

Midlothian

Vice-county 83

Scarce, Rare & Extinct Vascular Plant Register

(Second edition)



Gagea lutea
(© B.E.H. Sumner)



Scutellaria galericulata
(© B.E.H. Sumner)



Plantago media (© B.E.H. Sumner)

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

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

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Additional Acknowledgements for the Second edition

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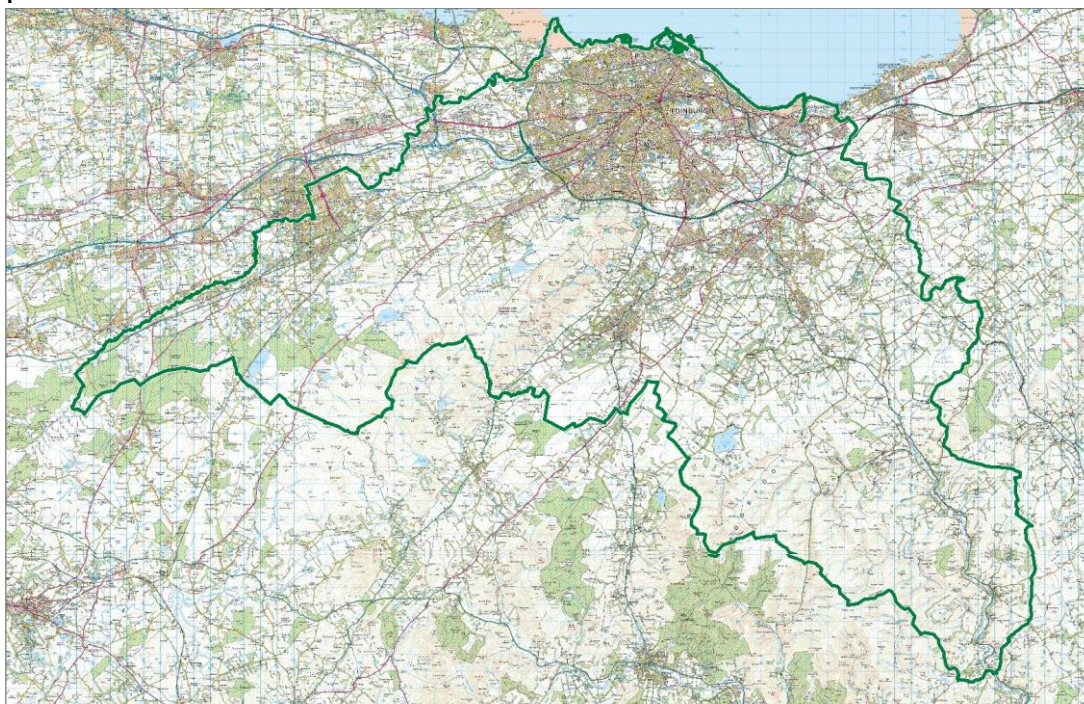
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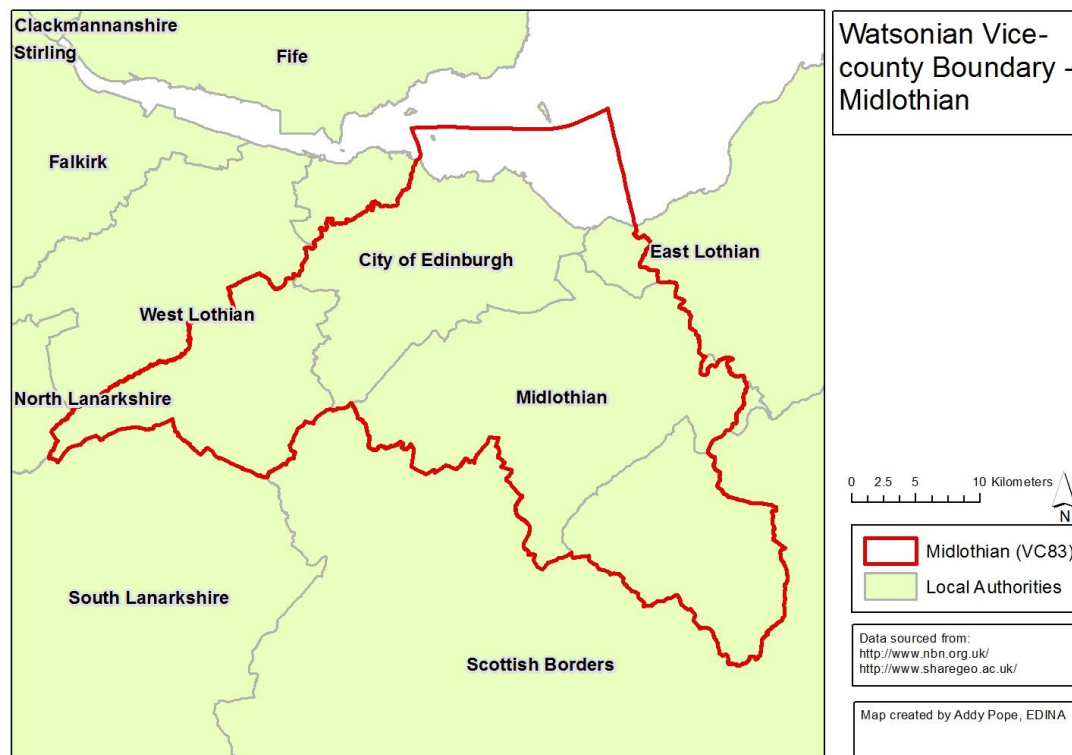
Abbreviations

Agg. – aggregate of closely related taxa
 Anon. – recorder unknown
 BSBI – Botanical Society of Britain and Ireland
 BSS – Botanical Society of Scotland (formerly BSE - Botanical Society of Edinburgh)
 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
 HRSR – Historic Scotland Ranger Service
 IUCN – International Union for the Conservation of Nature;
 Least Concern (LC); Data Deficient (DD); Extinct (EX); others on page 4
 JNCC – Joint Nature Conservation Committee
 LBAP – Local Biodiversity Action Plan
 LWIC – Lothian Wildlife Information Centre (forerunner of TWIC)
 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
 SEPA – Scottish Environment Protection Agency
 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 SE and part of Central Scotland)
 UK BAP – United Kingdom Biodiversity Action Plan
 VCCC – Vice-county Census Catalogue
 WACA: Sch. 8 – Wildlife and Countryside Act: Schedule 8

Maps of Vice-county 83



Map created by Jim McIntosh, BSBI. 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.



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.

Introduction

The first edition of this *Register* was published online in 2014. The second edition is intended to update details of the occurrence and distribution of rare plants in Vice-county 83, and to find out if there have been any changes as time has moved on. This second edition is available to view via a link on the Midlothian web-page (bsbi.org/midlothian) of the BSBI website.

The upper map on the facing page shows the onshore geography of Vice-county 83, (outlined in green). The map below shows the whole extent of the Vice-county (outlined in red) in relation to the current Local Authority administrative boundaries. 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. For comparative studies of plant distribution over time, the advantage of using the Watsonian Vice-county boundaries rather than Local Authority administrative boundaries is that the Vice-county boundaries date from 1852 (Dandy, 1969) and have remained unchanged, whereas the Local Authority administrative boundaries have been changed from time to time, making comparisons difficult.

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 Environment 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 conservation of a site requires knowledge of which species are present and how they are faring. Are they scarce or rare, and are they increasing or decreasing? Repeated recording is essential to gain this knowledge and to keep it up to date. The Midlothian Vice-county Recorder would warmly welcome any vascular plant records, particularly any that would update and improve this *Register*. The Recorder's e-mail address is listed on the BSBI website.

For the first edition of this *Register* the assessment of scarcity or rarity was made on recent records of vascular plants, using 1st January, 1970, as the beginning of the recent period, following BSBI guidelines. However, since the first edition was published the guidelines have been revised (2017) and 1st January, 1987, has been suggested as a suitable starting date for the recent period. From this date until 31st December, 2019, two intensive periods of recording have taken place to gather data for two national atlases of the British and Irish Flora. The first of these has been published (Preston, Pearman & Dines, 2002) and the second is in preparation. There is now a substantial body of records on which to assess scarcity or rarity, and from which this second edition of the *Register* has been compiled. As well as the

1987-2019 data, earlier records and historical information are provided where available, to put the recent records into perspective.

The selection of vascular plants for inclusion in this edition of the *Register* used the same criteria as used for the first edition, except for the revised dates for the recent period, as shown below.

The botanical and common names are those used by Stace (2019), except for the microspecies of *Hieracium* agg., which follow McCosh and Rich (2018, based on Sell and Murrell, 2006), *Rubus fruticosus* agg., which follow Edees & Newton (1988), and *Taraxacum* agg., which follow Dudman & Richards (1997).

The species are arranged in alphabetical order of botanical (Latin) names.

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, 1987, to 31st December, 2019) and do not fall into the above categories. In this context a “site” is a discrete area within a kilometre square, or a larger cohesive area under a single owner or

management regime;

- Are scarce - present in 4-10 sites in the Vice-county (from 1st January, 1987, to 31st December, 2019) and do not fall into the above categories. In a few cases where the upper limit is exceeded by only one site, the species is regarded as almost scarce;
- 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 for inclusion 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.

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.

Records which refer to planted specimens have been excluded, if known. However, in a few cases specimens have been planted on reserves or in other similar, controlled situations as a conservation measure for a declining species which is, or has been, known in the wild in the Vice-county. In these cases the planted records have been noted in the species account, but excluded from the assessment of scarcity or rarity.

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. The policy in this *Register* is to give grid references up to 6 figures, and for some records more detail may be available from the Vice-county Recorder on request (see below).

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 view of available records up to the end of 2019. To become an effective conservation tool the *Register* 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.

The Records

The records are those for Midlothian held in BSBI databases up to the end of 2019, 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 & 1989; 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 Vice-county Recorder 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 Vice-county Recorder 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, 2018; Preston *et al.*, 2002; Stace, 2019). Midlothian details are from the sources listed in the first paragraph of this section.

Summary of Updates in the second edition

The hybrid, *Rosa x dumalis*, which was included in the first edition of this *Register*, has been omitted from the second edition in case it needs re-determination, now that taxonomic revision has re-defined its content (Stace, 2019). This hybrid, formerly *R. canina* x *R. caesia*, is now the more narrowly defined *R. squarrosa* x *R. vosagiaca*. *R. squarrosa* is a new species separated from *R. canina*. *R. vosagiaca* is a former subspecies of *R. caesia*, now elevated to a species.

The period considered “recent” for the second edition of this *Register* was thirty-three years (1987-2019 inclusive), whereas “recent” for the first edition had been forty-four years (1970-2013 inclusive). Yet, even though the period for assessment of recent records was shorter for the second edition, at the end of 2019 twenty-one taxa (species, subspecies and hybrids) which had met the criteria for inclusion in the first edition of the *Register* were found to occur in too many sites in the Vice-county for inclusion in the second edition. These taxa were *Atriplex prostrata*, *Ballota nigra*, *Circaea x intermedia*, *Dryopteris affinis* subsp. *affinis* (formerly *Dryopteris affinis*), *Dryopteris affinis* subsp. *borreri* (formerly *Dryopteris borrieri*), *Leymus arenarius*, *Myosotis ramosissima*, *Nymphaea alba*, *Origanum vulgare*, *Plantago maritima*, *Quercus x rosacea*, *Ranunculus lingua*, *Ranunculus sceleratus*, *Sagina apetala* and *S. filicaulis*, *Scrophularia auriculata*, *Sparganium emersum*, *Stellaria pallida*, *Tripleurospermum maritimum*, *Veronica anagallis-aquatica* and *Vulpia myuros*. Three further taxa (all species), which had also apparently increased to “Not Scarce” by the end of 2019, were retained in the *Register* because they had conservation status. These were *Cichorium intybus*, *Fumaria purpurea* and *Glebionis segetum*. One possible explanation for the increases found might be that these taxa had indeed colonised new sites and expanded their ranges naturally. Another possibility is that the increased recording effort required for the national atlas project covered

more sites and found more occurrences of these taxa, especially in the period between the first and second editions of this *Register*. A further possibility is that some plantings might have occurred, unknown to the recorders, which increased the number of sites occupied by some of the taxa.

Thirteen taxa (species and a subspecies), assessed and found to be rare in the recent period for the first edition, were found to be scarce in the recent period for the second edition. These were *Armeria maritima*, *Atriplex laciniata*, *Calamagrostis epigejos*, *Dryopteris affinis* subsp. *cambrensis* (formerly *Dryopteris cambrensis*), *Helminthotheca echioides*, *Hylotelephium telephium* (formerly *Sedum telephium*); *Lysimachia maritima* (formerly *Glaux maritima*), *Orchis mascula*, *Plantago media*, *Rumex conglomeratus*, *Spergularia media*, *Taraxacum unguilobum* and *Vicia bithynica*. Two more taxa (both species), *Mentha arvensis* and *Ranunculus aquatilis*, had apparently increased from scarce to almost scarce by the end of 2019. *Sherardia arvensis* was found to be not scarce by the end of 2019, having apparently increased from almost scarce, but it was retained in the *Register* owing to its conservation status (SBL: >25% decline). As postulated for the taxa in the above paragraph, these taxa might have increased naturally, or their discovery by recorders might have increased. In a few cases they might have been augmented by plantings, though for most of these taxa this seems unlikely.

Assessment for the second edition of the *Register* decreased the status of fifteen taxa (species and hybrids) from scarce to rare, for various reasons. The later starting date for the recent period resulted in seven taxa showing a decrease to rare. These were *Hypericum humifusum*, *Lysimachia europaea* (formerly *Trientalis europaea*), *Rosa vosagiaca* x *sherardii* (formerly *R. caesia* x *R. sherardii*), *Silene noctiflora*, *Taraxacum bracteatum*, *Taraxacum hamatum*, and *Taraxacum maculosum*. For *Lysimachia arvensis* (formerly *Anagallis arvensis* subsp. *arvensis*), although recorded at four sites post-1987, two of these were likely to have been the same site. For *Rumex alpinus* also, two different site names were found to refer to the same site. Regarding the Union Canal as one site, and Holyrood Park as one site, resulted in the following five taxa being re-assessed as rare: *Lycopus europaeus*, *Lysimachia thyrsiflora*, *Potamogeton* x *cooperi*, *Potentilla verna* (formerly *Potentilla tabernaemontani*) and *Sabulina verna* (formerly *Minuartia verna*). For *Bistorta vivipara* (formerly *Persicaria vivipara*) the decrease to rare status resulted from the removal of two records which were found to be errors.

Eleven taxa (species and a subspecies) were moved from the Extant to the Extinct section of the *Register* in the second edition. Seven of these were found to have no recent records other than plantings or probable plantings. They were *Agrostemma githago*, *Genista tinctoria*, *Isatis tinctoria*, *Lepidium coronopus*, *Pilularia globulifera*, *Salix triandra* and *Utricularia vulgaris*. A recent addition to the Midlothian flora, *Anacamptis pyramidalis*, was unfortunately obliterated during construction work for the Borders Railway. *Beta vulgaris* subsp. *maritima* has not been found recently, in spite of extensive searches. *Pyrola media* and *Viola hirta* were found to have no recent records after removal of erroneous records from the database.

In contrast, thirteen taxa (species, a subspecies and a hybrid) were moved from the Extinct to the Extant section in the second edition. Five of these were *Hieracium* species. *H. dicella* and *H. umbellatum* were recorded recently, after a period without records. For *H. auratiflorum*, *H. deganwyense* and *H. oistophyllum*, there's a chance they might still be extant, even though they have no records within the 1987-2019 period (see species accounts). The other eight taxa were *Alchemilla filicaulis* subsp. *filicaulis*, *Chenopodium ficifolium*, *Foeniculum vulgare*, *Galeopsis angustifolia*, *Lepidium ruderales*, *Ornithopus perpusillus*, *Nasturtium* x *sterile* and *Schoenoplectus*

lacustris, all of which were recorded recently after a gap in the records.

This second edition of the *Register* contains two new entries, *Rubus caesius* and *Umbilicus rupestris*. The latter is a new species for the Vice-county, first discovered in 2009 on Blackford Hill. By the end of 2019 five other sites had been spotted. At present the species is scarce, but who knows what the future holds?

Overview

The total list of vascular plants in Vice-county 83 (VC 83) contains approximately 2235 species, including hybrid species but excluding aggregates. This total is increasing all the time, especially with neophytes and casuals.

The overall number of natives and archaeophytes included in this *Register* is 428, of which 316 are extant (or presumed extant) and 112 extinct (or presumed so). This is over a fifth 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	2	2	0	2	2
IUCN: EN	3	3	6	5	9	14
IUCN: VU	8	13	21	15	1	16
IUCN: NT	20	3	23	9	1	10
IUCN: LC	189	32	221	49	7	56
IUCN: DD	5	0	5	0	0	0
IUCN: Waiting List	1	0	1	1	1	2
IUCN: EX	0	0	0	0	1	1
Nationally Rare	5	0	5	5	3	8
Nationally Scarce	20	8	28	13	7	20
UK BAP, 2007	10	5	15	16	9	25
SBL	31	23	54	27	5	32
Total designations	296	90	386	144	48	192
Total designated taxa	227	53	280	79	22	101
Not designated	36	0	36	11	0	11
Total taxa	263	53	316	90	22	112

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

Local Status	Native	Archaeophyte	Total
Rare	162	27	189
Scarce	89	17	106
Almost Scarce	3	1	4
Not Scarce	6	8	14
Possibly Extant	1	0	1
Probably Extant	2	0	2
Extinct (or presumed so)	90	22	112
Total taxa	353	75	428

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, when set-aside schemes were introduced, biodiversity gained some space 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 and creating more habitats and micro-habitats for wild animals.

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Silene viscaria among natural vegetation on the edge of the disused Monktonhall Bing.
Photographed on 25th May, 2019 (© B.E.H. Sumner)

This new site for the species was discovered by Stuart Maxwell on 23rd May, 2019.

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. Recent records from the SWT Reserve at Johnston Terrace in 1991 have been excluded as possibly planted. The other recent records, and some earlier records, are shown below. 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.
Union Canal & Supermarket track	NT2070	14/06/2008	Muscott, J. & Clarkson, M.
Ratho, west of	NT128709§	25/07/2012	Sumner, B.E.H. & Merrick, D.
Newbridge to Kirkliston Walkway	NT126736	15/08/2013	McKean, D.R.
Catholes Meadow, Newtongrange	NT3264	27/07/2014	Harmsworth, N.A. & Beard, M.
Pencaitland Railway walk	NT3869	29/08/2015	Harmsworth, N.A., Eno, S. & TWIC
Currie Lee path (Colegate Road to Vogrie	NT381622	17/07/2019	Gilchrist, A.B.

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 perennial species, *Agrostis capillaris*, and the perennial 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, by the B6362 road	NT4745	10/08/1988	Learmonth, R.
Haltree Rings	NT4051	1990	Learmonth, R.

Alchemilla filicaulis Buser. **subsp. filicaulis**

Slender Lady's-mantle

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

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 only been seen once recently (see below). This is the only record since 16/06/1824, when it was recorded in NT27 by M. Ramsay. In contrast, subsp. *vestita* is not scarce.

Location	Grid Ref	Date	Recorder
Water of Leith (Currie to East Mills Bridge)	NT1887	15/05/2016	McKean, D.R. & TWIC

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 in and by still water, historically at Lochend, but more recently at Duddingston Loch (SSSI). In 2001 the species was recorded in three ponds at Bawsinch (SWT reserve) and in Torphin Quarry Pond. However, the Bawsinch ponds (artificial) might contain plantings, and the status of the species at Torphin Quarry Pond is uncertain, so these sites have not been included below or in the assessment of rarity. The remaining relatively recent records suggest that the species is still rare in Midlothian.

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 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 and other sites, scattered from the coast to the south-west and south-east of the Vice-county. Hadfast Valley is a SSSI and SWT reserve. 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

East of Torsonce	NT4743	04/1984	Nield, P.
Newhaven	NT2577	30/06/1984	Stewart, O.M.
North of Heriot Cleugh	NT3755	14/09/1994	McKean, D.R.
Granton	NT2477	29/05/1996	Anderson, E.M.
Hadfast Valley	NT387687§	2007	Tapson, J.
Musselburgh Race Course	NT347734	29/10/2007	Jackson, E.H.
Dundas Street, Edinburgh	NT251746	07/07/2015	Crawley, M.
Shoestanes	NT3954	28/08/2016	Maxwell, S.A.

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.
River Esk estuary, Musselburgh	NT3473	15/09/2015	Bowden, S.
Fisherrow Links	NT341732	19/06/2017	Jeffree, C.E., Jeffree, J.
Musselburgh shoreline	NT345733	19/06/2017	Jeffree, C.E., Jeffree, J.
Cramond	NT1976	22/06/2017	Obst, D.

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, Auchencorth Moss, south of Penicuik. This is a large area of peatland, part of which is a SSSI, designated for being an ombrogenous raised bog rich in sphagnum mosses. *Andromeda polifolia* was first discovered on Auchencorth Moss in 1895 by R. Godfrey, but the exact location is uncertain (the grid reference in the table below has been inferred). After Godfrey's record there were no more for 76 years. C.M. Badenoch finally re-found the species in 1971 after four years of searching the Moss. His grid reference is to the west of the SSSI. Commercial peat-cutting is currently taking place in the area west of the SSSI and it is uncertain whether *Andromeda polifolia* is still extant, but it is retained as extant for the time being.

Location	Grid Ref	Date	Recorder
Auchencorth Moss, Penicuik	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 to North Esk Reservoir	NT1556	22/06/2003	Sumner, B.E.H. & LWIC

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 is rare. 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.
Ratho, Craigpark Quarry	NT127706§	27/08/2016	Merrick, D.
Edinburgh, Holyrood Park, various streets	NT2774	01/01/2019	Maxwell, S.A.

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 1987. Most records, including the post-1987 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	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 mainly at various sites around Holyrood Park (Arthur's Seat Volcano SSSI), where it was also found in 1824. Bawsinch is an SWT Reserve, which now also includes Murder Acre.

Location	Grid Ref	Date	Recorder
Bawsinch	NT2872	1975	Stewart, O.M.
Windy Gowl, Holyrood Park	NT2772	1986	McKean, D.R.
Bawsinch	NT2872	1993	Muscott, J.
Samson's Ribs, Holyrood Park	NT274724	1998	Maxwell, S.A. & McKean, D.R.
Wester Craiglockhart	NT2270	28/05/2014	White, K.
Murrayfield	NT216730§	24/05/2015	Merrick, D.
Arthur's Seat	NT279725	15/07/2015	Cole, E., Jeffree, C., Wilson, J.
Queen's Drive, Holyrood Park	NT272727	11/05/2016	Maguire, W.
East Hermiston	NT183704§	24/05/2016	Merrick, D.
Murder Acre	NT275723§ & NT275724§	25/06/2016	Wilson, J., Jeffree, C., Farrar, J.
Holyrood Park	NT272728	28/05/2019	Griffin, B.D.

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 just scarce, with ten sites from 1987 to 2019 (inclusive). The Habbie's Howe site (SSSI near Loganlea) was known in 1809 and 1824, and the Blackford area in 1894. Further sites with this species 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	28/06/1999	Muscott, J.
Middleton Lime Quarries (site 3)	NT340573	16/06/2002	Chamberlain, D.F. & LWIC
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.
Blackford Glen (disused quarries)	NT258702\$, NT259702\$	02/06/2015	Sumner, B.E.H.
Clerk Street, east of	NT2672	06- 12/07/2017	Muscott, J.
Blackford Pond area	NT253709	31/08/2017	Muscott, J.
Astlie Ainslie Hospital	NT2571	05/2018	Muscott, J.

Armeria maritima (Mill.) Willd.

Thrift

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

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 scarce, recorded from two coastal and four inland sites since the beginning of 1987. 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.

Strathearn Road, Edinburgh	NT252719§	19/08/2016	Lowell, H. & Lowell, J.
Comely Bank, Edinburgh	NT241747§	15/12/2016	Crawley, M.
Queen Margaret University (by-pass near)	NT323714§	06/06/2019	Milne, R.I.
Cramond Foreshore	NT190771	18/06/2019	Alexander, L.

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-1987 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.
Warriston	NT2575	19/02/1988	McKean, D.R.
Lochend Pond	NT275748	26/08/1988	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.
Ratho	NT140709§	17/08/2012	Merrick, D.
Ratho	NT140709§	31/08/2013	Merrick, D.
Inch Park	NT2770	25/06/2017	Muscott, J.
Tramline survey, Edinburgh	NT1971	12/06/2019	Chamberlain, D., Chamberlain, M., Forbes, H. & West, R.

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 wall at Heriot Kirk, Halheriot, continuing along the garden wall next door.

Location	Grid Ref	Date	Recorder
Halheriot	NT389525	1973	Kerr, A.J.
Halheriot	NT3852	31/07/2017	Harding, M.
Halheriot	NT3952	31/07/2017	Harding, M.

Asplenium x murbeckii Dörfl. (**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 there is a historic record from Arthur's Seat in 1850, but the first recent record of this hybrid was from J. Muscott in 1993, also from Arthur's Seat. Then in 2009 D.W. Soden found the hybrid at a new grid reference point on Arthur's Seat. Both the recent points are still extant, though there is a risk from encroaching gorse. Arthur's Seat is a SSSI (Arthur's Seat Volcano SSSI).

Location	Grid Ref	Date	Recorder
Arthur's Seat, Holyrood Park	NT2772	1850	Anon.
Arthur's Seat, Holyrood Park	NT276726§	1993	Muscott, J.
Arthur's Seat, Holyrood Park	NT274726	01/03/2009	Soden, D.W.
Arthur's Seat, Holyrood Park	NT277726	28/12/2019	Soden, D.W.
Arthur's Seat, Holyrood Park	NT274726	28/12/2019	Soden, D.W.

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 currently inhabits basaltic rocks in two sites in Edinburgh, Holyrood Park (Arthur's Seat Volcano SSSI) and Blackford Hill. Both these sites are large areas, and were known for this species in 1824, when Woodforde said it 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. There have been no recent records from Braid Hermitage, but many repeated records from Holyrood Park, and occasional records from Blackford Hill. Selected records are shown below. In 2014 plants were found at six different grid references in Holyrood Park by J.W. McIntosh *et al.*, of which one is shown in the table below. Samson's Ribs, Salisbury Crags and Queen's Drive are all within Holyrood Park. Corbie's Craig is on Blackford Hill.

Location	Grid Ref	Date	Recorder
Arthur's Seat, Samson's Ribs	NT27	11/1847	Balfour, H.M.
Blackford Hill	NT27	05/1919	Templeman, A.
Arthur's Seat, Samson's Ribs	NT2772	09/1951	Walters, S.M.
Edinburgh, Salisbury Crags	NT2773	1985	Beddow, A.
Blackford Hill	NT254704§	07/10/2010	McHaffie, H.
Arthur's Seat, Holyrood Park	NT276725§	22/05/2012	Young, G. et al.
Arthur's Seat Volcano SSSI	NT273726§	08/07/2014	McIntosh, J.W., Cole, E. & McCabe,

			M.
Blackford, Corbie's Craig	NT256704§	27/02/2016	Maguire, W.
Queen's Drive, Edinburgh	NT276725§	29/10/2017	Groom, Q.J.
Holyrood Park	NT274724§	07/07/2019	McTague, J.

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 was one of the species studied in the BSBI "Threatened Plants Project". It is found in calcareous grassland, usually in short grass. In Midlothian this plant is scarce. The recent records have mostly been from short, limey sward on hills around Edinburgh, and from a few sites near the coast. Between 1778 and the present day the chief area for this species has been Holyrood Park (Arthur's Seat Volcano SSSI), which is regarded as one site, including Dunsapie Cliff, Haggis Knowe, Powderhouse Corner and Salisbury Crags, mentioned in the table below. In 2005 J.W. McIntosh found ten grid references around the SSSI with plants and in 2014 Historic Scotland recorded plants at nearly thirty different grid references (one record from each of these two surveys is shown below). Duddingston Loch is also a SSSI and a site for this species. In May, 1792, R. Brown recorded the species on the coast near Edinburgh, and coastal sites yielded records subsequently (Musselburgh, Leith, Granton and Cramond Island), but recently natural coastline has diminished and there is only one record from a coastal site since 1987 (see below). In 1886 there was a record from Blackford Hill, and records have occurred at intervals thereafter. The species has also been found on the Craiglockhart Hills.

Location	Grid Ref	Date	Recorder
Holyrood Park	NT27	20/06/1956	Beattie, E.P.
Cramond Island	NT1978	01/07/1957	Beattie, E.P.
Easter Craiglockhart Hill	NT2370	1970	Stewart, O.M.
Blackford Hill	NT2570	1979	McKean, D.R.
Lower Granton Road	NT2477	1981	Hobson, E.
Newington	NT2672	1981	Stewart, O.M.
Craiglockhart Hill (W)	NT2270	1988	Elston, D.
Duddingston Golf Course (Loch & Bawsinch)	NT2872	1992	Muscott, Miss J.
Powderhouse Corner	NT272726	19/06/1998	Maxwell, S.A. & McKean, D.R.
Arthur's Seat Volcano SSSI, Holyrood Park, above Salisbury Crags	NT271728§	28/06/2005	McIntosh, J.W.
Wester Craiglockhart Hill	NT229701	2007	McKean, D.R.
Powderhouse Corner	NT271727§	14/06/2013	Sumner, B.E.H.
Holyrood Park	NT267732§	25/07/2014	Scotland, Historic
Duddingston Loch	NT280725§	14/08/2014	Scotland, Historic
Dunsapie Cliff	NT281731§	04/06/2015	McIntosh, J.W. & Cole, E.
Salisbury Crags	NT270729	05/06/2016	Maguire, W.
Blackford Hill	NT254706§	13/06/2016	Maguire, W.
Holyrood Park, Haggis Knowe	NT274736§	26/05/2017	Harmsworth, N.A.
Holyrood Park	NT274737	14/05/2019	Scotland, Historic
Cramond Foreshore Plot 2	NT190771	18/06/2019	Alexander, L.

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 1987 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 labriuscula 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 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
Musselburgh, E of R. Esk	NT37	20/07/1957	Jack, J.R.
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.
Granton, E of	NT242771	07/01/1998	McKean, D.R.
Fisherrow Beach, east of harbour	NT335729	20/09/2015	Sumner, B.E.H.
Cramond Foresore	NT1977	24/09/2015	Sumner, B.E.H.
Musselburgh River Esk, east bank	NT346733	18/06/2017	Jeffree, C.E. & Jeffree, J.
Musselburgh shoreline	NT345733	19/06/2017	Jeffree, C.E. & Jeffree, J.

Atriplex laciniata L.

Frosted Orache

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

Nationally this native annual grows on most coasts of Britain, low down on sandy

beaches, often along the strandline. In Midlothian the most recent records are from the strandline at the eastern end 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. In 1962 and 1967 there were also records from Cramond and Cramond Island at the western end of the coastline (see below). The shore of the Firth of Forth is a SSSI.

Location	Grid Ref	Date	Recorder
Musselburgh, E of R. Esk	NT37	20/07/1957	Jack, J.R.
Musselburgh	NT37	28/07/1957	Jack, J.R.
Cramond	NT1977	05/08/1962	Tait, W.
Cramond Island	NT1978	1967	Beattie, E.P.
Fisherrow	NT3473	1982	Jackson, E.H.
Fisherrow Links & Goose Green, Musselburgh	NT3473	12/09/1987	Jackson, E.H.
Fisherrow Harbour	NT3373	1994	Learmonth, R.
Musselburgh River Esk, east bank	NT346735	18/06/2017	Jeffree, C.E. & Jeffree, J.
Musselburgh River Esk, west bank	NT345730	19/06/2017	Jeffree, C.E. & Jeffree, J.
Musselburgh shoreline	NT345733	19/06/2017	Jeffree, C.E., Jeffree, J.
Fisherrow Harbour	NT3373	16/07/2018	Jackson, E.H.
Fisherrow Harbour (east of)	NT335730	30/10/2018	Sumner, B.E.H., Moir, M. & Jury, S.

***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 inland along salted roadsides, not persisting. In Midlothian it is just scarce and has been solely a coastal species until 2015 and 2016 when it was found at three inland sites. The shore of the Firth of Forth is a SSSI. In 1824 the species was found at the eastern end of Caroline Park (near Granton).

Location	Grid Ref	Date	Recorder
Musselburgh	NT27	1955	Beattie, E.P.
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.
Birnie Rocks (shore opposite)	NT2177	1982	McNab, W.R.
Fisherrow	NT3473	1982	Jackson, E.H.
Cramond Island	NT1978	1985	McKean, D.R.
Granton	NT236776	08/06/1989	McKean, D.R.
Fisherrow Harbour	NT3373	1994	Learmonth, R.
Seafield	NT2876	1996	Dixon, C.
River Esk estuary, Musselburgh	NT3473	15/09/2015	Bowden, S.
Levenhall Links	NT3573	15/09/2015	Bowden, S.
Granton, beach west of	NT228774§	20/09/2015	Sumner, B.E.H.
Granton Harbour (East)	NT240770	20/09/2015	Sumner, B.E.H.

Cramond Foreshore	NT1977	24/09/2015	Sumner, B.E.H.
Baird Road, Ratho	NT139707§	06/10/2015	Merrick, D.
Fullarton Water / Peeswit Moss	NT2855	23/07/2016	McKean, D.R. & Maxwell, S.A.
Gladhouse, NE of Reservoir	NT3164	18/08/2016	Maxwell, S.A.
Leith Docks (square 1)	NT2876	28/05/2017-16/06/2017	Maxwell, S.A.
Fisherrow Harbour (beach below east wall)	NT335729§	16/07/2018	Jackson, E.H.
Fisherrow Harbour	NT3373	18/07/2018	Jackson, E.H.
Fisherrow Links & Goose Green, Musselburgh	NT3473	25/08/2018	Dundee Naturalists

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 relatively recent site for this species, in a loch and lochside SSSI, but there have been no records from this site since 1975 (see below). 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.

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), by still water at Bawsinch SWT Reserve, beside a pond and a burn at Dalmahoy, and by a river, but only two of these finds were within the 1987-2019 period, so it is rare. The species 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.
Bawsinch	NT281723	04/09/2016	Maxwell, S.A.
Water of Leith at Redbraes	NT257758§	09/08/2017	McLeman, A., Coy, T. & Foster, T.

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. Nowadays the species is included in some wildflower seed mixtures, which may confuse the natural distribution. From 1809 to 1934 the species was also recorded at Colinton and Auchendinny.

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.
Burdiehouse Burn Valley	NT2767	10/07/2014	Edmans, R.
Hermitage, Edinburgh	NT2470	26/06/2018	Grace, J.
Bauks View, Pleasance	NT264731	21/07/2019	Maxwell, S.A.

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), including Bawsinch SWT Reserve (on the southern shore). 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.
Bawsinch SWT Reserve	NT2872	21/08/1984	Muscott, J.
Duddingston Golf Course (Loch and Bawsinch)	NT2872	1992	Muscott, J.
Duddingston	NT279724	24/07/2003	Maxwell, S.A.

Bistorta vivipara (L.) Delarbre

Alpine Bistort

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

Nationally this native species (formerly *Persicaria vivipara*) is found in Scotland and northern England, in grassland and on mountain ledges. In Midlothian the species has been found in wet upland grassland, marshy ground and streamsides. Between Carlops and the North Esk Reservoir (North Esk Valley SSSI) the species has been found at several places in two adjacent kilometre squares.

Location	Grid Ref	Date	Recorder
Ninemileburn	NT15	1973	Beattie, E.P.
River North Esk, Carlops (above)	NT1556	1973	Long, D.G.
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

Blitum bonus-henricus (L.) Rchb.

Good-King-Henry

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

This perennial archaeophyte (formerly *Chenopodium bonus-henricus*) 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 1987 this species has been scarce, and the sites 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
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.
Craigmillar Castle	NT2870	31/10/1997	Watson, K.
Saughton Prison & Stenhouse	NT2171	11/08/1999	Maxwell, S.
Niddrie	NT37A	06/08/2004	McKean, D.R.
Craigmillar Castle	NT2870	2007	Chaney, P.
West Craigs	NT175736	08/10/2015	Lowell, H. & Lowell, J.
Wallyford	NT3671	03/07/2018	Dawson, K.T.
Turniedykes Farm	NT386632	15/07/2019	Gilchrist, A.B.
Astley Ainslie	NT2571	11/08/2019	Grace, J. Chamberlain, M. & Gathorne-Hardy, 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 most recent records have been from short, upland grassland, heaths and woodland, at sites shown in the table below. Searches since 2010 at Hermand Quarry and adjacent

fields have not re-found the species at that location. 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.
Hermand House	NT0263	1982	Stewart, N.F.
Hermand 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.
Middleton Lime Quarries (site 3)	NT343575	16/06/2002	Saville, R. & LWIC

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 parts of Scotland. It grows in dry, especially calcareous, grassland. In Midlothian the species is native, and 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.
Blackford Hill	NT258706	27/07/1995	Maxwell, S.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 relatively 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 the species is at the northern edge of its range. After 1870, when W.W. Evans found this grass in the woods at Penicuik, there were no further records for a long time and the species was considered extinct in Midlothian, but then, in 1998, the Penicuik site was re-discovered and a small colony was growing there, in a patch of swampy ground at the foot of a hillside behind a riverside coniferous plantation. The plantation has since been felled and re-planted with broad-leaved trees, leaving the swampy ground undisturbed. The species lives on.

Location	Grid Ref	Date	Recorder
Penicuik woods	NT25	1870	Evans, W.W.
Penicuik Estate	NT223593§	1998	Watson, K.
Penicuik Estate, south bank	NT223593§	24/07/2015	McHaffie, H.S., McKean, D.R. & Sumner, B.E.H.

Calamagrostis epigejos (L.) Roth

Wood Small-reed

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

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 was 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) looked well established and might have been there for some time. Since 2013 the species has been found at further sites in Edinburgh and at more remote sites in the Vice-county.

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.
Pate's Hill wind-farm	NS9958	08/08/2014	Hawker, D.
Newbridge brownfield site	NT1172	13/07/2016	McKean, D.R. & ENHS
Five Sisters Zoo, near West Calder	NT026645	25/07/2016	McKean, D.R., Maxwell, S.A.
Imperial Dock (near)	NT2777	28/05/2017	Harmsworth, N.A. & TWIC
Leith Docks	NT275773§	18/06/2017	Maxwell, S.A.
Edinburgh Park	NT178714§	01/08/2019	Merrick, D.
Pate's Hill Wind Farm	NS992582	05/08/2019	Harding, M.

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. Duddingston Loch is a SSSI and the other two loch sites (below) are within Arthur's Seat Volcano SSSI. The species was recorded at West Calder in 1863, in the Union Canal at Fountainbridge in 1877 and in 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.
Dunsapie Loch	NT280731	01/06/1997	Day, J.
Riccarton Estate – Barbecue West Pond	NT172690	31/07/2001	Alexander, L. & Eadie, L.
Wells o'Wearie	NT273724	16/08/2009	Scotland, Historic
Duddingston Loch	NT280724 & NT281725	06/09/2013	Stewart, N.F. & Baxter, E.
Threipmuir Reservoir (Balerno Common SSSI)	NT161633, NT161634 & NT163634	07/09/2013	Stewart, N.F. & Baxter, E.

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 most recent record of this species was in 1975, which, although falling short of the 1987 threshold, is relatively recent and not so long ago that it should be considered extinct. In 1975 the species was found at Duddingston Loch SSSI, where it had long been established. In the table below, King's Park is the

present-day Holyrood Park (now Arthur's Seat Volcano 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 a single km 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.
Musselburgh	NT37	1958	Beattie, E.P.
Musselburgh	NT3573	22/08/1988	McKean, D.R.
Cramond Island	NT1978	1994	McKean, D.R.
Fisherrow Harbour	NT3373	1994	Learmonth, R.
Fisherrow Links	NT3473	01/06/2011	Sumner, B.E.H.
Fisherrow	NT3473	07/08/2013	Sumner, B.E.H.
Fisherrow Links	NT341732	19/06/2017	Jeffree, C.E. & Jeffree, J.

Carex x boenninghausiana 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 relatively 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.
Longmuir Moss	NT471507 & NT472509	15/06/2013	Braithwaite, M.E.
Black Springs	NT190644§	21/08/2019	Averis, B. & Averis, A.

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 relatively recent 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.
Newbattle	NT329663	1977	David, R.W.

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 relatively recent 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 (S of)	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, NT284642 & NT284644	1997	Dixon, C.
Bilston Burn	NT26	1998	Watson, K.
Penicuik Estate, Hurley Pond	NT2158	1998	Watson, K.
Roslin Glen	NT276630§	23/04/2016	Muscott, J. & ENHS

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 Volcano SSSI and on other hills in Edinburgh, but is said to have been formerly more widespread (Smith *et al.*, 2002). Agassiz Rock is a SSSI (for geology and geomorphology).

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§	01/01/1994	Maxwell, S.A.
Arthur's Seat	NT270728§	1995	Maxwell, S.A.
Braid Hills, Howdean Field, N of	NT257703	1995	Maxwell, S.A.
Blackford Hill Observatory	NT2570	1997	McKean, D.R.
Salisbury Crags, Holyrood Park	NT267731	22/07/2002	Muscott, J.
Agassiz Rock	NT259702§	03/06/2016	Maguire, W.
Blackford Quarries to wooden bridge	NT2570	16/10/2016	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 ten sites since 1987, 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 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§, NT116724§	22/08/2013	McKean, D.R.
Loch Burn area, S of Cockmuir	NT266542	30/06/2015	Sumner, B.E.H.

Fala Moor (marsh south of)	NT430572§	06/08/2016	Sumner, B.E.H.
Mavisbank	NT293655§	08/06/2019	Dixon, C.

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 1831 this sedge was recorded from the R. North Esk at Lasswade, and from Duddingston Loch. In 1934 there were records from Arniston and Duddingston. Duddingston Loch (which is now a SSSI) remains a site to this day. Bawsinch, on the southern shore of the Loch, is a nature reserve (SWT). Inveresk Lodge Garden is in the care of the National Trust for Scotland.

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.
Inveresk (INV)	NT348718	25-26/05/2013	Macpherson, S.
Figgate Burn Park	NT2973	03/06/2014	Clarkson, M.
Easter Craiglockhart	NT2370	06/06/2014	White, K.
Carberry Estate	NT362693	20/06/2014	Sumner, B.E.H.
Ingliston	NT148724§	06/05/2016	Merrick, D.
Granton National Collections Facility	NT229770§	06/07/2016	BSS urban flora group
Duddingston Loch (north shore)	NT2872	17/09/2019	Muscott, J.

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, Craighentenny and Duddingston Loch, until 1957. Then there was a gap but, since the year 2000, other sites have yielded records (see table below). Duddingston Loch is a SSSI.

Location	Grid Ref	Date	Recorder
Craighentenny	NT27	1934	Martin, I.H.
Duddingston	NT27	1934	Martin, I.H.
Duddingston Loch	NT2872	1957	McNab, W.R.
Torphin Golf Course – Upper Pond	NT204678	25/09/2001	Alexander, L. & Eadie, L.
Torphin Golf Course – Lower Pond	NT208679	25/09/2001	Alexander, L. & Eadie, L.
Torphin Golf Course pond	NT203678	29/06/2016	McKean, D.R. & ENHS

Lin's Mill Aqueduct	NT105705§	21/07/2018	Merrick, D.
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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 scattered recent sites include disused quarries, rocks, walls, turf and bare ground. Salisbury Crags is in the Arthur's Seat Volcano SSSI. Blackford Hill was a site for this species at the beginning of the 20th century, as Blackford Glen is today. Early 20th century finds were also made at 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.
Blackford Glen	NT2570	30/06/1999	Clarkson, M.
Blackford Glen	NT2570	29/06/2001	Muscott, J.
Middleton Lime Quarries (site 1)	NTNT354576	16/06/2002	Maxwell, S.A. & LWIC
Esperston, north-east of	NT341575	08/07/2012	Maxwell, S.A., McKean, D.R. & Sumner, B.E.H.
East Claremont Street, Edinburgh	NT258753	04/09/2015	Edwards, A.S.
Salisbury Crags/Radical Road	NT269730§	05/06/2016	Maguire, W.
Dalry to Blinkbonny (disused railway)	NT2372	31/07/2016	McKean, D.R. & TWIC
Imperial Dock (near)	NT2777	28/05/2017	Harmsworth, N.A. & TWIC
Newbattle	NT3366	03/06/2018	Muscott, J., Clarkson, M. & Murray, J.

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 1987 have not been scarce, but may be more the result of garden escapes and wildflower plantings than natural 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, and some examples of recent records are shown below, omitting planted sites, where known. In 1768 the species grew all around Edinburgh.

Location	Grid Ref	Date	Recorder
Gogar Park	NT1772	26/06/1985	McKean, D.R.
North Middleton	NT3559	20/08/1985	Biagi, J.
Dalkeith, Sheriffhall	NT319679	23/08/1985	Biagi, J.
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.
Pathhead, Whitburgh Mains farm	NT400630	23/05/2006	Gaskell, L. & Velander, K.
Water of Leith, Powderhall	NT25397548	28/08/2011	Sumner, B.E.H.
Disused Railway – Glimerton Road to Todhills	NT3068	26/08/2019	Averis, B.

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 more frequent 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	07/1996	McKean, D.R.

Fisherrow (Promenade)	NT3373	13/02/2008	Jackson, E.H.
Holyrood Park	NT269729	16/08/2009	Scotland, Historic
R. Almond, mouth to Cammo Road	NT188767	16/07/2013	McKean, D.R.
Edinburgh, Comely Bank Avenue	NT240746§	06/05/2016	Merrick, D.

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 is a SSSI and Dunsapie Loch is within Arthur's Seat Volcano SSSI. 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. Recently, 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 House Pond	NT173746	02/07/2001	Alexander, L. & Eadie, L.
Torphin Quarry – Top Pond	NT201677	12/09/2001	Alexander, L. & Eadie, L.
Torphin Golf Course – Upper Pond	NT204678	25/09/2001	Alexander, L. & Eadie, L.
Cammo Pond, Cramond	NT1774	2005	SWT Survey
Duddingston Loch	NT282725§	06/02/2016	Maguire, W.

Chelidonium majus L.

Greater Celandine

*National Status: Not Scarce; IUCN: LC; SBL: >25% decline.**Midlothian Status: Almost 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. Owing to the SBL designation *Chelidonium majus* is retained in the second edition of this *Register*, but since the first edition more sites have been discovered and the species is now just over the limit for scarcity in Midlothian. The post-1987 sites have been scattered in or not far from Edinburgh and, where recorded, the habitats have been waste ground, railway embankments, waysides, a riverside, a pondside, a pavement and gardens. There's a chance that in gardens there might have been some planting. Historically, 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. Of these historic sites, only the Water of Leith remains. More recent records are shown below, excluding planted sites, where known. Duddingston Loch is a SSSI and Bawsinch is an SWT Reserve.

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.
Royal Botanic Garden Edinburgh, Inverleith	NT244754§	22/06/2013	Mill, R.
Portobello, E	NT3173	27/08/2015	Lowell, J.
Five Sisters Zoo, near West Calder	NT025645	25/07/2016	McKean, D.R. & Maxwell, S.A.
Water of Leith cycleway	NT262762§	26/04/2017	Taylor, S.
Musselburgh, 9 North High Street	NT341726	06/05/2019	Jackson, E.H.
Wester Melville	NT2966	02/06/2019	Moir, M.

Chenopodiastrum murale (L.) S. Fuentes, Uotila & Borsch
Nettle-leaved Goosefoot

National Status: Not Scarce; IUCN: VU.

Midlothian Status: Rare.

Nationally this annual archaeophyte (formerly *Chenopodium murale*) is a scattered casual in most of Britain, found in cultivated and waste ground, often coastal. In Midlothian the species is a rare casual, included in this Register because of its conservation status. Habitats have been inland or at the coast, in waste ground or in gardens, but there has been only one recent record.

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 ficifolium Sm.

Fig-leaved Goosefoot

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Rare.

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 recorded in 2018 (see below) and determined by D.R. McKean. This is the first record since 1907, when it was found in Edinburgh.

Location	Grid Ref	Date	Recorder
Water of Leith, east of South Fore Street	NT2676	31/07/2018	Harmsworth, N.A.
Water of Leith, east of South Fore Street	NT2676	01/08/2018	Muir, I. & TWIC

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 1987, 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: Not Scarce.*

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 an increase of records since the first edition of the *Register* the species has gone from rare to not scarce in the Vice-county. Habitats have included field edges, waste ground and tips, allotments and gardens. Owing to the possibility of plantings, records from Midmar Allotments and Johnston Terrace SWT Reserve have been excluded from the table below. During the 1960s the plant was seen at Lauriston Castle and Cramond Bridge being grown in fields for pigs. Historically, in 1824 the species was reported 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.
Musselburgh Lagoons	NT3573	22/08/1988	McKean, D.R.
Brick Works (west of Roslin)	NT2663	1991	Longstaff, M.
Water of Leith, Balerno to Slateford	NT202687	2002 to 2003	Bennett, F.
Braid Hills Road	NT254699§	04/07/2014	Chaney, P.
Blackford Glen	NT268702§	25/07/2015	Maguire, W.
Crichton, south-east of	NT392610§	28/08/2015	Sumner, B.E.H.
Baird Road, Ratho	NT137713§	17/07/2016	Merrick, D.
Braid Hills Road	NT254699§	30/07/2016	Chaney, P.
Broomhills, west of	NT2667	19/09/2017	Muscott, J.
Water of Leith, Edinburgh	NT2576	01/08/2018	BSS/SWT
Water of Leith, E of South Fore St.	NT2676	01/08/2018	Muir, I. & TWIC
Drum Wood	NT3069	20/08/2019	Averis, B.
Disused Railway – Gilmerton Road to Todhills	NT3068	26/08/2019	Averis, B.

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 one site since 1987, 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.
Caitha Hill	NT482409§	21/05/2017	Parratt, M.

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 few records, from marshy and wooded ground and a verge.

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.
Roadside Verge, A703, Leadburn	NT235554	21/06/2005	Tattersall, B.

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.
Whitecraig, E of	NT3670	06/1999	Dixon, C.
Fala Moor (marsh south of)	NT430572§	02/07/2015	Sumner, B.E.H.
Torphin Quarry	NT200676	25/07/2015	Cole, E., Jeffree, C.E. & Wilson, J.
Fala Moor (marsh south of)	NT429571§,	03/07/2016	Sumner, B.E.H.

	NT430571§, NT430572§ & NT431572§		
Edinburgh Park Station (waste ground)	NT184713	07/07/2019	Adamson, D. & Adamson, S.

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 three recent sites and one historic. In Craigmillar Castle Park sightings (with no details) have continued since 2011. The recent habitats were rough parkland, scrub and waste ground.

Location	Grid Ref	Date	Recorder
Gorebridge	NT36	1886	Anon.
Marchbank, near	NT1664	20/07/1999	Muscott, J. & Tebble, M.O.
Craigmillar Castle Park	NT283706	06/2011	Milne, R.I.
Edinburgh Park Station (waste ground)	NT184713	07/07/2019	Adamson, D. & Adamson, S.

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 five records since 1987, in waste ground, a car park, agricultural set-aside, a croft and a chink in a pavement. In 1764 the species was recorded at Stockbridge and through the 19th century there were many sites both within and outside Edinburgh.

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.
Stow, Stagehall Farm	NT448440	25/08/2000	Gaskell, L. & Velandar, K.
Leith Community Croft	NT273761§	17/05/2016	Gardner, J.
Links Place, Leith	NT275760	12/04/2018	Gardner, J.

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 Volcano SSSI. The Pentland Hills, the Braid Hills and the banks of Lochend were further historic locations, but wild plants have disappeared from these sites. 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 (records not shown below). The aim of the scheme is to augment the existing wild population there and encourage this scarce species. Plantings have also been made at the Braid Hills, by the Friends of the Braid Hills, to restore the species to this historic location. Occasionally the plant appears in planted wildflower areas (not shown below). Of the sites in the table below, Wester Craiglockhart Hill is a SSSI and Bawsinch is a nature reserve (SWT) on the southern shore of Duddingston Loch SSSI. On Craigmillar Park Golf Course a wild plant appeared in the rough by the 4th tee.

Location	Grid Ref	Date	Recorder
Blackford Hill	NT27	27/07/1936	Collins, B.M.
Arthur's Seat	NT2772	01/08/1956	Beattie, E.P.
Holyrood Park	NT281727	08/1981	Muscott, J.
Arthur's Seat	NT2772	07/1988	McKean, D.R.
Holyrood Park	NT2772	07/1998	McKean, D.R.
Haltree	NT4152	1990-1992	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.
Rosebank, West Calder (south of)	NT034658	1994	Muscott, J.
Craigmillar Park Golf Course	NT2670	01/11/1994	Clarkson, M.
Wester Craiglockhart Hill	NT226700§	1997	McLaughlin, J.
Craigmillar Park Golf Course	NT2670	1999	Clarkson, M.
Bawsinch	NT2872	1999	Muscott, J.
Duddingston Loch	NT279725§	19/06/2017	Checkley, G.
Holyrood Park	NT270740§	13/10/2019	Boddy, J.

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.
Toxside	NTNT275533	06/05/2017	Adamson, D. & ENHS
Broad Law, side of	NT344540§	21/05/2017	Parratt, M.

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, in a peaty moss south of Penicuik, just to the west of the area protected as a SSSI. Commercial peat-cutting is currently taking place in the area west of the SSSI, so the status of *Drosera anglica* is now uncertain.

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

Drymochloa sylvatica (Pollich) Holub

Wood Fescue

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

Nationally this native perennial grass (formerly *Festuca altissima*) is scattered in northern and western Britain, in damp wooded ravines and slopes. In Midlothian the post-1987 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	NT277630	12/07/1997	Curtis, I.

Dryopteris affinis* subsp. *cambrensis Fraser-Jenk.

Narrow Male-fern

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

This native fern (formerly *Dryopteris cambrensis*) occurs through much of Britain, but is absent from much of southern and eastern England. In Midlothian the species is scarce. The records below were from a ravine in the Pentland Hills, and from woodland, an exposed hillside, and between stones in an upland pasture field.

Roslin Glen is a SSSI and the head of the Medwin Water is within the Craigengar 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.
Dalmahoy, Kaimes Ridge (N slope)	NT129665§	08/06/2016	Merrick, D.
Edgelaw Reservoir, S of	NT294571§	07/07/2016	Sumner, B.E.H.
Dalmahoy, Kaimes Ridge (N slope)	NT129665§	12/10/2019	Merrick, D.

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 is a SSSI and an SWT reserve. Red Moss is within the Balerno Common SSSI and is also an SWT reserve.

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	01/01/1990	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, on scree, in gullies, and in a disused quarry.

Location	Grid Ref	Date	Recorder
Caitha Hill, Gala Water	NT461408	20/11/1976	Corner, R.W.M. & 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	06/1986	Little, M.
Hirendean Castle (south-east of)	NT301509	06/1993	Dixon, C.
Emly Bank, Moorfoots	NT2947	06/1993	Dixon, C.
North of Marfield (disused quarry)	NT188571	27/08/2014	Sumner, B.E.H.
Caitha Hill	NT458408 & NT461408	21/05/2017	Parratt, M.
Lugate Water (Ewes Castle area)	NT437447	12/07/2018	Sumner, B.E.H.

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. The Gutterford Burn, Fairliehope and Patie's Hill are within the North Esk Valley SSSI. Much of the Moorfoot Hills is a SSSI and SAC, but not east of Mount Main and not at NT297505.

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.
Patie's Hill	NT158572	14/06/1995	Dixon, C.
Gutterford Burn	NT159594	04/07/1995	Dixon, C.
North Esk Reservoir, south of	NT155577	22/06/2003	Maxwell, S.A. & LWIC
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.
Fullarton Water/Peeswit Moss	NT2855	23/07/2016	McKean, D.R. & Maxwell, S.A.
Fullarton Water, south of B6372	NT2855	03/08/2019	TWIC group

Elymus junceiformis (Å. & D. Löve) Hand & Buttler Sand Couch

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

Formerly known as *Elytrigia juncea*, with a native subspecies, *boreoatlantica*, this native maritime perennial is common on sandy coasts around Britain. In Midlothian this plant has also been found at sandy coastal sites, but is scarce. In 1911 the

species was recorded at Granton (see below), but there are no recent records from this site. However, pre-1934 records also came from Fisherrow, where it is still found today. The shore of the Firth of Forth is a SSSI.

Location	Grid Ref	Date	Recorder
Granton old quarry-harbour, Caroline Park	NT2277	26/07/1911	Fraser, J.
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.
Edinburgh Dock (E of)	NT2876	28/05/2017	Harmsworth, N.A. & TWIC
Leith Docks (square 1)	NT2876	28/05/2017	Maxwell, S.A.
Musselburgh shoreline	NT345733	19/06/2017	Jeffree, C.E. & Jeffree, J.

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.
South of Toxsidehill, (Gladhouse)	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 twice, first at a roadside north of Fountainhall. Then, after twenty-nine years, a second find was recorded, of one plant near Dalhousie Castle.

Location	Grid Ref	Date	Recorder
Haltree, north of Fountainhall	NT4152	17/08/1990	Learmonth, R.
Dalhousie Castle, near	NT323639	23/07/2019	Milne, R.I.

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, in a wooded area behind the Kirkhill Hotel, west of Gorebridge. (The Hotel has been renamed Kirkhill Mansion but is still on the O.S. 1:25,000 map as Kirkhill Hotel.) Recent searches have not re-found plants at this site, but it is too soon to consider it extinct. Taxonomically speaking, *Epipactis dunensis* is the outcome of a journey from *Epipactis muelleri* (which was listed as rare on the SBL). *Epipactis muelleri* was revised to *E. leptochila*, and the latter was the species determined by A.J. Richards for the Kirkhill plant. At the same time, or not long 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	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 margin of Harperrig Reservoir.

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 post-1987 sites have continued the association of this species with Roslin, where it is found among vegetation at various points along the banks of the River North Esk, especially within the Roslin Glen SSSI. In addition, this rare horsetail has been found in an upland flush above Carlops. 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.
Roslin Glen	NT275297§	23/04/2016	Muscott, J.

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. Hunter's Bog and Arthur's Seat are within the Arthur's Seat Volcano SSSI. The Gutterford Burn and North Esk Reservoir are within the North Esk Valley SSSI.

Location	Grid Ref	Date	Recorder
North Esk Reservoir, SE corner	NT156579	01/10/1983	Page, C.N. & McHaffie, H.S.
Gutterford Burn	NT156584	06/10/1983	McHaffie, H.S.
Cockpen Farm	NT3263	1983	Stewart, O.M.
Vogie Country Park	NT379633	1994	Dixon, C.
Hunter's 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, Edinburgh	NT244667	1998	Dixon, C.
Arthur's Seat	NT274732	17/06/1998	Maxwell, S.
Bush Estate	NT247637	17/06/2013	Sumner, B.E.H.
Murieston Water, (Livingstone South to Manse Covert)	NT0665	15/08/2016	McKean, D.R. & Maxwell, S.A.

R. Almond, Maitland Bridge	NT1273	21/07/2018	McKean, D.R.
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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 on the Penicuik Estate.

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 1980 the species has been recorded along the shady banks of the River North Esk near Penicuik, in a steep field and wood behind Gore Glen (near Shank) 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§	11/11/2013	McHaffie, H.S., McKean, D.R. & Sumner, B.E.H.
Shank, near	NT335612	29/06/2014	Maxwell, S.A.
Hirendean Burn	NT301508§	16/07/2015	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 in an upland marsh east of Mount Main, and on a roadside verge near a stream at Hillend Country Park.

Location	Grid Ref	Date	Recorder
Mount Main, east of	NT396484	1994	Dixon, C.
Hillend Country Park	NT244667§	26/06/2019	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. In a calcareous flush at the Fullarton Water there was also a large patch of plants. 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.
Fullarton Water, above	NT282559	23/07/2016	McKean, D.R. & Maxwell, S.A.
Fullarton Water, south of B6372	NT283559§	03/08/2019	TWIC group

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 species is just scarce, and post-1987 records have been from open habitats, pavements and walls, mostly in and around Edinburgh. Historically various rocky and hilly sites in and around the city 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.
Edinburgh, Craigmillar Hill	NT2274	31/03/1999	Pilling, E.
Edinburgh, St. Leonards car park	NT266727	18/04/1999	Maxwell, S.A.
Braid Hills Golf Course	NT2569	24/04/1999	Maxwell, S.A.
Musselburgh	NT333729	26/04/1999	Maxwell, S.A.
Belgrave Crescent	NT2474	10/05/2001	McKean, D.R.
Craigmillar Road	NT2274	04/04/2004	Pilling, E.A.
Craigentinny	NT2974	06/2015	Maxwell, S.A.
Old Dalkeith Road, Edinburgh	NT279710§	28/03/2016	Maguire, W.
Balcarres Street	NT238708§	04/04/2016	Dawson, K.T.

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-1987 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. Leonard's (near)	NT2672	19/04/1999	Maxwell, S.A.

Ervilia sylvatica (L.) Schur

Wood Vetch

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

This native perennial (formerly *Vicia sylvatica*) 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 Volcano SSSI). In 1792 the plant was recorded at Braid Hills (see below), in 1809 at both Salisbury Crags and Colinton Woods, and in 1934 at Roslin.

Location	Grid Ref	Date	Recorder
Edinburgh, Braid Hills	NT26	1792	Brown, R.
Niven's Knowe	NT2665	01/08/1999	Dixon, C.
Salisbury Crags, Holyrood Park	NT267732	2000	McKean, D.R.
Holyrood Park	NT266731	19/06/2016	Maguire, W.

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 is said to be more local and coastal in Scotland. In Midlothian the recent records have all been from inland sites with damp and rough ground. At Crichton Glen (SSSI) there is a clump of *Eupatorium cannabinum* at the foot of the bank below the castle, and in 2019 there was also a swathe in the marsh. In about 1980 the species was planted at Bawsinch SWT reserve, so these records have been omitted from the table below. A record of the species from the wildlife pond at allotments in the Blackford area has also been omitted, because it was probably planted. From 1824

to 1934 the species was recorded at Lasswade and Roslin.

Location	Grid Ref	Date	Recorder
Crichton Castle	NT379613	20/09/1992	McKean, D.R.
Saughton Prison & Stenhouse	NT2171	11/08/1999	Maxwell, S.A.
Preston Hall	NT3965	02/06/2006	McKean, D.R. & Maxwell, S.A.
Crichton Glen	NT379612	16/05/2010	McKean, D.R. & Sumner, B.E.H.
Edinburgh Zoo – Tapir Enclosure	NT207732	04/08/2015	Gaskell, L., MacKinnon, J. & Velander, K.
RBS Grounds	NT1672	04/08/2016	Lowell, J.
Colinton, Edinburgh	NT215690	21/08/2018	Waddell, J.
Gogar Burn – Union Canal to Fairview	NT1770	02/08/2019	Averis, B. & Averis, A.
Crichton Glen	NT378615	03/09/2019	Gilchrist, A.B.

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 1987 there have been records of this species from over 70 sites in town and country and 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 (Torpin 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.
Straiton	NT277685	30/05/2015	Maguire, W.
Newlandrig, N of	NT3663	18/07/2015	Harmsworth, N.A.
Gillygub Dean, near	NT2956	07/07/2016	Sumner, B.E.H.
Musselburgh, Beach Lane	NT339729	16/08/2017	Jackson, E.H.
Elphinstone, SW of (VC 83)	NT381698§	06/08/2019	Moir, M.
Tynehead area	NT390597§	23/08/2019	Sumner, B.E.H.
Hailes Quarry Park	NT2070	.28/09/2019	Muscott, J., Clarkson, M. & Krivtsov, V. & 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 the species 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 early in the 21st century. The plant has remained there ever since and has now been formally recorded. Two further sites have now been discovered. The 1934 record was from Prestonhall.

Location	Grid Ref	Date	Recorder
Saughton Mains Allotments	NT216712§	18/12/2012	Dawson, K.T.
Edinburgh tramline old path beside allotments	NT207718	21/07/2019	Jeffree, C. & Jeffree, J.
Saughton Park	NT222719	18/08/2019	Griffin, B.D.

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 subsp. *borealis* has been the only subspecies recorded, but was not named in the two records from Shoestanes (below). Recent records 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.
Shoestanes Burn	NT377538§	31/08/2017	Harding, M.

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 or near the Pentland Hills.

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.
Scald Law	NT190615§	07/07/2019	Moir, M.

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. This species may appear similar to *E. micrantha* but it often flowers earlier, and DNA analysis suggests that they are different species (Metherell & Rumsey, 2018). In Midlothian *Euphrasia scottica* has been recorded twice in the Moorfoot Hills, once in a wet flush within the SSSI and SAC, and later at a site north of the SSSI.

Location	Grid Ref	Date	Recorder
Trouslly, Moorfoot Hills	NT385457	14/08/1988	McKean, D.R.
Heriot Cleugh	NT373540§	31/07/2017	Harding, M.

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 1987 there have been records of this species from over 50 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.
Edinburgh, Warriston	NT2575	10/09/1997	McKean, D.R.
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
Dykeneuk, west of A701	NT231580§	30/09/2015	Gaskell, L.
Haltree Rings	NT4051	28/05/2017	Moir, M.
Cathpair north & Tartan Hill	NT466472§	11/08/2018	Jury, S.
Hailes Quarry Park	NT2070	28/09/2019	Muscott, J., Clarkson, M. & Krivtsov, V. & T.

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 is scarce, and grows in hill grassland and heath, except for the record from near Imperial Dock. Before 1990, the previous record from Arthur's Seat was before 1824. All the sites below are within SSSIs except Threipmuir Reservoir, Emly Bank, Kitchen Moss and Imperial Dock.

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.
Imperial Dock (near)	NT2777	28/05/2017	Harmsworth, N.A. & TWIC

Filago germanica L.

Common Cudweed

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

This annual native species (formerly *Filago vulgaris*) is similar to *Logfia minima* in its national distribution. In Scotland the plant has shown significant decline, recognised by the SBL. In Midlothian since 1987 the species has been recorded at three sites, where the habitats were waste ground next to a caravan site, a wooded streamside and a pathside. At the grid reference given, the Bilston Glen record would be just outside the Bilston Burn SSSI. *Filago germanica* 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.
Bilston Glen	NT280645	12/07/2017	Adamson, D. & ENHS

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 1987

this species has been recorded only from Arthur's Seat, but not long before that it was found also in the Moorfoot Hills (both these areas are SSSIs). Visits to the sites in the Moorfoot Hills since 2000 have not re-found the plant there, but it still grows on Arthur's Seat. In 1934 the species 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, NT275725, NT279727	1995	Maxwell, S.A.
Arthur's Seat	NT273726	18/06/2017	Soden, D.W. & Sumner, B.E.H.

Foeniculum vulgare Mill.

Fennel

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

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 there have been five recent records (see below), but before that there had been no records since pre-1934, when it was reported from Roslin, Comiston and Craigmillar.

Location	Grid Ref	Date	Recorder
Portobello Beach	NT312737	23/08/2015	Cole, E. & Wayland, L.
Braidburn	NT236694	03/09/2015	Cole, E.
Portobello E	NT318734§	30/05/2016	Lowell, J.
Greendykes (site of demolished housing)	NT295710	12/08/2016	Chaney, P.
Queensferry Road (passing Belford Road)	NT243738§	07/09/2018	Merrick, D.

Fumaria bastardi Boreau

Tall Ramping-fumitory

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Rare.

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)	NT022628	01/08/2003	McHaffie, H.S.
Edinburgh Airport	NT150732	19/06/2006	McHaffie, H.S.
Ratho, Craigpark estate	NT131706§	07/06/2017	Merrick, D.

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 scattered through the Vice-county (see table below). The record from Stagehall Farm in 2000 was from agricultural set-aside. At Ratho in 2017 many plants were found at field edges. Historically, there were records from Redhall, from near Craigmillar Castle and from fields near the new Botanic Garden in 1824. 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. Of the historic sites Ratho is the only site that features today.

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.
Ratho	NT130703§	07/06/2017	Merrick, D.
Seafield	NT293753	07/05/2019	Boddy, J.
Meadows Yard nature reserve	NT292753	13/05/2019	Boddy, J.

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 was one of those 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 1987, on a heap of earth at Edinburgh Castle, where works were in progress. Heap and plant have now disappeared, but it is 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: Not 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 has been recorded recently in about fifteen sites and can no longer be deemed scarce, but is retained in this *Register* because of its conservation status. Habitats, where recorded, have been similar to national habitats. The species was recorded at Cramond in 1913 (below) and in 1934. Otherwise, the sites have been scattered, as shown below.

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.
Ravelrig Quarry, Balerno	NT140669	27/06/2003	Hawker, D.
West Calder (south side of B7008)	NT023628	01/08/2003	McHaffie, H.
Edinburgh	NT258755	21/08/2004	French, R.G. & Squirrel, J.
Queensferry Road/Braehead	NT181753	17/05/2006	McHaffie, H.S. & McKean, D.R.
Whitburgh Mains	NT406632	23/05/2006	Gaskell, L.
Stow, Bow Farm	NT454424	15/09/2009	Gaskell, L. & Velander, K.
Grange Cemetery	NT2571	02/08/2011	Muscott, J.
Holyrood Park	NT268736§	12/06/2014	McIntosh, J.W.
Road to Rosslynlee	NT272625§	14/04/2015	Sumner, B.E.H.
Newhailes	NT326727§	27/06/2015	McHaffie, H.
Cammo Road	NT161743§	24/07/2015	Browning, I.A.
Queensferry Road, Edinburgh	NT181751	15/08/2015	Muscott, J.
Ratho	NT131706§	03/06/2018	Merrick, D.
Grange Cemetery	NT2571	20/09/2018	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. There have been repeated records from woodland beside the R. Esk at Cowpits, near Whitecraig. 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, one 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.
River Esk, Whitecraig Wood	NT345709§	09/04/2018	Moir, M.

Galeopsis angustifolia Ehrh. ex Hoffm.

Red Hemp-nettle

*National Status: Scarce; IUCN: CR; UK BAP, 2007.**Midlothian Status: Rare.*

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 (Roman Camp) near Dalkeith in 1824, at Newbattle in 1834 and 1865, Inveresk in 1837 and Leith in 1927. After that there was a long gap in records until the record shown below, which is almost recent. Birnie Rocks was the name given to monad NT2177 during fieldwork for the Lothians Flora (Plant Life of Edinburgh and the Lothians, 2002). However, Birnie Rocks are offshore and submerged at low tide, so the record below was more likely to be from the coastline opposite Birnie Rocks.

Location	Grid Ref	Date	Recorder
Birnie Rocks	NT2177	06/1982- 05/1983	McNab, W.R.

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 1987 records have been gleaned from over 50 sites but, although not scarce, 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. Some examples are shown in the table below.

Location	Grid Ref	Date	Recorder
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.
Dykeneuk, west of A701	NT231577§	30/09/2015	Gaskell, L.
Shoestanes	NT3954	28/08/2016	Maxwell, S.A.
Riccarton, Boundary Road North	NT168694§	30/08/2016	Merrick, D.
Haltree Rings	NT408517§	13/07/2017	Moir, M.
Carberry (NE of)	NT374701	09/07/2018	Dawson, K.T.
Cathpair north & Tartan Hill	NT466472§	11/08/2018	Jury, S.
Lothian Burn	NT273673	25/08/2019	Averis, B.

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.

Scald Law	NT190616§	07/07/2019	Moir, M.
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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 waste ground by a disused bing. 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.
Millerhill, waste ground near	NT323705§	15/09/2015	Sumner, B.E.H.
Monktonhall bing, near Millerhill	NT3170	06/08/2017	Maxwell, S.A.

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 Volcano 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 waste ground in 2009 and 2010. The species has been recorded repeatedly 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 reported from Salisbury Crags as well as Arthur's Seat. Both are within Holyrood Park, as is Queen's Drive (below).

Location	Grid Ref	Date	Recorder
Arthur's Seat	NT27	30/06/1955	Beattie, E.P.
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.
Cockmuir	NT2655	04/07/2007	Muscott, J. & ENHS
Millerhill, waste ground near	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.
Maurice Place	NT261709§	11/06/2012	Hicks, D.
Easter Craiglockhart Local Nature Reserve	NT231709§	22/07/2013	Dawson, K.T.
Blackford Hill	NT261701	31/08/2014	Cole, E.
Dalry to Blinkbonny (disused railway)	NT2274	31/07/2016	McKean, D.R. & TWIC
East Fettes Avenue, Edinburgh	NT239748§	15/12/2016	Crawley, M.
Queen's Drive, Edinburgh	NT276725§	29/10/2017	Groom, Q.J.
Holyrood Park	NT277726	30/04/2019	Checkley, G.

Glebionis segetum (L.) Fourr.

Corn Marigold

*National Status: Not Scarce; IUCN: VU.**Midlothian Status: Not 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 was one of those 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. With over 20 sites since 1987, it is not scarce. Recent records have been mostly from urban sites, waste ground and waysides, and from wildflower plantings in green spaces. Examples are shown below, but excluding sites with known wildflower plantings. 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 Kirkliston	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.
Figgate Burn, Portobello	NT303742§	25/07/2014	Sumner, B.E.H.
Newington Road, Edinburgh	NT264723§	13/12/2018	Crawley, M.
Edinburgh Holyrood Park various streets	NT2774	1/01/2019	Maxwell, S.
Tramtrack, Haymarket to Murrayfield, Edinburgh	NT2373	14/07/2019	Grace, J.
Disused railway – Gilmerton Road to Todhills	NT2968 & NT3068	26/08/2019	Averis, B.

Hailes Quarry Park	NT2070	28/09/2019	Muscott, J., Clarkson, M. & Krivtsov, V. & T.
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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, south-west	NT213583	05/1998	Watson, K.
Burdiehouse Burn	NT2767	08/1999	Maxwell, S.A.

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 relatively recent record, from a pine wood near Stow. Several searches since 2010 have failed to re-find this plant, so its current status is uncertain. 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: Rare.

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 Valley SSSI and SWT reserve. 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	NT318711§	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	NT341575§ & NT345576§	08/07/2012	Maxwell, S.A., McKean, D.R. & Sumner, B.E.H.
Halkerston Glen	NT344576	17/07/2016	Maxwell, S.A.

Helminthotheca echioides (L.) Holub.

Bristly Oxtongue

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

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, and then there were no more records until 2017, when plants were found at various sites around Leith Docks. In 1934 the species was reported at Leith, Murrayfield and Slateford.

Location	Grid Ref	Date	Recorder
Downie Grove	NT2273	1995	Adamson, D.
Marine Esplanade, Leith	NT2876	28/05/2017	Harmsworth, N.A. & TWIC
Leith Docks	NT 284762	28/05/2017	Maxwell, S.A. & TWIC/RBGE
Leith Docks (square 2)	NT275773§, NT274774§	28/05-16/06/2017	Maxwell, S.A.
Leith Docks	NT275773§, NT284762	18/06/2017	Maxwell, S.A.
Leith Docks (N side, square 4)	NT2677	18/06/2017	Maxwell, S.A.
Seafield	NT274774	18/06/2017	Maxwell, S.A.

Helosciadium nodiflorum (L.) W.D.J. Koch

Fool's-water-cress

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

Nationally this native species (formerly *Apium nodiflorum*) 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 recently and historically at Duddingston Loch (SSSI), Edinburgh. Bawsinch is an SWT Reserve on the southern shore of the loch, where the species was recorded in 1969. In 1934 this plant was not only recorded at Duddingston but also at the Braids. In the past, owing to grazing, the former *Apium nodiflorum* has been confused with the former *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. & Maxwell, S.A.
Duddingston Loch	NT281725	06/09/2013	Stewart, N.F. & Baxter, E.
Midlothian	NT2872	25/06/2016	Maxwell, S.A.

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 three 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.
Salisbury Craigs, Holyrood Park	NT27	1989	Saville, R.

Hieracium auratiflorum Pugsley

Dark-flowered Hawkweed

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

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), and the determiner, D.J. McCosh, thinks there is a possibility that the species might still be there.

Location	Grid Ref	Date	Recorder
Arthur's Seat	NT27	19/06/1934	Taylor, G.

Hieracium deganwyense Pugsley

Deganwy Hawkweed

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

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 five records verified by experts. The records are listed below. The site name of the historic record from Hanbury, F.J. included Blacklow Hill Quarries, but this looked like an error for Blackford Hill Quarries, so the record has been edited. The grid reference given for this record (NT2569) was the monad south of Blackford Hill, but Blackford Hill is in NT2570, so the grid reference has been edited. In the record from Muirhead, C.W., the grid reference given for Windy Gowl (NT2972) was too far east. Windy Gowl is in monad NT2772, so the grid reference has been edited. It is in Duddingston Loch SSSI near the Arthur's Seat Volcano SSSI. There have been no records since 1959, but the species might still be extant (D.J. McCosh).

Location	Grid Ref	Date	Recorder
Blackford Hill	NT27	06/1870	Craig-Christie, A.
Blackford Rocks & dry banks, Blackford Hill Quarries, Edinburgh	NT2570	07/1901	Hanbury, F.J.
Blackford Hill	NT27	06/1952	McClintock, D.
Windy Gowl, Duddingston	NT2772	24/06/1954	Muirhead, C.W.
Dalmahoy Hill	NT1466	07/1959	Henderson, D.M.

Hieracium dicella P.D. Sell & C. West

Forked Hawkweed

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

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 three sites, of which one, Salisbury Crags, is very long-standing. Arthur's Seat and Salisbury Crags are within the Arthur's Seat Volcano SSSI. 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. Further authenticated records are in the table below.

Location	Grid Ref	Date	Recorder
Salisbury Crags	NT27	1905	Marshall, E.S.
Arthur's Seat	NT27	27/05/1954	Muirhead, C.W.
Loganlea Reservoir, roadside rocks W end	NT1962	20/06/1954	Muirhead, C.W.
Salisbury Craigs, Holyrood Park	NT270736	1989	Saville, 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. The date of this record falls short of 1987, but the species might still be extant.

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

Hieracium oistophyllum Pugsley

Sagittate-leaved Hawkweed

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

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 (see below). Habbie's Howe is usually spelt with a terminal 'e'. The grid reference given (NT1962) is north-east of the Habbie's Howe – Logan Burn SSSI, which is in monad (km square) NT1861. The monad NT1962 includes The Howe and Loganlea Reservoir, downstream of the SSSI area. However, the site name given suggests that the SSSI area was intended. This is a rocky site (calciferous conglomerate). Although the species has not been found there recently it might still be extant (D.J. McCosh).

Location	Grid Ref	Date	Recorder
Currie	NT16	07/1837	Bell, T.B.
Habbie's How	NT1962	04/07/1954	Henderson, D.M.

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 cleughs in the hills, one of them near a waterfall (Habbie's Howe – Logan Burn SSSI). Rose Cleugh is in the Moorfoot Hills SSSI and SAC. The Auchendinny records were from woods in 1868 and a bridge verge in 1998.

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, South Esk Valley	NT295494	18/07/1998	McKean, D.R.
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. The date of this record is before 1987, but not so long ago that the species might be presumed extinct.

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. Both Arthur's Seat and the River North Esk above Carlops are SSSIs, but Loganlea Reservoir (NT1962) is not. However, the grid reference of NT1861 for the 1990 record suggests this find was upstream of the reservoir and in the same monad (km square) as the Habbie's Howe – Logan Burn SSSI.

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 near a waterfall above Loganlea (which suggests the Habbie's Howe – Logan Burn SSSI) and the other beside the River North Esk above Carlops (North Esk Valley SSSI). The date of the most recent record is not long before 1987, so the species may still be extant.

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 (Habbie's Howe – Logan Burn SSSI) upstream of Loganlea Reservoir.

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

Hieracium umbellatum L.

Umbellate Hawkweed

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

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. Then, after a long pause, there have been three records since 2000.

Location	Grid Ref	Date	Recorder
Holyrood Park	NT266733	16/08/2009	Scotland, Historic
Innocent Railway	NT275723	15/07/2015	Cole, E., Jeffree, C., Wilson, J.
Five Sisters Zoo, near West Calder	NT025645	25/07/2016	McKean, D.R., Maxwell, S.A.

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 1987, 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, 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.
Craigentinny	NT299747	30/06/2014	Checkley, G.
Granton Harbour (east)	NT240770	20/09/2015	Sumner, B.E.H.
Cramond Foreshore	NT1977	24/09/2015	Sumner, B.E.H.
Edinburgh Dock (E of)	NT2876	28/05/2017	Harmsworth, N.A. & TWIC
Leith Docks (square 1)	NT2876	28/05-16/06/2017	Maxwell, S.A.
Musselburgh shoreline	NT345733	19/06/2017	Jeffree, C. & J.
Fisherrow Links	NT341732	19/06/2017	Jeffree, C. & J.
Granton, coastal derelict site	NT240770§	27/04/2018	Chamberlain, D., Jeffree, C. & Wilson, J.

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 1987 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	Hearn, 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 & NT316517	1993	Dixon, C.
Moorfoot Hills	NT282505 & NT293491	1993	Dixon, C.
New Moss, Moorfoot Hills	NT303494	1993	Dixon, C.
Dundreich, Moorfoot Hills	NT2949	18/07/1998	McKean, D.R. & Maxwell, S.A.
Cairketton Hill	NT237663§	06/2018	Dixon, C.

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, Holyrood Park and Duddingston Loch are SSSIs. The species was found at several points around Threipmuir and Bonaly Reservoirs in 2019.

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 western shores)	NT1864	25/07/2009	Muscott, J. & ENHS
Murder Acre SWT reserve, Duddingston	NT276724	25/06/2016	Sumner, B.E.H.
Holyrood Park	NT2773	25/07/2017	MacKinnon, J.
Crichton Castle (bogs across Tyne Water from)	NT380607	29/07/2019	Gilchrist, A.B.
Bonaly Reservoir	NT208659	12/08/2019	Averis, B. & A.
Black Springs	NT190644	21/08/2019	Averis, B. & A.
Threipmuir Reservoir	NT170637	21/08/2019	Averis, B. & A.

Hylotelephium telephium (L.) H. Ohba

Orpine

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

This native perennial (formerly *Sedum telephium*) is locally distributed throughout Britain, among rocks, on hedgebanks and in woods. In Midlothian since 1987 the plant has been found at ten sites, so it is just scarce. The recent habitats have included a disused railway, a wood, thick grass in an orchard, a burnside and various city streets and allotments. Records were also from railway habitats (embankment and disused) from 1957 to 1962. Historically, the species was recorded at Musselburgh in 1762, but no habitat was reported. A record in 1765 was from a wood (see table below). 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
Auchendinny Wood	NT26K	22/07/1765	Hope, J.

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.
Colinton Mains Road	NT229690§	20/08/2012	Hicks, D.
Stenhouse Drive Allotments	NT208719§	06/09/2012	Hicks, D.
Glendevon Terrace	NT216726§	11/09/2012	Hicks, D.
Midmar Allotments	NT251705§	21/09/2012	Hicks, D.
Maurice Place	NT261709§	30/09/2012	Hicks, D.
Royal Edinburgh Hospital	NT237710§	16/08/2013	Dawson, K.T.
Brunstane Burn	NT3172	19/08/2019	Averis, B.
Hallyards Wood	NT1273	22/08/2019	Averis, B.

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 this species has been recorded at only two sites since 1987. At Cramond Island the habitat was grassland. The shore of the island is within the Firth of Forth SSSI but this does not extend to the land above. 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.
Holyrood Park	NT269730§	11/06/2015	White, K.

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 bog, 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.
Craigleith to Pilton (disused railway)	NT2275	16/08/2015	TWIC-BSS group
Edinburgh Tramline at Balgreen, leading to Saughton	NT2172	21/07/2019	Jeffree, C. & J.
Craiglockhart Dell	NT2170	14/09/2019	Muscott, J.

Hypericum humifusum L.

Trailing St. John's-wort

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

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 was found on railway embankments at Cobbinshaw and Crookston in 1971, but since 1987 the only habitats (where mentioned) have been verges. 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	NT449429	28/05/1994	Adamson, D. & McDougall, G.

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 over a wall beside a pavement in Edinburgh, and in wooded country estates south-east of the city. In 1934 the species was found at Prestonhall.

Location	Grid Ref	Date	Recorder
Vogrie Estate	NT36	1955	Beattie, E.P.
Clermiston Road North	NT203746	1999	McKean, D.R.
Mavisbank	NT2865	02/06/2004	Muscott, J. & ENHS
Clermiston Road north	NT200750§	2014	Merrick, D.

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 the Logan Burn Waterfalls site is a SSSI (Habbie's Howe – Logan Burn SSSI).

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 1987 over 30 sites have yielded records, and many contained naturally sown wild plants, so the species is not scarce, but is included in this *Register* because of its conservation status. Wild bushes have been found in gullies and on rocks, slopes and burn-sides in the hills. Some of the recent 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
Huntly Cot Hills	NT3151	1983	McKean, D.R.
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.
Uttershill, south of	NT237588§	24/05/2014	Sydes, C.
Clinty Cleugh, Moorfoot Hills	NT298496§	30/08/2015	Sumner, B.E.H.
Blackford Hill	NT258705§	01/10/2015	Maguire, W.
Auchencorth	NT195576	04/05/2017	Shaw, M. & Montgomery, R.
Tathieknowe Burn	NT3552	09/08/2017	McKean, D.R. & Maxwell, S.A.
Hillend Country Park	NT2467	01/10/2017	Mackinnon, J.
Bonaly Country Park	NT2186	12/10/2017	Mackinnon, J.
Rosebery Reservoir	NT308564	14/04/2019	Gilchrist, A.B.
Lugate area	NT443439	23/04/2019	Sumner, B.E.H.
Bow Castle	NT4641	20/05/2019	Jury, S.
Dean Burn	NT443587 & NT443593	14/08/2019	Gilchrist, A.B.
R. South Esk (north of Gladhouse Weirs)	NT304547	19/09/2019	Gilchrist, A.B.
R. South Esk glen, west bank	NT295502	29/11/2019	Gilchrist, A.B.

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 at Borthwick (no longer there) and on a walk along disused railway sidings at Currie. 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 records were obtained from four grid reference points in Holyrood Park (Arthur's Seat Volcano SSSI), of which two are shown below, and in 2004 from four points at Bawsinch and Duddingston, of which two are shown. Duddingston Loch is a SSSI. 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.
Rosebery, 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 Volcano SSSI	NT276725§ & NT277725§ &	30/07/2002	Crowther, N.
Bawsinch and Duddingston	NT279725§ & NT280725§	12/09/2004	Hutcheon, K.
Blackford Hill	NT254706§	13/06/2016	Maguire, W.
Easter Craiglockhart Hill	NT231705	17/06/2017	Chamberlain, M. & BSS
Salisbury Crags, Holyrood Park	NT267731	19/06/2018	Sumner, B.E.H.

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, mostly in rough grass and in cereal and vegetable fields, towards the east and south-east of the Vice-county. Recently, however, the plant has been found in rough ground in Edinburgh. 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.
Fala	NT4361	1987	Muscott, J.
Easthouses	NT3465	01/09/1994	McKean, D.R.
Crookston South Mains area	NT428529§	13/07/2017	Moir, M.
Edinburgh Royal Botanic Garden	NT243755§	24/07/2017	Comont, 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 since 1987 there have been eight sites for this species, chiefly along the wooded valleys of the R. Esk and its northern and southern tributaries, where the parasite has been found mostly on elm and hazel. However, in 2013 over 50 plants were found under laurel in a recently cleared area of the Dalkeith Estate. This patch was re-found in 2014, but not in 2015 (after felling). 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, 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
Lady Lothian's Plantation (north end)	NT335655	05/1986	Muscott, J.
Cowpits	NT347707	04/1989	Muscott, J.
Dalkeith Estate	NT338682	1994	Dixon, C.
Kirkhill	NT323624	1994	Dixon, C.
Inveresk	NT345714	1998	Glendinning, D.R.
Edgelaw Woods	NT307583	05/05/2013	Sydes, C.
Dalkeith Estate	NT336682	06/05/2013	Clark, I.
Dalkeith Country Park	NT337680§	14/05/2014	White, K.
Musselburgh, Roman Bridge Island	NT3472	29/04/2015	Jackson, E.H.
R. South Esk, south of Walcot Burn	NT315574	09/04/2017	Gilchrist, A.B.
Roslin Glen	NT274627§ & NT276629§	16/04/2019	Routledge, G.

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 relatively 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 seven sites since 1987. 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.
Quarryholes to Seafield (disused railway)	NT279754§	20/08/2013	McKean, D.R.
Blackford Hill	NT261701	20/05/2015	Cole, E.
Niddrie Burn	NT309724	06/08/2015	Cole, E., Jeffree, C.E. & Wilson, J.
Seafield	NT283762§	29/06/2019	Alexander, L.

Lepidium ruderales L.

Narrow-leaved Pepperwort

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

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 was recorded at Leith in 1875 (see below), reported pre-1934 from waste ground at Leith and Portobello, and then not recorded

again until 2019 (see below). In 2019 the plant was growing as a weed on the steps leading up to the Commonwealth Pool building on the north side.

Location	Grid Ref	Date	Recorder
Leith, Albert Dock	NT27	08/1875	Douglas, D.
Commonwealth Pool	NT268724§	09/09/2019	Milne, R.I.

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 at Seafield, and maritime rocks on Cramond Island, in 1966 and these sites are still extant. 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	NT194782§	01/06/2016	Jeffree, C.
Seafield	NT284763	28/06/2019	Johnson, C.

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 late summer of 2013, when it was found at the upper end of Threipmuir Reservoir. This end of the Reservoir is part of Balerno Common SSSI.

Location	Grid Ref	Date	Recorder
Lady Place		07/1845	Anon.
Threipmuir Reservoir (upper end)	NT161634	07/09/2013	Stewart, N.F. & Baxter, E.

Linaria repens (L.) Mill.

Pale Toadflax

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

Nationally this perennial species is now considered to be an archaeophyte again (Stace, 2019; Preston et al., 2002), having been regarded as a native for a while (Stace, 2010). It is scattered through much of Britain on stony and rough ground, banks and walls. In Midlothian since 1987 habitats have included railway ground, waste ground, verges and a car park. Building works have now destroyed it at the

car park (Edinburgh Royal Infirmary). In 1991 the species was recorded at Johnston Terrace SWT Reserve, which is a garden, so this record has been omitted from the assessment of scarcity and the table below in case it was planted. Holyrood Park is a SSSI (Arthur's Seat Volcano SSSI). Recent sites have been different from those in 1934, when 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.
Haltee	NT4152	1990	Learmonth, R.
Smeaton	NT3569	1990	Stewart, O.M.
Bower	NT4250	1992	Learmonth, R.
Holyrood Park	NT267729	16/08/2009	Historic Scotland
Edinburgh Royal Infirmary	NT288703	2009-2011	Milne, R.I.
Holyrood Park	NT267729	28/06/2015	Maxwell, S.A.
Millerhill, waste ground near	NT321699	06/08/2017	Maxwell, S.A.
Braidburn Valley Park	NT2469	05/06/2019	TWIC-BSS group

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.

Linum radiola L.

Allseed

National Status: Not Scarce; IUCN: NT.

Midlothian Status: Rare.

Nationally this native annual (formerly *Radiola linoides*) 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.

Lipandra polysperma (L.) S. Fuentes, Uotila & Borsch
Many-seeded Goosefoot

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Rare.

This annual archaeophyte of cultivated and waste ground (former name, *Chenopodium polyspermum*) is common in the centre and south of Britain, but local or rare in southern Scotland. In Midlothian the species has had only one record approaching recent, from 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.

Logfia minima (Sm.) Dumort.

Small Cudweed

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

Nationally this annual native species (formerly *Filago minima*) is found on rather bare, sandy ground through most of Britain. In Midlothian the records since 1987 have been mostly 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 ping (near Millerhill) was first recorded in 2007 (see below) and next year 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 was reported from Dalmahoy, Holyrood Park and Slateford.

Location	Grid Ref	Date	Recorder
Fairmilehead	NT2468	1956	Mackenzie, H.M.
Newtongrange	NT332632§	06/2006	Dixon, C.
Granton Gasworks	NT225771	02/06/2008	McKean, D.R.
Monktonhall ping (near Millerhill)	NT319708	2007	Milne, R.I.
Millerhill, waste ground near	NT3270	09/07/2011	Milne, R.I. & BSS
Baird Road Works, Ratho	NT136713§	08/07/2014	Sumner, B.E.H., Merrick, D.
Pate's Hill wind-farm	NS9958	08/08/2014	Hawker, D.
Pate's Hill wind-farm	NT0058	07/08/2015	Hawker, D.
Bilston Glen	NT280645	12/07/2017	Adamson, D. & ENHS
Monktonhall ping, near Millerhill	NT319708	20/07/2017	Griffin, B.D.
Corstorphine Hill	NT206738	01/10/2017	Adamson, D.
Newtongrange (National Mining Museum)	NT333637	14/10/2017	Adamson, D.
Ratho, Hillwood Quarry	NT131719§	27/06/2019	Merrick, D.

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. The plant is found on mountains, moors and heaths, usually in grassy areas. In Midlothian records of the species have been gathered from over 20 sites since 1987, so it is not scarce, but has been included in this *Register* because of its conservation designation. Examples of recent 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.
Bush Estate	NT2463	1988	Elston, D.
Penicuik House (south of)	NT2158	1988	Godfrey, A.R.
Gladsmuir	NS927576	1992	Muscott, J.
Kitchen Rig	NS9157	1992	Muscott, J.
Tynehead	NT391599	16/09/1992	McKean, D.R.
Rashie Hill Muir	NS958595	1993	Dixon, C.
Woodmuir Plantation	NS9759	1994	Muscott, J.
Bankhouse, Stow	NT432473	1994	Muscott, J.
Brunstane Castle, Penicuik	NT208583	1994	Dixon, C.
Scroof Hill	NT408447	01/09/1994	McKean, D.R.
Wester Bavelaw (east of)	NT162263	1995	Dixon, C.
Dundreich, Moorfoot Hills	NT24	18/07/1998	McKean, D.R. & Maxwell, S.
Pate's Hill wind-farm	NT0058	07/08/2015	Hawker, D.
Penicuik Estate, High Pond	NT213593§	22/09/2016	Chaney, P.
Toxside	NT275533	06/05/2017	Adamson, D. & ENHS
Capelaw Hill, near Bonaly	NT214662	29/08/2017	Maxwell, S.A.
Caerketton Hill	NT237663§	06/2018	Dixon, C.
Cathpair north and Tartan Hill	NT465471§	12/06/2018	Jury, S.
Scald Law	NT1961	07/07/2019	Moir, M.

Lycopus europaeus L.

Gypsywort

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

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, a canal and a burn. Part of Cobbinshaw Reservoir and the adjacent land are SSSIs. Although the bodies of water producing records have been few, the sites around or along these water bodies have been more numerous (e.g. along the Union Canal in 2014 plants were found at nine different grid references, of which one example is shown below). At one site along the Union Canal in 2012 (Hermiston) the plant was found to be plentiful. 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.
Union Canal, Myreside	NT232712§	04/09/2014	White, K.
Braidburn	NT236694	03/09/2015	Cole, E.
Cobbinshaw Main Reservoir	NT0157, NT0258, NT0259	27/08/2019	McKean, D.R. & Maxwell, S.A.

Lysimachia arvensis (L.) U. Manns & Anderb.

Scarlet Pimpernel

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

This native species (formerly *Anagallis arvensis* subsp. *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 from 1987 to 2019 (inclusive) this plant has been rare, as the two Millerhill sites below are likely to be the same site. Bawsinch is an SWT reserve. The habitats since 1950, where recorded, have been waste ground, a railway tip, rough grass and a canal bank. Historically, in 1824 the Scarlet Pimpernel was recorded in fields near Caroline Park and on the Braid Hills. In 1893 and 1921 the species was found at Leith Docks and in 1934 at Tynehead.

Location	Grid Ref	Date	Recorder
Levenhall	NT37	1955	Beattie, E.P.
Edinburgh, Blackhall	NT27	1959	Noble, M.F.
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.
Millerhill	NT321702	09/06/2015	Singleton, R.

Lysimachia europaea (L.) U. Manns & Anderb.

Chickweed-wintergreen

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

Nationally this native perennial (formerly *Trientalis europaea*) 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.
Kirknewton Estate	NT110660	1976	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.

Lysimachia foemina (Mill.) U. Manns & Anderb.

Blue Pimpernel

National Status: Scarce; IUCN: LC.

Midlothian Status: Rare.

Nationally this archaeophyte, which is usually annual, is scarcer than the native Scarlet Pimpernel (*Lysimachia arvensis*). *Lysimachia foemina* (formerly *Anagallis arvensis* subsp. *foemina*) is scattered in Britain as far north as central Scotland, and is usually found in arable ground. In Midlothian the Blue Pimpernel is a rare casual. It is included in this *Register* because of its national scarcity. There have been only two records since 1987, a single plant on waste ground at Craigmillar in 1999, and a record from Musselburgh in 2014 (see below). Historically, records were from high land south of Currie in 1878 (below), Leith Docks in 1904, an old quarry at Slateford in 1908, Leith Docks again in 1921, 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.
Hercus Loan, Musselburgh	NT339726	21/04/2014	Jackson, E.H.

Lysimachia maritima (L.) Galasso, Banfi & Soldano

Sea-milkwort

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

Nationally this tiny native perennial (formerly *Glaux maritima*) occurs around the coasts of Britain and in a few inland saltmarshes. In Midlothian the species has been recorded at various sites along the southern shore of the Firth of Forth from the west (Cramond Island) to the east (Musselburgh) of the Vice-county. The Firth of Forth is a SSSI.

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.
Fisherrow Harbour	NT334731§	05/10/2013	Merrick, D.

Edinburgh	NT294753§	06/05/2015	Wilson, J.
Leith Docks (square 1)	NT2876	28/05/2017	Maxwell, S.A.
Leith Docks (N edge, square 4)	NT2677	18/06/2017	Maxwell, S.A.
Musselburgh River Esk, east bank	NT346735	18/06/2017	Jeffree, C.E., Jeffree, J.
Portobello	NT304743	24/05/2019	Milne, R.I.

Lysimachia thyrsiflora L.

Tufted Loosestrife

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

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 recent records of the species have mostly been from Cobbinshaw Reservoir (partly a SSSI) and at various points along the Union Canal. A surprise new site was Easter Craiglockhart Hill (see below). In addition, it was planted at Bawsinch (SWT reserve) on the south side of Duddingston Loch (SSSI), and recorded at Bawsinch in 1997 and in 2019 (records not included in the table below, or in the assessment of scarcity). 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.
South Cobbinshaw	NT023572	10/07/1992	Muscott, J.
Hermiston (East)	NT186706	01/09/1992	McKean, D.R.
Hermiston (Long)	NT1770	01/09/1992	McKean, D.R.
Union Canal, Long Hermiston to Jaw Bridge	NT164701, NT165701, NT172702, NT178704	25/07/2000	McKean, D.R. & Tonkin, M.
Union Canal, Wester Hailes	NT2070	08/10/2004	Muscott, J.
Hermiston	NT183705§	01/08/2012	McKean, D.R. & McHaffie, H.S.
Easter Craiglockhart Hill	NT231708	17/06/2017	Chamberlain, M. & BSS
Cobbinshaw Main Reservoir	NT019588	27/08/2019	McKean, D.R. & Maxwell, S.A.

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 1987, but the Musselburgh site, on a verge, was temporary. In contrast, the plant is well established at the Penicuik site, in a marshy patch at the end of the Hurley Pond. The species has also been recorded by the pond in Inveresk Lodge Garden (NTS), but it might have been planted there, so the records have not been included in the assessment of rarity and

are not shown below. The wind-farm is an unusual habitat for this water-loving species. In 1934 the plant was recorded at Blackhall, Craigmillar and Leith.

Location	Grid Ref	Date	Recorder
Union Canal	NT2270, NT2271	1976	Sheldon, J., et al.
Penicuik Estate	NT213586§	17/08/1983	Sumner, B.E.H.
Musselburgh	NT360730	22/08/1988	McKean, D.R.
Penicuik Estate	NT213585	1998	McKean, D.R. & Maxwell, S.A.
Pate's Hill wind-farm	NT0058	07/08/2015	Hawker, D.
Penicuik Estate, Hurley Pond	NT212585§	17/09/2016	Chaney, P.

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 recent sites have been coastal. Habitats have been waste ground, sandy links and a pathside beside a promenade. In 1957 the plant was seen on a railway tip (Borthwick Bank). 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.

Fisherrow Links	NT340732	27/09/1975	Stewart, N.F.
Granton Harbour	NT2377	1981	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 Promenade	NT341732§	2014	Merrick, D.
Fisherrow Links	NT342732	19/06/2017	Jeffree, C.E. & Jeffree, J.

Mentha arvensis L.

Corn Mint

*National Status: Not Scarce; IUCN: LC; SBL: >25% decline.**Midlothian Status: Almost 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 eleven sites since 1987, which makes it almost scarce. Habitats have included fields, waste, damp and marshy ground, and the edge of a burn and reservoirs. In 1824 Greville said that the species was frequent in cornfields at Craigcrook 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.
Newlandrig	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.
Norton Quarry, near Ratho	NT134716	04/08/2014	Merrick, D.
Leadburn part-monad	NT233557§ & NT234557§	12/09/2017	Sumner, B.E.H.
Bonaly Reservoir	NT209662	12/08/2019	Averis, B. & Averis, A.
Threipmuir Reservoir	NT1763	21/08/2019	Averis, B. & Averis, B.
Ratho, west of old cement works	NT134712§	21/08/2019	Merrick, D.
Black Springs	NT187642§	21/08/2019	Averis, B. & Averis, A.

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 is a recent record from former sheep pasture in a garden by the Tweeddale Burn (see below).

Location	Grid Ref	Date	Recorder
Tweeddaleburn	NT276525§	20/06/2015	Gaskell, L.
Tweeddaleburn	NT276525§	30/06/2015	Sumner, B.E.H.

Micranthes stellaris (L.) Galasso, Banfi & Soldanao

Starry Saxifrage

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Rare.

Nationally this native perennial (formerly *Saxifraga stellaris*) 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 was found in an upland flush, south of Gladhouse Reservoir, in 1993. Sheep may have trampled it soon after the 1993 visits, and post-2010 visits have not re-found the species, so its current status is uncertain. It may also have been rare historically, as standard 19th century texts do not mention Midlothian sites for this species. Nor is it mentioned by I.H. Martin (1934).

Location	Grid Ref	Date	Recorder
Gladhouse (south of)	NT298499	1993	Dixon, C.

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 fairly recent record (see below).

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

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 almost recent records from just two sites, which were flushes and 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.
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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 a bog margin at Threipmuir Reservoir (1967). As the Black Springs area is the slender north-eastern arm of the Reservoir, it's conceivable that these two records were from the same place, but the grid references are not precise enough to be certain of that. 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.

Nasturtium x sterile (Airy Shaw) Oefelein
(N. officinale x N. microphyllum)

Hybrid Watercress

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

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 in 1846 (see below), and then there were no more records until 1999, when C. Dixon found it in a ditch in marshy ground at Niven's Knowe. 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. However, in 2016 the hybrid was recorded at a new site in monad NT3559.

Location	Grid Ref	Date	Recorder
Liberton	NT26	1846	Backie, W.B.
Niven's Knowe	NT2665	10/08/1999	Dixon, C.
Niven's Knowe, near Loanhead	NT2665	09/1999	Dixon, C.
Catcune to North Middleton	NT3559	27/06/2016	McKean, D.R. & Maxwell, S.A.

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.P.
Arniston	NT334617	1993	McKean, D.R. & Nisbet
Millbank House (Kirkhill Bing)	NT3361	18/08/1994	McKean, D.R.
Dalkeith	NT36	1998	Bateman, R.M.
Bolton Muir Wood	NT261734§	04/07/2017	Maxwell, S.A.
Pathhead, Hill Road	NT394646	08/07/2019	Gilchrist, A.B.

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 from Granton (below) is from waste ground. There is also a record from a disused industrial site at Polton in 1999, where some wildflower planting has been done, so the status of the *Nepeta* is uncertain and the record is not shown below. 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 is native and also introduced, and has been found recently in ponds and a pool. The record from Duddingston was actually from a pool and not in the loch itself. Duddingston Loch is a SSSI. Historically, plants were found at Lochend from 1764 to 1824, at Ravelston in 1894 and in Elf Loch in 1927 and 1934.

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.
Cammo Estate	NT1774	08/07/2009	Muscott, J. & ENHS
Skivo Quarry	NT0564	16/09/2010	McKean, D.R. & Sumner, B.E.H.
Duddingston	NT2872	25/06/2016	Maxwell, S.A.
Mavisbank pond	NT290653	13/05/2018	Muir, I, Krivtsov, V. & Harmsworth, N.A.

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 marshy areas, but only twice since 1987, 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.
Morton Reservoir, West Calder	NT0763	1976	Beattie, E.P.
Royal Botanic Garden Edinburgh - Inverleith	NT2475	21/06/2013	Mill, R.
Pate's Hill wind-farm	NS95Z & NT0058	07/08/2015	Hawker, D.

Omalothea sylvatica (L.) Sch. Bip. & F.W. Schulz

Heath Cudweed

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

Nationally this native perennial (formerly *Gnaphalium sylvaticum*) 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 five sites since 1987, and the habitats mentioned were a disused railway track, short heath grassland and gravel. 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.

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, at Portobello in 1863, Leith Docks in 1904 (see below) and at Leith and Dalkeith in 1934.

Location	Grid Ref	Date	Recorder
Leith Docks	NT27	1904	Fraser, J.
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.

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 frequent in Hunter's Bog (Holyrood Park, Arthur's Seat Volcano SSSI), but infrequent elsewhere. It has been recorded in damp grassland, especially if base-rich. Linhouse Glen is a SSSI and a nature reserve (SWT). 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
Kirknewton House	NT1166	1982	Stewart, N.F.
Hunter's Bog	NT272735	17/05/1989	Davis, A.
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.
Leven Seat Quarries (disused)	NS9457	15/05/2005	Harvie, B. & LWIC
Cockmuir Bridge	NT266554	05/07/2007	Muscott, J. et al.

Holyrood Park, Hunter's Bog	NT273734	26/05/2017	Harmsworth, N.A.
Edinburgh	NT272343§	18/05/2018	Gibson, M.

Orchis mascula (L.) L.

Early-purple Orchid

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

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 scarce but was formerly more widespread. The records shown in the table below were from base-rich grassland, woods, and an overgrown track. There is currently a private zoo around the limekiln at The Camp, and recent searches have not re-found this species at that site. Historically, 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 (Craggs) and Tynehead. In 1841 numerous plants were found in meadows in the parish of West Calder. In 1934, Ravelrig, Balerno and Ratho yielded records.

Location	Grid Ref	Date	Recorder
The Camp, Newtongrange (near limekiln)	NT358638	03/06/1970	Beattie, E.P.
Silverknowes	NT1976	1972	Beattie, E.P.
The Camp	NT354635	06/1995	Crowther, N.
Hermand Quarry	NT129635	29/06/2000	Hutcheon, S. & Badenoch, C.
Edgelaw Woods	NT307583	05/05/2002	Sydes, C.
Preston Dene & Mains area	NT401655§	07/05/2018	Moir, M.

Ornithopus perpusillus L.

Bird's-foot

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

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 (see below), Leith Docks in 1906 and 1907, and Dalkeith in 1927. Then there was a long gap before the recent record in 2008 (see below).

Location	Grid Ref	Date	Recorder
Musselburgh	NT37	1863	Balfour, J.H. & Sadler, J.
River Esk, Musselburgh (& field edge)	NT3471	24/05/2008	Muscott, J. & ENHS

Oxybasis rubra (L.) S. Fuentes, Uotila & Borsch

Red Goosefoot

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

Nationally this annual native goosefoot (formerly *Chenopodium rubrum*) 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 from waste or disturbed ground. The record from Borthwick in 1957 was from a railway tip, which no longer exists. In 1934 there were records from Newhailes and Leith. 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.

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.
Braidburn	NT238694	03/09/2015	Cole, E.
Ratho, Craigpark Quarry	NT126702§, NT126705§ & NT126706§	27/08/2016	Merrick, D.

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, and has been recorded there repeatedly from 1981 onwards. The recent records are all from three adjacent kilometre squares, so the species is rare. Historically this 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.
Vogrie Country Park (Alderdean)	NT381628	12/05/2019	Gilchrist, A.B.

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 four sites since 1987, 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.
East of Torsonce	NT4743	1984	Nield, P.
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.
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 has been only one relatively recent site reported for the species, from the coast opposite Birnie Rocks, west of Granton. Cramond was a historic site for this species, and Cramond Island more recently. The shorelines of these three sites are part of the Firth of Forth SSSI.

Location	Grid Ref	Date	Recorder
Cramond	NT1876	01/01/1767	Knapp, J.
Cramond	NT1876	1831	Knapp, J.
Cramond Island	NT1978	1967	Beattie, E.P.
Granton (west of)	NT2177	1982	McNab, W.R.

Plantago media L.

Hoary Plantain

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

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 1987, this plantain has been recorded at four sites. One of these was around a lime kiln near Newtongrange. In 1970 E.P. Beattie said this was a very old station for this plant,

and there were further records by other recorders in 1982 and 1999. However, the lime kiln near Newtongrange is currently within an area devoted to a private zoo, and searches in the vicinity in 2018 did not re-find the species there. The second long-known site is in the short turf of the churchyard at Carrington, and in 2018 over 53 plants were found there. The other two recently recorded sites are at Ratho, and in 2018 there were over ten plants in waste ground at the disused cement works there. Historically, 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.
Newtongrange	NT3563	31/07/1999	Muscott, J. & ENHS
Ratho, Craigpark Quarry	NT127706§	03/06/2018	Merrick, D.
Ratho (old cement works)	NT135712§	07/06/2018	Merrick, D.
Carrington Church	NT318605	15/06/2018	Sumner, B.E.H.

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 1987 this species has been recorded in about eleven sites in Midlothian, all in the western half of the Vice-county. This is one too many sites for scarcity, but the species has been included in this *Register* because of its conservation designation. Linhouse Glen and Skolie Burn are SSSIs, and Linhouse Glen is also an SWT reserve (see below). Habitats since 1987 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.
Hermend Quarry (east bank of river)	NT029637§	22/07/2012	Wilcox, M. & Sumner, B.E.H.
Hermend 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.
Skolie Burn SSSI – centre	NS987622	23/06/2014	MacKintosh, E.J.
Linhouse Glen (SWT Reserve and	NT070641§	23/06/2015	Sumner, B.E.H.

SSSI)			
Hermard Quarry	NT029635§	08/07/2015	Sumner, B.E.H.
Saw Mill Cottage, Annetscross Bridge	NT044622	07/2017	Leslie, A.

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 sites have included a rubbish tip, waste ground, disused railways, and a pavement by a wall. Another site, but possibly planted, was a riverside below concrete flood defences in Blackford Glen in 2011 (not shown in the table below). Historically the plant was recorded on walls about Holyrood Park (1809, 1824 and 1863), walls at St. Leonard's (1824), on the débris 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.
Seafeld	NT286762	1996	Dixon, C.
Warrender Park Road (north side)	NT254724	15/11/2018	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). There have been only two other records, one from waste ground a little inland from the coast in 1999, and the other, without mention of habitat, in 2015.

Location	Grid Ref	Date	Recorder
Inchmickery	NT2080	08/1982	Brandt, N.
Pilton, south of West Granton Road	NT221766	02/07/1999	McKean, D.R.
Craigentinny	NT292722	02/06/2015	Maxwell, S.A.

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, found since 1987 on a demolition site, a roadside verge, 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 on basaltic rocks, crags, and clefts in a few sites around Arthur's Seat and Duddingston (SSSIs). 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.
Duddingston (Girnal Crag)	NT2872	23/05/1972	Stirling, A. McG.
Hangman's Rock, Holyrood Park	NT280725	02/1981	Muscott, J.
Blackford Hill	NT254703	25/11/2004	McKean, D.R. & McHaffie, H.S.
Duddingston Low Road (cliff above)	NT280726§	12/03/2016	Maguire, W.

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 is scarce and has been recorded in scattered reservoirs in upland areas, and in a disused quarry pool. The reservoir south of Selm Muir Wood and near Corston Hill may be the same site, Morton Reservoir. 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	NT0863	01/09/1994	McKean, D.R.
Corston Hill	NT0863	10/1994	McKean, D.R.
Clubbiedean Reservoir	NT1966, NT2066	1997	Lumsden, B.
South Cobbinshaw	NT0257	25/05/2017	Moir, M.

Potamogeton x cooperi (Fryer) Fryer (**P. perfoliatus x P. crispus**)

Cooper's Pondweed

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

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 along the Union Canal at various points in Edinburgh, where it has been known since 1902, and just west of the city (as shown below).

Location	Grid Ref	Date	Recorder
Kingsknowe, Union Canal near	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.
Edinburgh, Union Canal	NT2371	06/08/1986	Anderson, K.
Union Canal	NT2372	1986	Murphy, K.J. & Anderson, K.
Ashley Terrace	NT234715	05/11/1987	McKean, D.R. & Preston, C.D.
Fountainbridge (E end Union Canal)	NT247728	05/05/1989	Noltie, H. & Preston, C.D.

Slateford Aqueduct	NT27	1999	McKean, D.R. & Preston, C.D.
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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 points along the Union Canal inside and outside the city of Edinburgh, the first record being near Slateford in 1875. The record from Ratho on 22/07/2000 was of one plant on the north side of the canal east of the Bridge Inn.

Location	Grid Ref	Date	Recorder
Union Canal, near Slateford	NT27	07/1875	Evans, W.W.
Union Canal, near Slateford	NT27	1889	Terras, E.B.
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.
Union Canal, Lochrin Basin	NT2472	11/07/1986	Anderson, K.
Ashley Terrace	NT2371	1999	McKean, D.R. & Preston, C.D.
Edinburgh, Union Canal	NT2270	1999	McKean, D.R.
Union Canal, Meggetland to Hermiston	NT17, NT27	2000	McKean, D.R.
Union Canal, Ratho	NT130709	22/07/2000	McKean, D.R. & Tonkin, M.

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, recent records have been from reservoirs, a loch and a pond in upland areas, but in 1905 it was recorded in the Union Canal in Edinburgh (see below). Gladhouse Reservoir is a SSSI.

Location	Grid Ref	Date	Recorder
Edinburgh, Slateford, Union Canal	NT27	26/06/1905	Fraser, J.
Threipmuir Reservoir	NT161634	05/06/1977	Lassiere, O.M. & Bailey, M.
North of Cauldhall Moor	NT2759	1986	McKean, D.R. & Munro, D.
Cauldhall Moor	NT2759	08/1992	McKean, D.R.
Howgate (Milkhall Pond)	NT243573	1995	Dixon, C.
Stow (Muirhouse Loch)	NT469447	1997	Scottish Loch Survey
Threipmuir Reservoir	NT161634, NT163635 & NT167634	05/06/1997	Lassiere, O. & Bailey, M.
Gladhouse Reservoir	NT298534 & NT300544	12/06/1997	Day, J. & Cornish, C.

Threipmuir Reservoir	NT1663	2004	Site Condition Monitoring
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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-1987 record of this species, from the Union Canal at Slateford (see below). Most of the pre-1987 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. There have been no records since 1970, and recently the Borders Railway has been constructed along the former Waverley route past Borthwick, so the current status of the species is uncertain. 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 verna L.

Spring Cinquefoil

National Status: Scarce; IUCN: LC.

Midlothian Status: Rare.

This native perennial (formerly *Potentilla tabernaemontani*) 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 points around Arthur's Seat in Holyrood Park (Arthur's Seat Volcano SSSI), 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
Arthur's Seat	NT27	1982	Stewart, N.F.
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.
Blackford Hill	NT253705§	09/05/2014	White, K.
Holyrood Park	NT269729	01/05/2018	Scotland, Historic
Holyrood Park	NT277725§	20/04/2019	Routledge, G.

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 Station in 1956. There were subsequent 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. Since then the railway has been reconstructed as the Borders Railway, and the plant has not so far been re-found in this area, but a further search is envisaged. There has been one other recent site (see below). Seven city sites with the hybrid have been discovered in Edinburgh, but they are likely to be garden varieties, and so are excluded from this *Register*. A further site in a park at Portobello was a planted cultivar, so it is also excluded. Historically (1821) the hybrid was found in NT26, but no further details

have been traced.

Location	Grid Ref	Date	Recorder
Borthwick Bank to Tynehead Station	NT36	25/05/1956	Beattie, E.P.
Crichton, near	NT390598§	16/05/2010	Legg, C.J.
Craigmillar Castle Park	NT284708§	2019	Milne, R.I.

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 found to be much planted along the disused railway between Quarryholes and Seafield, e.g. west of Restalrig Road Bridge, so this record has been excluded from the assessment of scarcity and omitted from the table below. 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.
Water of Leith, Currie	NT1867	15/07/2012	McKean, D.R., Sumner, B.E.H. & TWIC
Figgate Burn Park, Portobello	NT2973	08/05/2014	Muscott, J. & Clarkson, M.
R. Almond, Almondvale	NT0567	17/08/2016	McKean, D.R., & Maxwell, S.A.
Killandean Burn	NT0366	18/08/2016	McKean, D.R., & Maxwell, S.A.
Costerton Mains area	NT4362	17/08/2018	Moir, M.

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 relatively recently but has been 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, near a sea wall and near a river mouth.

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.
Musselburgh, River Esk, east bank	NT346733	18/06/2017	Jeffree, C.E. & Jeffree, J.

***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 was recorded in the 18th and 19th centuries, at Auchendinny Woods (1768, 1809, 1824, 1863, 1894), Roslin Woods (1824) and Corstorphine (1839), but then there were no more records until the species was discovered beside a ditch at the edge of a wood near Gorebridge in 2002, and re-found there in 2009, 2010, 2014 and 2018.

Location	Grid Ref	Date	Recorder
Gore Glen, E of A7, N of Shank Bridge	NT337617	09/2002	Maxwell, S.A.
Gore Glen, E of A7, N of Shank Bridge	NT337615§	04/02/2018	Sumner, B.E.H.

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 a disused railway, at the entrance to an old quarry and in a wood. Historically, the species was recorded 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 near	NT325701	2008	Milne, R.I.
Blackford Glen, near Agassiz Rock	NT258702	2011	McKean, D.R.
Millerhill, waste ground near	NT325701	04/2011	Milne, R.I.
Minto Street, Edinburgh	NT266719§	15/12/2016	Crawley, M.
Drum Wood	NT2968	20/08/2019	Averis, B.
Disused Railway – Gilmerton Road to Todhills	NT3068	26/08/2019	Averis, B.

Ranunculus aquatilis L.

Common Water-crowfoot

*National Status: Not Scarce; IUCN: LC.**Midlothian Status: Almost 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, and by reservoirs, but with eleven sites since 1987, it is almost scarce. Records from 1954 onwards are shown below, excluding the 1993 record of planted specimens at Bawsinch SWT Reserve. Peeswit Moss is a SSSI and SAC. Historically, the species was recorded in the Braid Burn at Blackford Quarry (1878), at Glencorse (1886), in the Pentland Hills (1887) and at Balerno (1903).

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.
Glen Cottage	NT2263	1993	Stewart, O.M.
Clubbiedean Reservoir	NT200668	04/04/1997	Day, J. & Cornish, C.
Harperigg Reservoir (Water of Leith inlet)	NT0860	21/06/2008	Sumner, B.E.H. & LWIC
Toxside Moss (north)	NT271550§	26/06/2012	Sumner, B.E.H.
Clubbiedean Reservoir	NT1966	12/07/2012	Sumner, B.E.H.
Gala Water at Stow	NT457445§	13/06/2013	Quinn, L.
Loganlea Reservoir	NT1962	20/07/2013	Harmsworth, N.A.
Penicuik Estate, High Pond	NT2159	11/07/2015	McKean, D.R.
Torphin Golf Course Pond	NT203678	29/06/2016	McKean, D.R. & ENHS
Fullarton Water, Peeswit Moss	NT2855	23/07/2016	McKean, D.R. & Maxwell, S.A.
Gladhouse, NE of Reservoir	NT3154	19/08/2016	Maxwell, S.A.
Fullarton Water, south of B6372	NT2855	03/08/2019	TWIC group

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 was one of those 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 at Duddingston Loch repeatedly since at least 1832. Duddingston Loch is now a SSSI. 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 this 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 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 1987 in a marshy rivulet. Before 1925 it was found at Garvald Punks.

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

Roemeria argemone (L.) C. Morales, R. Mend. & Romero Garcia

Prickly Poppy

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

Midlothian Status: Rare.

Nationally this annual archaeophyte (formerly *Papaver argemone*) 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. Since 1987 there have been only two sites reported for this species, and one of them, Johnston Terrace, has been omitted from the table below because it was a neglected garden, converted into a nature reserve by the SWT, and might have been planted. Since 1960 the wild habitats have been cereal fields, roadsides, disturbed ground and a railway bank. Historically, 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 reported from Dalkeith, Liberton, Comiston and Inveresk.

Location	Grid Ref	Date	Recorder
Edinburgh, Hillend	NT26	1961	Beattie, E.P.
Fushiebridge	NT36	25/06/1962	McCallum Webster, M.
Inveresk (roadside near)	NT358711	28/05/1975	Stewart, N.F.
Holyrood Park (Innocent Railway bank)	NT275724	03/06/1997	Usher, M.B.

Roemeria hispida (Lam.) Stace

Rough Poppy

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

Midlothian Status: Rare.

Nationally this annual archaeophyte (formerly *Papaver hybridum*) 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 1987. 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.

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 damp waste ground, marshy watersides and on a reservoir slipway. Bavelaw Marsh is part of Balerno Common SSSI. Threipmuir Reservoir is a long-known site for this species, and in 2019 plants were found at eight points along its shores, one of which is shown below.

Location	Grid Ref	Date	Recorder
Threipmuir	NT1663	11/07/1956	Currie, A.
South of Marchbank Hotel	NT1663	1976	Raeburn, J.
Harlaw Reservoir	NT1765, NT1864 & 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.
Edinburgh Park Station (waste ground)	NT184713	07/07/2019	Adamson, D. & S.
Threipmuir Reservoir	NT177643§	21/08/2019	Averis, B. & A.
Edinburgh Park Station (waste ground)	NT184713	15/09/2019	Merrick, D.

Rosa caesia Sm.

Hairy Dog-rose

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

Nationally this native perennial (formerly *Rosa caesia* subsp. *caesia*) 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 species is scarcer than *Rosa vosagiaca*, which was formerly *Rosa caesia* subsp. *vosagiaca*. Sites with records have been scattered over the Vice-county, and habitats have included scrub, hedges and woodland. Agassiz Rock is a SSSI for geological reasons.

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.
Union Canal	NT1570	06/07/2014	White, K.
Agassiz Rock	NT259702	03/06/2016	Maguire, W.

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.

Rosa vosagiaca x R. sherardii Sm.

National Status: Not designated; IUCN: Not designated.

Midlothian Status: Rare.

Nationally this native hybrid (= ?*R. x alpestris* Rapin ex Reut.) occurs in the north of Britain south to Leicestershire. *Rosa vosagiaca* was formerly a subspecies of *Rosa caesia*, and the hybrid formerly known as *Rosa caesia* x *R. sherardii* might have included either subspecies of *R. caesia*. In Midlothian the records were from subsp. *vosagiaca*. Sites have been scattered and habitats, where recorded, have been waysides and watersides.

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.
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.

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 caesius L.

Dewberry

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

Midlothian Status: Scarce.

Nationally this native perennial grows on disturbed ground, sand-dunes, grassland and scrub in the south and centre of Britain, north to central Scotland, but it is more scattered in the west and in Scotland. The species has shown significant decline in Scotland, recognised by the SBL. In Midlothian since 1987 the plant has been found in scattered locations (see below) on banks of former railways and by a river and a burn. A record of planted specimens by the disused railway at Warriston has been omitted from the *Register*. Historically, in the 19th century the species was found on the banks of the R. Esk at Musselburgh, by a roadside at Cockpen Church, and in an unrecorded habitat near Liberton (see below). In 1934 reports came from Liberton and Dalkeith.

Location	Grid Ref	Date	Recorder
Musselburgh	NT37	14/08/1819	Maughan, R.
Liberton, near	NT26	08/1825	BSE

Cockpen Church	NT3263	11/05/1872	Evans, W.W.
Davidson's Mains	NT213753	29/08/1999	Pankhurst, R.J.
Davidson's Mains	NT213753	2003	Ballantyne, G.H.
Davidson's Mains to Silverknowes	NT209755	02/2007	McKean, D.R. & McHaffie, H.S.
Straiton	NT276665§	08/08/2013	McKean, D.R.
Breich Water	NT0164	05/08/2018	McKean, D.R. & Maxwell, S.A.
Braidburn Valley Park	NT2470	05/06/2019	TWIC-BSS group

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	NT25	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 recently the species has been recorded on rocks in the Moorfoot and Pentland Hills. In the table below, the km square, NT3447, west of Dewar Hill and containing the two Cleughs, is within the Moorfoot Hills SSSI. The km square, NT2951, containing Hirendean Castle, is also in the Moorfoot Hills but not within the SSSI. The Carlops to North Esk Reservoir site in NT1556 is in the North Esk Valley SSSI. Historically this bramble was more widespread, with records from Roslin Woods (1824 to 1934), the Pentland Hills near Colinton (1824), Auchendinny, Arniston and Dalhousie (1863 to 1934), Pomathorn Dean and Penicuik (1877) and 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.
Moorfoot Hills	NT294495	15/09/1997	Dixon, C.
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.

Craigleith	NT27	2003	Ballantyne, G.H.
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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: Rare.

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-1987 records have been from a roadside and from a burnside near its outflow to a river. The latter site, a damp grassy area beside the Woodmuir Burn just before it flows into the Breich Water below Blackhill Farm, was also recorded in 1973. 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.
Blackhill area	NS968617§	05/06/2019	Sumner, B.E.H.

Rumex conglomeratus Murray

Clustered Dock

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

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 recent sites are grassy and most are beside water. Duddingston Loch and Holyrood Park are SSSIs. Bawsinch is an SWT reserve. 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	1984	Muscott, J.
Bawsinch	NT27	1989	Saville, R.

Holyrood Park	NT2872	06/09/2015	Muscott, J.
Carberry Tower	NT3669	03/04/2016	Muscott, J. & Fungus Group
Newlandrig, north of	NT3663	08/05/2016	Harmsworth, N.A.
Musselburgh	NT341725§	30/08/2016	Chaney, P.
Penicuik Estate, Hurley Pond	NT212585§	17/09/2016	Chaney, P.
Newbattle College, Lord Ancrum's Wood, R. South Esk	NT333660§, NT335661§	29/09/2016	Chaney, P.
Penicuik Estate, High Pond	NT214592§, NT215592§	10/10/2016	Chaney, P.
Duddingston Loch (north shore)	NT2872	17/09/2019	Muscott, J.

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.

Sabulina verna (L.) Rchb.

Spring Sandwort

National Status: Scarce; IUCN: NT.

Midlothian Status: Rare.

Nationally this native perennial (formerly *Minuartia verna*) 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 rare. Of the recent sites, Arthur's Seat was reported in 1906 (see below). Both Arthur's Seat and Craiglockhart Hill were noticed in 1934, when Blackford Hill was also reported. Arthur's Seat, Salisbury Crags and Queen's Drive are in Holyrood Park (Arthur's Seat Volcano SSSI), and Wester Craiglockhart Hill is also a SSSI.

Location	Grid Ref	Date	Recorder
Arthur's Seat	NT2872	30/05/1906	Adamson, R.S.
Arthur's Seat	NT27	30/05/1956	Beattie, E.P.
Salisbury Crags, Holyrood Park	NT2772	05/1985	Muscott, J.
Blackshiels	NT4361	1986	Muscott, J.
Wester Craiglockhart Hill	NT2270	1992	Maxwell, S.A.
Queen's Drive (above)	NT2772	1998	Maxwell, S.A.
Arthur's Seat	NT275727	1998	Maxwell, S.A. & McKean, D.R.
Craiglockhart Dell	NT2169	27/04/2003	Muscott, J. <i>et al.</i>
Holyrood Park	NT274730§	05/05/2011	McHaffie, H.S. & McKean, D.R.
Arthur's Seat Volcano SSSI	NT273729§, NT274728§, NT274729	04/06/2015	McIntosh, J.W. & Cole, E.
Holyrood Park	NT274729	14/06/2019	Scotland, Historic

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 mainly 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.
Fisherrow Harbour	NT3373	17/06/2002	Jackson, E.H.
Fisherrow Harbour (east wall)	NT334730§	16/07/2018	Jackson, E.H.

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 it has been found on bare ground at Balerno and a cliff base near Samson's Ribs, but habitats were not recorded for the other sites. 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.
Cramond Brig	NT179755§	12/08/2016	Wilson, J., Jeffree, C. & Chamberlain, D.

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 North Esk

Valley SSSI in the Pentland Hills.

Location	Grid Ref	Date	Recorder
Carlops, R. North Esk	NT157568	06/1999	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 an upland 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
Duddingston Loch	NT27	1800	Anon.
Dalkeith	NT36	16/08/1883	Craig-Christie, A.
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 three records, from widely separated locations. Two habitats were recorded, a pondside and a riverside.

Location	Grid Ref	Date	Recorder
Roslin, west of	NT260635	09/1997	Dixon, C.
R. Almond, north of Edinburgh Airport	NT152745§	18/07/2013	McKean, D.R.
Mid Calder	NT0767	27/07/2018	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.
Roslin, west of	NT260635	17/09/1997	Dixon, C.
Gladhouse Reservoir	NT309543	20/09/1997	Dixon, C.
Gladhouse	NT291536	27/09/1997	Dixon, C.
Ravensneuk, Penicuik	NT230583	26/10/1997	Dixon, C.

Penicuik Estate	NT217588 & NT223592	08/11/1997	Dixon, C.
Glencorse Reservoir	NT208635, NT215640 & NT224632	08/1998	Dixon, C.
Glencorse Reservoir (south-east of)	NT2263	10/06/2010	Sumner, B.E.H.
Longmuir Moss	NT470503, 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
Adamrae	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.
Cockmuir, SE of Howgate, W side of road	NT264553	13/06/1998	McKean, D.R.
Granton Gas Works - quarry pond	NT222767	14/06/2006	McKean, D.R.
Lin's Mill	NT1070	17/09/2006	McKean, D.R., Muscott, J. & Sumner, B.E.H.
Cockmuir	NT263549	01/09/2016	Tucker, L.
Harlaw Reservoir, southern shore	NT179646	09/09/2016	Tucker, D.R.
Breich Water – Fauldhouse to Breich Crossroads	NS9460	20/08/2019	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.K.
Bowshank	NT4541	1982	Little, M.
Heriot House	NT4054	1989	Learmonth, R.
Fala Mains	NT4460	01/09/1994	McKean, D.R.
			McKean, D.R., Sumner, B.E.H. & LWIC
Addiewell Bing	NT0063	15/07/2007	
Monktonhall bing, near Millerhill	NT3170	09/07/2011	Milne, R.I. & BSS
			Wilcox, M. & Sumner, B.E.H.
Skivo Quarry	NT0564	22/07/2012	
Torphin Quarry	NT2067	11/08/2012	McKean, D.R.
Gala Water, Torquhan	NT4447	01/09/2016	Tucker, L. <i>et al.</i>

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 a sandy area near the coast. The North Esk Reservoir and the river valley south of it are the North Esk valley SSSI. Sometimes this willow is planted, and a record from Limefield Glen in 2018 is excluded from the table below for this reason. 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 (south of)	NT2949	1991	Bland, K.P.
Cockmuir Farm	NT2655	1998	McKean, D.R.
Thornbank, Dalkeith	NT3467	08/1999	McKean, D.R.
South of North Esk reservoir	NT1557	29/08/1999	Sumner, B.E.H.
Musselburgh Lagoons	NT353738§	06/06/2011	Sumner, B.E.H.
			Sumner, B.E.H. & TWIC
Toxside Moss (south)	NT2753	29/06/2012	
North Esk Valley SSSI	NT157563	22/05/2016	Singleton, R.
Cockmuir Bridge, near	NT265553§	01/09/2016	Sumner, B.E.H.
Fullarton Water, south of B6372	NT283539	03/08/2019	TWIC group

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.

Salsola kali L.

Prickly Saltwort

National Status: Not Scarce; IUCN: VU; UK BAP, 2007; SBL: >25% decline.

Midlothian Status: Rare.

This native species (formerly a subspecies of *Salsola kali*) 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 records post-1987 have been from around Fisherrow, including a sandy strandline and a sandbank. 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.
Fisherrow Links	NT344733	26/08/1988	Jackson, E.H.
Fisherrow, mouth of R. Esk	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 Volcano 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. A few examples of the records are shown below.

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 Water (Source of)	NT0754	08/1980	Winham, J.
Sergeant Law, The Pike & Ravens Cleugh	NT0754§	05/10/2009	McIntosh, J. & McHaffie, H.
Medwin Water (Source of)	NT0754	04/09/2018	Tucker, L., Robinson, M., Godfrey, A. & Finger, A.

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 1987, 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 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 the recent sites for this species have mostly been rocky. Historically, the species was recorded on the top of an old wall near Craiglockhart in 1809. 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 and Cramond Island are recent additions.

Location	Grid Ref	Date	Recorder
Easter Craiglockhart Hill (top)	NT2370	1995	McKean, D.R.
Corbies Craig, Blackford Hill	NT255704	21/11/1995	Murray, F.
Cramond Island	NT196786	2005	Crowther, N.

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 the sites have been at the coast, and inland at a roadside and in damp locations.

Location	Grid Ref	Date	Recorder
Leith Docks	NT27	07/1902	Fraser, J.
Leith Docks	NT27	04/10/1902	Fraser, J.
Granton Harbour (East)	NT2477	1981	MacGilvray, A., Hobson, P.M.
Fushiebridge	NT36	26/06/1982	Stewart, O.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

Schoenoplectus lacustris (L.) Palla

Common Club-rush

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

This perennial native club-rush is frequent in most of Britain, in shallow, still water and slow-flowing rivers. In Midlothian the species was recorded in 1967 at Cobbinshaw (literature record, E.P. Beattie, shown below), but since then most records have been of definite plantings (new ponds on Gogarburn Golf Course, 2001) or probable plantings (Gogar Burn, 1999; pond by Glasgow Road, 2016;

fenced-off pools near Millerhill, 2017; pond at Inveresk Lodge Garden [NTS], 2008 & 2018). The records of plantings and probable plantings are excluded from this *Register*, but there is one find that might be of a natural occurrence, by the Union Canal, so this record is shown below. Historical records were from Duddingston Loch and Lochend Loch in 1835.

Location	Grid Ref	Date	Recorder
Cobbinshaw	NT05	1967	Beattie, E.P.
Union Canal	NT177704§	10/08/2014	White, K.

***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 just uncommon enough to be scarce. The Gogar Burn is both a more 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.
River South Esk at Newbattle Bridge	NT331657§	24/08/2012	SEPA Ecology Lab., Edinburgh
River South Esk at Laundry House, Dalkeith Country Park	NT338682§	24/08/2012	SEPA Ecology Lab., Edinburgh
River South Esk, downstream of Gore Water	NT330620§	24/08/2012	SEPA Ecology Lab., Edinburgh
Bowland area	NT452405§, NT454401§	08/07/2017	Sumner, B.E.H.
Gala Water at Stow	NT457445§	09/08/2017	Quinn, L.
Mavisbank	NT291653§	08/06/2019	Dixon, C.
Tyne Water, Currie Lee	NT381623§	15/06/2019	Dixon, C.

***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, disturbed ground, and by stones in farmland. 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	Findlay, M.
Shoestanes	NT394544	28/08/2018	Maxwell, S.A.

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 has few recent sites, even though at a particular site there might be many plants. Historic sites were Leadburn (1863 and 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	07/1999	Sumner, B.E.H.
South Cobbinshaw	NT018570	14/08/2016	Sumner, B.E.H.
Cobbinshaw Reservoir, S of South Cobbinshaw	NT017569	14/08/2016	Sumner, B.E.H.
Penicuik Estate, Hurley Pond	NT214586§	22/09/2016	Chaney, P.
Cathpair monad	NT467463§	11/08/2018	Jury, S.
Cobbinshaw Main Reservoir	NT0257 & NT0258	27/08/2019	McKean, D.R. & Maxwell, S.A.

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.

Braid Burn at Colinton Mains	NT2369	03/07/2014	Edmans, R.
Burdiehouse Burn Valley	NT2869	11/07/2014	Edmans, R.
Torduff Reservoir, near	NT207677	29/06/2016	McKean, D.R. & ENHS
Arthur's Seat	NT275725§	23/07/2017	Comont, R.
Seafield	NT283762§	29/06/2019	Alexander, L.

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 was one of those studied in the BSBI "Threatened Plants Project". In Midlothian since 1987 records have come from about 37 sites, so the species is not scarce, but is included in this *Register* because of its conservation status. Some examples of the records are shown in the table below. All the sites shown are in SSSIs except Cap Law. Craigengar is a SSSI and SAC, as is a large area of the Moorfoot Hills. 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.
Craigengar	NT074540§	28/08/2011	Gaskell, L.W.
Blackhope	NT337513§	11/08/2012	Sumner, B.E.H.
Clinty Cleugh, Moorfoot Hills	NT300496§	14/07/2015	Sumner, B.E.H.
Rose Cleugh, Moorfoot Hills	NT296481§	30/08/2015	Sumner, B.E.H.
The Pike	NT074540§	01/08/2016	Griffin, M. & B.
Gill Cleugh	NT353469§	17/07/2017	Sumner, B.E.H.
Medwin Water. upper	NT074540§	01/09/2020	McIntosh, J.W.

Sherardia arvensis L.

Field Madder

*National Status: Not Scarce; IUCN: LC; SBL: >25% decline.**Midlothian Status: Not 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 1987, the species has been recorded in about thirteen sites, so it is not 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 further inland. Examples of records are shown below. 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.
Newbridge	NT125727§	21/05/2018	Merrick, D.
Ingliston showground (overflow car park)	NT138730§	01/06/2019	Harding, M.
Norton, Norton Mains Farm	NT144720	01/06/2019	Merrick, D.

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. Only one site, Leith Docks, has a recent record and this was from waste ground. Leith was also a site for this species in 1927.

Location	Grid Ref	Date	Recorder
Leith Docks	NT2776 & NT2876	08/1989	Stewart, O.M.

Silene noctiflora L.

Night-flowering Catchfly

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

Midlothian Status: Rare.

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	NT195782§	01/08/2016	Jeffree, C.
Edinburgh Dock (east of)	NT2876	28/05/2017	Harmsworth, N.A. & TWIC
Cramond Foreshore	NT190771	18/06/2019	Alexander, L.

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 currently two sites with wild plants of this species, one in Edinburgh and one outside the city. One of the wild sites is at Samson's Ribs on Arthur's Seat in Holyrood Park, which is a traditional Edinburgh site for this species. Plant populations have been known in Holyrood Park since before 1670 (Willisel's discovery, reported by Ray in 1670, cited by Lusby, 1996). There was also a wild population on the rock at Edinburgh Castle, but this was last recorded in 1977 (see table below), and thereafter became extinct. (Holyrood Park and Edinburgh Castle are SSSIs.) The wild population at a third Edinburgh 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 in Edinburgh 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. 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 took place at Holyrood Park, Hermitage of Braid and Blackford Hill. Plantings were also made at the Braid Hills and Ravelrig Quarry. Then, in 2019, a new wild population was spotted outside the city on a ridge along the northern edge of the disused Monktonhall Bing, near Millerhill, both sides of an ashy path. This new population looked well established among the vegetation of the site. This new site and Samson's Ribs are the only sites with wild plants, which means that, despite all the plantings, the species is deemed rare. Historically, apart from the Edinburgh sites, there was a further site for the species outside the city at the Den of Borthwick (1768).

Location	Grid Ref	Date	Recorder
Samson's Ribs, Arthur's Seat	NT2772	05/1793	Brown, R.
Corstorphine Hill	NT2073	1950s	Donaghue, C.
Edinburgh Castle	NT2573§	1977	Beattie, E.P.
Samson's Ribs	NT2772§	10/07/1992	Lusby, P.
Samson's Ribs, Arthur's Seat	NT2772§	26/05/2004	Holme, R.
Arthur's Seat Volcano SSSI	NT2772§	27/06/2014	McIntosh, J.W., Cole, E. & McCabe, M.
Monktonhall Bing, near Millerhill	NT318710§	23/05/2019	Maxwell, S.A.

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, a riverside, arable fields and allotments. A record from the Costerton Mains area in 2019 has been excluded from the assessment of scarcity and the table below as it was by a pond in a seeded field and may have been planted. The species is now scarce, but in 1824 it 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.
Inverleith Park Allotments	NT238752§	15/05/2012	Hicks, D.
Pilrig Park Allotments	NT264754§	21/05/2012	Hicks, D.
Inverleith Park Allotments	NT238752§	30/07/2012	Hicks, D.
Wester Hailes Allotments	NT193696§	22/08/2012	Hicks, D.
R. North Esk, N of Lasswade	NT3068	15/07/2015	McKean, D.R. & Maxwell, S.A.
The Meadows (east end)	NT262725§	06/06/2016	Maguire, W.

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 1987 there have been more than 100 sites with this plant, so it is not scarce, but has been included in this *Register* because of its conservation status. A few of the most recent records are shown in the table below. The habitats have included arable fields and set-aside, allotments, disturbed ground, banks of earth and a pavement.

Location	Grid Ref	Date	Recorder
Musselburgh Lagoons	NT3573	06/06/2011	Sumner, B.E.H.
Mansfield Road, Balerno	NT1665	02/07/2011	Muscott, J.
Stow	NT4545	25/06/2013	Sumner, B.E.H.
Midmar Allotments	NT2570	11/08/2013	Grace, J. & BSS
Blackford Glen	NT262701§	11/05/2015	Maguire, W.
Gogar, SW	NT1672	24/08/2015	Lowell, J.
Dykeneuk, west of A701	NT2358	30/09/2015	Gaskell, L.
R. Almond, Almondvale	NT0566 & NT0567	17/08/2016	McKean, D.R. & Maxwell, S.A.
Broomhills, west of	NT2667	19/09/2017	Muscott, J.
Castle Wynd, Edinburgh	NT253734§	13/12/2018	Crawley, M.
Ratho, Edinburgh	NT137707	01/01/2019	Merrick, D.
Musselburgh, Fishers Wynd	NT339728	09/06/2019	Jackson, E.H.
King's Buildings, waste ground	NT267705§	14/05/2020	Jury, S.

Smyrniolus 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 1987 have been from coastal and inland sites, on roadside verges, paths, cliffs, steep wooded banks, rocks and walls. At Craigmillar Castle, a historical site for the species, it was recorded not only on rocks at the Castle, but also on the roadside verge south-west of the Castle, where in 1988 it was 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.
Portobello, Seafield Road East	NT292755§	03/06/2013	Merrick, D.
Bridgend Allotments	NT283709	10/05/2014	Cole, E.
Levenhall Links	NT359734	30/05/2015	McTague, J.
Edinburgh Castle Rock	NT253735§	19/02/2016	Maguire, W.
Musselburgh Lagoons	NT360737	05/05/2017	Griffin, B.D.
Craigmillar Park	NT2870	23/05/2018	Muscott, J. & ENHS
Musselburgh Lagoons	NT359734§	23/05/2019	Jury, S.

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 in Holyrood Park, having been recorded there since 1813 (see King's Park below, which is a forerunner of Holyrood Park). Holyrood Park is a SSSI (Arthur's Seat Volcano SSSI) and Duddingston Loch is also a SSSI. In 2005 the small population of trees in Holyrood Park was augmented by planting further seedlings, and seedlings were introduced at Blackford Hill. 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. Some of the most historic and most recent records from Holyrood Park are shown below at low resolution, and include the wild sites. Historically, there were also records from Liberton (1868) and Stenhouse (1879 and 1898).

Location	Grid Ref	Date	Recorder
King's Park, Edinburgh	NT27	1813	Greville, R.K.
Arthur's Seat, Edinburgh	NT27	15/06/1832	Lemann, C.M.
Above Duddingston Loch,	NT2772	1947	Sinclair, J.

Edinburgh			
Duddingston Loch	NT2772	1986	McKean, D.R.
Dunsapie Loch	NT2873	1990	HSRS
Duddingston Golf Course (Loch and Bawsinch)	NT2872	1992	Muscott, J.
Dunsapie Loch, Holyrood Park	NT2873§	2001	Smith, P.A.
Holyrood Park	NT2773§, NT2873§, NT2872§	24/06/2015	Scotland, Historic

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 1987 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
South of Marchbank Hotel	NT1663	1976-1999	Raeburn, J.K.
Threipmuir Reservoir	NT1663	29/09/1988	McKean, D.R. & Hendry, S.
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.
Medwin Water (Source of)	NT0854	1999	McKean, D.R.
Union Canal, Wilkie's Basin to Ratho	NT127708	23/08/2013	McKean, D.R.
Threipmuir Reservoir	NT164634§	21/08/2019	Averis, B. & A.
Black Springs	NT187641§	21/08/2019	Averis, B. & A.

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 but only has one recent site (see below). 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
Ravelrig Bog	NT16	07/1838	Knapp, J.
Braid Hill Marshes	NT26	11/07/1857	Young, E.
Medwin Water	NT05	09/1870	Reid, J.R.
Cobbinshaw	NT025590	18/08/1994	Garner, D. & Miles, J.

Spergula 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 1987 records of this species have come from approximately 90 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 included cultivated and waste ground, mostly inland, but occasionally at the coast.

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.
Swanston, west of	NT2367	29/06/2015	Dawson, K.T.
Musselburgh, Beach Lane	NT339729	16/08/2017	Jackson, E.H.
Vogie Country Park	NT377635	05/06/2018	Harmsworth, N.A.
Cathpair North & Tartan Hill	NT466472§	11/08/2018	Jury, S.
Costerton Mains area	NT432626§	17/08/2018	Moir, M.
Heatherlands	NT1164	06/06/2019	Dawson, K.T.
Inveresk, Musselburgh	NT349716§	23/06/2019	Wilson, J.
Fullarton Water, south of B6372	NT2855	02/08/2019	Harmsworth, N.A. & McKean, D.R.
Bonaly Reservoir	NT2166	12/08/2019	Averis, B. & A.
Threipmuir Reservoir	NT177643§	21/08/2019	Averis, B. & A.

Spergularia media (L.) C. Presl

Greater Sea-spurrey

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

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 records have been from inland sites, one of them a gutter beside a pavement, the others without mention of habitat. Peeswit Moss is a SSSI and SAC. Holyrood Park is in Arthur's Seat Volcano SSSI.

Location	Grid Ref	Date	Recorder
Cramond	NT1876	1961	Beattie, E.P.
Seafeld	NT291758	1996	Dixon, C.
St. Bernard's Row	NT245747	27/07/2006	McKean, D.R.
Fullarton Water / Peeswit Moss	NT2855	23/07/2016	McKean, D.R. & Maxwell, S.A.
Holyrood Park	NT276730§	26/05/2017	Scotland, Historic
Bonaly Reservoir	NT2166	12/08/2019	Averis, B. & A.

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. Sites have been scattered and habitats, where mentioned, have been a manse garden, a turnip field, grassland and disturbed ground. Duddingston Loch is a SSSI. In 1934 the species was recorded in the Pentland Hills, and at Leith and Roslin.

Location	Grid Ref	Date	Recorder
Cockpen	NT3263	05/11/1958	Milne, J.
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.
Duddingston Loch	NT284723	31/08/2016	Scotland, Historic
Edinburgh Zoo (above panda enclosure)	NT208735	30/08/2019	Adamson, D.

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 1987, 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-1987 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

Stuckenia pectinata (L.) Börner

Fennel Pondweed

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

Nationally this native species (formerly *Potamogeton pectinatus*) 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. Dunsapie Loch is in the Arthur's Seat Volcano 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.
Dalmahoy	NT1467	06/08/1975	Beattie, E.P.
Dunsapie Loch	NT281732	27/09/1983	Stewart, N.F. & Stewart, O.M.
Union Canal, Leamington	NT27	11/07/1986	Anderson, K.
Craiglockhart Pond	NT2370	05/11/1987	McKean, D.R. & Preston, C.D.
Duddingston Loch, N side (east bay)	NT284724	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.
Union Canal, Myreside to Merchiston	NT2371	23/08/2015	Harmsworth, N.A. & TWIC
Union Canal, Slateford	NT2270, NT2271	23/08/2015	Harmsworth, N.A. & TWIC
Union Canal, Wester Hailes	NT184706§	02/06/2016	Merrick, D.

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 a verge at only one site since 1987, at the southern edge of the city, where it was also recorded in 1970. The other 1970 site was also a verge, 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 in three dry sites in Edinburgh, but only one since 1987. Arthur's Seat is a SSSI, and in 1971 this species was found on a moor at the top of the hill.

Location	Grid Ref	Date	Recorder
Arthur's Seat	NT27	30/04/1971	McCallum Webster, M.
Leith Links	NT2676	24/04/1972	McCallum Webster, M.
Leith Links	NT27	06/1977	King, F.C.
Blackford Hill	NT27	15/05/1987	Aglen, P.
Blackford Hill	NT260707	19/04/2016	Maguire, W.

Taraxacum bracteatum Dahlst.

Dandelion

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

Nationally this native species is usually found in damp sites of Britain and Ireland. In Midlothian since 1987 the species has been recorded in three Edinburgh sites. Habitats mentioned were the top of a wall and grass by a track. Duddingston Loch is a SSSI. In 1975 this dandelion was found south-east of the city by a wall on a track.

Location	Grid Ref	Date	Recorder
Cowpits, near	NT346708	29/04/1975	Stewart, N.F.
Colinton	NT21693	30/04/1984	Stewart, O.M.
Cammo Road, Cramond Bridge	NT1775	05/1986	McKean, D.R.
Cramond Bridge	NT1775	1993	Muscott, J.
Royal Botanic Garden Edinburgh	NT2475	18/05/1994	Pankhurst, R.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 trackside by the Union Canal, west of the city, several years before 1987, but relatively recent.

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. All were pre-1987, but might still be extant. 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, not long before 1987.

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 have

been two records from Edinburgh since 1987, and one pre-1987 record from a roadside near Crookston, south of Wallyford.

Location	Grid Ref	Date	Recorder
Crookston, Falside Hill	NT367708	28/05/1975	Stewart, N.F.
Edinburgh, old railway	NT232760	29/04/1999	Pankhurst, R.J.
Edinburgh, supermarket filling station	NT234758	29/04/1999	Pankhurst, R.J.

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, from a roadside at Bowshank to a river bank at Cowpits and to the boundary with Vice-county 84 at East Calder.

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). Both records were pre-1987, but the species might still be extant.

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: Rare.

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 have been 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 two of the sites have been coastal, but the third was by a canal.

Location	Grid Ref	Date	Recorder
Granton	NT2277	21/05/1979	Stewart, O.M.
Union Canal, Hermiston	NT222708	27/04/1997	Pankhurst, R.J.
Granton – waste ground	NT230774	28/04/2006	
Musselburgh – sandy roadside by sea	NT337730§	28/04/2007	Pankhurst, R.J.

Taraxacum maculosum A.J. Richards

Dandelion

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

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, pre-1987, but the species might still extant.

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, pre-1987, but the species might still be extant.

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, and on verges (two records), a grassy track, and in a garden. 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.
Stow	NT4339	18/05/1987	Thompson, I.
Duddingston Loch	NT284723	09/05/1996	Pankhurst, R.J.
Ross Gardens, Edinburgh	NT264710§	01/05/2016	Maguire, W.

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. The habitats were not recorded for the Windydoors records.

Location	Grid Ref	Date	Recorder
Dalkeith	NT36	15/05/1970	Beattie, E.P.
Windydoors	NT4339	19/08/1994	Thompson, I.A.
East of Windydoors	NT4439	21/08/1994	Thompson, I.A.

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 in Edinburgh on Arthur's Seat Volcano SSSI, and in locations at the eastern and western extremities of the Vice-county by a riverside path, on a river bank, and in school grounds. All these records were pre-1987, but the species might still be extant.

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.
Arthur's Seat	NT2673	22/05/1979	Stewart, O.M.

Taraxacum unguilobum Dahlst.

Dandelion

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

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, and habitats have included grassland, rough grass, a grassy bank and an overgrown lane.

Location	Grid Ref	Date	Recorder
Carberry Tower	NT3669	05/1970	Beattie, E.P.
Musselburgh Golf Course	NT352733	19/06/1975	Stewart, N.F.
Granton, west of	NT2177	1982	McNab, W.R.
Bow Castle	NT4641	1984	Little, M.
Little Cathpair, Stow	NT4547	05/1986	McKean, D.R. & Hollands, R.C.
Stow, south-west of	NT4339	18/05/1987	Thompson, I.

Windydoors	NT4339	19/08/1994	Thompson, I.A.
East of Windydoors	NT4339	21/08/1994	Thompson, I.A.
Blackford Hill	NT260702§	31/05/2016	Maguire, W.
Gala Water, Torquhan	NT4447	01/09/2016	Tucker, L. <i>et al.</i>

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 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 (see below), and it was found south of Balerno recently (1998, 1999 and 2011 in the table below).

Location	Grid Ref	Date	Recorder
Balerno, near	NT1666	29/06/1945	Evans, W.E.
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.
Roslin Chapel	NT2763	1997	Dixon, C.
Bavelaw	NT1663	1998	Mill, R.R.
Marchbank Hotel	NT1664	07/1999	Muscott, J. & Tebble, M.O.
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 1987, 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 Volcano SSSI.

Location	Grid Ref	Date	Recorder
Holyrood Park	NT2872	1977	Napier College
Brandon Street	NT251748	10/06/2006	Pankhurst, R.J.
Dalry Graveyard, Edinburgh	NT236726§	15/06/2018	Grace, J.

Trichophorum cespitosum (L.) Hartm.

Northern Deergrass

*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 was later elevated to a species (Stace, 2010). This deergrass 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, and both in wet bogs. These days Red Moss, Balerno, is an SWT reserve and part of Balerno Common SSSI.

Location	Grid Ref	Date	Recorder
Red Moss, Balerno	NT16	1931	McNab, W.R.
Longmuir Moss	NT471504§	01/07/2000	Braithwaite, M.E.
Longmuir Moss	NT471504	15/06/2013	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 three other sites (see below).

Location	Grid Ref	Date	Recorder
Threipmuir	NT16	31/05/1834	Anon.
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.

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 have been three records from recent times. The species was

growing around the active ash lagoon (No. 8) at Musselburgh Lagoons in 1999, and was confirmed by the Ranger at Levenhall Links (D. Allan). Then there were no records from this site until 2019 (see below). Also in 2019, a new site has been found at Seafield. In 1824 the species was recorded at Leith Links and in 1840 at Meadowbank.

Location	Grid Ref	Date	Recorder
Musselburgh Lagoons	NT37	1999	Allan, D.
Seafield	NT283762§	29/06/2019	Alexander, L.
Musselburgh Lagoons	NT354738	17/07/2019	Milne, R.I.

Trollius europaeus L.

Globeflower

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 1987 the species has been found in several marshes scattered through the Vice-county. In 2014 hundreds of plants were seen in scattered groups along the marsh below Cauldhall. Historically, this plant was recorded in Auchendinny Wood by Professor Hope in 1764 (see below). In 1768 it was present at Colinton and Auchendinny. 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 and the steep-sided valley from Carlops are a SSSI (North Esk Valley SSSI).

Location	Grid Ref	Date	Recorder
Auchendinny Wood	NT26K	06/06/1764	Hope, J.
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.
Royal Botanic Garden Edinburgh, Inverleith	NT2475	21/06/2013	Mill, R.
Cauldhall, south of	NT285577	11/06/2014	Sumner, B.E.H.

Umbilicus rupestris (Salisb.) Dandy

Navelwort

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

Nationally this native perennial is frequent on rocks, walls and stony banks under hedges, mainly in the west of Britain. In eastern Britain it is rare. In Midlothian this

species was unknown until 2009, when it was discovered on shady rocks at Blackford Hill (see below). In 2011 a small population was spotted on shady rocks at Calton Hill. These two initial populations have increased and are now established colonies. Other sites have been discovered, but the plant at Plewlands Gardens died and those in Drummond Street were wiped out. Further occupied sites have been found on Salisbury Crags and the Radical Road (part of Arthur's Seat Volcano SSSI) and at Hermitage of Braid. Scattered plants are spreading west of there.

Location	Grid Ref	Date	Recorder
Blackford Hill	NT253707	2009	Muscott, J.
Plewlands Gardens, Edinburgh	NT238707§	06/2010	Dawson, K.T.
Calton Hill	NT261741§	07/09/2011	Sumner, B.E.H.
Drummond Street, Edinburgh	NT262734	13/04/2014	Maxwell, S.A.
Salisbury Crags	NT270729§	31/01/2016	White, K.
Radical Road, Edinburgh	NT269729§	31/10/2017	Groom, Q.J.
Hermitage of Braid	NT249702	05/03/2019	Harmsworth, N.A.
Calton Hill (SW corner)	NT2674	11/07/2019	Muscott, J. & ENHS
Blackford Hill	NT253707	30/07/2019	Muscott, J.

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

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 much of the Moorfoot Hills are SSSIs and SACs. The species has long been known in the Pentland Hills (since at least 1809). Historically, a site above Swanston Woods was reported from 1824 to 1934, and Balerno was added in 1934, but there have been no recent records from these sites.

Location	Grid Ref	Date	Recorder
West Cairn Hill	NT1058	1957	Beattie, E.P.
East Cairn Hill/Mid Hill	NT132600	1976	Hearn, 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.
East of Torsonce	NT4743	1984	Nield, P.
Craigengar	NT0955	1992	McKean, D.R.
Emly Bank	NT2947	1993	Dixon, C.
West of Dewar Hill	NT3447	1994	Dixon, C., McKean, D.R.
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 1987. The North Esk Reservoir (and the approach valley from Carlops) 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
Longmuir Moss	NT472508, NT472509 & NT472511	15/06/2013	Braithwaite, M.E.
Fala Moor (marsh south of)	NT431572	02/07/2015	Sumner, B.E.H.

Valerianella carinata Loisel.

Keeled-fruited 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 have been two records of this species. One find was at a hotel near the river in Edinburgh, where it was a garden weed, and the other find was at Ratho, where a patch of plants was spotted in Main Street.

Location	Grid Ref	Date	Recorder
Belford Place	NT235736	10/05/2006	Mill, R.R.
Ratho, Main Street	NT139707§	07/06/2016	Merrick, D.

Veronica catenata Pennell

Pink 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, but rarer in Scotland. It is found mostly in open muddy areas, and 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.
Bawsinch SWT Reserve	NT2872	09/1981	Muscott, J.
Haltree	NT4152	1990	Learmonth, R.
Auchinoon (Harperrig Reservoir)	NT0961	1991	Edgar, C.
Mid Crosswood	NT058569§	12/07/2011	Sumner, B.E.H. & McKean, D.R.
Duddingston Loch (north shore)	NT280725§	25/08/2016	Sumner, B.E.H.

Vicia bithynica (L.) L.

Bithynian Vetch

National Status: Not Scarce; IUCN: VU; SBL: rare.
Midlothian Status: Scarce.

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 in Midlothian until the year 2000 (see below). One of the historic records was from a railway embankment. The recent

records have been from inland sites, though two were not far from the coast. One of the habitats recorded was long grass between a road and houses, another was low down a river bank, and the most recent habitat was at the edge of a park.

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.
Little France Park	NT293708§	04/05/2019	Maxwell, S.A.

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. Haggis Knowe and Arthur's Seat are within Holyrood Park (Arthur's Seat Volcano 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
Arthur's Seat	NT27	1955	Beattie, E.P.
Blackford Hill	NT27	1955	Beattie, E.P.
Cramond Island	NT27	1955	Beattie, E.P.
Cramond Island	NT1978	19/11/1995	McKean, D.R.
Newhailes	NT3272	1998	Watson, K.
Haggis Knowe	NT275737	16/06/1998	McKean, D.R.
Edgelaw Reservoir	NT35	30/03/1999	Muscott, J., Murray, J. & Clarkson, M.
Arthur's Seat	NT269729§	12/05/2002	Lusby, P.S.
Middleton Lime Quarries	NT354575	16/06/2002	Sumner, B.E.H. & LWIC
Holyrood Park	NT275736	21/04/2007	HSRS
Arthur's Seat	NT269729§	22/05/2012	Young, G. et al.
Wester Craiglockhart Hill	NT228701§	20/05/2015	White, K.
Blackford Glen (disused quarries)	NT258702§	02/06/2015	Sumner, B.E.H.
Torquhan House	NT4447	02/07/2015	Moir, M.
Blackford Quarry	NT258702§	28/04/2016	Maguire, W.
Cathpair north & Tartan Hill	NT4647	06/06/2018	Jury, S.

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. Historically, in 1792 this plant was recorded on the north side of the Braid Hills (first by R. Brown) and then repeatedly recorded at this site until 1847. In the 19th century it was also found on Blackford Hill and at Currie, Dalmahoy, Lasswade, Borthwick and Tynehead, but in 1894 the species was said by Sonntag to be rare. However, in 1899 it was recorded on a roadside near Stow, and this site remains today (see below).

Location	Grid Ref	Date	Recorder
Stow, roadside near	NT44	09/09/1899	Evans, W.
Stow	NT460450	09/07/1967	McCallum Webster, M.
Stow, steep roadside	NT4645	25/08/1992	Smith, A.J. & Little,
Lauder Road, Stow	NT460448§	11/07/2013	Sumner, B.E.H.
Lauder Road, Stow	NT460448§	05/10/2013	Sumner, B.E.H.

***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 1987, one of them in a formerly heathy but now forested area, the dry bed of an overflow channel from a reservoir, and hill passes. In 1824 Greville said the species was “very common”, but he included *V. riviniana* in *V. canina* (M.E. Braithwaite, personal communication). 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	1981-1989	McKean, D.R.
Glasmuir	NS919572	06/1992	Muscott, J.
Harlaw Reservoir	NT179651§	10/06/2013	Merrick, D.
Carnethy Hill, pass south of	NT204610	16/05/2019	Moir, M.
Scald Law, pass north of	NT1961	16/05/2019	Moir, M.

***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. Sites since 1987 (and just before) 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. However, in Greville’s flora *V. tricolor* included *V. arvensis* (M.E. Braithwaite, personal communication). In 1934 the sites reported were Penicuik, Roslin, Tynehead, Kames (Kaimies), Dalmahoy and Balerno.

Location	Grid Ref	Date	Recorder
South of Rashiehill	NS9560	1985	Rutherford, A., Stirling, A.McG., McKean, D.R.
Edgefield	NT2866	1986	Selfridge, M.
Granton	NT2477	1986	MacGilvrey, 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.
Saughton Mains Allotments	NT215711§	04/06/2012	Hicks, D.
Midmar Allotments	NT2570	11/08/2013	Grace, J. & BSS
Jordan Lane	NT2471	07/09/2015	Dawson, K.T.
Greendykes (site of demolished housing)	NT295710	14/08/2016	Chaney, P.
Ratho	NT137707	01/01/2019	Merrick, D.
Tramline Survey, Edinburgh	NT1971	12/06/2019	Chamberlain, D. & M., Forbes, H. & West, R.

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, the species has been listed by the SBL as Rare, which gives it conservation designation and merits its inclusion in the *Register*. Although regarded as casual, plants can persist for more than five years, as they have done at several sites in Edinburgh (see below). Plants can also spread to further sites naturally, as has happened in St. Albans Road. Records have been mostly from city sites, and of plants growing most often on *Tilia*, occasionally on *Malus* or *Crataegus*, but rarely on *Populus*. Recent and first records are shown below. Note: Old John Watson School became the National Gallery of Modern Art, Belford Road, which then became Modern One. Belford Road (east side) became the Dean Gallery, which then became Modern Two.

Location	Grid Ref	Date	Recorder
Fordel Dean	NT3866	1950	Thomson, M.
St. Albans Road, Edinburgh	NT260713	1964	Muscott, J.
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.
Royal Botanic Garden Edinburgh	NT2475	03/03/2002	Muscott, J.
St. Albans Road	NT2671	08/11/2013	Cochrane, M.P.
St. Alban's Road (2 nd site)	NT259713	2015	Kilpatrick, A.
Dean Cemetery	NT237740	08/02/2016	Maguire, W.
Sunbury Place, Edinburgh	NT238738	29/01/2017	Harmsworth, N.A.
St. Alban's Road (2 nd site)	NT259713§	14/07/2017	Sumner, B.E.H.
Modern One	NT2347738	30/09/2017	Muscott, J.
Modern Two	NT236737§, NT235738§, NT235739§	12/2017	Muscott, 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. Duddingston Loch is a SSSI and Dunsapie Loch is within the Arthur's Seat Volcano SSSI.

Location	Grid Ref	Date	Recorder
Edinburgh, Union Canal	NT235718	10/09/1968	Stewart, O.M.
Ashley Terrace	NT235718	10/09/1969	Stewart, O.M.
Craiglockhart Pond	NT231708	05/11/1987	Preston, C.D. & McKean, D.R.
Duddingston Golf Course (Loch and Bawsinch)	NT2872	1992	Muscott, J.
Blackford Pond	NTNT2570	1997	Scottish Loch Survey
Dunsapie Loch	NT280731	01/06/1997	Day, J.
Duddingston Loch	NT281724	10/06/1997	Lassiere, O.L. & Bailey, M.
Craiglockhart Pond	NT2370	2001	Alexander, L.
Dalmahoy Loch	NT148689	03/09/2001	Alexander, L. & L. Eadie, L.
Union Canal, Lochrin Basin	NT2472	20/07/2003	Maxwell, S.A.
Threipmuir Reservoir (upper end)	NT1663	2013	Stewart, N.F.

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 Seafeld. 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.

Agrostemma githago L.

Corncockle

*National Status: See below; IUCN: Waiting List.**Midlothian Status: Extinct.*

This annual archaeophyte was formerly scattered through much of Britain as a common cornfield weed, but is now uncommon 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 five records since 1987 are all from wildflower plantings, and hence excluded from this *Register*. 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. Since then there have been no further records of naturally occurring plants.

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.

Anacamptis pyramidalis (L.) Rich.

Pyramidal Orchid

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Extinct.

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 a search in 2014 found that the site of the orchid had been obliterated by a vehicle track.

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.

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

Sea Beet

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Extinct.

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 relatively recent record was in 1982, from a seashore site opposite Birnie Rocks, 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. Further, more extensive, searches at Cramond in 2015 and along the whole coastline later were also fruitless. The shore of the Firth of Forth is a SSSI. Historically the records were from the Cramond area (1824, 1845, 1863 and 1934).

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).

Buglossoides arvensis (L.) I.M. Johnst.

Field Gromwell

*National Status: Not Scarce; IUCN: EN.**Midlothian Status: Extinct.*

Formerly known as *Lithospermum arvense*, 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.

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 was recorded pre-1934, when it was seen at Gogar, Musselburgh and Howgate. In August, 1960, the species was recorded without a site name, and then there was a long gap in the records until 2012. From 2012 onwards plants have been found at sites where they've probably been planted, Fernhill Community Park (2012), Riccarton Estate, Heriot Watt University (2014), King's Buildings (2018), by the Water of Leith between Colinton Dell & Lanark Road, where there's a wildflower meadow (2018), on a diverse verge at Fala [Moor Road] (2019) and at the south-east corner of Duddingston Loch where it meets Bawsinch SWT reserve (2019). On one site they were definitely planted, Harmeny Estate School (2019). These planted and probably planted records are excluded from the *Register*, which leaves the species extinct as a naturally occurring plant.

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.

Chenopodiastrum hybridum (L.) S. Fuentes, Uotila & Borsch
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. Formerly known as *Chenopodium hybridum*, 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.

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 reported from Lochend in 1927, and no further 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 Oxfangs 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 Dactylodenia 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 *Dactylodenia* 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), Handerswood (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 Hills by G. Don (1806), south of Braid Hills by J. Brodie (pre-1824), and at Braid Marshes by J. Knapp (1835) and W.W. Evans (July, 1869).

Elymus x laxus (Fr.) Melderis & D.C. McClint. (***E. repens* x *E. junceaformis***)

National Status: Not designated; IUCN: Not designated.

Midlothian Status: Extinct.

Formerly this sterile native hybrid was known as *Elytrigia x laxa* (*E. repens* x *E. juncea*). It 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.

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. The last record was by E.P. Beattie in July, 1956, at Tynehead.

Genista tinctoria L.

Dyer's Greenweed

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Extinct.

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 have been introduced (Smith *et al.*, 2002). In recent times *Genista tinctoria* was introduced to Bawsinch SWT Reserve. The only other recent record was from east of Granton Point in 1999, where the species had been planted along the shore. Both these planted records are excluded from this *Register*. Before these recent records the only previous records were from the Pentland Hills in 1824, 1894 and 1934.

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.) Fourr.

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 was recorded by J. Woodforde in Hunter's Bog in 1826, by E. Young at Corstorphine in 1838, and by W. Tweedie at Dunsapie Loch in 1854. In 1934 the species was reported to be at Duddingston and Corstorphine, but has not been recorded since.

Hieracium cravoniense (F. Hanb.) Roffey

Craven Hawkweed

National Status: Not Scarce; IUCN: LC.

Midlothian Status: 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 long gone but the disused railway, which used to be the Waverley route from Edinburgh to Carlisle, has been re-built as the Borders Railway.

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.

Isatis tinctoria L.

Woad

National Status: Scarce; IUCN: LC.

Midlothian Status: Extinct.

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 further records except for its introduction to Bawsinch Wildlife Reserve (SWT) in 1986, and a record from the churchyard at Greyfriars in 2018. As both these recent records are of plantings they are excluded from this *Register*.

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 Crag.

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 coronopus (L.) Al-Shehbaz

Swine-cress

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

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 the one recent record, from bare ground under trees on a campus in 2010, is likely to have been planted and so is excluded from this *Register*. Previous records are historic, from Musselburgh and from a roadside west of Tobago Street, Edinburgh (1824), from near Portobello (1856), from Leith (1903 and 1906) and from Slateford (1905).

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 pre-1934, on Bavelaw Moor.

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).

Lysimachia minima (L.) U. Manns & Anderb.

Chaffweed

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

This native annual (formerly *Centunculus minimus*) 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.

Lysimachia tenella L.

Bog Pimpernel

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

Nationally this low-growing native perennial (formerly *Anagallis tenella*) 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.

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.

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).

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.

Oxybasis glauca (L.) S. Fuentes, Uotila & Borsch

Oak-leaved Goosefoot

National Status: Scarce; IUCN: VU.

Midlothian Status: Extinct.

This annual archaeophyte (formerly *Chenopodium glaucum*) 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.

Oxybasis urtica (L.) S. Fuentes, Uotila & Borsch

Upright Goosefoot

National Status: Rare; IUCN: CR; UK BAP, 2007.

Midlothian Status: Extinct.

This annual archaeophyte (formerly *Chenopodium urticum*) 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.

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 had not been recorded since, until June, 2016, when a plant was spotted at the base of a traffic post by the main road (A702) through Silverburn. This turned out to be an escape from plantings in a flower bed further down the street. The escape only lasted for a season, and there have been no reappearances since.

Pilularia globulifera L.

Pillwort

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

Midlothian Status: Extinct.

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 was recorded in the Pentland Hills from 1801 to 1894. The marshes in the Pentland Hills near Currie were sites for the fern in 1832 and 1846. Logan House and Threipmuir Reservoir were also mentioned in 1823 and 1836, respectively. In 1824 and 1863 the species was recorded at Braid Hill Marshes and in 1908 at Mid Calder. Before 1934 the fern was recorded at Duddingston Loch. Then the species became extinct in Midlothian but, under the Edinburgh LBAP it was re-introduced in 1997 to Duddingston Loch (new pond). Duddingston Loch is a SSSI.

In 1998 Bawsinch SWT Reserve (Martin Pond), Wells o'Wearie, and Meadows Yard Local Reserve were planted with this fern. The introduced plants eventually died out and further introductions are planned.

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 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 hedgebanks 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.

Pyrola media Sw.

Intermediate Wintergreen

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

Nationally this native species is said to be 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 there were records from Bilston (1863 and 1894), Tynehead (1863, 1894 and 1934), and Juniper Lee (1934), but recent searches have failed to re-find the species.

Rhodiola rosea L.

Roseroot

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

This native perennial (formerly *Sedum rosea*) 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.

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. *Rosa caesia* was formerly *Rosa caesia* subsp. *caesia*. Either subspecies of *R. caesia* could 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. *Rosa caesia* was formerly *Rosa caesia* subsp. *caesia*. Either subspecies of *R. caesia* could be involved in the hybrid. In Midlothian there has been only one record of this hybrid, and *R. caesia* subsp. *caesia* was the subspecies involved. The hybrid was recorded by F.M. Webb in Muirburn Wood, near Ratho, on 16/07/1878.

Rosa x molletorum Hesl.-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.

Salix triandra L.

Almond Willow

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

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 the two recent records have been of planted trees, and are hence excluded from this *Register*. In 1824 the species was recorded at Craigmuck, and in 1863 not only at Craigmuck, but also at Saughton Hall, Coltbridge and Granton.

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 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.

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 Midlothian the species was first discovered at Leith Docks by O.M. Stewart in 1974. From 1982 studies by Abbott *et al.* found that the species had arisen from hybridisation between *Senecio squalidus* and *S. vulgaris*, and become fertile through polyploidy (Abbott *et al.*, 1983). It was recorded from 1982 until 1993 on demolition and redevelopment sites around Leith 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 there have been no reports of this species since 1934, when Slateford and Craigmillar were listed as sites. W.E. Evans had recorded the species at Slateford on 5th July, 1904. Craigmillar Quarry was noted pre-1894 and pre-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.

Stuckenia filiformis (Pers.) Börner

Slender-leaved Pondweed

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

This native species (formerly *Potamogeton filiformis*) 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.

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. The Braid Hills site was noted previously pre-1863 and the Dalmahoy site pre-1927.

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 pre-1894, and at an unknown site by E.P. Beattie in 1961. Since then, the only other record has been from Midmar Allotments in 2013, where the plant might have

been planted or a throw-out.

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.

Utricularia vulgaris L.

Greater Bladderwort

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Extinct.

Nationally this native perennial has a scattered distribution and is found in base-rich, still or slow-moving water. In Midlothian, in 1824, this species was recorded in a marsh near Ravelrig Toll and it was recorded there repeatedly until 1934. Since then there have been no more records of naturally occurring plants. The one recent record (1988) is of *Utricularia vulgaris* s.l., which was introduced to an artificial pond at Bawsinch SWT Reserve from the Marl Loch at Aberlady. Being a deliberate planting, it is excluded from this Register.

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 hirta L.

Hairy Violet

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

Nationally this native perennial grows in calcareous grassland and scrub from the south of Britain as far north as central Scotland. In Midlothian, in the 19th century and pre-1934, the species was found at Blackford Hill, Corstorphine, Cramond, Currie,

Roslin and Auchendinny, but has not been recorded since.

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 last record of this plant was pre-1934, when it was reported from 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 reported in 1934, but since then there have been no records of *Zostera marina*.

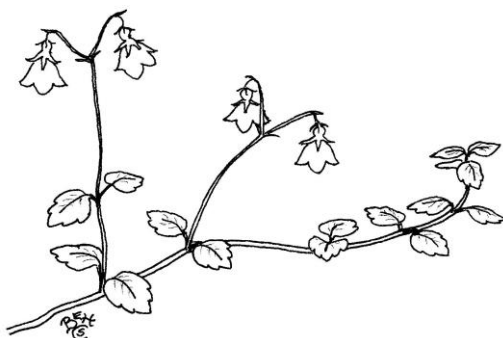
Zostera noltei Hornem.

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, Leith, pre-1934, but has not been recorded since. W.E. Evans collected a specimen near the Queens Hotel, Joppa on 9th May, 1914.



Linnaea borealis, extinct in VC 83 (© B.E.H. Sumner)



Anacamptis pyramidalis, extinct in VC 83 (© B.E.H. Sumner)