

**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.

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Additional Acknowledgements for the Second edition

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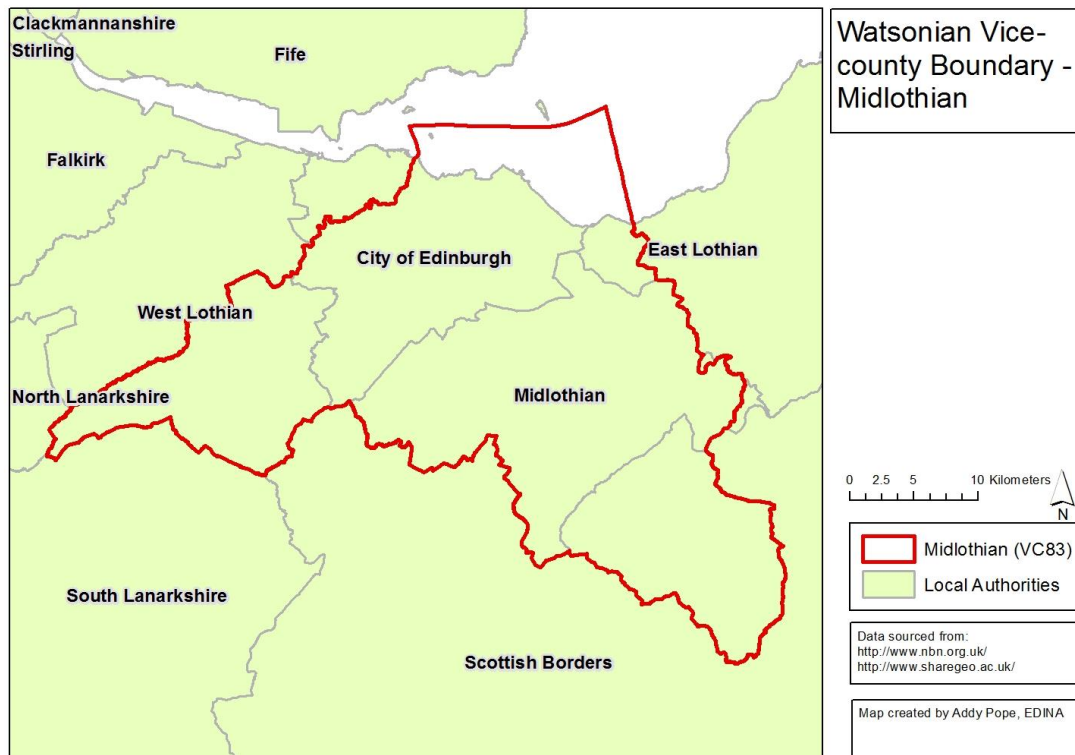
Abbreviations

- 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 thyrsoiflora*, *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 three new entries, *Hammarbya paludosa* (extinct) and *Rubus caesius* and *Umbilicus rupestris* (both extant). *Umbilicus rupestris* 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 429, of which 316 are extant (or presumed extant) and 113 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 | 50 | 7 | 57 |
| 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 | 145 | 48 | 193 |
| Total designated taxa | 227 | 53 | 280 | 80 | 22 | 102 |
| Not designated | 36 | 0 | 36 | 11 | 0 | 11 |
| Total taxa | 263 | 53 | 316 | 91 | 22 | 113 |

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) | 91 | 22 | 113 |
| Total taxa | 354 | 75 | 429 |

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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UK Grid Reference Finder: gridreferencefinder.com

Woodland Trust: www.woodlandtrust.org.uk



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) | NT1867 | 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) | NT2171 | 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 Dörf. (**A. ruta-muraria x A. septentrionale**)

National Status: Rare; IUCN: VU.

Midlothian Status: Rare.

Nationally this native hybrid between two native parents occurs in Cumberland, and historically in central Scotland. In Midlothian 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 glabriuscula Edmondston

Babington's Orache

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

This native annual straggles along beaches around Britain, but is apparently rare in places, even though not designated as nationally scarce. In Midlothian it has been recorded at various places along the shoreline from the east to 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 | NT290756§ | 2013 | Merrick, D. |
| 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 | NT3154 | 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. |
| Hermant House | NT0263 | 1982 | Stewart, N.F. |
| Hermant Quarry & adjacent fields | NT028635 | 05/07/1982 | Stewart, N.F. |
| Bonaly Reservoir | NT2166 | 1985 | McKean, D.R. |
| Gladsmuir | NS919572 | 1992 | Muscott, J. |
| Kitchen Rig | NS9157 | 1992 | Muscott, J. |
| North Esk Reservoir | NT1557 | 1996 | Crowther, N. |
| 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 boeninghausiana Weihe (**C. paniculata x C. remota**)

National Status: Not designated; IUCN: Not designated.

Midlothian Status: Rare.

Nationally this native hybrid sedge is scattered over the British Isles. In Midlothian the only 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 only recent records of this hybrid have been from a marsh and a calcareous flush, both near SSSIs.

| Location | Grid Ref | Date | Recorder |
|---------------------------------|----------|------------|---------------------------------|
| Ravelrig Bog | NT1566 | 1835 | Knapp, J. |
| Gladhouse Reservoir (S of) | NT296502 | 16/08/1997 | Dixon, C. |
| Fullarton Water, south of B6372 | NT283559 | 02/08/2019 | Harmsworth, N.A. & McKean, D.R. |

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 | 06/1995 | 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, Craigentenny 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 |
|----------------------------------|----------|------------|---------------------------|
| Craigentenny | 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. |
|---------------------|-----------|------------|-------------|

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) | NT354576 | 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. |
| 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 | NT253754§ | 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 | NT2872 | 1992 | Muscott, J. |

| | | | |
|--|-----------|------------|---------------------------------|
| Bawsinch) | | | |
| 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. |

Chenopodium 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 Fort Street | NT2676 | 31/07/2018 | Harmsworth, N.A. |
| Water of Leith, east of South Fort 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 Fort 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 | NT462409§ | 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 Craigmillar Castle Park | NT1664 | 20/07/1999 | Muscott, J. & Tebble, M.O. |
| Edinburgh Park Station (waste ground) | NT283706 | 06/2011 | Milne, R.I. |
| | 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 | NT275533 | 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 birchwood, a coniferous plantation, and on a moss with woodland nearby. *Dryopteris dilatata* was present at all three sites, but *D. carthusiana* was not recorded at the Stow site. The grid reference given for the Hermand site is north of Hermand Birchwood SSSI and SWT Reserve. Red Moss is an SWT Reserve within the Balerno Common SSSI.

| Location | Grid Ref | Date | Recorder |
|-----------------------------|----------|------------|---------------|
| Hermand, West Calder | NT0363 | 23/09/1986 | Dyer, A.F. |
| Stow, 4 miles south-west of | NT4339 | 1986 | Thompson, I. |
| Red Moss Wildlife Reserve | 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 (Á. & 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) | NT163707§ | 29/09/2011 | Browning, I.A. |

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

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 | NT276629§ | 23/04/2016 | Muscott, J. & ENHS |

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

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. |
| Vogrie 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, West Calder | 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 | Browning, I.A. & McKean, D.R. |
|----------------------------|--------|------------|-------------------------------|

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 | NT2259 | 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 | NT2259 | 1994 | Dixon, C. |
| Moorfoot Hills | NT2949 | 1994 | McKean, D.R. |
| Hirendeane 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. |
| Hirendeane 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, Craighleith 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. |
| Craighleith Road | NT2274 | 04/04/2004 | Pilling, E.A. |
| Craigentenny | 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. & Velandar, 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 |
|-------------------------|-----------|------------|--------------|
| Trously, 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 bastardii 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. & Squirrell, 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. album** x **G. verum**)

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 | NT24 | 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. |
|-----------|-----------|------------|----------|

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 |
| Monktonhall ping, near Millerhill | NT322704 | 2009 | Milne, R.I. |
| Monktonhall ping, 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 |
| 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. |
| 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. |
|--|--|--|-------------------|

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 Crags, 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 Crags, 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 Howe | 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. |
| Craigentiny | 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 one 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 |
|----------------------------|---------------------|---------|------------------------------|
| 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. |
| Brunstane Castle, Penicuik | NT208583 | 1994 | Dixon, C. |
| Dundreich | NT2949 | 07/1998 | Maxwell, S.A. & McKean, D.R. |
| Caerketton 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. maculatum** x **H. perforatum**)

Des Etang's St. John's-wort

National Status: Not designated; IUCN: Not designated.

Midlothian Status: Scarce.

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

| Location | Grid Ref | Date | Recorder |
|----------------|----------|------|----------------|
| Leadburn, near | NT2456 | 1985 | Cottrell, J.E. |

| | | | |
|---|-----------|------------|-------------------------------------|
| Walltower | NT2457 | 1993 | Cottrell, J.E. |
| Blackhall, south-west of Morton Reservoir | NT0662 | 1994 | Muscott, J. |
| Duddingston Road | NT288721 | 1999 | Luxmoor, S. |
| Granton (Caroline Park) | NT227773 | 04/07/1999 | Pilling, E., Muscott, J. et al. |
| Monktonhall bing, near Millerhill | 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. acutiflorus** x **J. articulatus**)*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 (Habbe'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 | NT2166 | 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 | 05/05/2002 | 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 ruderae 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. |
| Haltree | 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. repens* x *L. vulgaris*)**

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 bing (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 bing (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 bing, 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) | NT162623 | 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. |
| Livingston (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. |
|---------|--------|------|----------------|

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. |
| 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. |

Omalotheca 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 (Torphin 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 (Craigs) and Tynehead. In 1841 numerous plants were found in meadows in the parish of West Calder. In 1934, Ravelrig, Balerno and Ratho yielded records.

| 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. |
| Hermant Quarry | NT029635 | 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. |
| Birnie Rocks | 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 | NT003626 & 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. |
| Hermant Quarry (east bank of river) | NT029637§ | 22/07/2012 | Wilcox, M. & Sumner, B.E.H. |
| Hermant 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 SSSI) | NT070641§ | 23/06/2015 | Sumner, B.E.H. |
| Hermand Quarry | NT029635§ | 08/07/2015 | Sumner, B.E.H. |
| Saw Mill Cottage, Annetcross 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 | NT283664 | 25/09/1993 | McKean, D.R. |
| Seafield | 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. |
| Craigentenny | 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. interjectum** x **P. vulgare**)

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. crispus x P. perfoliatus**)

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. |

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 |

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** 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. veris x P. vulgaris)

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. Two records of planted trees have been omitted from the assessment of scarcity and from the table below. One record was from Gogar Station in 1992 and the other (dated 2013) was from the disused railway between Quarryholes and Seafield, where much planting had occurred, e.g. west of Restalrig Road Bridge. In 1809 and 1824 it was found in the Pentland Hills and in 1863 and 1894 at Dalmahoy, Corstorphine, Colinton and Lasswade.

| Location | Grid Ref | Date | Recorder |
|-------------------------------|----------|------------|---|
| River Almond, Cramond Bridge | NT17 | 1956 | Beattie, E.P. |
| Broomhill House | NT3166 | 02/06/1976 | Stewart, O.M. |
| Hallyards, Kirkliston | NT1273 | 1984 | McKean, D.R. |
| Blackford Hill | NT257706 | 1992 | McKean, D.R. |
| Gogar Station | NT1771 | 1992 | McKean, D.R. |
| Seafield | NT019662 | 1994 | McKean, D.R. |
| Old Church Lane, Duddingston | NT283727 | 1998 | McKean, D.R. |
| | | | McKean, D.R., Sumner, B.E.H. & TWIC |
| Water of Leith, Currie | NT1867 | 15/07/2012 | |
| 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 | NT3673 | 10/08/1970 | Beattie, E.P. |
| Musselburgh Lagoons | NT3673 | 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. |
| Oxenford 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 Brampton Lodge | NT1570 | 11/09/1978 | Beattie, E.P. |
| Carlops, east of | NT1656 | 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 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 Hirendeane 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. |
| Hirendeane 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 hedgerbanks 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 hedgerbanks, 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. |
|------------|------|------|------------------|

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. crispus** x **R. longifolius**)

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 | NT274728§, NT274729§ & NT273729§ | 20/05/2014 & 04/06/2015 | McIntosh, J.W., Cole, E. & McCabe, M. |
| 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. (det.) |
| 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. aurita x S. cinerea**)

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 | Howitt, 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, L. |
| 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) | NT2755 | 1991 | Bland, K.P. |
| Cockmuir Farm | NT2655 | 1998 | McKean, D.R. |
| Thornybank, 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§ | 04/05/2018 | 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, streambanks 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. |

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, Agassiz Rock and Roslin Glen are SSSIs. Holyrood Park is within Arthur's Seat Volcano SSSI. Midlothian habitats recorded for this plant have been waste and disturbed ground, amenity grounds, pathsides and roadsides, dry turf, 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. |
| 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. |
| Agassiz Rock | NT259702§ | 31/05/2016 | Maguire, W. |
| 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. |

Smyrniurn 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. |
| 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. |
| Water of Leith, Bell's Mills area (bank behind Gallery of Modern Art) | NT233737 | 14/04/2014 | Muscott, J. |
| 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 | NT2772§, NT2773§, NT2873§ | 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. |
| Vogrie 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. |
| Seafield | 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. & McKean, D.R. |
| 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 | Pankhurst, R.J. |
| Musselburgh | 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 | 16/05/1973 | 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 | NT4439 | 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.

Globoseflower

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Scarce.

This showy native perennial is locally distributed in northern Britain, in damp grassland and woods, often in upland areas. In Midlothian since 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. A record from Johnston Terrace SWT Reserve in 1991 has not been included in the *Register* in case the species was planted. 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. |
| North Esk Reservoir, south of | NT155577 | 22/06/2003 | Sumner, B.E.H. & LWIC |
| 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, near to the Craigenar SSSI and SAC.

| Location | Grid Ref | Date | Recorder |
|------------|----------|------|--------------|
| Bawdy Moss | NT0656 | 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 form the North Esk Valley SSSI. Calder Wood is also a SSSI. 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. |
| Fala Moor (marsh south of) | NT429571§, NT430572§ & NT431572§ | 19/06/2017 | Sumner, B.E.H. |

Valerianella carinata Loisel.

Keel- 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 Volcano SSSI | NT269729§ | 20/05/2014 | McIntosh, J.W. 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. |
| Gladsmuir | 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 (Kaimes), 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. Albans Road (2 nd site) | NT259713 | 2016 | Kilpatrick, A. |
| Dean Cemetery | NT237740 | 08/02/2016 | Maguire, W. |
| Sunbury Place, Edinburgh | NT238738 | 29/01/2017 | Harmsworth, N.A. |
| St. Albans Road (2 nd site) | NT259713§ | 14/07/2017 | Sumner, B.E.H. |
| Modern One | NT233738§ | 12/2017 | Muscott, J. |
| Modern Two | NT236737§, NT236738§, 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 | NT2570 | 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 Seafield. In 1906 the plant was at Leith Docks and in 1914 at Duddingston Station.

Agrimonia procera Wallr.

Fragrant Agrimony

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Extinct.

This native perennial is scattered through Britain in grassy fields and hedgerows. In Midlothian the species has not been recorded since 1940, when it was seen at Hallyards.

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. septentrionale x A. trichomanes)

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.

Chenopodium 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 *Dactyloдения st-quintinii* (Godfery) J. Duvign.
(*Gymnadenia borealis* x *Dactylorhiza fuchsii*)

National Status: Not designated; IUCN: Not designated.
Midlothian Status: Presumed Extinct.

This native hybrid orchid is said to be the commonest of three X *Dactyloдения* hybrids in northern England and Scotland. In Midlothian the orchid was last found on 14/07/1936 by W. Handyside, on a heath at Balerno.

Dryas octopetala L.

Mountain Avens

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

This native perennial is very local in Britain, in the north of England and the north and west of Wales and Scotland. It is found on base-rich mountain rocks (on ledges and in crevices). In Midlothian the species was recorded at Levensat (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.

Hammarbya paludosa (L.) Kuntze

Bog Orchid

National Status: Not Scarce; IUCN: LC.

Midlothian Status: Extinct.

This native orchid was named *Ophrys paludosa* by Linnaeus, but in 1891 Otto Kuntze changed the genus name to *Hammarbya*, commemorating Hammarby, which was Linnaeus's summer residence. The species is found on wet *Sphagnum* bogs and was formerly scattered through much of Britain and Ireland. However, it is now very rare, except in west-central and north-west Scotland, and parts of southern Hampshire and central Wales. In Midlothian this orchid was recorded flowering on the side of Lochend Loch on 11th July, 1764, 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 Crags.

Juncus compressus Jacq.

Round-fruited Rush

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

This native perennial is scattered in Britain north to Central Scotland, and is found in water meadows and marshes, often coastal. In Scotland the plant is recognised as rare by the SBL. In Midlothian the species has not been recorded since 1934, when it was found in moist places at Ravelrig and along the coast from Granton to Cramond.

Lepidium 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 urbica (L.) S. Fuentes, Uotila & Borsch

Upright Goosefoot

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

This annual archaeophyte (formerly *Chenopodium urbicum*) 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 Hestl.-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 Craigcrook, and in 1863 not only at Craigcrook, 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.

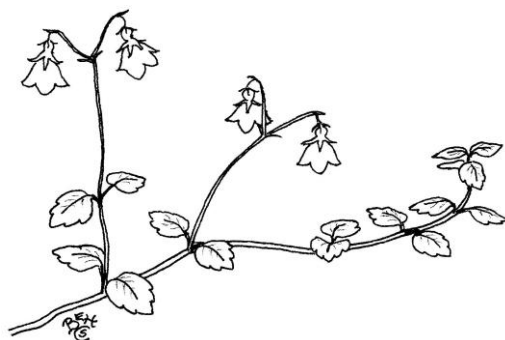
This native marine perennial is scattered around British coasts and estuaries, especially in the west. It is found from half-water mark to below low-water mark. Narrow-leaved plants were formerly thought to be a separate species, *Zostera angustifolia* Rchb., but are now regarded as a variety or growth 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)