species appears to be rare, but up to now it has seldom been distinguished from *Dryopteris affinis* agg., so it is possible that it might be commoner than recognised, and that there might be more records in the future. The records below were from a ravine in the Pentland Hills, and from woodland. Roslin Glen is a SSSI and the head of the Medwin Water is within the Craigengarr SSSI and SAC.

| Location | Grid Ref | Date | Recorder |
|--------------------------|----------|------------|-------------------------------|
| Medwin Head, White Craig | NT072543 | 18/08/1992 | McKean, D.R. & Jermy, A.C. |
| Beeslack, Penicuik | NT245613 | 1995 | Dixon, C. |
| Roslin Glen | NT278629 | 1995 | Dixon, C. |

Dryopteris x deweveri (J.T. Jansen) Jansen & Wacht.
(D. carthusiana x D. dilatata)

National Status: Not designated; IUCN: Not designated.

Midlothian Status: Rare.

This native hybrid fern is scattered over the British Isles, and is frequent where the parents occur. In Midlothian the hybrid has been recorded in a broad-leaved wood, a coniferous plantation, and on a moss with woodland nearby. *Dryopteris dilatata* was common at all three sites, but *D. carthusiana* was not recorded at the Stow site, although present at the other two. Hermand Birchwood and Red Moss are SSSIs.

| Location | Grid Ref | Date | Recorder |
|-----------------------------|----------|------------|---------------|
| Hermand Birchwood | NT0363 | 23/09/1986 | Dyer, A.F. |
| Stow, 4 miles south-west of | NT4339 | 1986 | Thompson, I. |
| Red Moss | NT164638 | 2002 | Pearman, D.A. |

Dryopteris expansa (C. Presl) Fraser-Jenk. & Jermy Northern Buckler-fern

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Rare.

This native fern is found in cool damp woods and mountains in northern Britain and is locally frequent in Scotland. In Midlothian it has been recorded at only two sites, in an upland area and in a wood, both SSSIs.

| Location | Grid Ref | Date | Recorder |
|----------------|----------|---------|--------------|
| Blackhope Scar | NT3148 | 08/1988 | McKean, D.R. |
| Roslin | NT2763 | 1990 | Page, C.N. |

Dryopteris oreades Fomin

Mountain Male-fern

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

This native fern occurs in northern Britain on mountains among rocks and scree. In Midlothian it has been found at several sites in the hills, in gullies and scree, and at a lowland waste-ground site.

| Location | Grid Ref | Date | Recorder |
|-----------------------------------|----------|------------|----------------------------|
| Caitha Hill, Gala Water | NT461408 | 20/11/1976 | Corner, R.W. & Jermy, A.C. |
| South of Gladhouse | NT2950 | 1981 | Dixon, C. |
| West of The Kipps | NT2949 | 1981 | Dixon, C. & McKean, D.R. |
| Bow Castle | NT4641 | 1984 | Little, M. |
| Caitha Hill, Gala Water | NT4641 | 1986 | Little, M. |
| Millerhill | NT3270 | 06/1988 | McKean, D.R. |
| Hirendeane Castle (south-east of) | NT301509 | 1993 | Dixon, C. |
| Emly Bank | NT2947 | 1993 | Dixon, C. |

Eleocharis quinqueflora (Hartmann) O. Schwarz

Few-flowered Spike-rush

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native perennial is found through most of Britain in wet areas of fens, dunes and moors. In Midlothian it has been recorded in upland sites, in flushes and marshy areas, some of them in SSSIs.

| Location | Grid Ref | Date | Recorder |
|--|----------|------------|-----------------------------|
| West of The Kipps | NT2949 | 1981 | Dixon, C., McKean, D.R. |
| North-east of Dunlee Hill | NT4143 | 05/07/1991 | McKean, D.R. |
| Moorfoot Hills | NT297505 | 1993 | Dixon, C. |
| Mount Main (east of) | NT3948 | 1993 | Dixon, C. |
| Fairliehope | NT157566 | 1994 | Dixon, C. |
| Gutterford Burn | NT159594 | 04/07/1995 | Dixon, C. |
| Patie's Hill | NT158572 | 14/06/1995 | Dixon, C. |
| Bell's Hill & Harbour Hill | NT2064 | 25/07/2009 | Muscott, J. & ENHS |
| Harbour Hill (track west of, towards Harlaw) | NT2065 | 25/07/2009 | Muscott, J. & Clarkson, M. |
| Sergeant Law, The Pike & Ravens Cleugh | NT05S | 05/10/2009 | McIntosh, J. & McHaffie, H. |

Elytrigia juncea (L.) Nevski

Sand Couch

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

In Britain the native subspecies of this maritime perennial is subsp. *boreoatlantica* (Simonet & Guin.) Hyl., which is common on sandy coasts. In Midlothian this plant has also been found at sandy coastal sites, but is scarce. In 1934 the species was found at Fisherrow, where it is still found today. It was also recorded at Granton in 1934, but there are no recent records from this site. The shore of the Firth of Forth is a SSSI.

| Location | Grid Ref | Date | Recorder |
|--|----------|------------|----------------|
| Cramond | NT1877 | 1955 | Beattie, E.P. |
| Fisherrow Harbour (west of) | NT37 | 1970 | Beattie, E.P. |
| Fisherrow Links & Goose Green, Musselburgh | NT3473 | 26/08/1988 | Jackson, E.H. |
| Fisherrow Harbour | NT3373 | 1994 | Learmonth, R. |
| Cramond Island | NT1978 | 1997 | McKean, D.R. |
| Seafield | NT27 | 1999 | McKean, D.R. |
| Fisherrow | NT3473 | 07/08/2013 | Sumner, B.E.H. |

Epilobium x aggregatum Čelak. (**E. montanum x E. obscurum**)*National Status: Not designated; IUCN: Not designated.**Midlothian Status: Rare.*

This native hybrid willowherb is scattered over the British Isles and is one of the commonest hybrids. In Midlothian this plant has been recorded only twice, in disparate locations.

| Location | Grid Ref | Date | Recorder |
|--|----------|------|---------------|
| Churchhill | NT2471 | 1982 | Stewart, O.M. |
| Toxsidehill, south of (Gladhouse Reservoir, west of) | NT2853 | 1993 | Cottrell, J. |

Epilobium anagallidifolium Lam.

Alpine Willowherb

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

This native mountain perennial occurs in flushes and beside streams in northern Britain. In Midlothian the only records have been from two adjacent km squares in the Moorfoot Hills, within the area protected as a SSSI and SAC.

| Location | Grid Ref | Date | Recorder |
|----------------|-----------|------------|--------------|
| Blackhope Scar | NT323493§ | 14/07/2003 | McKean, D.R. |
| Blackhope Scar | NT324483§ | 14/07/2003 | McKean, D.R. |

Epilobium x erroneum Hausskn. (**E. hirsutum x E. montanum**)

National Status: Not designated; IUCN: Not designated.

Midlothian Status: Rare.

This native hybrid willowherb is scattered in England, Wales and central Scotland. In Midlothian this plant has been recorded only once, at a roadside.

| Location | Grid Ref | Date | Recorder |
|--------------------------------|----------|------------|---------------|
| Haltree, north of Fountainhall | NT4152 | 17/08/1990 | Learmonth, R. |

Epilobium tetragonum L.

Square-stalked Willowherb

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Rare.

This native perennial is common locally in southern and central Britain, but is very scattered in northern Britain. It is found in open woods and hedgerows, in waste and cultivated ground, and beside water. In Midlothian records of *E. tetragonum* have usually turned out to be *E. obscurum* on further scrutiny. However, there is now a definite record (found by I. Browning and determined by D.R. McKean) from a field cultivated by the Scottish Agricultural Science Agency.

| Location | Grid Ref | Date | Recorder |
|-----------------------------|-----------|------|--------------|
| Gogarbank (Kirklands Field) | NT163670§ | 2008 | Browning, I. |

Epipactis dunensis (T. & T.A. Stephenson) Godfery

Dune Helleborine

National Status: Rare; IUCN: Data Deficient.

Midlothian Status: Rare.

Nationally this native helleborine (formerly *Epipactis leptochila* var. *dunensis*) is a northern species, found in woods, dune-slacks, river gravels and polluted ground. In central Scotland it may also grow on mine spoil. It is endemic. In Midlothian the species has been recorded at only one site, on a wooded former bing. *Epipactis muelleri* (which was listed as rare on the SBL, and then revised to *E. leptochila*) was probably the species recorded. Soon afterwards *E. muelleri* was regarded as not certainly distinct from *E. leptochila* var. *dunensis* (A.J. Richards in Stewart *et al.*, 1994). The latter variety was subsequently upgraded to a species, *E. dunensis*.

| Location | Grid Ref | Date | Recorder |
|---------------------------|----------|------------|--------------|
| Kirkhill bing, Gorebridge | NT3262 | 18/08/1994 | McKean, D.R. |

Equisetum x dycei C.N. Page (**E. fluviatile x E. palustre**)

National Status: Not designated; IUCN: Not designated.

Midlothian Status: Rare.

Nationally this native hybrid horsetail has been found only in west Scotland, Cardiganshire, and west and south-west Ireland. In Midlothian the hybrid has been recorded at only one site, on the reservoir margin.

| Location | Grid Ref | Date | Recorder |
|---------------------|----------|------|-----------|
| Harperrig Reservoir | NT089608 | 1997 | Dixon, C. |

Equisetum hyemale L.

Rough Horsetail

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native perennial is scattered through much of Britain among vegetation beside streams and in ditches. In Midlothian the few post-1970 sites are among vegetation at various points along the banks of the River North Esk, within the Roslin Glen SSSI. There were more sites in 1824, not only Roslin but also Colinton Woods, Duddingston Loch, Dalkeith, and between Mavisbank and Lasswade. In 1863 the species was at Auchendinny and Currie, as well as at Roslin.

| Location | Grid Ref | Date | Recorder |
|--------------------------|----------|------------|---------------|
| Hawthornden (near) | NT2863 | 01/09/1973 | Beattie, E.P. |
| Roslin Chapel (south of) | NT275629 | 01/09/1973 | Beattie, E.P. |
| Roslin Castle | NT275629 | 04/01/1993 | McKean, D.R. |
| Patie's Hill, Carlops | NT161575 | 07/2004 | Dixon, C. |

Equisetum x litorale Kühlew. ex Rupr. (**E. fluviatile** x **E. arvense**)

Shore Horsetail

*National Status: Not designated; IUCN: Not designated.**Midlothian Status: Scarce.*

Nationally this native hybrid horsetail is scattered through Britain in wet places beside water and in dune-slacks, sometimes without one or both parents. In Midlothian the hybrid has been recorded in grassland and marshes, and at the edges of a reservoir, ponds, streams and burns. Arthur's Seat, the Gutterford Burn and North Esk Reservoir are SSSIs.

| Location | Grid Ref | Date | Recorder |
|----------------------------|----------|------------|----------------|
| North Esk Reservoir | NT156579 | 06/10/1983 | McHaffie, H.S. |
| Gutterford Burn | NT156584 | 06/10/1983 | McHaffie, H.S. |
| Cockpen Farm | NT3263 | 1983 | Stewart, O.M. |
| Vogrie Country Park | NT379633 | 1994 | Dixon, C. |
| Hunters Bog, Arthur's Seat | NT274734 | 1994 | Dixon, C. |
| Bush Estate | NT247637 | 1995 | Dixon, C. |
| Loanhead | NT296657 | 1995 | Dixon, C. |
| Addiewell | NT008628 | 01/07/1995 | Dixon, C. |
| Hillend | NT244667 | 1998 | Dixon, C. |
| Hunters Bog, Arthur's Seat | NT274732 | 17/06/1998 | Maxwell, S. |
| Bush Estate | NT247637 | 17/06/13 | Sumner, B.E.H. |

Equisetum x mildeanum Rothm. (**E. pratense** x **E. sylvaticum**)*National Status: Not designated; IUCN: Not designated.**Midlothian Status: Rare.*

Nationally this native hybrid horsetail has been found in Midlothian, Perthshire and

the Outer Hebrides. In Midlothian the hybrid has been recorded at only one site, beside the R. North Esk.

| Location | Grid Ref | Date | Recorder |
|-----------------|----------|------|-----------|
| Penicuik Estate | NT246604 | 1994 | Dixon, C. |

Equisetum pratense Ehrh.

Shady Horsetail

National Status: Scarce; IUCN: LC.

Midlothian Status: Scarce.

Nationally this scarce native perennial is mostly an upland species, found in wet grass and shade beside streams and rivers. It is local in northern Britain south to north-west Yorkshire. In Midlothian since 1970 the species has been recorded along the shady banks of the River North Esk near Penicuik, and in the damp uplands of the Moorfoot Hills. Penicuik has been known as a site for this species since at least 1863, when Auchendinny was also noted. In 1927 the species was recorded at Mid Calder.

| Location | Grid Ref | Date | Recorder |
|-----------------------------|-----------|------------|---|
| Penicuik Estate | NT25 | 1968 | Read, A. |
| Penicuik Estate | NT218587 | 1973 | Beattie, E.P. |
| River North Esk, Penicuik | NT246603 | 1994 | Dixon, C. |
| Moorfoot Hills | NT2949 | 1994 | McKean, D.R. |
| Hirendean Castle (south of) | NT2950 | 1994 | Dixon, C. |
| Penicuik Estate | NT220590§ | 16/06/2011 | Sumner, B.E.H., McIntosh, J. & Spencer-Vellacott, P. |
| Penicuik Estate | NT220590§ | 11/11/2013 | McHaffie, H.S., McKean, D.R. & Sumner, B.E.H. |

Equisetum x rothmaleri C.N. Page (**E. arvense x E. palustre**)

National Status: Not designated; IUCN: Not designated.

Midlothian Status: Rare.

Nationally this native hybrid horsetail was first found in North Ebudes (1972), then Hertfordshire (1987), and subsequently elsewhere in Scotland. In Midlothian the hybrid has been recorded at only one site, in an upland marsh.

| Location | Grid Ref | Date | Recorder |
|---------------------|----------|------|-----------|
| Mount Main, east of | NT396484 | 1994 | Dixon, C. |

Eriophorum latifolium Hoppe

Broad-leaved Cottongrass

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

This native cottongrass, a perennial like other *Eriophorum* species, is scattered through Britain in base-rich marshes and flushes. In Midlothian the records have

been from wet sites in or near lime-rich areas. The colony at Patie's Hill was in a base-rich flush and noted as extensive. The R. North Esk valley above Carlops is a SSSI. In the 19th century the species was also recorded at Borthwick and Crichton Castles.

| Location | Grid Ref | Date | Recorder |
|-----------------------|----------|------------|----------------|
| Carlops | NT159562 | 1972 | Badenoch, C.M. |
| Carlops, R. North Esk | NT157569 | 1999 | Dixon, C. |
| Patie's Hill | NT1657 | 07/2004 | Dixon, C. |
| Toxside Moss (north) | NT278546 | 24/07/2011 | Maxwell, S.A. |

Erophila glabrescens Jord.

Glabrous Whitlowgrass

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

This native species, which flowers early and briefly, occurs throughout Britain on walls and rocks and in dry open places, especially if calcareous. In Midlothian the five post-1970 records have been from open habitats and walls in Edinburgh. Historically various rocky and hilly sites were also reported (see below).

| Location | Grid Ref | Date | Recorder |
|-------------------------|----------|------------|----------------|
| Corstorphine Hill | NT27 | 11/05/1831 | Anon. |
| Arthur's Seat | NT27 | 04/1847 | Anon. |
| Blackford Hill | NT27 | 15/04/1876 | Douglas, D. |
| Craiglockhart Hill | NT27 | 29/04/1878 | Johnston, H.H. |
| Swanston (above) | NT26NW | 16/04/1903 | Evans, W.E. |
| Craigmillar | NT27 | 20/04/1904 | Fraser, J. |
| Inverleith Nurseries | NT2475 | 21/05/1904 | Fraser, J. |
| Granton Harbour | NT238772 | 18/06/1998 | Saville, R. |
| St. Leonards (near) | NT2672 | 19/04/1999 | Maxwell, S.A. |
| Braid Hills Golf Course | NT2569 | 24/04/1999 | Maxwell, S.A. |
| Belgrave Crescent | NT2474 | 10/05/2001 | McKean, D.R. |
| Craigleith Road | NT2274 | 04/04/2004 | Pilling, E.A. |

Erophila majuscula Jord.

Hairy Whitlowgrass

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Rare.

This native species is thinly scattered through Britain on dry and open ground, especially if calcareous. It flowers early and briefly. In Midlothian the plant favours volcanic outcrops but there has been only one post-1970 record. Historically the species was more widespread (see below).

| Location | Grid Ref | Date | Recorder |
|--------------------|----------|------------|----------------|
| Colinton | NT26 | 05/1831 | Anon. |
| Arthur's Seat | NT2772 | 23/03/1834 | Anon. |
| Mid Calder | NT06 | 10/04/1858 | Rees, H.B. |
| Arthur's Seat | NT27 | 06/1858 | Brown, J.W. |
| Mortonhall | NT2668 | 1869 | Evans, W. |
| Craiglockhart Hill | NT27 | 29/04/1878 | Johnston, H.H. |
| Mortonhall | NT26 | 22/04/1914 | Evans, W.E. |
| Blackford Hill | NT27 | 10/04/1915 | Fraser, J. |

| | | | |
|---------------------|--------|------------|-------|
| Borthwick | NT35 | 29/04/1933 | Anon. |
| St. Leonards (near) | NT2672 | 19/04/1999 | Anon. |

Eupatorium cannabinum L.

Hemp-agrimony

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native perennial is a common species of damp and rough ground, but it is more local and coastal in Scotland. In Midlothian the recent records have all been from inland sites with damp and rough ground. Crichton Glen is a SSSI and Bawsinch is a nature reserve (SWT) in a SSSI area. In about 1980 *Eupatorium cannabinum* was planted at Bawsinch, and the 1993 record below is of planted specimens. The 2011 record at the allotments in the Blackford area was at a wildlife pond, which was probably also planted. From 1824 to 1934 the species was recorded at Lasswade and Roslin.

| Location | Grid Ref | Date | Recorder |
|-----------------------------|----------|------------|-------------------------------|
| Bawsinch | NT2872 | 1993 | Muscott, J. |
| Saughton Prison & Stenhouse | NT2171 | 11/08/1999 | Maxwell, S.A. |
| Prestonhall | NT3965 | 02/06/2006 | McKean, D.R. & Maxwell, S.A. |
| Crichton Glen | NT379612 | 16/05/2010 | McKean, D.R. & Sumner, B.E.H. |
| Allotments, Blackford area | NT262709 | 10/08/2011 | Muscott, J. & Tebble, M. |

Euphorbia helioscopia L.

Sun Spurge

*National Status: Not Scarce; IUCN: LC; SBL: >25% decline.**Midlothian Status: Not Scarce.*

Nationally this annual archaeophyte is a common weed of waste and cultivated ground in lowland Britain. In Scotland the species has shown significant decline, recognised by the SBL. In Midlothian it is still common, but is included in this *Register* because of its conservation status. Since 1970 there have been 65 records from over 50 town and country sites scattered over the Vice-county. A few examples are shown in the table below. The habitats have included gardens and other cultivated ground, waste ground and waysides.

| Location | Grid Ref | Date | Recorder |
|--|----------|------------|--------------------------|
| East of Reservoir House (Torphin Quarry) | NT0359 | 1981 | McKean, D.R. |
| Warriston | NT2575 | 14/03/1989 | McKean, D.R. |
| Heriot House | NT4054 | 1989 | Learmonth, R. |
| West of Soutra Mains | NT4459 | 1991 | Winham, J. |
| East of Rosewell (Shiel Bridge) | NT3062 | 1995 | Miller, I. & Broom, A. |
| Niven's Knowe | NT2665 | 01/08/1999 | Dixon, C. |
| Allotments, Blackford area | NT262709 | 10/08/2011 | Muscott, J. & Tebble, M. |
| Ingliston | NT1572 | 27/08/2013 | Dawson, K.T. |

Euphorbia lathyris L.

Caper Spurge

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this well-naturalised biennial archaeophyte is frequent in shade over much of Britain. In Midlothian it had not been seen since 1934 until it was spotted as a new, self-sown arrival on an Edinburgh allotment after flooding from the Water of Leith about twelve years ago. The plant has remained there ever since and has now been formally recorded. The 1934 record was from Prestonhall.

| Location | Grid Ref | Date | Recorder |
|---------------------------|-----------|------------|--------------|
| Saughton Mains Allotments | NT216712§ | 18/12/2012 | Dawson, K.T. |

Euphrasia arctica Lange ex Rostrup **subsp. borealis** (F. Towns.) Yeo

Eyebright

*National Status: Not Scarce; IUCN: Data Deficient.**Midlothian Status: Scarce.*

Euphrasia arctica is a native annual of pastures and meadows and is commoner in north and west Britain than in the south. Subsp. *borealis* does not reach Shetland, whereas subsp. *arctica* is only found in Orkney and Shetland. In Midlothian *E. arctica* subsp. *borealis* is the only subspecies recorded. Recent records (below) have been from upland grassland. In the 19th century the species was found at Gilmerton (1836), Penicuik (1869), Arthur's Seat and Meadowbank Park. At the latter site it was very common in dry pastures.

| Location | Grid Ref | Date | Recorder |
|-------------------------------|----------|------------|---------------|
| Stow | NT4549 | 05/08/1987 | Learmonth, R. |
| Clinty Cleuch, Moorfoot Hills | NT3049 | 08/1988 | McKean, D.R. |
| Shoestanes | NT3954 | 1990 | Learmonth, R. |
| Ladyside | NT3650 | 1994 | McKean, D.R. |

Euphrasia micrantha Rchb.

Eyebright

*National Status: Not Scarce; IUCN: Data Deficient.**Midlothian Status: Rare.*

This native annual occurs through most of Britain but is absent from most of eastern and central England. It grows on heathland, often among *Calluna*, and sometimes in damp areas. In Midlothian the species has been recorded in heathery upland sites in the Pentland Hills. Most recently the plant was found on a grassy hillside among *Calluna*.

| Location | Grid Ref | Date | Recorder |
|--|-----------|------------|----------------|
| Bavelaw Moor | NT16 | 17/07/1902 | Evans, W.E. |
| Balerno Moor | NT16 | 09/08/1933 | Callen, E.O. |
| Balerno Moor | NT16 | 20/08/1935 | Callen, E.O. |
| Glencorse Reservoir | NT26 | 20/08/1935 | Callen, E.O. |
| Glencorse Reservoir | NT26 | 15/10/1955 | Flannigan, B. |
| Bell's Hill, above Glencorse Reservoir | NT207646§ | 13/07/2011 | Sumner, B.E.H. |

Euphrasia scottica Wettst.

Eyebright

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

This native annual occurs in Scotland, northern and western England, Wales and Ireland, on wet moorland. Although it often flowers earlier than *Euphrasia micrantha*, it may not be distinct from that species (Stace, 2010). In Midlothian *Euphrasia scottica* has been recorded only once, in a wet flush in the Moorfoot Hills SSSI and SAC.

| Location | Grid Ref | Date | Recorder |
|-------------------------|----------|------------|--------------|
| Trously, Moorfoot Hills | NT385457 | 14/08/1988 | McKean, D.R. |

Fallopia convolvulus (L.) Á. Löve

Black-bindweed

*National Status: Not Scarce; IUCN: LC; SBL: >25% decline.**Midlothian Status: Not Scarce.*

Nationally this annual archaeophyte is common through most of Britain in cultivated and waste ground. In Scotland the species has shown significant decline, recognised by the SBL. In Midlothian it is still common, but is included in this *Register* because of its conservation status. Since 1970 there have been 73 records from more than 60 city, town and country sites scattered around the Vice-county. A few examples are shown in the table below. The habitats have included waste and cultivated ground, and agricultural set-aside.

| Location | Grid Ref | Date | Recorder |
|----------------------------|----------|------------|-------------------|
| Newbridge | NT1273 | 1981 | BSS surveyor |
| Craigcrook Road, Edinburgh | NT2174 | 24/08/1982 | McKean, D.R. |
| Shoestanes | NT3954 | 1990 | Learmonth, R. |
| Windydoors | NT4339 | 19/08/1994 | Thompson, I.A. |
| Stagehall Farm | NT448440 | 25/08/2000 | Gaskell, L. |
| Musselburgh Lagoons | NT3573 | 29/07/2011 | Sumner, B.E.H. |
| Midmar Allotments | NT2570 | 11/08/2013 | Muscott, J. & BSS |

Festuca altissima All.

Wood Fescue

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native perennial grass is scattered in northern and western Britain, in damp wooded ravines and slopes. In Midlothian the post-1970 records have been from two wooded gorges, Roslin and Edgelaw. The Roslin sites are within the Roslin Glen SSSI. Historically Colinton Dell was another site for this species.

| Location | Grid Ref | Date | Recorder |
|------------------------------|----------|------------|--------------|
| Colinton Dell | NT2169 | 08/1878 | Evans, W.W. |
| Roslin | NT26 | 1958 | Adams, F.W. |
| Edgelaw Reservoir | NT3058 | 18/07/1992 | Broom, A. |
| Roslin (near Wallace's Cave) | NT284635 | 07/10/1992 | McKean, D.R. |
| Edgelaw Reservoir | NT305582 | 23/10/1992 | McKean, D.R. |
| Roslin (near Wallace's Cave) | NT270633 | 1992 | McKean, D.R. |

| | | | |
|--------|----------|------------|------------|
| Roslin | NT277630 | 12/07/1997 | Curtis, I. |
|--------|----------|------------|------------|

Festuca vivipara (L.) Sm.

Viviparous Sheep's-fescue

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

This native perennial grass is common in northern and western Britain in hill districts. In Midlothian it grows in hill grassland and heath, but is scarce. Before the 1990 record, the previous record from Arthur's Seat was before 1824. All the sites below are within SSSIs except Threipmuir Reservoir, Emly Bank and Kitchen Moss.

| Location | Grid Ref | Date | Recorder |
|---|-----------|------------|--------------------------------|
| North of Rough Moss (north-west of Dewar) | NT3349 | 09/05/1987 | Noltie, H.J.; McKean, D.R. |
| Threipmuir Reservoir | NT188643 | 1988 | Garner, D. |
| Arthur's Seat | NT267730§ | 1990 | Saville, R. |
| Emly Bank | NT293474 | 02/08/1993 | Dixon, C. |
| Kitchen Moss | NT1561 | 28/08/1999 | Sumner, B.E.H. |
| Blackhope Scar | NT322485§ | 14/07/2003 | McKean, D.R. |
| Sergeant Law, The Pike & Ravens Cleugh | NT05S | 05/10/2009 | McIntosh, J. & McHaffie, H. |

Filago minima (Sm.) Pers.

Small Cudweed

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this annual native species is found on rather bare, sandy ground through most of Britain. In Midlothian the records since 1970 have been from former industrial sites, but in 1956 (see below) it was found in a field. In June, 2006 (see table) the species was spotted on the former colliery site at Newtongrange. On 30/05/2007 there were about 1000 plants at this site. The colonisation of the disused Monktonhall bing (near Millerhill) was first recorded in 2007 (see below) and in 2008 D.R. McKean found thousands of plants at this site, a local abundance which has continued. At the former Granton Gasworks (2008 in table below) the substrate was open gravelly ground. In 1863 there were records from Dalmahoy Hill, Holyrood Park, Musselburgh, Dalkeith and Blackford. In 1934 the species grew at Dalmahoy, Holyrood Park and Slateford.

| Location | Grid Ref | Date | Recorder |
|------------------------------------|-----------|------------|-------------------|
| Fairmilehead | NT2468 | 1956 | Mackenzie, H.M. |
| Newtongrange | NT332632§ | 06/2006 | Dixon, C. |
| Newtongrange | NT332632§ | 30/05/2007 | McKean, D.R. |
| Granton Gasworks | NT225771 | 02/06/2008 | McKean, D.R. |
| Monktonhall bing (near Millerhill) | NT319708 | 2007 | Milne, R.I. |
| Monktonhall bing (near Millerhill) | NT3170 | 09/07/2011 | Milne, R.I. & BSS |
| Monktonhall bing (near Millerhill) | NT3171 | 09/07/2011 | Milne, R.I. & BSS |
| Millerhill, waste ground near | NT3270 | 09/07/2011 | Milne, R.I. & BSS |

Filago vulgaris Lam.

Common Cudweed

*National Status: Not Scarce; IUCN: NT; SBL: >25% decline.**Midlothian Status: Rare.*

This annual native species is similar to *F. minima* in its national distribution. In Scotland the plant has shown significant decline, recognised by the SBL. In Midlothian since 1970 the species has been recorded at only two sites, on waste ground next to a caravan site, and by a wooded stream. The species was formerly more widespread. In 1863 there were records from Holyrood Park, Slateford, Lasswade and Blackford Hill. All these sites except Blackford Hill were reported again in 1934.

| Location | Grid Ref | Date | Recorder |
|---------------------------------|----------|------------|------------------------------|
| Duddingston Caravan Site | NT285720 | 07/07/1998 | Maxwell, S.A. |
| Greenburn Wood to Hatton Bridge | NT131674 | 03/09/2013 | McKean, D.R. & Maxwell, S.A. |

Filipendula vulgaris Moench

Dropwort

*National Status: Not Scarce; IUCN: LC; SBL: rare.**Midlothian Status: Rare.*

Nationally this native perennial of calcareous grassland is locally frequent as far north as central Scotland. In Scotland the SBL lists it as rare. In Midlothian since 1970 this plant has only been recorded from Arthur's Seat and the Moorfoot Hills (both SSSIs), but in 1934 it used to grow at Blackford Hill and Penicuik as well as at Arthur's Seat. The recent habitats have been grassland and cliff ledges.

| Location | Grid Ref | Date | Recorder |
|-----------------------------------|----------|---------|---------------------------|
| Holyrood Park (Arthur's Seat) | NT27 | 1955 | Beattie, E.P. |
| Rough Moss Cleugh, Moorfoot Hills | NT3447 | 1972 | S.D. Ward & Ferreira, C. |
| Wolf Cleugh, Moorfoot Hills | NT3447 | 07/1972 | Ward, S.D. & Ferreira, C. |
| Arthur's Seat | NT273726 | 1995 | Maxwell, S.A. |
| Arthur's Seat | NT275725 | 1995 | Maxwell, S.A. |
| Arthur's Seat | NT279727 | 1995 | Maxwell, S.A. |

Fumaria bastardi Boreau

Tall Ramping-fumitory

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native annual is scattered mainly in the west of Britain, where it grows in arable and waste ground and hedgerows. In Midlothian the few records have been from both inland and coastal sites, and since 2000 have all been from disturbed ground.

| Location | Grid Ref | Date | Recorder |
|-----------------------------------|----------|------------|----------------|
| Granton Harbour | NT2377 | 1981 | Stewart, O.M. |
| West Calder (south side of B7008) | NT002628 | 01/08/2003 | McHaffie, H.S. |
| West Calder | NT022628 | 01/08/2003 | McHaffie, H.S. |

| | | | |
|-------------------|----------|------------|----------------|
| Edinburgh Airport | NT150732 | 19/06/2006 | McHaffie, H.S. |
|-------------------|----------|------------|----------------|

Fumaria capreolata L.

White Ramping-fumitory

National Status: Not Scarce; IUCN: LC; SBL: >25% decline.
Midlothian Status: Scarce.

Nationally this native annual is scattered, and is absent from much of Scotland. In Scotland the plant has shown significant decline, recognised by the SBL. It grows in arable fields, hedgerows and waste ground. The British subspecies [subsp. *babingtonii* (Pugsley) P.D. Sell] is endemic. In Midlothian the recent sites have been few and scattered through the Vice-county. The record from 2000 (see table below) was from agricultural set-aside. In 1824 there were records from Redhall, from near Craigmillar Castle and from fields near the new Botanic Garden. The Braid Hills were reported in 1825 (see below). In 1863 and 1894 the plant was still at Craigmillar, but was also found at Currie, Corstorphine and Salisbury Crags. In 1934 the species was recorded at Craigmillar, Currie and Ratho.

| Location | Grid Ref | Date | Recorder |
|--------------------|----------|------------|---------------|
| Braid Hills | NT27 | 07/1825 | Lloyd, G. |
| Livingston | NT0668 | 1981 | BSS surveyor |
| Craigpark | NT1270 | 1981 | BSS surveyor |
| North of Muirhouse | NT4745 | 1986 | Learmonth, R. |
| Stagehall Farm | NT448440 | 25/08/2000 | Gaskell, L. |

Fumaria parviflora Lam.

Fine-leaved Fumitory

National Status: Scarce; IUCN: VU.
Midlothian Status: Rare.

Nationally this annual archaeophyte is found on arable land, especially on chalk, and mostly in the east, south-east and south-centre of Britain. It used to be found, rarely, in eastern Scotland. The species is one of those being studied in the BSBI "Threatened Plants Project". In Midlothian this plant is a casual, but has been included in this *Register* because of its conservation status. It is said to be a grain alien and was found at Leith and Slateford before 1934. There has been only one record of the species since 1970, on a heap of earth at Edinburgh Castle, where works were in progress. Heap and plant have now disappeared, but it is perhaps too early to assume that the species is extinct in the Vice-county.

| Location | Grid Ref | Date | Recorder |
|------------------|----------|------------|-------------|
| Edinburgh Castle | NT2573 | 05/07/2010 | Muscott, J. |

Fumaria purpurea Pugsley

Purple Ramping-fumitory

National Status: Scarce; IUCN: LC; UK BAP, 2007; SBL: >25% decline.
Midlothian Status: Scarce.

Nationally this native annual is sparsely scattered over Britain, in arable and waste ground or hedgerows. In Scotland the species has shown significant decline, recognised by the SBL. In Midlothian the plant is scarce and has been found in similar habitats to those above. The species was recorded at Cramond in 1913

(below) and in 1934. Otherwise, the sites have been scattered.

| Location | Grid Ref | Date | Recorder |
|---------------------------|----------|------------|-------------------------------|
| Currie | NT1867 | 04/07/1835 | Anon. |
| Lothianburn | NT2567 | 1869 | Evans, W.W. |
| Cramond | NT1876 | 1913 | Fraser, J. |
| Cockpen | NT3263 | 1983 | Stewart, O.M. |
| Granton | NT2377 | 1985 | Stewart, O.M. |
| Musselburgh | NT37 | 01/10/1994 | Stewart, O.M. |
| Damhead | NT260663 | 30/05/1997 | Dixon, C. |
| Wallace Crescent, Roslin | NT2763 | 10/06/1997 | Dixon, C. |
| West Calder | NT023628 | 01/08/2003 | McHaffie, H. |
| Ravelrig Quarry, Balerno | NT140669 | 27/06/2003 | Hawker, D. |
| Whitburgh Mains | NT406632 | 23/05/2006 | Gaskell, L. |
| Queensferry Road/Braehead | NT181753 | 17/05/2006 | McHaffie, H.S. & McKean, D.R. |
| Grange Cemetery | NT2571 | 02/08/2011 | Muscott, J. |

Gagea lutea (L.) Ker Gawl.

Yellow Star-of-Bethlehem

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

This native perennial is scattered in Britain, reaching north to central Scotland. It grows in damp, base-rich ground in woods, hedgerows and fields. In Midlothian the species has been found mostly on wooded riversides, especially along the R. Esk and its northern and southern tributaries. In 1841 the species was abundant by the Breich Water, and in 2002 (see below) was recorded downstream of this river by the R. Almond. However, the most recent record was not from a wooded riverside, but from a garden, where the plant was self-sown (2013, below).

| Location | Grid Ref | Date | Recorder |
|--------------------------------|-----------|------------|--------------------------|
| Newbattle | NT36 | 1839 | Sibbald, A. |
| Dalkeith Woods | NT36 | 1847 | Balfour, J.H. |
| River Esk, Whitecraig Wood | NT3470 | 02/04/1946 | Davidson & Evans, W.E. |
| Cowpits (Whitecraig Wood) | NT3470 | 1958 | Beattie, E.P. |
| River South Esk, Millholm Ford | NT3263 | 1967 | Basden, E.B. |
| Hardengreen | NT3265 | 1981 | BSS surveyor |
| Cowpits (Whitecraig Wood) | NT3470 | 28/05/1988 | McKean, D.R. |
| Lady Lothian Wood | NT328652 | 06/04/1991 | Winham, J. & Muscott, J. |
| River Esk, Whitecraig Wood | NT347707 | 27/03/1999 | Glendinning, D. |
| River Almond, Cramond | NT183762 | 30/03/2002 | Murray, J. |
| Dalhousie Mains Cottages | NT324650§ | 10/07/2013 | Pendlebury, B. |

Galeopsis speciosa Mill.

Large-flowered Hemp-nettle

National Status: Not Scarce; IUCN: VU; SBL: >25% decline.

Midlothian Status: Not Scarce.

Nationally this annual archaeophyte is locally common in the centre and north of Britain, but is scattered and rare in the south. The species grows in arable fields, especially among root crops in peaty ground, and on waste ground. In Scotland the

species has shown significant decline, recognised by the SBL. In Midlothian it is still locally common. Since 1970 there have been 77 records from over 70 sites, but the species has been included in this *Register* because of its conservation status. The plant is especially common in arable fields (root crops) and set-aside along the valley of the Gala Water, but it has also been found elsewhere in fields, waste and disturbed ground. A few examples are shown in the table below.

| Location | Grid Ref | Date | Recorder |
|-------------------------------|-----------|------------|-------------------------------|
| Addiewell | NS96 | 1971 | Beattie, E.P. |
| King's Buildings | NT27 | 1976 | Muscott, J. |
| West of Stagehall | NT4444 | 1987 | Learmonth, R. |
| Haltree Rings | NT4051 | 1990 | Learmonth, R. |
| South of Cockburnhill | NT1463 | 06/07/1994 | Whitehouse, C. & McKean, D.R. |
| South of Burdiehouse | NT2666 | 01/08/1999 | Dixon, C. |
| Water of Leith, Juniper Green | NT1968 | 2007 | Badenoch, C. |
| Bowshank | NT451414§ | 05/08/2010 | Sumner, B.E.H. |
| Kilcoulter area | NT4052 | 29/08/2013 | Sumner, B.E.H. |

Galium x pomeranicum Retz. (**G. verum** x **G. album**)

National Status: Not designated; IUCN: Not designated.

Midlothian Status: Rare.

Nationally this native hybrid occurs with the parents, and is frequent as far north as Moray, but is rare in Ireland. In Midlothian the records have been from the south-east of the Vice-county, in scrub and woodland, and on a grassy bank beside the road (A7).

| Location | Grid Ref | Date | Recorder |
|-----------------------------|----------|------------|---------------|
| Fountainhall, near | NT4249 | 1981 | Little, M. |
| Stow, 2 miles north-east of | NT44 | 13/07/1984 | Learmonth, R. |
| Middleton Moor | NT373585 | 1989 | Little, M. |
| Middleton Moor | NT374585 | 1989 | Little, M. |

Galium sternerii Ehrend.

Limestone Bedstraw

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

This native perennial species is found locally in north-west Britain in base-rich grassland or among rocks. In Midlothian it has been recorded in hill districts, in short turf, on dry banks and rocky slopes, and at the foot of a wall. Habbie's Howe, Gladhouse Reservoir and Dundreich Plateau are SSSIs.

| Location | Grid Ref | Date | Recorder |
|------------------------------|----------|------------|------------------------------|
| Habbie's Howe, near Loganlea | NT1962 | 07/1836 | McNab, G. |
| Loganlea | NT16 | 02/07/1953 | Henderson, D.M. & Burt, B.L. |
| Glencorse Reservoir | NT26 | 02/07/1953 | Henderson, D.M. & Burt, B.L. |
| Gladhouse | NT2952 | 1998 | McKean, D.R. |
| Loganlea Reservoir | NT1962 | 1998 | McKean, D.R. |
| Dundreich, Moorfoot Hills | NT25 | 18/07/1998 | McKean, D.R. & |

| | | | |
|------------------------------|----------|------------|--------------------------|
| | | | Maxwell, S.A. |
| Habbie's Howe, near Loganlea | NT1861 | 22/08/2004 | McKean, D.R. & Dixon, C. |
| Loganlea Reservoir | NT196625 | 20/07/2013 | Harmsworth, N. |

Genista tinctoria L.

Dyer's Greenweed

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

This native species is a small perennial shrub, of which the more widely distributed subspecies (subsp. *tinctoria*) is found as far north as southern Scotland. It grows in rough grassland and on banks. In Midlothian this species is said to be introduced (Smith *et al.*, 2002). There has been only one recent record, from the shore at Granton, and it may have been planted. Before 1934 the species grew in the Pentland Hills, where it had been recorded previously in 1894 and 1824.

| Location | Grid Ref | Date | Recorder |
|-------------------------|----------|------------|---------------------------------|
| Granton (Caroline Park) | NT2277 | 23/06/1999 | Pilling, E., Muscott, J. et al. |

Gentianella amarella (L.) Börner

Autumn Gentian

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally, three subspecies are recognised for this native annual or biennial, and subsp. *amarella* is the one which occurs in the Lothians. It is said to be locally frequent south of Angus, and grows on basic grassland and dunes. In Midlothian this plant has been recorded in grassland by a disused lime quarry and on a concreted area of a former industrial site. In 1863 the species was recorded at Roman Camp (near Dalkeith).

| Location | Grid Ref | Date | Recorder |
|-------------------------------|-----------|------------|--------------------------|
| Middleton | NT3558 | 05/10/1965 | Muirhead, C.W. |
| Middleton | NT356574 | 04/08/1994 | McKean, D.R. & Dixon, C. |
| Millerhill, waste ground near | NT322705§ | 14/08/2011 | Milne, R.I. |

Gentianella campestris (L.) Börner

Field Gentian

*National Status: Not Scarce; IUCN: VU; UK BAP, 2007; SBL: listed.**Midlothian Status: Rare.*

Nationally this native annual or biennial is locally common in north Britain, and is found on grassland and dunes. In Midlothian there has been only one recent record, from grassland beside a stream near Mount Lothian. In the 19th century there were records from the coast at Leith, from Caroline Park near Granton, from Holyrood Park and from the Pentland Hills. In 1934 it was recorded only in the Pentland Hills.

| Location | Grid Ref | Date | Recorder |
|-----------------|----------|------------|-----------|
| Fullarton Water | NT283564 | 17/08/1997 | Dixon, C. |

Geranium sanguineum L.

Bloody Crane's-bill

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

This showy native perennial has a local and mostly coastal distribution in Britain. It is found in calcareous grassland, on rocks and dunes, and in sparse woods. It is also naturalised in other places from garden escapes. In Midlothian this plant grows on rocks and grassland in and around Holyrood Park (Arthur's Seat SSSI), and on rocky sites and waste ground elsewhere. At the disused Monktonhall coal bing, near Millerhill, the pink form (var. *striatum* Weston) was recorded in 2009 and 2010. The species has been recorded in Holyrood Park since at least 1809, when Maughan said the plant was abundant on rocks at Arthur's Seat. In 1824 and 1894 the plant was recorded on Salisbury Crags as well as Arthur's Seat.

| Location | Grid Ref | Date | Recorder |
|---|-----------|------------|-------------------------------|
| Trinity | NT2476 | 1981 | Hobson, P.M. |
| Duddingston Golf Course (Loch and Bawsinch) | NT2872 | 1992 | Muscott, J. |
| Duddingston Road West | NT289721 | 08/06/1995 | Maxwell, S.A. |
| Salisbury Crags, Holyrood Park | NT279728 | 17/06/1998 | McKean, D.R. & Maxwell, S.A. |
| Niddrie | NT37A | 13/06/2003 | Maxwell, S. |
| Monktonhall bing, near Millerhill | NT322704 | 2009 | Milne, R.I. |
| Monktonhall bing, near Millerhill | NT322704§ | 12/07/2010 | McKean, D.R. |
| Holyrood Park | NT274730§ | 05/05/2011 | McHaffie, H.S. & McKean, D.R. |
| Arthur's Seat | NT277726§ | 22/05/2012 | Young, G. et al. |
| Easter Craiglockhart Local Nature Reserve | NT231709§ | 22/07/2013 | Dawson, K.T. |

Glaux maritima L.

Sea-milkwort

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this tiny native perennial occurs around the coasts of Britain and in a few inland saltmarshes. In Midlothian the species has been recorded on the shore around Granton (all in the same kilometre square), and at Seafield and Cramond Island, so this suggests rarity, rather than scarcity.

| Location | Grid Ref | Date | Recorder |
|------------------------------|----------|------------|------------------------------|
| Granton Harbour (west of) | NT27 | 1957 | Beattie, E.P. |
| Lower Granton Road | NT2477 | 1981 | Hobson, E. |
| Granton Harbour (East) | NT2477 | 1981 | MacGilvray, A., Hobson, P.M. |
| Cramond Island | NT1978 | 1985 | McKean, D.R. |
| Seafield | NT295755 | 02/01/1998 | McKean, D.R. |
| Granton Gas Works (north of) | NT2477 | 07/01/1998 | McKean, D.R. |
| Cramond Island | NT196786 | 1998 | McKean, D.R. |

Glebionis segetum (L.) Fourr.

Corn Marigold

*National Status: Not Scarce; IUCN: VU.**Midlothian Status: Scarce.*

Nationally this annual archaeophyte (formerly *Chrysanthemum segetum*) is locally frequent in Britain, as a naturalised weed of arable fields or a casual on waysides and waste ground. The species is one of those being studied in the BSBI "Threatened Plants Project". In Midlothian this plant is a casual, but has been included in this *Register* because of its conservation status. Recent records have been from waste ground, a canal embankment, and around a car park (where it was part of a wildflower planting). In 1824 Greville said the plant was common, but cleared by farmers. In 1863 it was recorded at Dalhousie and in 1945 it was common in fields at Hallyards (see table).

| Location | Grid Ref | Date | Recorder |
|-------------------------------------|----------|------------|----------------------------|
| Hallyards, near Newbridge | NT1373 | 22/06/1945 | Evans, W.E. |
| Granton | NT27 | 12/08/1955 | Beattie, E.P. |
| St. James Complex | NT2574 | 28/07/1975 | Beattie, E.P. |
| Millerhill | NT3270 | 06/1988 | McKean, D.R. |
| Gogar Park | NT1772 | 1989 | McKean, D.R. |
| Slateford Road | NT223708 | 20/07/2003 | Maxwell, S.A. |
| Roslin Glen Country Park - Car Park | NT272628 | 27/09/2011 | Muscott, J. & Clarkson, M. |

Glyceria x pedicellata F. Towns. (**G. fluitans x G. notata**)

Hybrid Sweet-grass

*National Status: Not designated; IUCN: Not designated.**Midlothian Status: Rare.*

Nationally this native hybrid is scattered over most of Britain in wetlands and watersides with both, one or neither of the parents. In Midlothian the hybrid has been found by streamsides and in a marsh in widely separated locations. Neither of the parents is scarce in the Vice-county.

| Location | Grid Ref | Date | Recorder |
|---------------------|----------|------------|---------------|
| Stow, north-east of | NT4745 | 01/09/1986 | Learmonth, R. |
| Stow, north-east of | NT4745 | 24/06/1987 | Learmonth, R. |
| Penicuik Estate | NT213583 | 05/1998 | Watson, K. |
| Burdiehouse Burn | NT2767 | 1999 | Maxwell, S.A. |

Gnaphalium sylvaticum L.

Heath Cudweed

*National Status: Not Scarce; IUCN: EN; SBL: >25% decline.**Midlothian Status: Scarce.*

Nationally this native perennial is still locally frequent in Britain, but has decreased in recent years. In Scotland the decline has been significant enough to be recognised by the SBL. The species is found on open ground on woodland rides, heaths and banks. In Midlothian the plant has been recorded in seven sites since 1970, on disused railway tracks, gravel, verges and short heath grassland. Searches in 2012 and 2013 failed to re-find the species at the Penicuik Estate site (1994 in the table

below) and the site near South Melville (1997 in table). Maggie Bowie's Wood is within a SSSI, and Cobbinshaw Moss and part of Cobbinshaw Reservoir are SSSIs. Historically the species was recorded in the Pentland Hills and at Roslin (1824, 1863 and 1934), Figgate Whins (1824), Currie (1863 and 1934) and Comiston (1934).

| Location | Grid Ref | Date | Recorder |
|---|----------|------------|----------------------------|
| Marfield, near Nine Mile Burn | NT15 | 02/08/1941 | Anon. |
| West Calder | NT06 | 1960 | Beattie, E.P. |
| Currie | NT1867 | 1960 | Beattie, E.P. |
| Maggie Bowie's Wood, near Tynehead | NT36 | 21/07/1963 | Beattie, E.P. |
| Cobbinshaw | NT05 | 23/07/1968 | Beattie, E.P. |
| Penicuik Estate | NT25 | 1971 | Beattie, E.P. |
| East of Reservoir House (Torpin Quarry) | NT0359 | 1981 | McKean, D.R. |
| West of Polton (Springfield House) | NT2864 | 1985 | Muscott, J. |
| Bilston Colliery | NT2764 | 25/09/1993 | McKean, D.R. |
| West Long Livingston | NT0266 | 10/05/1994 | Muscott, J. & McKean, D.R. |
| Penicuik Estate | NT226592 | 30/08/1994 | Findlay, M. |
| North of Black Hill (Harlaw Reservoir) | NT1864 | 31/08/1994 | McKean, D.R. |
| River North Esk, South Melville | NT310669 | 07/1997 | Dixon, C. |

Goodyera repens (L.) R. Br.

Creeping Lady's-tresses

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Rare.

This native orchid is locally distributed in northern Britain southwards to Cumberland, and is found in relatively bare ground under pines or birches. Rarely, it occurs on moist dunes. In Midlothian there has been only one recent record, from a pine wood near Stow. Historically it was found in woods at Auchendinny and Fountainhall.

| Location | Grid Ref | Date | Recorder |
|--------------|----------|---------|------------|
| Auchendinny | NT26 | 07/1865 | Sadler, J. |
| Fountainhall | NT44 | 05/1906 | Evans, W. |
| Stow | NT4743 | 1984 | Nield, P. |

Gymnadenia borealis (Druce) R.M. Bateman, Pridgeon & M.W. Chase

Heath Fragrant-orchid

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

Nationally this native orchid (formerly *Gymnadenia conopsea* subsp. *borealis*) occurs in hill grassland (whether base-rich or not) in Scotland, north and south-west England and west Wales. In southern England bogs are also colonised. In Midlothian the records have been from limestone grassland, heath grassland, a railway bank, a streamside, and a marsh beside a disused bing. The Linhouse Water site was within the Linhouse Glen Nature Reserve (SWT). Before 1900 the species was recorded at Brunstane, Auchendinny, Tynehead, Currie, Dalmahoy and Hallyards Castle.

| Location | Grid Ref | Date | Recorder |
|-----------------------------------|------------|------------|--------------------------|
| Esperston Quarry (near) | NT339575 | 1970 | Beattie, E.P. |
| Linhouse Water | NT075646 | 1993 | Maxwell, S.A. |
| Linhouse Water | NT074644 | 1994 | Young, S. |
| Middleton Lime works (west of) | NT351579 | 1994 | McKean, D.R. & Dixon, C. |
| Monktonhall bing, near Millerhill | NT31897111 | 12/07/2010 | McKean, D.R. |

Gymnadenia densiflora (Wahlenb.) A. Dietr.

Marsh Fragrant-orchid

*National Status: See below; IUCN: Data Deficient.**Midlothian Status: Rare.*

Nationally this native orchid (formerly *Gymnadenia conopsea* subsp. *densiflora*) has an uncertain distribution owing to data deficiency. Preferred habitats are base-rich fens and north-facing chalk grassland. In Midlothian the species has been recorded on lime-rich grassy banks, facing in various directions.

| Location | Grid Ref | Date | Recorder |
|--------------------------|-----------|------------|--|
| Borthwick (near) | NT3659 | 18/07/1835 | Balfour |
| Middleton Lime works | NT356580 | 1982 | Muscott, J. |
| Esperston, north-east of | NT345576§ | 08/07/2012 | Maxwell, S.A., McKean, D.R. & Sumner, B.E.H. |
| Esperston, north-east of | NT341575§ | 08/07/2012 | Maxwell, S.A., McKean, D.R. & Sumner, B.E.H. |

Helminthotheca echioides (L.) Holub.

Bristly Oxtongue

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this annual-to-biennial archaeophyte (formerly *Picris echioides*) is frequent in southern and central Britain but more scattered further north to central Scotland. It is naturalised in disturbed, marginal, rough and waste ground. In Midlothian the species was recorded as a garden weed at Corstorphine in 1995. In 1934 it was found at Leith, Murrayfield and Slateford.

| Location | Grid Ref | Date | Recorder |
|--------------|----------|------|-------------|
| Downie Grove | NT2273 | 1995 | Adamson, D. |

Hieracium argenteum Fr.

Silvery Hawkweed

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native perennial is widespread in central and northern Scotland, but more scattered in southern Scotland, and in parts of northern England, Wales and Ireland. It grows on rocks, cliffs and grassy banks, often on limestone. In Midlothian the two authenticated records have been from rocks on Arthur's Seat, Holyrood Park,

which is a SSSI.

| Location | Grid Ref | Date | Recorder |
|-----------------------------|----------|------------|---------------|
| Arthur's Seat | NT27 | 07/1839 | Ball, J. |
| Arthur's Seat, Raven's Rock | NT273727 | 05/07/1984 | Learmonth, R. |

Hieracium latobrigorum (Zahn) Roffey

Yellow-styled Hawkweed

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Rare.

This native perennial is frequent and widespread in northern Britain. In Midlothian the one authenticated record was from a wooded glen, which is a SSSI.

| Location | Grid Ref | Date | Recorder |
|-------------|----------|------------|---------------|
| Roslin Glen | NT2864 | 18/07/1976 | Beattie, E.P. |

Hieracium prenanthoides Vill.

Rough-leaved Hawkweed

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Rare.

This native leafy perennial is quite frequent in central Scotland, but more local in southern Scotland and northern England. In Midlothian the upland records have been from rocky cliffs and cleuchs in the hills, one of them near a waterfall. The Auchendinny records were from woods in 1868 and a bridge verge in 1998. All the sites except Auchendinny are SSSIs.

| Location | Grid Ref | Date | Recorder |
|-------------------------------|----------|------------|----------------------------|
| Habbie's Howe (near Loganlea) | NT1861 | 09/1823 | Balfour, J.H. |
| Auchendinny | NT2561 | 07/1868 | Evans, W.W. |
| Habbie's Howe (near Loganlea) | NT1861 | 06/1990 | McCosh, D.J. |
| Rose Cleugh, Moorfoot Hills | NT295494 | 18/07/1998 | McKean, D.R. & Maxwell, S. |
| Auchendinny | NT252617 | 22/09/1998 | McKean, D.R. |

Hieracium reticulatiforme P.D. Sell

Reticulate-leaved Hawkweed

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Rare.

This British endemic is widespread from Yorkshire to Sutherland. It is the most widespread of the microspecies in the aggregate of *H. reticulatum* Pugsley. In Midlothian there has been only one authenticated record, from a wooded riverside which is a SSSI.

| Location | Grid Ref | Date | Recorder |
|--------------------------|----------|------------|---------------|
| Roslin Glen, near Polton | NT2864 | 18/07/1976 | Beattie, E.P. |

Hieracium rubicundiforme (Zahn) Roffey

Rubicund Hawkweed

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

This species is endemic to the UK and occurs especially in northern England and southern Scotland, getting sparser further north and south. Two of the Midlothian records of *Hieracium rubicundiforme* were formerly determined as *H. caledonicum*, but the latter species has now been split, enabling *H. rubicundiforme* to be recognised separately. All three sites are SSSIs.

| Location | Grid Ref | Date | Recorder |
|--|----------|------------|----------------|
| Loganlea | NT1962 | 20/06/1954 | Muirhead, C.W. |
| River North Esk, Fairliehope (above Carlops) | NT1556 | 29/06/1985 | McCosh, D.J. |
| Arthur's Seat | NT2773 | 1989 | Saville, R. |
| Loganlea | NT1861 | 07/06/1990 | McCosh, D.J. |

Hieracium rubiginosum F. Hanb.

Rusty-red Hawkweed

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

This species is endemic to the UK and is scattered in the northern half of Britain. The two authenticated Midlothian records were from SSSIs in the Pentland Hills. One was found near a waterfall above Loganlea, and the other beside the River North Esk above Carlops.

| Location | Grid Ref | Date | Recorder |
|--------------------|----------|------------|----------------|
| Loganlea | NT16 | 08/08/1954 | Muirhead, C.W. |
| Carlops (north of) | NT156565 | 07/07/1979 | McCosh, D.J. |

Hieracium subhirtum (F. Hanb.) Pugsley

Hairy-headed Hawkweed

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

This species is a Scottish endemic, common in Perthshire and Inverness-shire, but scattered elsewhere in Scotland. In Midlothian the species was found in the waterfalls area (SSSI) upstream of Loganlea Reservoir.

| Location | Grid Ref | Date | Recorder |
|----------|----------|------------|--------------|
| Loganlea | NT182618 | 07/06/1990 | McCosh, D.J. |

Honckenya peploides (L.) Ehrh.

Sea Sandwort

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this low-growing, native, perennial succulent is common on sandy beaches and shingle all round the coasts of Britain. In Midlothian, even though this plant has been recorded on several sandy beaches (or seaside walls) along the coast since

1970, suitable sites are scarce. A similar scatter of coastal sites was found in 1863, when the species was recorded at Musselburgh Links, Leith Sands and between Caroline Park (near Granton) and Cramond. The Firth of Forth shoreline is a SSSI.

| Location | Grid Ref | Date | Recorder |
|----------------------------|-----------|------------|----------------|
| Cramond | NT1877 | 1955 | Beattie, E.P. |
| Granton | NT27 | 1955 | Beattie, E.P. |
| Seafield | NT27 | 1955 | Beattie, E.P. |
| Fisherrow | NT3373 | 1956 | Beattie, E.P. |
| Fisherrow Harbour | NT3373 | 1994 | Learmonth, R. |
| Joppa, Portobello | NT3074 | 1998 | McKean, D.R. |
| Granton Harbour (east of) | NT2477 | 1998 | McKean, D.R. |
| Silverknowes | NT2077 | 05/10/1999 | McKean, D.R. |
| Fisherrow Links | NT3373 | 01/06/2011 | Sumner, B.E.H. |
| Fisherrow Links | NT3473 | 01/06/2011 | Sumner, B.E.H. |
| Cramond Island | NT1978 | 08/06/2011 | Sumner, B.E.H. |
| West of Portobello | NT302745 | 03/06/2013 | Sumner, B.E.H. |
| Granton, promenade west of | NT212769§ | 06/07/2013 | Sumner, B.E.H. |
| Granton, west of harbour | NT226773 | 06/07/2013 | Sumner, B.E.H. |
| Marine Esplanade, Leith | NT2876 | 27/07/2013 | Dawson, K.T. |

Huperzia selago (L.) Bernh. ex Schrank & Mart.

Fir Clubmoss

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

This native clubmoss is found on heaths, moors and mountains. It has two subspecies, of which the distribution of subsp. *selago* is better known than that of subsp. *arctica*. The latter is said to be rare in Scotland, but the former is commoner. In Midlothian the subspecies have not been recorded. Since 1970 the species has been recorded at various sites in the Pentland and Moorfoot Hills (some within SSSIs), but in 1965 the record was from a slightly lower-altitude site at Brunstane Castle. In 1824 this clubmoss was found in the Pentland Hills above Swanston, and in 1934 at Tynehead and Balerno.

| Location | Grid Ref | Date | Recorder |
|----------------------------|----------|------------|------------------------------|
| Brunstane Castle, Penicuik | NT208583 | 1965 | Dixon, C. |
| Rowantree Law | NT068561 | 1976 | Heern, K. |
| The Kipps (west of) | NT2949 | 1981 | Dixon, C., McKean, D.R. |
| Huntley Cot Hills | NT3151 | 1983 | McKean, D.R. |
| Jeffries Corse | NT2949 | 1983 | Stewart, N.F. |
| Moorfoot Hills | NT292495 | 1992 | Dixon, C. |
| Dundreich | NT298497 | 1993 | Dixon, C. |
| Huntley Cot Hills | NT310515 | 1993 | Dixon, C. |
| Huntley Cot Hills | NT316517 | 1993 | Dixon, C. |
| Moorfoot Hills | NT293491 | 1993 | Dixon, C. |
| Moorfoot Hills | NT282505 | 1993 | Dixon, C. |
| New Moss, Moorfoot Hills | NT303494 | 1993 | Dixon, C. |
| Dundreich, Moorfoot Hills | NT2949 | 18/07/1998 | McKean, D.R. & Maxwell, S.A. |

Hydrocotyle vulgaris L.

Marsh Pennywort

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

This native perennial is locally common throughout Britain in boggy or marshy areas, fens and lake margins. In Midlothian the species has been recorded in marshes and margins of lochs and reservoirs but is not now common. In 1824 the plant appears to have been common in marshes of the Braid and Pentland Hills, Holyrood Park, Duddingston Loch, Lochend, etc., and in 1863 further sites were Ravelrig and Borthwick. In 1894 the species was still said to be common. Of the sites in the table below, Duddingston Loch is a SSSI.

| Location | Grid Ref | Date | Recorder |
|---|-----------|------------|--------------------|
| Threipmuir | NT16 | 1946 | Anthony, G. |
| Duddingston Loch | NT2872 | 20/06/1956 | Beattie, E.P. |
| Duddingston Loch | NT2872 | 1980 | McKean, D.R. |
| Brick Works (west of Roslin) | NT2663 | 1991 | Longstaff, M. |
| Threipmuir Reservoir | NT173640 | 1992 | Dixon, C. |
| Loganlea Reservoir | NT191621 | 1993 | McKean, D.R. |
| Harlaw Reservoir | NT180648 | 1993 | Dixon, C. |
| Ravelrig Hill | NT1466 | 15/06/1993 | McKean, D.R. |
| Bonaly Reservoir | NT26 | 15/07/1993 | McKean, D.R. |
| Black Springs, Threipmuir | NT189643 | 20/06/1999 | Sumner, B.E.H. |
| Harlaw & Threipmuir Reservoirs (track on eastern shores) | NT1864 | 25/07/2009 | Muscott, J. & ENHS |
| Black Springs | NT189643§ | 02/08/2013 | Sumner, B.E.H. |
| Threipmuir Reservoir | NT169637§ | 02/08/2013 | Sumner, B.E.H. |

Hyoscyamus niger L.

Henbane

*National Status: Not Scarce; IUCN: VU; SBL: >25% decline.**Midlothian Status: Rare.*

This annual-to-biennial archaeophyte is scattered in Britain, and reaches north to central Scotland. In Scotland the species has shown significant decline, recognised by the SBL. The plant is found on sand and shingle at the coast, and inland in rough and waste places. In Midlothian there have been only three records from 1970 onwards, and two of those were from the same kilometre square. At Warriston the non-cemetery record was from a railway embankment, and at Cramond Island the habitat was grassland. The shore of the island is within the Firth of Forth SSSI. In 1824 there were records from fields by the shore and at Lochend, and in 1824 and 1894 from Salisbury Crags. In 1934 the species was found at Slateford.

| Location | Grid Ref | Date | Recorder |
|--------------------|----------|------------|---------------|
| Arthur's Seat | NT27 | 25/06/1959 | Lamond, J. |
| Leith Docks | NT27 | 06/1960 | Beattie, E.P. |
| Borthwick | NT36 | 08/1964 | Beattie, E.P. |
| Warriston | NT2575 | 10/07/1969 | Beattie, E.P. |
| Warriston Cemetery | NT2575 | 10/07/1969 | Beattie, E.P. |
| Warriston | NT2575 | 01/07/1970 | Beattie, E.P. |
| Warriston Cemetery | NT2575 | 1975 | Beattie, E.P. |
| Cramond Island | NT1978 | 16/02/1997 | McKean, D.R. |

Hypericum x desetangsii Lamotte (**H. perforatum x H. maculatum**)

Des Etang's St. John's-wort

*National Status: Not designated; IUCN: Not designated.**Midlothian Status: Scarce.*

This native hybrid is partially fertile, and variable owing to backcrossing. Although often overlooked, it appears to be sparse in Britain, and scattered as far north as central Scotland, in variably damp grassland. In Midlothian the records have been from rough grass, watersides and rather bare waste ground, in scattered locations.

| Location | Grid Ref | Date | Recorder |
|---|-----------|------------|-------------------------------------|
| Leadburn, near | NT2456 | 1985 | Cottrell, J.E. |
| Walltower | NT2457 | 1993 | Cottrell, J.E. |
| Blackhall, south-west of Morton Reservoir | NT0662 | 1994 | Muscott, J. |
| Duddingston Road | NT288721 | 1999 | Luxmoor, S. |
| Granton (Caroline Park) | NT227773 | 04/07/1999 | Pilling, E., Muscott, J. et al. |
| Monktonhall bing, near Millerhill | NT3170 | 09/07/2011 | Silverside, A.J. |
| Monktonhall bing, near Millerhill | NT318710 | 09/07/2011 | Silverside, A.J., Milne, R.I. & BSS |
| Millerhill, waste ground near | NT3270 | 09/07/2011 | Silverside, A.J. |
| R. Almond, Edinburgh Airport to Cramond | NT159754§ | 16/07/2013 | McKean, D.R. |

Hypericum humifusum L.

Trailing St. John's-wort

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native perennial is frequent through much of Britain in hedgerows, open woods and heaths, mostly on dry acid soil. In Midlothian the species has been found on railway embankments and roadside verges scattered through the Vice-county. Roslin Glen and the Cobbinshaw area are SSSIs. Historically the plant was found at Dalmahoy, the Pentland Hills (Hillend) and Roslin (1824 and 1934). In 1824 at Roslin the plant was found on roadsides and in fields about the village.

| Location | Grid Ref | Date | Recorder |
|-------------------|----------|------------|--------------------------|
| Cobbinshaw | NT05 | 1971 | Beattie, E.P. |
| Crookston | NT4251 | 1971 | Beattie, E.P. |
| Huntley Cot Hills | NT3151 | 1983 | McKean, D.R. |
| Stow (near) | NT4645 | 1992 | Smith, A.J. & Little, M. |
| Rosewell | NT287620 | 19/08/1997 | Dixon, C. |
| Roslin Glen | NT267620 | 1998 | Crowther, N. |

Imperatoria ostruthium L.

Masterwort

*National Status: Scarce; IUCN: NT.**Midlothian Status: Rare.*

Nationally this perennial archaeophyte (formerly *Peucedanum ostruthium*) is naturalised in grassy areas, marshes and riversides, but is scattered and decreasing

in northern Britain. In Midlothian there has been only one recent record, from a roadside verge. In 1809 and 1824 the species was found near Borthwick Castle.

| Location | Grid Ref | Date | Recorder |
|----------|----------|------|-------------|
| Stow | NT44 | 1994 | Adamson, D. |

Inula helenium L.

Elecampane

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Rare.

Nationally this perennial archaeophyte is found in marginal habitats, waysides, rough ground and fields throughout Britain, but is scattered and decreasing. In Midlothian the species has been recorded at a woodland edge and a streamside in Edinburgh, and in wooded country estates south-east of the city. At Bawsinch (SWT reserve) it may have been planted. In 1934 the species was found at Prestonhall.

| Location | Grid Ref | Date | Recorder |
|---|----------|------------|--------------------|
| Vogrie Estate | NT36 | 1955 | Beattie, E.P. |
| Duddingston Golf Course (Loch and Bawsinch) | NT2872 | 1992 | Muscott, J. |
| Bawsinch | NT2872 | 1993 | Muscott, J. |
| Clermiston Road North | NT203746 | 1999 | McKean, D.R. |
| Mavisbank | NT2865 | 02/06/2004 | Muscott, J. & ENHS |

Isatis tinctoria L.

Woad

National Status: Scarce; IUCN: LC.

Midlothian Status: Rare.

This biennial-to-perennial archaeophyte is established on cliffs in East Gloucestershire and Surrey, but is a scarce casual elsewhere in Britain. Historically the species was commoner. In Midlothian this plant occurred at Musselburgh in 1863, and was recorded there again in 1894, 1927 and 1934, but since then there have been no records except for its introduction at Bawsinch Wildlife Reserve (SWT) in 1986 (see below).

| Location | Grid Ref | Date | Recorder |
|-----------------------|----------|------|----------|
| Bawsinch, SWT Reserve | NT2872 | 1986 | Anon. |

Juncus gerardii Loisel.

Saltmarsh Rush

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Rare.

Nationally this small native perennial rush is abundant in saltmarshes around British coasts, but more scattered in saline areas inland. In Midlothian the species has been recorded in a saltmarsh and on a riverside, and has been known at Cramond since at least 1934. The shore at Cramond is within the Firth of Forth SSSI.

| Location | Grid Ref | Date | Recorder |
|----------------|----------|------|------------------------------|
| Cramond Island | NT1978 | 1967 | Beattie, E.P. |
| Cramond Island | NT1978 | 1985 | McKean, D.R. |
| Cramond Bridge | NT1775 | 1993 | Muscott, J.; McKean, D.R. |

Juncus x surrejanus Druce ex Stace & Lambinon
(**J. articulatus x J. acutiflorus**)

National Status: Not designated; IUCN: Not designated.
Midlothian Status: Rare.

This native hybrid of common native wetland species occurs with the parents all over the British Isles. It has low fertility. In Midlothian, although the parents are common, the hybrid is apparently rare. Both the sites below are in the Pentland Hills and one is a SSSI (Logan Burn Waterfalls).

| Location | Grid Ref | Date | Recorder |
|-----------------------|----------|------------|-----------------------------------|
| Threipmuir Reservoir | NT178617 | 12/09/1998 | Gouray, V. & Skuriat, J. (SWT) |
| Logan Burn Waterfalls | NT1861 | 18/08/2010 | McKean, D.R. & Sumner, B.E.H. |

Juniperus communis subsp. communis L.

Common Juniper

National Status: Not Scarce; IUCN: LC; UK BAP, 2007; SBL: listed.
Midlothian Status: Not Scarce.

Nationally this native coniferous shrub (or tree) is very local through much of Britain on calcareous and acid soils. In Midlothian since 1970 there have been 27 records, of which 24 were of self-sown plants (in 22 sites), so the species is not scarce, but is included in this *Register* because of its conservation status. Self-sown bushes have been found in gullies and on rocks, slopes and burn-sides in the hills. A few examples of the wild records are shown in the table below. Gladhouse Reservoir is a SSSI. Juniper is also planted in the Vice-county.

| Location | Grid Ref | Date | Recorder |
|--------------------------|-----------|------------|---------------|
| Blackford Hill | NT27 | 1972 | Stewart, O.M. |
| Uttershill | NT2359 | 1984 | Sydes, C. |
| Caerketton Hill | NT233662 | 1986 | McKean, D.R. |
| The Kipps | NT297497 | 1988 | McKean, D.R. |
| Gladhouse Reservoir | NT304547 | 1992 | McKean, D.R. |
| Fowie Burn, Lugate Water | NT434441 | 06/05/1996 | Singleton, R. |
| Allermuir Hill | NT233665§ | 15/11/2012 | Dawson, K.T. |

Kickxia elatine (L.) Dumort.

Sharp-leaved Fluellen

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this annual archaeophyte of arable fields and field edges is locally common from the south of Britain to the north of Lincolnshire, often on light, limey soils. In Midlothian the species has been found on a railway tip and disused railway sidings, at widely separated locations. In 1908 and 1921 the species was recorded at Leith.

| Location | Grid Ref | Date | Recorder |
|-----------|----------|------------|---------------|
| Borthwick | NT3660 | 01/08/1954 | Beattie, E.P. |
| Borthwick | NT3660 | 1986 | Stewart, O.M. |
| Currie | NT182677 | 27/08/2000 | Mill, R.R. |

Koeleria macrantha (Ledeb.) Schult.

Crested Hair-grass

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native perennial occurs through most of Britain in short turf on base-rich or sandy soils and dunes. The species is mostly coastal in the north, but mostly on calcareous soils in the south. In Midlothian the species has been found in dry grassland and on dry banks, at coastal and inland sites scattered through the Vice-county. In 2002 the records were from three points in Holyrood Park (Arthur's Seat SSSI) around the grid reference shown in the table. Holyrood Park and Blackford Hill are long-established sites for this grass, and in 1934 the Braid Hills were also reported.

| Location | Grid Ref | Date | Recorder |
|---|-----------|------------|---------------|
| Cramond Island | NT1978 | 1955 | Beattie, E.P. |
| Holyrood Park | NT27 | 1955 | Beattie, E.P. |
| Cramond Island | NT1978 | 1985 | McKean, D.R. |
| Stagehall (west of) | NT4444 | 1987 | Learmonth, R. |
| Duddingston Golf Course (Loch and Bawsinch) | NT2872 | 1992 | Muscott, J. |
| Roseberry, Temple | NT3057 | 10/08/1992 | Broom, A. |
| Dalmahoy Hill | NT1366 | 10/07/1993 | McKean, D.R. |
| Holyrood Park | NT2773 | 16/06/1998 | McKean, D.R. |
| Blackford Hill | NT2570 | 1999 | Muscott, J. |
| Arthur's Seat (Holyrood Park) | NT277725§ | 30/07/2002 | Crowther, N. |

Lamium confertum Fr.

Northern Dead-nettle

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this annual archaeophyte of cultivated and waste ground is locally frequent near the coasts of Scotland and the Isle of Man. In Midlothian the species has been found away from the coast in rough grass and in cereal and vegetable fields, towards the east and south-east of the Vice-county. In 1934 it was recorded at Duddingston.

| Location | Grid Ref | Date | Recorder |
|------------------|----------|------------|--------------|
| Hardengreen | NT3265 | 1981 | BSS surveyor |
| Stow (near) | NT4347 | 1984 | Nield, P. |
| East of Torsonce | NT4743 | 1984 | Nield, P. |
| Blackshiels | NT4361 | 1986 | Muscott, J. |
| Fala | NT4361 | 1987 | Muscott, J. |
| Easthouses | NT3465 | 01/09/1994 | McKean, D.R. |

Lathraea squamaria L.

Toothwort

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native species is locally frequent as far north as central Scotland. The plant is parasitic on woody plants, especially elm and hazel, and grows in damp woods and hedgerows on rich soils. In Midlothian there have been eight sites for this species since 1970, chiefly along the valleys of the R. Esk and its northern and southern tributaries, where the parasite has been found mostly on elm and hazel, and rarely on laurel, in woods and on wooded riversides. Roslin Glen is a SSSI. Arniston, Dalhousie, Dalkeith and Roslin are longstanding sites for this species, and in 1863 the parasite was recorded on hazel and laurel there. Other sites were Mavisbank (1768 and 1824), Auchendinny (1824) and Kevock Mill (1824 and 1863).

| Location | Grid Ref | Date | Recorder |
|---------------------|----------|------------|----------------------|
| Arniston Glen | NT35 | 30/04/1957 | Beattie, E.P. |
| Arniston Glen | NT36 | 30/04/1957 | Beattie, E.P. |
| Roslin Glen | NT26 | 29/04/1959 | Beattie, E.P. |
| Dalhousie Glen | NT36 | 02/05/1959 | Beattie, E.P. |
| Lady Lothian Wood | NT36 | 17/05/1962 | Beattie, E.P. |
| River Esk, Inveresk | NT3470 | 24/05/1972 | Stewart, N.F. & O.M. |
| Heriot | NT35 | 1973 | Beattie, E.P. |
| Hardengreen | NT3265 | 1981 | BSS surveyor |
| Dalkeith Estate | NT338682 | 1994 | Dixon, C. |
| Kirkhill | NT323624 | 1994 | Dixon, C. |
| Roslin Glen | NT279633 | 1994 | Dixon, C. |
| Inveresk | NT345714 | 1998 | Glendinging, D. |
| Dalkeith Estate | NT338682 | 06/05/2013 | Clark, I. |

Legousia hybrida (L.) Delarbre

Venus's-looking-glass

*National Status: Not Scarce; IUCN: LC; SBL: rare.**Midlothian Status: Rare.*

Nationally this annual archaeophyte of arable fields is decreasing, and is now scattered, chiefly in southern, central and eastern England, and mostly on calcareous soils. In Midlothian there has been only one recent record, from waste ground near a granary. The species is said to have been frequent around 1900 (Smith *et al.*, 2002).

| Location | Grid Ref | Date | Recorder |
|-------------|----------|------|---------------|
| Leith Docks | NT2776 | 1981 | Stewart, O.M. |

Lepidium campestre (L.) W.T. Aiton

Field Pepperwort

*National Status: Not Scarce; IUCN: LC; SBL: >25% decline.**Midlothian Status: Scarce.*

Nationally this annual-to-biennial archaeophyte is scattered and locally common in Britain, especially in the south. In Scotland the species has shown significant decline, recognised by the SBL. Its habitats include open grassland, arable fields and waysides. In Midlothian this species is scarce, with six records since 1970. In 1824 the species was found on the north bank of the Water of Leith, near St. Bernard's Well. From 1826 to 1910 (see table) records came from a number of waste-ground sites, a railway bank (Inveresk) and a sand pit (Portobello). In 1934 the species was still recorded at Leith, Portobello and Musselburgh. Subsequent records (see table) have been from waste ground, railway and other tips, paths and tracks.

| Location | Grid Ref | Date | Recorder |
|---|-----------|------------|----------------------|
| Craiglockhart | NT27 | 15/06/1826 | Balfour |
| Newhaven | NT27 | 1836 | Reid, J.R. |
| Ratho | NT17 | 18/07/1896 | Craig Christie, A. |
| Leith Docks | NT27 | 10/1902 | Fraser, J. |
| Musselburgh | NT37 | 13/06/1903 | McRae |
| Inveresk | NT37 | 30/06/1904 | Evans, W.E. |
| Portobello | NT37 | 14/07/1910 | Fraser, J. |
| Levenhall | NT37 | 1957 | Beattie, E.P. |
| Borthwick Bank | NT3660 | 1957 | Beattie, E.P. |
| Granton | NT27 | 1962 | Beattie, E.P. |
| Union Canal, Sighthill | NT17 | 07/07/1963 | Beattie, E.P. |
| Borthwick Bank | NT3660 | 10/06/1965 | McCallum Webster, M. |
| West Dock, Leith | NT27 | 05/06/1972 | Stewart, O.M. |
| Blackford Glen Road | NT2670 | 03/07/2013 | Muscott, J. |
| Hallyards, Kirkliston | NT127738 | 17/07/2013 | McKean, D.R. |
| R. Almond, north of Edinburgh Airport | NT132738 | 17/07/2013 | McKean, D.R. |
| R. Almond, Kirkliston to Boathouse Bridge | NT135738 | 17/07/2013 | McKean, D.R. |
| Quarryholes to Seafield (disused railway) | NT279754§ | 20/08/2013 | McKean, D.R. |

Lepidium coronopus (L.) Al-Shehbaz

Swine-cress

*National Status: Not Scarce; IUCN: LC; SBL: >25% decline.**Midlothian Status: Rare.*

Nationally this archaeophyte (formerly *Coronopus squamatus*) occurs through most of Britain and is found on waste ground, paths and gateways. In Scotland the species has shown significant decline, recognised by the SBL. In Midlothian there has been only one recent record, from bare ground under trees on a campus in 2010, but there is a chance that the species might have been planted. This is the first record in the Vice-county since 1934, when the species was found at Musselburgh. There was a previous record from Musselburgh in 1824, and from a roadside west of Tobago Street, Edinburgh, in the same year. Other historic records, and the recent one, are shown in the table below.

| Location | Grid Ref | Date | Recorder |
|---|-----------|------------|---------------|
| Portobello (near) | NT37 | 07/1856 | McNab, W.R. |
| Leith | NT27 | 07/1903 | Fraser, J. |
| Slateford | NT27 | 29/06/1905 | Fraser, J. |
| Leith | NT27 | 08/09/1906 | Fraser, J. |
| Craiglockhart Campus, Napier University | NT225701§ | 06/08/2010 | Patterson, A. |

Leymus arenarius (L.) Hochst.

Lyme Grass

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native, perennial, maritime grass is frequent on mobile dunes around the British coasts. In Midlothian the recent records have been scattered along the coast where suitable sandy beaches and dunes occur. The shore of the Firth of Forth is a SSSI. In 1934 the species was recorded at Leith.

| Location | Grid Ref | Date | Recorder |
|--|-----------|------------|----------------|
| Cramond | NT1877 | 1955 | Beattie, E.P. |
| Levenhall | NT37 | 1955 | Beattie, E.P. |
| Musselburgh | NT37 | 1956 | Beattie, E.P. |
| Cramond Island | NT1978 | 1985 | McKean, D.R. |
| Fisherrow Links & Goose Green, Musselburgh | NT3473 | 12/09/1987 | Jackson, E.H. |
| Fisherrow Harbour | NT3373 | 1994 | Learmonth, R. |
| Portobello | NT37 | 1998 | McKean, D.R. |
| Silverknowes | NT2077 | 1999 | McKean, D.R. |
| Fisherrow Links | NT3373 | 01/06/2011 | Sumner, B.E.H. |
| Fisherrow Links | NT3473 | 01/06/2011 | Sumner, B.E.H. |
| Levenhall Links | NT3673 | 06/06/2011 | Sumner, B.E.H. |
| Cramond Island | NT1978 | 08/06/2011 | Sumner, B.E.H. |
| Granton | NT226773§ | 09/06/2011 | Sumner, B.E.H. |
| West of Portobello | NT302745 | 03/06/2013 | Sumner, B.E.H. |
| Granton, west of harbour | NT226773 | 06/07/2013 | Sumner, B.E.H. |
| Fisherrow | NT3473 | 07/08/2013 | Sumner, B.E.H. |

Ligusticum scoticum L.

Scots Lovage

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native perennial is frequent around the coasts of Scotland and is found on maritime cliffs and rocks. In Midlothian the plant was recorded on coastal waste ground in 1966 and, more recently, on maritime cliffs and rocks. The shore of the Firth of Forth is a SSSI. The species has long been known at Cramond (1863, 1894 and 1934). In 1824 it was also found behind the glassworks at Leith.

| Location | Grid Ref | Date | Recorder |
|----------------|----------|------------|----------------|
| Seafield | NT287757 | 06/07/1966 | Beattie, E.P. |
| Cramond Island | NT197783 | 01/08/1966 | Beattie, E.P. |
| Cramond Island | NT1978 | 08/06/2011 | Sumner, B.E.H. |

Limosella aquatica L.

Mudwort

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this small native annual is declining and is now scattered in Britain from southern England to northern Aberdeenshire. It grows in wet sandy mud, at pondsides which may dry out in summer. In Midlothian the plant was recorded in 1845 at Lady Place (not yet traced), but then not seen again until the summer of 2013, when it was found at Threipmuir Reservoir.

| Location | Grid Ref | Date | Recorder |
|----------------------------------|----------|---------|---------------|
| Lady Place | | 07/1845 | Anon. |
| Threipmuir Reservoir (upper end) | NT1663 | 2013 | Stewart, N.F. |

Linaria repens (L.) Mill.

Pale Toadflax

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this perennial is now considered to be a native (Stace, 2010), whereas formerly it was regarded as an archaeophyte (Preston *et al.*, 2002). It is scattered through much of Britain on stony and rough ground, banks and walls. In Midlothian since 1970 it has been spotted on railway ground, waste ground and verges, and is scarce. In 1934 the species was recorded at Duddingston, Warriston, Leith and Musselburgh.

| Location | Grid Ref | Date | Recorder |
|-----------------------------|----------|------------|----------------|
| Levenhall | NT37 | 09/08/1955 | Muirhead, C.W. |
| Davidson's Mains | NT219776 | 14/08/1962 | Beattie, E.P. |
| Braid Hills Golf Course | NT249700 | 15/07/1967 | Beattie, E.P. |
| Millerhill | NT3269 | 1981 | BSS surveyor |
| Smeaton | NT3569 | 03/10/1982 | Stewart, O.M. |
| Millerhill marshalling yard | NT3270 | 20/08/1988 | McKean, D.R. |
| Haltree | NT4152 | 1990 | Learmonth, R. |
| Smeaton | NT3569 | 1990 | Stewart, O.M. |
| Bower | NT4250 | 1992 | Learmonth, R. |

Linaria x sepium (L.) G.J. Allman (**L. vulgaris x L. repens**)*National Status: Not designated; IUCN: Not designated.**Midlothian Status: Rare.*

Nationally this native hybrid is frequent as far north as central Scotland, and is found within the range of *L. repens*. In Midlothian there has been only one record, from a railway track (disused).

| Location | Grid Ref | Date | Recorder |
|----------|----------|------------|---------------------------|
| Granton | NT2276 | 06/09/1998 | McKean, D.R. & Hendry, S. |

Lycopodium clavatum L.

Stag's-horn Clubmoss

*International Status: HabDir-Annex II, IV or V.**National Status: Not Scarce; IUCN: LC.**Midlothian Status: Not Scarce.*

This native clubmoss has international conservation designation. Nationally the species used to occur throughout Britain but has now disappeared from most lowland sites. This clubmoss is found on mountains, moors and heaths, usually in grassy areas. In Midlothian there have been 23 records of the species since 1970, from as many sites, so it is not scarce, but has been included in this *Register* because of its conservation designation. A few examples of the records are shown in the table. Dundreich Plateau is a SSSI. The habitats have included rough grass, heath, riverside, roadside, forest track, conifer plantation and the side of a quarry.

| Location | Grid Ref | Date | Recorder |
|---------------------------|----------|------------|----------------------------|
| South Bank Wood, Penicuik | NT220588 | 06/11/1983 | McBeth, R. |
| Cornbank, Penicuik | NT2160 | 30/05/1985 | Sydes, C. |
| Tynehead | NT391599 | 16/09/1992 | McKean, D.R. |
| Gladsmuir | NS927576 | 1992 | Muscott, J. |
| Woodmuir Plantation | NS9759 | 1994 | Muscott, J. |
| Bankhouse, Stow | NT432473 | 1994 | Muscott, J. |
| Dundreich, Moorfoot Hills | NT24 | 18/07/1998 | McKean, D.R. & Maxwell, S. |

Lycopus europaeus L.

Gypsywort

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native perennial is common through England and Wales but more scattered in Scotland. It is found in wet fields and fens, and beside lakes and rivers. In Midlothian the species has been recorded beside a reservoir and a canal. Part of Cobbinshaw Reservoir and the adjacent land are SSSIs. Although the sites producing records have been few, the plant was found to be plentiful at Hermiston in 2012. In 1934 the species was recorded in the Pentland Hills and at Roslin and Leith.

| Location | Grid Ref | Date | Recorder |
|--|----------|------------|-------------------------------|
| Cobbinshaw Reservoir | NT05 | 1958 | Beattie, E.P. |
| Cobbinshaw Reservoir (south-west corner) | NT014577 | 1992 | McKean, D.R. |
| North Cobbinshaw | NT0157 | 1992 | Muscott, J. |
| Slateford Aqueduct | NT2170 | 2000 | McKean, D.R. |
| Union Canal, Hermiston | NT1770 | 01/08/2012 | McKean, D.R. & McHaffie, H.S. |
| Union Canal, north bank, Wilkie's Basin to Ratho | NT127708 | 23/08/2013 | McKean, D.R. |

Lysimachia thyrsoflora L.

Tufted Loosestrife

*National Status: Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native wetland perennial is scattered in central and southern Scotland and northern England. It is found in marshes and by canals and ditches. In Midlothian the species has recently been recorded at Cobbinshaw Reservoir (partly a SSSI) and at various points along the Union Canal. In addition, it was planted at Bawsinch (SWT reserve) on the south side of Duddingston Loch (SSSI), and recorded there in about 1997 (see table). Historically there were records from the marsh at Canonmills (1750) and from Duddingston Loch (1824).

| Location | Grid Ref | Date | Recorder |
|-------------------------------|-----------|------------|-------------------------------|
| Cobbinshaw Reservoir | NT0056 | 12/07/1960 | Beattie, E.P. |
| Union Canal, Sighthill (near) | NT1970 | 07/07/1967 | Beattie, E.P. |
| Hermiston (near) | NT1670 | 22/07/1967 | Beattie, E.P. |
| Union Canal, Sighthill (near) | NT1970 | 1975 | Beattie, E.P. |
| Hermiston (East) | NT186706 | 01/09/1992 | McKean, D.R. |
| Hermiston (Long) | NT1770 | 01/09/1992 | McKean, D.R. |
| South Cobbinshaw | NT0257 | 1992 | Muscott, J. |
| Bawsinch (SWT reserve) | NT2872 | c. 1997 | McKean, D.R. |
| Union Canal, Wester Hailes | NT2070 | 08/10/2004 | Muscott, J. |
| Hermiston | NT183705§ | 01/08/2012 | McKean, D.R. & McHaffie, H.S. |

Lysimachia vulgaris L.

Yellow Loosestrife

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native perennial is scattered through Britain but not found in northern Scotland. It grows in marshes and ditches and beside lakes and rivers. In Midlothian there have been essentially three sites since 1970, although two of them extend into adjacent kilometre squares. The recent records have been from a verge (where it might have been temporary) and beside a canal and a pond. In 1934 the plant was recorded at Blackhall, Craigmillar and Leith.

| Location | Grid Ref | Date | Recorder |
|-----------------|----------|------------|------------------------------|
| Union Canal | NT2270 | 1976 | Sheldon, J., et al. |
| Union Canal | NT2271 | 1976 | Sheldon, J., et al. |
| Musselburgh | NT3573 | 22/08/1988 | McKean, D.R. |
| Musselburgh | NT360730 | 22/08/1988 | McKean, D.R. |
| Penicuik Estate | NT213585 | 1988 | Sumner, B.E.H. |
| Penicuik Estate | NT213585 | 1998 | McKean, D.R. & Maxwell, S.A. |

Lythrum portula (L.) D.A. Webb

Water-purslane

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native annual is scattered through most of Britain on damp tracks, on open or bare ground beside water, and in water. In Midlothian the species has been

found scattered through the Vice-county at water margins, on bare mud and in marshes. Part of the North Esk Reservoir is within a SSSI. In 1934 the species was recorded at Dalmahoy and in the Pentland Hills.

| Location | Grid Ref | Date | Recorder |
|--|----------|------------|-----------------------|
| Craigentarrie | NT1964 | 06/07/1956 | Beattie, E.P. |
| Crosswood Reservoir | NT057575 | 04/07/1976 | Beattie, E.P. |
| Harperrig Reservoir | NT0860 | 22/08/1992 | McKean, D.R. |
| North of Black Hill (Harlaw Reservoir) | NT1864 | 31/08/1994 | McKean, D.R. |
| Harlaw Reservoir | NT176646 | 1995 | Dixon, C. |
| Harperrig Reservoir | NT089607 | 1995 | Dixon, C. |
| North Esk Reservoir | NT157585 | 1995 | Dixon, C. |
| Rosebery Reservoir | NT308559 | 1995 | Dixon, C. |
| Threipmuir Reservoir | NT173640 | 1995 | Dixon, C. |
| North Esk Reservoir | NT154581 | 11/06/1997 | Day, J. & Cornish, C. |

Malva neglecta Wallr.

Dwarf Mallow

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

Nationally this archaeophyte is frequent in the centre and south of Britain but scattered further north. It is found on rough and waste ground and waysides. In Midlothian the post-1970 records have been scarce, and mostly coastal. Most were from waste ground and one was beside a promenade. In 1934 the species was recorded at Borthwick, Dalkeith and Eskmouth.

| Location | Grid Ref | Date | Recorder |
|--|-----------|------------|----------------|
| Borthwick Bank | NT3660 | 27/06/1957 | Beattie, E.P. |
| Kingsknowe | NT2169 | 01/07/1965 | McKie, M.P. |
| Musselburgh | NT341732 | 06/07/1968 | Stewart, O.M. |
| South-east of Newhaven (Water of Leith) | NT2676 | 1982 | Stewart, O.M. |
| Salamander Street | NT2776 | 26/06/1983 | Stewart, O.M. |
| Fisherrow Links & Goose Green, Musselburgh | NT3473 | 12/09/1987 | Jackson, E.H. |
| Granton | NT2377 | 1990 | Stewart, O.M. |
| Fisherrow Harbour | NT3373 | 1994 | Learmonth, R. |
| Fisherrow Links | NT337730§ | 01/06/2011 | Sumner, B.E.H. |

Mentha arvensis L.

Corn Mint

National Status: Not Scarce; IUCN: LC; SBL: >25% decline.

Midlothian Status: Scarce.

Nationally this native perennial is quite common through most of Britain, and is found in arable or damp fields, woodland clearings and beside ponds. In Scotland the species has shown significant decline, recognised by the SBL. In Midlothian the species has been recorded in fields, and once in waste ground, but it is scarcer now than it used to be. In 1824 Greville said that the species was frequent in cornfields at Craiggrook and Colinton. In 1894 it was said by Sonntag to be common. This mint was recorded at Dryden in 1934 and at Mortonhall in 1936.

| Location | Grid Ref | Date | Recorder |
|---------------------------------|-----------|------------|------------------------|
| Cramond | NT17 | 1955 | Beattie, E.P. |
| Dalmahoy Estate | NT16 | 1956 | Beattie, E.P. |
| Almondell | NT0969 | 1982 | Stewart, N.F. |
| Livingstone (South) | NT0667 | 1993 | Muscott, J. |
| Newlandburn House | NT3662 | 1994 | Muscott, J. |
| Newland Rig | NT3662 | 1994 | Muscott, J. |
| East of Rosewell (Shiel Bridge) | NT3062 | 1995 | Miller, I. & Broom, A. |
| Baird Road Works, Ratho | NT136713§ | 30/08/2013 | Merrick, D. |

Meum athamanticum Jacq.

Spignel

*National Status: Scarce; IUCN: NT.**Midlothian Status: Rare.*

This native perennial of mountain grassland is locally distributed from Cheshire north to central Scotland. In Midlothian the species was recorded at Penicuik from 1863 to 1934, but has not been recorded there since. However, there are more recent records from pasture in the Moorfoot Hills, near or within SSSIs.

| Location | Grid Ref | Date | Recorder |
|----------------------------|----------|-------|-----------------|
| Eastloch, near | NT2652 | 1964 | Ratcliffe, D.A. |
| Moorfoot Hills, near Dewar | NT34 | 1980s | Ward, D. |

Minuartia verna (L.) Hiern

Spring Sandwort

*National Status: Scarce; IUCN: NT.**Midlothian Status: Scarce.*

Nationally this native perennial is locally abundant in the north of England but scattered in Scotland. It is found on base-rich ground and rocks, and lead-mine spoil. In Midlothian the species has been recorded on rocks but it is scarce. Of the recent sites, Arthur's Seat and Craiglockhart Hill were noticed in 1934, when Blackford Hill was also reported. Arthur's Seat and Wester Craiglockhart Hill are SSSIs.

| Location | Grid Ref | Date | Recorder |
|---------------------------|------------|------------|-------------------------------|
| Arthur's Seat | NT27 | 30/05/1956 | Beattie, E.P. |
| Blackshiels | NT4361 | 1986 | Muscott, J. |
| Wester Craiglockhart Hill | NT2270 | 1992 | Maxwell, S.A. |
| Arthur's Seat | NT275727 | 1998 | Maxwell, S.A. & McKean, D.R. |
| Craiglockhart Dell | NT2169 | 27/04/2003 | Muscott, J., et al. |
| Holyrood Park | NT27437304 | 05/05/2011 | McHaffie, H.S. & McKean, D.R. |

Misopates orontium (L.) Raf.

Weasel's-snout

*National Status: Not Scarce; IUCN: VU.**Midlothian Status: Rare.*

Nationally this annual archaeophyte is a weed of cultivated ground, locally frequent in the south of Britain but scattered and declining in the north. In Midlothian this plant is a ruderal casual, included in this *Register* because of its conservation status. Although the species was more frequent between 1904 and 1912, since then there has only been one record (see below).

| Location | Grid Ref | Date | Recorder |
|-------------------|----------|------|----------------------|
| Hailes Quarry Tip | NT2070 | 1971 | McCallum Webster, M. |

Myosotis ramosissima Rochel

Early Forget-me-not

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

This native annual is locally common in open places on dry sandy or limey soils in lowland Britain. In Midlothian this plant is scarce, and has been found in waste ground and short grassland, and on disused railway tracks, rocks and walls. Arthur's Seat and Duddingston Loch are SSSIs.

| Location | Grid Ref | Date | Recorder |
|---|----------|------------|------------------|
| Holyrood Park | NT2872 | 03/05/1955 | Beattie, E.P. |
| Cramond Island | NT1978 | 1957 | Beattie, E.P. |
| Bowshank | NT4541 | 1982 | Little, M. |
| Crookston | NT3670 | 15/06/1988 | McKean, D.R. |
| Outerston (Temple) | NT3257 | 1992 | Broom, A. |
| Duddingston Golf Course (Loch and Bawsinch) | NT2872 | 1992 | Muscott, J. |
| Bawsinch | NT2872 | 1993 | Muscott, J. |
| West Calder | NT032627 | 07/06/1994 | McKean, D.R. |
| Bowshank | NT4541 | 1995 | Little, M. |
| Blackford Hill | NT2575 | 30/05/1997 | McKean, D.R. |
| Arthur's Seat | NT2672 | 17/06/1998 | McKean, D.R. |
| Arthur's Seat | NT274732 | 17/06/1998 | Maxwell, S. |
| Blackford Glen/Hermitage | NT2570 | 02/06/2004 | Muscott, J. |
| Blackford Glen | NT2570 | 21/05/2010 | Muscott, J. |
| Arthur's Seat | NT279727 | 22/05/2012 | Young, G. et al. |

Myosotis stolonifera (DC.) J. Gay ex Leresche & Levier

Pale Forget-me-not

*National Status: Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native perennial has a local distribution in northern England and southern Scotland, where it grows in wet flushes and beside streams in the hills. In Midlothian, the northern edge of its range, there have been just two records, from wet areas beside burns in the Pentland Hills.

| Location | Grid Ref | Date | Recorder |
|----------------------------|----------|------------|----------------|
| Harbour Hill / Bell's Hill | NT206648 | 11/06/1984 | Burnett, W. |
| Lawhead | NT2161 | 1984 | Sumner, B.E.H. |

Myrica gale L.

Bog-myrtle

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native shrub occurs through most of Britain but especially in the north-west. It grows in bogs and fens, and on wet heaths and moors. In Midlothian the most recent records of the species have been from the boggy Black Springs area (1993) and from the edge of a bog at Threipmuir Reservoir (1967). Historically the species was found at Ravelrig as well as in the Pentland Hills.

| Location | Grid Ref | Date | Recorder |
|----------------------|----------|------------|------------------|
| Threipmuir Reservoir | NT16 | 05/07/1967 | Myerscough, P.J. |
| Black Springs | NT16X | 1993 | Garratt, D. |

Neottia nidus-avis (L.) Rich.

Bird's-nest Orchid

*National Status: Not Scarce; IUCN: NT.**Midlothian Status: Scarce.*

Nationally this native saprophyte is scattered through most of Britain on leaf litter, often under beech trees on calcareous soils. In Midlothian it has been found in broad-leaved and mixed woodland and scrub. Of the sites for this species in the table below, Arniston, Dalhousie and Dalkeith were also known in 1863. Further sites in 1863 were Penicuik, Auchendinny, Roslin, Tynehead, Prestonhall, Craighall and Cramond.

| Location | Grid Ref | Date | Recorder |
|--------------------------------|----------|------------|-----------------------|
| Dalhousie Estate | NT3263 | 1955 | Beattie, E.P. |
| Lady Victoria Wood, Newbattle | NT3265 | 01/07/1960 | Beattie, E.P. |
| West Calder | NT06 | 1973 | Martin, M.E.R. |
| Pathhead | NT394647 | 18/06/1979 | McKean, D.R. |
| Aikendean | NT318618 | 1992 | Bland, K. |
| Arniston | NT334617 | 1993 | McKean, D.R. & Nisbet |
| Millbank House (Kirkhill Bing) | NT3361 | 18/08/1994 | McKean, D.R. |
| Dalkeith | NT36 | 1998 | Bateman, R. |

Nepeta cataria L.

Cat-mint

*National Status: Not Scarce; IUCN: VU.**Midlothian Status: Rare.*

Nationally this perennial archaeophyte is scattered in calcareous grassland, rough ground and on waysides in England, Wales and Man. The species used to be commoner. In Midlothian this plant is a rare escape, included in this *Register* because of its conservation status. The record below is from waste ground. From 1895 to 1934 the species was found as a casual ruderal at Leith, and in 1934 it was

also recorded at Salisbury Crags.

| Location | Grid Ref | Date | Recorder |
|----------|----------|------------|---------------|
| Granton | NT27 | 25/07/1979 | Stewart, O.M. |

Nuphar lutea (L.) Sm.

Yellow Water-lily

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

Nationally this native aquatic perennial is frequent throughout Britain in still and running water. In some areas, however, it is naturalised from introduced plants. In Midlothian this water-lily has been found in ponds, and some plants may have been introduced.

| Location | Grid Ref | Date | Recorder |
|--------------|----------|------------|-------------------------------|
| Harburn | NT044613 | 15/08/1965 | Beattie, E.P. |
| Mavisbank | NT291654 | 1992 | McKean, D.R. |
| Harburn | NT0460 | 1994 | McKean, D.R. |
| Mavisbank | NT2965 | 02/06/2004 | Muscott, J. & ENHS |
| Cammo Estate | NT1774 | 08/07/2009 | Muscott, J. & ENHS |
| Skivo Quarry | NT0564 | 16/09/2010 | McKean, D.R. & Sumner, B.E.H. |

Nymphaea alba L.

White Water-lily

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

Nationally this native aquatic perennial occurs throughout Britain in still and slow-flowing water. In Midlothian the species has been found in ponds, and is sometimes planted. It has recently disappeared from the Penicuik pond. In 1934 the species was recorded at Tynehead and Meadowbank.

| Location | Grid Ref | Date | Recorder |
|----------------------------|----------|------------|--------------------------|
| Penicuik Estate | NT2158 | 1983 | Sumner, B.E.H. |
| Bawsinch | NT2872 | 1993 | Muscott, J. |
| Toxside Moss (north) | NT2754 | 24/07/2011 | Sumner, B.E.H. & TWIC |
| Allotments, Blackford area | NT262709 | 10/08/2011 | Muscott, J. & Tebble, M. |
| Kirknewton Estate | NT1166 | 19/08/2012 | Sumner, B.E.H. & TWIC |

Oenanthe crocata L.

Hemlock Water-dropwort

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Rare.

Nationally this is a native wetland perennial, found in marshes and beside water. It is locally common in Britain, though absent from much of the east. In Midlothian it has been recorded in marshes, but only twice since 1970, so it is rare. Duddingston Loch

and the Cobbinshaw area are SSSIs. In 1768 the species was a general plant in a ditch east of Abbeyhill and in 1824 it was recorded on a riverbank near Lasswade. In 1863 the plant not only occurred at Lasswade but also at Granton and Cramond.

| Location | Grid Ref | Date | Recorder |
|--------------------------------|----------|------|---------------|
| Duddingston Loch | NT2872 | 1958 | Beattie, E.P. |
| Threipmuir Reservoir | NT16 | 1958 | Beattie, E.P. |
| Cobbinshaw | NT05 | 1960 | Beattie, E.P. |
| Stow | NT44 | 1967 | Beattie, E.P. |
| Niddrie Burn | NT17 | 1974 | Beattie, E.P. |
| Mornton Reservoir, West Calder | NT0763 | 1976 | Beattie, E.P. |

Onopordum acanthium L.

Cotton Thistle

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

Nationally this biennial archaeophyte is locally frequent in the southern half of Britain, but scattered elsewhere. It occurs in fields, rough and waste ground and marginal habitats. In Midlothian the recent records have been from scattered sites, at the coast and inland, on roadsides and in waste ground, fields and set-aside. Historically the species was spotted near Musselburgh in 1824, then at Portobello (1863), and at Leith and Dalkeith in 1934.

| Location | Grid Ref | Date | Recorder |
|--|-----------|------------|---------------------------------|
| Leith Docks | NT27 | 01/08/1968 | Beattie, E.P. |
| Ratho | NT17 | 1973 | Beattie, E.P. |
| Fisherrow | NT3473 | 1982 | Jackson, E.H. |
| East of Torsonce | NT4743 | 1984 | Nield, P. |
| Fisherrow Links & Goose Green, Musselburgh | NT3473 | 12/09/1987 | Jackson, E.H. |
| Duddingston | NT2872 | 1996 | Maxwell, S.A. |
| Sheriffhall Roundabout | NT3267 | 1997 | McKean, D.R. |
| Granton (Caroline Park) | NT225773 | 23/06/1999 | Pilling, E., Muscott, J. et al. |
| Craigmillar Hill | NT288708§ | 2007 | Chaney, P. |

Ophioglossum vulgatum L.

Adder's-tongue

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

This native fern is frequent throughout much of Britain in grassland, open woods, ditches and dune-slacks. In Midlothian the species is locally common in Hunter's Bog (Holyrood Park, Arthur's Seat SSSI), but uncommon elsewhere. It has been recorded in damp grassland, especially if base-rich. In 1824 the species was found in shady areas of Dalhousie Woods and in a field at Little Vantage. The fern was still at Dalhousie in 1934, when it was also recorded at Arniston, Prestonhall and in the Pentland Hills.

| Location | Grid Ref | Date | Recorder |
|------------------|----------|------------|---------------|
| Hunter's Bog | NT272735 | 17/05/1989 | Davis, A. |
| Kirknewton House | NT1166 | 1982 | Stewart, N.F. |

| | | | |
|------------------|----------|------------|--------------|
| Kirknewton House | NT1166 | 16/06/1994 | McKean, D.R. |
| Murieston Meadow | NT059647 | 30/06/1997 | Phillips, S. |
| Arthur's Seat | NT274732 | 17/06/1998 | Maxwell, S. |
| Linhouse Glen | NT06 | 1999 | Cowen, B. |
| Crichton Manse | NT380615 | 22/05/2001 | Seymour, T. |
| Cockmuir Bridge | NT266554 | 05/07/2007 | Muscott, J. |

Orchis mascula (L.) L.

Early-purple Orchid

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native orchid is frequent to common throughout Britain, and found in neutral or base-rich grassland, scrub and woods. In Midlothian the species is rare but was formerly more widespread. Between 1764 and 1905 there were records from Auchendinny Wood, Roslin Woods, Lugton Wood (near Dalkeith), Newbattle, Dalhousie, Ratho, Dalmahoy, Cramond Bridge, the Water of Leith above Currie, Colinton, Hunter's Bog, Salisbury Craigs and Tynehead. In 1841 numerous plants were found in meadows in the parish of West Calder. In 1934, Ravelrig, Balerno and Ratho yielded records. The two records below were from base-rich grassland and a wood.

| Location | Grid Ref | Date | Recorder |
|--|----------|------------|---------------|
| The Camp, Newtongrange (near limekiln) | NT358638 | 03/06/1970 | Beattie, E.P. |
| Silverknowes | NT1976 | 1972 | Beattie, E.P. |

Origanum vulgare L.

Wild Marjoram

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

This native perennial herb is locally common in Britain, north to Moray. It grows wild in dry grassland, scrub and hedgebanks, usually on calcareous soil. In Midlothian the wild distribution is now confused by wildflower plantings and garden escapes. The records in the table below have been from a railway tip (1963), from other waste or reclaimed sites, and from derelict gardens, allotments and pavements. In 1824 the species was recorded along the Water of Leith, and in 1894 it was frequent there and at Roslin and Arniston. In 1934 Cramond was an additional site.

| Location | Grid Ref | Date | Recorder |
|--|-----------|------------|--------------------------------|
| Borthwick Bank | NT3760 | 1963 | Younger, A. & McCallum Webster |
| Craiglockhart Dell & Redhall Walled Garden | NT2170 | 2004 | Muscott, J., et al. |
| Monktonhall bing, near Millerhill | NT320707§ | 12/07/2010 | McKean, D.R. |
| Allotments, Blackford area | NT262709 | 22/07/2010 | Muscott, J. |
| Polton | NT2864 | 30/08/2010 | Sumner, B.E.H. |
| Monktonhall bing, near Millerhill | NT319708 | 2010 | Milne, R.I. |
| Monktonhall bing, near Millerhill | NT3170 | 09/07/2011 | Milne, R.I. & BSS |
| Edmonstone | NT297698§ | 26/08/2012 | Chaney, P. |
| Warriston Avenue, Edinburgh | NT250757 | 08/10/2012 | Sumner, B.E.H. |
| Heriot | NT3952 | 31/07/2013 | Sumner, B.E.H. |
| Midmar Allotments | NT2570 | 11/08/2013 | Muscott, J. & BSS |

Papaver argemone L.

Prickly Poppy

*National Status: Not Scarce; IUCN: VU; SBL: >25% decline.**Midlothian Status: Rare.*

Nationally this annual archaeophyte of arable and waste ground used to be more widespread, but is now mostly restricted to central and southern Britain. In Scotland the species has shown significant decline, recognised by the SBL. In Midlothian this plant is now a rare casual, included in this *Register* because of its conservation status. In 1768 the species was common around Edinburgh and in 1824 the sites noted were Holyrood Park, Arthur's Seat, a field near the new Botanic Garden, a field near Newhaven, and roadsides about Lasswade. In 1863 there were records from Holyrood Park and Newhaven again, and also from Braid, Caroline Park, Portobello, and Dalkeith. In 1934 the species was found at Dalkeith, Liberton, Comiston and Inveresk. Since 1960 there have been only three records (below), from roadsides, disturbed ground and cereal fields.

| Location | Grid Ref | Date | Recorder |
|--------------------|----------|------------|----------------------|
| Edinburgh, Hillend | NT26 | 1961 | Beattie, E.P. |
| Fushiebridge | NT36 | 25/06/1962 | McCallum Webster, M. |
| Inveresk (near) | NT358711 | 28/05/1975 | Stewart, N.F. |

Papaver hybridum L.

Rough Poppy

*National Status: Not Scarce; IUCN: LC; SBL: rare & >25% decline.**Midlothian Status: Rare.*

Nationally this annual archaeophyte of arable fields and waste ground used to be more widespread (except in Scotland), but is now mostly restricted to the east and south of England, on calcareous soils. In Scotland the species has shown significant decline, recognised by the SBL. In Midlothian the plant is a rare casual of waste ground, included in this *Register* because of its conservation status. There have been only two records since 1970. Historically the species was recorded at Bilston (1864), Craigmillar Quarry and Comiston (1902) and Slateford (1934).

| Location | Grid Ref | Date | Recorder |
|----------------------|----------|------------|---------------|
| Victoria Dock, Leith | NT27 | 1989 | Stewart, O.M. |
| Cameron Toll | NT276712 | 15/07/2011 | Milne, R.I. |

Paris quadrifolia L.

Herb-paris

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

This native perennial is locally distributed in Britain, in damp woods on calcareous soils. In Midlothian the species was thought to be extinct, but then it was re-found in the Vogrie area, in broad-leaved woodland. As the recent records are all from three adjacent kilometre squares, the species is rare. Historically the species was recorded in Borthwick Den and at Westhouses south of Dalkeith (1768), in a wood one mile south of Newbattle (1809, 1824, 1863 and 1934), in a wood on the banks of the Water of Leith near Currie (1824 and 1934), and at Calder Wood (1843), Arniston (1863 and 1934) and Roslin (1934).

| Location | Grid Ref | Date | Recorder |
|-------------------------|----------|------------|--------------|
| Tynebank | NT3862 | 1981 | Chalmers, C. |
| Vogrie Grange (east of) | NT3862 | 1986 | Chalmers, C. |
| Stretchendean | NT377623 | 1992 | Coppins, S. |
| Alderdean | NT382628 | 1992 | Dixon, C. |
| Vogrie | NT381630 | 1992 | Dixon, C. |
| Vogrie Country Park | NT3862 | 22/04/2006 | Crowther, N. |

Persicaria vivipara (L.) Ronse Decr.

Alpine Bistort

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native species is found in Scotland and northern England, in grassland and on mountain ledges. In Midlothian the species has been found chiefly in wet upland grassland, marshy ground and streamsides, but at Leadburn the species was recorded in woodland. Between Carlops and the North Esk Reservoir (a SSSI) the species has been found at several places in two kilometre squares. The other sites have been in two further kilometre squares, which suggests this species is scarce, rather than rare.

| Location | Grid Ref | Date | Recorder |
|--------------------------------|----------|------------|-------------------------------|
| Ninemileburn | NT15 | 1973 | Beattie, E.P. |
| Woodend | NT2255 | 1987 | Webb, C., Bogue, M. |
| Leadburn | NT2255 | 1990 | Webb |
| North Esk Reservoir | NT1556 | 1994 | Dixon, C. |
| North Esk Reservoir | NT158572 | 14/06/1995 | Dixon, C. |
| Carlops to North Esk Reservoir | NT1557 | 22/07/2000 | Jones, M., Muscott, J. & ENHS |

Phegopteris connectilis (Michx.) Watt

Beech Fern

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native fern is common in western and northern Britain, on acid soils in damp woods and shady banks. In Midlothian the species has been found in eight sites since 1970, which suggests scarcity. Woodlands, heath and streamsides have yielded records. Newhall Woods, Roslin Glen (south-west of Hawthornden Castle) and parts of the Moorfoot Hills are SSSIs. In 1934 the species was recorded at Auchendinny, and was found there again in 1962 (see below).

| Location | Grid Ref | Date | Recorder |
|------------------------------------|----------|------------|-------------------------|
| Auchendinny Woods | NT2562 | 26/06/1962 | Beattie, E.P. |
| Newhall Woods | NT1756 | 02/07/1967 | Beattie, E.P. |
| Rough Moss Cleuch (opposite) | NT3547 | 1967 | Beattie, E.P. |
| Rough Moss Cleuch | NT3447 | 1972 | Ferreira, C. |
| South of Gladhouse | NT2950 | 1981 | Dixon, C. |
| Hawthornden Castle (south-west of) | NT2863 | 1986 | McKean, D.R. |
| Moorfoot Hills | NT294501 | 1992 | Dixon, C. |
| Tynehead | NT387603 | 1992 | Dixon, C. |
| West of Dewar Hill | NT3447 | 1994 | Dixon, C., McKean, D.R. |

| | | | |
|------------------|----------|------|-----------|
| East of Torsonce | NT4743 | 1984 | Nield, P. |
| Penicuik Estate | NT231593 | 1995 | Dixon, C. |

Phleum arenarium L.

Sand Cat's-tail

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native annual is frequent on sand-dunes around most British coasts, except for northern and western Scotland. In Midlothian there have been only two records of the species, one historic and one recent, from the coast between Granton and Cramond, which is part of the Firth of Forth SSSI.

| Location | Grid Ref | Date | Recorder |
|-------------------|----------|------|-------------|
| Cramond | NT1876 | 1831 | Knapp, J. |
| Granton (west of) | NT2177 | 1982 | McNab, W.R. |

Pilularia globulifera L.

Pillwort

*National Status: Scarce; IUCN: NT; UK BAP, 2007; SBL: listed.**Midlothian Status: Scarce.*

Nationally this native perennial (a small fern) is scattered through Britain, but declining. It grows on mud beside still water, and is sometimes submerged. In Midlothian the species had become extinct, but was then re-introduced, under the Edinburgh LBAP, at the sites shown in the table below. Unfortunately the introduced plants died out in 2011 and further introductions are planned for several Edinburgh sites in 2014. The Duddingston and Bawsinch sites are within a SSSI. In 1824 and 1863 this species grew naturally in Braid Hill Marshes and in marshes in the Pentland Hills two miles west of Currie. Threipmuir and Logan Cottage were also pre-1863 sites.

| Location | Grid Ref | Date | Recorder |
|----------------------------|----------|------------|-----------------------|
| Duddingston new pond | NT278725 | 16/07/1997 | Scott, S. |
| Wells O' Wearie | NT275724 | 29/09/1998 | Scott, S. |
| Meadows Yard Local Reserve | NT293753 | 13/10/1998 | Scott, S. & Burns, M. |
| Bawsinch, SWT Reserve | NT284723 | 18/10/1998 | Duffy, T. |

Plantago maritima L.

Sea Plantain

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native maritime perennial is common in saltmarshes, short turf and rocky places around the coasts of Britain, and is also found inland on Scottish mountains, on saltmarshes and beside salted roads. In Midlothian the species has been recorded at two inland sites so far, but is otherwise coastal, in short grass and on rocks. The shore of the Firth of Forth is a SSSI. Historically (1824) this species was found on Cramond Island, and on the rocks between Caroline and Granton Parks. It was still at Caroline Park in 1863 and on Cramond Island in 1998 (see below).

| Location | Grid Ref | Date | Recorder |
|----------------------------|----------|------------|----------------|
| Granton | NT27 | 12/07/1972 | Beattie, E.P. |
| Fisherrow | NT3473 | 1982 | Jackson, E.H. |
| Newhailes Estate | NT3272 | 15/06/1988 | McKean, D.R. |
| Newbigging | NT2760 | 1992 | Broom, A. |
| Seafield | NT291758 | 1996 | Dixon, C. |
| Cramond Island | NT1978 | 22/06/1998 | McKean, D.R. |
| Levenhall Links | NT3573 | 06/06/2011 | Sumner, B.E.H. |
| Levenhall Links | NT3673 | 06/06/2011 | Sumner, B.E.H. |
| Levenhall Links | NT3473 | 29/06/2011 | Sumner, B.E.H. |
| Granton, promenade west of | NT2176 | 06/07/2013 | Sumner, B.E.H. |
| Granton, promenade west of | NT2177 | 06/07/2013 | Sumner, B.E.H. |

Plantago media L.

Hoary Plantain

National Status: Not Scarce; IUCN: LC; SBL: >25% decline.
Midlothian Status: Rare.

Nationally this native perennial is locally common in eastern and central Britain as far north as central Scotland, on neutral and basic grassland. In Scotland the species has shown significant decline, recognised by the SBL. In Midlothian, since 1970, this plantain has been recorded at only two sites, one near a lime kiln and the other in the short turf of a churchyard. In 1809 Maughan said the species was in "great abundance" at Roman Camp, above Newbattle. In 1934 the species was recorded at Ratho, Prestonhall, Dalkeith and Inveresk.

| Location | Grid Ref | Date | Recorder |
|--------------|----------|------------|---------------|
| Newtongrange | NT3563 | 07/07/1970 | Beattie, E.P. |
| Newtongrange | NT3563 | 30/05/1982 | McKean, D.R. |
| Carrington | NT318606 | 22/07/1982 | Stewart, O.M. |
| Carrington | NT3160 | 1987 | Stewart, O.M. |

Platanthera chlorantha (Custer) Rchb.

Greater Butterfly-orchid

National Status: Not Scarce; IUCN: NT; SBL: >25% decline.
Midlothian Status: Almost Scarce.

This native orchid is locally frequent throughout Britain, usually in calcareous districts, in woods or (in the north) in open grassland. In Scotland the species has shown significant decline, recognised by the SBL. Since 1970 this species has been recorded in about thirteen sites in Midlothian, all in the western half of the Vice-county. Thirteen sites are too many for scarcity, but the species has been included in this *Register* because of its conservation designation. Linhouse Glen and Skolie Burn are SSSIs. Habitats since 1970 have been damp grassland and watersides, but in 1955 and 1967 plants were found in heathy woodland, at Inveroe and Gladhouse. Historically there were other sites, such as Auchendinny in 1778 and Ravelrig, Dalmahoy and the Pentland Hills in 1863 and 1894.

| Location | Grid Ref | Date | Recorder |
|--------------------------|----------|------------|---------------|
| Linhouse Water | NT0765 | 14/07/1972 | Beattie, E.P. |
| Threipmuir Reservoir | NT1763 | 18/07/1973 | Beattie, E.P. |
| South of Marchbank Hotel | NT1663 | 1976 | Raeburn, J. |

| | | | |
|-------------------------------------|-----------|------------|-----------------------------|
| Linhouse Glen | NT06 | 1982 | Stewart, N.F. |
| Breich Water, West Calder | NT016645 | 02/06/1994 | McKean, D.R. |
| Little Harwood, West Calder | NT017613 | 1994 | McKean, D.R. |
| West of Nether Longford | NS9761 | 01/06/1994 | McKean, D.R. |
| Addiewell, West Calder | NT008628 | 01/07/1995 | Dixon, C. |
| Murieston Meadow | NT059647 | 30/06/1997 | Phillips, S. |
| Skolie Burn | NS9862 | 10/06/1999 | Hutcheon, S. & Badenoch, C. |
| Addiewell Ponds | NT003625§ | 17/07/2012 | Sumner, B.E.H. |
| Hermand Quarry (east bank of river) | NT029637§ | 22/07/2012 | Wilcox, M. & Sumner, B.E.H. |
| Hermand Quarry (field east of) | NT030636 | 05/07/2013 | Sumner, B.E.H. |
| Parkhead East (west bank of river) | NT029637§ | 05/07/2013 | Sumner, B.E.H. |

Poa angustifolia L.

Narrow-leaved Meadow-grass

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native perennial grass is frequent in England, but scattered in Scotland. It is found in grassy and rough ground on well-drained soil, and on or by walls. In Midlothian the two records have been from a steep grassy slope and dry grassland. The slopes around Edinburgh Castle are part of a SSSI.

| Location | Grid Ref | Date | Recorder |
|------------------|----------|------------|----------------------------------|
| Edinburgh Castle | NT255735 | 05/07/1977 | Muirhead, C.W. |
| Sunnybank Place | NT276743 | 05/06/1989 | Silverside, A.J. & Jackson, E.H. |

Poa compressa L.

Flattened Meadow-grass

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native grass is scattered through most of Britain and grows on walls, stony ground, paths and waysides on well-drained soils. In Midlothian the scattered records since 1950 have been from a rubbish heap, waste ground, and disused railways. Another record, but possibly planted, is from a riverside below concrete flood defences (2011). Historically the plant was recorded on walls about Holyrood Park (1809, 1824 and 1863), walls at St. Leonard's (1824), on the debris of Salisbury Crags (1824), and at Leith (1934).

| Location | Grid Ref | Date | Recorder |
|--------------------------------|----------|------------|---------------|
| Royal Botanic Garden Edinburgh | NT2475 | 30/07/1954 | Green, P.S. |
| Hailes Quarry | NT2070 | 02/06/1972 | Stewart, O.M. |
| Bonnyrigg | NT311656 | 1992 | Muscott, J. |
| Edgefield | NT286664 | 25/09/1993 | McKean, D.R. |
| Seafield | NT286762 | 1996 | Dixon, C. |
| Blackford Glen | NT2670 | 14/10/2011 | Muscott, J. |

Polygonum boreale (Lange) Small

Northern Knotgrass

*National Status: Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native annual is scattered around the Scottish coasts, in open ground. In Midlothian the species was first recorded on a coastal path on an island in 1982 (see below), and there has been only one other record, from waste ground a little inland from the coast in 1999.

| Location | Grid Ref | Date | Recorder |
|------------------------------------|----------|---------|--------------|
| Inchmickery | NT2080 | 08/1982 | Brandt, N. |
| Pilton, south of West Granton Road | NT221766 | 1999 | McKean, D.R. |

Polygonum rurivagum Jord. ex Boreau

Cornfield Knotgrass

*National Status: Not Scarce; IUCN: LC; SBL: rare.**Midlothian Status: Scarce.*

Nationally this annual archaeophyte of arable land is decreasing in south and south-east England, and is rare and scattered further north, as far as central Scotland. In Midlothian the plant is a scarce casual, most recently found on a roadside verge, a demolition site, and by a wooded stream. The species is included in this *Register* because of its conservation status.

| Location | Grid Ref | Date | Recorder |
|---------------------------------|----------|------------|------------------------------|
| Carrington | NT3160 | 1987 | Stewart, O.M. |
| Craigmillar Castle Terrace | NT2871 | 1999 | Maxwell, S.A. |
| Burdiehouse | NT2767 | 05/11/2000 | Maxwell, S.A. |
| Greenburn Wood to Hatton Bridge | NT132677 | 03/09/2013 | McKean, D.R. & Maxwell, S.A. |

Polypodium cambricum L.

Southern Polypody

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native fern is scattered as far north as central Scotland, on moist, base-rich rocks and sometimes on tree trunks. In Midlothian the species has been recorded in a few sites around Arthur's Seat (SSSI), on basaltic rocks, crags, and clefts. At Blackford Hill it was found on a low, broken cliff.

| Location | Grid Ref | Date | Recorder |
|------------------------------------|----------|------------|-------------------------------|
| Arthur's Seat (south facing rocks) | NT2772 | 1957 | Simpson, B. |
| Arthur's Seat | NT27 | 1959 | Page, C.N. |
| North shore of Duddingston Loch | NT281725 | 23/05/1972 | Stirling, A. McG. |
| Blackford Hill | NT254703 | 25/11/2004 | McKean, D.R. & McHaffie, H.S. |

Polypodium x mantoniae Rothm. & U. Schneid.
(**P. vulgare x P. interjectum**)

National Status: Not designated; IUCN: Not designated.
Midlothian Status: Rare.

Nationally this sterile native hybrid is scattered through the British Isles. In Midlothian there has been only one record, from the bank of a steep ravine in a SSSI in the Pentland Hills.

| Location | Grid Ref | Date | Recorder |
|-----------------------|----------|------------|----------------|
| Logan Burn Waterfalls | NT182618 | 02/10/1982 | McHaffie, H.S. |

Potamogeton alpinus Balb.

Red Pondweed

National Status: Not Scarce; IUCN: LC.
Midlothian Status: Scarce.

Nationally this native pondweed is fairly frequent through most of Britain in lakes, canals and streams, especially on peat. In Midlothian it has been recorded in scattered reservoirs in upland areas, and in a disused quarry pool. Part of Cobbinshaw Reservoir is a SSSI.

| Location | Grid Ref | Date | Recorder |
|--|----------|------------|---------------|
| Cobbinshaw Reservoir | NT0157 | 13/07/1946 | Taylor, G. |
| Threipmuir Reservoir | NT1764 | 1970 | Mackay |
| Cobbinshaw Reservoir | NT0157 | 03/08/1976 | Beattie, E.P. |
| Cobbinshaw Reservoir (southern end of causeway) | NT0156 | 1989 | McKean, D.R. |
| Levenseat Quarry Pool | NS941582 | 1993 | Maxwell, S.A. |
| South of Selm Muir Wood (Corston Hill Reservoir) | NT0863 | 01/09/1994 | McKean, D.R. |
| Clubbiedean Reservoir | NT1966 | 1997 | Lumsden, B. |
| Clubbiedean Reservoir | NT2066 | 1997 | Lumsden, B. |

Potamogeton x cooperi (Fryer) Fryer (**P. perfoliatus x P. crispus**)
Cooper's Pondweed

National Status: Not designated; IUCN: Not designated.
Midlothian Status: Scarce.

Nationally this native hybrid is scattered in Britain as far north as central Scotland, and is found in still water and streams. In Midlothian it has been recorded at various points along the Union Canal, both within the city of Edinburgh, where it has been known since 1902, and outside the city. However, only four of the records have been since 1970.

| Location | Grid Ref | Date | Recorder |
|------------------------------|----------|------------|------------|
| Union Canal, near Kingsknowe | NT27 | 04/08/1902 | Evans, W. |
| Union Canal, Hermiston | NT1870 | 04/10/1937 | Taylor, G. |
| Union Canal, Slateford | NT2170 | 04/10/1937 | Taylor, G. |
| Union Canal, Hermiston | NT1870 | 04/09/1941 | Taylor, G. |
| Union Canal, Hermiston | NT1870 | 06/06/1942 | Taylor, G. |

| | | | |
|-------------------------------------|----------|------------|------------------------------|
| Union Canal, Hermiston | NT1870 | 20/07/1955 | Beattie, E.P. |
| Union Canal, Sighthill | NT1870 | 20/07/1955 | Beattie, E.P. |
| Union Canal, Edinburgh | NT2371 | 06/08/1986 | Anderson, K. |
| Union Canal, Ashley Terrace | NT234715 | 05/11/1987 | McKean, D.R. & Preston, C.D. |
| Union Canal, Fountainbridge (basin) | NT247728 | 05/05/1989 | Preston, C.D. & Noltie, H. |
| Union Canal, Slateford Aqueduct | NT27 | 1999 | McKean, D.R. & Preston, C.D. |

Potamogeton friesii Rupr.

Flat-stalked Pondweed

*National Status: Scarce; IUCN: NT.**Midlothian Status: Rare.*

Nationally this native species is frequent in England but scattered in Scotland, and found in ponds, lakes and canals. In Midlothian it has been recorded at a few sites along the Union Canal inside and outside the city of Edinburgh.

| Location | Grid Ref | Date | Recorder |
|--------------------------------------|----------|------------|------------------------------|
| Union Canal, Slateford | NT2170 | 04/10/1937 | Taylor, G. |
| Union Canal, Hermiston | NT1870 | 20/07/1955 | Beattie, E.P. |
| Union Canal, Sighthill | NT1870 | 20/07/1955 | Beattie, E.P. |
| Ashley Terrace | NT2371 | 1999 | McKean, D.R. & Preston, C.D. |
| Union Canal, Meggetland to Hermiston | NT27 | 2000 | McKean, D.R. |
| Union Canal, Meggetland to Hermiston | NT17 | 2000 | McKean, D.R. |

Potamogeton obtusifolius Mert. & W.D.J. Koch

Blunt-leaved Pondweed

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native species is locally frequent through most of Britain in ponds, lakes, canals and streams. In Midlothian it has been found in ponds and reservoirs in upland areas. Gladhouse Reservoir is a SSSI.

| Location | Grid Ref | Date | Recorder |
|-------------------------|----------|------------|---------------------------|
| North of Cauldhall Moor | NT2759 | 1986 | Munro, D. & McKean, D.R. |
| Cauldhall Moor | NT2759 | 1992 | McKean, D.R. |
| Howgate (Milkhall Pond) | NT243573 | 1995 | Dixon, C. |
| Threipmuir Reservoir | NT161634 | 05/06/1997 | Lassiere, O. & Bailey, M. |
| Threipmuir Reservoir | NT167634 | 05/06/1997 | Lassiere, O. & Bailey, M. |
| Gladhouse Reservoir | NT300544 | 12/06/1997 | Day, J. & Cornish, C. |

Potamogeton pectinatus L.

Fennel Pondweed

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native species is frequent through most of Britain in lakes, rivers, streams and dykes, even if brackish. In Midlothian the species has been found in ponds, a loch, canal and river, in lowland and city sites. The species has been known at Duddingston Loch from 1824, when it was also recorded at Lochend Loch. Duddingston Loch is a SSSI.

| Location | Grid Ref | Date | Recorder |
|--|----------|------------|------------------------------|
| Union Canal, Hermiston | NT1870 | 1955 | Muirhead, C.W. |
| Union Canal, Sighthill | NT1970 | 1955 | Muirhead, C.W. |
| Inverleith Pond | NT2474 | 1963 | Cornyle |
| Union Canal, Slateford | NT2170 | 1967 | Stewart, O.M. |
| Craiglockhart Pond | NT2370 | 05/11/1987 | McKean, D.R. & Preston, C.D. |
| Duddingston Loch (east bay) | NT2872 | 05/11/1987 | McKean, D.R. & Preston, C.D. |
| West Long Livingston | NT0266 | 10/05/1994 | Muscott, J., McKean, D.R. |
| River Almond, Gavieside | NT0266 | 1994 | McKean, D.R. |
| Union Canal, Wilkie's Basin to Ratho | NT127708 | 23/08/2013 | McKean, D.R. |
| Union Canal, Harrison Road to Yeaman Place | NT2372 | 08/09/2013 | Muscott, J. |
| Union Canal, Leamington Terrace Lift Bridge to Basin | NT2472 | 18/09/2013 | Muscott, J. |
| Union Canal, Viewforth Bridge to Leamington Terrace | NT2472 | 18/09/2013 | Muscott, J. |
| Threipmuir Reservoir (upper end) | NT1663 | 2013 | Stewart, N.F. |
| Duddingston Loch | NT2872 | 2013 | Stewart, N.F. |

Potamogeton perfoliatus L.

Perfoliate Pondweed

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native species is frequent throughout Britain in ponds, canals, streams and rivers. In Midlothian there has been only one post-1970 record of this species, from the Union Canal at Slateford (see below). Most of the pre-1970 records have also been from points along the Union Canal. Historically, in the 19th century, there were records not only from the Union Canal, but also from Duddingston Loch (see below). In the 18th century the species was at Lochend as well as Duddingston Loch.

| Location | Grid Ref | Date | Recorder |
|-------------------------------|----------|------------|----------------|
| Duddingston Loch | NT27 | Pre-1824 | Brodie, J. |
| Union Canal near Edinburgh | NT17 | 07/1878 | Evans, W.W. |
| Edinburgh, near | NT27 | 07/1885 | Terras, E.B. |
| Union Canal, above Drumbryden | NT27 | 31/05/1941 | Taylor, G. |
| Union Canal, Hermiston | NT17 | 06/06/1942 | Taylor, G. |
| Union Canal, Sighthill | NT17 | 25/08/1955 | Muirhead, C.W. |
| Union Canal, East Hermiston | NT17 | 08/1964 | Muirhead, C.W. |
| Union Canal, Ashley Terrace | NT235718 | 14/07/1969 | Stewart, O.M. |

| | | | |
|------------------------|--------|------|--------------|
| Union Canal, Slateford | NT2170 | 2000 | McKean, D.R. |
|------------------------|--------|------|--------------|

Potentilla argentea L.

Hoary Cinquefoil

National Status: Not Scarce; IUCN: NT; SBL: >25% decline.
Midlothian Status: Rare.

Nationally this native perennial is found on sandy grassland and waste ground as far north as central Scotland. It is local and decreasing except in eastern England, where it is common. In Scotland there has been significant decline, recognised by the SBL. In Midlothian the species has been recorded in only one site since 1969, on waste ground at former railway sidings, where it had been recorded previously in 1959 and 1955. From 1809 to 1894 the plant was found on Blackford Hill and in 1894 at Newhaven. In 1934 it was recorded at Gorgie.

| Location | Grid Ref | Date | Recorder |
|----------------|----------|------------|---------------|
| Borthwick | NT3660 | 1955 | Beattie, E.P. |
| Borthwick Bank | NT3660 | 16/06/1970 | Stewart, O.M. |

Potentilla x mixta Nolte ex Rchb. (**P. anglica or erecta x P. reptans**)

Hybrid Cinquefoil

National Status: Not designated; IUCN: Not designated.
Midlothian Status: Rare.

Nationally this sterile native hybrid is frequent through most of Britain, with or without its native parents. In Midlothian there have been only two records, from rough and long grass in widely separated locations.

| Location | Grid Ref | Date | Recorder |
|--------------|----------|------------|-------------|
| Tynehead | NT3960 | 12/07/1992 | Muscott, J. |
| Cammo Estate | NT172743 | 28/07/1999 | Lumsden, B. |

Potentilla tabernaemontani Asch.

Spring Cinquefoil

National Status: Scarce; IUCN: LC.
Midlothian Status: Scarce.

This native perennial (formerly *Potentilla neumanniana*) is locally distributed in Britain, and found on dry basic grassland and rocky slopes. In Midlothian it has been recorded on rocks and slopes at several sites around Arthur's Seat (SSSI) in Holyrood Park, and also at Blackford Hill and Musselburgh. The species has been known in Holyrood Park since at least 1809. In 1863 the species was also recorded at Craiglockhart. Musselburgh was a new site for the plant in 2012, but the plant has now disappeared from there.

| Location | Grid Ref | Date | Recorder |
|-------------------------|----------|------|------------------------------|
| Blackford Hill | NT2570 | 1997 | McKean, D.R. & Lusby, P. |
| Queen's Drive | NT277726 | 1998 | Maxwell, S.A. |
| Samson's Ribs (west of) | NT274724 | 1998 | Maxwell, S.A. & McKean, D.R. |

| | | | |
|-------------------------|-----------|------------|--|
| Holyrood Park | NT269729§ | 05/05/2011 | Kenicer, G., McHaffie, H.S. & McKean, D.R. |
| Arthur's Seat | NT269729§ | 22/05/2012 | Young, G. et al. |
| Beach Lane, Musselburgh | NT338729 | 05/06/2012 | Jackson, E.H. |

Primula x polyantha Mill. (**P. vulgaris x P. veris**)

False Oxlip

*National Status: Not designated; IUCN: Not designated.**Midlothian Status: Rare.*

Nationally this native hybrid arises sporadically where both parents are present, often in scrub. In Midlothian the hybrid was abundant along the embankment of the disused railway between Borthwick Bank and Tynehead in 1956. There were records from the same hectad, without further details, in 1968 and 1999. The most recent record was from south of Crichton and north of Tynehead, beside the same disused railway as in 1956, with both parent species nearby. Historically (1821) the hybrid was found in NT26, but no further details have been traced.

| Location | Grid Ref | Date | Recorder |
|----------------------------|-----------|------------|---------------|
| Borthwick Bank to Tynehead | NT36 | 25/05/1956 | Beattie, E.P. |
| Crichton, near | NT390598§ | 16/05/2010 | Legg, C.J. |

Prunus domestica L. **subsp. insititia** (L.) Bonnier & Layens

Damson / Bullace

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this subspecies of the naturalised archaeophyte, *Prunus domestica*, is a shrub or tree found through much of Britain in hedges, scrub, copses and waste ground. In Midlothian the species, *Prunus domestica*, is too common to include in this *Register*, but subsp. *insititia* is scarce, and has been recorded in hedges, roadside and riverside banks, and rough grass. In 2013 it was also found to be planted, e.g. west of Restalrig Road Bridge. In 1809 and 1824 it was found in the Pentland Hills and in 1863 and 1894 at Dalmahoy, Corstorphine, Colinton and Lasswade.

| Location | Grid Ref | Date | Recorder |
|------------------------------|----------|------------|---|
| River Almond, Cramond Bridge | NT17 | 1956 | Beattie, E.P. |
| Broomhill House | NT3166 | 02/06/1976 | Stewart, O.M. |
| Hallyards, Kirkliston | NT1273 | 1984 | McKean, D.R. |
| Blackford Hill | NT257706 | 1992 | McKean, D.R. |
| Gogar Station | NT1771 | 1992 | McKean, D.R. |
| Seafield | NT019662 | 1994 | McKean, D.R. |
| Old Church Lane, Duddingston | NT283727 | 1998 | McKean, D.R. |
| | | | McKean, D.R., Sumner, B.E.H. & TWIC |
| Water of Leith, Currie | NT1867 | 15/07/2012 | |
| Quarryholes to Seafield | NT2775 | 20/08/2013 | McKean, D.R. |

Puccinellia distans (Jacq.) Parl. **subsp. borealis** (Holmb.) W.E. Hughes.
Northern Saltmarsh-grass

National Status: Scarce; IUCN: LC.
Midlothian Status: Rare.

This northern subspecies of the native perennial, *Puccinellia distans*, is the rarer of its two subspecies and is found on stony, rocky, or sandy coastal sites, and on sea walls, in northern and eastern Scotland. Subsp. *borealis* has not, so far, been recorded inland by salted roads, whereas subsp. *distans*, the commoner of the two subspecies, is found both at the coast and in salty inland sites. In Midlothian subsp. *borealis* has been recorded on waste ground in dockland and harbour areas, but is rare. In contrast, the species and subsp. *distans* (considered together) are not scarce in the Vice-county, and have been found inland as well as at the coast. The coastal sites are within the Firth of Forth SSSI.

| Location | Grid Ref | Date | Recorder |
|---------------------------|----------|------------|---------------|
| Leith Docks (east end of) | NT2876 | 17/09/1973 | Stewart, O.M. |
| Leith Docks (east end of) | NT2876 | 30/07/1977 | Stewart, O.M. |
| Granton Harbour | NT2377 | 19/09/1979 | Stewart, O.M. |

Puccinellia maritima (Huds.) Parl. Common Saltmarsh-grass

National Status: Not Scarce; IUCN: LC.
Midlothian Status: Rare.

Nationally this native perennial is common around the British coasts in estuarine mud and saltmarshes. It is rarer inland, by salted roads and in saline areas. In Midlothian the species has been found only at the coast, on an offshore island and on the mainland coast at the edge of ash lagoons and near a sea wall.

| Location | Grid Ref | Date | Recorder |
|----------------------|----------|------------|---------------|
| Inchmickery | NT2080 | 1967 | Beattie, E.P. |
| Musselburgh Lagoons | NT3070 | 10/08/1970 | Beattie, E.P. |
| Musselburgh Lagoons | NT3070 | 01/02/1987 | McKean, D.R. |
| Silverknowes/Granton | NT209771 | 29/08/2002 | McKean, D.R. |

Pyrola media Sw. Intermediate Wintergreen

National Status: Not Scarce; IUCN: VU; SBL: >25% decline.
Midlothian Status: Rare.

Nationally this native species is frequent in central and northern Scotland, but very local elsewhere. However, in Scotland as a whole the plant has shown significant decline, recognised by the SBL. It is found in woods and moors rich in humus. In Midlothian about a thousand plants were found in a ditch near a road bridge in 2002, the first record of this species for a long time. Previous records were from Bilston (1863 and 1894), Tynehead (1863, 1894 and 1934), and Juniper Lee (1934).

| Location | Grid Ref | Date | Recorder |
|---------------------------------------|----------|------|------------------------------|
| Shank Bridge (east side of road near) | NT3361 | 2002 | Maxwell, S.A. & McKean, D.R. |

Pyrola rotundifolia L.

Round-leaved Wintergreen

*National Status: See below; IUCN: See below.**Midlothian Status: Rare.*

Nationally this native species is represented by two subspecies of doubtful value (Stace, 2010). Subsp. *rotundifolia* is Nationally Scarce and IUCN: NT, and is the subspecies most likely to have been found in Midlothian. It grows in damp rocky places, woods, fens and bogs and is very local in Britain. In Midlothian this wintergreen has been recorded recently at the edge of a wood near Gorebridge. Previous records were from the 18th and 19th centuries, when the species was found at Auchendinny Woods (1768, 1809, 1824, 1863, 1894), Roslin Woods (1824) and Corstorphine (1839).

| Location | Grid Ref | Date | Recorder |
|-----------------------|-----------|------------|--------------------|
| Gore Glen, Gorebridge | NT337617 | 2002 | Maxwell, S.A. |
| Millbank Wood | NT337615§ | 14/08/2010 | Muscott, J. et al. |

Pyrus communis L.

Pear

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

This archaeophyte is a tree, naturalised in hedges and waste ground, and is commoner in the southern half of Britain than the north. In Midlothian the species has been found in waste ground, on a railway bank, and at the entrance to an old quarry. Previous records were from Duddingston (1863 and 1934), and Craigmillar (1934).

| Location | Grid Ref | Date | Recorder |
|-----------------------------------|----------|---------|--------------|
| Newbridge | NT1273 | 1981 | BSS surveyor |
| Warriston | NT252758 | 1998 | McKean, D.R. |
| Millerhill, waste ground | NT325701 | 04/2011 | Milne, R.I. |
| Blackford Glen, near Agassiz Rock | NT258702 | 2011 | McKean, D.R. |

Quercus x rosacea Bechst. (**Q. petraea** x **Q. robur**)*National Status: Not designated; IUCN: Not designated.**Midlothian Status: Scarce.*

This fertile, native, hybrid oak is found all over the the British Isles where one or both parents occur. In Midlothian it is apparently scarce, but might have been under-recorded. Calder Wood, Crichton Glen and Maggie Bowies Glen are SSSIs.

| Location | Grid Ref | Date | Recorder |
|---|----------|------------|--|
| North of Colinton (Colinton Dell & Merchiston School) | NT2169 | 1983 | McKean, D.R., Maxwell, S.A., Stewart, O.M. |
| Selm Muir Wood | NT0864 | 11/07/1992 | Robertson, S. |
| Calder Wood | NT077667 | 01/06/2000 | Hutcheon, S. & Badenoch, C. |
| Crichton Glen | NT3761 | 24/04/2004 | Muscott, J. & ENHS |
| Vogrie | NT3863 | 22/04/2006 | Crowther, N., et al. |

| | | | |
|--------------------|--------|------------|-------------------------------|
| Maggie Bowies Glen | NT3860 | 16/05/2010 | McKean, D.R. & Sumner, B.E.H. |
| Corstorphine Hill | NT2073 | 23/06/2011 | Muscott, J. |
| Hermard Quarry | NT0263 | 22/07/2012 | Wilcox, M. & Sumner, B.E.H. |
| B6362 near Tanwell | NT4845 | 21/10/2012 | Sumner, B.E.H. |

Radiola linoides Roth

Allseed

*National Status: Not Scarce; IUCN: NT.**Midlothian Status: Rare.*

Nationally this native annual is scattered through most of Britain, especially near the coast. It grows in open sandy or peaty ground and woodland rides, which are seasonally damp. In Midlothian the species has been found recently in inland grassland some miles south-east of Edinburgh. It was recorded at Fisherrow, a coastal site, in 1765.

| Location | Grid Ref | Date | Recorder |
|-------------------------------------|----------|------|-----------|
| Hagbrae, Crichton | NT378621 | 1995 | Dixon, C. |
| Springfield House, Polton (west of) | NT288647 | 1995 | Dixon, C. |

Ranunculus aquatilis L.

Common Water-crowfoot

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native species is frequent through most of Britain in ditches, ponds, canals and slow rivers. In Midlothian it occurs in marshes, ponds and ditches, but is scarce. Duddingston Loch is a SSSI and Bawsinch is a nature reserve (SWT) within the SSSI.

| Location | Grid Ref | Date | Recorder |
|---|-----------|------------|------------------|
| Mortonhall Golf Course | NT253693 | 1954 | McKenzie, H.M. |
| Threipmuir Reservoir | NT1663 | 1967 | Myerscough, P.J. |
| Rosewell Reservoir (south of) | NT2759 | 25/08/1992 | McKean, D.R. |
| Duddingston Golf Course (Loch and Bawsinch) | NT2872 | 1992 | Muscott, J. |
| Bawsinch | NT2872 | 1993 | Muscott, J. |
| Glen Cottage | NT2263 | 1993 | Stewart, O.M. |
| Toxside Moss (north) | NT271550§ | 26/06/2012 | Sumner, B.E.H. |
| Clubbiedean Reservoir | NT1966 | 12/07/2012 | Sumner, B.E.H. |

Ranunculus arvensis L.

Corn Buttercup

*National Status: Not Scarce; IUCN: CR; UK BAP, 2007; SBL: rare & >25% decline.**Midlothian Status: Rare.*

Nationally this annual archaeophyte used to be frequent in England and scattered in central and northern Scotland, but it is now declining in Britain. In Scotland the species is rare and its decline has been significant, recognised by the SBL. It is found in cornfields and other cultivated ground. The species is one of those being

studied in the BSBI “Threatened Plants Project”. In Midlothian the plant is a rare casual of waste and cultivated ground, but is included in this *Register* because of its conservation status. In 1824 this species was recorded in cornfields near Stockbridge, and in 1863 in fields near Granton and at Prestonhall. Prestonhall also featured in 1867 (see below). In 1927 Leith and Portobello were reported sites (see below). By 1934 the species was found near Granton and at Prestonhall, Leith, Portobello and Slateford, but has since decreased.

| Location | Grid Ref | Date | Recorder |
|------------------|----------|------------|---------------|
| Prestonhall | NT37 | 06/1867 | Sadler, J. |
| Leith | NT2876 | 1927 | Anon. |
| Portobello | NT3073 | 1927 | Anon. |
| Blackford Hill | NT27 | 1980 | Kemp, R. |
| Leith Docks | NT27 | 1982 | Stewart, O.M. |
| Newhailes Estate | NT3272 | 15/06/1988 | McKean, D.R. |
| Leith Docks | NT2676 | 1990 | Stewart, O.M. |

Ranunculus baudotii Godr.

Brackish Water-crowfoot

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Rare.

Nationally this native species is scattered around the British coasts, in ponds and ditches near the sea. In Midlothian the species has been recorded Duddingston Loch repeatedly since at least 1832. Duddingston Loch is a SSSI at the present time. In 1839 and 1919 the plant was also recorded at Lochend Loch and in 1889 at Braid Hill Marshes, but has not been recorded at these two sites recently.

| Location | Grid Ref | Date | Recorder |
|------------------|----------|------|--------------|
| Duddingston Loch | NT2872 | 1999 | McKean, D.R. |

Ranunculus circinatus Sibth.

Fan-leaved Water-crowfoot

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Rare.

This native species is thinly scattered in Britain north to central Scotland, in still and slow-moving water. In Midlothian the species was first recorded in 1839 at Lochend (Pond) and Duddingston Loch (see below). The last record from Lochend Pond was in 1956 and from Duddingston Loch in 1960. Duddingston Loch is a SSSI. The location of the 1849 site, near Edinburgh, is uncertain. In 2013 the species was recorded from a new site, Threipmuir Reservoir.

| Location | Grid Ref | Date | Recorder |
|----------------------------------|----------|------------|---------------|
| Duddingston Loch | NT27 | 07/1839 | Balfour, J.H. |
| Lochend | NT27 | 14/08/1839 | Knapp, J. |
| Edinburgh, near | NT27 | 08/1849 | Balfour, J.H. |
| Lochend Pond | NT2774 | 1956 | McNab, W.P. |
| Duddingston Loch | NT2872 | 1960 | Roger, J.G. |
| Threipmuir Reservoir (upper end) | NT1663 | 2013 | Stewart, N.F. |

Ranunculus x levenensis Druce ex Gornall (**R. flammula x R. reptans**)

Loch Leven Spearwort

*National Status: Not designated; IUCN: Not designated.**Midlothian Status: Rare.*

Nationally this native hybrid is local in Britain, on pebbles or silt at lake edges. It often occurs in the absence of *R. reptans*, but usually in the presence of *R. flammula*. The hybrid backcrosses with *R. flammula*. In Midlothian the hybrid has been found on mud at the edge of a reservoir which is a SSSI.

| Location | Grid Ref | Date | Recorder |
|---------------------|----------|------|-----------|
| Gladhouse Reservoir | NT305533 | 1996 | Dixon, C. |
| Gladhouse Reservoir | NT305536 | 1996 | Dixon, C. |

Ranunculus lingua L.

Greater Spearwort

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native perennial is scattered through most of Britain and grows in marshes and beside ponds. It is also planted, which confuses the natural distribution. In Midlothian it has similar habitats and is also planted, so the confusion is similar. In 1824 the species was present at Duddingston Loch (now a SSSI) and has persisted there. In 1934 the plant was also recorded at Prestonhall.

| Location | Grid Ref | Date | Recorder |
|---------------------------|-----------|------------|-----------------------|
| Carberry Tower | NT3669 | 07/07/1962 | Beattie, E.P. |
| Duddingston Loch | NT2872 | 1999 | Muscott, J. |
| Bankhead House | NT1566 | 26/05/1999 | Luxmoore, S. |
| Redford Wood | NT166638 | 10/09/1999 | SWT Survey |
| Blackford Pond | NT2570 | 25/06/2010 | Muscott, J. |
| Valleyfield, Penicuik | NT238597 | 04/08/2010 | Sumner, B.E.H. |
| Craiglockhart Pond | NT231708§ | 16/07/2012 | Dawson, K.T. |
| Vogrie Country Park | NT3763 | 04/08/2012 | Sumner, B.E.H. |
| Kirknewton Estate | NT1166 | 14/08/2012 | Sumner, B.E.H. |
| Kirknewton Estate | NT1266 | 19/08/2012 | Sumner, B.E.H. & TWIC |
| Carberry Estate | NT3669 | 30/06/2013 | Sumner, B.E.H. & TWIC |
| Blackford Hillside & Pond | NT2570 | 06/07/2013 | Muscott, J. |
| Midmar Allotments | NT2570 | 11/08/2013 | Muscott, J. & BSS |

Ranunculus omiophyllus Ten.

Round-leaved Crowfoot

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native species is locally frequent on wet mud and in shallow ponds and streams towards the west of Britain and in south-west Scotland. In Midlothian it has been recorded since 1970 in a marshy rivulet. Before 1925 it was found at Garvald Punks.

| Location | Grid Ref | Date | Recorder |
|----------------|----------|------|----------|
| Tweeddale Burn | NT25 | 1999 | Day, J. |

Ranunculus sceleratus L.

Celery-leaved Buttercup

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native annual is frequent through England but scattered and more coastal in Scotland. It grows in marshy areas in fields and beside ditches, ponds and streams. In Midlothian since 1970 the species has been recorded in marshes and in shallow water at a pond edge. It occurs just inland from the coast, and much further inland in the hills south of Stow. Duddingston and Lochend Lochs are traditional sites for this species (since at least 1824). Historically the species was also recorded in the Nor' Loch (1768), in ditches on The Meadows (1824) and at Craigmillar (1934). Duddingston Loch is a SSSI.

| Location | Grid Ref | Date | Recorder |
|--------------------|-----------|------------|---------------|
| Duddingston Loch | NT2872 | 07/08/1955 | Beattie, E.P. |
| East of Torsonce | NT4743 | 1984 | Nield, P. |
| Lochend Pond | NT2774 | 1999 | McKean, D.R. |
| Inch Park | NT278709 | 20/05/2011 | Milne, R.I. |
| Craiglockhart pond | NT230708§ | 14/10/2012 | Dawson, K.T. |
| Duddingston Loch | NT2872 | 2013 | Stewart, N.F. |

Rorippa islandica (Oeder ex Gunnerus) Borbás

Northern Yellow-cress

*National Status: Scarce; IUCN: LC.**Midlothian Status: Scarce.*

This native species, an annual or short-lived perennial, is scattered in Britain, and grows in damp, open places, such as pondsides. In Scotland it is often near the sea. In Midlothian it has been found in marshy watersides and on a reservoir slipway at the north-western edge of the Pentland Hills. Bavelaw Marsh is part of a SSSI.

| Location | Grid Ref | Date | Recorder |
|--------------------------|----------|------------|----------------|
| Threipmuir | NT1663 | 11/07/1956 | Currie, A. |
| South of Marchbank Hotel | NT1663 | 1976 | Raeburn, J. |
| Harlaw Reservoir | NT1864 | 1994 | Lusby, P. |
| Harlaw Reservoir | NT1865 | 1994 | Lusby, P. |
| Threipmuir Reservoir | NT16 | 1998 | SWT Survey |
| Bavelaw Bridge (east of) | NT168637 | 16/09/1998 | Garner, D. |
| Bavelaw Marsh, Balerno | NT1663 | 12/06/2010 | Sumner, B.E.H. |
| Torduff Reservoir | NT2067 | 06/09/2013 | Harmsworth, N. |

Rosa caesia Sm. **subsp. caesia**

Hairy Dog-rose

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native perennial subspecies occurs throughout the north and centre of Britain, but is more scattered in the south. The bush grows in hedges, woodland

edges and scrub. In Midlothian this subspecies is the scarcer of the two subspecies of *R. caesia* (subsp. *vosagiaca* being the commoner). Since 1970 the six records of subsp. *caesia* have been from scrub, hedges and woodland in Edinburgh and south of the city (see below). The table shows that pre- and post-1970 sites were not the same.

| Location | Grid Ref | Date | Recorder |
|-----------------------|----------|------------|---------------|
| West Calder | NT06 | 1868 | Anon. |
| Ratho | NT17 | 06/07/1870 | Anon. |
| Juniper Green | NT26 | 24/08/1876 | Webb, F.M. |
| Balerno | NT16 | 20/06/1889 | Anon. |
| Colinton | NT26 | 08/07/1901 | Anon. |
| Fairmilehead | NT26 | 27/06/1912 | Adamson, R.S. |
| Stow | NT44 | 24/08/1978 | Beattie, E.P. |
| Blackford Glen | NT2670 | 25/08/1978 | Beattie, E.P. |
| Haggs Farm (south of) | NT1367 | 21/09/1978 | Beattie, E.P. |
| Oxenfoord Mains | NT3967 | 1994 | Learmonth, R. |
| North of Rose Mains | NT4066 | 1994 | Learmonth, R. |
| Niddrie | NT3071 | 15/07/2003 | McKean, D.R. |

Rosa caesia x R. sherardii Sm.

National Status: Not designated; IUCN: Not designated.

Midlothian Status: Scarce.

Nationally this native hybrid (?= *R. x alpestris* Rapin ex Reut.) occurs in the north of Britain south to Leicestershire. Either subspecies of *R. caesia* may be involved in the hybrid. In Midlothian all except two records (the last two in the table below) have been of the hybrid involving subsp. *vosagiaca*. In the last two records the subspecies of *R. caesia* was not identified. Habitats, where recorded, have been waysides and watersides; locations have been scattered.

| Location | Grid Ref | Date | Recorder |
|--------------------------------------|----------|------------|---------------|
| Ratho | NT17 | 06/07/1870 | Anon. |
| Hawthornden, R.N. Esk bank opposite | NT26 | 08/08/1876 | Webb, F.M. |
| Easter Newton | NT16 | 26/07/1883 | Anon. |
| Fushiebridge, south of Gorebridge | NT3560 | 28/06/1978 | Stewart, O.M. |
| Union Canal, opposite Brompton Lodge | NT1570 | 11/09/1978 | Beattie, E.P. |
| Carlops, east of | NT15 | 27/08/1978 | Beattie, E.P. |
| Cousland | NT3868 | 23/10/1985 | McKean, D.R. |

Rosa x dumalis Bechst. (**R. canina x R. caesia**)

National Status: Not designated; IUCN: Not designated.

Midlothian Status: Rare.

Nationally this native hybrid, the commonest of the hybrid roses, is found over most of Britain, even if *R. caesia* is absent. Either subspecies of *R. caesia* may be involved in this hybrid with *R. canina*. In Midlothian the hybrid involving subsp. *caesia* has not been recorded since 11/08/1887, when it was found at Dalhousie (NT36) by an unknown recorder. The records in the table below are of the hybrid

involving subsp. *vosagiaca*. The recent records have been from a pathside (Cowpits), a wood edge (Colinton Dell) and from the roadside west of Pirn House (near Stow). Historically this hybrid was recorded not only at the site near Edinburgh (1888, see table), but also on Blackford Hill (1841) and at Curriehill (1914).

| Location | Grid Ref | Date | Recorder |
|-----------------|----------|------------|--------------|
| Edinburgh, near | NT27 | 1888 | Rogers, W.M. |
| Blackford Hill | NT27 | 24/07/1954 | Anon. |
| Cowpits | NT3470 | 1985 | McKean, D.R. |
| Cowpits | NT3470 | 28/05/1988 | McKean, D.R. |
| Stow, near | NT4347 | 1986 | McKean, D.R. |
| Colinton Dell | NT2169 | 1999 | McKean, D.R. |

Rosa x perthensis Rouy (**R. sherardii x R. mollis**)

National Status: Not designated; IUCN: Not designated.

Midlothian Status: Rare.

Nationally this native hybrid is found in northern Britain, south to north-west Yorkshire. In Midlothian there have been two records, one historic and one post-1970.

| Location | Grid Ref | Date | Recorder |
|-----------------|----------|------------|---------------|
| Roslin | NT26 | 12/09/1900 | Anon. |
| North Middleton | NT35 | 24/08/1978 | Beattie, E.P. |

Rubus adenanthoides Newton

Bramble

National Status: Not Scarce; IUCN: LC (designations for R. fruticosus agg.).

Midlothian Status: Rare.

This endemic perennial is widespread in central England and Ireland, and found at the edges of moors and heaths, roadsides and open woodland. In Midlothian there has been only one record, from a city site by an old railway.

| Location | Grid Ref | Date | Recorder |
|--------------|----------|------|------------------|
| South Pilton | NT27 | 2003 | Ballantyne, G.H. |

Rubus lindleianus Lees

Lindley's Bramble

National Status: Not Scarce; IUCN: LC (designations for R. fruticosus agg.).

Midlothian Status: Rare.

This native perennial is widespread in north-west Europe, including Britain. It is common on hedgebanks, less so at woodland edges, and avoids exposed habitats such as coasts and uplands. In Midlothian there has been only one recent record, from a wooded site.

| Location | Grid Ref | Date | Recorder |
|---------------------|----------|------|------------------|
| Roslin Country Park | NT26 | 2003 | Ballantyne, G.H. |

Rubus phaeocarpus W.C.R. Watson

Bramble

*National Status: Not Scarce; IUCN: LC (designations for R. fruticosus agg.).**Midlothian Status: Rare.*

This endemic perennial is widespread in south-east England and northern France, where it grows at the edges of woods and on heaths. In Midlothian there has been only one record, and this was the second for Scotland. The species was plentiful by the disused goods railway line leading into the former mill site. This bramble is aggressive and might spread.

| Location | Grid Ref | Date | Recorder |
|----------|----------|------|------------------|
| Penicuik | NT2559 | 2003 | Ballantyne, G.H. |

Rubus raduloides (Rogers) Sudre

Bramble

*National Status: Not Scarce; IUCN: LC (designations for R. fruticosus agg.).**Midlothian Status: Rare.*

This native perennial is widespread in north-west Europe, including Britain. It grows on hedgebanks, at the edges of woods and in woods, where soils are less acid. In Midlothian the species has been recorded at an inland and a coastal site in the city.

| Location | Grid Ref | Date | Recorder |
|---------------|----------|------|------------------|
| Colinton Dell | NT2169 | 1992 | Ballantyne, G.H. |
| Seafield | NT2875 | 1992 | Ballantyne, G.H. |

Rubus saxatilis L.

Stone Bramble

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

This native perennial is rather scattered in the northern half of Britain, and is found in woods and mountains, on basic soils and on scree. In Midlothian since 1970 the species has been recorded on rocks in the Moorfoot and Pentland Hills. The sites in NT3447 are within the Moorfoot Hills SSSI. Historically this bramble was recorded in Roslin Woods (1824 to 1934), in the Pentland Hills near Colinton (1824), at Auchendinny, Arniston and Dalhousie (1863 to 1934), Pomathorn Dean and Penicuik (1877) and at Mid Calder (1927 to 1934).

| Location | Grid Ref | Date | Recorder |
|-----------------------------------|----------|------------|-------------------------------|
| Rough Moss Cleugh, Moorfoot Hills | NT3447 | 1972 | Ferreira, C. |
| Wolf Cleugh, Moorfoot Hills | NT3447 | 1972 | Ferreira, C. |
| Hirendean Castle | NT2951 | 1990 | Dixon, C. |
| West of Dewar Hill | NT3447 | 1994 | Dixon, C. & McKean, D.R. |
| Carlops to North Esk Reservoir | NT1556 | 22/07/2000 | Jones, M., Muscott, J. & ENHS |

Rubus sciocharis W.C.R. Watson

Bramble

*National Status: Not Scarce; IUCN: LC (designations for R. fruticosus agg.).**Midlothian Status: Scarce.*

This native perennial is widespread in north-west Europe, including Britain, where it grows on hedgebanks and at woodland edges. In Midlothian the species has been recorded in city sites, one of them at the edge of a woodland den.

| Location | Grid Ref | Date | Recorder |
|--------------------------------|----------|------|------------------|
| Hermitage of Braid | NT2570 | 1992 | Ballantyne, G.H. |
| Trinity | NT27 | 2003 | Ballantyne, G.H. |
| Newhaven | NT27 | 2003 | Ballantyne, G.H. |
| Royal Botanic Garden Edinburgh | NT2475 | 2003 | Ballantyne, G.H. |

Rubus scoticus (Rogers & Ley) Edees

Bramble

*National Status: Not Scarce; IUCN: LC (designations for R. fruticosus agg.).**Midlothian Status: Rare.*

This endemic perennial is widespread in northern Europe, including Britain. It grows on moors and hedgebanks, at woodland edges and in woods. In Midlothian the species has been found in three city sites.

| Location | Grid Ref | Date | Recorder |
|--------------------|----------|------|------------------|
| Warriston Cemetery | NT2575 | 1984 | Ballantyne, G.H. |
| Craiglockhart Dell | NT2170 | 1992 | Ballantyne, G.H. |
| Craigeleith | NT27 | 2003 | Ballantyne, G.H. |

Rubus trichodes W.C.R. Watson

Bramble

*National Status: Not Scarce; IUCN: LC (designations for R. fruticosus agg.).**Midlothian Status: Rare.*

This endemic perennial is regional, and grows in woods and at woodland edges. In Midlothian there has been only one record of this species, the first Scottish record. The bramble was found by a former railway line.

| Location | Grid Ref | Date | Recorder |
|----------|----------|------|------------------|
| Trinity | NT27 | 2003 | Ballantyne, G.H. |

Rumex alpinus L.

Monk's-rhubarb

*National Status: Scarce; IUCN: NT.**Midlothian Status: Scarce.*

Nationally this perennial archaeophyte (formerly *Rumex pseudoalpinus*) is scattered from north Britain south to Staffordshire, and grows in grass among old buildings, and by roads and streams. In Midlothian the post-1970 records have been from riversides and roadsides. In 1863 and 1894 the species was recorded on Penicuik Moor.

| Location | Grid Ref | Date | Recorder |
|-------------------------------------|----------|------------|---------------|
| Heriot | NT35 | 1973 | Beattie, E.P. |
| Breich Water, Blackhill Farm (near) | NS969617 | 13/07/1973 | Beattie, E.P. |
| Frogston Road (south side) | NT2567 | 20/09/1992 | McKean, D.R. |
| Woodmuir Burn/Breich Water | NS9661 | 1994 | McKean, D.R. |

Rumex conglomeratus Murray

Clustered Dock

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native species, which is biennial to perennial, occurs throughout Britain but is absent from northern Scotland. It is found in damp grassy or bare areas, often by water, but is sparse in upland districts. In Midlothian the three recent sites are all grassy and, at Duddingston Loch SSSI, by water. The species has been recorded at Duddingston since at least 1934. The plant is said to have been common in Midlothian in about 1824 (Smith *et al.*, 2002).

| Location | Grid Ref | Date | Recorder |
|----------------------|----------|------|----------------|
| Milton Bridge | NT2562 | 1981 | Sumner, B.E.H. |
| Dalmahoy Golf Course | NT1468 | 1982 | Campbell, C. |
| Duddingston Loch | NT2872 | 2013 | Stewart, N.F. |

Rumex x propinquus Aresch. (**R. longifolius x R. crispus**)*National Status: Not designated; IUCN: Not designated.**Midlothian Status: Rare.*

Nationally this native hybrid is frequent in Scotland where the parents occur together. In Midlothian there has been only one record, from roadside waste ground south of Fountainhall.

| Location | Grid Ref | Date | Recorder |
|-----------|----------|------|-------------|
| Bankhouse | NT4347 | 1994 | Muscott, J. |

Sagina apetala Ard.

Annual Pearlwort

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

After taxonomic revisions, which took place between the 2nd and 3rd editions of Stace's "New Flora of the British Isles" (1997 and 2010), *Sagina apetala* has retained much of former subsp. *apetala*, but lost former subsp. *erecta* F. Herm. This revised content of *S. apetala* Ard. is now synonymous with the historic species, *S. ciliata* Fr. The revised *S. apetala* is a native annual, scattered through most of Britain on paths, heaths and sea-cliffs. In Midlothian there have been essentially four post-1970 sites for the revised *S. apetala*. Three of these, Musselburgh, Leith Docks and Merchiston, are also historic sites for this species (shown by voucher specimens originally determined as *S. ciliata*). Since 1970 the species has been found on bare and waste ground, and on shingle at the edge of ash lagoons, but in 1871 it was

found on a roadside.

| Location | Grid Ref | Date | Recorder |
|---------------------|----------|------------|----------------------|
| Musselburgh Links | NT37 | 08/1837 | Knapp, J. |
| Merchiston, near | NT27 | 09/1871 | Evans, W.W. |
| Holyrood Park | NT27 | 26/06/1872 | Craig Christie, A. |
| Leith Docks | NT27 | 07/1904 | Fraser, J. |
| Musselburgh Lagoons | NT37 | 09/1971 | McCallum Webster, M. |
| Leith Docks | NT2676 | 1996 | Dixon, C. |
| Leith Docks | NT2876 | 1996 | Dixon, C. |
| Merchiston Castle | NT2169 | 1999 | McKean, D.R. |
| Niven's Knowe | NT2665 | 10/08/1999 | Dixon, C. |

Sagina filicaulis Jord.

Slender Pearlwort

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

After taxonomic revisions, this newly recognised species has been separated from *Sagina apetala*, and contains the more slender forms of the latter species, including the former subsp. *erecta* F. Herm. *Sagina filicaulis* Jord. is a native annual, scattered through most of Britain on walls, paths and bare areas of cultivated ground. It is more likely to be found in man-made habitats than the revised *S. apetala* (above). In Midlothian this new species appears to be commoner than the revised *Sagina apetala*, but still scarce, so far. The records below were all previously determined as *S. apetala* subsp. *erecta*. The sites have been both within and outside Edinburgh, on railway ballast, pavements and other bare ground.

| Location | Grid Ref | Date | Recorder |
|-----------------------------|----------|------------|---------------------------------|
| Goodtrees | NT1565 | 1981 | BSS surveyor |
| Turnhouse | NT1772 | 26/06/1985 | McKean, D.R. |
| Gowanhill | NT1668 | 1992 | Mackay, K. |
| Langside | NT0365 | 1994 | Muscott, J. |
| Saughton Prison & Stenhouse | NT2171 | 11/08/1999 | Maxwell, S. |
| Granton (Caroline Park) | NT2277 | 23/06/1999 | Pilling, E., Muscott, J. et al. |
| Niddrie | NT37A | 13/06/2003 | Maxwell, S.A. |
| Warriston Road | NT2575 | 18/03/2005 | McHaffie, H.S. & McKean, D.R. |
| Grange Cemetery | NT2571 | 02/08/2011 | Muscott, J. |
| Marchmont | NT2572 | 08/2013 | Muscott, J. |

Sagina maritima Don.

Sea Pearlwort

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

This native annual occurs around British coasts and occasionally inland by salted roads. At the coast it is found on damp sand-dunes, rocks and cliffs. In Midlothian it is coastal and has been recorded on waste ground, a sea wall, a harbour mouth, and on the shore. The shore of the Firth of Forth is a SSSI. The species was previously recorded at Cramond Island in 1934.

| Location | Grid Ref | Date | Recorder |
|---|----------|------------|------------------------------------|
| Cramond Island | NT1978 | 1952 | Beattie, E.P. |
| Seafield | NT282765 | 02/07/1968 | Stewart, O.M. |
| Granton Harbour (East) | NT2477 | 1981 | MacGilvray, A., Hobson, P.M. |
| South-east of Newhaven (Water of Leith) | NT2676 | 1982 | Stewart, O.M. |
| Victoria Dock | NT268767 | 19/06/1989 | McKean, D.R. |
| Musselburgh Harbour | NT334731 | 19/09/1994 | Jackson, E.H. |
| Inchmickery | NT2080 | 1997 | McKean, D.R. |
| Granton (Caroline Park) | NT2277 | 23/06/1999 | Pilling, E., Muscott, J. et al. |

Sagina subulata (Sw.) C. Prest.

Heath Pearlwort

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native perennial is scattered through most of Britain and occurs on dry open ground, on sand or gravel. In Midlothian since 1970 it has been found on bare ground and a cliff base. Samson's Ribs and Duddingston Loch are in SSSIs. The species was recorded in the Dalmahoy Hills in 1894 and 1934. In 1934 it was also recorded at The Kipps and at Balerno.

| Location | Grid Ref | Date | Recorder |
|-------------------------|----------|------|---------------|
| Balerno | NT16 | 1972 | Stewart, O.M. |
| Samson's Ribs (east of) | NT2772 | 1999 | Muir, I. |
| Duddingston Loch | NT283726 | 1999 | McKean, D.R. |

Salix x ambigua Ehrh. (**S. aurita x S. repens**)*National Status: Not designated; IUCN: Not designated.**Midlothian Status: Rare.*

Nationally this native hybrid is common in Britain where the parents co-exist. In Midlothian there has been only one record, from an upland heath in the Pentland Hills.

| Location | Grid Ref | Date | Recorder |
|----------|----------|------|-----------|
| Carlops | NT157568 | 1999 | Dixon, C. |

Salix x latifolia J. Forbes (**S. caprea x S. myrsinifolia**)*National Status: Not designated; IUCN: Not designated.**Midlothian Status: Rare.*

Nationally this native hybrid occurs in northern Britain through the range of *S. myrsinifolia*. In Midlothian there has been only one recent record, from a hilly district. The historic record from Duddingston Loch (now a SSSI) was from a marsh at the south-west corner of the Loch.

| Location | Grid Ref | Date | Recorder |
|------------------|----------|------------|--------------------|
| Dalkeith | NT36 | 16/08/1883 | Craig-Christie, A. |
| Duddingston Loch | NT27 | 1800 | Anon. |
| Falahill | NT3956 | 01/09/1994 | McKean, D.R. |

Salix x laurina Sm. (**S. cinerea x S. phylicifolia**)

Laurel-leaved Willow

*National Status: Scarce; IUCN: Not designated.**Midlothian Status: Rare.*

Nationally this native hybrid is frequent in northern Britain where the parents co-exist. In Midlothian there have been only two records, one from a pondside and the other from a riverside, in widely separate locations.

| Location | Grid Ref | Date | Recorder |
|---------------------------------------|------------|------------|--------------|
| Roslin, west of | NT260635 | 1997 | Dixon, C. |
| R. Almond, north of Edinburgh Airport | NT15227459 | 18/07/2013 | McKean, D.R. |

Salix x multinervis Döll (**S. cinerea x S. aurita**)*National Status: Not designated; IUCN: Not designated.**Midlothian Status: Scarce.*

Nationally this native hybrid is scattered through most of the British Isles on acid soils. In Midlothian it has been found in bogs and watersides in scattered locations. Gladhouse Reservoir is a SSSI.

| Location | Grid Ref | Date | Recorder |
|----------------------|----------|------------|-------------------|
| Burnhouse | NT4349 | 1978 | Howilt, R.C.L. |
| Heriot House | NT4054 | 1989 | Learmonth, R. |
| Bower | NT4250 | 1992 | Learmonth, R. |
| Gladhouse Reservoir | NT309543 | 20/09/1997 | Dixon, C. |
| Gladhouse | NT291536 | 27/09/1997 | Dixon, C. |
| Ravensneuk, Penicuik | NT230583 | 26/10/1997 | Dixon, C. |
| Glencorse | NT224632 | 1998 | Dixon, C. |
| Glencorse | NT208635 | 1998 | Dixon, C. |
| Glencorse Reservoir | NT215640 | 1998 | Dixon, C. |
| Glencorse Reservoir | NT2263 | 10/06/2010 | Sumner, B.E.H. |
| Longmuir Moss | NT470503 | 31/08/2013 | Braithwaite, M.E. |
| Longmuir Moss | NT471503 | 31/08/2013 | Braithwaite, M.E. |

Salix myrsinifolia Salisb.

Dark-leaved Willow

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native shrub is frequent in northern Britain, extending south to mid Yorkshire. It grows among damp rocks by ponds and streams. In Midlothian it has been found in bogs and ditches, and by ponds and disused railways, at sites scattered through the Vice-county. Duddingston Loch is a SSSI.

| Location | Grid Ref | Date | Recorder |
|---|----------|------------|---------------|
| Adambrae | NT0566 | 1981 | BSS surveyor |
| Granton | NT2377 | 1985 | Stewart, O.M. |
| Heriot House | NT4054 | 1989 | Learmonth, R. |
| Heriot Station | NT4054 | 1990 | Learmonth, R. |
| Duddingston Golf Course (Loch and Bawsinch) | NT2872 | 1992 | Muscott, J. |
| Trinity | NT2576 | 28/08/1992 | McKean, D.R. |
| West of Pearie Law | NS9858 | 1994 | Muscott, J. |
| Granton Gas Works - quarry pond | NT222767 | 14/06/2006 | McKean, D.R. |

Salix x puberula Döll (**S. cinerea x S. myrsinifolia**)

National Status: Not designated; IUCN: Not designated.

Midlothian Status: Rare.

Nationally this native hybrid occurs with the parents in northern and central Britain. In Midlothian two of the three records have been from water margins. Gladhouse Reservoir is a SSSI.

| Location | Grid Ref | Date | Recorder |
|----------------------|----------|------------|------------------|
| Blackhall | NT0662 | 1994 | Muscott, Miss J. |
| Threipmuir Reservoir | NT16 | 13/09/1997 | Dixon, C. |
| Gladhouse Reservoir | NT306541 | 04/10/1997 | Dixon, C. |

Salix x reichardtii A. Kern. (**S. caprea x S. cinerea**)

National Status: Not designated; IUCN: Not designated.

Midlothian Status: Scarce.

Nationally this native, variable hybrid is common through most of Britain. In Midlothian it has been found scattered through the Vice-county in various habitats, e.g. verges, waste ground and disused quarries.

| Location | Grid Ref | Date | Recorder |
|-----------------------------------|----------|------------|-----------------------------|
| Threipmuir | NT16 | 20/08/1973 | Beattie, E.P. |
| Niddrie | NT3071 | 08/09/1975 | Beattie, E.P. |
| South of Marchbank Hotel | NT1663 | 1976 | Raeburn, J. |
| Bowshank | NT4541 | 1982 | Little, M. |
| Heriot House | NT4054 | 1989 | Learmonth, R. |
| Fala Mains | NT4460 | 01/09/1994 | McKean, D.R. |
| Monktonhall bing, near Millerhill | NT3170 | 09/07/2011 | Milne, R.I. & BSS |
| Skivo Quarry | NT0564 | 22/07/2012 | Wilcox, M. & Sumner, B.E.H. |
| Torphin Quarry | NT2067 | 11/08/2012 | McKean, D.R. |

Salix repens L.

Creeping Willow

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this low-growing native willow occurs throughout Britain in dry and wet areas of heaths, moors, fens and dunes. In Midlothian the species has been found in upland bogs and marshes, and also in sandy areas near the coast. The North Esk Reservoir and the river valley south of it are within a SSSI. In 1934 the species was recorded at Cobbinshaw and Ravelrig.

| Location | Grid Ref | Date | Recorder |
|------------------------------|-----------|------------|-----------------------|
| Corston (north of) | NT0864 | 21/07/1978 | Beattie, E.P. |
| North of Fountainside | NT2957 | 1981 | Rangeley, A. |
| Leadburn | NT25 | 1986 | Webb, C. |
| Longmuir Moss | NT4750 | 16/07/1988 | McKean, D.R. |
| Mount Lothian Marsh | NT2949 | 1997 | Souter, R. |
| South of North Esk reservoir | NT1557 | 29/08/1999 | Sumner, B.E.H. |
| Thornycroft, Dalkeith | NT3467 | 08/1999 | McKean, D.R. |
| Levenhall Links | NT353738§ | 06/06/2011 | Sumner, B.E.H. |
| Cockmuir (north of) | NT2655 | 25/06/2012 | Sumner, B.E.H. |
| Toxside Moss (south) | NT2753 | 29/06/2012 | Sumner, B.E.H. & TWIC |

Salix x tetrapla Walker (**S. myrsinifolia** x **S. phylicifolia**)*National Status: Not designated; IUCN: Not designated.**Midlothian Status: Rare.*

Nationally this native hybrid willow is common in northern Britain where the parents occur. In Midlothian the only three records have been from a disused railway and from upland districts.

| Location | Grid Ref | Date | Recorder |
|--------------------------|----------|------------|---|
| Trinity Academy | NT2576 | 07/09/1988 | McKean, D.R. |
| Heriot House | NT4054 | 1989 | Learmonth, R. |
| Esperston, north-east of | NT3457 | 08/07/2012 | McKean, D.R. Maxwell, S.A. & Sumner, B.E.H. |

Salix triandra L.

Almond Willow

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

This archaeophyte, a small tree or shrub of damp places, is frequent in the south and centre of England, but much less so elsewhere in Britain. In Midlothian there has been only one recent record, in fact only one tree, found along a cycle track. In 1824 the species was recorded at Craigmuck, and in 1863 not only at Craigmuck, but also at Saughton Hall, Coltbridge and Granton.

| Location | Grid Ref | Date | Recorder |
|----------|----------|------|--------------|
| Trinity | NT2476 | 1999 | McKean, D.R. |

Salsola kali L. **subsp. kali**

Prickly Saltwort

*National Status: Not Scarce; IUCN: VU; UK BAP, 2007; SBL: >25% decline.**Midlothian Status: Rare.*

This native subspecies is an annual, found in sandy places around the British coasts. In Scotland the plant has shown significant decline, recognised by the SBL. In Midlothian the recent records have been from sandy banks and beaches, chiefly around Fisherrow, but once it was recorded as a weed in a field of carrots at Kellerstain. The shore of the Firth of Forth is a SSSI. From 1824 to 1894 the species was recorded between Caroline Park and Granton Park, and at Musselburgh.

| Location | Grid Ref | Date | Recorder |
|-------------------|----------|------------|---------------|
| Seafield | NT287757 | 08/07/1963 | Stewart, O.M. |
| Kellerstain | NT166714 | 10/11/1987 | Campbell, G. |
| Fisherrow Links | NT344733 | 26/08/1988 | Jackson, E.H. |
| Fisherrow | NT346734 | 26/08/1988 | Jackson, E.H. |
| Fisherrow Harbour | NT3373 | 1994 | Learmonth, R. |

Salvia verbenaca L.

Wild Clary

*National Status: Not Scarce; IUCN: LC; SBL: rare & >25% decline.**Midlothian Status: Rare.*

Nationally this native species, as represented by subsp. *horminoides* (Pourr.) Nyman, is quite frequent in southern and eastern Britain, reaching north to central Scotland. In Scotland the plant is rare and has shown significant decline, recognised by the SBL. It is found in dry grassy or rough ground, beside roads and in dunes. In Midlothian the species has only one known site, on a slope below Salisbury Crags (in the Arthur's Seat SSSI), and it was previously recorded there in 1934.

| Location | Grid Ref | Date | Recorder |
|--------------------------------|----------|------|----------------|
| Salisbury Crags, Holyrood Park | NT2772 | 1997 | Napier College |

Saxifraga hirculus L.

Marsh Saxifrage

*International Status: Bern-A1; HabDir-Annex II, IV or V.**National Status: Rare; IUCN: VU; UK BAP, 2007; WACA: Sch. 8; SBL rare & >25% decline.**Midlothian Status: Rare.*

Nationally this native perennial is very local and extends from northern Britain south to north-west Yorkshire. The species occurs on wet areas of moors and used to be more widespread and to extend further south, but it has decreased. In Scotland the plant is rare and the decline has been significant, recognised by the SBL. This species is the most conservation-designated species in Midlothian. It is found in base-rich flushes, bogs and mossy areas of the southern Pentland Hills, in the Craigengar SSSI and SAC. The species was recorded in the Pentland Hills by J.H. Balfour in 1838, and has been re-found repeatedly, near the source of the Medwin Water, ever since.

| Location | Grid Ref | Date | Recorder |
|--|----------|------------|-----------------------------|
| Craigengar | NT0754 | 08/08/1890 | Crawford, F.C. |
| Medwin Head, White Craig | NT0754§ | 05/07/1956 | Beattie, E.P. |
| Craigengar | NT0754§ | 07/08/1971 | Beattie, E.P. |
| Medwin Head, White Craig | NT0754§ | 1991 | Pilling, E.A. |
| Sergeant Law, The Pike & Ravens Cleugh | NT0754§ | 05/10/2009 | McIntosh, J. & McHaffie, H. |
| Ravens Cleugh | NT0754§ | 23/07/2011 | Moir, M. |

Saxifraga hypnoides L.

Mossy Saxifrage

National Status: Not Scarce; IUCN: VU; SBL: >25% decline.
Midlothian Status: Rare.

Nationally this native perennial is locally common from north Somerset and Derbyshire northwards. In Scotland the species has shown significant decline, recognised by the SBL. It is found on damp rock-ledges and dunes, among boulders and by mountain streams. In Midlothian the species has been recorded at only one site since 1970, in a damp rocky area, a SSSI in the Pentland Hills. In 1824 the plant was found not only at Habbie's Howe and the Pentlands, but also at Dalmahoy and Arthur's Seat. In 1863 Auchendinny was added to the list of sites, but since 1934 records have been few.

| Location | Grid Ref | Date | Recorder |
|--------------------------|----------|------------|--------------------------|
| Habbie's Howe, Pentlands | NT1861 | 1970 | Beattie, E.P. |
| Habbie's Howe, Pentlands | NT1861 | 22/08/2004 | McKean, D.R. & Dixon, C. |

Saxifraga stellaris L.

Starry Saxifrage

National Status: Not Scarce; IUCN: LC.
Midlothian Status: Rare.

Nationally this native perennial is frequent in northern England and Scotland, and is found in flushes, by mountain streams and among wet rocks and stones. In Midlothian the species has been found in upland flushes, but is rare. It may also have been rare historically, as standard 19th century texts do not mention Midlothian sites for this species.

| Location | Grid Ref | Date | Recorder |
|----------------------|----------|------|-------------------------|
| West of The Kipps | NT2949 | 1981 | Dixon, C., McKean, D.R. |
| Gladhouse (south of) | NT298499 | 1993 | Dixon, C. |

Saxifraga tridactylites L.

Rue-leaved Saxifrage

National Status: Not Scarce; IUCN: LC.
Midlothian Status: Rare.

Nationally this native annual is locally common through most of Britain, and occurs on bare ground, sand, rocks and walls, especially if calcareous. In Midlothian both the recent sites for this species are rocky. In 1809 the species was recorded on the

top of an old wall near Craiglockhart. In 1824 the species was also found on rocks at Craiglockhart, on stony ground at the western end of Duddingston Loch and in Holyrood Park. In 1863 and 1894 only Craiglockhart was mentioned, and the species has persisted there. Blackford Hill is a recent addition.

| Location | Grid Ref | Date | Recorder |
|---------------------------------|----------|------------|--------------|
| Easter Craiglockhart Hill (top) | NT2370 | 1995 | McKean, D.R. |
| Corbies Craig, Blackford Hill | NT255704 | 21/11/1995 | Murray, F. |

X *Schedolium loliaceum* (Huds.) Holub (*Schedonorus pratensis* x *Lolium perenne*)

National Status: Not designated; IUCN: Not designated.

Midlothian Status: Rare.

Formerly known as X *Festulolium loliaceum* (Hybrid Fescue), this native cross-generic hybrid grass occurs through most of Britain but is commoner in the south. It grows often on rich, damp soils in meadows, pastures, waysides and riversides. In Midlothian there have been only three records of this hybrid, all in damp locations and one coastal.

| Location | Grid Ref | Date | Recorder |
|--------------------------|----------|------------|--|
| Granton Harbour (East) | NT2477 | 1981 | MacGilvray, A., Hobson, P.M. |
| South of Mount Lothian | NT2755 | 1992 | Sumner, B.E.H. |
| Water of Leith, Saughton | NT2171 | 21/08/2011 | Sumner, B.E.H., McKean, D.R., Muscott, J., Maxwell, S. & TWIC |

***Scirpus sylvaticus* L.**

Wood Club-rush

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

Nationally this native perennial is locally frequent as far north as central Scotland. It is found in marshes and by streams in shady places. In Midlothian it has also been found in these habitats, but is scarce. The Gogar Burn is both a recent and a historical site for this species (1809 and 1863). In 1863 it also occurred at Roslin, and on the banks of the R. Almond at Cramond. The species was still at Roslin in 1934. Lasswade was a further historical site (Smith *et al.*, 2002).

| Location | Grid Ref | Date | Recorder |
|----------------------|-----------|------------|--------------------------------|
| Gogarburn at Linburn | NT1268 | 06/08/1982 | Stewart, N.F. |
| Auchendinny | NT2561 | 10/06/1987 | McKean, D.R. & Miller, A.E. |
| Milkhall Pond | NT242574 | 1988 | Elston, D. |
| Outerston (Temple) | NT3257 | 1992 | Broom, A. |
| Milkhall Pond | NT241573§ | 30/06/2010 | Sumner, B.E.H. |

Scleranthus annuus L.

Annual Knawel

*National Status: Not Scarce; IUCN: EN; UK BAP, 2007; SBL: >25% decline.**Midlothian Status: Rare.*

Nationally this native species (represented by subsp. *annuus*) is scattered through most of Britain on dry sandy ground. In Scotland the plant has shown significant decline, recognised by the SBL. It is annual to biennial. In Midlothian the recent records of this plant have been from sandy ground and disturbed ground, but at only two sites. In 1824 Greville said it was common in cornfields. The species was found at Lasswade, and on wall-tops west of Corstorphine, in 1824. In 1863 the Pentlands were a further site for the species and in 1934 it was also at Colinton. In 1894 Sonntag remarked again that the species was common. That is not the case today.

| Location | Grid Ref | Date | Recorder |
|--------------------------|----------|------|----------------------------------|
| Musselburgh | NT37 | 1990 | Jackson, E.H. & Silverside, A.J. |
| Beechmount, Corstorphine | NT215732 | 1994 | Findley, M. |

Scrophularia auriculata L.

Water Figwort

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native perennial is common in England but rare in Scotland. It occurs in wet open and shady places. In Midlothian this plant has been found in and beside water and in marshes. It was repeatedly recorded by the Gogar Burn from 1809 to 1934. Other sites reported in 1934 were Blackford and Musselburgh. Present-day sites include these vicinities.

| Location | Grid Ref | Date | Recorder |
|--------------------------|-----------|------------|------------------------------|
| Newbridge | NT1273 | 1981 | BSS surveyor |
| Almondell | NT06 | 22/02/1988 | McKean, D.R. |
| Braid Burn | NT27 | 1990 | Anon. |
| Cramond Bridge | NT1775 | 1993 | Muscott, J.; McKean, D.R. |
| Liberton Dams | NT2770 | 1994 | Learmonth, R. |
| Hallyards Wood | NT128733 | 08/1999 | SWT Survey |
| Gogar | NT17 | 1999 | Luxmoor, S. |
| Blackford Glen/Hermitage | NT2570 | 02/06/2004 | Muscott, J. |
| Blackford Glen | NT2670 | 25/06/2010 | Muscott, J. |
| Figgate Burn, Portobello | NT3074 | 20/07/2012 | McKean, D.R. |
| Loan Burn, Penicuik | NT230600§ | 05/10/2013 | Braithwaite, M.E. |

Scutellaria galericulata L.

Skullcap

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

This native perennial is locally common through most of Britain, in wet meadows and fens, and beside still and running water. In Midlothian the species has been found in damp ground beside water, but it is rare, with only one site since 1970. Historic sites were Leadburn (1863 & 1894) and Musselburgh (1934).

| Location | Grid Ref | Date | Recorder |
|-------------------|----------|------------|----------------|
| Mortonhall Estate | NT26 | 06/1949 | Basden, E.B. |
| Roslin | NT26 | 1952 | Faed, H. |
| Penicuik Estate | NT212586 | 28/08/1973 | Beattie, E.P. |
| Penicuik Estate | NT2158 | 1998 | Watson, K. |
| Penicuik Estate | NT223593 | 1999 | Sumner, B.E.H. |

Sedum anglicum Huds.

English Stonecrop

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

This native perennial is common in western Britain but local and mainly coastal in the east and centre of Britain. It grows on rocks, shingle and sand. In Midlothian the species has been found on rocks and walls, on dunes and a disused road, at sites scattered through the Vice-county. In 1934 it was recorded at Cramond.

| Location | Grid Ref | Date | Recorder |
|------------------|----------|------------|----------------|
| Cramond Island | NT1978 | 1966 | Beattie, E.P. |
| Dreghorn | NT2268 | 10/10/1982 | Stewart, O.M. |
| East of Torsonce | NT4743 | 1984 | Nield, P. |
| Dreghorn | NT2268 | 1986 | Stewart, O.M. |
| Rosebery | NT3057 | 1992 | Broom, A. |
| Ratho Quarry | NT17 | 1999 | McKean, D.R. |
| Niven's Knowe | NT2665 | 10/08/1999 | Dixon, C. |
| Honeybrae | NT1656 | 04/09/1999 | Sumner, B.E.H. |

Sedum telephium L.

Orpine

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

This native perennial is locally distributed throughout Britain, among rocks, on hedgebanks and in woods. In Midlothian, since 1970, the plant has been found at only three scattered sites, two of which are (or were) disused railways. In 1762 the species was recorded at Musselburgh, but no habitat was reported. In the 19th century the plant was found on hedgebanks near Roslin (1809 and 1824), and between Mavisbank and Lasswade (1824). Corstorphine and Penicuik were added as further sites in 1863 and all four sites persisted in 1894. Roslin was alone in 1934.

| Location | Grid Ref | Date | Recorder |
|----------------------|----------|------------|------------------------------------|
| Borthwick Bank | NT3760 | 1957 | Beattie, E.P. |
| Ravelston Dykes Lane | NT2173 | 1962 | Beattie, E.P. |
| Balerno Station | NT1566 | 27/06/1973 | Beattie, E.P. |
| South of West Calder | NT0262 | 08/06/1991 | Chipcase, A., Muir, I., Mackay, K. |
| Ravelston/Craigleith | NT2274 | 1999 | Muscott, J. |

Sedum villosum L.

Hairy Stonecrop

*National Status: Scarce; IUCN: NT.**Midlothian Status: Not Scarce.*

Nationally this native stonecrop, which is biennial-to-perennial, is a northern species in Britain, reaching south to mid-west Yorkshire. It is found in stony flushes and beside streams in the hills. The species is one of those being studied in the BSBI "Threatened Plants Project". In Midlothian since 1970 there have been 55 records and 40 sites, so the species is not scarce, but is included in this *Register* because of its conservation status. A few examples of the records are shown in the table below. All the sites shown are in SSSIs except Cap Law. The habitats have been flushes, marshes, rivulets, streamsides and a pathside, all in hill districts.

| Location | Grid Ref | Date | Recorder |
|-------------------------------|-----------|------------|-------------------------------|
| Medwin Water | NT0754 | 1980 | McKean, D.R. |
| Rose Cleugh, Moorfoots | NT2947 | 1988 | McKean, D.R. |
| Cap Law | NT1759 | 24/04/1992 | Morss, L. |
| Hawkster Gill Burn, Moorfoots | NT288497 | 1992 | Dixon, C. |
| Peat Hill | NT352526 | 1993 | Dixon, C. |
| Dundreich, Moorfoot Hills | NT2949 | 18/07/1998 | McKean, D.R. & Maxwell, S. |
| The Pike | NT078543§ | 26/07/2011 | Sumner, B.E.H. & McKean, D.R. |
| Blackhope | NT337513§ | 11/08/2012 | Sumner, B.E.H. |

Sherardia arvensis L.

Field Madder

*National Status: Not Scarce; IUCN: LC; SBL: >25% decline.**Midlothian Status: Almost Scarce.*

This annual native is local in Scotland, although frequent elsewhere in Britain. In Scotland the species has shown significant decline, recognised by the SBL. It grows in waste ground, arable fields, lawns and sparse grassland. In Midlothian, since 1970, the species has been recorded in just too many sites (twelve) to be deemed scarce, but has been included in this *Register* owing to its SBL status. The sites are scattered from the coast, through Edinburgh, to country places south and south-east of the city. Duddingston Loch, Holyrood Park (Arthur's Seat), Agassiz Rock and Roslin Glen are SSSIs. Midlothian habitats recorded for this plant have been waste and disturbed ground, amenity grounds, pathsides and roadsides, dry turf on a rock, dry pasture and grassy slopes. The species has been recorded in the Vice-county since at least 1764, when it occurred at Salisbury Crags (Hope, 1765).

| Location | Grid Ref | Date | Recorder |
|--------------------------------|----------|------------|---------------|
| Duddingston Loch (E. side of) | NT2772 | 1955 | Beattie, E.P. |
| Middleton Lime works | NT3558 | 1982 | Muscott, J. |
| Windy Gowl, Holyrood Park | NT2772 | 1986 | McKean, D.R. |
| Fisherrow Links | NT340732 | 11/07/1987 | Jackson, E.H. |
| Cowpits | NT347707 | 07/05/1988 | Jackson, E.H. |
| Lothianburn Golf Course | NT2467 | 1993 | Ellis, N. |
| Swanston | NT2467 | 1993 | Ellis, N. |
| Agassiz Rock | NT259702 | 1993 | Maxwell, S.A. |
| Fisherrow Harbour | NT3373 | 1994 | Learmonth, R. |
| Millbank House (Kirkhill Bing) | NT3361 | 18/08/1994 | McKean, D.R. |

| | | | |
|-----------------------|----------|------------|---------------|
| Balmwell Terrace | NT2768 | 1997 | Maxwell, S.A. |
| Roslin Glen | NT265623 | 1998 | Crowther, N. |
| Broughton High School | NT238751 | 29/05/2007 | Mill, R.R. |

Silene gallica L.

Small-flowered Catchfly

National Status: Scarce; IUCN: EN; UK BAP, 2007; SBL: rare & >25% decline.
Midlothian Status: Rare.

Nationally this annual archaeophyte has decreased and is now scattered in southern Britain and even rarer further north, to central Scotland. In Scotland the species is rare and has shown significant decline, recognised by the SBL. It is found on cultivated, waste and sandy ground. In Midlothian the species is a casual, but has been included in this *Register* because of its conservation status. The one record was from waste ground.

| Location | Grid Ref | Date | Recorder |
|-------------|----------|------|---------------|
| Leith Docks | NT2876 | 1989 | Stewart, O.M. |

Silene noctiflora L.

Night-flowering Catchfly

National Status: Not Scarce; IUCN: VU; SBL: rare & >25% decline.
Midlothian Status: Scarce.

Nationally this annual archaeophyte has decreased and is now scattered or rare, and sometimes casual, on sandy arable ground through Britain. In Scotland the species is rare and has shown significant decline, recognised by the SBL. In Midlothian the species is a casual, but has been included in this *Register* because of its conservation status. The records have been from waste ground, a railway tip and agricultural set-aside. In 1934 the species was recorded at Murrayfield and Inveresk, as well as at Leith.

| Location | Grid Ref | Date | Recorder |
|---|----------|------------|------------------------------------|
| Borthwick | NT36 | 1963 | Younger, A. & McCallum Webster, M. |
| Cramond Island | NT1978 | 1967 | Beattie, E.P. |
| West Bowling Green Street, Leith | NT263762 | 1982 | Stewart, O.M. |
| South-east of Newhaven (Water of Leith) | NT2676 | 1982 | Stewart, O.M. |
| Pilton | NT2276 | 1997 | McKean, D.R. & Smith, F. |
| Stagehall Farm | NT448440 | 25/08/2000 | Gaskell, L. |

Silene uniflora Roth

Sea Campion

National Status: Not Scarce; IUCN: LC.
Midlothian Status: Rare.

This native perennial is found on cliffs, rocks and shingle around most coasts of Britain. It also occurs on the shores of lakes and streams on inland mountains, but rarely in northern Britain. In Midlothian Cramond Island was reported by the literature

as a site for this species in 1824, and it is still extant there (see below). The shore of the Firth of Forth is a SSSI. In 1824 the rocks west of Granton, near Caroline Park, also supported plants but the species has not been seen there recently. It is probable that the voucher specimen from near Edinburgh in 1834 (below) was from this coastline. The offshore island of Inchmickery is a recently discovered site for the species, and it was found to be occasional there.

| Location | Grid Ref | Date | Recorder |
|-----------------|----------|------------|----------------|
| Granton, near | NT27 | 1824 | Anon. |
| Edinburgh, near | NT27 | 02/06/1834 | Anon. |
| Cramond Island | NT1978 | 1958 | Beattie, E.P. |
| Inchmickery | NT2080 | 08/1982 | Brandt, N. |
| Cramond Island | NT1978 | 08/06/2011 | Sumner, B.E.H. |

Silene viscaria (L.) Jess.

Sticky Catchfly

National Status: Scarce; IUCN: NT.

Midlothian Status: Rare.

Nationally this native perennial (formerly *Lychnis viscaria*) grows on rocks and cliffs in Wales and Scotland, where it is very local. In Midlothian there are four Edinburgh sites for this species, of which three are traditional. Plant populations have been known in Holyrood Park since before 1670 (Willisel's discovery, reported by Ray in 1670, cited by Lusby, 1996). A wild population is still extant at Samson's Ribs (see table below). The wild population on the rock at Edinburgh Castle was last recorded in 1977 (see table below), but thereafter became extinct. (Holyrood Park and Edinburgh Castle are SSSIs.) The wild population at the third site, on rocks at Blackford Hill, became extinct in the 19th century (last recorded in 1877). Introductions and re-introductions are being carried out at these and other sites under a Species Action Plan (Edinburgh LBAP), to encourage this rare species. The first plantings of 20 plants above Samson's Ribs in 1994, augmented the extant wild population (Lusby, 1996). In 2002 plantings were carried out at Blackford Hill (see table below). By 2005 the Blackford Hill plants had disappeared, but further plantings were made nearby at Hermitage of Braid, and these became established. Other plantings took place high up the slope on the south side of Edinburgh Castle. Further plantings are under way and planned at Holyrood Park, Hermitage of Braid and Blackford Hill, Braid Hills and Ravelrig Quarry. Historically, apart from the Edinburgh sites, there was a further site for the species at the Den of Borthwick (1768).

| Location | Grid Ref | Date | Recorder |
|------------------------------|----------|------------|----------------|
| Corstorphine Hill | NT2073 | 1950s | Donaghue, C. |
| Edinburgh Castle | NT2573§ | 1977 | Beattie, E.P. |
| Blackford Hill | NT2570§ | 04/11/2002 | McHaffie, H.S. |
| Samson's Ribs, Arthur's Seat | NT2772§ | 26/05/2004 | Holme, R. |

Silybum marianum (L.) Gaertn.

Milk Thistle

National Status: Not Scarce; IUCN: LC; SBL: >25% decline.

Midlothian Status: Rare.

This annual-to-biennial archaeophyte is a frequent casual, or may become naturalised, in rough or waste ground through Britain, from the south as far north as Easter Ross. In Scotland the species has shown significant decline, recognised by

the SBL. The plant is also a recent birdseed- or wool-alien. In Midlothian the species is a rare casual, but has been included in this *Register* because of its conservation status. The records below were from waste ground and rough grassland. In 1863 the species was recorded at Borthwick Castle and in 1934 at Musselburgh, Duddingston, Slateford and Leith.

| Location | Grid Ref | Date | Recorder |
|--------------------|----------|---------|---------------|
| Leith Docks | NT27 | 1960 | Beattie, E.P. |
| Craigmillar Castle | NT288708 | 05/2007 | Chaney, P. |

Sinapis alba L.

White Mustard

National Status: Not Scarce; IUCN: LC; SBL: >25% decline.
Midlothian Status: Scarce.

Nationally this annual archaeophyte is scattered in Britain but absent from much of the north. It is naturalised or casual on waste ground, tips and waysides, and in arable fields. In Scotland the species has shown significant decline, recognised by the SBL. In Midlothian the plant has been found in waste places and arable fields. It is now scarce, but in 1824 the species was frequent in cornfields around Edinburgh. In 1863 Roman Camp was reported as a site and in 1934 Dalkeith, Slateford and Leith were reported. In 1945 the species was on a rubbish tip at Slateford (Smith *et al.*, 2002).

| Location | Grid Ref | Date | Recorder |
|------------------------------------|----------|------|-------------------------------|
| Lawhead Farm | NT2161 | 1981 | Sumner, B.E.H.; Peters, M. |
| West of Polton (Springfield House) | NT2864 | 1985 | Muscott, J. |
| Blackshiels | NT4361 | 1986 | Muscott, J. |
| Leith Docks | NT27 | 1989 | Stewart, O.M. |

Sinapis arvensis L.

Charlock

National Status: Not Scarce; IUCN: LC; SBL: >25% decline.
Midlothian Status: Not Scarce.

Nationally this annual archaeophyte is found throughout Britain in arable fields, and on roadsides, waste ground and tips. In Scotland the species has shown significant decline, recognised by the SBL. However, in Midlothian since 1970 there have been 122 records from over 120 sites, so the plant is not scarce, but has been included in this *Register* because of its conservation status. A few examples from the records are shown in the table below. The habitats have included arable fields and set-aside, disturbed ground and banks of earth.

| Location | Grid Ref | Date | Recorder |
|-------------------------|----------|-----------|-----------------------------|
| Hilltown | NT3170 | 1981 | BSS surveyor |
| Cramond Island | NT1978 | 1985 | McKean, D.R. |
| North of Cauldhall Moor | NT2759 | 1986 | Munro, D. & McKean, D.R. |
| Sighthill | NT1971 | 1988 | Mackay, K. |
| Corsehope Farm | NT3851 | 1992 | Cook, J. & McKean, D.R. |
| Fala Mains | NT4460 | 01-Sep-94 | McKean, D.R. |

| | | | |
|-------------------------|--------|------------|----------------|
| Ratho Byres | NT1471 | 23/03/1995 | Thornton, J. |
| Musselburgh Lagoons | NT3573 | 06/06/2011 | Sumner, B.E.H. |
| Mansfield Road, Balerno | NT1665 | 02/07/2011 | Muscott, J. |

Smyrniium olusatrum L.

Alexanders

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

This biennial-to-perennial archaeophyte has become naturalised on waste ground, waysides, banks and cliffs, especially near the coast, where it is common from the south of Britain to central Scotland, but rarer further north. Inland distribution is more scattered. In Midlothian the records since 1970 have been from coastal and inland sites, on roadside verges, steep wooded banks, and rocks adjacent to a castle. At Craigmillar Castle, a historical site for the species, it was recorded as abundant. In 1934 the species was also recorded at Musselburgh and Crichton.

| Location | Grid Ref | Date | Recorder |
|--|----------|------------|----------------|
| Craigmillar Castle | NT2870 | 30/04/1956 | Beattie, E.P. |
| Craigmillar Castle Road | NT2870 | 30/05/1988 | McKean, D.R. |
| Fillyside, Seafield | NT2975 | 1999 | McKean, D.R. |
| Swanston | NT236684 | 2000 | Dixon, C. |
| Water of Leith, Bell's Mills area (bank behind Gallery of Modern Art) | NT233737 | 18/05/2010 | Sumner, B.E.H. |
| Little France | NT2870 | 15/06/2011 | Muscott, J. |

Sorbus rupicola (Syme) Hedl.

Rock Whitebeam

*National Status: Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this small native tree is scattered in Britain, in rocky woods and scrub, and on cliffs, especially if limestone. In Midlothian the species has long been known growing wild on the rocks of Arthur's Seat (Holyrood Park), having been recorded there in 1813 and at intervals since. Arthur's Seat and Duddingston Loch are SSSIs. Recently the small population on Arthur's Seat has been increased by planting further seedlings, and seedlings have been introduced at Blackford Hill (records shown at low resolution below, 2005). These plantings were carried out under a Species Action Plan (Edinburgh LBAP), to encourage this rare species. Further planting sites under this scheme (2011 and 2012) included Hermitage of Braid and Craigmillar Castle Park.

| Location | Grid Ref | Date | Recorder |
|---|----------|------|--------------|
| Duddingston Loch | NT2772 | 1986 | McKean, D.R. |
| Dunsapie Loch | NT2873 | 1990 | HSRS |
| Duddingston Golf Course (Loch and Bawsinch) | NT2872 | 1992 | Muscott, J. |
| Blackford Hill | NT2570§ | 2005 | Coleman, M. |
| Blackford Quarry | NT2570§ | 2005 | Coleman, M. |
| Dunsapie Loch | NT2773§ | 2005 | Coleman, M. |
| Dunsapie Loch | NT2873§ | 2005 | Coleman, M. |

Sparganium angustifolium Michx.

Floating Bur-reed

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

This native perennial of peaty ponds and lakes is locally distributed, mostly in the west and north of Britain. In Midlothian since 1990 the species has been found in ponds, reservoirs and slow-moving water, mostly in or west of the Pentland Hills. Part of Cobbinshaw Reservoir is a SSSI. In 1934 the Pentland Hills, Ravelrig, Dalmahoy and Currie were all reported as sites for this species.

| Location | Grid Ref | Date | Recorder |
|--|-----------|------------|---------------|
| Cobbinshaw Reservoir | NT025591 | 1993 | Maxwell, S.A. |
| Murieston Water (near) | NT046627§ | 1993 | Maxwell, S.A. |
| North of Black Hill (Harlaw Reservoir) | NT1864 | 31/08/1994 | McKean, D.R. |
| Threipmuir Reservoir | NT1663 | 11/07/1997 | Dixon, C. |
| Threipmuir Reservoir | NT16 | 1998 | SWT Survey |
| Medwin Water (Source of) | NT0854 | 1999 | McKean, D.R. |
| Threipmuir Reservoir (upper end) | NT1663 | 2013 | Stewart, N.F. |

Sparganium emersum Rehmman

Unbranched Bur-reed

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

This native perennial is frequent all over Britain, in still and slow-moving water and, occasionally, out of water in marshy areas. In Midlothian the species has been found in shallow water at the edges of pools, reservoirs, and the Union Canal, mostly in the western half of the Vice-county. Part of Cobbinshaw Reservoir is a SSSI. In 1824 it was found in ditches west of Corstorphine and, in 1934, also at Duddingston. At present this species appears to be scarce, whereas *S. erectum* does not.

| Location | Grid Ref | Date | Recorder |
|----------------------------------|----------|------------|--|
| Craigpark | NT1270 | 1981 | BSS surveyor |
| Over Gogar | NT1670 | 1981 | BSS surveyor |
| Skivo Quarry | NT0564 | 1982 | Stewart, N.F. |
| Murieston (west of) | NT052641 | 1982 | Stewart, N.F. |
| Easter Hailes Gate | NT215704 | 1988 | Hendry, S. & Elston, D. |
| Cobbinshaw Reservoir | NT016573 | 01/10/1989 | McKean, D.R. |
| West Long Livingston | NT0266 | 10/05/1994 | Muscott, J. & McKean, D.R. |
| Union Canal, Ratho | NT1370 | 27/07/2003 | Muscott, J., Clarkson, M. & Cochrane, M.P. |
| Kirknewton Estate | NT1266 | 19/08/2012 | Sumner, B.E.H. & TWIC |
| Threipmuir Reservoir (upper end) | NT1663 | 2013 | Stewart, N.F. |

Sparganium natans L.

Least Bur-reed

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native perennial is scattered through Britain, mostly in the northern half. It grows in pools rich in organic material. In Midlothian this rare bur-reed has been found in peaty pools. Part of Cobbinshaw Loch is a SSSI. In the 19th century the species was recorded at Braid Hill Marshes, Ravelrig Bog and Medwin Water.

| Location | Grid Ref | Date | Recorder |
|--------------------|----------|------------|-----------------------|
| Black Hill, Currie | NT16 | 1992 | Cook, C.D.K. |
| Cobbinshaw | NT025590 | 18/08/1994 | Garner, D., Miles, J. |

Spargula arvensis L.

Corn Spurrey

*National Status: Not Scarce; IUCN: VU.**Midlothian Status: Not Scarce.*

Nationally this annual species is said to be mainly introduced (an archaeophyte), but also native. It is found on cultivated sandy soil away from lime. Rarely, the species occurs in short turf at the coast. In Midlothian since 1970 there have been nearly 90 records of this plant from over 85 sites, so it is not scarce, but has been included in this *Register* because of its conservation status. A few examples of the records are shown below. The habitats have been arable fields and set-aside, and waste ground.

| Location | Grid Ref | Date | Recorder |
|-----------------|----------|------------|----------------|
| Cobbinshaw | NT05 | 1977 | Beattie, E.P. |
| Fisherrow | NT3473 | 1982 | Jackson, E.H. |
| Salamander St. | NT2876 | 1988 | McKean, D.R. |
| Rosewell | NT2962 | 1990 | Cochrane, M.P. |
| Straiton | NT2666 | 14/08/1999 | Dixon, C. |
| Stagehall Farm | NT448440 | 25/08/2000 | Gaskell, L. |
| Fala & south of | NT4360 | 04/09/2013 | Sumner, B.E.H. |

Spargularia media (L.) C. Presl

Greater Sea-spurrey

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

This native perennial is common around Britain on sandy and muddy coasts, but rare inland. In Midlothian since 1960 two records have been from the coast (one of them from reclaimed land). The shore of the Firth of Forth is a SSSI. The most recent record was from an inland site, a gutter beside a pavement.

| Location | Grid Ref | Date | Recorder |
|-------------------|----------|------------|---------------|
| Cramond | NT1876 | 1961 | Beattie, E.P. |
| Seafield | NT291758 | 1996 | Dixon, C. |
| St. Bernard's Row | NT245747 | 27/07/2006 | McKean, D.R. |

Stachys arvensis (L.) L.

Field Woundwort

*National Status: Not Scarce; IUCN: NT; SBL: >25% decline.**Midlothian Status: Scarce.*

Nationally this annual archaeophyte is scattered through much of Britain but rare in Scotland. In Scotland the species has shown significant decline, recognised by the SBL. It is found on non-calcareous, arable soils. In Midlothian this plant is a casual, included in this *Register* because of its conservation status. Since 1970 it has been recorded in a turnip field and in grassland. In 1934 the species was recorded in the Pentland Hills, and at Leith and Roslin.

| Location | Grid Ref | Date | Recorder |
|---------------------------|----------|------------|---------------|
| Cockpen | NT325637 | 23/10/1983 | Stewart, O.M. |
| Smeaton | NT3569 | 1990 | Stewart, O.M. |
| Dalkeith (1 mile west of) | NT314671 | 1992 | Muscott, J. |
| Redford Brae, Dreghorn | NT223683 | 19/09/2000 | Muscott, J. |

Stellaria pallida (Dumort.) Crép.

Lesser Chickweed

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native species is locally frequent on shingle and dunes at the coast, and on bare sandy ground inland. It is absent from western Scotland. In Midlothian since 1970 there has been only one record, from cut grass inland. The pre-1970 record in the table below is from a SSSI.

| Location | Grid Ref | Date | Recorder |
|----------------------|----------|------------|---------------|
| Duddingston Loch | NT2872 | 1957 | Beattie, E.P. |
| Colinton Dell (near) | NT2169 | 01/06/1984 | Stewart, O.M. |

Stellaria palustris Ehrh. ex Hoffm.

Marsh Stitchwort

*National Status: Not Scarce; IUCN: VU; UK BAP, 2007; SBL: >25% decline.**Midlothian Status: Rare.*

This native species of base-rich fens and marshes is scattered in Britain, north to central Scotland. In Scotland the plant has shown significant decline, recognised by the SBL. In Midlothian the species has been recorded in only two sites since 1970, in marshy ground. Historically, between 1809 and 1934, this stitchwort was recorded repeatedly at Duddingston and Lochend Lochs. In 1863 and 1894 Braid Hill Marshes were a further site. In 1934 the species was also recorded at Ratho, Dalmahoy, Kirknewton, Brunstane Castle and Glencorse. Duddingston Loch (SSSI) still featured in 1957, but the two post-1970 sites are different from all the foregoing.

| Location | Grid Ref | Date | Recorder |
|----------------------|----------|------|---------------|
| Duddingston Loch | NT2872 | 1957 | Beattie, E.P. |
| Outerston (Temple) | NT3257 | 1992 | Broom, A. |
| Threipmuir Reservoir | NT16 | 1998 | SWT Survey |

Taraxacum alatum H. Lindb.

Dandelion

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native species is found on waysides, and in grassy and waste areas throughout Britain. It is very common locally. In Midlothian it has been recorded on verges at only two sites, one in the city and the other in a country location south-east of the city.

| Location | Grid Ref | Date | Recorder |
|------------|----------|------------|-----------------|
| Mortonhall | NT26 | 14/05/1970 | Beattie, E.P. |
| Borthwick | NT35 | 15/05/1970 | Beattie, E.P. |
| Mortonhall | NT2668 | 01/01/1990 | Pankhurst, R.J. |

Taraxacum brachyglossum (Dahlst.) Raunk.

Dandelion

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native species is found in dry sites of Britain and Ireland. In Midlothian it has been recorded on two dry hill sites in Edinburgh. Arthur's Seat is a SSSI.

| Location | Grid Ref | Date | Recorder |
|----------------|----------|------------|----------------------|
| Arthur's Seat | NT27 | 30/04/1971 | McCallum Webster, M. |
| Blackford Hill | NT27 | 15/05/1987 | Aglen, P. |

Taraxacum bracteatum Dahlst.

Dandelion

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native species is usually found in damp sites of Britain and Ireland. In Midlothian it has been recorded in two Edinburgh sites (on top of a wall and in grass by a track) and one site south-east of the city. Duddingston Loch is a SSSI.

| Location | Grid Ref | Date | Recorder |
|----------------------------|----------|------------|-----------------|
| Cowpits, near | NT346708 | 29/04/1975 | Stewart, N.F. |
| Cammo Road, Cramond Bridge | NT1775 | 05/1986 | McKean, D.R. |
| Cramond Bridge | NT1775 | 1993 | Muscott, J. |
| Duddingston Loch | NT284723 | 09/05/1996 | Pankhurst, R.J. |

Taraxacum britannicum Dahlst.

Dandelion

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native, mainly western species is often found in species-rich grasslands on calcareous or neutral soils. In Midlothian there has been only one record, from the edge of the Union Canal, west of the city.

| Location | Grid Ref | Date | Recorder |
|----------|----------|------------|---------------|
| Ratho | NT1370 | 27/05/1978 | Stewart, O.M. |

Taraxacum cophocentrum Dahlst.

Dandelion

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this endemic species is widespread and locally common, especially in the south. It is found in grassy areas, scrub and woodland edges. In Midlothian there have been two records, from different points along the R. Esk valley.

| Location | Grid Ref | Date | Recorder |
|----------|----------|------------|---------------|
| Inveresk | NT352717 | 29/04/1975 | Stewart, N.F. |
| Cowpits | NT3470 | 28/05/1988 | McKean, D.R. |

Taraxacum cordatum Palmgr.

Dandelion

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native species is widespread and locally common throughout Britain. It is found on cliffs and in sand dunes, on roadsides and in waste ground, etc. In Midlothian the records have been from a field edge, a river bank, a roadside verge, waste ground and rocks. Arthur's Seat is a SSSI.

| Location | Grid Ref | Date | Recorder |
|--------------------------------|----------|------------|----------------------|
| North Middleton | NT35 | 15/05/1970 | Beattie, E.P. |
| Leith Docks | NT27 | 30/04/1971 | McCallum Webster, M. |
| R. Esk, Musselburgh | NT358720 | 28/05/1975 | Stewart, N.F. |
| Broomhill House, near Lasswade | NT3166 | 02/06/1976 | Stewart, O.M. |
| Arthur's Seat | NT27 | 30/04/1977 | Stewart, O.M. |

Taraxacum croceiflorum Dahlst.

Dandelion

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native species is widespread and locally common throughout Britain. It is found on roadsides and in waste ground, grassy areas, etc. In Midlothian there has been only one record, from beside a river in the city.

| Location | Grid Ref | Date | Recorder |
|----------|----------|------------|---------------|
| Currie | NT1867 | 26/04/1981 | Stewart, O.M. |

Taraxacum cyanolepis Dahlst.

Dandelion

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this species is native, in Scotland at least, and is locally abundant in north-east Scotland. Elsewhere the species is more scattered. Habitats for this dandelion include damp, species-rich grasslands, cliffs and walls. In Midlothian there has been only one record, from a roadside in the east of the Vice-county.

| Location | Grid Ref | Date | Recorder |
|--------------|----------|------------|---------------|
| Falside Hill | NT367708 | 28/05/1975 | Stewart, N.F. |

Taraxacum gelertii Raunk.

Dandelion

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native species is common in the west and grows on neutral to basic soils in grassy or man-made habitats. In the north and west this dandelion also grows on cliffs and in ravines. In Midlothian the few sites have been widely scattered. The Cowpits record was from a river bank.

| Location | Grid Ref | Date | Recorder |
|-------------|----------|------------|---------------|
| Bowshank | NT4541 | 15/05/1984 | Little, M. |
| East Calder | NT0868 | 1987 | Robertson, S. |
| Cowpits | NT3470 | 22/03/1992 | Stewart, O.M. |

Taraxacum hamatiforme Dahlst.

Dandelion

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native species is locally common through Britain and grows on roadsides and hedgebanks, in grassy places, etc. In Midlothian the two records were from a railway bank (Inveresk) and from the edge of a track by a stream (Hermitage of Braid).

| Location | Grid Ref | Date | Recorder |
|--------------------|----------|------------|---------------|
| Inveresk | NT354717 | 29/04/1975 | Stewart, N.F. |
| Hermitage of Braid | NT27 | 28/04/1976 | Stewart, O.M. |

Taraxacum hamatum Raunk.

Dandelion

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native species is widespread and common, especially in northern England and Scotland. It grows especially well in woodland, but also grows in scrub and grassy habitats, roadsides, gardens and rocky areas, if some shade is present. In Midlothian the records were from widely dispersed locations. The two habitats

noted were a roadside verge and a garden.

| Location | Grid Ref | Date | Recorder |
|--------------------------------|----------|------------|-----------------|
| Penicuik | NT25/26 | 13/05/1970 | Beattie, E.P. |
| Church Hill | NT27 | 28/04/1976 | Stewart, O.M. |
| Auchinoon, Harperrig Reservoir | NT0961 | 1991-1993 | Edgar, C. |
| Royal Botanic Garden Edinburgh | NT245755 | 28/04/1995 | Pankhurst, R.J. |

Taraxacum longisquameum H. Lindb.

Dandelion

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Rare.

Nationally this native species is locally common in natural, especially coastal, habitats. In Midlothian the only record has been from a coastal site.

| Location | Grid Ref | Date | Recorder |
|-------------|-----------|------------|-----------------|
| Musselburgh | NT337730§ | 28/04/2007 | Pankhurst, R.J. |

Taraxacum maculosum A.J. Richards

Dandelion

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

Nationally this native species is chiefly northern, and grows in wet habitats, e.g. wet wood edges and wet cliff faces. In Midlothian the records have been from widely dispersed locations, along roadside verges, on a railway bank and in a damp hill district. Linhouse Glen is a SSSI and a nature reserve (SWT).

| Location | Grid Ref | Date | Recorder |
|---------------------|----------|------------|-----------------|
| Dreghorn, Edinburgh | NT2268 | 18/05/1970 | Beattie, E.P. |
| Carberry Tower | NT3669 | 20/05/1970 | Beattie, E.P. |
| Huntley Cot Hill | NT3151 | 12/06/1983 | Haworth, C.C. |
| Linhouse Glen | NT074645 | 13/05/1995 | Pankhurst, R.J. |

Taraxacum marklundii Palmgr.

Dandelion

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Rare.

Nationally this native species is mainly southern and western, but is also scattered elsewhere in Britain. It grows on roadsides and waste ground, grassy places, etc. In Midlothian the records have been from city waste sites and from grassland near a coastal race course.

| Location | Grid Ref | Date | Recorder |
|-------------------|----------|------------|----------------------|
| Blackford Quarry | NT2377 | 30/04/1971 | McCallum Webster, M. |
| Slateford | NT2070 | 30/04/1971 | McCallum Webster, M. |
| Musselburgh Links | NT351733 | 28/04/1975 | Stewart, N.F. |

Taraxacum nordstedtii Dahlst.

Dandelion

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native species is common through Britain in wet habitats below 450 m. In Midlothian the records have been from a valley, from hillside grassland and by a footpath, all in damp sites in widely separated locations. Roslin Glen is a SSSI.

| Location | Grid Ref | Date | Recorder |
|---------------|----------|------------|-----------------|
| Bowshank | NT4541 | 1984 | Little, M. |
| Rowantree Law | NT4649 | 25/05/1986 | Learmonth, R. |
| Roslin Glen | NT278630 | 02/05/1995 | Pankhurst, R.J. |

Taraxacum oxoniense Dahlst.

Dandelion

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native species is widespread, but more local in Scotland. Dry, neutral or calcareous habitats are preferred, and sand-dunes. In Midlothian the plant was found in short grass in a disused quarry near the southern edge of the city.

| Location | Grid Ref | Date | Recorder |
|------------------|----------|------------|---------------|
| Blackford Quarry | NT2570 | 06/05/1973 | Stewart, O.M. |

Taraxacum pseudohamatum Dahlst.

Dandelion

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native species is common all through Britain in various habitats, e.g. roadsides, wasteland, grassland, scrub, rocky places and gardens. In Midlothian the species has been found in scattered locations. One habitat was a verge and another a grassy track. Duddingston Loch is a SSSI.

| Location | Grid Ref | Date | Recorder |
|----------------------------|----------|------------|-----------------|
| Cammo Road, Cramond Bridge | NT1775 | 20/05/1986 | McKean, D.R. |
| Cousland | NT3768 | 05/1986 | McKean, D.R. |
| Duddingston Loch | NT284723 | 09/05/1996 | Pankhurst, R.J. |

Taraxacum pseudolarssonii A.J. Richards

Dandelion

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native species occurs chiefly in northern England and Scotland. It is common in sand-dunes, by moorland tracks and in country lanes. In Midlothian the species has been found on a roadside verge in an urban area south-east of the city.

| Location | Grid Ref | Date | Recorder |
|----------|----------|------------|---------------|
| Dalkeith | NT36 | 15/05/1970 | Beattie, E.P. |

Taraxacum sellandii Dahlst.

Dandelion

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native species is widespread and common, occurring on waysides, waste ground and grassy areas. In Midlothian the species has been recorded by a riverside path, on a river bank, and in school grounds, in locations at the eastern and western extremities of the Vice-county.

| Location | Grid Ref | Date | Recorder |
|-----------------------------|----------|------------|----------------------|
| Cramond | NT1876 | 25/05/1973 | McCallum Webster, M. |
| Loretto School, Musselburgh | NT349728 | 20/05/1975 | Stewart, N.F. |
| R. Esk, Musselburgh | NT37 | 28/05/1975 | Stewart, N.F. |

Taraxacum unguilobum Dahlst.

Dandelion

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native species is common in hill districts of the north and west of Britain. It grows on wet roadsides, paths, rock-faces and flushes. In Midlothian the species has been recorded in the north and south of the Vice-county, in grassland, waste ground, and on a grassy bank.

| Location | Grid Ref | Date | Recorder |
|-----------------------|----------|------------|-------------------------------|
| Carberry Tower | NT3669 | 05/1970 | Beattie, E.P. |
| Musselburgh Lagoons | NT352733 | 19/06/1975 | Anon. |
| Little Cathpair, Stow | NT4547 | 05/1986 | McKean, D.R. & Hollands, R.C. |

Thalictrum minus L.

Lesser Meadow-rue

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native perennial is scattered in Britain and found in various, often calcareous, habitats, including limestone pavement and cliffs, dunes, grassland, scrub and lakesides. In Midlothian since 1970 it has been recorded in city and country sites, on rough and waste ground and a verge. Historically the species was recorded between Caroline Park and Cramond in 1824 and at Cramond in 1894. In 1945 the species was found near Balerno and it was found again in that general area (but further south) recently.

| Location | Grid Ref | Date | Recorder |
|---|----------|------------|--|
| Morningside (Church Hill) | NT2471 | 1981 | Stewart, O.M. |
| North of Colinton (Colinton Dell & Merchiston School) | NT2169 | 1983 | McKean, D.R., Maxwell, S.A., Stewart, O.M. |
| Gladsmuir Hills (disused mines) | NS9257 | 1992 | Muscott, J. |
| Bavelaw | NT1663 | 1998 | Mill, R.R. |
| Roslin Chapel (near) | NT275631 | 06/2009 | McKean, D.R. & McHaffie, H.S. |
| North of Red Moss | NT1664 | 02/07/2011 | Muscott, J. |

Torilis nodosa (L.) Gaertn.

Knotted Hedge-parsley

*National Status: Not Scarce; IUCN: LC; SBL: rare.**Midlothian Status: Rare.*

Nationally this native species, which is usually annual (rarely biennial), is scattered in Britain as far north as south-east Scotland. It is found on arable and rather bare ground, often at the coast. In Scotland it is recognised as rare by the SBL. In Midlothian the species has only been recorded at two sites since 1970, neither of which is coastal, though not far inland. In 1934 the species was found in grassy fields on the south side of Craigmillar Castle, in a market garden at Seafield (which is coastal) and at Granton, Leith and Arthur's Seat. Holyrood Park is in the Arthur's Seat SSSI.

| Location | Grid Ref | Date | Recorder |
|----------------|----------|------------|-----------------|
| Holyrood Park | NT2872 | 1977 | Napier College |
| Brandon Street | NT251748 | 10/06/2006 | Pankhurst, R.J. |

Trichophorum cespitosum (L.) Hartm.

Northern Deergass

*National Status: Rare; IUCN: Data Deficient.**Midlothian Status: Rare.*

This native perennial (formerly *Trichophorum cespitosum* subsp. *cespitosum*) is scattered in northern England and Scotland, and rare in west central and south-west England. The subspecies was first recognised in 1988, and has been elevated to a species in the latest revisions (Stace, 2010). This deergass grows in wetter bogs, and on wetter heaths and moors, than the commoner *Trichophorum germanicum*. In Midlothian *T. cespitosum* has been recorded at only two sites, one of them historic, both in wet bogs.

| Location | Grid Ref | Date | Recorder |
|-------------------|-----------|------------|-------------------|
| Red Moss, Balerno | NT16 | 1931 | McNab, W.R. |
| Longmuir Moss | NT471504§ | 01/07/2000 | Braithwaite, M.E. |

Trichophorum x foersteri (Swan) D.A. Simpson
(T. cespitosum x T. germanicum)

National Status: Not designated; IUCN: Not designated.
Midlothian Status: Rare.

The two taxa composing this native hybrid were formerly regarded as subspecies of *T. cespitosum* (subsp. *cespitosum* and subsp. *germanicum*, respectively). Their hybrid was known as *Trichophorum cespitosum* nothosubsp. *foersteri*. Now that both former subspecies have been elevated to species, the hybrid has become *Trichophorum x foersteri*. Currently *T. x foersteri* is scattered in Britain, mostly in northern England and Scotland but with a few scattered sites in Wales. It grows in bogs and on heaths and moors, often with *T. germanicum*, but not necessarily with *T. cespitosum*. In Midlothian there is only one extant site for this hybrid, a wet bog, though in the 19th century there were records from two other bogs (see below).

| Location | Grid Ref | Date | Recorder |
|------------------|-----------|------------|-------------------|
| Ravelrig Bog | NT16 | 1834 | Anon. |
| Auchencorth Moss | NT1955 | 1870 | Anon. |
| Longmuir Moss | NT471504§ | 01/07/2000 | Braithwaite, M.E. |
| Longmuir Moss | NT471504§ | 15/06/2013 | Braithwaite, M.E. |
| Longmuir Moss | NT471505§ | 15/06/2013 | Braithwaite, M.E. |
| Longmuir Moss | NT471503§ | 31/08/2013 | Braithwaite, M.E. |

Trientalis europaea (L.) Hartm.

Chickweed-wintergreen

National Status: Not Scarce; IUCN: LC.
Midlothian Status: Scarce.

Nationally this native perennial extends from Derbyshire to the north of Scotland, and is locally common in Scotland. It grows in peat on heather moors and in open pine-woods. In Midlothian the species has been recorded on moors and in woodland, including the edges of coniferous forestry plantations (e.g. of *Picea sitchensis*). Although the sites have been few, populations of 200 to 300 plants have been recorded at a single site. In 1863 and 1894 the species was recorded at Dalmahoy.

| Location | Grid Ref | Date | Recorder |
|---|----------|------------|---------------|
| Cauldstane Slap (near) | NT1158 | 1959 | Gunn, P.W. |
| Torfichen Hill | NT3353 | 1965 | Beattie, E.P. |
| Quarrel Burn Reservoir (200 yards west of The Font Stone) | NT176592 | 04/07/1976 | Beattie, E.P. |
| East of Torsonce | NT4743 | 1984 | Nield, P. |
| Woodmuir Plantation | NS974587 | 1993 | Dixon, C. |
| Kirknewton House | NT1166 | 16/06/1994 | McKean, D.R. |
| Pate's Hill | NS994590 | 27/05/2008 | Hawker, D. |

Trifolium fragiferum L.

Strawberry Clover

National Status: Not Scarce; IUCN: LC; SBL: rare.
Midlothian Status: Rare.

Nationally this native perennial is scattered, but locally common, from the south of Britain as far north as southern Scotland. It grows in grassy areas on heavy or

brackish soil. In Scotland this species is recognised as rare by the SBL. In Midlothian there has been only one record from recent times. In 1824 the species was recorded at Leith Links and in 1840 at Meadowbank.

| Location | Grid Ref | Date | Recorder |
|-------------|----------|------|----------|
| Musselburgh | NT37 | 1999 | Anon. |

Tripleurospermum maritimum (L.) W.D.J. Koch

Sea Mayweed

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

This native species is biennial-to-perennial, and is locally common around British coasts, growing on sand and shingle, cliffs, rocks, walls and waste ground. In Midlothian the species appears to be scarce, but may not always have been distinguished from *Tripleurospermum inodorum* (Smith *et al.*, 2002). It has been found mostly at coastal sites, on the mainland, a tidal island (Cramond Island) and an offshore island (Inchmickery). The shore of the Firth of Forth is a SSSI. Most recently the species has been found on the stone embankment of the River Almond, just inland from the coast.

| Location | Grid Ref | Date | Recorder |
|--------------------------------|----------|------------|----------------|
| Inchmickery | NT2080 | 08/1982 | Brandt, N. |
| Cramond Island | NT1978 | 1986 | McKean, D.R. |
| Granton | NT27 | 1999 | Anon. |
| Musselburgh | NT37 | 1999 | Anon. |
| Silverknowes Promenade | NT2077 | 06/07/2013 | Sumner, B.E.H. |
| Granton Promenade | NT2177 | 06/07/2013 | Sumner, B.E.H. |
| R. Almond, mouth to Cammo Road | NT188767 | 16/07/2013 | McKean, D.R. |

Trollius europaeus L.

Globoseflower

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

This showy native perennial is locally distributed in northern Britain, in damp grassland and woods, often in upland areas. In Midlothian since 1970 the species has been found in a few marshes scattered through the Vice-county. Historically this plant was recorded at Colinton and Auchendinny in 1768. In the 19th century there were records from meadowground south of Ravelrig Toll, the banks of the Water of Leith at Newmill, above Currie, near Borthwick Castle, Lugton Woods, and woods at Mid Calder, Auchendinny, Penicuik Glen and Arniston. Mid Calder, Currie and Penicuik were still noted in 1934, but the recent sites have been different. The North Esk Reservoir is a SSSI, including the steep-sided valley from Carlops.

| Location | Grid Ref | Date | Recorder |
|--------------------------------|----------|------------|---------------------|
| Heriot Station | NT402547 | 01/07/1969 | Beattie, E.P. |
| Breich Water, Addiewell | NS9862 | 07/06/1972 | Beattie, E.P. |
| Heriot House | NT4054 | 1989 | Learmonth, R. |
| Heriot Station | NT4054 | 09/04/1990 | Learmonth, R. |
| North Esk Reservoir, Carlops | NT15 | 1994 | Ranger |
| Cockmuir, Howgate | NT263552 | 1997 | Crowther, N. |
| Carlops to North Esk Reservoir | NT1557 | 22/07/2000 | Jones, M., Muscott, |

| | | | |
|-------------------|----------|------------|----------------|
| | | | J. & ENHS |
| Cockmuir, Howgate | NT263552 | 25/06/2012 | Sumner, B.E.H. |

Utricularia minor L.

Lesser Bladderwort

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

This native perennial is scattered in Britain, in fen-ditches and boggy pools. In Midlothian there has been only one recent record and the species has been recorded at this site repeatedly since at least 1809, when it was found in peat-pits near Ravelrig Toll. In 1824 the plant was also recorded in marshes in the Pentland Hills, near Currie, and subsequently recorded there repeatedly until 1934.

| Location | Grid Ref | Date | Recorder |
|----------|----------|------|-----------------------|
| Ravelrig | NT16 | 1992 | Aquatic Plant Project |

Utricularia vulgaris L.

Greater Bladderwort

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native perennial has a scattered distribution and is found in base-rich, still or slow-moving water. In Midlothian the species has been found at only two sites since 1970, one of them planted. At the Bawsinch site, an SWT reserve within Duddingston Loch SSSI, *Utricularia vulgaris s.l.* was introduced from the Marl Loch at Aberlady. At the Buteland Hill site, *U. vulgaris s.s.* was recorded. In 1824 the species was recorded in a marsh near Ravelrig Toll and it was recorded repeatedly at this site until 1934.

| Location | Grid Ref | Date | Recorder |
|---------------|----------|------------|--------------|
| Bawsinch | NT283724 | 11/11/1988 | McKean, D.R. |
| Buteland Hill | NT1263 | 24/06/1994 | Mackay, K. |

Vaccinium microcarpum (Turcz. ex Rupr.) Schmalh.

Small Cranberry

*National Status: Scarce; IUCN: LC.**Midlothian Status: Rare.*

This low-growing native shrub is nationally scarce and found in bogs in Northumberland, and central and northern Scotland. In Midlothian the species has only one known site, in wet, boggy moorland at the southern end of the Pentland Hills. Bawdy Moss is within the Craigengar SSSI and SAC.

| Location | Grid Ref | Date | Recorder |
|-------------------|----------|------|--------------|
| Bawdy Moss (near) | NT05 | 1958 | Duncan, U.K. |
| Bawdy Moss | NT063564 | 1992 | McKean, D.R. |

Vaccinium vitis-idaea L.

Cowberry

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this low-growing native shrub is locally abundant from the centre of Britain northwards, on moors and in open peaty woods. In Midlothian it is found on dry moorland in the Pentland and Moorfoot Hills. Craigengar and the Moorfoot Hills are SSSIs and SACs. The species has long been known in the Pentland Hills (since at least 1809). A site above Swanston Woods was reported from 1824 to 1934, and Balerno was added in 1934.

| Location | Grid Ref | Date | Recorder |
|--------------------------|----------|------------|-------------------------|
| West Cairn Hill | NT1058 | 1957 | Beattie, E.P. |
| East Cairn Hill/Mid Hill | NT132600 | 1976 | Heern, K. |
| North of Dewar Hill | NT3548 | 1981 | BSS surveyor |
| South of Gladhouse | NT2950 | 1981 | Dixon, C. |
| West of The Kipps | NT2949 | 1981 | Dixon, C., McKean, D.R. |
| Craigengar | NT0955 | 1992 | McKean, D.R. |
| Emly Bank | NT2947 | 1993 | Dixon, C. |
| West of Dewar Hill | NT3447 | 1994 | Dixon, C., McKean, D.R. |
| East of Torsonce | NT4743 | 1984 | Nield, P. |
| Blackhope Scar | NT34J | 14/07/2003 | McKean, D.R. |

Valeriana dioica L.

Marsh Valerian

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native perennial is frequent as far north as southern Scotland, and is found in fens, bogs and marshes. In Midlothian the species has been recorded in marshes, riversides and bogs at four sites since 1970. The North Esk Reservoir and Calder Wood are SSSIs. In 1934 this valerian was found in the Pentland Hills (where it still occurs) and at Currie, Gogar, Dalkeith, Newbattle, Gorebridge, Borthwick and Roslin.

| Location | Grid Ref | Date | Recorder |
|--------------------------------|----------|------------|-------------------------------|
| North Esk Reservoir | NT1558 | 1995 | Dixon, C. |
| Calder Wood | NT077667 | 01/06/2000 | Hutcheon, S. & Badenoch, C. |
| Longmuir Moss | NT4651 | 15/07/2000 | Muscott, J. et al. |
| Carlops to North Esk Reservoir | NT1557 | 22/07/2000 | Jones, M., Muscott, J. & ENHS |

Valerianella carinata Loisel.

Keel-fruiting Cornsalad

*National Status: Not Scarce; IUCN: LC; SBL: rare.**Midlothian Status: Rare.*

Nationally this annual archaeophyte is scattered in Britain as far north as central Scotland. It is found on bare and rough ground, rocky outcrops, walls, banks and

arable fields. In Scotland the species is recognised as rare by the SBL. In Midlothian there has been only one record of this species, at a hotel near the river in Edinburgh, where it was a garden weed.

| Location | Grid Ref | Date | Recorder |
|---------------|----------|------------|------------|
| Belford Place | NT235736 | 10/05/2006 | Mill, R.R. |

Veronica anagallis-aquatica L.

Blue Water-speedwell

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

This native species, which is annual to perennial, is locally common through lowland Britain, in marshes and wet meadows and by still and running water. In Midlothian the records since 1970 have been from rivers and river shingle, and from the edges of streams, a reservoir and a loch, at sites scattered through the Vice-county. The species was found at Duddingston in 1863, and was said by Sonntag to be frequent there in 1894. In 1934 both Duddingston and Gogar were sites for this species. Duddingston Loch is a SSSI. Note: *Veronica anagallis-aquatica* can be confused with *V. catenata* (D.R. McKean, personal communication).

| Location | Grid Ref | Date | Recorder |
|------------------------------------|----------|------------|---------------------------------|
| Mortonhall | NT2668 | 1953 | Basden, E.B. |
| Breich Water, Addiewell | NS96 | 1972 | Beattie, E.P. |
| Ravensneuk Farm | NT2358 | 1982 | Sumner, B.E.H.; Cottrell, J. |
| Mortonhall Garden Centre (east of) | NT265683 | 27/08/1993 | Baillie, R.S. |
| Threipmuir Reservoir | NT16 | 1998 | SWT Survey |
| Blackford Glen | NT2670 | 02/06/2004 | Muscott, J. |
| Blackford Glen | NT261702 | 19/10/2010 | Muscott, J. |
| Bonaly Tower | NT2167 | 02/06/2011 | Muscott, J. |
| Duddingston Loch | NT2872 | 2013 | Stewart, N.F. |

Veronica catenata Pennell

Pink Water-speedwell

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

Nationally *Veronica catenata*, a native species, is distributed like *Veronica anagallis-aquatica*, but is said to be rarer in Scotland. It is found in muddy areas, mostly without flowing water. In Midlothian the species has been recorded in a wet ditch and by other, larger areas of still water, scattered through the Vice-county. Duddingston Loch is a SSSI.

| Location | Grid Ref | Date | Recorder |
|---------------------------------|-----------|------------|----------------------------------|
| Duddingston | NT2872 | 1969 | McKean, D.R. |
| Duddingston Loch | NT2772 | 1977 | Stewart, O.M. |
| Auchinoon (Harperrig Reservoir) | NT0961 | 1991 | Edgar, C. |
| Haltree | NT4152 | 1990 | Learmonth, R. |
| Duddingston | NT2872 | 05/07/2011 | Sumner, B.E.H. |
| Mid Crosswood | NT058569§ | 12/07/2011 | Sumner, B.E.H. & McKean, D.R. |

Vicia bithynica (L.) L.

Bithynian Vetch

*National Status: Not Scarce; IUCN: VU; SBL: rare.**Midlothian Status: Rare.*

Nationally this annual species is probably native but has also been introduced. Its distribution in Britain is mainly southern, where it grows inland and at the coast, but there are further scattered coastal sites reaching north to Wigtownshire. At the coast the species grows in rough grassland and on cliffs, but inland the species is found in scrub/grassland, hedges, and on railway banks. Its coastal sites are said to be declining. In Scotland this species is recognised as rare by the SBL. In Midlothian the species is a casual, but is included in this *Register* because of its conservation designation. There were three records from the Musselburgh/Inveresk area in the early 20th century, and then no more records until the year 2000 (see below). One of the historic records was from a railway embankment. The few recent records have been from inland sites near the coast, and the two habitats recorded were long grass between a road and houses, and low down a river bank.

| Location | Grid Ref | Date | Recorder |
|------------------------------------|-----------|------------|--------------------|
| Musselburgh | NT37 | 1902 | Craig Christie, A. |
| Inveresk | NT37 | 21/05/1904 | Evans, W.E. |
| Inveresk | NT37 | 30/06/1904 | Evans, W.E. |
| Bonnington/Pilrig | NT266757 | 05/05/2000 | Kennedy, D. |
| Danderhall | NT303697 | 26/05/2012 | Milne, R.I. |
| River Esk, Musselburgh, below weir | NT338717§ | 29/10/2013 | Jackson, E.H. |

Vicia lathyroides L.

Spring Vetch

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

This native annual is scattered through Britain but not in the far north-west. It grows on sand, both at the coast and on inland heaths. In Midlothian the plant has been found in dry places and on grassy slopes at the coast and inland, and in rough grassland and on volcanic rocks. Arthur's Seat is a SSSI. The species was common in Holyrood Park and on Blackford Hill in 1809, and has been known there ever since. Cramond Island and Eskmouth were reported in 1934.

| Location | Grid Ref | Date | Recorder |
|-------------------|-----------|------------|--|
| Blackford Hill | NT27 | 1955 | Beattie, E.P. |
| Cramond Island | NT1978 | 19/11/1995 | McKean, D.R. |
| Haggis Knowe | NT275737 | 16/06/1998 | McKean, D.R. |
| Newhailes | NT3272 | 1998 | Watson, K. |
| Edgelaw Reservoir | NT35 | 30/03/1999 | Muscott, J., Murray, J. & Clarkson, M. |
| Arthur's Seat | NT269729§ | 22/05/2012 | Young, G. et al. |

Vicia orobus DC.

Wood Bitter-vetch

*National Status: Scarce; IUCN: NT; SBL: >25% decline.**Midlothian Status: Rare.*

Nationally this native perennial is scattered through western Britain in rocky and grassy areas and scrub. In Scotland the species has shown significant decline, recognised by the SBL. In Midlothian the species has only been recorded at one site in recent times, on a steep grassy bank above a road in the south-east of the Vice-county. In 1792 this plant was recorded on the north side of the Braid Hills. In the 19th century it was also found at Currie, Lasswade and Tynehead, but in 1894 the species was said by Sonntag to be rare. By 1934 only Tynehead was listed.

| Location | Grid Ref | Date | Recorder |
|-------------------|-----------|------------|----------------------|
| Stow | NT460450 | 09/07/1967 | McCallum Webster, M. |
| Lauder Road, Stow | NT460448§ | 11/07/2013 | Sumner, B.E.H. |

Vicia sylvatica L.

Wood Vetch

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

This native perennial is scattered and local through much of Britain, and is found not only in sparse woods and scrub but also on scree and on coastal cliffs and shingle. In Midlothian the species has been found at only two sites recently, one of which was on a slope below cliffs at Salisbury Crags (within Arthur's Seat SSSI). The plant was recorded at this site and in Colinton Woods in 1809. In 1934 the species was found at Roslin.

| Location | Grid Ref | Date | Recorder |
|--------------------------------|----------|------------|--------------|
| Niven's Knowe | NT2665 | 01/08/1999 | Dixon, C. |
| Salisbury Crags, Holyrood Park | NT267732 | 2000 | McKean, D.R. |

Viola canina L.

Heath Dog-violet

*National Status: Not Scarce; IUCN: NT.**Midlothian Status: Scarce.*

Nationally this native perennial is represented through most of Britain by subsp. *canina*, which grows on heaths or in fens. In Midlothian this plant has been found at four sites since 1970, in formerly heathy but now forested areas, on a forest ride, near a disused quarry, and on the dry bed of an overflow channel from a reservoir. In 1824 Greville said the species was "very common". In 1863 the Pentland Hills, Dalmahoy, Blackford Hill and Salisbury Crags were sites for this species and in 1894 Sonntag said it was "locally common".

| Location | Grid Ref | Date | Recorder |
|--|-----------|------------|--------------|
| East of Reservoir House (Torphin Quarry) | NT0359 | 1981 | McKean, D.R. |
| Kitchen Rig | NS9157 | 1992 | Muscott, J. |
| Gladsmuir | NS919572 | 1992 | Muscott, J. |
| Harlaw Reservoir | NT179651§ | 10/06/2013 | Merrick, D. |

Viola hirta L.

Hairy Violet

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Rare.*

Nationally this native perennial grows in calcareous grassland and scrub from the south of Britain as far north as central Scotland. In Midlothian the species has been found at only one site recently, on the coast, but was formerly more widespread. In the 19th century and up to 1934 the species was recorded at Blackford Hill, Currie, Corstorphine, Cramond, Roslin and Auchendinny.

| Location | Grid Ref | Date | Recorder |
|-------------|----------|------------|--------------|
| Musselburgh | NT3573 | 22/08/1988 | McKean, D.R. |

Viola tricolor L.

Wild Pansy

*National Status: Not Scarce; IUCN: NT; SBL: >25% decline.**Midlothian Status: Not Scarce.*

Nationally this native species, as represented by subsp. *tricolor*, is common on waste and cultivated ground through much of Britain. Yet it is causing enough conservation concern to be deemed "Near Threatened". In Scotland the species has shown significant decline, recognised by the SBL. In Midlothian the species is not scarce, but local. It is included in this *Register* because of its conservation status. The sites since 1970 are shown in the table below. In 1824 it was said by Greville to be "very common" and it was still common in 1863 and 1894. In 1934 the sites reported were Penicuik, Roslin, Tynehead, Kames (Kaimes), Dalmahoy and Balerno.

| Location | Grid Ref | Date | Recorder |
|------------------------------|----------|------------|--|
| Inveresk | NT37 | 1971 | Milne, J. |
| Catcune/Tynehead (between) | NT36 | 1978 | Beattie, E.P. |
| Ninemileburn | NT15 | 10/07/1979 | Beattie, E.P. |
| South of Rashiehill | NS9560 | 1985 | Rutherford, A., Stirling, A.McG., McKean, D.R. |
| Edgefield | NT2866 | 1986 | Selfridge, M. |
| Granton | NT2477 | 1986 | MacGillvrey, A. |
| North of Cauldhall Moor | NT2759 | 1986 | Munro, D., McKean, D.R. |
| Sighthill | NT1971 | 1988 | Mackay, K. |
| Brick Works (west of Roslin) | NT2663 | 1991 | Longstaff, M. |
| Bower | NT4250 | 1992 | Learmonth, R. |
| East of Gourlaw | NT2861 | 1992 | Broom, A. |
| Greenhall Farm | NT3462 | 1993 | Garrod, R. |
| Kirknewton House | NT1166 | 16/06/1994 | McKean, D.R. |
| Ratho Byres | NT1471 | 23/03/1995 | Thornton, J. |
| Niddrie | NT37A | 13/06/2003 | Maxwell, S.A. |

Viscum album L.

Mistletoe

*National Status: Not Scarce; IUCN: LC; SBL: rare.**Midlothian Status: Scarce.*

Nationally this well-known perennial, evergreen species is native in southern Britain and is locally common there, but was introduced to Scotland and Ireland and is rare there. The plant is semi-parasitic on trees, especially *Tilia*, *Crataegus*, *Populus* and *Malus*. In Midlothian the species is regarded as casual, which would make it ineligible for inclusion in this *Register*. However, although the plant has been introduced and hardly ever spreads it can persist for more than five years, as at the site in St. Albans Road (see below). Furthermore, the species has conservation designation, and is recognised as rare, by the SBL, and so merits inclusion in the *Register*. Records have been mostly from city sites, and of plants growing most often on *Tilia*, occasionally on *Malus* or *Crataegus*, but rarely on *Populus*.

| Location | Grid Ref | Date | Recorder |
|---|----------|------------|---------------------------|
| Fordel Dean | NT3866 | 1950 | Thomson, M. |
| Old Dean Cemetery | NT2473 | 02/09/1968 | Beattie, E.P. |
| Old John Watson School | NT2373 | 1980 | McKean, D.R. |
| Pentland Avenue, Colinton | NT2169 | 1985 | Tait, W. |
| Ravelston Terrace | NT236742 | 1988 | McKean, D.R. |
| Gallery of Modern Art, Belford Road | NT2373 | 1990 | McKean, D.R. & Kemp, E.E. |
| Old Dean Cemetery | NT2473 | 1990 | McKean, D.R. & Kemp, E.E. |
| Duddingston Golf Course (Loch and Bawsinch) | NT2872 | 1992 | Muscott, J. |
| Belford Road (east side) | NT2373 | 1992 | McKean, D.R. |
| Innocent Railway, Duddingston | NT2872 | 1993 | Baird, W. & McBeath, R. |
| St. Albans Road | NT2671 | 2005 | Clarkson, M. |
| St. Albans Road | NT2671 | 08/11/2013 | Cochrane, M.P. |

Vulpia myuros (L.) C.C. Gmel.

Rat's-tail Fescue

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

This annual species is an archaeophyte, but has also been re-introduced as a wool- and grain- alien, and has spread through most of Britain except for central and northern Scotland. It grows on open, rough and waste ground, beside roads and railways and on walls. In Midlothian the species is scarce, and the recent records have been from scattered sites in and near Edinburgh. Duddingston Loch is a SSSI. In 1768 this grass was recorded at Restalrig and Abbeyhill. In 1934 records were from Slateford, Leith and Musselburgh.

| Location | Grid Ref | Date | Recorder |
|---|----------|------------|---------------------------------|
| Leith Docks | NT27 | 1958 | Beattie, E.P. |
| Newington | NT2672 | 1981 | Stewart, O.M. |
| Millerhill | NT3270 | 06/1988 | McKean, D.R. |
| Duddingston Golf Course (Loch and Bawsinch) | NT2872 | 1992 | Muscott, J. |
| Granton (Caroline Park) | NT27 | 23/06/1999 | Pilling, E., Muscott, J. et al. |

| | | | |
|----------------------------|----------|------------|----------------------------|
| Union Canal | NT2070 | 14/06/2008 | Muscott, J. & Clarkson, M. |
| Warriston Drive, Edinburgh | NT250756 | 21/09/2012 | Crawley, M.J. |

Zannichellia palustris L.

Horned Pondweed

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Scarce.*

Nationally this native pondweed is frequent through most of Britain in fresh or brackish water, still or running. All but one of the recent Midlothian records have been from Edinburgh sites, in lochs, a pond and a canal. The most recent record is from a reservoir in the Pentland Hills. The species has been at Duddingston Loch from at least 1768. In the 19th century Lochend and Ravelrig were reported, and the latter also in 1934. Both Duddingston and Dunsapie Lochs are within SSSIs.

| Location | Grid Ref | Date | Recorder |
|---|----------|------------|---------------|
| Ashley Terrace | NT235718 | 10/09/1969 | Stewart, O.M. |
| Duddingston Golf Course (Loch and Bawsinch) | NT2872 | 1992 | Muscott, J. |
| Dunsapie Loch | NT280731 | 01/06/1997 | Day, J. |
| Craiglockhart Pond | NT2370 | 2001 | Alexander, L. |
| Union Canal, Lochrin Basin | NT2472 | 20/07/2003 | Maxwell, S.A. |
| Threipmuir Reservoir (upper end) | NT1663 | 2013 | Stewart, N.F. |

*Saxifraga hirculus* (© B.E.H. Sumner)

Extinct Species

Adonis annua L.

Pheasant's Eye

National Status: Scarce; IUCN: EN; UK BAP, 2007.

Midlothian Status: Extinct.

Nationally this annual archaeophyte is now only found as a rare casual in southern England, whereas formerly it was locally naturalised in cornfields in the south and centre of Britain. It is now a weed in cultivated and waste ground. In Midlothian the species was a grain casual, but has not been recorded since 1934 when it was seen at Seafield. In 1906 the plant was at Leith Docks and in 1914 at Duddingston Station.

Agrimonia procera Wallr.

Fragrant Agrimony

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Extinct.

This native perennial is scattered through Britain in grassy fields and hedgerows. In Midlothian the species has not been recorded since 1940, when it was seen at Hallyards.

Alchemilla filicaulis Buser. **subsp. filicaulis**

Slender Lady's-mantle

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Extinct.

This native perennial subspecies of *Alchemilla filicaulis* is scattered northwards from the south of Wales and the centre of England to the north of Scotland. In Midlothian this subspecies has not been seen since 16/06/1824, when it was recorded in NT27 by M. Ramsay. In contrast, subsp. *vestita* is not scarce.

Anacamptis morio (L.) R.M. Bateman, Pridgeon & M.W. Chase Green-winged Orchid

National Status: Not Scarce; IUCN: NT; SBL: rare.

Midlothian Status: Extinct.

This native orchid (formerly *Orchis morio*) has decreased and is now local in Britain. It grows on undisturbed, neutral or base-rich, short turf. In Scotland the species is recognised as rare by the SBL. In Midlothian the species has not been recorded since 1841, when it was found in meadows at West Calder.

Anagallis tenella (L.) L.

Bog Pimpernel

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Extinct.

Nationally this low-growing native perennial is scattered in Britain, mostly in the west,

and is found in bogs and damp peat. In Midlothian the species has not been seen since 1934, when it was recorded at Eskside and in Hunter's Bog (below Arthur's Seat). The Hunter's Bog site had been known since 1792, when Robert Brown said the plant had been found "sparingly". In 1765 the species was also found in a marsh west of Fisherrow.

Apium graveolens L.

Wild Celery

National Status: Not Scarce; IUCN: LC; SBL: rare.

Midlothian Status: Extinct.

Nationally this native biennial occurs from the south of Britain north to southern Scotland, and is mostly coastal, in damp brackish and rather bare ground. In Scotland the species is recognised as rare by the SBL. The plant has not been seen in Midlothian since 1934, when it occurred at Slateford, Leith and Musselburgh. Musselburgh records had been obtained repeatedly from at least 1764. Slateford and Leith records began about 1904 and 1905, respectively.

Asparagus officinalis L.

Garden Asparagus

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Extinct.

Nationally this perennial archaeophyte is naturalised in dunes and other sandy, sparsely grassy places from the south of Britain north to central Scotland. The species has not been recorded in the wild in Midlothian since 1934, when it was found at Slateford, where it had been recorded repeatedly since 1906. In 1910 the plant was found on a wall top at Lasswade, but not recorded there subsequently.

Asplenium viride Huds.

Green Spleenwort

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Extinct.

This native spleenwort is locally distributed in northern and western Britain south to Derbyshire and South Wales. It grows in crevices of base-rich rocks. In Midlothian the last record in the database is 12/07/1872, when the species was found by an unknown recorder in NT1775. The site name was not recorded, but Cramond Bridge is in this kilometre square and it was previously seen there in 1866. In 1871 the fern was found on lime-rich rocks by the Medwin Water.

Asplenium x alternifolium Wulfen

(A. trichomanes x A. septentrionale)

National Status: Not designated; IUCN: Not designated.

Midlothian Status: Extinct.

This hybrid of two native species is known from parts of Wales, Cumberland and a few other sites in northern and western Britain. In Midlothian the last record was from Blackford Hill, recorded by A. Inglis in 1857.

Bidens tripartita L.

Trifid Bur-marigold

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Extinct.*

This native species is locally common in the south of Britain but more scattered in the north. It is annual, or a short-lived perennial, and grows in marshes and ditches and by ponds and streams. In Midlothian the species has not been recorded since 1934, when it occurred at Duddingston Loch. It had previously been found at Leith (1910) and in the 19th century it also occurred at Lochend. In 1768 the plant was recorded at the Nor' Loch. Later the Nor' Loch was drained and Waverley Station and Princes Street Gardens created.

Blysmus compressus (L.) Panz. ex Link

Flat-sedge

*National Status: Not Scarce; IUCN: VU; UK BAP, 2007; SBL: listed.**Midlothian Status: Extinct.*

Nationally this native perennial is locally frequent in England but very local in southern Scotland. The plant grows in marshy, open ground. The species was last recorded in Midlothian in 1934, when it was found at Borthwick and Ravelrig. The Borthwick site had been known since 1824. In 1863 the plant was recorded not only at Borthwick, but also at Ford and Ravelrig.

Bromus hordeaceus L. **subsp. ferronii** (Mabille) P.M. Sm.

Least Soft-brome

*National Status: Scarce; IUCN: LC.**Midlothian Status: Extinct.*

This native annual is coastal, and locally frequent in the south and south-west of Britain but more scattered north to Kirkcudbrightshire and eastern Scotland. It is found on sand, shingle or grassy cliff-tops. In Midlothian the species has not been seen since 1934, when it was found at Leith, Portobello and Musselburgh. However, these records are said to be dubious (Smith *et al.*, 2002).

Campanula rapunculus L.

Rampion Bellflower

*National Status: Rare; IUCN: EN; UK BAP, 2007; SBL: rare & >25% decline.**Midlothian Status: Extinct.*

Nationally, this declining archaeophyte, which is usually biennial, is scattered north to central Scotland on rough grassy banks and fields. In Scotland the rarity and the significant decline of the species has been recognised by the SBL. In Midlothian the species was last recorded in 1905, at Newbattle.

Carex depauperata Curtis ex With.

Starved Wood-sedge

*National Status: Rare; IUCN: EN; UK BAP, 2007; WACA: Sch. 8.**Midlothian Status: Extinct.*

This native sedge is very rare in North Somerset and Surrey, and is extinct in Dorset, West Kent, Anglesey and Midlothian. It is found in dry hedgebanks and woods on limestone or chalk. In Midlothian the species was last seen in woods above Bonaly between about 1860 and 1869, when a voucher specimen was collected by W.R. McNab. It may have been an escape from the Rev. Dr. Walker's garden at the manse, Colinton (D.R. McKean, personal communication). Although this species can return from the seedbank after a very long time, it is now over 140 years since last recorded, and is thought to be extinct.

Carex elata All.

Tufted-sedge

*National Status: Not Scarce; IUCN: LC; SBL: rare.**Midlothian Status: Extinct.*

This native sedge of reedswamps, fens, bogs, and the edges of rivers and lakes, is locally frequent in the centre of Britain but very scattered elsewhere, north to Central Scotland. In Scotland the species is recognised as rare by the SBL. In Midlothian the species was last seen in 1911 at Leith Docks.

Carex lasiocarpa Ehrh.

Slender Sedge

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Extinct.*

This native sedge of fens and bogs is scattered through Britain but absent from the centre of England and most of Scotland. In Midlothian the species was last seen at Duddingston and Ravelrig in 1934.

Carex magellanica Lam.

Tall Bog-sedge

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Extinct.*

The British subspecies of this native sedge is subsp. *irrigua* (Wahlenb.) Hiitonen. It is scattered in north and west Britain and grows in wet bogs with moving water, often in *Sphagnum*. In Midlothian the species was recorded at Roslin in 1863 and last reported in 1934.

Carex x pseudoaxillaris K Richt. (**C. otrubae x C. remota**)*National Status: Not designated; IUCN: Not designated.**Midlothian Status: Extinct.*

Nationally this native hybrid sedge grows with the native parents and is scattered in Britain as far north as Midlothian. In Midlothian the species was recorded repeatedly in the 19th century in a bog below Crichton Castle (NT36). The first record was on

25/06/1828 and the last in 1863, both by unknown recorders.

Carex vesicaria L.

Bladder-sedge

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Extinct.

This native sedge is frequent throughout Britain beside lakes and in marshes and swamps. In Midlothian the species was recorded at Blackhall in 1910, and at Auchendinny, Ravelrig and in the Pentland Hills in 1934. Those were the last records.

Carum carvi L.

Caraway

National Status: Scarce; IUCN: EN; UK BAP, 2007; SBL: >25% decline.

Midlothian Status: Extinct.

This biennial archaeophyte is sparsely scattered through Britain on roadsides, waste ground and in fields. In Scotland the species has shown significant decline, recognised by the SBL. In Midlothian the species was recorded as a casual at Leith and Roslin in 1934, and has not been recorded since. In 1824 it grew on rocks on the west side of Edinburgh Castle and in 1863 it was recorded at Lochend and Penicuik.

Catapodium marinum (L.) C.E. Hubb.

Sea Fern-grass

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Extinct.

This native annual is locally common around British coasts except for parts of the east and north. It grows on dry sand, shingle, banks and walls. In southern England it has also been recorded by salted roads inland. In Midlothian the species was recorded west of Granton between 1863 and 1943, since when there have been no more records. The species was also found at Leith Docks in 1921, with no subsequent records.

Centaurea scabiosa L.

Greater Knapweed

National Status: Not Scarce; IUCN: LC; SBL: >25% decline.

Midlothian Status: Extinct.

This native perennial is locally common in Britain but very local in Scotland, and is found mainly in calcareous areas. In Scotland the species has shown significant decline, recognised by the SBL. The plant grows on waysides and in grassland, rough ground and on cliffs. In Midlothian the species has not been recorded since 1934, when it was seen at Gogar, Musselburgh and Howgate.

Centunculus minimus L.

Chaffweed

National Status: Not Scarce; IUCN: NT.
Midlothian Status: Extinct.

This native annual (formerly *Anagallis minima*) is scattered through Britain on damp, sandy ground on woodland rides and heaths, chiefly near western coasts. In Midlothian the species was found in the littoral zone west of Fisherrow in 1765, but has not been recorded since.

Cephalanthera longifolia (L.) Fritsch

Narrow-leaved Helleborine

National Status: Scarce; IUCN: VU; UK BAP, 2007; SBL: listed.
Midlothian Status: Extinct.

This native helleborine is scattered and decreasing in Britain, and is found in woods and other shady places on calcareous soil. In Midlothian the species has not been recorded since 1894, when it was found in woods at Dalmahoy.

Chenopodium ficifolium Sm.

Fig-leaved Goosefoot

National Status: Not Scarce; IUCN: LC.
Midlothian Status: Extinct.

This annual archaeophyte of arable and waste ground is established in the south and east of Britain but is casual elsewhere. In Midlothian the species was last recorded in Edinburgh in 1907.

Chenopodium glaucum L.

Oak-leaved Goosefoot

National Status: Scarce; IUCN: VU.
Midlothian Status: Extinct.

This annual archaeophyte is very local in Britain, and mostly in the south and east. It grows on rich soils in waste areas, and is casual on tips and in dockland. In Midlothian the species was recorded in fields in 1768, at Leith Docks in 1888 and 1889, and near Edinburgh in 1891. No further records have come to light.

Chenopodium hybridum L.

Maple-leaved Goosefoot

National Status: Not Scarce; IUCN: LC.
Midlothian Status: Extinct.

Even though this annual archaeophyte is not designated as nationally scarce or rare, it is said to be rare in Britain. It is mostly southern and usually casual on arable and waste ground. In Midlothian the species has not been recorded since 1934, when it was found at Leith. Previously the plant had been recorded in cultivated fields around Edinburgh in 1809 and 1824.

Chenopodium urbicum L.

Upright Goosefoot

*National Status: Rare; IUCN: CR; UK BAP, 2007.**Midlothian Status: Extinct.*

This annual archaeophyte is rare and scattered in England, and usually only casual. It is found on cultivated and waste ground, and mostly comes from grain. In Midlothian the species has not been recorded since 1934, when it was found at Leith and Musselburgh. The plant had also been recorded at Musselburgh (and Fisherrow) in 1894 and before that in 1863. In 1824 the species was said to be rare in rubbish and waste places near towns.

Cicuta virosa L.

Cowbane

*National Status: Scarce; IUCN: LC.**Midlothian Status: Extinct.*

This native perennial has decreased and is now very local in the west and east of central England. Elsewhere in Britain it is very rare. The plant grows beside ponds and in marshes and ditches. In Midlothian the species was recorded at Lochend Loch in 1809, when Maughan said that it was “possibly the most poisonous plant indigenous to Scotland”. In 1824 it was recorded at Lochend again and said by Greville to be rare. The plant was last recorded at Lochend in 1927, and no other records have occurred.

Clinopodium acinos (L.) Kuntze

Basil Thyme

*National Status: Not Scarce; IUCN: VU; UK BAP, 2007; SBL: rare & >25% decline.**Midlothian Status: Extinct.*

Nationally this native species, which is usually annual, is locally distributed north to East Lothian, but is sparser further north. In Scotland the species is rare and has shown significant decline, recognised by the SBL. The plant is found on dry, mostly calcareous, soils in arable fields and on rocky and bare ground. In Midlothian the species was recorded by E.P. Beattie on disused railway sidings at Borthwick in 1965, but in 1971 the track was taken up and the plant disappeared. This appears to have been the last record. From 1863 to 1934 the species had been recorded at Salisbury Crags and Samson’s Ribs, but has not been found there since. Other sites were Leith Docks in 1903 and 1904, and a cornfield at Oxfgangs in 1903, none of which sites have yielded further records.

Cochlearia officinalis L. **subsp. scotica** (Druce) P.S. Wyse Jacks.

Scottish Scurvygrass

*National Status: Not Scarce; IUCN: Waiting List; UK BAP, 2007; SBL: >25% decline.**Midlothian Status: Extinct.*

This native subspecies is found on sandy and rocky coasts of Scotland, and northern and western Ireland. A threat category (IUCN) has not yet been assigned, owing to ongoing taxonomic work. In Scotland the plant has shown significant decline, recognised by the SBL. In Midlothian the subspecies has not been recorded since 1868, when it was found at Musselburgh.

Corallorrhiza trifida Châtel

Coralroot Orchid

*National Status: Scarce; IUCN: VU.**Midlothian Status: Extinct.*

This native orchid is scattered in northern Britain south to mid-west Yorkshire. It is saprophytic and grows in damp peat or moss under bushes or trees in scrub, woods or dune-slacks. In Midlothian the orchid was recorded by E.J. Maughan at Ravelrig Toll Moss in 1807, and continued to be recorded there until 1863. It was found growing among willows. Other records were from Edinburgh (1856) and Dalmahoy Moss (1840). The latter site was adjacent to Ravelrig Toll Moss.

Cornus suecica L.

Dwarf Cornel

*National Status: Not Scarce; IUCN: VU.**Midlothian Status: Extinct.*

This native perennial is very local in northern England but frequent in central and northern Scotland. It grows among low shrubs on upland moors. In Midlothian there is a record of this species from the Pentland Hills in 1764. In 1809 Maughan included the record as “communicated by Lightfoot, on the authority of the late Dr. Hope”. In 1824 Woodforde noted that the plant was very rare in the Pentland Hills, “if to be found at all”. There have been no further records.

Crambe maritima L.

Sea Kale

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Extinct.*

This native species is distributed around the coasts of Britain on shingle (mostly), sand, cliffs and rocks. In Midlothian the species was recorded at Cramond in 1845 and 1927, but had become extinct by 1934. In 1927 the habitat was recorded as shingle.

Crepis mollis (Jacq.) Asch.

Northern Hawk's-beard

*National Status: Rare; IUCN: EN; UK BAP; SBL: rare.**Midlothian Status: Extinct.*

This native perennial has decreased nationally and is now very local from the mid-west of Yorkshire to the east of Perthshire. It grows on grassy slopes (often damp). In Scotland the species is recognised as rare by the SBL. In Midlothian the species has not been recorded since 1847, when it was found by W.W. Evans at Habbie's Howe in the Pentland Hills.

Cuscuta epithymum (L.) L.

Dodder

*National Status: Not Scarce; IUCN: VU.**Midlothian Status: Extinct.*

This native species is frequent in southern Britain, but scattered further north to

central Scotland. It is parasitic on various hosts, but especially *Ulex* and *Calluna*, on heaths. In Midlothian the species has not been recorded since 1894, when it was found at Dalkeith and Newton.

Cuscuta europaea L.

Greater Dodder

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Extinct.

This native species has decreased and is now local in England north to Northamptonshire. It is parasitic on various hosts, but especially *Urtica dioica*, near water. In Midlothian the species was found by J.H. Balfour at Edmonstone on 02/09/1876, but has not been recorded since.

**X *Dactyloдения st-quintinii* (Godfery) J. Duvign.
(*Gymnadenia borealis* x *Dactylorhiza fuchsia*)**

National Status: Not designated; IUCN: Not designated.

Midlothian Status: Presumed Extinct.

This native hybrid orchid is said to be the commonest of three X *Dactyloдения* hybrids in northern England and Scotland. In Midlothian the orchid was last found on 14/07/1936 by W. Handyside, on a heath at Balerno.

Dryas octopetala L.

Mountain Avens

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Extinct.

This native perennial is very local in Britain, in the north of England and the north and west of Wales and Scotland. It is found on base-rich mountain rocks (on ledges and in crevices). In Midlothian the species was recorded at Levenseat (Leven Seat), Handerwood (Handaxwood) in 1841. This surprising record strains credulity. However, it is slightly hilly at Leven Seat (up to 356 m) and there is a band of limestone there (Robertson *et al.*, 1949). The limestone was quarried before 1949. There have been no records of the species since 1841.

Eleocharis acicularis (L.) Roem. & Schult.

Needle Spike-rush

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Extinct.

This native perennial is scattered through Britain in and beside lakes and ponds. In Midlothian the species was recorded in Edinburgh in 1796. It also occurred at Lasswade but had become extinct by 1934. In 1980 it was recorded by J. Muscott at Bawsinch SWT Reserve, but the species disappeared after pond works in 1984.

Eleocharis multicaulis (Sm.) Desv.

Many-stalked Spike-rush

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Extinct.*

This native perennial occurs throughout Britain but is commoner in the west than the east. It is found especially where soils are acid, on wet peat and in bogs. In Midlothian the species was recorded near Edinburgh in 1837, by J.H. Balfour and J.T.I.B. Syme. In 1934 it occurred in the Pentland Hills, but there have been no localised records since.

Eleocharis uniglumis (Link) Schult.

Slender Spike-rush

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Extinct.*

This native perennial is scattered through Britain and usually coastal in dune-slacks and marshes. In Midlothian the species was last recorded by G. Don in the Pentland Hills in 1824.

Eleogiton fluitans (L.) Link

Floating Club-rush

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Extinct.*

This native perennial is quite frequent through Britain, especially in the west. It grows in or beside peaty ditches, ponds and lakes. In Midlothian the species has not been recorded since 1934, when it was found at Ravelrig. From 1806 to 1869 the species was recorded at Braid Hill Marshes by J. Brodie (pre-1824), J. Knapp (1835) and W.W. Evans (July, 1869).

Elytrigia x laxa (Fr.) Kerguélen (**E. repens x E. juncea**)*National Status: Not designated; IUCN: Not designated.**Midlothian Status: Extinct.*

This sterile native hybrid occurs quite frequently in the northern half of Britain, but rarely in the south. It grows on coasts where the parents are present. In Midlothian the last record of this hybrid was in August, 1877, when it was found on coastal sandhills at Musselburgh by F.M. Webb. Previously, J. Ball had recorded the hybrid on the sea coast near Edinburgh in August, 1850.

Epipactis palustris (L.) Crantz

Marsh Helleborine

*National Status: Not Scarce; IUCN: LC; SBL: rare.**Midlothian Status: Extinct.*

This native species is locally frequent from the south of Britain to mid-Perthshire, but has disappeared from many inland places. It is found in base-rich marshes, fens and dune-slacks. In Scotland the species is recognised as rare by the SBL. In Midlothian the plant has not been recorded since 1900. Before this date it was found at

Glencorse, Roman Camp near Dalkeith, Braid Hills, and Lochend and Duddingston Lochs.

Erodium moschatum (L.) L'Hér.

Musk Stork's-bill

National Status: Not Scarce; IUCN: LC; SBL: rare.

Midlothian Status: Extinct.

This annual archaeophyte grows in rough ground and in rather bare patches in short turf, especially near the sea. In Britain it is widespread as a casual and a wool alien, reaching north to central Scotland. In Scotland the plant is recognised as rare by the SBL. In Midlothian the species has not been recorded since 1905, when it was found at Leith Docks. Previous records at this site were in 1889 and 1890. The species had also been recorded at Musselburgh in 1836 and at Slateford in 1904.

Eryngium maritimum L.

Sea-holly

National Status: Not Scarce; IUCN: LC; SBL: >25% decline.

Midlothian Status: Extinct.

Nationally this native perennial has decreased and is now absent from most of north-east England and the north and east of Scotland. In Scotland the decline has been recognised as significant by the SBL. The plant grows on coastal sand and shingle. In Midlothian the species has not been recorded since 1894, when it was found at Musselburgh. Previously the species had been recorded at Fisherrow and Musselburgh Links (1824).

Euphorbia exigua L.

Dwarf Spurge

National Status: Not Scarce; IUCN: NT.

Midlothian Status: Extinct.

This annual archaeophyte of arable land is common in the south and east of England, but scattered elsewhere. In Midlothian the species has not been recorded since 1934, when it was found at Musselburgh.

Filago pyramidata L.

Broad-leaved Cudweed

National Status: Scarce; IUCN: EN; UK BAP, 2007; WACA: Sch. 8.

Midlothian Status: Extinct.

Nationally this annual archaeophyte has decreased and is now very local in southern England, but formerly also occurred northwards up to the north of Lincolnshire. It grows on rather bare sandy ground on waysides and heaths, and in sand-pits. In Midlothian the species has not been recorded since 1917, when it was found at Levenhall. Previously the species had been found on waste ground at Leith Docks in 1885 and at Slateford Quarry in 1906.

Foeniculum vulgare Mill.

Fennel

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Extinct.*

Nationally this perennial archaeophyte is naturalised in open and waste ground, especially near the coast, but is rarer and more casual in the northern half of Britain. In Midlothian the species has not been recorded since 1934, when it was found at Roslin, Comiston and Craigmillar.

Galeopsis angustifolia Ehrh. ex Hoffm.

Red Hemp-nettle

*National Status: Scarce; IUCN: CR; UK BAP, 2007.**Midlothian Status: Extinct.*

This annual archaeophyte of open ground and arable land is decreasing and is now very scattered from the centre and south of England north to County Durham. It is found mostly on calcareous soils or coastal sand and shingle. In Midlothian the species was recorded at Roman Fort near Dalkeith in 1824, at Newbattle in 1834 and 1865, Inveresk in 1837, Leith in 1927, and has not been recorded since.

Galeopsis segetum Neck.

Downy Hemp-nettle

*National Status: Extinct; IUCN: EX (Extinct).**Midlothian Status: Extinct.*

This annual archaeophyte is now extinct nationally. The species used to be casual on arable and waste ground in England and Wales, where it was last recorded in 1975. In Midlothian the species was found in fields at Lochend in 1863, but this was the first and last record in the Vice-county.

Genista anglica L.

Petty Whin

*National Status: Not Scarce; IUCN: NT.**Midlothian Status: Extinct.*

This small native shrub is found on moors and heaths through most of Britain. In Midlothian the species was recorded in the Pentland Hills from 1809 to 1934, on a patch of moorland near the eastern boundary of Borthwick Parish in 1839, at Tynehead from 1863 to 1934, at Bavelaw Moss in 1934 and near Balerno in 1935. No subsequent records have come to light.

Geranium columbinum L.

Long-stalked Crane's-bill

*National Status: Not Scarce; IUCN: LC; SBL: >25% decline.**Midlothian Status: Extinct.*

This native annual is rare in the north of Britain, but locally frequent elsewhere. In Scotland the species has shown significant decline, recognised by the SBL. The plant grows mostly in calcareous places, in grassy areas and scrub, and on banks. In Midlothian in the 19th century the species was recorded in the Dalmahoy Hills, by

the Water of Leith near Balerno, at Ratho, Slateford, Colinton and Leith, on Salisbury Craigs and at Roslin. By 1934 Roslin, Slateford and Leith were still extant sites, but no further records have been found.

Groenlandia densa (L.) Fourn.

Opposite-leaved Pondweed

National Status: Not Scarce; IUCN: VU.

Midlothian Status: Extinct.

This native pondweed of still and running water is locally frequent in England, scattered in Wales and rare in Scotland. In Midlothian the species has not been recorded since 1934, when it occurred at Duddingston and Corstorphine.

Hieracium auratiflorum Pugsley

Dark-flowered Hawkweed

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Presumed Extinct.

Nationally this British endemic is found on the limestone of northern England, except for one record from Midlothian. The one authenticated Midlothian record was from rocks on Arthur's Seat (SSSI), found by G. Taylor on 19/06/1936.

Hieracium cravoniense (F. Hanb.) Roffey

Craven Hawkweed

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Presumed Extinct.

This British endemic is widespread in northern Britain, especially on limestone in northern England. In Midlothian the one authenticated record was from Borthwick railway tip on 20/07/1963, found by M. McCallum Webster. The railway tip is now long disused but the disused railway, which used to be the Waverley route from Edinburgh to Carlisle, is currently being re-built as the Borders Railway.

Hieracium deganwyense Pugsley

Deganwy Hawkweed

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Presumed Extinct.

This species was formerly included in *Hieracium subrude*, but has now been segregated as a separate species and recognised as a British endemic. Although first described from North Wales, *H. deganwyense* is frequent in Northumberland and southern Scotland, reaching north to Kincardineshire. In Midlothian the species has been found on basalt rocks, and there have been four authenticated records. In June, 1870, A. Craig Christie found the species at Blackford Hill, and it was found there again by D. McClintock in June, 1952. On 24/06/1954, C.W. Muirhead recorded the plant at Windy Gowl, Duddingston, and in July, 1959, D.M. Henderson recorded it at Dalmahoy Hill. Since then there have been no further records.

Hieracium dicella P.D. Sell & C. West

Forked Hawkweed

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Presumed Extinct.*

This British endemic is widely but thinly scattered from Derbyshire to Sutherland, but is apparently absent from the central Highlands. In Midlothian there have been four authenticated records. The habitats, where recorded, have been rocky. An unknown recorder found the species on Arthur's Seat in 1796. In 1831 an unknown recorder found the species at Dalhousie. E.S. Marshall recorded the plant on Salisbury Crags in 1905. Then in May, 1954, C.W. Muirhead found this hawkweed on Arthur's Seat again. Since then there have been no further records.

Hieracium oistophyllum Pugsley

Sagittate-leaved Hawkweed

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Presumed Extinct.*

This native perennial is quite common in northern England but scattered elsewhere, from Merioneth to East Sutherland. In Scotland it favours light shade. In Midlothian there have been two authenticated records. In 1837 the species was found at Currie by T.B. Bell. On 04/07/1954, D.M. Henderson found this hawkweed on a calciferous conglomerate at Habbie's Howe (near Loganlea) in the Pentland Hills, in the SSSI area. The species has not been found there recently.

Hieracium umbellatum L.

Umbellate Hawkweed

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Extinct.*

This native species (as represented by subsp. *umbellatum*) is widespread in Britain and Ireland, but has declined in southern Scotland with the decline of the railways. In Midlothian the species was recorded in 1814 at Figgate Whins, near Portobello, by G. Don. There have been no further records.

Hordeum marinum Huds.

Sea Barley

*National Status: Scarce; IUCN: VU; UK BAP, 2007.**Midlothian Status: Extinct.*

This native annual is locally common in southern Britain but scattered and casual further north to the centre and east of Scotland. It grows on almost bare coastal ground, by saltmarshes, on banks and walls, and in waste ground. Rarely, it grows inland by salted roads. In Midlothian the species has not been recorded since 1934, when it occurred at Leith, Portobello, Musselburgh and Slateford.

Jasione montana L.

Sheep's-bit

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Extinct.*

This native species is locally common and mainly western in Britain, where it occurs in acid districts in sandy, grassy or rocky sites. It is absent from much of the centre, east and north of Britain. In Midlothian the species has not been recorded since 1871, when it was found on Cousland Crags.

Juncus compressus Jacq.

Round-fruited Rush

*National Status: Not Scarce; IUCN: NT; SBL: rare.**Midlothian Status: Extinct.*

This native perennial is scattered in Britain north to Central Scotland, and is found in water meadows and marshes, often coastal. In Scotland the plant is recognised as rare by the SBL. In Midlothian the species has not been recorded since 1934, when it was found in moist places at Ravelrig and along the coast from Granton to Cramond.

Lepidium ruderales L.

Narrow-leaved Pepperwort

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Extinct.*

This annual or biennial archaeophyte is locally common in the south and centre of England, but scattered elsewhere in Britain. In waste ground and waysides the species is casual, but in coastal open ground it may be naturalised and perhaps native. In Midlothian the species has not been recorded since 1934, when it was found on waste ground at Leith and Portobello.

Linnaea borealis L.

Twinflower

*National Status: Scarce; IUCN: LC; UK BAP, 2007; SBL: listed.**Midlothian Status: Extinct.*

This procumbent, native, dwarf shrub is decreasing, and is now locally distributed in eastern Scotland north to Caithness. It grows in shade under rocks or trees, especially in pinewoods, even if they are forestry plantations. In Midlothian from 1837 to 1899 the species was recorded repeatedly, and vouchers collected, near Ravelrig and near Balerno in a damp 'fir' plantation. The plantation, about a mile or two south of Balerno, was felled in 1918-1919. In 1921 only about half a dozen sprays were found by W. Evans after careful searching. The last record was in 1934, on Bavelaw Moor.

Lithospermum arvense L.

Field Gromwell

National Status: Not Scarce; IUCN: EN.
Midlothian Status: Extinct.

This annual archaeophyte of arable, open and rough ground is locally frequent in England but scattered and often casual elsewhere in Britain. In Midlothian the species used to be widespread but has not been recorded since 1934, when it occurred in fields at Slateford, Leith, Portobello and Musselburgh.

Lotus tenuis Waldst & Kit. ex Willd.

Narrow-leaved Bird's-foot-trefoil

National Status: Not Scarce; IUCN: LC; SBL: rare.
Midlothian Status: Extinct.

Nationally this native perennial (formerly *Lotus glaber*) is scattered in dry grassland north to central Scotland. In Scotland the plant is recognised as rare by the SBL. In Midlothian the species was found in dry pastures at Dalmahoy in 1863, but has not been recorded since.

Lycopodiella inundata (L.) Holub

Marsh Clubmoss

National Status: Scarce; IUCN: EN; UK BAP, 2007; SBL: listed.
Midlothian Status: Extinct.

This native clubmoss was formerly scattered through most of Britain but is now very local. It is found on wet heaths and peat, and sometimes under water. In Midlothian the species has not been recorded since 1845, when it was found in Glencorse Parish.

Lycopodium annotinum L.

Interrupted Clubmoss

National Status: Scarce; IUCN: LC; HabDir-Annex II, IV or V.
Midlothian Status: Presumed Extinct.

This native clubmoss is found on thin soil on mountain rocks and moors, often among *Calluna*, in central and northern Scotland. It is said to be extinct in southern Scotland and most of northern England and Wales. In Midlothian the species was last recorded sometime before 1970, in the Swanston hectad (NT26) (Stewart *et al.*, 1994; Preston *et al.*, 2002).

Lythrum hyssopifolia L.

Grass-poly

National Status: Rare; IUCN: EN; UK BAP; WACA: Sch. 8; SBL: rare & >25% decline.
Midlothian Status: Extinct.

This native species, usually annual, is local in southern England but a rare birdseed casual elsewhere in Britain. In Scotland the species is rare and has shown significant decline, recognised by the SBL. It grows on bare ground that is seasonally flooded. In Midlothian the species has not been recorded since 1908,

when it was found at Leith Docks.

Moneses uniflora (L.) A. Gray

One-flowered Wintergreen

National Status: Rare; IUCN: VU; UK BAP, 2007; SBL: listed.

Midlothian Status: Extinct.

This native species, found among leaf-litter in pinewoods, is nowadays very local in northern Scotland. In Midlothian the species was recorded in 1841, in Harburn Firwood in the parish of West Calder. No further records have been discovered.

Nasturtium x sterile (Airy Shaw) Oefelein
(N. officinale x N. microphyllum)

Hybrid Watercress

National Status: Not designated; IUCN: Not designated.

Midlothian Status: Presumed Extinct.

Nationally this native hybrid is scattered through most of Britain in marshes, ditches and streams, often in the absence of either parent. In Midlothian the hybrid was found at Liberton (NT26) by W.B. Backie in 1846, and was last recorded on 10/08/1999 by C. Dixon, in a ditch in marshy ground at Niven's Knowe (NT2665). Searches in 2010 failed to locate any plants at the Niven's Knowe site, and a housing estate has since been built on this ground.

Oenanthe aquatica (L.) Poir.

Fine-leaved Water-dropwort

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Extinct.

This native annual-to-biennial species is scattered through England in ponds and ditches that often dry up in the summer. In Midlothian the species was recorded at Corstorphine before 1927 but has not been recorded since.

Oenanthe fistulosa L.

Tubular Water-dropwort

National Status: Not Scarce; IUCN: VU; UK BAP, 2007; SBL: rare & >25% decline.

Midlothian Status: Presumed Extinct.

This native wetland perennial is locally frequent in Britain as far north as central Scotland. However, in Scotland the species is rare and has shown significant decline, recognised by the SBL. In Midlothian the species was recorded sometime before 1970, in the Edinburgh hectad (NT27) (Preston *et al.*, 2002).

Ornithopus perpusillus L.

Bird's-foot

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Extinct.

This native annual is locally common through much of Britain, but absent from much of Ireland and Scotland. It grows in dry, sandy places on rather bare ground. In

Midlothian the species was recorded at Portobello Links from 1825 to 1832, Musselburgh in 1863, Leith Docks in 1906 and 1907, and Dalkeith in 1927. Since 1927 there have been no more records of this species.

Orobanche rapum-genistae Thuill.

Greater Broomrape

National Status: Scarce; IUCN: NT; SBL: rare.

Midlothian Status: Extinct.

This native species is parasitic on woody members of the Fabaceae, but has declined and is now local in Britain, north to southern Scotland. In Scotland the plant is recognised as rare by the SBL. In Midlothian the species has not been recorded since 1841, when it was found at West Calder.

Oxyria digyna (L.) Hill

Mountain Sorrel

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Extinct.

This native perennial is found in the north and west of Britain, among rocks in damp areas on mountains. In Midlothian the species was recorded before 1934 in the Pentland Hills, but has not been recorded since.

Platanthera bifolia (L.) Rich.

Lesser Butterfly-orchid

National Status: Not Scarce; IUCN: VU; UK BAP, 2007; SBL: >25% decline.

Midlothian Status: Extinct.

This native species is locally frequent in Britain, in woods and, in the north, in open grassland, usually in calcareous areas. In Scotland this orchid has shown significant decline, recognised by the SBL. In Midlothian the species was recorded near Roslin in July, 1792. In 1824 it was found at Ravelrig Toll Moss, at many places in the Pentland Hills, especially a marsh 4 miles west of Currie, and near Auchendinny. By 1934 this orchid still occurred at Ravelrig, in the Pentland Hills and around Auchendinny, but it has not been recorded since.

Potamogeton filiformis L.

Slender-leaved Pondweed

National Status: Scarce; IUCN: LC.

Midlothian Status: Extinct.

This native species is scattered in Scotland and the south of Northumberland, in still and running water. In Midlothian the species has not been recorded since 1935, when it was found in a pool in the disused Mount Lothian Quarry.

Potamogeton lucens L.

Shining Pondweed

National Status: Not Scarce; IUCN: LC.
Midlothian Status: Presumed Extinct.

This native pondweed is common in England but rare in Scotland, in still and slow-running water. In Midlothian the species has not been recorded since 1961, when it was found in the Union Canal at Slateford. Previously this pondweed was recorded at Lochend (1894) and Duddingston (1778).

Potentilla anglica Laichard.

Trailing Tormentil

National Status: Not Scarce; IUCN: LC.
Midlothian Status: Extinct.

This native perennial is scattered through Britain as far as northern Aberdeenshire. It is found in dry hedgerbanks and woodland edges, and on heaths. In Midlothian the species was recorded before 1934 at Bavelaw, but this record is unconfirmed. There have been no further records of the species in the Vice-county.

Pseudorchis albida (L.) Á. & D. Love

Small-white Orchid

National Status: Not Scarce; IUCN: VU; UK BAP, 2007; SBL: >25% decline.
Midlothian Status: Extinct.

This native species of orchid is frequent in the centre, west and north of Scotland and scattered in northern England. In Scotland the species has shown significant decline, recognised by the SBL. The orchid usually grows in upland, base-rich districts, in short grass. In Midlothian the species was rare near Edinburgh in 1824, and has not been recorded since 1841, when it grew on the drier ground in the parish of West Calder.

Rosa x biturigensis Boreau (**R. spinosissima x R. rubiginosa**)

National Status: Not designated; IUCN: Not designated.
Midlothian Status: Extinct.

This native hybrid rose is very scattered in the British Isles and absent from Wales. In Midlothian the hybrid was last recorded at Ratho by J.E. Bagnall on 12/07/1877, and no other records have been found.

Rosa x glaucoides Wolley-Dod (**R. caesia x R. mollis**)

National Status: Not designated; IUCN: Not designated.
Midlothian Status: Extinct.

This native hybrid rose is northern, occurring in Scotland and reaching south to Derbyshire. Either subspecies of *R. caesia* can be involved in the hybrid. In Midlothian the hybrid (which involved *R. caesia* subsp. *caesia*) was last recorded at Balerno by W. Horton-Smith on 29/06/1878, and no other records have been found.

Rosa x involuta Sm. (**R. spinosissima x R. sherardii**)

National Status: Not designated; IUCN: Not designated.

Midlothian Status: Extinct.

This native hybrid rose occurs in most of Britain but is very scattered. In Midlothian the hybrid was last recorded at Ratho on 14/07/1891 by an unknown recorder. There had been previous records from Ratho in 1877 and 1879, and one record from near Edinburgh in 1885, by J.A. Terras.

Rosa x margerisonii (Wolley-Dod) Wolley-Dod
(**R. spinosissima x R. caesia**)

National Status: Not designated; IUCN: Not designated.

Midlothian Status: Extinct.

This native hybrid rose (formerly *R. x setonensis* Wolley-Dod) is found in northern England, Northern Ireland and Scotland. Either subspecies of *R. caesia* can be involved in the hybrid. In Midlothian there has been only one record of this hybrid, and *R. caesia* subsp. *caesia* was subspecies involved. The hybrid was recorded by F.M. Webb in Muirburn Wood, near Ratho, on 16/07/1878.

Rosa x molletorum Hesi.-Harr. (**R. canina x R. mollis**)

National Status: Not designated; IUCN: Not designated.

Midlothian Status: Extinct.

This native hybrid is a northern rose which occurs in Scotland, reaching south as far as Staffordshire. In Midlothian the hybrid was last recorded at Threipmuir on 17/07/1878 by W. Horton-Smith, and no previous records have been found.

Rosa x rothschildii Druce (**R. canina x R. sherardii**)

National Status: Not designated; IUCN: Not designated.

Midlothian Status: Extinct.

This native hybrid rose occurs in most of the British Isles but is rare in eastern England. In Midlothian the hybrid was last recorded near Cramond Bridge on 26/08/1876 by F.M. Webb, and no previous records have been found.

Rosa x sabinii Woods (**R. spinosissima x R. mollis**)

National Status: Not designated; IUCN: Not designated.

Midlothian Status: Extinct.

This native hybrid rose is scattered over most of the British Isles, but absent from south-east England. In Midlothian the hybrid was last recorded at Blackford Hill on 26/06/1911 by R.S. Adamson. Previously this rose had been recorded at Colinton Dell on 02/08/1899 by W. Evans, and at Ratho and near Edinburgh in 1885 (the latter record by J.A. Terras).

Rumex maritimus L.

Golden Dock

National Status: Not Scarce; IUCN: LC; SBL: rare.
Midlothian Status: Extinct.

This native annual-to-perennial species is scattered in Britain north to central Scotland, in marshes, ditches and pond edges, sometimes flooded. In Scotland this dock is recognised as rare by the SBL. In Midlothian the species has not been recorded since 1840, when it was found at Meadowbank. In 1863 Balfour and Sadler commented that it had not been found of late.

Sambucus ebulus L.

Dwarf Elder

National Status: Not Scarce; IUCN: LC; SBL: >25% decline.
Midlothian Status: Extinct.

This perennial archaeophyte is scattered through most of Britain in rough and waste ground and on waysides. In Scotland the species has shown significant decline, recognised by the SBL. In Midlothian the species was recorded in 1768 by the Manse at Duddingston, and by the road to Dalkeith 2 miles south of Edinburgh. It was still at the latter site in 1824, and was also recorded on the south bank of the Water of Leith. In 1850 the plant was still found by the Water of Leith and at Moredun, but has not been recorded since.

Samolus valerandi L.

Brookweed

National Status: Not Scarce; IUCN: LC.
Midlothian Status: Extinct.

This native perennial of wet areas, in flushes and by streams, is found more often near the coasts of Britain than inland. It is absent from the north and east of Scotland. In Midlothian the species has not been recorded since 1896, when it was found at Roslin.

Saxifraga oppositifolia L.

Purple Saxifrage

National Status: Not Scarce; IUCN: LC.
Midlothian Status: Extinct.

This native perennial of damp rocks and scree in the mountains, is locally common in north-west England and Scotland. In Midlothian the species was recorded at the Allermuir Burn in the Pentland Hills in 1863, but has not been recorded since.

Scandix pecten-veneris L.

Shepherd's-needle

National Status: Not Scarce; IUCN: CR; UK BAP, 2007.
Midlothian Status: Extinct.

This annual archaeophyte was formerly common in England and scattered elsewhere, but it is now rare and mostly in the centre and south of England. It is an arable weed, also found on waste ground. In Midlothian the species was common in

cornfields in 1824, for instance near Caroline Park, near Liberton Church, etc. In 1894 the plant grew at Corstorphine and Dalhousie. By 1934 the plant had also been recorded at Murieston, Dalhousie, Slateford, Leith and Portobello, but has not been recorded since.

Schoenoplectus lacustris (L.) Palla

Common Club-rush

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Presumed Extinct.

This perennial native club-rush is frequent in most of Britain, in shallow, still water and slow-flowing rivers. In Midlothian the species has not been recorded since 1967, at Cobbinshaw Reservoir. Previous records were from Duddingston Loch and Lochend Loch in 1835.

Schoenoplectus tabernaemontani (C.C. Gmel.) Palla

Grey Club-rush

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Extinct.

Nationally this native perennial is frequent near the coasts, but more scattered inland, through most of Britain. It is found in water (still and slow), marshes, wet peat and dune-slacks. In Midlothian the species has not been recorded since 1903, when it was found at Lochend and Threipmuir.

Sedum rosea (L.) Scop.

Roseroot

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Extinct.

This native perennial is found on sea cliffs and mountain rocks in northern Britain as far south as South Wales. In Midlothian in 1863 the species grew on the banks of a stream above Currie, and at Habbie's Howe in the Pentland Hills. In 1894 the plant grew at these two sites and also at Roslin. By 1934 only the Habbie's Howe site was occupied, and the species has not been recorded there since.

Senecio cambrensis Rosser

Welsh Groundsel

National Status: Rare; IUCN: NT.

Midlothian Status: Extinct.

Nationally this native annual was first found in 1948 in Flintshire and subsequently in Denbighshire, on waste ground and waysides. In 1982 the species was discovered in Midlothian, where it had arisen from hybridisation between *Senecio squalidus* and *S. vulgaris* and had become fertile through polyploidy (Abbott *et al.*, 1983). In Midlothian the species was found on demolition and redevelopment sites around Leith, Edinburgh. It was recorded from 1982 until 1993 but has not been found since, in spite of extensive searches (Abbott & Forbes, 2002).

Silaum silaus L.

Pepper-saxifrage

National Status: Not Scarce; IUCN: LC.
Midlothian Status: Extinct.

Nationally this native perennial is locally frequent as far north as central Scotland, in grassy places. In Midlothian the species has not been recorded since 1894, when it was found at Dalkeith.

Silene conica L.

Sand Catchfly

National Status: Not Scarce; IUCN: VU.
Midlothian Status: Extinct.

This native annual is scattered through Britain as far north as central Scotland, growing in sand, especially in coastal dunes. In Midlothian the species has not been recorded since 1934, when it was found at Slateford and Craigmillar. It had previously been recorded at Craigmillar Quarry in 1894 and 1927.

Sium latifolium L.

Greater Water-parsnip

National Status: Scarce; IUCN: EN; UK BAP, 2007.
Midlothian Status: Extinct.

This native perennial of fens and ditches has decreased and is now very local in the east and south-east of England, but formerly extended north to central and eastern Scotland. In Midlothian the species has not been recorded since 1897, when it was found at Duddingston.

Teesdalia nudicaulis (L.) W.T. Aiton

Shepherd's Cress

National Status: Not Scarce; IUCN: NT; SBL: >25% decline.
Midlothian Status: Extinct.

This native perennial is scattered very locally through Britain and is found on sand, shingle and gravel. In Scotland the species has shown significant decline, recognised by the SBL. In Midlothian the species was recorded on the Braid Hills and at Dalmahoy before 1934, but has not been recorded since.

Thalictrum flavum L.

Common Meadow-rue

National Status: Not Scarce; IUCN: LC.
Midlothian Status: Extinct.

This native perennial of wet meadows, fens and streamsides is decreasing in England and naturalised in Scotland. In Midlothian the species was recorded at Roslin in 1894, but has not been recorded since.

Torilis arvensis (Huds.) Link

Spreading Hedge-parsley

*National Status: Scarce; IUCN: EN; UK BAP, 2007.**Midlothian Status: Extinct.*

This annual archaeophyte of arable land used to be frequent in central and southern Britain, but it has decreased and is now rare and casual in southern England. In Midlothian the species was a casual ruderal, last recorded at Leith, Levenhall and Slateford in 1934.

Triglochin maritima L.

Sea Arrowgrass

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Presumed Extinct.*

This native perennial occurs around the coasts of Britain in saltmarshes and salt-spattered grassland. It is rare in inland salty areas. In Midlothian the last record of this species was in 1967, when E.P. Beattie found it on the shore of Cramond Island. No previous records have been discovered.

Utricularia intermedia Hayne

Intermediate Bladderwort

*National Status: Not Scarce; IUCN: LC for Utricularia intermedia s.l., DD (Data Deficient) for U. intermedia s.s.**Midlothian Status: Extinct.*

This native perennial is very scattered in Britain, in marshes and bogs and in still, shallow water. In Midlothian there has been only one record, for *Utricularia intermedia s.l.*, and that was in 1962, south of Straiton.

Valerianella dentata (L.) Pollich

Narrow-fruited Cornsalad

*National Status: Not Scarce; IUCN: EN.**Midlothian Status: Extinct.*

This annual archaeophyte of cornfields and rough ground is scattered and decreasing in Britain. Formerly the species extended north to central Scotland but is now found from Northumberland southwards. In Midlothian the species has not been recorded since about 1910, when it was casual at Leith and Portobello. Before that it was found at Granton and Newhaven in 1824, and Crossgate Toll, south of Musselburgh, in 1809. The 1809 record was the first for Scotland (Smith *et al.*, 2002).

Valerianella eriocarpa Desv.

Hairy-fruited Cornsalad

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Extinct.*

This native annual is very scattered in southern England, and is found on rough ground and banks, and in grassland. In Midlothian the species has not been recorded since about 1820, when it was found at Slateford and Leith.

Valerianella rimosa Bastard

Broad-fruited Cornsalad

*National Status: Scarce; IUCN: EN; UK BAP, 2007.**Midlothian Status: Extinct.*

This annual archaeophyte is now very local in southern England, but formerly reached north to central Scotland. It grows in cornfields and rough ground. In Midlothian the species has not been recorded since 1907, when it grew at Leith.

Veronica triphyllos L.

Fingered Speedwell

*National Status: Rare; IUCN: EN; UK BAP, 2007; WACA: Sch. 8.**Midlothian Status: Extinct.*

This annual archaeophyte of sandy arable fields is now very local in west Norfolk and east and west Suffolk, but formerly extended north to mid-west Yorkshire. In Midlothian the species has not been recorded since 1927, when it was very rare at Slateford. Previously, voucher specimens had been collected from Slateford Quarry by W.E. Evans and J. Fraser on 13th April, 1906.

Viola reichenbachiana Jord. ex Boreau

Early Dog-violet

*National Status: Not Scarce; IUCN: LC; SBL: rare.**Midlothian Status: Extinct.*

This native perennial is common in Britain, reaching north to southern Scotland, and is found on hedgebanks and in woods. In Scotland the species is recognised as rare by the SBL. In Midlothian the plant has not been recorded since 1934, when it was found at Arniston.

Zostera marina L.

Eelgrass

*National Status: Not Scarce; IUCN: NT; Bern-A1.**Midlothian Status: Extinct.*

This native marine perennial is scattered around British coasts and estuaries, especially in the west. It is found from half-water mark to below low-water mark. Narrow-leaved plants were formerly thought to be a separate species, *Zostera angustifolia* Rchb., but are now regarded as a variety or growth form of *Z. marina*. For the former *Z. marina* var. *angustifolia* Hornem., see *Z. noltei*, below. In Midlothian *Z. marina* was recorded at the Black Rocks at Leith in 1824, and was still there in 1863, when it was also recorded at Granton. Both sites were still occupied in 1934, but since then there have been no records of *Zostera marina*.

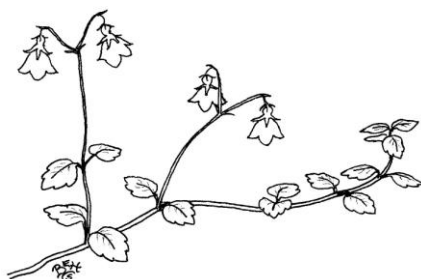
Zostera noltei Hornem.

Dwarf Eelgrass

*National Status: Scarce; IUCN: VU.**Midlothian Status: Extinct.*

This native perennial (the former *Zostera marina* var. *angustifolia* Hornem.) is scattered around British coasts and estuaries, from half-tide to low-tide mark.

In Midlothian the species was recorded at Granton and at the Black Rocks at Leith in 1934, but has not been recorded since.



Linnaea borealis, extinct in VC 83 (© B.E.H. Sumner)

Some extant species in VC 83 (© B.E.H. Sumner)



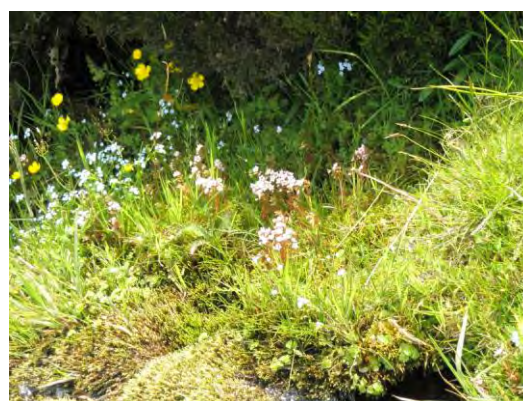
Paris quadrifolia



Gymnadenia densiflora



Astragalus danicus on a grassy, rocky knoll



Sedum villosum in a burnside community