

UPDATED VASCULAR PLANT CHECKLIST AND ATLAS FOR THE FALKLAND ISLANDS

2014

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Falkland Islands Government

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1. INTRODUCTION

1.1 History of botanical study

This checklist and atlas builds on a long history of botanical study in the Falkland Islands. The most comprehensive recent publications are those of Moore (1965, 1983) & Broughton & McAdam (2002a, 2002b, 2005). Moore summarised the history of botanical study and produced the first and only flora to date of the Islands, whilst Broughton & McAdam produced checklists and the first atlas of the flora, based on extensive systematic surveys which sampled a wide range of habitats and locations. The documents stand as important benchmarks of our increasing knowledge of the Falklands' flora and we direct readers to these publications for more information on previous botanical studies in the Falkland Islands.

1.2 The need for an updated checklist and atlas

The most recent checklist of the native flora of the Falklands was published in 2005 (Broughton and McAdam, 2005) and that for the introduced flora in 2002 (Broughton and McAdam, 2002a). The only atlas for the flora, which covers both native and introduced taxa, was published in 2002 (Broughton and McAdam, 2002b). All these publications are based on data gathered prior to 2002 (Broughton & McAdam, 2002b). An interval of over 10 years warrants re-surveying of sites and presenting new data accumulated in this period. Surveys of islands in recovery from grazing have shown that changes in management practices such as these can allow colonization by new species within 20 years (R. Upson, pers. comm. 2012).

Significant targeted botanical survey work was carried out between 2007 and 2012, resulting in a major increase in data, including records of new species and improved distribution data. It is therefore timely, ten years on, to produce an updated checklist and atlas to the vascular flora of the Falkland Islands. These additional data accumulated since 2002 have come from a range of sources which are summarized below. The majority of these data were collected during surveys by the authors during 2007-2013. During this period Rebecca Upson's surveys were primarily targeted at rare and threatened native species and habitats, whilst Richard Lewis's surveys were mainly focused on introduced species and anthropogenic or disturbed habitats.

1.3 Native plants projects

Since 2002, Falklands Conservation has undertaken two major OTEP-funded projects focused on native plants. Dr. Rebecca Upson was the project officer for both, with the first running from 2007 to 2009 and the second running from 2009 to 2011. The first project, entitled 'Falkland Islands Plants Conservation Project' had a focus on surveying new potentially suitable areas not covered in the previous Falklands plant atlas - informed by local knowledge and species distribution modelling carried out at RBG Kew - and areas of botanical significance studied at a finer scale. International Important Plant Areas were defined and plant community data gathered for all to enable habitat mapping once suitable satellite imagery is available. Links with the Millennium Seed Bank were strengthened and both this and the National Herbarium collection were further developed. All botanical records made are geo-referenced to enable repeat long term monitoring. Surveys were conducted to inform species and habitat action plans. Long term monitoring plots were also set up on an East Falkland Farm where a rotational grazing trial was put in place by the Department of Agriculture. This series of exclosures and grazed plots will provide valuable insights into processes of succession and long term data on the impacts of an altered grazing regime on plant communities.

The second project, entitled 'Falkland Islands Native Plants Programme' built on previous projects, to continue to improve the knowledge regarding distribution and status of threatened plant species but also furthered action on sites and devised a monitoring strategy for Important Plant Areas along with suggested management actions for all sites. The habitat classification system was updated using the improved knowledge gained from vegetation surveys at further sites across the Islands. A native plant nursery was

set up with local business Stanley Growers to encourage gardeners to use native species as well as to act as support for specific restoration projects.

1.4 Invasive plants projects

Since 2002, three projects have included survey and research on introduced plant species, all of which have led to increased knowledge of the species present as well as their distribution and abundance. These were developed in response to increasing concern regarding the potential impacts of invasive non-native plants on biodiversity and economic activity, especially agriculture.

The South Atlantic Invasive Species Project 2006-2009 was managed by the RSPB with funding from the EU. FC and FIG were partners in the project, which was also supported by RBG, Kew. This project looked at all introduced taxa across all 5 South Atlantic UKOTs and within the Falklands, invasive plants were highlighted as a particular area of concern and action. As part of this project, B. Summers, R. Lewis and others undertook a range of actions, including surveys to identify and map naturalised and cultivated taxa; risk assessment of introduced species and targeted control of some species.

In 2009-10, R. Lewis undertook further work in the Falklands with support from FC and funding from FIG and the Bentham-Moxon Trust at RBG, Kew. This included several actions, such as drafting a species action plan for thistles (*Cirsium* spp.) and further surveys of naturalised and cultivated plants, as well as a focus on prioritisation and of species with limited distributions for early intervention, control and eradication.

The third project ran from 2011-13 and was managed by FC with funding from Defra and included drafting a national strategy for invasive plants; further surveys; and as well as baseline mapping and control of a range of priority species, for early intervention and eradication.

1.5 Other data sources

In addition to the above projects, botanical records have also been obtained from a range of other sources since 2002 including data from volunteer recorders. The following are a list of key additional data sources:

- Sally Poncet - Beaver Island Landcare project work (ongoing)
- RBG Kew – members of the UKOTs team (Colin Clubbe, Martin Hamilton, Tom Heller, Kit Strange, Marcella Corcoran) visiting the Islands to assist project officers (ongoing)
- Alicky Davey – project officer for the DARWIN Challenge Fund project ‘Developing Native Seed Mixes for Habitat Restoration’ (2012-13)
- Margaret Carr – project officer for the Mohamed bin Zayed Species Conservation Fund project to assess the current status of *Nassauvia falklandica* (2011-2013)
- Additional historical records from herbarium specimens held at RBG Kew

2. METHODOLOGY

2.1 Data management and storage

All recent data were collected using standard recording protocols in line with the data gathering standards of the UKOTs Conservation Program at RBG, Kew (Hamilton, 2008). Data from an existing Access database compiled for the 2002 Atlas, including large datasets collected by both Moore and Broughton & McAdam (Broughton & McAdam, 2002a), were transferred to fit this same format. The combined dataset comprises c. 66,000 individual vascular plant records.

The combined records are stored as dbf files and organized using the Botanical Research and Herbarium Management System (BRAHMS); these can be viewed directly within GoogleEarth, or easily exported into formats compatible with Geographical Information Systems such as ArcGIS or QGIS. This allows mapping and visualization of the dataset. The data are owned by the Falkland Islands Government, held by Falklands Conservation in Stanley and managed by RBG Kew.

These different data sources inevitably include different data of different qualities, collected to different data standards. In particular unification of the habitat classification system used in data collected prior to the 2007 is ongoing and may be impossible in some cases where insufficient information was recorded at the time.

2.2 Survey methods and coverage

2.2.1 Field data capture

Most data, including all data collected by the authors, was collected using handheld personal digital assistants (PDAs) (Fujitsu-Siemens LOOX N560) with an in-built Global Positioning System (GPS) to record survey data in the field. These were housed in waterproof cases (Otterbox, 2009). Running ArcPad software (Version 7.1) developed by ESRI (ESRI, 2009), a set of dropdown menus and freestyle text fields (Hamilton, 2008) were used in order that survey data could be collected in a consistent manner.

Additional data were also gathered by volunteers using Falklands Conservation's recording sheet which is based on a simplified version of this protocol (see Appendix 4 in Upson, 2012a)

Habitat types were identified in accordance with the updated habitat classification for the Falkland Islands (Upson, 2012a), which is presented in Appendix II.

2.2.2 Native and Invasive Plants Projects

The main focus of the 2007-2011 OTEP-funded field work was the identification of Important Plant Areas across the Falkland Islands (Upson, 2012a; Upson *et al.* 2011). Unlike surveys carried out specifically for the production of the first Falkland Island plant atlas (Broughton and McAdam, 2002a) this most recent sampling was biased towards a range of target sites for threatened species and habitats. The latest surveying builds on the 'coarse-grid' approach taken by Broughton and McAdam (2002a) by focusing instead on the collection of detailed geo-referenced, finer-scale data. A range of different surveys were carried out during the period between 2007 and 2012, and all data were gathered at a resolution well below the 1 km grid square scale.

Surveys specifically targeting introduced plant species were undertaken in 2008-9 and 2011-13. Previous records indicated that the majority of introduced species are most abundant in disturbed anthropogenic habitats, so these habitats were targeted for detailed surveys.

These included inhabited and abandoned settlements, isolated farmhouses and 'shanties' (remote houses used as temporary accommodation for farm workers), as well as areas of military activity. Herbarium vouchers were collected for most taxa encountered, with particular emphasis given to any additions to the checklist and cryptic species.

Species records originate from the following survey methods:

- Vegetation Assessment Points (VAPs)
 - Standardized recording sheets were used to provide geo-referenced target notes on the vegetation of the target site. The target notes included a description of the plants present, their relative abundance in the community, aspect, soil, disturbance level etc and any general observations on habitat condition (adapted from Hamilton, 2008). Where possible a photograph was taken at each recording site (images stored on Falklands Conservation's server).
 - For areas surveyed under the native plants projects, representative locations were chosen based on the patterned arrangement of species over the ground and any vertical layering (JNCC, 2006). Relative abundance was estimated in 5x5m quadrats using % ground cover (to the nearest 5 %; JNCC, 2006). This was repeated for at least 3 examples of each of the dominant habitat types (e.g. Upson, 2011a; Upson, 2008a,b,c,d). Geo-referenced panoramic views were also photographed on selected sites to aid with habitat mapping and long-term monitoring.
 - Where long term studies were established, quadrats were used to allow repeated surveys in a reasonable time-frame (e.g. Upson, 2008b)
 - For anthropogenic habitats, plot size for VAPs was typically a single garden or entire patch of anthropogenic habitat.
- Species Assessment Points (SAPs)
 - As for VAPs, standardized recording sheets were used to provide geo-referenced data on individual populations of target species, including new species records, threatened, rare or little-known species and potentially invasive species. Adapted SAPs were also used where material was collected, including herbarium vouchers, DNA samples and seed collections. In addition to recording the same basic site data as described above, standardized data were gathered on habit, flowering, fruiting and where possible on the number of mature individuals, any signs of recruitment and associated species (e.g. Upson, 2011).
 - Volunteer records were made using Falklands Conservation's recording sheet which is a simplified version of a full SAP, designed to capture essential information (see Appendix 4 in Upson, 2012a)
- Transects – species recorded along a line, taking the form of
 - The line intercept (Sutherland, 2009) method in combination with VAPS to establish long-term studies of vegetation on New Island and Middle Island (Upson, 2011b; Upson and Woods, 2010)
 - Pre-determined lines were walked and a series of VAPs made along the transect, with representative sites selected as explained above for VAPs (e.g. Upson, 2009) – this was carried out to develop the habitat classification and aid habitat mapping efforts once good quality imagery becomes available
 - Informal transects were carried out as part of larger surveys between VAPs and SAPs. The start and end points were recorded along with a species list and abundance estimates where possible
- Small Island Species lists – whole Island surveys were carried out by:
 - Robin Woods (e.g. Woods, 2009)
 - Sally Poncet as part of various Beaver Island Landcare projects (e.g. Passfield and Poncet, 2009)
- Ad hoc records made by local/ visiting naturalists and reported to Falklands Conservation

2.3 Mapping

Two categories of data are mapped, recent data and historic data. All records prior to 1980, including those inherited from the flora of David Moore, have been mapped as historic data (grey dots), whilst all records since 1980 have been mapped as recent data (black dots). This differs from the previous vascular plant atlas (Broughton and McAdam, 2002a) where the cut-off point was 1964.

The atlas maps were produced using ArcGIS® software by Esri. Data were mapped to the highest degree of accuracy possible, which varied between different data sources. Lat-long point data with an accuracy of under 10 m were available for most records since 2007; and 1 km grid square data were available for most data collected by Broughton and McAdam (2002a). Latitudes and longitudes were assigned to historical records which contained geographical location information using standard gazetteers from either the Falkland Islands Biodiversity Database (version 6) or RBG Kew. A gazetteer is a geographical directory; the gazetteers used for the current atlas provide the geographical coordinates for a given place name in the Falkland Islands. In all cases the accuracy of the mapping is noted within the database. Any records which cannot be confidently located within a 10km grid square have been excluded from the maps.

All data has been projected using WGS 1984 within Zone 21 of the Universal Transverse Mercator (UTM) grid.

3. CHECKLIST AND ATLAS OF THE FALKLAND ISLANDS VASCULAR FLORA

The full checklist and atlas is presented in Appendix I and lists of taxa of uncertain status and excluded taxa are presented in appendix 2.

3.1 Scope

The checklist includes all currently recognized native genera, species, subspecies, varieties and hybrids known to occur, or to have once occurred, in the Falkland Islands and all introduced taxa that are found outside of cultivation.

Introduced taxa that are solely found in cultivation are not included in this checklist. However, when recording plants during fieldwork it did not always prove straightforward to draw a clear line between cultivated and non-cultivated plants. In response to this, we have attempted to create and apply objectively defined categories which are relevant to local social and environmental conditions in the Falklands and which can be readily applied in future recording efforts. These are outlined in section 3.5.

A critical approach was taken in compiling this checklist. All species recorded here as native or probably native are supported by both field observations and determined voucher specimens. Recent surveys have attempted to collect verified voucher specimens and detailed georeferenced data of all introduced species encountered. However, not all previous surveys have provided this level of evidence and some specimens and records have been redetermined or questioned. Consequently, some introduced taxa are not included on the checklist as there is now doubt as to the reliability of these records. These taxa are instead included in the lists of species of uncertain status and excluded species.

3.1.1 Checklist

All introduced species are retained on the checklist where a reliable voucher specimen from a non-cultivated plant is available. Only two vouchered taxa have not been included, where it is believed that the historic specimens may be mislabelled and do not originate from the Falklands. Unvouchered taxa are included only if misidentification is unlikely as no similar species are known to be present in the Falklands.

3.1.2 Species of uncertain status

Where evidence for the presence of a taxon within the Islands is inconclusive it is included as being of uncertain status. This covers a range of issues, including:

- Historic herbarium vouchers which may not have been collected in the Falklands.
- Published checklists where vouchers are unavailable and misidentification is likely due to the confirmed presence of similar taxa.
- Unpublished checklists without location details or further evidence
- Photographic records where further work is needed to confirm species identity and location.

3.1.3 Excluded species

This covers species which have previously been reported in published literature (Moore, 1968; Broughton & McAdam 2002) but where evidence indicates that these were erroneous. This includes two categories:

- Existing herbarium material has been redetermined and all recent field records support this.
- Tentatively included by Moore (1968) but excluded by Broughton & McAdam (2002) and recent surveys have not recorded these taxa.

3.2 Format

All taxa are arranged into four main groups: Club-mosses (Lycopods), Ferns and Horsetails (Monilophytes), Conifers (Gymnosperms) and Flowering Plants (Angiosperms). Within each of the latter groups, taxa are

arranged alphabetically by family, genus and species. This format is used for the checklist and atlas as well as the separate lists of taxa of uncertain status and excluded taxa.

3.2.1 Species accounts

Species accounts are laid out in the format summarized in Table 1. If data for a given category is absent then that entry is omitted from the checklist.

3.2.2 Distribution maps

Maps are provided for all native and the majority of introduced taxa included in this checklist. Introduced taxa known from only one 10 km grid square are not mapped but their distribution is noted in the checklist.

The maps are based on a grid of 10 x 10 km squares overlying the whole of the Falkland Islands and relating directly to Zone 21 of the UTM grid (GPS Datum WGS 1984). A total of 259 10 km grid squares overlie the land areas of the Falkland Islands.

Dots indicate the presence (not abundance) of a given species. The absence of a dot means that it has not been recorded, but due to limitations in survey effort, this does not necessarily indicate that it is absent. Red dots and yellow dots represent records made prior to 1980 and after 1980, respectively.

The distributions of some taxa of the genera *Gamochaeta*, *Luzula*, *Sambucus*, *Trisetum*, *Ribes* and *Narcissus* are very poorly known due to confusion in distinguishing between two or more similar taxa. Records for these taxa are therefore mapped together so as to avoid confusion and enable the use of records which were not identified to the lowest taxonomic level.

Table 1: Description of categories used in checklist.

Category	Explanation		
Name, author and citation	Currently accepted name, author and citation of first publication. An asterisk in front of the name indicates a new record for the Falkland Islands		
Synonym(s)	List of synonyms that have appeared in selected previous literature (Broughton and McAdam, 2002a, 2002b, 2005; Moore 1968, 1983)		
Local name	Local name(s) for species in the Falkland Islands		
Description	A brief description of the taxon including life-form, habit and maximum height (if appropriate)		
Phenology	Months within which flowering has been recorded		
Habitat	A list of the most frequent habitat types within which a taxon has been recorded; following the habitat classification detailed in Appendix III.		
Status	The Falkland Island biogeography of taxon; abundance; and distribution		
	Biogeography	Native	Taxa that are considered to have colonized the Falkland Islands through natural processes
		Endemic	Taxa which are native only to the Falkland Islands and no other country
		Near endemic	Taxa which are native only to the Falkland Islands and one or two other locations.
		Introduced	Taxa that arrived on the Falkland Islands as a result of human activity
		Probably native	Taxa where available evidence suggests a native origin, but this is not fully conclusive
Abundance	These categories are based on the number of 10 km grid squares a taxon occurs in:		
		Very Rare:	< 5
		Rare:	5-15
		Scarce:	16-30
		Occasional:	31-65

	Frequent:	66-130
	Common:	131-195
	Abundant:	196-259
	N.B. At present the 'abundant' category is not possible owing to the extent of survey work	
	Distribution	Notes on the distribution or mapping of the taxon.
National Red List Category	For native, endemic and near-endemic taxa: threat of national extinction (following IUCN 2001 categories and criteria (version 3.1)). For endemic taxa, this is also the global threat category: CR: Critically Endangered EN: Endangered VU: Vulnerable NT: Near Threatened DD: Data Deficient LC: Least Concern	
Conservation measures	For native taxa a summary of key conservation action which has taken place:	
	CITES	Taxon is included on Appendix II of the Convention on International Trade in Endangered Species
	National protection	Taxon is protected by the Conservation of Wildlife and Nature Ordinance 1999, FIG
	Action Plan	A brief individual Action Plan has been produced for this taxon
	DNA collection	Material has been collected for DNA banking at RBG Kew
	Seed collection	Seeds are stored in the Millennium Seed Bank (exact seed numbers or over 1000 seeds)
	ID guide	If threatened, whether a species identification guide is available
Naturalisation Notes	For introduced species: Naturalised status; Presence; Invasive species actions; Cultivation	
	Naturalised status	Naturalised Observed to reproduce sexually or vegetatively outside of cultivation
		Persisting Persisting after cultivation in windbreaks, plantations or abandoned gardens
		Casual Present outside of cultivation but not observed to reproduce sexually or vegetatively
		Unknown Not recorded since 2007 and no data are available to assign to a category
	Presence	Possibly extirpated May be locally extirpated and no longer present in the Falklands, but data are limited
		Probably extirpated Believed to be locally extirpated and no longer present in the Falklands
	Invasive species action	Action Plan A full Invasive Species Action Plan has been developed for this species
		High risk Species which have been assessed as potentially high risk of being invasive
		Moderate risk Species which have been assessed as potentially high risk of being invasive, but further data are required
		All plants controlled Control of all known mature plants has occurred, though seeds or propagules may remain.
		Some plants controlled Control of some plants has occurred, though seeds or propagules may remain.
	Cultivation	Taxa which are known to be cultivated in the Falklands for ornament, lawns, food, fodder, pasture, shelter or forestry.
Distribution	The global native range of taxon	
Nomenclature notes	Notes where nomenclature or taxonomy is not fully resolved; taxonomic changes since Moore (1968); and previous misidentifications	

3.3 Nomenclature and taxonomy

3.3.1 Plant families

Family classification of Club-mosses, Ferns and Horsetails follows Christenhusz et al (2011) the flowering plants follows APG III (2009) (See also Stevens, 2001 onwards). This is largely in line with the previous classification used in Broughton & McAdam (2002), though some changes affect the Falkland flora. These are listed in table 2.

3.3.2 Genera and species

Genera and species primarily follow The Plant List (2010). However The Plant List is a work in progress, with many names not yet fully resolved, so it has been necessary to cross-reference with additional sources. The major additional sources used were: Flora del Cono Sur (2009) for native taxa, Stace (1997) for introduced species, Cope & Gray (2009) for introduced grasses and Zuloaga *et al.* (2012) for native grasses. Where The Plant List conflicts with other sources, this is noted in the checklist under 'nomenclatural notes'.

After the above investigations, the following taxa remain unresolved in terms of their taxonomy: *Agoseris coronopifolium*, *Agrostis magellanica*, *Grammitis kerguelensis*, *Nastanthus falklandicus*, *Plantago moorei*, *Schizeilema ranunculus*. Resolution of these issues awaits further study by the botanical research community.

Table 2: Summary of changes to familial classification since Broughton & McAdam (2002)		
Previous classification	Current classification	Genera affected
Ferns and Horsetails		
Woodsiaceae	Cystopteraceae	<i>Cystopteris</i>
Flowering plants		
Aceraceae	Sapindaceae	<i>Acer</i> *
Agavaceae	Xanthorrhoeaceae	<i>Phormium</i> *
Alliaceae	Amaryllidaceae	<i>Allium</i> *
Callitrichaceae	Plantaginaceae	<i>Callitriche</i>
Caprifoliaceae	Adoxaceae	<i>Sambucus</i> *
Chenopodiaceae	Amaranthaceae	<i>Atriplex</i> , * <i>Chenopodium</i> , <i>Suaeda</i>
Fagaceae	Nothofagaceae	<i>Nothofagus</i> *
Fumariaceae	Papaveraceae	<i>Fumaria</i> *
Hyacinthaceae	Asparagaceae	<i>Hyacinthoides</i> *, <i>Muscari</i> *
Philesiaceae	Alstroemericaceae	<i>Luzuriaga</i>
Portulacaceae	Montiaceae	<i>Montia</i>
Scrophulariaceae	Calceolariaceae	<i>Calceolaria</i>
Scrophulariaceae	Orobanchaceae	<i>Euphrasia</i>
Scrophulariaceae	Plantaginaceae	<i>Veronica</i>
Valerianaceae	Caprifoliaceae	<i>Valeriana</i> , <i>Valerianella</i> *

* indicates genera only represented by introduced species in the Falkland Islands

3.3.3 Intraspecific taxa

Nomenclature of intraspecific taxa largely follows the same sources as for species. Moore (1968 & 1983) makes reference to a few native intraspecific taxa which are not cited by other references. A few introduced intraspecific taxa are not recognised by any of these sources and nomenclature follows the RHS Database (2011). This is most notable for cultivars, many of which have not been formally published and do not have a botanically accepted name.

These exceptions are all retained, pending greater clarification of their status and are noted in the 'nomenclatural notes' section of the taxon entry.

3.3.4 Synonyms

The most recent synonyms in use are indicated where relevant but a full list of synonyms is not attempted as these are well covered in the Plant List (2010), the Flora del Cono Sur (2009) and Moore (1968, 1983).

3.3.5 Local names

Local names follow Broughton and McAdam (2002a) except for *Senecio littoralis* and *S. vaginatus* which have been renamed the Falklands Woolly-daisy and Falklands Smooth-daisy, respectively.

Interim common names have been given to newly recorded species, both native and introduced, however these may change once further discussion within the community has taken place.

3.4 Biogeographic status

See Table 1 for a summary of the different biogeographic status categories included here and section 4.4 for a discussion of application of the terms 'native' and 'probably native'.

3.5 Naturalisation notes

3.5.1 Introduced status

All introduced taxa have been assigned to one of the following categories:

1. **Naturalised:** Taxa which show evidence of unaided reproduction (either vegetative or sexual) and are either found outside of gardens or, if only found within cultivated gardens are regarded as 'garden weeds' (taxa which are not intentionally cultivated in the Falklands). This includes any taxa from any of the other categories below, where these are found to reproduce unaided.
2. **Casual:** Taxa which are found outside of cultivation, but do not show evidence of unaided reproduction. For example, this includes taxa that grow from accidentally introduced 'weed' seeds or propagules and taxa that grow from dumped garden waste.
3. **Persisting after cultivation:** Taxa that are cultivated but do not show evidence of unaided reproduction and are either:
 - a. Only found persisting in gardens associated with houses or settlements which have not been permanently occupied or cultivated for at least 3 years. Taxa are only assigned to this category if the entire settlement is uninhabited and uncultivated. Where uninhabited houses are present within an otherwise occupied settlement, associated garden plants are treated as being in cultivation.
 - b. Intentionally planted outside of gardens, eg. for shelterbelts or forestry, or in cemeteries outside of settlements.
4. **Unknown:** Taxa which have not been recorded during recent survey work, and no data are available to confidently assign them to a category.

The categories were developed in response to the specific conditions of the Falklands and in response to a complex dataset that included many records from cultivated gardens and strongly anthropogenic habitats.

The following factors influenced the development of these categories:

- We have decided on a broadly inclusive checklist which not only includes well-established naturalised species, but also includes a number of species that may turn out to be transient.
 - Surveys usually capture a snapshot in time and do not record the process of a species' establishment. When a single individual or small population is found, it is not possible to know whether that population is transient and likely to die out soon, or whether it will persist and spread. This is evident as some species recorded as well-established in 2002 have not been refound and are believed to have become locally extirpated. Taking a more inclusive approach also avoids the need to make subjective decisions on the likely persistence of a species.
 - Including a broader range of species in the checklist will allow a better understanding to be gained in the future of patterns of establishment, identifying which species fail to establish as well as those that do eventually become establish.
 - The most difficult group of species to assign were those persisting after cultivation. A number of settlements and isolated houses in the Falklands are no longer permanently occupied, often these were abandoned after extensive reform of land ownership in the 1980s. A distinctive suite of species often persist (but do not reproduce) in some of these locations, which can be in remote isolated places. It has not proved possible to define this category as succinctly as we would like and it is possible that in future this category may need to be changed if some sites may become occupied again, or other settlements become unoccupied.
5. The category of 'Invasive' was not used here, as this term is subject to a range of different interpretations by different authors. Using this term would have required a more or less subjective decision to be made on the impacts of species on other vegetation. This is often unclear, especially in the early stages of invasion and is an understudied area in the Falklands, so many decisions would have been inaccurate due to insufficient data. However, species that are recognised as being invasive or potentially invasive in a risk assessment, or which have been subject to control are identified in the checklist, though some control actions have been precautionary rather than in response to observed impacts.

3.5.2 Local extirpation

Many species which have been recorded in the past have not been recorded in recent years and are believed to no longer be present in the Falklands. However, due to the large area of the Falklands, much of which remains unsurveyed, it is rarely, if ever possible to be confident that no individuals remain, especially where a persistent seedbank may be present. It is also possible that some introduced taxa may be re-introduced after local extirpation, especially for taxa which remain present in cultivation.

Two categories are recognised:

Probably extirpated

Species which fit one of the following categories are recorded as 'Probably Extirpated'.

- Not recorded since 1968
- Recorded prior to 2002, where targeted follow-up surveys have failed to re-find that species
- Only a single individual recorded, this was removed and there is no evidence of reproduction

Possibly extirpated

Species which fit one of the following categories are recorded as 'Possibly Extirpated'.

- Recorded after 1968 but not recorded since 2002, though not all recorded locations have been re-surveyed
- Small number of plants recorded since 2002, all individuals removed or controlled and seedbank likely to be small or absent, but some seeds or rhizomes may have survived

4. CURRENT STATUS OF THE FALKLAND ISLANDS NATIVE VASCULAR FLORA

4.1 An overview

181 plant taxa (including one hybrid) are considered native or probably native to the Falkland Islands; 14 (8%) of these taxa are recognised as endemic. The native flora is represented by 59 families and 122 genera, including one endemic genus *Phlebotobium*.

The most species-rich vascular plant family in the Islands is the Asteraceae with 25 species. Table 3 summarises the plant families represented by five or more species.

Family	Number of species
Asteraceae	25
Cyperaceae	19
Poaceae	17
Ranunculaceae	10
Apiaceae	9
Rosaceae	6
Orchidaceae	5
Caryophyllaceae	5
Brassicaceae	5

The most species-rich genus is *Carex* with 13 species; this is followed by *Ranunculus* with 7 species, *Acaena* with 5; and *Hymenophyllum*, *Gamochaeta* and *Azorella* which all have 4 species.

Taxonomic and ecological research is limited for many southern hemisphere plant taxa and there remain a number of uncertainties:

- The recent recognition of *Calceolaria fothergillii* as endemic following detailed taxonomic study indicates that other species currently regarded as native may prove to be endemic species or subspecies if these genera are studied in more detail.
- Due to lack of a clear taxonomy, it has not been possible to confidently name one species, which is regarded here as *Calandrinia cf. nitida* (see section 4.4.1)
- Specific taxonomic questions are raised for a further nine taxa, these are discussed in section 4.4.2

The status of four species as native or introduced is not completely resolved. Currently available evidence suggests that all are likely to be native and are here regarded as 'probably native', though for two species, both native and introduced genotypes may occur. These issues are discussed in section 4.4.1

4.2 Changes to the checklist since Broughton & McAdam, 2002

This checklist recognises a larger native flora than previous checklists. Broughton & McAdam recognized 171 native species, so this checklist represents a net increase of 9 taxa or 5%.

To summarise these changes:

- One new endemic species (*Nassauvia falklandica*) has been discovered.
- Six taxa also native to Patagonia have been recorded in the Falklands for the first time.
- Two species which were included by Moore (1968) but excluded by Broughton & McAdam (2002) have been rediscovered and reinstated.
- One species (*Calandrinia menziesii* syn. *C. feltonii*) previously considered endemic is now known to be introduced.

- One species (*Calandrinia cf. nitida*) previously considered introduced is now considered probably native.

4.2.1 Discoveries

Survey work in under-studied areas of the Falkland Islands has led to the discovery of several new native species, one new to science and the others also known from South America. This strongly emphasizes the need to continue baseline botanical survey work. *Nassauvia falklandica* is a new endemic for the Falkland Islands and currently known from two populations on West Falkland (Upson *et al.* 2013). It is over 25 years (see Rahn 1984) since a new endemic vascular plant species has been described for the Falkland Islands, reclassification of native species notwithstanding.

Five species and one subspecies native to Patagonia have recently been found to also occur in the Falkland Islands and are therefore added to the current checklist: *Gavilea araucana*, *Hymenophyllum darwinii*, *Hypolepis poeppigii*, *Samolus repens*, *Trisetum spicatum* subsp. *spicatum* and *Uncinia kingii*. Each of these six taxa is currently known from a restricted area only, though with large areas unsurveyed, it is likely that additional populations are present but not yet discovered. These are the first native species that have been added to the Falkland vascular plant checklist for 8 years (see Broughton and McAdam, 2005). The discovery of six previously unrecorded taxa within five years represents a significant increase in the rate of discovery and suggests that further taxa await discovery in other remote areas of the Islands.

4.2.2 Rediscoveries

Two species which were removed from the last Falkland checklist have been reinstated here based on recent survey work. *Plantago maritima* and *Schizea fistulosa* had been included in Moore's Flora (Moore 1968) but were excluded from the most recent checklist because they were believed to have been erroneous records (Broughton and McAdam, 2005). A further two species, *Saxifraga magellanica* and *Koeleria permollis* have been rediscovered. Previously regarded as possibly locally extinct, they were last recorded *c.* 100 and *c.* 75 years ago respectively. The examples of these rediscovered species demonstrate the need for caution when considering the current status of other species that have not been recorded for many years. *Draba magellanica*, *Calceolaria biflora* and *Scutellaria nummularia* are the remaining native species without recent records. Although all three were last recorded over 100 years ago, they may well still be present in unsurveyed areas. See box 1 for details of these discoveries and rediscoveries.

4.2.3 Local extinction

The examples of these rediscovered species demonstrate the need for caution when considering the current status of other species that have not been recorded for many years. *Draba magellanica*, *Calceolaria biflora* and *Scutellaria nummularia* are the remaining native species without recent records (see 4.4.1.3 for related discussion on status of species with restricted distributions). All three were last recorded around 100 years ago and may be locally extinct in the Falklands.

Box 1: Discoveries and rediscoveries - taxon profiles

Gavilea araucana

A recent record made by a landowner on West Falkland has brought the total number of orchid species to five. Interestingly the location of *Gavilea araucana* overlaps with a population of *Gavilea australis* and the two species appear to flower at different times. An important distinguishing feature is the green, long, thickened apex of the lateral sepals (Carlos Lehnebach, pers. comm. 2013).

Hymenophyllum darwinii

In 2009 *Hymenophyllum darwinii* (Hymenophyllaceae) was recorded from one remote location on West Falkland. This species is otherwise only known from the Southern Cone (Flora del Cono Sur, 2009). *Hymenophyllum* is one of the most species rich genera of ferns in both Chile and Argentina (Ponce *et al.*, 2002), so it is perhaps unsurprising that further taxa within this easily overlooked group have also dispersed to the Falkland Islands. This discovery brings the number of filmy fern species up to four in the Falklands, compared to 11 in Tierra del Fuego (Flora del Cono Sur, 2009), and 16 and 18 in Argentina and Chile, respectively (Ponce *et al.*, 2002). Further *Hymenophyllum* species may await discovery in the relatively understudied upland sites of the Falklands.

Hypolepis poeppigii

In 2012 another new fern species was discovered in a different remote location on West Falkland. A small population of *Hypolepis poeppigii* (Dennstaedtiaceae) was recorded in the north of West Falkland. This species may have suffered a reduction in numbers owing to a fire in the 1990s which severely affected the surrounding vegetation. This large fern is not easily overlooked but occurs in an area that has not previously been surveyed, suggesting it is genuinely rare. *Hypolepis poeppigii* also occurs in Argentina, Chile and Bolivia although no records exist from Tierra del Fuego (Flora del Cono Sur, 2009; GBIF Data Portal, 2012). This disjunction in the distribution of the species is unexpected, though tiny, airborne fern spores can disperse long distances on air currents. Tierra del Fuego still has relatively understudied areas so it is possible that it has yet to be discovered, or that it was present there in the past but is no longer. Further research into this question may prove useful. With these two new fern records and the reinstatement of *Schizaea fistulosa*, there are now 12 families, 15 genera and 21 species of ferns and clubmosses native the Falklands.

Plantago maritima

After a single record made by Skottsberg in the early 1900s (Skottsberg, 1913), *Plantago maritima* was not seen again in the Falklands until 2009, with further nearby subpopulations recorded in 2012, all in an area subject to very low grazing pressure. Skottsberg recorded *P. maritima* as abundant at a pond near Victoria Creek (East Falkland), however this subpopulation was unable to be relocated by targeted surveys carried out by D. Broughton between 1999 and 2001; this anecdotal evidence suggests a possible vulnerability to grazing. Usually found on coastal sites or 'sometimes on open soil inland' (Moore, 1983), *P. maritima* may also be vulnerable to competition. The recently recorded population is found on ledges and crevices on low, coastal cliffs on the west coast of West Falkland.

Plantago maritima is widely distributed across the northern hemisphere but is also 'not uncommon' in Patagonia (K. Rahn pers. comm. 2012), where it is found predominantly in coastal areas to c. 34°S and 47°S in Chile and Argentina, respectively (Moore, 1983). The undisturbed nature of the West Falkland coastal location, the presence of other rare species in the vicinity, combined with Skottsberg's historical record of the species in the Falklands and its known range within Tierra del Fuego all strongly suggest that this population is native and it is therefore listed as such.

A small population of *P. maritima* was also recently recorded on a disturbed roadside within the Mount Pleasant Complex on East Falkland. This, however, is suspected to be introduced from Europe owing to the nature of the site and surrounding vegetation (R. Lewis, pers. com.).

Samolus repens

A recent (2012) record of the coastal species *Samolus repens*, from a small island off the north coast of West Falkland, has increased the number of genera and species in the family Primulaceae from two to three. All Primulaceae species present in the Falklands have also been recorded from Chile and Argentina however, unlike *Primula magellanica* and *Anagalis alternifolia*, *Samolus repens* has not so far been recorded in Tierra del Fuego (Flora del Cono Sur, 2009). Also found across the southern hemisphere in Argentina, Australia, Chile, French Polynesia, New Caledonia, New Zealand and Pitcairn Island, *S. repens* is clearly effective at long range dispersal (GBIF Data Portal, 2012; Kingston *et al.* 2003). Rather than indicating a recent colonization event, it is likely that *S. repens* has simply been overlooked because the island on which it is found has never previously been surveyed. It may be that restricted suitable habitat has determined its distribution in the Falklands; there are few sites with the appropriate sheltered, sparsely vegetated saltmarsh conditions that *S. repens* appears to require. Targeted surveys of such habitats may identify further populations.

<p><i>Saxifraga magellanica</i> Eleanor Vallentin made a collection of <i>Saxifraga magellanica</i> 'in the vicinity of Darwin Harbour' between 1909 and 1911. Species-specific surveys failed to locate the species along coastlines on the east side of Darwin Harbour and it was therefore previously postulated that it may have gone extinct (Broughton and McAdam, 2005). In November 2011 it was eventually recorded on a stretch of coastline south of Darwin Harbour, near Bodie Creek Bridge and it may be worthwhile to carry out further targeted surveys around the Lafonia coastline. Globally, <i>S. magellanica</i> is restricted to South America, also occurring in Tierra del Fuego (Moore, 1983) and further north along the Andes, in Argentina, Chile, Bolivia, Ecuador and Peru (GBIF Data Portal, 2012).</p>
<p><i>Schizaea fistulosa</i> Not recorded since Gaudichaud-Beaupre's East Falkland record of 1820, Comb Fern <i>Schizaea fistulosa</i> was amongst those believed to have been recorded in error (Broughton and McAdam, 2005; Broughton, 2000). In 2010, <i>S. fistulosa</i> was recorded on a stream bank within Double Stream valley on West Falkland. This discovery adds weight to Moore's view that the species has probably simply been overlooked or occurs in under surveyed remote sites (Moore 1968). However, even if further populations are found, it is likely that this species is rare within the Falkland Islands. The only known population is in an area that has been subject to very low grazing pressure, suggesting that the species is grazing intolerant and populations in other locations may have been lost due to grazing pressure. Globally, <i>S. fistulosa</i> has a wide distribution across the southern hemisphere, occurring in Australasia and South America (GBIF Data Portal, 2012; Parris, 2001). Its distribution suggests that long distance dispersal to the Falkland Islands has most likely been enabled by prevailing south temperate westerly winds (Parris, 2001).</p>
<p><i>Trisetum spicatum</i> subsp. <i>spicatum</i> Whilst <i>Trisetum spicatum</i> subsp. <i>phleoides</i> has long been known from the Falklands, recent records have brought to light that, <i>T. spicatum</i> subsp. <i>spicatum</i> is also present.</p>
<p><i>Uncinia kingii</i> Cyperaceae is the second most species rich family in the Falkland Islands' native flora, with 19 native species previously recorded. Recently a second species of <i>Uncinia</i>, <i>U. kingii</i>, was recorded on East Falkland, with a population scattered over several wet flushes and moist acid grassland high up on Mt Osborne. As with <i>H. darwinii</i> its diminutive size and habitat requirements suggest it is likely to be present elsewhere across the islands, although its habitat appears to be somewhat less restricted than <i>H. darwinii</i>. Including the two found in the Falklands, there are at least 7 species of <i>Uncinia</i> native to Tierra del Fuego (GBIF Data Portal, 2012; Flora del Cono Sur, 2009; Wheeler, 2005).</p>

4.3 Endemic and near-endemic flora

Native taxa are allocated to one of three categories: endemic, near-endemic and not endemic (see Table 4).

Our knowledge of the status of Falkland endemic and near-endemic species has increased significantly over the last 5 years, in particular with more detailed information on the abundance and distribution of populations

4.3.1 Endemic species

There are 14 vascular species (see Table 4) currently recognized as endemic to the Falkland Islands; this is 8% of the native flora. Three species occur as narrow range endemics; *Nastanthus falklandicus* and *Plantago moorei* are limited to the extreme south-south-west of the islands whereas *Nassauvia falklandica* appears to be restricted to upland regions of north/ central West Falkland. The remaining 11 endemic species are more widely distributed across the islands.

Table 4: A list of all 14 vascular plant species endemic to the Falkland Islands	
Family	Latin name
Asteraceae	<i>Chevreulia lycopodioides</i>
Asteraceae	<i>Erigeron incertus</i>
Asteraceae	<i>Gamochaeta antarctica</i>
Asteraceae	<i>Leucheria suaveolens</i>
Asteraceae	<i>Nassauvia gaudichaudii</i>
Asteraceae	<i>Nassauvia serpens</i>
Asteraceae	<i>Nassauvia falklandica</i>
Asteraceae	<i>Senecio littoralis</i>
Asteraceae	<i>Senecio vaginatus</i>
Brassicaceae	<i>Phlebolobium maclovianum</i>
Calceolariaceae	<i>Calceolaria fothergillii</i>
Calyceraceae	<i>Nastanthus falklandicus</i>
Plantaginaceae	<i>Plantago moorei</i>
Ranunculaceae	<i>Hamadryas argentea</i>

Since the previous checklist (Broughton & McAdam 2002a), two further endemic species have been identified and a third species is now known not to be endemic (see Box 2). *Gamochaeta antarctica* is currently considered endemic to the Falklands however its taxonomic status remains uncertain and is discussed in more detail in Box 4.

Box 2: Focus on endemics - additions and removals
<p><i>Calandrinia menziesii</i> Previously regarded as endemic, <i>Calandrinia menziesii</i> (syn. <i>C. feltonii</i>) is now known to be an introduced species in the Falklands and is only currently known in cultivation (Broughton and McAdam, 2005; Herschovitz, 2006).</p>
<p><i>Calceolaria fothergillii</i> <i>Calceolaria fothergillii</i> has only relatively recently been recognized as a Falkland endemic (Broughton and McAdam, 2005; Mascó <i>et al.</i> 2004); it was previously thought that its range extended into Andean Patagonia (Moore, 1968). However, plants from Patagonia are now considered specifically distinct and are known as <i>C. uniflora</i>. <i>C. fothergillii</i> has therefore only ever been reliably documented from the Falkland Islands and nowhere else in the world. Mascó <i>et al.</i> (2004) point out that ‘the color pattern on the instep of <i>C. fothergillii</i>, as seen in flower images is quite distinct from that of both subspecies of <i>C. uniflora</i>’.</p>
<p><i>Nassauvia falklandica</i> A new endemic species of <i>Nassauvia</i> has been recorded on West Falkland, increasing the number of Falkland species in this genus to three, all of which are endemic (Upson <i>et al.</i> 2013). The overall habit of this new species makes it appear similar to a dwarf version of <i>N. serpens</i>; its flowerheads are similarly grouped into a globular clusters at the end of stems, however its stems reach only c. 5 cm (Upson <i>et al.</i> 2013). A key morphological trait which distinguishes <i>Nassauvia falklandica</i> from all other <i>Nassauvia species</i> is the restriction of stomata to sunken hair-filled surfaces on the undersides of otherwise glabrous leaves (Upson <i>et al.</i> 2013). This species is known from the Hornby mountains and Hill Cove mountains on West Falkland (Carr and Upson, 2014).</p>

4.3.2 Near-endemic taxa

There is no consensus on how to define when a species is near-endemic (also known as ‘restricted range’). For the purpose of this atlas a taxon is treated as near-endemic for the Falkland Islands if it occurs in only one or two additional geographical units in an area outside the Falkland Islands that does not exceed 12,000 square kilometers (the approximate size of the Falkland Islands).

Two native species, *Gamochaeta malvinensis* and *Polystichum mohrioides*, are considered near-endemics owing to their restricted global distribution outside of the Falkland Islands. *Gamochaeta malvinensis* also

occurs on two islands in Tierra del Fuego: on Staten Island (Isla de los Estados) and on the Mitre Peninsula (under 4000 km², but part of the larger Isla Grande). *Polystichum mohrioides* is thought to be restricted to the Falkland Islands and South Georgia, though the taxonomy of this group of species is currently being reviewed and the status of this species may need to be reassessed.

Broughton and McAdam (2002a) note that the Falkland Islands are likely to hold at least 20% of the world's population of *Poa flabellata*. The Falklands may be of global importance for some other species, though this has not yet been comprehensively studied. The UK Overseas Territories (UKOTs) programme at the Royal Botanic Gardens, Kew, aims to assess the global status of all native UKOT plant species, including those native to the Falklands, for the IUCN's Red Data List, which identifies species at risk of extinction. This process will identify any species for which the Falkland populations are of international importance.

4.4 Unresolved Issues

4.4.1 Endemic, native or introduced?

Whilst the evidence is clear-cut for the majority of species, it is not always straightforward to conclude whether a species is native or introduced. Several species previously regarded as introduced are now believed to be native. These include *Lepidium didymus*, *Deschampsia flexuosa*, *Gamochaeta americana*, *Montia fontana* and *Schoenoplectus californicus*.

A number of factors need to be considered to ascertain the status of an individual species and doubts have been raised where the species' native range is in the Southern Hemisphere but there is:

- Taxonomic uncertainty;
- A strong association with anthropogenic habitats; or
- A restricted distribution which is significantly less widespread than habitat presumed to be suitable and not obviously explained by other factors such as dispersal limitation or unfavourable land management practices

One or more of the above may also be combined with a late date of first record for the taxon in question. The date a taxon was first recorded can provide clues as to whether it is native or not, however in the Falkland Islands this may lead to erroneous conclusions as the islands are not as intensively studied as, for example, the British Isles. Many taxa native to Chile and Argentina have also only been recorded for the first time from the 1800s onwards.

Without strong evidence of human-assisted dispersal from the literature or the local community, detailed further studies (including taxonomic and genetic research) are needed to better understand the status of these species, though in some cases it may be impossible to fully resolve the situation.

4.4.1.1 Taxonomic uncertainty

Taxonomic uncertainty of two species means that their status as native or introduced remains unresolved. *Calandrinia cf. nitida* is discussed further in Box 3 and *Epilobium ciliatum* may be present as both native and introduced genotypes and is also discussed further in Box 3.

4.4.1.2 Association with anthropogenic habitats

One species, *Sisyrinchium chilense* is associated with both semi-natural and anthropogenic habitats, especially reseeded pastures, and this has led to doubts over its status. This species is discussed further in Box 3.

4.4.1.3 Restricted distribution

A restricted range is perhaps the most questionable cause for doubt over the status of a taxon as disjunct distributions are possible, particularly where suitable habitat or climatic conditions are limited. There are many reasons why taxa may be genuinely rare and also a range of anthropogenic reasons why taxa may become restricted (see Section 5). For cryptic species and those which occur in under-surveyed areas there is also the possibility that the apparent rarity is an artifact.

Saxifraga magellanica is only known from a population near Bodie Creek Bridge. The saxifrage was first recorded in 1909 by Eleanor Vallentin (see Box 1) 'in the vicinity of Darwin Harbour'; this was prior to construction of the bridge in 1924-5 and it is unlikely that this section of the river would have been a well-used route prior to that (Brian Summers, pers. comm.). *Saxifraga magellanica* grows at two nearby sites on undisturbed, low coastal cliff which is dominated by native species. Although predominantly found as an alpine species in Patagonia, it is also associated with 'rock-crevices, cliff-ledges, screes, open soil among rocks' in Tierra del Fuego (Moore, 1983). *Saxifraga magellanica* is likely vulnerable to grazing pressure so the current sites may be refugia. Based on the available evidence we therefore consider *Saxifraga magellanica* to be native to the Falkland Islands.

Viola magellanica is also known from a single population but owing to reasonable questions over its current distribution we regard it as 'probably native'. See Box 3 for further discussion of this species.

Box 3: Unresolved status - endemic, native or introduced?
<p><i>Calandrinia cf. nitida</i> A putative additional Falkland native or even endemic species is <i>Calandrinia cf. nitida</i> (previously referred to as <i>Calandrinia sp.</i>, Broughton & McAdam 2002a). Two species of <i>Calandrinia</i> are now recorded from the Falklands. One species, <i>C. menziesii</i> (previously known as <i>C. feltonii</i>), is now known to be introduced to the islands from California (Hershkovitz, 2006). However, surveys have located a second <i>Calandrinia</i> species (Woods, 2000). Our understanding of the correct name and status of this species remains unresolved. One DNA study suggested that a possible explanation is that it is a hybrid-origin species originating from a cross between <i>C. nitida</i> and either <i>C. ciliata</i> or <i>C. compressa</i> (Hershkovitz, 2006). However, it is part of a group of species which is taxonomically complex and poorly known and it is unlikely that the Falklands plants can be confidently named until further studies resolve the taxonomy and naming of the group of species native to South America.</p> <p>The species is considered probably native owing to the fact that it has been recorded on uninhabited, remote islands in natural habitats, (eg. Tea Island in coastal dwarf shrub heath) and appears to be most closely related to species growing naturally in similar habitats in Patagonia & Tierra del Fuego.</p>
<p><i>Epilobium ciliatum</i> <i>Epilobium ciliatum</i> was first recorded in Chile c. 1793 and in the Falklands in 1867. Moore (1968) records <i>Epilobium ciliatum</i> (syn. <i>E. cunninghamii</i>) as rare across the Falkland Islands, occurring 'in and on the margins of fresh-water streams'. Broughton and McAdam (2005) again record the presence of <i>Epilobium ciliatum</i> in the Falkland Islands but with an additional note that there may be both native and non-native populations. The species grows in both apparently undisturbed sites with no introduced species, such as within the Chartres Horse Paddock along small streams, and also in more disturbed habitats with introduced species dominating, such as by the roadside near the entrance to the Chartres Horse Paddock.</p> <p>The species is widespread in anthropogenic habitats in Stanley and the introduced <i>E. obscurum</i> was found at one built-up site. A specimen from a disturbed site near Stanley airport was determined as <i>Epilobium cf. ciliatum</i> with a note to say 'possible hybrid with <i>Epilobium obscurum</i>' (T Pennington pers. comm. 2009). <i>E. ciliatum</i> is native to the Americas, from Canada south to Tierra del Fuego. North American genotypes have been introduced to the UK and are now a very common widespread weed in the UK. It is possible that some Falklands populations in disturbed habitats have arrived as recent accidental introductions from the UK (or elsewhere). Further studies, are needed to elucidate whether there are two distinct genotypes of <i>E. ciliatum</i> present in the Falkland Islands, which may reflect both natural and human-aided colonisations as is the case for <i>Plantago maritima</i>. The species is therefore currently considered probably native and also introduced in some areas.</p>

<p><i>Sisyrinchium chilense</i> The status of <i>Sisyrinchium chilense</i> remains unresolved. Broughton and McAdam (2005) state that this species is 'widespread across West Falkland, perhaps native to Lafonia but introduced elsewhere on East Falkland'; their view was of a species which had been introduced from one island to the other. Further research needs to be carried out on specimens of this species from across the Falkland Islands to elucidate which, if any, populations are likely to be native. Several populations are clearly associated with introduced seed mixes including those restricted to horse paddocks. However there are also populations where the status based on associated plant communities is more ambiguous. This species is therefore currently considered probably native.</p> <p>In addition, this species is part of a species complex on mainland South America and delimitation of species is not fully resolved. Consequently the identity and name of the species present in the Falklands may be subject to change in the future.</p>
<p><i>Viola magellanica</i> <i>Viola magellanica</i> is known from a single population on Sea Lion Island and is found growing on sand in grass behind coastal dunes. Its preferred habitat in Tierra del Fuego is very different and described as 'moist places in scrub and, especially at margins and in clearings of deciduous <i>Nothofagus</i> forest' (Moore, 1983). The population on Sea Lion Island is in reasonable proximity to the island settlement. The first published mention of the species was in 2002 (Broughton & McAdam 2002a) but it has not been possible to ascertain when it was first recorded on the island (A. Pollard, pers. comm.). Its distribution seems unnaturally restricted given the apparent availability of suitable habitat in ungrazed areas even on Sea Lion Island itself. Population level genetic studies could prove useful in investigating the level of similarity between these and mainland populations.</p>

Other species, such as *Adiantum chilense*, *Hymenophyllum darwinii* and *Samolus repens*, only known from three or fewer populations are regarded here as certainly native as a suite of factors including habitat preferences, undisturbed sites and native range indicate that accidental or intentional introduction is unlikely (see Table 5).

As a result of the issues discussed above, reasonable doubts remain over the status of four taxa and we therefore regard *Calandrinia cf. nitida*, *Epilobium ciliatum*, *Sisyrinchium chilense* and *Viola magellanica* as 'probably native' at present.

Taxa currently known from 0-3 populations:	Summary of key justifications for native status
<i>Adiantum chilense</i>	Habitat preference, undisturbed location, global range and evidence of at least one further population in past suggest this species is native.
<i>Calceolaria biflora</i>	Notes accompanying early (1911) historical vouchered collection from Vallentin suggest this species was rare at the time. Not currently known from any location and may be extinct in the wild. No evidence to suggest that it has been introduced. Local knowledge of former population in undisturbed location on Pebble Island (M. Morrison pers. comm.).
<i>Carex banksii</i>	Habitat preference and global range suggest this species is native.
<i>Carex vallis-pulchrae</i>	Habitat preference and global range suggest this species is native.
<i>Gavilea araucana</i>	Habitat preference, undisturbed location (close to that of another rare and threatened orchid, <i>Gavilea australis</i>) and global range suggest this species is native.
<i>Hypolepis poeppigii</i>	Habitat preference and global range suggest this species is native.
<i>Hymenophyllum darwinii</i>	Habitat preference, undisturbed location and global range suggest this species is native.
<i>Koeleria permollis</i>	Strong likelihood of misidentification with <i>Trisetum</i> taxa means that further survey work is needed to inform decision on the status of this species. However early records, habitat preference and native range suggest this species is native
<i>Plantago maritima</i>	Habitat preference, undisturbed location and past records suggest that the Falkland Islands holds native populations of this species.
<i>Samolus repens</i>	Habitat preference and the native range of this species suggest that the Falkland Islands holds native populations.
<i>Schizea fistulosa</i>	Habitat preference, undisturbed location and global range suggest this species is native.
<i>Scutellaria magellanica</i>	Notes accompanying early historical vouchered collection from Vallentin (1911) suggest

	this species occurs in similar habitat in Falklands to elsewhere in native range. Not currently known from any location – may be extinct in the wild. No evidence to suggest that it has been introduced.
<i>Uncinia kingii</i>	Habitat preference, undisturbed location and global range suggest this species is native.

4.4.2 Native taxa with ongoing taxonomic issues

There remain ongoing taxonomic uncertainties with several of the native vascular species. There will likely always be some questions remaining as this is an ongoing area of research that will continue to change as our knowledge grows. Box 4 summarises the most significant unresolved taxonomic issues relating to the Falkland flora.

Box 4: Unresolved issues – taxonomic uncertainties
<p><i>Acaena magellanica</i> <i>Acaena magellanica</i> has two distinct morphologies within the Falkland Islands. One form has glaucous leaves and the other dark green leaves. The dark green form often has additional smaller axillary inflorescences below the terminal inflorescence whilst these are usually absent in the glaucous-leaved form. The most recent revision of <i>Acaena</i> in South America identified morphological variation within this species and speculated that there may be a hybrid-origin taxon from hybrids with <i>A. ovalifolia</i>. Further morphological and molecular studies are needed to investigate whether there are two distinct taxa.</p>
<p><i>Armeria maritima</i> A single species of <i>Armeria</i> is native to the Falkland Islands, though this is subject to nomenclatural and taxonomic confusion. Moore (1968) refers to this species as <i>Armeria macloviana</i> however more recently it has been referred to as <i>A. maritima</i> var. <i>maritima</i> (Moore, 1983; Broughton and McAdam, 2005). Following Flora del Conosur (2009) and The Plant List (2010), it continues to be treated here as <i>A. maritima</i>, though the situation is not fully resolved and further taxonomic research is clearly needed to clarify the situation. The situation is further complicated by the recent naturalisation of introduced European forms of <i>A. maritima</i>.</p>
<p><i>Calceolaria fothergillii</i> <i>Calceolaria fothergillii</i>, an endemic to the Falkland Islands, has two-lipped flowers; the upper lip is entirely yellow and the lower lip is usually yellow with red streaks on the inside and a red stripe outside. Moore (1968) notes that <i>C. fothergillii</i> can also have flowers which are 'almost entirely red or entirely yellow with red spots'. Subpopulations of <i>C. fothergillii</i> with entirely yellow flowers are currently known from two locations, both in the north-west of the archipelago. These subpopulations appear to flower later than other forms of <i>C. fothergillii</i> and may be warrant recognition at infraspecific level.</p>
<p><i>Gamochaeta antarctica</i> <i>Gamochaeta antarctica</i> is currently considered a distinct species however there may be reason to doubt its specific recognition. First recorded by Hooker in 1842 (Hooker, 1847), Moore (1968) describes <i>G. antarctica</i> as a 'glabrous form' of <i>G. malvinensis</i> and states that 'further specimens are required before a definite decision is possible'. Further herbarium specimens of <i>G. antarctica</i> were collected 2009-2011; in addition to being glabrous, <i>G. antarctica</i> leaves also appear to have more prominent mucronate tips and the inflorescence appears to have fewer capitula per stem, giving it a less dense appearance than <i>G. malvinensis</i>. Recent preliminary molecular investigations have failed to clarify the situation and more intensive sampling and taxonomic study is planned to better understand the relationship between these two taxa.</p>
<p><i>Gamochaeta americana</i> and <i>Gamochaeta spiciformis</i> These two species are similar in appearance and a review of previous records indicates that these two species have not been consistently identified. The only distinction Moore (1968) makes between the two species is in <i>G. spicatum</i> having acute, rather than obtuse involucral bracts. This is not always an easy trait to identify in the field. Referring to Moore (1983) and Cabrera (1971), the difference in the shapes of involucral bracts is also described but a further distinction is made between the two which greatly assists in recognition in the field. The flowerheads of <i>G. spiciformis</i> are in a spherical cluster at the end of the flowering stems and are surrounded by leaf-like bracts, sometimes with smaller spherical clusters on short stalks in leaf axils below the main cluster. In contrast the flowerheads of <i>G. americana</i> are each subtended by a leaf, forming a spike-like group of flowerheads. Due to this previous confusion, these species are mapped together, though a review of available herbarium and photographic records suggests that in contrast to reports in Moore (1968) and Broughton & McAdam (2002b) <i>G. americana</i> is widespread and frequent, whilst <i>G. spiciformis</i> has only been reliably recorded once, from a remote military site.</p>

It would be worth following up former records for these two species to confirm identification and better understand the relative distributions of these two species.

Hamadryas argentea

Two records of *Hamadryas argentea* from West Falkland include material with distinctive morphology, with more divided, hairless leaves. It is unclear whether these merit specific or infraspecific recognition and further research is needed.

Poa alopecurus

Poa alopecurus displays two broadly distinct growth forms in the Falkland Islands known locally as 'Mountain Bluegrass' and 'Coastal Bluegrass'. This species is also found in Argentina and Chile to 51°S, is extremely variable and has in the past been split into different species and subspecies (e.g. Moore, 1983; Skottsberg, 1913), none of which are currently recognised by The Plant List (2010). In the Falkland Islands the most striking features of one morphological group are the narrow leaves, all with a prominent keel, that are dark green on the abaxial surface and often tinged purplish at the tip, glaucous on their adaxial surface and found predominantly on grassland-heath peat soils – these can be pseudo-viviparous (where the seedlings develop whilst still attached to the seed head). The other group have leaves that are glaucous on both upper and lower leaf surfaces, can attain greater widths, can be keeled or almost flat, and can also be pseudo-viviparous and appear restricted to sand/ sandy peat soils; they are therefore predominantly known from coastal areas but have also been observed growing on sand at an upland site close to Death Valley (West Falkland; R. Upson pers. comm.). There is a great deal of variation within these two groups, however, and so a more detailed study is now needed to better clarify the delineation of *Poa alopecurus*. As a starting point, seeds of both forms have now been collected and will be grown up to compare their morphology under the same environmental conditions.

Most recently Zuloaga *et al.* (2012) recognises several subspecies of *Poa alopecurus* and the form referred to as 'Mountain Bluegrass' broadly fits the description for *P. alopecurus* subsp. *alopecurus*, whilst the form referred to locally as 'Coastal Bluegrass' fits the broad description for *P. alopecurus* subsp. *fuegiana*, but is usually larger in stature than plants reported from the mainland. Zuloaga *et al.* (2012) highlights the need for further research into this highly variable taxon.

Polystichum mohrioides

The delimitation of *Polystichum mohrioides* from other austral South American *Polystichum* species is not well studied and requires further analysis of nuclear-DNA markers (D. Barrington *pers. comm.*). It may prove to be a complex of several closely-related species, but it is retained here as a single, near-endemic species until further evidence is available.

4.5 Protected species

4.5.1 Nationally protected species

Table 6 lists the 17 species which are currently protected by law in the Falkland Islands under the Conservation of Wildlife and Nature Ordinance 1999. The table highlights the need for further species which are on the National Red Data List (see below) to be protected by law.

As noted by Broughton and McAdam (2002a) *Viola maculata* remains on the protected species list because, although widespread across the Falkland Islands (occurring in over 50 10 km grid squares), it is thought to be the larval food plant for the Queen-of-the-Falklands Fritillary (*Issoria cytheris*), a nationally rare butterfly.

4.5.2 Internationally protected species

There are five orchid species native to the Falkland Islands, all of which are covered by Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). This appendix lists all taxa whose international trade is subject to licensing. In the Falkland Islands the Falkland Islands Government customs office is the national agency ('Management Authority') responsible for implementing CITES.

4.6 Threatened species

There are nine Red List Categories for which a species can qualify: Extinct, Extinct in the Wild, Critically Endangered, Endangered, Vulnerable, Near Threatened, Least Concern, Data Deficient, and Not Evaluated (IUCN, 2001). Every species can be placed into one of these categories and those that qualify as Critically Endangered, Endangered or Vulnerable can all be described as 'threatened' – these species are the focus of this section. In practice application of the categories relating to extinction must be applied only with extreme caution. Section 4.2.2 provides the example of *Saxifraga magellanica* which was recently re-discovered after over 100 years and which had been thought to have perhaps become extinct in the Falkland Islands.

Upson (2012b) provides full details of all IUCN threat categories and criteria assigned to Falkland Islands vascular Red Data List plants. All Falkland species are data deficient for criteria A, C and E (IUCN, 2001) which require more detailed population data and over long time periods that are not have available at present.

All species have been listed either under Criterion B or D or both (IUCN, 2001); this reflects the lack of quantitative data on long term population trends for any plant species in the Falkland Islands. All species listed under criteria B meet the requirements through restricted ranges and severe fragmentation/ number of IUCN locations coupled with a continuing decline. Abeli *at al.* (2009) argue that application of Criterion B to restricted range peripheral populations can lead to an overestimation of the extinction risk 'when there is no documented decline in the past'. All ongoing declines for Falkland species are inferred, rather than observed however these inferences have been based on either historical information, as in the case of *Phlebotobium maclovianum*; comparative observations between subpopulation sizes at similar sites under differing management regimes, such as grazing level; comparisons with related species with similar biological requirements; and/ or site observations which clearly show ongoing deterioration of a species' habitat such as active erosion exacerbated by past or current land management practices. In the case of threats from invasive species, a lack of control at present leads to an inference of ongoing declines in available habitat etc. These inferences are felt to be justified based on the available evidence.

Overall 22% of the Falkland native flora is identified as at risk of extinction (including endemic species). Listing a species indicates that it is 'at risk of extinction in the wild'; for the National Red List this means that there are ongoing threats to the population that suggest that it could be lost from the Falkland Islands without actions to safeguard it.

Despite the human induced declines to species through, for example, over-grazing Broughton and McAdam (2002a) rightly emphasize the positive role that Red Listing can play, in providing 'a means of identifying rare taxa, highlighting their inherent vulnerability and the need to protect them into the long-term future, rather than being solely a means to criticize the past'. For example some species, such as *Adiantum chilense*, have probably always been rare in the Falkland Islands, rather than having suffered a decline. Such species require Red Listing where factors point to an uncertain future, in this case primarily owing to ongoing coastal erosion and a precarious habitat, the condition of which has changed over the years as indicated, for example, by the many introduced species that co-occur.

Table 6: Globally and nationally threatened and protected species of the Falklands and all endemics

Latin Name	Common Name	Family	Falkland Distribution	Endemic	National Legal Protection ¹	International Category	National Red List Threat Category
<i>Acaena antarctica</i>	Antarctic Prickly-burr	Rosaceae	FI	-	-	Not assessed	Vulnerable
<i>Adiantum chilense</i> var. <i>chilense</i>	Maidenhair-fern	Adiantaceae	WF	-	+	Not assessed	Endangered
<i>Alopecurus magellanicus</i>	Fuegian foxtail	Poaceae	FI	-	-	Not assessed	Vulnerable
<i>Arachnitis uniflora</i>	Spider-flower	Corsiaceae	EF	-	-	Not assessed	Endangered
<i>Asplenium dareoides</i>	Spleenwort	Aspleniaceae	FI	-	-	Not assessed	Endangered
<i>Blechnum cordatum</i>	Chilean Tall-fern	Blechnaceae	WF	-	-	Not assessed	Vulnerable
<i>Botrychium dusenii</i>	Dusen's Moonwort	Ophioglossaceae	FI	-	+	Not assessed	Endangered
<i>Calandrinia</i> cf. <i>nitida</i>	-	Portulacaceae	WF	?	-	Not assessed	Data Deficient
<i>Calceolaria biflora</i>	Yellow Lady's Slipper	Calceolariaceae	WF	-	+	Not assessed	Critically Endangered
<i>Calceolaria fothersgillii</i>	Lady's Slipper	Calceolariaceae	FI	+	-	Least Concern	Least Concern
<i>Carex acaulis</i>	Small Dusky Sedge	Cyperaceae	FI	-	-	Not assessed	Vulnerable
<i>Carex aematorrhyncha</i> var. <i>corralensis</i>	Blood-beak Sedge	Cyperaceae	FI	-	-	Not assessed	Least Concern
<i>Carex banksii</i> var. <i>banksii</i>	Bank's Sedge	Cyperaceae	EF	-	-	Not assessed	Critically Endangered
<i>Carex macloviana</i>	Falkland Sedge	Cyperaceae	FI	-	-	Not assessed	Vulnerable
<i>Carex magellanica</i> spp. <i>magellanica</i>	Fuegian Sedge	Cyperaceae	FI	-	-	Not assessed	Endangered
<i>Carex sagei</i> (= <i>C. barrosii</i>)	Sage's Sedge	Cyperaceae	FI	-	-	Not assessed	Endangered
<i>Carex vallis-pulchrae</i>	Marsh Sedge	Cyperaceae	FI	-	-	Not assessed	Data Deficient
<i>Chevreulia lycopodioides</i>	Clubmoss Cudweed	Asteraceae	FI	+	-	Least Concern	Least Concern
<i>Chloraea fonckii</i>	Gaudichaud's Orchid	Orchidaceae	FI	-	+	Not assessed	Least Concern
<i>Codonorchis lessonii</i>	Dog Orchid	Orchidaceae	FI	-	-	Not assessed	Least Concern
<i>Cystopteris fragilis</i>	Brittle Bladder-fern	Woodsiaceae	FI	-	-	Not assessed	Vulnerable
<i>Draba magellanica</i>	Fuegian Whitlowgrass	Brassicaceae	WF	-	-	Not assessed	Critically Endangered
<i>Elatine triandra</i>	Waterwort	Elatinaceae	EF	-	-	Not assessed	Endangered
<i>Erigeron incertus</i>	Hairy Daisy	Asteraceae	FI	+	+	Vulnerable	Endangered
<i>Gamochaeta antarctica</i>	Antarctic Cudweed	Asteraceae	FI	+	-	Endangered	Endangered
<i>Gavilea australis</i>	Pale Yellow Orchid	Orchidaceae	FI	-	+	Not assessed	Vulnerable
<i>Gavilea littoralis</i>	Yellow Orchid	Orchidaceae	FI	-	+	Not assessed	Least Concern
<i>Grammitis poeppigiana</i>	Strap-fern	Grammitidaceae	FI	-	-	Not assessed	Vulnerable
<i>Hamadryas argentea</i>	Silvery Buttercup	Ranunculaceae	FI	+	-	Near Threatened	Near Threatened
<i>Hieracium patagonicum</i>	Patagonian Hawkweed	Asteraceae	WF	-	-	Not assessed	Endangered

Species	Common Name	Family	Distribution	Endemic	National Legal Protection ¹	International Category	National Red List Threat Category
<i>Huperzia fuegiana</i>	Fir Clubmoss	Lycopodiaceae	FI	-	+	Not assessed	Vulnerable
<i>Hypolepis poeppigii</i>	Bramble-fern	Dennstaedtiaceae	WF	-	-	Not assessed	Critically Endangered
<i>Hymenophyllum darwinii</i>	Darwin's Filmy-fern	Hymenophyllaceae	WF	-	-	Not assessed	Critically Endangered
<i>Koeleria permollis</i>	Berg's Hair-grass	Poaceae	EF	-	-	Not assessed	Critically Endangered
<i>Leucheria suaveolens</i>	Vanilla Daisy	Asteraceae	FI	+	-	Least Concern	Least Concern
<i>Limosella australis</i>	Southern Mudwort	Plantaginaceae	FI	-	-	Not assessed	Least Concern
<i>Lycopodium</i> sp.	N/A	Lycopodiaceae	WF	-	-	Not assessed	Data Deficient
<i>Nassauvia falklandica</i>	Falkland Nassauvia	Asteraceae	WF	+	-	Endangered ²	Endangered
<i>Nassauvia gaudichaudii</i>	Coastal Nassauvia	Asteraceae	FI	+	-	Least Concern	Least Concern
<i>Nassauvia serpens</i>	Snakeplant	Asteraceae	FI	+	-	Least Concern	Least Concern
<i>Nastanthus falklandicus</i>	False-plantain	Calyceae	WF	+	+	Endangered	Endangered
<i>Ophioglossum crotalophoroides</i>	Adder's-tongue	Ophioglossaceae	FI	-	+	Not assessed	Vulnerable
<i>Phlebotobium maclovianum</i>	Falkland Rock-cress	Brassicaceae	FI	+	+	Vulnerable	Endangered
<i>Plantago moorei</i>	Moore's Plantain	Plantaginaceae	WF	+	-	Endangered	Endangered
<i>Plantago maritima</i> Rahn	Sea Plantain	Plantaginaceae	WF(EF)	-	-	Not assessed	Critically Endangered
<i>Potamogeton linguatus</i>	Native Pondweed	Potamogetonaceae	FI	-	+	Not assessed	Near Threatened
<i>Rumohra adiantiformis</i>	Leathery Shield-fern	Dryopteridaceae	WF	-	+	Not assessed	Endangered
<i>Ruppia filifolia</i>	Tasselweed	Ruppiaceae	FI	-	-	Not assessed	Vulnerable
<i>Samolus repens</i>	Shore Pimpernel	Primulaceae	WF	-	-	Not assessed	Critically Endangered
<i>Saxifraga magellanica</i>	Saxifrage	Saxifragaceae	EF	-	+	Not assessed	Critically Endangered
<i>Schizaea fistulosa</i>	Comb Fern	Schizaeaceae	FI	-	+	Not assessed	Critically Endangered
<i>Schoenoplectus californicus</i> var. <i>californicus</i>	California Club-rush	Cyperaceae	FI	-	-	Not assessed	Near Threatened
<i>Scutellaria nummularifolia</i>	Skullcap	Lamiaceae	WF	-	-	Not assessed	Critically Endangered
<i>Senecio littoralis</i>	Woolly Falkland Daisy	Asteraceae	FI	+	-	Least Concern	Least Concern
<i>Senecio vaginatus</i>	Smooth Falkland Daisy	Asteraceae	FI	+	-	Least Concern	Least Concern
<i>Suaeda argentinensis</i>	Shrubby Seablite	Amaranthaceae	WF	-	+	Not assessed	Endangered
<i>Uncinia kingii</i>	King's Hook-sedge	Cyperaceae	EF	-	-	Not assessed	Data Deficient
<i>Viola maculata</i>	Common Violet	Violaceae	FI	-	+	Not assessed	Least Concern
<i>Viola magellanica</i>	Fuegian Violet	Violaceae	EF	-	-	Not assessed	Critically Endangered

¹Plants protected by the Conservation of Wildlife and Nature Ordinance 1999

²Assessed by Carr and Upson (2013) – not yet submitted to IUCN for review

Red Listing provides a way of objectively justifying and driving forward active conservation work. In combination with *ex-situ* conservation measures this will in many cases simply translate into a much needed increase in the level of monitoring so that any changes to a site's condition/ species' health can be picked up on early on. This in turn acts as an advocate for monitoring schemes to be kept simple so that a larger number of species can be monitored where limited resources are available. Ideally we need monitoring that enables us to detect significant decreases in populations. In reality however the level of resources required for such work is currently prohibitive in the Falkland Islands and for some species calculating population estimates would also prove problematic without the aid of molecular research. Where subpopulations are small and mature individuals easy to identify this can be done regular population counts should be made for threatened species. Where this is not possible simple site checks will provide valuable long term data to continue to better understand the threats faced by particular species.

4.6.1 Globally threatened species

The application of IUCN criteria (using version 3.1 IUCN Red List categories and criteria; IUCN, 2001) to all available survey data for Falkland endemic species has allowed Upson (2012b) to build on previous Red Lists for the Falklands (Walter and Gillet, 1997; Broughton and McAdam, 2002c) and recognize six Falkland Island endemic species as globally threatened. These species, listed in Table 6, are: *Erigeron incertus*, *Gamochaeta antarctica*, *Nassauvia falklandica*, *Nastanthus falklandicus*, *Phlebotobium maclovianum*, *Plantago moorei*. In addition *Hamadryas argentea* is listed as Near Threatened (Upson, 2012b). It is primarily their small population sizes and restricted distributions that make these Falkland endemic species vulnerable to extinction.

Erigeron incertus, *Gamochaeta antarctica*, *Phlebotobium maclovianum* and *Hamadryas argentea* have remained in the same categories as assigned by Broughton and McAdam (2002c), however the justifications for these have altered slightly based on additional survey data (Upson, 2012b). This increased survey data includes records of previously unrecorded subpopulations of all six globally threatened species as well as detailed population data and habitat surveys for previous presence-absence only records.

In the case of the dioecious *Hamadryas argentea*, recent survey work has identified that individual populations are often either all male or all female, suggesting that most spread is vegetative. It is therefore possible that the number of genetically distinct individuals in the total population may be significantly less than previously thought. Research into the genetic heterogeneity within and between populations is urgently needed to enable a more accurate conservation assessment of this species to be made.

Nastanthus falklandicus and *Plantago moorei* have moved into higher threat categories, from VU to EN. Both were listed as VU on the basis of the number of locations at which they occur as well as, in the case of *P. moorei*, the number of individuals thought to be in the population. Both species are still only known from under 5 IUCN locations however more detailed information about the distribution of individual subpopulations and site visits, providing insights into ongoing threats, have allowed the application of Criterion B. Both species are spread across total areas of well under 2,500 km² and cover much less than 500 km². In addition ongoing threats include potential displacement by the invasive *Pilosella officinarum* as well as high levels of soil erosion at their vulnerable coastal sites (Upson, 2012b). Criterion D1 can no longer be applied to *P. moorei* as we now know that the total

population is composed of over 1000 individuals. A significant increase in its known range includes the finding of a new subpopulation on the west coast of Weddell Island.

Nassauvia falklandica (Upson *et al.* 2013) has been added to the list of globally threatened species as Endangered (IUCN, 2001) primarily because of its geographic range, number of IUCN locations and continuing threats to the majority of sites where it occurs. (Carr and Upson, 2013).

Calandrinia menziesii (= *feltonii*) has been removed from the Red List for reasons discussed in Box 2.

4.6.2 Nationally threatened species

Upson (2012b) recognized 34 non-endemic species as nationally threatened (using version 3.1 IUCN Red List categories and criteria; IUCN, 2001); since then new survey data for *Puccinellia pusilla* from the Hornby and Hill Cove mountains (Carr and Upson, 2013) has led to a new listing of Least concern and so a reduction to 33 nationally threatened non-endemic species; all are listed in Table 6. This represents almost a doubling since the previous assessment in 2002, when only 17 non-endemic threatened species were identified (Broughton and McAdam (2002c)).

There are three main reasons why the number of nationally threatened species has increased to 33:

- (a) The discovery/ re-discovery of seven threatened species (*Carex banksii*, *Elatine triandra*, *Hymenophyllum darwinii*, *Hypolepis poeppigii*, *Plantago maritima*, *Samolus repens*, *Schizaea fistulosa*)
- (b) Increased survey data for nine species providing better population estimates/ means to consider threats to species (*Acaena antarctica*, *Alopecurus magellanicus*, *Carex acaulis*, *Carex magellanica*, *Carex sagei*, *Cystopteris fragilis*, *Grammitis poeppigiana*, *Puccinellia pusilla*, *Asplenium dareoides*)
- (c) Re-appraisal of the Red List criteria for two species to ensure a consistent approach to the application of the Red List criteria (*Carex macloviana*, *Koeleria permollis*)

Limosella australis has been removed from the Red List (Broughton and McAdam, 2002c) because it is now considered unlikely to be at risk of extinction in the Falkland Islands; it is now known from 14 IUCN locations and appears to set large amounts of seed (Upson, 2012b). Large sub-populations of *L. australis* exist in grazed areas indicating that livestock do not appear to have an adverse impact (Upson, 2012b). This example shows how Red-Listing can raise awareness of a species, promote targeted survey work and ultimately lead to a better understanding of its status.

5. DISTRIBUTION OF FALKLAND ISLANDS NATIVE VASCULAR FLORA

Whilst a full understanding of biogeographical trends awaits further research, it is useful here to summarize qualitative assessments of the broad scale distribution of vascular plants across the archipelago on the basis of our current level of knowledge. In particular it is worth noting that all native plant species have affinities with southern South America and that most species are widely distributed in suitable habitats across the Falkland Islands (though these habitats may be scarce and widely scattered), with only a small proportion of species having noticeably restricted distributions.

5.1 Origins of the flora

With the possible exception of *Veronica elliptica* (syn. *Hebe elliptica*), which may have colonised directly from New Zealand via long-range dispersal, all of the Falkland Island native vascular species are most likely to have originally colonised from South America.

All 14 endemic species have their closest relatives in South America, suggesting that they have evolved from species that colonized the Falklands from the continent. At least 161 native taxa (89%) are also present in South America. Of the three remaining taxa, *Gaultheria antarctica* x *pumila* is a spontaneous hybrid between two native species and further research may prove it to also be present on mainland South America. *Polystichum mohrioides* is restricted to the Falklands and South Georgia and *Calandrinia* cf. *nitida* may be endemic (see box 3).

In particular the majority of Falkland taxa are shared with the eastern slopes of the Andes up to the snow line, where rainfall levels are most similar (Moore, 1968). There are fewer affinities with western Patagonia, which receives the highest rainfall in the region and even fewer species in common with east Patagonia and north-east Tierra del Fuego which have the lowest annual precipitation in the region owing to the rain shadow effect of the Andes (Moore, 1983).

Of the Falkland native flora, 34 taxa (19%) are also native in the sub-Antarctic zone, New Zealand or southeastern Australia (Moore, 1968). In contrast 17 taxa (9%) have a bipolar distribution, occurring both in the Southern Hemisphere and in the higher latitudes of the Northern Hemisphere, especially America and to a lesser degree Europe (Moore, 1968).

5.1.2 Colonisation and establishment

It is probable that the majority of Falkland native taxa have dispersed to the Islands through the air by wind. Weather and climate are therefore important factors determining the geographical origins of the ancestors of Falkland plants. There is also a possibility that some propagules arrived via birds, sea currents, or the extinct Falkland Islands wolf (Austin et al. 2012).

Arrival at a site does not guarantee successful colonization. After arrival there are biotic and abiotic filters that act together to determine if a species can establish successfully. There is a large gap in our understanding of the factors that may determine local patterns of colonization in the Falkland Islands. Research into fine-scale biotic interactions that may influence plant establishment has not yet begun, however a wealth of field observations and

research carried out on the same or related species found in nearby areas can provide many clues (e.g. Cavieres *et al.* 2007; 2002).

Research is currently underway to quantitatively investigate relationships between plant distributions and broad-scale climatic gradients, geological and topographical features across the Falkland Islands. Unfortunately comprehensive soil and vegetation maps are lacking for the Islands but if developed in the future, these will greatly improve our ability to investigate the biogeography of the Islands.

5.2 Geographically widespread taxa

134 native taxa (74% of the total flora) are 'widespread' to 'sparsely scattered' across the Falkland Islands. Most of these are good dispersers and have a wide range of preferred habitats and/or are associated with habitats that are common across the islands such acid grassland or dwarf-shrub heath. Some taxa are restricted to more narrow habitats, but occur wherever these habitats are present across the islands.

5.2.1 Impacts of land management

It is possible that several of the widespread taxa may have become more widespread since human habitation owing to a greater resistance to certain land management practices; for example resistance to grazing has most likely favoured the dominance of unpalatable species such as *Blechnum penna-marina* over large areas as well as the dominance of *Empetrum rubrum* and *Cortaderia pilosa* over more palatable grasses and herbs.

A larger number of widespread taxa are likely to have been negatively affected by grazing and other land management practices. For example, a combination of burning by sealers and subsequent grazing are both likely to have contributed to the severe decline in *Poa flabellata*, whilst surveys of ungrazed islands or islands that have been free from grazing for over 25 years (such as Keppel, Weddell, Middle and New Island) point to a former dominance of palatable grasses such as *Hierochloe redolens*, *Elymus magellanicus* and *Poa alopecurus* over larger areas than currently observed (e.g. see Upson, 2009). Although still widespread and frequent even in grazed areas, under lighter grazing conditions, *Hierochloe redolens* appears can come to dominate larger areas by overgrowing dwarf shrub heath and *Blechnum penna-marina* fern beds (e.g. see Upson, 2009; Upson & Woods, 2010). A range of other palatable grasses and herbs including *Trisetum* spp., *Deschampsia* spp, *Acaena magellanica* and *Olsynium filifolium* are also more frequent under low grazing pressure and are likely to have been more common in the past.

For many less common taxa, it is currently only possible to hypothesize the extent to which land management practices, rather than biotic and abiotic factors, have determined the present day distribution. However, comparisons between sites can provide clues as to the likely impacts of grazing. A classic example for the Falkland Islands is provided by the endemic *Nassauvia serpens*, which is currently widespread but scarce across the archipelago. This species is now found almost exclusively in stone runs and it was therefore previously thought that *N. serpens* had a strict requirement for this habitat. Surveys have since discovered that in the absence of grazing pressure, *N. serpens* can thrive in a range of other habitats including *Chilotrichum* scrub, *Blechnum penna-marina* fern beds and dwarf shrub heath, with an apparent preference for sites in proximity to running water/ run-off gullies (Upson, 2009). It is likely that grazing has also caused the contractions in ranges of many

other palatable species which are now uncommon. This includes the globally threatened endemic species *Phlebotobium maclovianum* and *Erigeron incertus*, for which available evidence suggests they were significantly more common before the introduction of livestock, (see Upson, 2013).

5.2.2 Widespread and frequent to common taxa

57 taxa (32% of the total flora) are 'widespread' and common or frequent across the Islands. These include the near ubiquitous *Empetrum rubrum*, *Cortaderia pilosa* and *Blechnum penna-marina*; these species are amongst those that can become the dominant species in their preferred habitats and also occupy a wide range of different habitats.

This group also includes species such as *Lobelia pratiana* and *Juncus scheuchzerioides* which never form the dominate ground cover over large areas but find suitable microhabitats within a wide range of broad habitat types including the dominant *Cortaderia pilosa* acid grassland and *Empetrum rubrum* dwarf shrub heath.

5.2.3 Widespread and occasional taxa

32 taxa (18% of the total flora) are widespread and occasional across the Islands; this group broadly contains two sets of species. Firstly, those whose distribution appears to be predominantly determined by specific habitat requirements, such as the carnivorous *Drosera uniflora*. Secondly, those that were previously more common but are likely to have been greatly impacted by grazing, such as *Calceolaria fothergillii* and *Elymus magellanicus* (e.g. see Upson, 2011b).

5.2.4 Widespread or widely/ sparsely scattered and scarce/ rare/ very rare

45 taxa (25% of the total flora) are categorised as widespread, widely scattered or sparsely scattered; and scarce, rare or very rare. Species in this group appear to be good dispersers as they occur in geographically distant parts of the Islands. Again, this distribution may be due to either a susceptibility to grazing or other land management practices, narrow habitat requirements including a preference for habitats which are geographically restricted. Some species are difficult to spot or accurately identify in the field and may prove to be more frequent than current data suggest. For example, *Limosella australis* is small and nondescript when not in flower and it was formerly believed to be very rare in the Islands. However, a better understanding of its requirement for seasonally dry pond margins means it has been searched for and found in these areas and is now known to be less rare than previously thought.

Cystopteris fragilis provides a good example of a species whose distribution is constrained by narrow habitat requirements; its need for calcium combined with an intolerance of drought conditions is most likely responsible for its limited area of occupancy as such conditions are rare but widely scattered across the Falkland Islands (Broughton and McAdam, 2003).

It is likely that drought intolerance restricts the distribution of several species, including scarcer ferns such as *Polystichum mohrioides* and *Hymenophyllum falklandicum*; these species are largely restricted to suitable rock outcrops or stone runs, although where conditions are suitable they can occur in dwarf shrub heath or under moist acid grassland, respectively (Broughton and McAdam, 2003). *Gaimardia austalis* and *Botrychium dusenii* also provide examples where specific habitat requirements are likely to be the cause of low

areas of occupancy, although these are easily overlooked and may be more common than current data suggest.

Rare upland species such as *Acaena antarctica* and *Azorella selago* are found only at high elevations and are probably adapted to slightly cooler annual temperatures and moister conditions, with studies having shown the latter to be highly drought sensitive (le Roux et al. 2005).

Vulnerability to competition can also severely restrict the distribution of a given species. It is probable that a group of species with a disjunct coastal/ montane distribution (typically at very exposed sites) fall within this category. *Deschampsia parvula* and *Valeriana sedifolia* exhibit this disjunct distribution, with the latter only found in exposed areas of low vegetation cover. *Puccinellia pusilla* is another such species, which in upland sites appears to prefer areas of late snow melt further suggesting a low competitive ability.

5.3 Species with restricted distributions

23 Species (13%) are restricted to only one side of Falkland Sound. There are clear climatic gradients across the Islands which are likely to play a strong part in explaining these restricted distributions. The annual mean temperature increases moving westwards across the islands and there is a decrease in annual precipitation to the south (unpublished data; McAdam, 2012; McAdam and Broughton, 2011; McAdam, 1985). The minimum temperature of the coldest month increases towards the west reflecting milder winters and the mean temperature of the wettest quarter also increases towards the west (unpublished data).

5.3.1 Impacts of land management

As with widespread species, it is currently only possible to hypothesize the extent to which land management practices determine the present day distribution of some range-restricted species, as opposed to biotic and abiotic factors such as narrow habitat requirements. However, comparison between grazed and ungrazed sites shows that several species are intolerant of grazing. For such species, grazing may exacerbate the situation and their current ranges may therefore represent refugia from a somewhat wider previous distribution. Such species include *Acaena ovalifolia*, *Acaena pumila*, *Calceolaria biflora*, *Calceolaria fothergillii*, *Carex banksii*, *Carex magellanica*, *Epilobium ciliatum*, *Hieracium patagonicum*, *Koeleria permollis*, *Saxifraga magellanica*, *Suaeda argentinensis*, *Veronica elliptica* and *Viola magellanica*. Most of these species are considered nationally threatened and further study to determine the relative impact of grazing and other threats is urgently needed to ensure these species achieve a more favourable conservation status.

5.3.2 Species restricted to the west of Falkland Sound

18 taxa (10 %) are only known from west of Falkland Sound (see Table 7); this is perhaps in part because of the major direction of colonisation to the Islands but probably more importantly, as a result of site suitability. These geographic distributions appear to reflect the known climatic gradients, suggesting that climatic niche requirements are likely to be determining their ranges. These species can broadly be divided into 3 groups: species mainly found in the extreme west, species found mainly in the northwest and species found only in the southwest. The only exception to this pattern is *Scutellaria nummularifolia*, which has only been recorded from Fox Bay, however it is not certain that this is a native species (see also section 4.4.1).

Whilst climatic influences are likely to be very significant in determining the distributions of these species, this could also be linked to a reduced dispersal ability as propagules such as seeds and spores are more likely to first arrive in the west as this is the main direction of colonisation from southern South America (Parris, 2001).

Table 7: Native flora only known from west of Falkland Sound

Latin name	Falkland distribution
<i>Adiantum chilense</i>	Northwest (however there is an historical record from Port Edgar area)
<i>Azorella monantha</i>	West
<i>Blechnum cordatum</i>	West
<i>Calandrinia</i> cf. <i>nitida</i>	West (Islands)
<i>Calceolaria biflora</i>	Northwest (possibly locally extinct in the wild)
<i>Draba magellanica</i>	Northwest (possibly locally extinct in the wild)
<i>Gavilea araucana</i>	Northwest
<i>Hieracium patagonicum</i>	Northwest
<i>Hypolepis poeppigii</i>	Northwest
<i>Hymenophyllum darwinii</i>	Northwest
<i>Hymenophyllum tortuosum</i>	Northwest
<i>Nassauvia falklandica</i>	Northwest
<i>Nastanthus falklandicus</i>	Southwest
<i>Plantago moorei</i>	Southwest
<i>Rumohra adiantiformis</i>	Northwest
<i>Samolus repens</i>	Northwest (Islands)
<i>Scutellaria nummularifolia</i>	West (Fox Bay, possibly locally extinct in the wild)
<i>Suaeda argentinensis</i>	Northwest (Islands)

5.3.2.1 Extreme western distribution

Three species have an exclusively western range: *Azorella monantha*, *Blechnum cordatum* and *Calandrinia* cf. *nitida*, which are known only from coastal areas and islands in the extreme west of the archipelago. It appears likely that they prefer the milder climate towards the west of the archipelago.

Azorella monantha was previously believed to be present on the east (Broughton and McAdam 2002a), but disjunct records from Sea Lion Island and the north of East Falkland have since been confirmed as erroneous (R. Woods, pers. comm.) and a record further inland at Green Hill Fish Hole is considered doubtful.

In addition to these three species, *Veronica elliptica* is largely restricted as a native species to these extreme western coasts and islands. However, it is also known from a small number of sites further east, including Bleaker Island and a neighbouring small island (S. Poncet, pers. comm.). It is not certain whether this disjunct distribution is natural or the result of naturalization as this species has been widely cultivated since the 19th Century and some or all eastern populations may be naturalised from garden source populations.

5.3.2.2 North-western distribution

12 species are restricted to the northwest, in areas that correspond to patterns of higher springtime rainfall than the majority of the Islands. This may be significant because rainfall is usually lowest in the spring and, combined with the strong, drying winds that also occur at this time, acts as a major limit to plant growth in the Islands (McAdam, 1985; Summers

and McAdam, 1993). Five of these northwest species are ferns known to be sensitive to drought (Table 7) and so likely to benefit. For example *Adiantum chilense* is largely a species of warmer climes and is at its southern-most limit in the Falkland Islands; this may explain its restriction to the milder and moister northwest and sheltered coastal sites (Broughton and McAdam, 2003).

The fact that many nationally rare species are limited to the northwest of the islands also makes this area a hotspot for new discoveries and possible extinctions. Five out of the seven additions to the checklist are currently only known from the northwest whilst two of the three native species which may be locally extinct are only known from this region.

Draba magellanica, *Calceolaria biflora*, *Gavilea araucana* and *Hieracium patagonicum* favour the milder climate of the northwest although the former two species may now be extinct in the wild. The coastal *Suaeda argentinensis* and *Samolus repens* also favour these milder conditions and may be further restricted owing to the narrow distributions of their preferred habitats. It is highly likely that the former species, only known from un-grazed islands, has been impacted by livestock elsewhere, whilst the very specific habitat requirements of the latter, growing on peat or silt in sheltered saltmarsh habitat immediately below the high tide mark, is likely to further limit the range of sites where it could establish.

5.3.2.3 South-western distribution

Two endemic species, *Nastanthus falklandicus* and *Plantago moorei*, are restricted to the southwest of the archipelago. Both species appear well-adapted to highly exposed, coastal sites, and display root morphology that is well adapted to erosion-prone sites.

N. falklandicus is restricted to coastal free-draining, sandy, predominantly mineral substrates and may also be vulnerable to competition so preferring areas strongly influenced by sea-spray with low vegetation cover.

Plantago moorei occurs in different plant communities to *N. falklandicus*, being mainly found in coastal dwarf shrub and cushion heath habitats. Extensive areas of coastal (saline) grassland only occur in the southwest of the archipelago so it may be that conditions favouring this community such as extreme exposure to strong westerlies and high salt loads also favours the growth of *Plantago moorei*, with the hairy leaves of this species likely being an adaptation to these conditions, though these hypotheses need to be addressed by targeted scientific research (Upson, 2008a, 2012c).

5.3.3 Widespread species which are more abundant in the west

In addition to the 23 species only known from the west of the archipelago, 10 widespread species (6%) are much more abundant in the west than the east, further highlighting the importance of longitudinal climatic differences in shaping species distributions. These species are presented in Table 8 below.

<i>Asplenium dareoides</i>	<i>Schoenoplectus californicus</i>
<i>Calceolaria fothergillii</i>	<i>Sisyrinchium chilense</i>
<i>Deschampsia parvula</i>	<i>Sticherus cryptocarpa</i>
<i>Gamochaeta antarctica</i>	<i>Tetronchium magellanicum</i>
<i>Potamogeton linguatus</i>	<i>Veronica elliptica</i>

Other species such as *Azorella selago* also have more populations in the west than east, however in this case it is likely that this has more to do with the relative distribution of upland sites within the altitudinal range preferred by this species.

5.3.4 Species restricted to the east of Falkland Sound

Six species (3%) are currently only known from east of Falkland Sound, these are listed in table 9. East Falkland-only distributions are harder to explain in terms of longitudinal climatic trends as it is unlikely that taxa would suffer under the milder more favourable growing conditions found in the west, particularly the northwest. It is likely that such patterns are largely an artifact caused by a combination of differing land use histories and lower levels of survey work in western islands. As Broughton and McAdam (2002a) predicted, recent surveys have expanded the known ranges of several species; four of the seven species formerly thought to be limited to this area (Broughton and McAdam, 2002b) have now also been recorded to the west of Falkland Sound.

In particular, *Arachnitis uniflora* is a mycoheterotrophic species which lacks leaves and chlorophyll and is present above ground only as a small brownish flower for a few weeks each summer, so opportunities to record this species are limited. It shares similar narrow habitat requirements to *Botrychium dusenii*, and further survey work of coastal sand dune habitats is likely to uncover additional populations of both these species in the west. The sedges and grass species *Carex banksii*, *Koeleria permollis* and *Uncinia kingii* are also likely to suffer from under-recording. When not in flower *C. banksii* and *U. kingii* can be hard to distinguish from other *Carex* species and *K. permollis* strongly resembles *Trisetum* species.

Alternatively, for some of these species (including *C. banksii*, *K. permollis*, *Saxifraga magellanica* and *Viola magellanica*) that are known to be vulnerable to grazing, the current distributions may represent refugia from previously more widespread occurrences (see section 4.4.1 for a more detailed discussion). There is also a possibility that some of these species are recent natural arrivals that are at an early stage of colonisation.

In the absence of convincing evidence to show otherwise, all these species are considered to be native or probably native (*Viola magellanica*). Further studies may help to elucidate the extent to which Falkland populations can be differentiated from South American populations.

Table 9: Native flora only known from East Falkland

Latin name	Falkland distribution
<i>Arachnitis uniflora</i>	Eastern coast
<i>Carex banksii</i>	Inland
<i>Koeleria permollis</i>	Eastern coast
<i>Saxifraga magellanica</i>	Eastern coast
<i>Uncinia kingii</i>	Inland
<i>Viola magellanica</i>	Outlying island

5.3.5 Widespread species which are more abundant in the east

Five widespread species are currently known from many more locations in the east than in the west. These are presented in table 10. As with species restricted entirely to the east, the apparent distributions of some species are likely to be an artifact of survey intensity. This may be especially true for the sedge *Carex macloviana*, which can be more difficult to

identify in the field, especially when not flowering or fruiting. The distribution of *Epilobium ciliatum* may be due to anthropogenic factors, as discussed in Box 3.

<i>Botrychium dusenii</i>	<i>Euphrasia antarctica</i>
<i>Carex macloviana</i>	<i>Rumex magellanicus</i>
<i>Epilobium ciliatum</i>	

Three species (like *Arachnitis uniflora* which is discussed above) are only or predominantly known from coastal sand-dune marshy grassland habitats, so their distribution may reflect a greater abundance of this habitat on the east. Firstly, *Botrychium dusenii* was previously believed to be restricted to the east of the islands, but a relatively small population has recently been discovered on Keppel Island in the north-west of the archipelago, suggesting it may be more widespread in suitable habitats. It is typically only present above ground for a few weeks in the summer months so is easily missed if botanical surveys do not coincide with this period. Secondly, *Rumex magellanicus*, was first recorded in the archipelago from sites on East Falkland in 2001, where it forms extensive populations in a few locations (Broughton & McAdam, 2002a). It has since been recorded from relatively small populations on Weddell, Keppel and Saunders Islands and one site on West Falkland. The third species, *Euphrasia antarctica* is more common and is likely to be found in suitable habitats wherever they occur.

5.3.6 Widespread species which are more abundant in the north

Carex magellanica, *C. microglochin* and *C. canescens* appear to be more abundant in the north of the islands. This may again be a survey artifact owing to the challenges of identifying these when not in flower. Their distribution may, however, correspond to the higher levels of precipitation experienced in these areas in comparison to further south.

6. INTRODUCED AND INVASIVE VASCULAR FLORA

6.1 Invasive species

Invasive species are widely recognised as being one of the most significant threats to global biodiversity and these impacts are particularly strong on islands, due to high levels of endemism, small areas of habitat and low species richness. The impacts of invasive plants within the Falklands have received more attention in recent years, especially following the 3-year South Atlantic Invasive Species Project 2006-2009. Invasive species impacts are now recognised by the Falkland Islands Government as one of the highest priorities for biodiversity and also a significant threat to agriculture. These concerns have led to a number of actions over recent years which have targeted introduced plant species for surveys, research, biosecurity and control. Consequently, our knowledge of the introduced flora has increased considerably in recent years and work is ongoing, so this trend is likely to continue.

6.2 Status of introduced flora

6.2.1 Summary

249 introduced taxa are recognised here, including 241 species and nothospecies (hybrids formed by direct hybridization of two species), 6 additional infraspecific taxa and one spontaneous hybrid between two introduced species. Together, these species cover 152 genera from 52 families. Of these, 23 families are only represented in the Falklands by introduced species.

The most species-rich families are Poaceae (34 species and one subspecies), and Asteraceae (31 species and one subspecies). Table 11 summarises the plant families represented by 5 or more introduced species.

Table 11: Plant families represented by 10 or more introduced taxa in the Falkland Islands	
Family	Number of taxa
Poaceae	35
Asteraceae	32
Fabaceae	19
Brassicaceae	15
Rosaceae	11
Plantaginaceae	11
Caryophyllaceae	11

Of the 249 introduced taxa, 7 are not resolved to species level.

- Four taxa cannot be determined to species level with absolute confidence because no fertile specimens are available. Despite this vegetative material has been determined as far as possible. These taxa are indicated by 'cf.' before the species epithet in the checklist and comprise *Pinus cf. echinata*, *Pinus cf. radiata*, *Prunus cf. domestica* and *Rumex cf. hydrolapathum*.
- One taxon, *Sidalcea cf. malviflora*, cannot be confirmed as it is likely to be a garden-origin taxon, possibly including complex hybridisation in its origins.

- Two taxa have not been resolved beyond genus level. *Narcissus* sp. includes at least 3 different cultivars, each of which probably has different, potentially complex hybrid origins. *Escallonia* sp. includes a single plant, probably originating from cultivated material, for which only a single vegetative voucher is available.

An additional 22 species of uncertain status are listed separately and ten previously recorded species are excluded from the checklist. Two native species may also be present as both native and introduced genotypes (see Box 3 for a discussion of this issue).

6.2.2 Changes since Broughton & McAdam (2002b)

This checklist recognises a much larger introduced flora than previous checklists. Broughton & McAdam (2002b) recognised 180 introduced taxa, so this checklist represents a gross increase of 68 taxa or 38%.

However, this figure masks two differences between the two checklists. Firstly, this checklist has a broader remit, including casual and persisting species, not just naturalised species; and secondly, some previously accepted species have been excluded or relegated to uncertain status. Therefore a straight comparison of taxon totals does not give a complete picture.

To summarise all changes:

- 77 additional taxa have been recorded
- 11 taxa previously on the checklist are now regarded as being of uncertain status
- *Elymus repens* var. *aristata* is no longer considered distinct from the type variety and is now included only as a synonym
- *Medicago sativa*, which was tentatively included by Moore (1968) but excluded by Broughton & McAdam (2002) has been reinstated.
- One species (*Calandrinia menziesii*) was formerly believed to be endemic but is now known to be introduced.
- Seven taxa have been redetermined. The new determinations are included in this checklist and four of the previous determinations have been excluded, whilst three are listed as being of uncertain status pending further research.
- 21 taxa were not recorded during surveys by Broughton & McAdam (2002) and 14 of these were noted as possibly locally extirpated. Eight of these species have subsequently been recorded since 2008, though in most cases it is not clear whether these were present but unrecorded in 2002, have re-established from a buried seedbank, or are re-introductions.
- 13 taxa recorded during surveys by Broughton & McAdam (2002) have not been recorded since and may now be locally extirpated.
- *Armeria maritima* was previously recorded solely as a native species, introduced individuals of this species are now known to have naturalised from cultivation in gardens along sections of the seafront in Stanley, East Falkland (see also Box 4).
- Previous records of *Atriplex prostrata* are now known to refer to *A. patula*. However, a single small population of *A. prostrata* was discovered at MPA. This was controlled and is now believed to be locally extirpated.
- *Plantago maritima* and *Epilobium ciliatum* may both be present as native and introduced genotypes. This is discussed further in Boxes 1 and 3, respectively. Due to uncertainty about their status, these have not been included as introduced taxa in these analyses

Taking these factors into account, only 171 introduced taxa recorded prior to 2002 are retained on the checklist and consequently this checklist represents a net increase of 77 taxa or 45%.

6.2.3 Verification of records

228 (92%) of the introduced taxa are represented by verified voucher specimens of wild-collected material deposited in either international herbaria or the Falkland Islands National Herbarium. 20 taxa are recorded only from observations, though some of these are probably escapes from cultivation and are represented in herbaria by cultivated material from the Falklands. These 20 taxa have been retained on the checklist as they are morphologically distinctive and unlikely to have been misidentified, though it has not been possible to fully verify such records. 11 of these may now be locally extirpated, making future verification impossible.

6.2.4 Status Of introduced taxa

6.2.4.1 Extirpated taxa

63 taxa (25%) may no longer be present in the Falklands, with 28 taxa classified as 'possibly extirpated' and 35 as 'probably extirpated'. It is never possible to be confident that a species is completely extirpated as many areas remain unsurveyed and species can often persist unseen in the soil seedbank for many years. This fact is emphasised by the rediscovery of eight taxa previously believed extirpated and it is likely that some of the species described here as possibly or probably extirpated will be refound in the future. In particular, some taxa are still present in cultivation in the Falklands and may re-colonise in the future.

Most of these putatively extirpated species probably died out through natural processes, but at least eight species (*Berberis ilicifolia*, *Epilobium hirsutum*, *Rumex x propinquus*, *Cymbalaria muralis*, *Oxalis corniculata*, *Carduus tenuiflorus*, *Urtica dioica*, *Chamerion angustifolium*) were deliberately removed from all known sites as a precautionary action to reduce the impacts of invasive plants. However, as with all other putatively extirpated species, these may still be present in other locations or in the soil seedbank and ongoing monitoring is recommended.

6.2.4.2 Naturalised status

163 taxa are naturalised, 24 are persisting after cultivation, 28 are casual, and 4 taxa are both casual and persisting. Insufficient data were available to assign 29 taxa to a category. It should be noted that these assignments represent a snapshot in time, looking at an ongoing process of establishment and extirpation. Species regarded here as casual or persistent may become naturalised in the future, whilst others may die out.

Of the taxa assigned to a category, the vast majority, 74%, are considered to be naturalised. However, this high figure may be misleading as there are other factors to consider. Firstly, in this checklist a broad definition of naturalised has been used to include any taxon which reproduces unaided, either vegetatively or sexually, including some populations that may turn out to be short-lived, and which might under other circumstances might be considered 'casual'. Secondly, casual taxa are usually present in very small numbers for a very short time period, making it unlikely that they will be recorded during botanical surveys and casual taxa are probably under-represented on this checklist. It is likely that additional

species have been present as casual individuals or populations, but these were transitory and died out before being recorded.

6.2.4.3 Naturalised taxa

163 taxa (74% of the taxa assigned to a category) are naturalised, covering species which have been observed to reproduce unaided. Most have been observed to reproduce sexually, though a few species have only been observed to reproduce vegetatively. The latter group includes *Epilobium hirsutum* and *Chamerion angustifolia* (both Onagraceae), which each established in single locations where they spread by creeping rhizomes over several square metres. No seedlings of either were recorded, perhaps due to lack of cross-pollination in these strongly out-crossing species. Populations of *Salix* and *Populus* species are mostly clones of a single sex, so despite some spreading vegetatively by suckers or layering, they are unable to reproduce sexually. *Rosa rugosa* is known from a single location, where it is spreading vigorously via suckers, however it is capable of sexual reproduction and is likely to spread further afield through bird-dispersed seeds in future.

6.2.4.4 Casual taxa

32 taxa (15% of the taxa assigned to a category) are casual, covering species which have not been observed to reproduce unaided and including those classed as either casual or casual and persisting. Examples of this category include:

- *Triticum x aestivum* (Poaceae, Wheat) and *Chenopodium album* (Amaranthaceae, Fat-Hen) have rarely been recorded growing from spilt, imported chicken-feed, but have not been observed to reproduce.
- *Atriplex prostrata* has been recorded once on a disturbed road verge at Mount Pleasant Airbase. Around six plants were found within a 1 m² area and this species has not been refound in subsequent surveys.
- Several ornamental cultivated taxa have been recorded in the vicinity of Stanley, apparently growing from dumped garden waste.

6.2.4.5 Taxa which persist after cultivation

29 taxa (13% of the taxa assigned to a category) are persisting after cultivation, covering species which were originally planted but are found away from habitation and including those classed as either persisting or casual and persisting. This category includes three distinct suites of species:

- Ornamental shrubs or trees such as cultivars of *Sambucus nigra* (Adoxaceae, Elder) and plants grown for food, such as *Rheum x hortorum* (Polygonaceae, Rhubarb) and *Ribes uva-crispa* (Grossulariaceae, Gooseberry). These are often found persisting in gardens long after cultivation has ceased and are associated with houses or settlements which are no longer inhabited. They are also occasionally found in cemeteries located outside of settlements.
- Conifers including several *Pinus spp.* (Pine trees) which are occasionally planted for windbreaks and hedges outside of settlements, mostly to offer shelter to livestock.
- Trees and shrubs found in forestry plantations. A few small areas of plantation forest exist in the Falklands, including Hill Cove, Keppel Island and Port Howard. The plantation on Keppel Island is the most species-rich plantation recorded and several tree species such as *Quercus robur*, *Salix gmelinii*, and *Castanea sativa* are only known from this location.

- *Berberis ilicifolia* has been recorded from two mature plants on a hillside behind Stanley. These plants may have originally been planted in this location but they have since been removed.

6.2.5 Species of uncertain status

22 taxa are listed as being of uncertain status. In addition, introduced genotypes of two putatively native species (*Epilobium ciliatum* and *Plantago maritima*) may be present alongside the native genotypes, but are not included here.

- Two species (*Stipa neaei* and *Glycyrrhiza astragalina*) are only known from vouchers at CGE collected by Darwin. There are grounds to suspect that these are mislabelled and were collected on mainland South America. Hooker, who was in close communication with Darwin has labelled one of these vouchers to this effect.
- Ten species were present on previous published checklists but are possible misidentifications, where no vouchers exist but morphologically similar species are known to be present
- *Stellaria graminea* and *Festuca ovina* are only known from unpublished checklists and it has not yet been possible to either confirm or contradict these records, though they may be misrecords for *S. alsine* and *F. filiformis* respectively.
- *Saxifraga x urbium* is known only from photographs taken by a local resident. Further survey is needed to confirm the identity and location.
- Records of *Dryopteris filix-mas* and *Silene latifolia* may refer to cultivated plants but this is unresolved.
- *Ulex gallii* has been recorded from cultivated plants at a commercial nursery and this species may have been planted at other locations for hedging and stock shelter, or may have naturalised from planted bushes.
- One herbarium voucher has been determined as a possible hybrid of *Epilobium ciliatum* x *obscurum*, though this is not confidently determined.
- *Luzula multiflora* subsp. *multiflora* has been reported, but is very similar to other introduced *Luzula* taxa and further studies are required.
- The taxonomy of *Festuca rubra* remains unresolved, with no full agreement on the recognition of various subspecies. *F. rubra* ssp. *commutata* is regarded as a taxon of uncertain status until the taxonomy has been resolved and all records are here included in *F. rubra* s.l.
- *Pinus nigra* has been reported as being planted in shelterbelts, but no field records or vouchers exist yet.

It is likely that additional pasture, windbreak and forestry species have been cultivated either recently or historically, and may also have naturalised. A thorough search of published and grey literature relating to agricultural improvement would be useful to identify such species.

6.2.6 Excluded species

Ten taxa are excluded from the checklist.

- Four taxa which were included by Broughton & McAdam (2002) but herbarium material has been re-determined and all recent field records support this.
- Four taxa were tentatively included by Moore (1968) but excluded by Broughton & McAdam (2002) and recent surveys have not recorded these taxa.
- Two taxa which were included on unpublished checklists and are now known to be misidentifications.

6.3 Origins of introduced flora

It is rarely possible to be certain of the origin of introduced plants. A few intentional introductions have been recorded historically, such as Gorse and Marram and some pasture species, but most introductions are undocumented, or at least any records which do exist have not yet been adequately researched. It is particularly unusual to have documented evidence of accidental introductions, though *Plantago major* is reported as establishing at MPA at the time of construction of a paved footpath in the 1990s and it is likely that seeds were introduced with imported building materials.

For some species, it is possible that there has been more than one introduction event, so there may be two or more points of entry into the Falklands and different genotypes may be present, further confusing the understanding of how these species arrived in the Falklands.

Understanding the pathways that lead to the intentional and accidental introduction of new species is important for managing and preventing the introduction of potentially invasive species and more research is needed to better understand these pathways.

The UK and southern South America are the most likely sources for many introduced plants and the Falkland Islands retain significant trade and communications with these regions. Additional pathways for introduction from other regions are, however, also possible; for example, before construction of the Panama Canal, ships from many locations travelling between the Atlantic and Pacific Oceans often stopped in the Falklands. To this day, yachts continue to visit the Falklands from many areas of the world. Whilst these means of transportation are typically smaller in volume, so representing a less likely pathway for introduction, the possibility cannot be entirely discounted.

6.3.1 Pathways of introduction

There are many potential routes through which non-native plants may become introduced to the Falklands. These can broadly be divided into intentional introductions and accidental introductions. The former includes species intentionally cultivated for a range of purposes, including ornament, agriculture, domestic food production and forestry. The latter includes a wide range of ways in which propagules such as seeds, spores or plant fragments may be imported as contaminants of a wide range of imported goods, such as the footwear of passengers, construction materials and road vehicles. Accidentally imported species are more likely to include those regarded as 'weeds', though it is important to remember that any one species may be imported multiple times, sometimes through different pathways or from different source regions.

6.3.1.1 Accidental introduction

Just over half the introduced taxa (132 taxa or 53%) are 'weedy' species which are not cultivated in the Falklands. There is a very wide range of potential pathways through which plant propagules may be accidentally introduced to the Falklands. Little is known about the relative importance of these different pathways and it is rarely possible to attribute a particular introduction to a particular pathway.

6.3.1.2 Intentional introduction

Just fewer than half the taxa assigned to a cultivation category (116 taxa) are also found in cultivation in the Falklands. Of these, 78 taxa (31%) are cultivated as ornamental or lawn species in the Falklands, 22 taxa (9%) are cultivated for food and 36 taxa (14%) are

cultivated for agriculture (including pasture, fodder, windbreaks, forestry and erosion control). This indicates that intentional and accidental introduction pathways are both significant contributors to the introduced flora of the Falklands.

In order to better understand the role of different pathways of intentional introduction, it will be necessary to understand the levels of introduction of cultivated taxa and to compare the rates at which these have become established outside of cultivation. For example, it is to be expected that the level of propagule pressure will influence the success with which a species becomes established, so pasture species sown on large scales are likely to produce large quantities of seeds, rhizomes and other propagules and may be more likely to become established than species only grown in gardens. Likewise, species which are widely planted in gardens are probably more likely to become naturalised than those which are rare in cultivation.

Further information on the rates of intentional introductions needed to better understand the contributions of these pathways to the introduced flora.

6.3.2 The role of the UK as a source of introduced species

The majority of introduced taxa (209 taxa or 84%), are native to or widely naturalised in the UK and were probably introduced from the UK, either intentionally or unintentionally. It is, however, important to note that many European species are also naturalised in southern South America, so some of the species may have reached the Falklands indirectly via links with South America.

Of these, 209 taxa, 82 are found in cultivation in the Falklands and were probably originally intentionally introduced for use in gardens, pastures, fodder, shelter or forestry.

30 taxa are not native to or widely naturalised in the UK, but are in cultivation both in the Falklands and the UK and are probably escapes from cultivation. This includes *Sisyrinchium californicum* which was probably an accidental introduction from material cultivated in the UK and is not yet known in cultivation in the Falklands. In addition, whilst the genus *Escallonia* is native to southern South America, it is probably only present in the Falklands from cultivars developed in European or North American gardens, so is not a direct introduction from South America.

It seems likely that most cultivated taxa originate from cultivated material sourced from the UK. However, it should be noted that some cultivated plants are also imported from southern South America. As a consequence even taxa which were originally brought into cultivation in the UK may have arrived in the Falklands via cultivation in southern South America.

In addition, some pasture species which originate in the UK or elsewhere have been grown widely in other locations and agricultural seeds may have been imported from areas such as New Zealand or Australia.

6.3.2 The role of Southern South America as a source of introduced species

Only nine (3.6%) taxa regarded as introduced are native to southern South America and were probably introduced directly from there to the Falklands. It should also be noted that whilst these are few in number, they include a relatively high proportion of species which are potentially invasive, notably the shrubby species *Berberis microphylla*, *Ribes magellanica*

and *Fuchsia magellanica*, though the latter two species are currently only spreading in areas free from grazing. There is anecdotal or circumstantial evidence that these may have been introduced initially to Keppel Island in the 19th century by indigenous Fuegian people resident at the missionary society that was based there.

6.4 Patterns in the distribution and abundance of introduced plants

There are some clear patterns in the distributions of introduced plants, with greatest abundance and species richness in anthropogenic and disturbed habitats, especially in settlements, improved pastures and reseeded, as well as areas which are most heavily impacted by grazing such as neutral grassland (greens).

6.4.1 Rare species

Overall, most introduced taxa are currently relatively rare and very limited in their distributions. 63 taxa (25%) may already be locally extirpated, and a further 62 taxa (25%) are recorded from <3 ten km grid squares, so just over half of all recorded taxa have a very narrow distribution or may even be extirpated.

In particular, Stanley and MPA are among the most species-rich sites for introduced plants. They are probably also the most important sites for the establishment of species newly arriving in the Falklands, reflecting the high levels of human activity at these sites, especially the transport and importation of people and goods.

Most (75 taxa, or 97%) of the 77 introduced taxa recorded for the first time since 2002 occur in only four or fewer 10 km grid squares. Of these recently recorded taxa, 34 are known only from Stanley (44%), 5 taxa are known only from MPA (6%), and one species is known from both sites. In total, 40 taxa (52%) are only recorded from these two sites.

However, it should be noted that these figures may be conservative, as there are many barriers to establishment at the earliest stages of a species arriving in a country. It is likely that many species have established and died out before being recorded, or are currently present in small numbers and have yet to be recorded. In addition, other species will have arrived as propagules, but these propagules have failed to find appropriate conditions to develop into mature plants.

There is also the chance that the high number of taxa recorded from Stanley to some extent reflects a bias in recording, as most botanists have been based in Stanley and other locations may be less well recorded. In particular, much of MPA and Mare Harbour remain poorly recorded and there are probably more species present which are as yet unrecorded.

6.4.2 Widespread and invasive species

Very few species have yet colonised significant areas of less disturbed vegetation and only five taxa are present in more than a hundred 10 km grid squares (*Cerastium fontanum*, *Poa pratensis*, *Sagina procumbens*, *Aira praecox* and *Rumex acetosella*). However, several species are still apparently expanding their ranges and it is probably only a matter of time before a range of species which are well adapted to grazing, cool temperatures and the poor soils of heathland and acid grassland habitats, are much more widespread unless significant action is taken to control them. These species include *Galium saxatile*, *Pilosella officinarum*, *Pilosella aurantiacum*, *Veronica officinalis*, *Calluna vulgaris* and *Berberis microphylla*.

As much of the land area of the islands is currently grazed, grazing intolerant species are less likely to become widespread, however some species such as *Ribes magellanicum* and *Fuchsia magellanica* are widely grown in gardens and are already spreading in a few ungrazed locations and are likely to continue to spread in ungrazed islands or inaccessible locations such as cliffs.

6.5 The dynamics of the introduced flora

6.5.1 Increasing rate of species colonisation

Figure 1 clearly shows that the number of recorded introduced taxa is, as expected, increasing over time and that the rate at which new species are recorded is also increasing. 92 taxa were reported by Moore in 1968; this rose to 171 taxa (92% increase) reported by Broughton & McAdam in 2002, rising again to 249 taxa (38% increase) in 2013. This indicates a rate of increase of *c.* 2 taxa/year between 1968 and 2002, rising to 7 taxa/year since 2002. However, it should be noted that additional factors may have contributed to this apparently dramatic rise in numbers of species, including greater survey effort, the broader remit of this checklist and more effort invested in accurate species identification. For example, *Rumex longifolius* is known to have been present prior to 2002 and was seen by Broughton & McAdam, but was misidentified as the similar species *R. crispus* and *R. obtusifolius*, which are also present. This should be balanced against the fact that it is likely that many additional species are present in the islands but remain overlooked or misidentified.

Despite these caveats, due to increasing economic activity within the islands from the 1980s onwards, it is to be expected that the rate of species introduction should have risen in recent decades. The rate at which species arrive in a new country is strongly linked to the level of economic activity, as this reflects the level of communications with other parts of the world, increasing the rate at which people and goods arrive in the country and thus the size of the potential pathways for both accidental and intentional introductions. Increases in economic and military activity since the 1980s have led to increased levels of people and goods travelling to and from the islands. This provides new or increased pathways by which seeds and other propagules could 'hitch-hike' as accidental introductions to the islands. There are also likely to have been increases in the intentional introduction of pasture and shelterbelt species for agricultural improvement, as well as ornamental and productive species for domestic and commercial horticulture.

It is also possible that changes in the pattern of communication links since the 1980s may influence the range of species arriving in the Falklands. There are now more direct links with the UK, which has a high diversity of temperate, weedy or heathland-adapted species that are likely to be able to establish in natural or disturbed habitats in the Falklands. Increased links with sites in Tierra del Fuego and Patagonia, such as flights and shipping from Punta Arenas and cruise ship tourists from Ushuaia also provides pathways for accidental introduction of species adapted to similar environmental conditions.

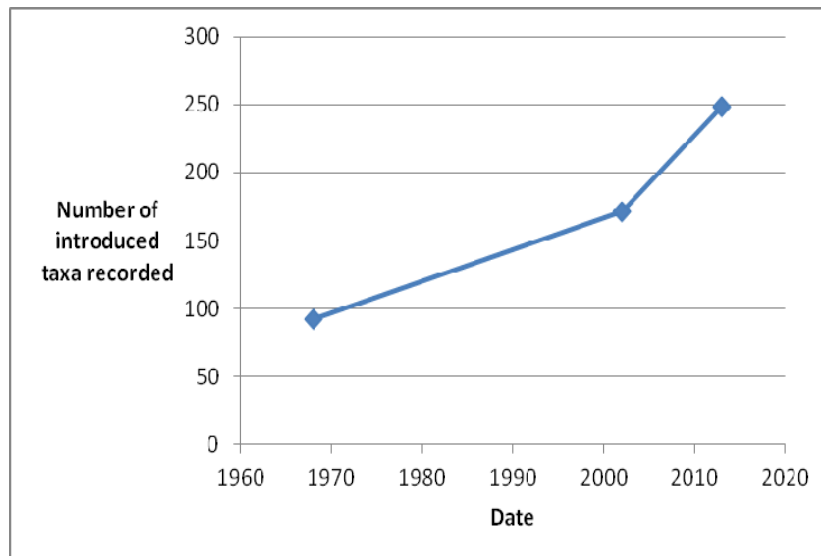


Figure 1: Rate of increase in number of introduced taxa recorded in the Falkland Islands

6.5.2 High rates of local extirpation

The distribution patterns of rare described in section 6.4.1 indicate that most taxa become established initially in highly disturbed habitats associated with human activity and many species fail to establish, naturally die out or are intentionally extirpated at this stage. Thus there is a relatively high turnover of species at an early stage of establishment. Species may die out for a number of reasons, for example, if:

- They are not suited to the climatic or edaphic conditions of the Falklands
- They do not happen to colonise appropriate suitable habitat
- They have limited genetic diversity (founder effects)
- Stochastic events lead to them dying out before further colonisation is possible

Whilst many species unsuited to wider establishment in the Falklands could only ever be present as small, temporary populations, a species becoming locally extirpated at an early stage of colonisation does not necessarily mean that it could never have established more widely. This early stage is crucial in the establishment of a new species, with many barriers to the species surviving and spreading to a suitable habitat type, so this is the point at which targeted control action may be most effective at preventing the establishment and spread of introduced or potentially invasive species.

As with species establishment, extirpation is rarely documented, though there are a few exceptions, especially where extirpation has been achieved by deliberate control. This is the case for a number of species, including *Carduus tenuiflorus*, *Chamerion angustifolia*, *Epilobium hirsutum* and *Atriplex prostrata*. *Muscari armeniacum* was established in a single location on a roadside in sand dunes on Cape Pembroke but was not re-found during follow up surveys a decade later and it is believed that erosion of the sand dunes was responsible for its local extirpation. Some farmland weeds such as *Agrostemma githago*, *Anthemis arvensis* and *Centaurea cyanus* were last recorded in the mid-20th century and may only ever have established as temporary populations from seeds imported in hay or animal feed. The severe declines of these species in the UK during the latter half of the twentieth century due to improved seed cleaning and herbicides may have cut off the supply of seeds to the

Falklands and they may be unlikely to re-colonise from similar sources. However, *A. githago* and *C. cyanus* are both now cultivated for ornament in the Falklands and may recolonise from gardens in the future.

6.5.3 Barriers to establishment and spread

The process of species establishment, with the greatest barriers at the earliest stages, is similar in many places around the world. The Falklands have a number of features that significantly slow down the rate at which plants spread into less disturbed habitats, after initial establishment:

- The relatively limited range of habitats, with most of the islands covered with acid, nutrient-poor peat soils restricts growth rates and is unfavourable to most species, except those adapted to such conditions.
- The cool, dry windy climate is an additional barrier, further reducing growth rates for most species.
- The high levels of grazing across most of the islands act as a strong influence, though this may be more variable in its results. Grazing intolerant species are less likely to find ungrazed habitats to spread into, but some grazing-adapted species may benefit. For example, grazing of vigorous grasses can open up patches of bare soil which allow germination and development of unpalatable species such as Thistles (*Cirsium* spp.) and Hawkweeds (*Pilosella* spp.). Continued grazing pressure on the grasses then acts to increase the competitive advantage of these unpalatable species.

This range of factors has helped insulate much of the Falklands from some of the negative impacts of introduced plant species. Many species which are widespread and problematic in other parts of the world are unable to establish in the Falklands, with only a particular suite of species adapted to the specific conditions of the Falklands able to spread away from human-influenced sites into less disturbed habitats.

However, for the suite of species that can potentially colonise widely in the Falklands, the current situation suggests that these factors act to slow down rather than prevent the impacts of introduced species. With increasing rates of species introduction, it is only a matter of time before a much wider range of potentially problematic species are introduced and begin to spread. Meanwhile, several species are already starting to spread across less disturbed habitats. Whilst the rates at which these species spread may be lower than in many other countries, the process is inevitable and they will continue to spread until they occupy all suitable habitats.

Once a species is well established in multiple locations, it is likely to be impossible or prohibitively expensive to eradicate it or prevent spread to new locations (e.g. Belton, 2008). Where the aim is to reduce future impacts of introduced plants on the native flora, the best results are likely to come from targeting species at the early stages of colonisation.

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APPENDIX I: Checklist for the Falkland Islands

CLUBMOSESSES (LYCOPODS)

LYCOPODIACEAE

Huperzia saururoides (Bory & d'Urv. ex Baker) Rothm.

Feddes Repert. Spec. Nov. Regni Veg. 54: 59 (1944)

Synonym(s): In Broughton & McAdam (2002) as *Huperzia fuegiana*; in Moore (1983, 1968) as *Huperzia selago* (L.) Bernh. ex. Schrank & Mart

Local name: Fir Clubmoss

Description: A clubmoss with short, ascending, branched stems 2-5 cm tall; leaves 4-8 mm in length

Habitat: Exposed situations without shrub overgrowth, such as rocky ledges, peaty hummocks around boulders, and sites where the growth of dwarf shrubs and other vegetation is low and thinned by the presence of shallow underlying rocks; inland rock (outcrop, cliff); acid grassland; 0-507 m

Status: Native; Rare; Sparsely scattered across the Falkland Islands

National Red List Category: VU [D1]

Conservation measures: Listed on the Conservation of Wildlife and Nature Ordinance (FIG, 1999); Action Plan; vouchered DNA sample; ID guide

Distribution: Southern South America: Argentina (Tierra del Fuego), Falkland Islands

Nomenclature Notes: Arana & Øllgaard (2012) redetermine Falkland specimens as *H. saururoides* and recognise its range as restricted to Tierra del Fuego and the Falkland Islands; TPL and Flora del Conosur support recognition of this species (R Upson 2013).

Lycopodium alboffii Rolleri

Fl. Ind. Occid. 3: 1575 (1806)

Local name: Common Clubmoss

Description: A clubmoss with creeping, belowground leafless stems producing erect/ prostrate aboveground branches; leaves 3-5 mm in length

Habitat: Predominantly in dwarf shrub heath and acid grassland; rarely in inland rock (stone run, outcrop, other); fern beds; bogs (*Astelia* mat); coastal cushion heath; Fachine scrub; montane habitats; 0-701 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample

Distribution: Southern South America: Chile (Región X, Región XI, Región XII), Falkland Islands

Nomenclature Notes: Arana & Øllgaard (2012) redetermine Falkland specimens as *L. alboffii* and place it in the segregate genus *Austrolycopodium*. TPL does not support this change of genus and so we continue to *Lycopodium* until further evidence is presented (R Upson 2012).

Lycopodium confertum Willd.

Sp. Pl. 5(1-2): 27-28 27 1810.

Local name: Creeping Clubmoss

Description: A clubmoss with creeping, overground leafy stems producing procumbent/ ascending branches; leaves 4-7 mm in length

Habitat: Predominantly in dwarf shrub heath; acid grassland; rarely in Fachine scrub; bare ground; 0-650 m

Status: Native; Scarce; Widely scattered across the Falkland Islands

National Red List Category: LC

Conservation measures: Unvouchered DNA sample

Distribution: Southern South America: Argentina (Santa Cruz, Tierra del Fuego), Chile (Región X, Región XI, Región XII), Falkland Islands

Nomenclature Notes: Arana & Øllgaard (2012) redetermine place *Lycopodium confertum* in the segregate genus *Austrolycopodium*. TPL does not support this change of genus and so we continue to *Lycopodium* until further evidence is presented (R Upson 2012).

FERNS & HORSETAILS (MONILOPHYTES)

ADIANTACEAE

Adiantum chilense Kaulf.

Enum. Filic. 207 (1824)

Local name: Maidenhair-fern

Description: Fern with creeping rhizome, covered in dark-coloured scales; divided leaves 20-40 cm in length.

Habitat: Maritime cliff; 1-5 m

Status: Native; Very rare; Currently only known from Saunders Island, however there is an historical record (early 1900s) from West Falkland (Port Edgar) that needs following up.

National Red List Category: EN [D1]

Conservation measures: Listed on the Conservation of Wildlife and Nature Ordinance (FIG, 1999); Action Plan; unvouchered DNA sample; ID guide

Distribution: Falkland Islands, west Patagonia, Andean Patagonia, Chiloe, southern Chile, north-east Argentina, Juan Fernandez. At the southern and eastern limits of its natural distribution in the Falkland Islands.

ASPLENIACEAE

Asplenium dareoides Desv.

Ges. Naturf. Freunde Berlin Mag. Neuesten Entdeck. Gesamten Naturk. 5: 322. 1811.

Local name: Spleenwort

Description: Fern with short erect rhizome; divided leaves 2-7.5 cm in length.

Habitat: Inland rock (cliff, outcrop); 155-460 m

Status: Native; Rare; Recorded at five locations across the Falkland Islands (3 are historical, 2 are post-1990)

National Red List Category: EN [B12ab(iii)]

Conservation measures: Action Plan; vouchered DNA sample; ID guide

Distribution: Argentina (Buenos Aires, Chubut, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región IV, Región V, Región VI, Región VII, Región VIII, Región IX, Región X, Región XI, Región XII, Archipiélago Juan Fernández), Falkland Islands

Asplenium scolopendrium L.

Sp. Pl. 2: 1079 (1753)

Synonym(s): Phyllitis scolopendrium (L.) Newman

Local name: Hart's-tongue Fern

Description: Tufted fern with short rhizome; undivided leaves 10-60 cm in length.

Habitat: Inland rock (cliff, outcrop); Unknown

Status: Introduced; Very rare; West Falkland (Mount Philomel, 1910), Pebble Island (1990s)

Distribution: A NW European species

Naturalisation Notes: Status unknown; Probably locally extirpated (R. Lewis 2013); Unknown

Notes: This species could be easily confused with young plants of *Blechnum magellanicum* and all records should therefore be treated with caution (Broughton & McAdam 2002). Only the record from Philomel is confirmed by a voucher. The record from Pebble Island has not been refound and may be an error. (R Lewis 2013)

BLECHNACEAE

Blechnum cordatum (Desv.) Hieron.

Hedwigia 47. 239. 1908 (1908)

Synonym(s): In Moore (1968) as *Blechnum chilense* (Kaulf.) Mett

Local name: Chilean Tall-fern

Description: Fern with erect/ ascending, very stout rhizome that often produces a short 'trunk'; separate sterile and fertile leaves 0.4-1.5 m in length

Habitat: Predominantly found forming fern beds where it can be the dominant or co-dominant species; dwarf shrub heath; also occurs in acid grassland; running water (bank); 1-200 m

Status: Native; Rare; West Falkland and western islands

National Red List Category: VU [B12ab(iii)]

Conservation measures: Action Plan; vouchered DNA sample; ID guide

Distribution: Argentina, Brazil, Chile, Falkland Islands, Paraguay, Uruguay

Blechnum magellanicum Mett.

Fil. Lechl. 1. 14. 1856 (1856)

Local name: Tall-fern

Description: Fern with erect/ ascending, very stout rhizome that often produces a short 'trunk'; separate sterile and fertile leaves 0.4-1.5 m in length

Habitat: Predominantly in dwarf shrub heath or forming fern beds where it can be dominant/ co-dominant; maritime cliff and slope; also occurs in acid grassland; running water (bank); inland rock (outcrop, cliff, stone run, other); rarely in Fachine scrub; Tussac; cushion heath - upland; built up areas and gardens; coniferous woodland (shelterbelt); 0-459 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Unvouchered DNA sample

Distribution: Argentina (Chubut, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VII, Región VIII, Región IX, Región X, Región XI, Región XII, Archipiélago Juan Fernández), Falkland Islands

Blechnum penna-marina (Poir.) Kuhn

Filic. Afr. 92. 1856

Local name: Small-fern

Description: Fern with creeping rhizome up to 20 cm in length; separate sterile and fertile leaves; sterile leaves 6-15 cm long, fertile leaves 3-6(-9) cm long

Habitat: Found in most communities but most frequently recorded in dwarf shrub heath; forming fern beds where it can be dominant; and acid grassland where it can dominate the understorey; also occurs by running water (bank); inland rock (outcrop, stone run, cliff, other); maritime cliff and slope; marshy grassland; built up areas and gardens; cushion heath; Fachine scrub; rarely in coniferous woodland (shelterbelt); improved grassland; introduced vegetation; strandline vegetation; Tussac; 0-705 m

Status: Native; Common; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample

Distribution: South America South temperate (Argentina (Buenos Aires, Chubut, Córdoba, Jujuy, Neuquen, Río Negro, Salta, Santa Cruz, San Luis, Tierra del Fuego, Tucumán), Bolivia, Brazil, Chile (Región IX, Región X, Región XI, Región XII), Falkland Islands), Tristan da Cunha, Gough Island; subantarctic (South Georgia, Prince Edward Islands, Iles Crozet, Iles de Kerguelen, Macquarie Island, Campbell Island, Auckland Islands)

DENNSTAEDTIACEAE

Hypolepis poeppigii (Kunze) Mett. ex Maxon

Lilloa 6: 289 289 1941.

Local name: Bramble-fern

Description: Fern with creeping rhizomes with reddish hairs; leaves are (0.2-) 0.4 to 1 (-2) m in length.

Habitat: Stone runs; found growing at the edge of a stone run where stream emerges into gully; c. 35 m

Status: Native; Very rare; West Falkland (single site)

National Red List Category: CR [D1]

Conservation measures: Vouchered DNA sample; ID guide

Distribution: Southern South America: Argentina (Buenos Aires, Mendoza, Neuquen, Río Negro), Chile (Región IV, Región V, Región VI, Región VII, Región VIII, Región IX, Región X, Región XI, Región XII, Archipiélago Juan Fernández, Región Metropolitana de Santiago), Falkland Islands

DRYOPTERIDACEAE

Dryopteris dilatata (Hoffm.) A. Gray

A Manual of the Botany of the Northern United States 631. 1848.

Synonym(s): *Dryopteris spinulosa* subsp. *dilatata* (Hoffm.) C. Chr.

Local name: Broad Buckler-fern

Description: A deciduous fern with short rhizomes; subdivided leaves 30-150 cm long

Habitat: Recorded in Tussac and fern beds; 0-20 m

Status: Introduced; Very rare; Top Tussac Island (2009), West Falkland (Port North area, last recorded 1909-

Citation: Upson R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

1911), West Point Island (record by Sladen cited by Moore (1968) - relates to cultivated material)

Distribution: A European Temperate species

Naturalisation Notes: Casual; Cultivated ornamental

Polystichum mohrioides (Bory) C.Presl

Tent. Pterid. 83. 1836.

Local name: Shield-fern

Description: Fern with short, erect/ ascending rhizome; subdivided leaves 8-20 cm in length

Habitat: Predominantly found in inland rock (stone run, outcrop, cliff, other); maritime cliff; rarely in strandline vegetation (shingle); dwarf shrub heath (Narrows Island); acid grassland; 10-600 m

Status: Near endemic; Scarce; Widespread across the Falkland Islands; not recorded in Lafonia

National Red List Category: LC

Conservation measures: Vouchered DNA sample

Distribution: Falkland Islands, South Georgia

Rumohra adiantiformis (G. Forst.) Ching

Sinensia 5: 70. 1934.

Local name: Leathery Shield-fern

Description: Fern with thick, long-creeping rhizome; subdivided leaves 5-30 cm long

Habitat: Grows within coastal dwarf shrub heath, *Blechnum magellanicum* fern beds and more rarely on maritime cliff and inland rock; 0-50 m (119 m on Steeple Jason)

Status: Native; Very rare; West Falkland (NW) and two outer NW islands

National Red List Category: EN [B12ab(iii)]

Conservation measures: Listed on the Conservation of Wildlife and Nature Ordinance (FIG, 1999); Action Plan; unvouchered DNA sample; ID guide

Distribution: Circum-Antarctic distribution (Africa, America, Australasia): Tropics not Australia, S temperate (Parris, 2001)

EQUISETACEAE

Equisetum arvense L.

Sp. Pl. 2: 1061 (1753)

Local name: Field Horsetail

Description: Herbaceous rhizomatous perennial with jointed ridged aerial stems to 80 cm; reproduction by spores.

Habitat: Built up areas and gardens; < 10 m

Status: Introduced; Very rare; East Falkland (Stanley)

Distribution: A Circumpolar Wide-boreal species

Naturalisation Notes: Naturalised; Factsheet; High risk; All plants controlled (R. Lewis 2013); Not cultivated

GLEICHENIACEAE

Sticherus cryptocarpus (Hook.) Ching

Sunyatsenia 5: 282. 1940. (1940)

Synonym(s): *Gleichenia cryptocarpa* Hook.

Local name: Coral-fern

Description: Fern with long-creeping rhizome; subdivided leaves 10-20 cm long

Habitat: Predominantly found forming fern beds where it can be the dominant or co-dominant species; also occurs in dwarf shrub heath; acid grassland; Fachine scrub; marshy grassland; 0-150 m

Status: Native; Scarce; West Falkland except for 2 historical records from the west coast of East Falkland

National Red List Category: LC

Conservation measures: Unvouchered DNA sample

Distribution: Southern South America: Argentina (Chubut, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VIII, Región IX, Región X, Región XI, Región XII), Falkland Islands

GRAMMITIDACEAE

Grammitis poeppigiana (Mett.) Pic. Serm.

Webbia 32(2): 461 (July 1978):. 1978

Local name: Strap-fern

Description: Fern with short, ascending rhizome; undivided leaves 1-3 cm in length

Habitat: Inland rock (outcrop, cliff); 180-550 m (1 m on Pebble Island)

Status: Native; Very rare; East Falkland (4 locations), Pebble Island (1 location at 1 m a.s.l. - considered extinct/erroneous at this site owing to intensive survey efforts 2007-2011)

National Red List Category: VU [D1 + D2]

Conservation measures: Action Plan; vouchered DNA sample; ID guide

Distribution: Circum-Antarctic distribution: S temperate (Parris, 2001) - Argentina, Chile, Falkland Islands, Iles Kerguelen, Iles Crozet, Marion Island, South Georgia

Notes: Moore (1983) includes *G. poeppigiana* in a broad species concept of *G. magellanica*; Moore (1958) includes *G. kerguelensis* which is an unresolved name in TPL.

HYMENOPHYLLACEAE

Hymenophyllum caespitosum Gaudich.

Ann. Sci. Nat. (Paris) 5: 99. 1825

Synonym(s): *Serpyllopsis caespitosa* (Gaudich.) C. Chr.

Local name: Red-haired Filmy-fern

Description: Mat-forming filmy fern with extensive, narrow, creeping rhizome; subdivided leaves 5-20 mm in length

Habitat: Inland rock (outcrop, stone run); rarely on moist peat in dwarf shrub heath and acid grassland at undisturbed sites; 60-300 m

Status: Native; Scarce; Fairly widespread across the Falkland Islands; not recorded in Lafonia

National Red List Category: LC

Conservation measures: Unvouchered DNA sample

Distribution: Southern South America: Argentina (Chubut, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región X, Región XI, Región XII), Falkland Islands

Notes: Broughton & McAdam (2005) list *Hymenophyllum caespitosum* Gaudich. as present in the Falkland Islands. The Plant List (2010) recognises *H. caespitosum* as a synonym of *Serpyllopsis caespitosa*, however, it is marked as an unresolved name (R. Upson, 2012).

Hymenophyllum darwinii Hook. f. ex Bosch

Ned. Kruidk. Arch. 5(3): 157 1863.

Local name: Darwin's Filmy-fern

Description: Filmy fern with extensive, narrow, creeping rhizome; subdivided leaves 7-15 mm in length

Habitat: Grows in moist and sheltered rock crevices in inland rock (outcrop); c. 379 m

Status: Native; Very rare; West Falkland (1 location in NW)

National Red List Category: CR [B12ab(iii)]

Conservation measures: Action Plan; unvouchered DNA sample; ID guide

Distribution: Southern South America: Argentina (Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VII, Región VIII, Región IX, Región X, Región XI, Región XII), Falkland Islands

Hymenophyllum falklandicum Baker

Syn. Fil. (Hooker & Baker) 68. 1867

Local name: Falkland Filmy-fern

Description: Mat-forming filmy fern with extensive, narrow, creeping rhizome; subdivided leaves 1-3(-5) cm in length

Habitat: Inland rock; rarely on moist peat in acid grassland; maritime cliff damp crevice; 0-515 m

Status: Native; Scarce; Fairly widespread across the Falkland Islands; not recorded in Lafonia

National Red List Category: LC

Conservation measures: Vouchered DNA sample

Distribution: Southern South America: Argentina (Chubut, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VIII, Región IX, Región X, Región XI, Región XII, Archipiélago Juan Fernández), Falkland Islands; subantarctic: South Georgia

Hymenophyllum tortuosum Hook. & Grev.

Icon. Filic. t. 129. 1829; HB. 70. Npfl. 112. 1829

Local name: Twisted Filmy-fern

Description: Mat-forming filmy fern with extensive, narrow, creeping rhizome; subdivided leaves 2-10(-14) cm in length

Habitat: Inland rock (stone run, outcrop, cliff); 155-460 m

Status: Native; Rare; West Falkland (can be locally abundant)

National Red List Category: LC

Conservation measures: Vouchered DNA sample

Distribution: Southern South America: Argentina (Chubut, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región IX, Región X, Región XI, Región XII, Archipiélago Juan Fernández), Falkland Islands

OPHIOGLOSSACEAE

Botrychium dusenii Alston

Lilloa 30: 107. 1960.

Local name: Dusen's Moonwort

Description: Small perennial fern with vertical rhizomes and 1-2 above ground leaves; leaves 2-15 cm in length

Habitat: Predominantly coastal in open sandy/ gravel areas either sparsely vegetated or within marshy grassland; sand dunes; littoral sediments (sand); 0-60 m

Status: Native; Very rare; East Falkland (3 locations), Keppel Island

National Red List Category: EN [B2ab(iii)]

Conservation measures: Listed on the Conservation of Wildlife and Nature Ordinance (FIG, 1999); Action Plan; vouchered DNA sample; ID guide

Distribution: Southern South America: Argentina (Chubut, Mendoza, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región XI, Región XII), Falkland Islands

Ophioglossum crotalophoroides Walter

Fl. Carol. 256. 1788.

Local name: Adder's-tongue

Description: Fern with short, swollen rhizome; each plant has 1-2 undivided leaves and usually a single distinct fertile spore-producing spike; leaves are 2.5-4 cm in length

Habitat: On peaty soils in dwarf shrub heath; acid grassland; 15-152 m

Status: Native; Rare; East Falkland, Beaver Island, Speedwell Island (last recorded 1908)

National Red List Category: VU [D1]

Conservation measures: Listed on the Conservation of Wildlife and Nature Ordinance (FIG, 1999); Action Plan; ID guide

Distribution: South America, North America, Falkland Islands, South Georgia

SCHIZAEACEAE

Schizaea fistulosa Labill.

Nov. Holl. Pl. 2: 103, t. 250 f. 3. 1806

Local name: Comb Fern

Description: Fern with short, creeping rhizomes; erect leaf stalks up c. 4 cm tall, c. 1 mm wide; subdivided leaf lamina 3-10 mm in length

Habitat: Most recently (2009) recorded growing in sandy peat beside running water (river bank); also likely to occur in Sphagnum bogs and sand dune slacks (Moore, 1968); c. 31 m

Status: Native; Very rare; West Falkland (single site); there is also an historical record (1825) for East Falkland

National Red List Category: CR [D1]

Conservation measures: Action Plan; vouchered DNA sample; ID guide

Distribution: Australasia and South America: S temperate, Old World tropics

WOODSIACEAE

Cystopteris fragilis (L.) Bernh.

Neues J. Bot. 1(2): 27. 1806 (1805)

Local name: Brittle Bladder-fern

Description: Fern with short rhizome; subdivided leaves 4-15 cm in length

Habitat: Moist rock crevices/ caves in inland rock (cliff, outcrop); rarely on maritime cliff; 0-100 m (c. 700m, Mt Usborne)

Status: Native; Rare; Sparsely scattered across the Falkland Islands

National Red List Category: VU [D1]

Conservation measures: Vouchered DNA sample; ID guide

Distribution: Africa and South America; tropics, N and S Temperate (Parris, 2001); also widespread in the North Temperate regions (Parris, 2001)

CONIFERS (GYMNOSPERMS)

CUPRESSACEAE

Cupressus macrocarpa Hartw. ex Gordon

J. Hort. Soc. London 4: 296. 1849.

Local name: Monterey Cypress

Description: Evergreen tree with scale-like leaves

Habitat: Predominantly in built up areas and gardens; rarely in acid grassland; inland rock; coniferous woodland (shelterbelt); dwarf shrub heath; improved grassland; 0-35 m

Status: Introduced; Scarce; Sparsely scattered across the Falkland Islands. Most naturalised trees have been planted by man but regeneration from seed, whilst rare, does occur.

Distribution: Native to California, N. America; widely planted in N. America, Europe and beyond

Naturalisation Notes: Casual & Persisting (Taxa); Ornamental & windbreak

PINACEAE

Picea sitchensis (Bong.) Carrière

Traité Général des Conifères: 260. 1855.

Local name: Sitka Spruce

Description: Tree 8 m tall; evergreen, needle-like leaves borne singly on pegs

Habitat: Built up areas and gardens; coniferous woodland (plantation, shelterbelt); 0-15 m

Status: Introduced; Rare; Sparsely scattered across the Falkland Islands

Distribution: Native to western N. America

Naturalisation Notes: Persisting (Taxa); Ornamental & windbreak

Pinus contorta Douglas ex Loudon

Arbor. Frut. Brit. 4: 2292. 1838.

Local name: Lodgepole Pine

Description: Tree to 5 m tall; evergreen, needle-like leaves borne in pairs

Habitat: Built up areas and gardens; coniferous woodland (plantation, shelterbelt); rarely in improved grassland; 1-40 m

Status: Introduced; Rare; Sparsely scattered across the Falkland Islands

Distribution: Native to western N. America

Naturalisation Notes: Persisting (Taxa); Moderate risk (R. Lewis 2013); Ornamental & windbreak

Pinus echinata Mill.

Gard. Dict., ed. 8. n. 12 (1768)

Local name: Shortleaf Pine

Description: Tree to 8 m tall; evergreen, needle-like leaves borne in pairs

Habitat: Coniferous woodland (shelterbelt); c. 15 m

Status: Introduced; Very rare; Recorded on West Falkland (Hill Cove)

Distribution: Native to eastern N. America

Naturalisation Notes: Persisting (Taxa); Moderate risk (R. Lewis 2013); Ornamental & windbreak

Pinus muricata D. Don

Trans. Linn. Soc. London 17(3): 441 (1836)

Local name: Bishop Pine

Description: Tree 3-8 m tall; evergreen, needle-like leaves borne in pairs

Habitat: Built up areas and gardens; mixed woodland (plantation); 11-20 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley) and Keppel Island

Distribution: Native to western N. America

Naturalisation Notes: Persisting (Taxa); Moderate risk (R. Lewis 2013); Ornamental & windbreak

Pinus radiata D. Don

Trans. Linn. Soc. London 17(3): 442 (1836)

Local name: Monterey Pine

Description: Tree to 8 m tall; evergreen, needle-like leaves borne in pairs

Habitat: Built up areas and gardens; mixed woodland (plantation); c. 10-25 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley) and Keppel Island

Distribution: Native to western N. N. America and Mexico

Naturalisation Notes: Persisting (Taxa); Moderate risk (R. Lewis 2013); Cultivated ornamental

Pinus sylvestris L.

Sp. Pl. 2: 1000 (1753)

Local name: Scots Pine

Description: Tree with evergreen, needle-like leaves borne in pairs

Habitat: Built up areas and gardens; coniferous woodland (shelterbelt); also persisting in acid grassland; 1-15 m

Status: Introduced; Very rare; Recorded on East Falkland (Darwin), West Falkland (Hill Cove) and Keppel Island

Distribution: Native to Eurasian Boreal-montane areas

Naturalisation Notes: Persisting (Taxa); Moderate risk (R. Lewis 2013); Ornamental & windbreak

FLOWERING PLANTS (ANGIOSPERMS)

ADOXACEAE

Sambucus nigra L. f. ***nigra***

Species Plantarum 1: 269. 1753 [1 May 1753]

Local name: Elder

Description: Shrub to 10 m

Phenology: Jan, Feb, Mar

Habitat: Built up areas and gardens; dwarf shrub heath; 0-91 m

Status: Introduced; Rare; All cultivars and forms of *Sambucus nigra* has been mapped together: widely scattered across the Falkland Islands

Distribution: Horticultural origin

Naturalisation Notes: Casual & Persisting (Taxa); Moderate risk (R. Lewis 2013); Cultivated ornamental

Nomenclature Notes: Cultivars and Forms not in The Plant List (2010). Source of name: RHS Horticultural Database, but no author given. (R. Lewis 2012)

Sambucus nigra L. f. ***laciniata*** (L.) Zabel

Species Plantarum 1: 269. 1753 [1 May 1753]

Local name: Cut-leaved Elder

Description: Shrub to 10 m

Phenology: Jan, Feb, Mar

Habitat: Built up areas and gardens; dwarf shrub heath; 0-91 m

Status: Introduced; Rare; All cultivars and forms of *Sambucus nigra* have been mapped together: widely scattered across the Falkland Islands

Distribution: Horticultural origin

Naturalisation Notes: Persisting (Taxa); Moderate risk (R. Lewis 2013); Cultivated ornamental

Nomenclature Notes: Cultivars and Forms not in The Plant List (2010). Source of name: RHS Horticultural Database, but no author given. (R. Lewis 2012)

***Sambucus nigra* L. cv. 'Marginata'**

Species Plantarum 1: 269. 1753 [1 May 1753]

Local name: Variegated Elder

Description: Shrub to 10 m

Phenology: Jan, Feb, Mar

Habitat: Built up areas and gardens; dwarf shrub heath; 0-91 m

Status: Introduced; Rare; All cultivars and forms of *Sambucus nigra* have been mapped together: widely scattered across the Falkland Islands

Distribution: Horticultural origin

Naturalisation Notes: Persisting (Taxa); Moderate risk (R. Lewis 2013); Cultivated ornamental

Nomenclature Notes: Cultivars and Forms not in The Plant List (2010). Source of name: RHS Horticultural Database, but no author given. (R. Lewis 2012)

ALSTROEMERIACEAE

***Luzuriaga marginata* (Gaertn.) Benth. & Hook.f.**

Gen. Pl. 3: 768 1883.

Synonym(s): In Moore (1968) as *Enargea marginata*

Local name: Almond-flower

Description: Prostrate, creeping perennial herb, woody at base; stems up to 2 m.

Phenology: Dec, Jan, Feb

Habitat: Predominantly found in dwarf shrub heath; inland rock (stone run, cliff, outcrop, other); maritime cliff and slope; also occurs in acid grassland; *Blechnum penna-marina* fern beds; *Fachine* scrub; bogs (*Astelia* mat); cushion heath; rarely in marshy grassland; 0-700 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Chubut, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región X, Región XI, Región XII), Falkland Islands

AMARANTHACEAE

***Atriplex patula* L.**

Species Plantarum 2: 1053. 1753.

Local name: Common Orache

Description: Erect/ procumbent annual herb to 1 m

Phenology: Feb

Habitat: Built up areas and gardens; littoral sediments; maritime cliff; 1-15 m

Status: Introduced; Rare; Recorded in the south east of the Falkland Islands and on West Falkland (Fox Bay). All records for *Atriplex prostrata* except that for Mount Pleasant Complex have been treated as *A. patula* - see Falknotes.

Distribution: A Euro Siberian Wide-temperate species that has naturalised extensively beyond this range

Naturalisation Notes: Naturalised; Not cultivated

Notes: Almost all records of *Atriplex* are attributable to this species. Previously (pre-2009) misrecorded as *A. prostrata*. (R. Lewis 2012)

***Atriplex prostrata* Boucher ex DC.**

Fl. Franc. (DC. & Lamarck), ed. 3. 3: 387 (1805)

Local name: Spear-leaved Orache

Description: Erect/ procumbent annual herb to 1 m

Phenology: Feb, Mar

Habitat: Built up areas and gardens; c. 60 m

Status: Introduced; Very rare; Recorded once at Mount Pleasant Complex and possibly locally extirpated (R. Lewis 2012).

Distribution: A Euro Siberian Wide-temperate species that has naturalised extensively beyond this range

Naturalisation Notes: Casual; Possibly locally extirpated; All plants controlled (R. Lewis 2013); Not cultivated

Notes: Most records are misidentifications for *A. patula*. *A. prostrata* is very rare (R. Lewis 2012)

Chenopodium macrospermum Hook. f.

Fl. Antarct. 341 1846.

Local name: Goosefoot

Description: Glabrous, fleshy annual herb; procumbent to erect stems 7-20 cm.

Phenology: Dec, Jan, Feb

Habitat: A coastal species found in strandline vegetation; littoral sediments; coastland - shingle; also occurs on coastland rock/ boulders; coastal (saline) grassland; rarely in standing water (margin of seasonal pool); Tussac; built up areas and gardens; 0-12 m (68 m above New Island cliffs)

Status: Native; Occasional; Widely scattered across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina, Chile, Falkland Islands, Mexico, Paraguay, SW N. America (California)

Suaeda argentinensis A.Soriano

Revista Argent. Agron. 9: 349, fig. 3. 1942

Local name: Shrubby Seablite

Description: Glabrous gynodioecious shrub to 1.2 m tall; upright/ prostrate stems that are woody at base and up to 10 cm in diameter

Phenology: Jan

Habitat: A coastal species that grows in strandline vegetation; coastland rock; coastland shingle; littoral sediment (shingle/ cobbles); 0-5 m

Status: Native; Very rare; NW of archipelago; north of West Falkland on small, ungrazed islands

National Red List Category: EN [D1]

Conservation measures: Listed on the Conservation of Wildlife and Nature Ordinance (FIG, 1999); Action Plan; unvouchered DNA sample; MSB seed collection (354); ID guide

Distribution: Southern South America - Argentina (Buenos Aires, Chubut, Mendoza, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región XII), Falkland Islands

AMARYLLIDACEAE

Allium schoenoprasum L.

Species Plantarum 1: 301. 1753 [1 May 1753]

Local name: Chives

Description: Perennial herb with bulb(s); round stems to 50 cm

Phenology: Dec

Habitat: Built up areas and gardens; 1-30 m

Status: Introduced; Rare; East Falkland (Stanley), West Falkland (Port Stephens), Pebble Island, Weddell Island

Distribution: A Circumpolar Boreo-arctic Montane species that is extensively naturalised outside this range

Naturalisation Notes: Naturalised; Cultivated herb

Allium triquetrum L.

Species Plantarum 1: 300. 1753 [1 May 1753]

Local name: Three-cornered Garlic

Description: Perennial herb with bulb(s); triangular stems to 45 cm

Phenology: Nov, Dec

Habitat: Built up areas and gardens; improved grassland; c. 2-15 m

Status: Introduced; Rare; East Falkland (Stanley), West Falkland (Fox Bay), Carcass Island, New Island

Distribution: A W. and C. Mediterranean species

Naturalisation Notes: Naturalised; Cultivated ornamental

Narcissus sp.

Local name: Daffodil

Description: Perennial herb with bulb(s)

Phenology: Oct, Nov

Habitat: Built up areas and gardens; improved grassland; also occurs in disturbed acid grassland; Blechnum penna-marina fern beds; 0-30 m

Status: Introduced; Widely scattered across the Falkland Islands - records for *Narcissus pseudonarcissus* agg. and *Narcissus* sp. have been mapped together owing to ambiguity in previous identifications and the likelihood that all Falkland records are of garden origin

Distribution: Horticultural origin

Naturalisation Notes: Naturalised; Cultivated ornamental

Notes: At least 3 cultivars are present, the commonest being in RHS Division 1, but there is also one vouchered record of each of Div. 2 (Stanley Common) and Div. 3 (poss. Div 9, Mt Rosalie House, W Falkland). (R. Lewis 2012)

APIACEAE

Anthriscus sylvestris (L.) Hoffm.

Gen. Pl. Umbell. 40 (t. 1, fig. 19) (1814)

Local name: Cow Parsley

Description: Erect perennial herb to 1.5 m

Phenology: Nov, Dec, Jan

Habitat: Built up areas and gardens; improved grassland; c.10 m

Status: Introduced; Very rare; East Falkland (Cape Pembroke, Fitzroy, Stanley)

Distribution: A Eurasian Boreo-temperate species

Naturalisation Notes: Naturalised; Factsheet; High risk; All plants controlled (R. Lewis 2013); Not cultivated

Apium australe Thouars

Equisse de la Flore de l'Isle de Tristan d'Acugna 1808

Local name: Wild Celery

Description: Glabrous, perennial herb with tap-root; erect/ ascending stems (0-)5-50 cm tall

Phenology: Nov, Dec, Jan, Feb, Mar

Habitat: Recorded in a wide range of coastal habitats - maritime cliff and slope; coastland shingle; coastland rock/ boulders; strandline vegetation; coastal (saline) grassland; coastal cushion heath; marshy grassland (coastal); Tussac; sand dunes; coastal feldmark; also occurs in *Poa alopecurus*/*Festuca magellanica* acid grassland (coastal); running water (bank/ in small stream); standing water (margin/ in seasonal pool); dwarf shrub heath; bare ground; *Blechnum penna-marina* fern beds; *Hierochloa redolens* neutral grassland; inland rock (outcrop); rarely in improved grassland; introduced vegetation (*Ammophila arenaria*/*Rumex acetosella* dominant); built up areas and gardens; 0-159 m

Status: Native; Frequent; Widespread across the Falkland Islands, including Beauchene Island

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina, Chile (including Juan Fernandez), Falkland Islands, Tristan da Cunha, New Zealand, south-east Australia, Tasmania, Lord Howe Island

Nomenclature Notes: Flora del Conosur recognises *Apium australe* Thours as a synonym of *A. prostratum* Labill. The Plant List recognises both *A. australe* and *A. prostratum* as accepted names. We follow The Plant List at this time and therefore follow Moore (1983) for global distribution.

Azorella filamentosa Lam.

Encycl. (Lamarck) 1(1): 344 (1783)

Local name: Wiry Azorella

Description: Perennial cushion-forming herb; procumbent/ ascending/ suberect, many-branched stems up to 10 cm in length

Phenology: Nov, Dec, Jan

Habitat: Predominantly recorded in coastal cushion heath (where it can be dominant/ co-dominant); dwarf shrub heath; coastal (saline) grassland; maritime cliff and slope; coastland - shingle; also occurs in littoral sediments; coastal feldmark; inland rock (outcrop, stone run, cliff); acid grassland; marshy grassland; *Blechnum penna-marina* fern beds; sand dunes; strandline vegetation; bare ground (coastal); rarely in Tussac; montane; improved grassland (coastal, ungrazed); 0-150 m (400-562 m)

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Tierra del Fuego), Chile (Region XII), Falkland Islands

Azorella lycopodioides Gaudich.

Ann. Sci. Nat. (Paris) 5: 105, t. 3 (1825)

Local name: Clubmoss Azorella

Description: Perennial cushion-forming or creeping herb; prostrate/ ascending, many-branched stems up to 30 cm in length

Phenology: Nov, Dec, Jan, Feb

Habitat: Predominantly recorded in dwarf shrub heath; cushion heath - coastal and upland; acid grassland; inland rock (stone run, outcrop, cliff, other); maritime cliff and slope; also occurs in fern beds; rarely in coastal

Citation: Upson R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

(saline) grassland; coastal feldmark; montane; Fachine scrub; montane; bogs (*Astelia* mat); *Hierochloa redolens* neutral grassland; 0-705 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample

Distribution: Southern South America: Argentina (Chubut, Mendoza, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VI, Región VII, Región VIII, Región IX, Región X, Región XI, Región XII), Falkland Islands

Azorella monantha Clos

Fl. Chil. [Gay] 3(1): 79 (1848)

Synonym(s): In Moore (1983, 1968) as *Azorella caespitosa* Cav.

Local name: Tufted *Azorella*

Description: Perennial herb forming hard, dense cushions 10-50 cm high

Phenology: Dec, Jan

Habitat: A coastal species recorded predominantly in dwarf shrub heath (coastal); coastal cushion heath (where it can become the dominant/ co-dominant species); coastal rock/ boulders; maritime cliff and slope; also occurs on bare ground (sand/ clay/ peat; coastal); 5-370 m

Status: Native; Scarce; In the west of West Falkland; a previous record on East Falkland (Port Luis) has been confirmed as erroneous by the named collector (R. Woods pers. comm. 2013) and a record from Sea Lion Island by McHardy has never been relocated, is doubted and has been removed from the database (R. Upson, pers. comm.)

National Red List Category: LC

Conservation measures: Vouchered DNA sample

Distribution: Southern South America: Argentina (Chubut, Mendoza, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región IV, Región VII, Región VIII, Región IX, Región XI, Región XII, Región Metropolitana de Santiago), Falkland Islands

Azorella selago Hook. F.

Fl. Antarct. 284 1846.

Local name: Cushion *Azorella*

Description: Perennial herb forming dense cushions 10-40 cm high

Phenology: Dec, Jan

Habitat: An upland species found in montane habitats; acid grassland (upland); cushion heath - upland; inland rock (cliff, stone run); also occurs in dwarf shrub heath (upland); found between 60-300 m Saunders Island - record has not so far been confirmed.; 450-685 m

Status: Native; Rare; Localised distribution

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (539)

Distribution: Southern South America: Argentina (Santa Cruz, Tierra del Fuego), Chile (Region XII), Falkland Islands; subantarctic: Iles de Kerguelen; Iles Crozet, Marion Island, Heard Island, Macquarie Island

Bolax gummifera (Lam.) Spreng.

Syst. Veg. (ed. 16) [Sprengel] 1: 879 (1824)

Synonym(s): *Bolax glebaria* Comm. ex Lam.

Local name: Balsam-bog

Description: Gynodioecious perennial herb forming hard, dense cushions up to 130 cm high

Phenology: Oct, Nov

Habitat: Predominantly in dwarf shrub heath and cushion heath (where it can be the dominant/ co-dominant species); inland rock (outcrop, stone run, cliff, other); maritime cliff and slope; also occurs in acid grassland; coastal (saline) grassland; montane; coastal feldmark; 0-705 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Santa Cruz, Tierra del Fuego), Chile (Region XII), Falkland Islands

Conium maculatum L.

Species Plantarum 1: 243. 1753 [1 May 1753]

Local name: Hemlock

Description: Biennial herb; erect stems to 2.5 m

Phenology: Nov, (-Feb)

Citation: Upson R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

Habitat: Built up areas and gardens; 11-31 m

Status: Introduced; Very rare; East Falkland (Fitzroy, Stanley), West Falkland (Roy Cove)

Distribution: Introduced to the British Isles prior to 1492 - it is a Eurosiberian Southern-temperate species that has naturalised extensively beyond this range

Naturalisation Notes: Naturalised; Factsheet; High risk; All plants controlled (R. Lewis 2013); Not cultivated

Heracleum sphondylium L. subsp. *sphondylium*

Sp. Pl. 1: 249. 1753 [1 May 1753]

Local name: Hogweed

Description: Biennial herb; erect stems to 2 m

Phenology: Jan, Feb

Habitat: Built up areas and gardens; coniferous woodland plantation; 0-47 m

Status: Introduced; Very rare; East Falkland (Stanley)

Distribution: A Eurasian Boreo-temperate species that has naturalised extensively beyond this range.

Naturalisation Notes: Naturalised; Possibly locally extirpated; Factsheet; Moderate risk; All plants controlled (R. Lewis 2013); Not cultivated

Levisticum officinale W.D.J.Koch

Nova Acta Phys.-Med. Acad. Caes. Leop.-Carol. Nat. Cur. 12(1): 101, f. 41 (1824)

Local name: Lovage

Description: Perennial herb; erect stems to 2.5 m

Phenology: Unknown

Habitat: Built up areas and gardens; c.16 m

Status: Introduced; Very rare; East Falkland (Stanley)

Distribution: A species native to Iran and Afghanistan that has naturalised extensively beyond this range because of its popular use as a herb

Naturalisation Notes: Casual; Possibly locally extirpated (R. Lewis 2013); Cultivated herb

Lilaeopsis macloviana (Gand.) A.W. Hill

J. Linn. Soc., Bot. 47: 545 1927

Synonym(s): In Moore (1983) as *Lilaeopsis hillii* Perez-Moreau

Local name: Lilaeopsis

Description: Perennial herb; prostrate stems to 30 cm, rooting at nodes

Phenology: Dec, Jan, Feb

Habitat: A predominantly coastal species found in marshy grassland; standing water (lake or pond margin/ in seasonal pool); running water (river or stream margin/ in small stream); strandline vegetation; coastal (saline) grassland; moist coastal cushion heath; coastland rock/ boulders; maritime cliff; saltmarsh; littoral sediments; sand dunes; coastland - shingle, sand; also occurs in dwarf shrub heath; 0-188 m (459 m Dunbar)

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Catamarca, Chubut, Jujuy, La Rioja, Mendoza, Río Negro, Salta, Santa Cruz, San Juan, Tierra del Fuego, Tucumán), Chile (Región I, Región II, Región III, Región IV, Región V, Región VIII, Región IX, Región X, Región XI, Región XII, Región Metropolitana de Santiago), Falkland Islands

Oreomyrrhis hookeri Mathias & Constance

Univ. Calif. Publ. Bot. 27: 369 1955

Local name: Hooker's Sweet Cicely

Description: Perennial herb with slender tap-root; flowering stems 1-15 cm tall

Phenology: Nov, Dec, Jan

Habitat: Predominantly recorded in improved grassland; dwarf shrub heath; acid grassland; also occurs in Blechnum penna-marina fern beds; dwarf shrub heath; marshy grassland; rarely in built up areas and gardens; Fachine scrub; 0-90 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Santa Cruz, Tierra del Fuego), Chile (Region XII), Falkland Islands

Schizeilema ranunculus Domin

Bot. Jahrb. Syst. 40: 576. 1908

Local name: Buttercup-parsley

Description: Perennial herb; creeping stems up to 30 cm, rooting at nodes

Phenology: Nov, Dec, Jan

Habitat: Predominantly found in moist places in acid grassland; dwarf shrub heath; also occurs in *Blechnum penna-marina*/ *Sticherus cryptocarpa* fern beds; marshy grassland; Fachine scrub; cushion heath; inland rock (outcrop); running water (bank, stream); standing water (margin of small pond/ in small ditch); maritime cliff and slope; rarely in flush; coastal (saline) grassland; neutral grassland; Tussac; 0-610 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Unvouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Santa Cruz, Tierra del Fuego), Chile (Región X, Región XI, Región XIII), Falkland Islands

Nomenclature Notes: Govaerts made no comment on this - TPL lists this as an unresolved name - from WCSP (in review)

ARALIACEAE

Hedera helix L.

Sp. Pl. 1: 202 (1753)

Local name: Ivy

Description: Perennial herb with creeping/ climbing stems bearing roots

Phenology: Unknown

Status: Introduced; Very rare; West Falkland (Hill Cove Forest)

Distribution: A European Southern-temperate species

Naturalisation Notes: Naturalised; High risk (R. Lewis 2013); Cultivated ornamental

Hydrocotyle chamaemorus Cham. & Schlttdl.

Linnaea 1: 363 1826.

Local name: Marsh Pennywort

Description: Perennial herb.

Phenology: Dec, Jan

Habitat: Predominantly in running water (stream/ small stream margins, in seasonal stream); marshy grassland; also occurs in wet acid grassland; standing water (pond, lake margin); Fachine scrub; 0-15 m

Status: Native; Occasional; Sparsely scattered across the Falkland Islands: recorded on East and West Falkland, Speedwell, Saunders and Keppel Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample

Distribution: Argentina (Buenos Aires, Chubut, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VIII, Región IX, Región X, Región XI, Región XII), Falkland Islands

ASPARAGACEAE

Cordyline australis (G.Forst.) Endl.

Prodr. Fl. Norfolk. 29 1833.

Local name: Cabbage Palm

Description: Evergreen monocot tree with palm-like appearance; 3-10 m tall

Phenology: Unknown

Habitat: Built up areas and gardens; 1-20 m

Status: Introduced; Very rare; recorded in abandoned garden on New Island; also found in cultivation

Distribution: Endemic to New Zealand

Naturalisation Notes: Persisting; Cultivated ornamental

Hyacinthoides x massartiana Geerinck

Belgian J. Bot. 129: 83 (1996 publ. 1997).

Local name: Hybrid Bluebell

Description: Perennial herb with bulb

Phenology: Nov, Dec

Habitat: Built up areas and gardens; rarely in dwarf shrub heath; acid grassland; < 15 m

Citation: Upson R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

Status: Introduced; Rare; East Falkland (Stanley, North Arm), West Falkland (Port Howard, Hill Cove Forest)

Distribution: W. Europe

Naturalisation Notes: Casual; Moderate risk (R. Lewis 2013); Cultivated ornamental

Notes: Misrecorded as *H. non-scripta* prior to 2009. (R. Lewis 2012)

ASTELIACEAE

Astelia pumila (J.R.Forst.) Gaudich.

Ann. Sci. Nat. (Paris) 5: 101 (1825)

Local name: Soft-camp-bog

Description: Dioecious perennial mat-forming herb; forms dense carpets several square metres in area

Phenology: Nov, Dec, Jan

Habitat: Wet areas in acid grassland; dwarf shrub heath and bogs (where it can form the dominant/ co-dominant species); also occurs in flush vegetation; running water (stream bank); marginal vegetation; c. 6-700 m

Status: Native; Occasional; Widespread: recorded on East Falkland, West Falkland, Weddell Island, Saunders Island, Keppel Island

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Tierra del Fuego), Chile (Región X, Región XI, Región XII), Falkland Islands

ASTERACEAE

Abrotanella emarginata (Cass. ex Gaudich.) Cass.

Dict. Sci. Nat., ed. 2. [F. Cuvier] 36: 27. 1825

Synonym(s): *Oligosporus emarginatus* Cass. ex Gaudich.

Local name: Notched Moss-bog

Description: Mat/ cushion-forming herb to 4 cm.

Phenology: Oct, Nov, Dec

Habitat: Most commonly recorded in dwarf shrub heath; cushion heath; also found in acid grassland; bogs; montane; associated with inland rock (outcrops, inland cliffs, stone runs); coastal feldmark; margin of standing or running water; flush, coastal saline grassland; 0-705 m

Status: Native; Occasional; widespread across the Falkland Islands.

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Santa Cruz, Tierra del Fuego), Chile (Región XI, Región XII), Falkland Islands; Not known to be cultivated

Achillea millefolium L. subsp. *millefolium*

Species Plantarum 2: 899. 1753 [1 May 1753]

Local name: Yarrow

Description: Strongly scented perennial herb with long stolons, erect stems up to 45 cm.

Phenology: Jan, Feb, Mar, Apr

Habitat: Most commonly found in built up areas and gardens, including waste ground, and improved grassland; also found in dwarf shrub heath; coastal slopes and acid grassland; 0-76 m

Status: Introduced; Scarce; widespread across the Falkland Islands.

Distribution: Native to Eurasia but widely naturalised in temperate regions of both hemispheres

Naturalisation Notes: Naturalised; High risk (R. Lewis 2013); Cultivated ornamental

Agoseris coronopifolium (D'Urv.) Chambers ex D.M. Moore

Vasc. Fl. Falkland Isl. 137 (1968)

Synonym(s): *Troximon pumilum* (Gaudich.) Wildem.; *Macrorhynchus pumilus* (Gaudichaud.) DC.; *Taraxacum pumilum* Gaudich.; *Taraxacum coronopifolium* D'Urv.

Local name: Fuegian Hawks-beard

Description: Annual herb with flowering stems up to 12 cm.

Phenology: Nov, Dec, Jan, Feb

Habitat: Sand dunes; dwarf shrub heath; maritime shingle; strandline vegetation; coastal slope; improved

Citation: Upson R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

grassland; and also acid grassland, introduced vegetation; inland rock; 0-150 m

Status: Native; Occasional; widespread across the Falkland Islands.

National Red List Category: LC

Conservation measures: Unvouchered DNA sample

Distribution: Argentina (Chubut, Mendoza, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región IV, Región V, Región VIII, Región IX, Región X, Región XI, Región XII, Región Metropolitana de Santiago), Falkland Islands

Nomenclature Notes: Govaerts made no comment on this - TPL list this as an unresolved name - from TICA - N Hind is investigating

Anthemis punctata Vahl subsp. *cupaniana* (Tod. ex Nyman) R.Fernand

Bot. J. Linn. Soc. 70(1): 7 (1975)

Local name: Sicilian Chamomile

Description: Perennial herb to 60 cm tall.

Phenology: Jan, Feb, Mar

Habitat: Built up areas and garden; 10-20 m

Status: Introduced; Very rare; Stanley (East Falkland) and Keppel Island

Distribution: Native of Sicily

Naturalisation Notes: Naturalised; Cultivated ornamental

Baccharis magellanica (Lam.) Pers.

Syn. Pl. 2: 424. 1807.

Local name: Christmas-bush

Description: Dioecious, evergreen creeping/ dwarf shrub to 40 cm.

Phenology: (Nov-), Dec, Jan, Feb, (-Mar)

Habitat: Predominantly found in dwarf shrub heath and acid grassland, often as a co-dominant; also occurs in improved grassland; cushion heath; bare ground; built up areas and gardens; Fachine scrub; fern beds; marshy grassland; introduced vegetation; coastal slope; Tussac; bogs; coastal (saline) grassland; inland rock (stone run, outcrop); stream/ river bank; strandline vegetation; sand dunes; flush; littoral sediments; montane habitats; 0-705 m

Status: Native; Common; widespread across the Falkland Islands.

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Chubut, Mendoza, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VII, Región VIII, Región IX, Región X, Región XI, Región XII), Falkland Islands

Nomenclature Notes: N Hind confirmed this is the accepted name

Bellis perennis L.

Species Plantarum 2: 886. 1753.

Local name: Daisy

Description: Perennial herb, flowering stem to 12 cm.

Phenology: Oct, Nov, Dec, Jan, Feb, Mar

Habitat: Predominantly found in built up areas and gardens; improved grassland; marshy grassland; also occurs in dwarf shrub heath; sand dunes; cushion heath; Tussac; acid grassland; Fachine scrub; strandline vegetation; maritime cliff and slope; maritime shingle; coastal (saline) grassland; Blechnum penna-marina fern bed; introduced vegetation; 0-300 m

Status: Introduced; Frequent; widespread across the Falkland Islands.

Distribution: Native to temperate Europe; widely naturalised in temperate regions of both hemispheres

Naturalisation Notes: Naturalised; Cultivated ornamental

Chevreulia lycopodioides (D'Urv.) DC.

Prodromus 7(1): 45. 1838

Synonym(s): Gnaphalium lycopodioides D'Urv.

Local name: Clubmoss Cudweed

Description: Perennial mat-forming herb; prostrate to ascending stems up to 7 cm.

Phenology: Dec, Jan, Feb

Habitat: Predominantly within dwarf shrub heath and acid grassland; also occurs in built up areas and gardens; cushion heath; Fachine scrub; marshy grassland; bare ground (including disturbed ground on roadside verge); 0-320 m

Status: Endemic; Frequent; widespread across the Falkland Islands.

IUCN Red List Category: LC

Citation: Upson R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

National Red List Category: LC [Widespread across the Falkland Islands and common wherever suitable habitat exists, *Chevreulia lycopodioides* is tolerant of some disturbance.]

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Endemic to the Falkland Islands.

Chiliodendron diffusum (G. Forst.) Kuntze

Revis. Gen. Pl. 3[3]: 141 141 1898.

Synonym(s): *Amellus diffusus* G.Forst.; *Aster magellanicus* Spreng. [Illegitimate]; *Chiliodendron amelloides* DC.; *Chiliodendron amelloides* Cass.; *Chiliodendron amelloides* var. *diffusum* (G.Forst.) Nees; *Chiliodendron amelloides* var. *lanceolatum* T. Nees; *Chiliodendron amelloideum* Cass.; *Chiliodendron amelloideum* var. *lanceolatum* Nees; *Chiliodendron diffusum* f. *media* Speg.; *Chiliodendron diffusum* var. *media* Speg.; *Chiliodendron feliciae* Decne.; *Chiliodendron virgatum* Phil.

Local name: Fachine

Description: Evergreen shrub; many branched stems 20-200 cm.

Phenology: Dec, Jan, Feb

Habitat: Predominantly found within acid grassland, dwarf shrub heath and as the dominant or co-dominant in Fachine scrub; also occurs in marshy grassland; fern beds; improved grassland; stream/ river banks; inland rock (outcrop, stone run, cliff); marginal vegetation; flush; bogs; maritime cliff and slope; 0-440 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Chubut, Mendoza, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VI, Región VII, Región VIII, Región IX, Región X, Región XI, Región XII), Falkland Islands

Cichorium intybus L.

Sp. Pl. 2: 813 (1753)

Local name: Chicory

Description: Perennial herb flowering stems 30-100cm

Status: Introduced; Very rare; Rarely included in seed mixes for pasture re-seeds. Occurs on West Falkland (Port Stephens)

Distribution: A Eurosiberian Southern-temperate archaeophyte species that has naturalised extensively beyond this range to become Circumpolar Southern-temperate

Naturalisation Notes: Status unknown; Cultivated vegetable

Notes: Trialled as fodder crop by DoA (FI Pasture Plant Guide, McAdam & Olave 2010). Recorded from a reseed at Port Stephens by Anne and Diane Robertson (R. Lewis 2013)

Cirsium arvense (L.) Scop. var. *arvense*

Flora Carniolica, Editio Secunda 2: 126-127. 1772.

Local name: Creeping Thistle

Description: Perennial herb with long rhizomes; flowering stems, erect, up to 90 cm tall.

Phenology: (Jan-), Feb, Mar

Habitat: Built up areas and gardens (includes roadside verges); improved grassland; 1-11 m

Status: Introduced; Rare; Recorded on East Falkland (Stanley, Mount Pleasant Complex, Teal Creek, Cape Pembroke, Bertha's Beach), West Falkland (Fox Bay and Mount Alice) and Saunders Island.

Distribution: Native to temperate Eurasia, but naturalised in N. America.

Naturalisation Notes: Naturalised; Action Plan; High risk; All plants controlled (R. Lewis 2013); Not cultivated

Cirsium vulgare (Savi) Ten.

Flora Napolitana 5: 209. 1835 [1836].

Local name: Spear Thistle

Description: Biennial herb; flowering stems, erect, up to 1.5 m.

Phenology: Dec, Jan, Feb, Mar

Habitat: Predominantly found within improved grassland; built up areas and gardens; dwarf shrub heath; also recorded on maritime slope; stream bank; marshy grassland; bare ground; littoral sediments, sand dunes; 0-60 m

Status: Introduced; Rare; Recorded on Saunders Island, Keppel Island, Pebble Island and East Falkland (Stanley area, Mount Pleasant Complex, Mare Harbour)

Distribution: Native to temperate Eurosiberia; widely naturalised outside its native range

Naturalisation Notes: Naturalised; Action Plan; High risk; All plants controlled (R. Lewis 2013); Not cultivated

Crepis capillaris (L.) Wallr.

Linnaea 14(6): 657. 1840.

Local name: Smooth Hawks-beard

Description: Annual herb to 75 cm tall.

Phenology: Jan

Habitat: Recorded in neutral grassland; built up areas and gardens; maritime slope; dwarf shrub heath; c. 2 m

Status: Introduced; Rare; East Falkland (Stanley, Mount Pleasant Complex, Volunteer Shanty, Johnson's Harbour, Fitzroy), West Falkland (Port Stephens), River Island, Weddell Island

Distribution: Native to temperate European; widely naturalised outside its native range

Naturalisation Notes: Naturalised; Not cultivated

Erigeron incertus (d'Urv.) Skottsbo.

Wiss. Ergebn. Schwed. Sudpolar-Exped 4, Lief. 10: 49 (1909)

Local name: Hairy Daisy

Description: Shortly rhizomatous perennial herb; erect flowering stems 5-15 cm tall.

Phenology: Nov, Dec, Jan, Feb

Habitat: Predominantly found within dwarf shrub heath; also occurs in *Blechnum penna-marina* fern beds, cushion heath; on ungrazed islands also within *Poa alopecurus* acid grassland-dwarf shrub heath mosaic; 1-143 m

Status: Endemic; Scarce; Widespread but fragmented population

IUCN Red List Category: EN

National Red List Category: EN [B12ab(iii)]

Conservation measures: Listed on the Conservation of Wildlife and Nature Ordinance (FIG, 1999); Action Plan; unvouchered DNA sample; MSB seed collection (732); ID guide

Distribution: Endemic to the Falkland Islands.

Gamochaeta americana (Mill.) Wedd.

Chlor. And. 1: 151 (1856)

Synonym(s): *Gamochaeta americana* var. *alpina* Wedd., *Gamochaeta americana* var. *vulgaris* Wedd., *Gamochaeta guatemalensis* (Gand.) Cabrera, *Gnaphalium americanum* Mill., *Gnaphalium americanum* var. *alpina* Wedd., *Gnaphalium consanguineum* Gaudich., *Gnaphalium guatemalense* Gand., *Gnaphalium purpureum* var. *americanum* (Mill.) Klatt

Local name: American Cudweed

Description: Biennial herb; flowering stems up to 10 cm.

Phenology: Feb

Habitat: Dwarf shrub heath; improved grassland; sand dunes; cushion heath; marshy grassland; introduced vegetation; strandline vegetation; built up areas and gardens; acid grassland; also coastal (saline) grassland, river banks, saltmarsh, maritime shingle; bare ground; Tussac; seasonal pool margin; 0-20 m

Status: Native; Occasional; Widespread across the Falkland Islands; Due to confusion in distinguishing between *G. spiciformis* and *G. americana* (see Box 4), records for these taxa are mapped together.

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Native to Mexico, Central and South America (including Falkland Islands); naturalised outside this range including in N. America, Australia and New Zealand

Gamochaeta antarctica (Hook. f.) Cabrera

Fl. Patagonica 7: 125. 1971

Synonym(s): *Gnaphalium antarcticum* Hook.f.

Local name: Antarctic Cudweed

Description: Biennial herb; flowering stem to 5 cm.

Phenology: Dec, Jan, Feb, Mar

Habitat: Predominantly found in dwarf shrub heath; also previously recorded on sand and in acid grassland; 8-73 m

Status: Endemic; Rare; Saunders Island, Pebble Island (not relocated in 2007, 2009, 2011 - R. Upson pers. comm.), Weddell Island, East Falkland (Walker Creek), Port Louis (not relocated 2008-2010 - R. Upson pers. comm.)

IUCN Red List Category: EN

National Red List Category: EN [B2ab(iii)]

Conservation measures: Action Plan; unvouchered DNA sample; ID guide

Distribution: Endemic to the Falkland Islands

Gamochaeta malvinensis (H. Koyama) T.R. Dudley

Rhodora 83(836): 478. 1981.

Synonym(s): *Gamochaeta affinis* (d'Urv.) Cabrera, *Gnaphalium affine* d'Urv., *Gnaphalium affine* var. *medium* Speg., *Gnaphalium affine* var. *pusillum* Speg., *Gnaphalium consanguineum* Hombr. & Jacquinot ex Decne., *Gnaphalium malvinense* H.Koyama

Local name: Falkland Cudweed

Description: Perennial/ biennial (?) herb to 5 cm.

Phenology: Dec, Jan, Feb

Habitat: Predominantly found in dwarf shrub heath; also occurs in improved grassland, acid grassland, *Blechnum penna-marina* fern beds, introduced vegetation, inland rock (cliff, outcrop, stone run), built up areas and gardens (includes roadside verge), maritime cliff and slope, bare ground, cushion heath, river bank, Fachine scrub, sand dunes, marshy grassland, montane; 0-600 m

Status: Near endemic; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Unvouchered DNA sample; MSB seed collection (>1000)

Distribution: Falkland Islands and two islands in Tierra del Fuego (Argentina) - Staten Island 'Isla de los Estados'; Mitre Peninsula, part of Isla Grande

Gamochaeta spiciformis (Sch. Bip.) Cabrera

Bol. Soc. Argent. Bot. 9: 381 1961

Synonym(s): *Gamochaeta peteroana* (Phil.) Anderb., *Gnaphalium mucronatum* Phil. [Illegitimate], *Gnaphalium peteroanum* Phil., *Gnaphalium purpureum* var. *mucronatum* (Phil.) Skottsb., *Gnaphalium spiciforme* Sch.Bip. [Illegitimate]

Local name: Spiked Cudweed

Description: Perennial herb; flowering stems up to 37 cm.

Phenology: Dec, Jan, Feb, Mar

Habitat: Predominantly recorded in dwarf shrub heath and maritime cliff and slope; also occurs in and improved grassland, built up areas and gardens; cushion heath; introduced vegetation; acid grassland; marshy grassland; coastal (saline) grassland; sand dunes; 0-74 m

Status: Native; Frequent; Widespread across the Falkland Islands; Due to confusion in distinguishing between *G. spiciformis* and *G. americana* (see Box 4), records for these taxa are mapped together.

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Chubut, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VII, Región IX, Región X, Región XI, Región XII, Región Metropolitana de Santiago), Falkland Islands

Gnaphalium luteoalbum L.

Species Plantarum 2: 851. 1753.

Local name: Jersey Cudweed

Description: Annual to perennial herb; erect flowering stems up to 50 cm.

Phenology: Dec, Jan, Feb

Habitat: A coastal species, occurs on maritime rock, shingle, cliff and slope; dwarf shrub heath (coastal); 0-60 m

Status: Introduced; Rare; NW West Falkland, Saunders Island, Hummock Island, Burnt Island, Steeple Jason, Keppel Island

Distribution: Native to southern-temperate Eurosiberia (northern limit is S. Sweden). It is widely naturalised outside this range.

Naturalisation Notes: Naturalised; Not cultivated

Notes: Likely to move out of *Gnaphalium* but generic circumscription is uncertain (and The Plant List (2010) is currently inaccurate), so it's not yet clear what genus it will end up in. Suggest keeping in *Gnaphalium* until this has been resolved. (R. Lewis 2012).

Hieracium antarcticum d'Urv.

Mém. Soc. Linn. Paris 4: 608. 1826

Local name: Antarctic Hawkweed

Description: Perennial herb; stems 3-14 cm.

Phenology: Nov, Dec, Jan, Feb

Habitat: Predominantly in dwarf shrub heath; also occurs on maritime cliff and slope; inland rock (outcrop); 0-600 m

Status: Native; Scarce; Fairly widespread across the Falkland Islands; not recorded in Lafonia

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VIII, Región X, Región XI, Región XII), Falkland Islands

Hieracium patagonicum Hook. f.

Bot. Antarct. Voy. I. (Fl. Antarct.). 324. 1846

Synonym(s): *Hieracium austroamericanum* Dahlst.

Local name: Patagonian Hawkweed

Description: Perennial herb; stems 15-35 cm; not stoloniferous.

Phenology: Nov, Dec, Jan, Feb

Habitat: Predominantly found in dwarf shrub heath; maritime cliff and slope; inland rock (outcrop); 1-60 m

Status: Native; Rare; NW West Falkland (Crooked Inlet, Dunbar, Hill Cove - 1964, Port Howard - 1908), Saunders Island

National Red List Category: EN [B12ab(iii)]

Conservation measures: Action Plan; unvouchered DNA sample; MSB seed collection (103); ID guide

Distribution: Argentina (Chubut, Santa Cruz, Tierra del Fuego), Chile (Región VII, Región VIII, Región IX, Región X, Región XII), Falkland Islands

Hypochaeris arenaria Gaudich.

Ann. Sci. Nat. (Paris). 5: 103 1825

Synonym(s): *Achyrophorus arenarius* (Gaudich.) DC., *Achyrophorus webbii* Sch.Bip. [Invalid]

Local name: Sand Cat's-ear

Description: Perennial herb; 1(-5) unbranched flowering stems up to 8(-20 in fruit) cm.

Phenology: Nov, Dec, Jan, Feb, Mar

Habitat: Most often recorded in dwarf shrub heath; also occurs on maritime rock, cliff and slope; Fachine scrub; improved grassland; stream bank; acid grassland; inland rock (outcrop); 0-580 m

Status: Native; Occasional; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Chubut, Mendoza, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región V, Región VIII, Región IX, Región X, Región XI, Región XII), Falkland Islands

Hypochaeris radicata L. subsp. *radicata*

Species Plantarum 2: 811. 1753.

Local name: Common Cat's-ear

Description: Perennial herb; flowering stems forked, 4-12 or more per plant, up to 30 cm tall.

Phenology: Dec, Jan, Feb, Mar, Apr

Habitat: Predominantly in built up areas and gardens; dwarf shrub heath; also occurs in sand dunes; improved grassland; introduced vegetation; Tussac; maritime shingle and slope; Fachine scrub; marshy grassland; acid grassland; cushion heath; 0-104 m

Status: Introduced; Occasional; Widespread across the Falkland Islands

Distribution: Native to the southern-temperate Europe; widely naturalised outside this range.

Naturalisation Notes: Naturalised; Not cultivated

Lagenophora nudicaulis (Comm. ex Lam.) Dusén

Wiss. Ergebn. Schwed. Exped. Magell. 3(5): 98. 1900

Synonym(s): *Lagenophora commersonii* (Cass.) Cass., *Aster nudicaulis* Comm. ex Lam., *Lagenophora nudicaulis* (Comm. ex Lam.) T.R.Dudley

Local name: Dwarf Daisy

Description: Perennial herb with slender rhizomes; flowering stems up to 6.5 cm.

Phenology: Dec, Jan, Feb

Habitat: Inland rock; dwarf shrub heath; greens and neutral grassland; acid grassland; coastal cushion heath; 3-670 m

Status: Native; Occasional; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Unvouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Neuquen, Río Negro, Tierra del Fuego), Chile (Región VI, Región VII, Región VIII, Región IX, Región X, Región XI, Región XII), Falkland Islands

Leontodon hispidus L.

Species Plantarum 2: 798. 1753.

Local name: Rough Hawkbit

Description: Perennial herb; stems, unbranched, up to 60 cm.

Phenology: Dec, Jan, Feb

Habitat: Improved grassland; introduced vegetation; sand dunes; built up areas and gardens; dwarf shrub heath; 0-15 m

Status: Introduced; Rare; East Falkland (Bertha's Beach, Cape Pembroke, Stanley), West Falkland (Hill Cove), New Island, Weddell Island

Distribution: Native to temperate Europe.

Naturalisation Notes: Naturalised; Not cultivated

Leptinella scariosa Cass.

Bull. Sci. Soc. Philom. Paris. 1822: 127. 1822.

Synonym(s): *Cotula acaenoides* (Hook. & Arn.) Alb., *Cotula scariosa* (Cass.) Franch.

Local name: Buttonweed

Description: Perennial herb, dioecious; stems up to 12 cm long but creeping along ground for most of their length.

Phenology: Dec, Jan

Habitat: Predominantly coastal and found in marshy grassland on sandy soil; sand dunes; built up areas and gardens; dwarf shrub heath; as a primary colonizer of bare ground; also occurs in acid grassland; Tussac; cushion heath; improved grassland; strandline vegetation; coastal (saline) grassland; maritime rock, cliff and shingle; littoral sediments; pond/ lake margins; inland rock (outcrop); Fachine scrub; stream bank; 0-459 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VIII, Región X, Región XI, Región XII), Falkland Islands

Leucanthemum vulgare Lam.

Fl. Franç. 2: 137. 1779.

Local name: Oxeye Daisy

Description: Perennial herb with rhizomes; erect/ ascending flowering stems to 75 cm.

Phenology: Dec, Jan, Feb, Mar

Habitat: Predominantly in built up areas and gardens; also occurs in improved grassland; maritime slope; acid grassland; 0-21 m

Status: Introduced; Scarce; Widespread across the Falkland Islands

Distribution: Native to boreo-temperate Eurosiberia; widely naturalised outside this range.

Naturalisation Notes: Naturalised; Cultivated ornamental

Leucanthemum x superbum (Bergmans ex J.Ingram) D.H.Kent

Watsonia 18(1): 89. 1990

Local name: Shasta Daisy

Description: Perennial herb with rhizomes; erect/ ascending flowering stems to 1.2 m.

Phenology: Feb

Habitat: Acid grassland; built up areas and gardens; introduced vegetation; < 10 m

Status: Introduced; Very rare; Recorded on Pebble Island, W.F. Fox Bay, E.F. Stanley

Distribution: Horticultural origin

Naturalisation Notes: Naturalised; Cultivated ornamental

Nomenclature Notes: Incorrect in The Plant List (2010). Correct in Stace (2010). (R. Lewis 2012).

Leucheria suaveolens (d'Urv.) Speg.

Revista Fac. Agron. Univ. Nac. La Plata. 3: 538 1897

Synonym(s): *Leuceria suaveolens* (D'Urv.) Skottsb.

Local name: Vanilla Daisy

Description: Perennial herb; erect unbranched flowering stems up to 32 cm.

Phenology: Nov, Dec, Jan, Feb, (-Mar)

Habitat: Predominantly found in dwarf shrub heath, acid grassland and *Blechnum penna-marina* fern beds. Also found in coastal cushion heath, Fachine scrub, neutral grassland, maritime cliffs and slopes and inland rock; 0-650 m

Status: Endemic; Frequent; Widespread across the Falkland Islands

IUCN Red List Category: LC

National Red List Category: LC [*Leucheria suaveolens* is assessed as Least Concern because it is widespread and frequent across the Islands; however, grazing can reduce population density and plant size locally.]

Conservation measures: Vouchered DNA sample; MSB seed collection (>947)

Distribution: Endemic to the Falkland Islands

***Matricaria discoidea* DC.**

Prodr. (DC.) 6: 50. 1838

Local name: Pineappleweed

Description: Annual herb, stem erect to 35 cm.

Phenology: Oct, Nov, Dec, Jan, Feb, Mar

Habitat: Built up areas and gardens (includes waste ground and roadside verge); introduced vegetation; bare ground, particularly in association with nutrient input from penguin rookeries; also occurs in strandline vegetation; littoral sediments; improved grassland; at the margin of standing water; marshy grassland; 0-25 m

Status: Introduced; Occasional; Widespread across the Falkland Islands

Distribution: Probably native to North and South Asia and possibly also neighbouring areas of North America; widely naturalised outside its native range.

Naturalisation Notes: Naturalised; Not cultivated

Nomenclature Notes: Incorrect in The Plant List (2010). Correct in Stace (2010). (R. Lewis 2012).

Nassauvia falklandica Upson, R. and Hind, D.J.N

Kew Bull. 67: 1-8 (2013)

Local name: Falkland Nassauvia

Description: Perennial herbaceous sub-shrub; stems up to c. 5 cm

Phenology: Nov, Dec, Jan

Habitat: Growing in gravel/mineral substrate within feldmark habitat; c. 400-500 m

Status: Endemic; Rare; West Falkland (Hill Cove Mountains, Hornby Mountains)

IUCN Red List Category: EN

National Red List Category: EN [B12ab(iii)]

Conservation measures: Vouchered DNA sample; MSB seed collection (<1000)

Distribution: Endemic to the Falkland Islands

***Nassauvia gaudichaudii* (Cass.) Cass. ex Gaudich.**

Ann. Sci. Nat. (Paris). 5: 103 1825.

Local name: Coastal Nassauvia

Description: Perennial low cushion-forming herb; cushions up to 8 cm high.

Phenology: Dec, Jan, Feb, (-Mar)

Habitat: Predominantly in coastal cushion heath, where it can form the dominant/ co-dominant and dwarf shrub heath; also occurs on coastal (saline) grassland; Blechnum penna-marina fern beds; bare ground as a primary colonist; improved grassland; maritime cliff and slope; introduced vegetation; coastal feldmark; inland rock (outcrop, inland cliff); marshy grassland; coastland rock/ boulders; strandline vegetation; montane; acid grassland; Tussac; pond margin; neutral grassland; sand dunes; 0-585 m

Status: Endemic; Frequent; Widespread across the Falkland Islands

IUCN Red List Category: LC

National Red List Category: LC [Widespread and locally common around the coasts and although there are some threats these are not of significant concern, hence Nassauvia gaudichaudii is assessed as Least Concern]

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Endemic to the Falkland Islands

***Nassauvia serpens* d'Urv.**

Mém. Soc. Linn. Paris 4: 609 1826

Local name: Snakeplant

Description: Perennial herb, prostrate/ ascending/ erect/ branched stems to 200 cm.

Phenology: Nov, Dec, Jan, Feb, (-Mar)

Habitat: Well-drained substrates with access to running water: predominantly found within stone runs; also occurs in inland rock (inland cliff, outcrop); dwarf shrub heath; Blechnum penna-marina fern beds; Fachine scrub; 2-700 m

Status: Endemic; Scarce; Widespread across the Falkland Islands; not recorded in Lafonia. Five locations (Big Arch Island, Chartres Horse Paddock, Little Chartres, Narrows Island, Weddell Island) are now known to support populations of *N. serpens* at lowland or upland sites outside of stone runs.

IUCN Red List Category: LC

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Endemic to the Falkland Islands

Perezia recurvata (Vahl) Less.

Linnaea. 5: 21. 1830.

Local name: Falkland Lavender

Description: Perennial suffruticose bush to 25 cm; stems procumbent/ erect 7-50 cm.

Phenology: Dec, Jan, Feb, (-Mar)

Habitat: Predominantly coastal in dwarf shrub heath; cushion heath; maritime cliff and slope; also recorded in coastal (saline) grassland; inland rock (outcrop); strandline vegetation; littoral sediment (shingle); sand dunes; 0-216 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Buenos Aires, Chubut, Mendoza, Neuquen, Río Negro, Santa Cruz, San Juan, Tierra del Fuego), Chile (Región VI, Región VII, Región VIII, Región X, Región XI, Región XII), Falkland Islands

Pilosella aurantiaca (L.) F.W.Schultz & Sch.Bip. subsp. *aurantiaca*

Flora 45(27): 426. 1862.

Synonym(s): Hieracium aurantiacum L.

Local name: Orange Hawkweed, Fox-and-cubs

Description: Stoloniferous perennial herb; flowering stems to 40 cm.

Phenology: Dec, Jan, Feb, Mar, Apr

Habitat: Predominantly found in built up areas and gardens (includes waste ground and roadside verges); also occurs in acid grassland; improved grassland; sand dunes; Blechnum penna-marina fern beds; 0-21 m

Status: Introduced; Rare; Widely scattered across the Falkland Islands

Distribution: Native range is within Boreal-montane Europe; it is naturalised outside this range.

Naturalisation Notes: Naturalised; High risk (R. Lewis 2013); Cultivated ornamental

Nomenclature Notes: Given the taxonomic expertise in this group in Europe (for example the UK has over 400 (micro)species of Hieracium) relative to South America the European view is being followed i.e. Pilosella not Hieracium.

Pilosella officinarum F.W.Schultz & Sch.Bip.

Flora 45: 421, 422. 1862.

Synonym(s): In Broughton & McAdam (2002) as Hieracium pilosella Hook. f.

Local name: Mouse-ear-hawkweed

Description: Stoloniferous, perennial herb; flowering stems to 10(-30) cm.

Phenology: Dec, Jan, Feb, Mar

Habitat: Dwarf shrub heath; built up areas and gardens; improved grassland; Blechnum penna-marina fern beds; bare ground; acid grassland; 1-200 m

Status: Introduced; Rare; West Falkland (Port Stephens, Port North, Chartres, Fox Bay East), East Falkland (Mount Pleasant Complex, North Arm, Stanley)

Distribution: Native to the temperate Europe; widely naturalised outside this range.

Naturalisation Notes: Naturalised; High risk; Some plants controlled (R. Lewis 2013); Not cultivated

Notes: Several ssp. recognised and D. Broughton would be willing to vet pressed material.

Senecio candidans DC.

Prodr. 6: 412. 1838

Local name: Sea Cabbage

Description: Perennial herb to 50 cm

Phenology: Dec, Jan, Feb

Habitat: A coastal species predominantly occurring within strandline vegetation; sand dunes and coastland shingle; also occurs in Tussac; maritime cliff and slope; coastland rock; introduced vegetation (dominated by Marram grass); saltmarsh; dwarf shrub heath; coastal (saline) grassland; 0-12 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Tierra del Fuego), Chile (Región VIII, Región X, Región XI, Región XII), Falkland Islands

Nomenclature Notes: Moore (1983) lists Senecio candidans auct., non Wall. as a misapplied non-synonym

Senecio littoralis Gaudich.

Ann. Sci. Nat. (Paris). 5: 104. 1825

Local name: Woolly Falkland Daisy

Description: Perennial herb to 25 cm; woody branching stems.

Phenology: Nov, Dec, Jan, Feb, Mar

Habitat: Predominantly found in dwarf shrub heath; also occurs in inland rock (stone run, outcrop); *Blechnum penna-marina* fern beds; Tussac; Maritime cliff and slope; montane; rarely in improved grassland; acid grassland; neutral grassland; marshy grassland; introduced vegetation (*Rumex acetosella* dominated); sand dunes; 1-398 m

Status: Endemic; Occasional; Widespread across the Falkland Islands, including Beauchene Island.

IUCN Red List Category: LC

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Endemic to the Falkland Islands

***Senecio squalidus* L.**

Species Plantarum 2: 869. 1753

Local name: Oxford Ragwort

Description: Short-lived perennial herb; erect/ ascending stems to 50 cm.

Phenology: Nov, Dec, Jan, Feb, Mar

Habitat: Built up areas and gardens; improved grassland; acid grassland; c. 60 m

Status: Introduced; Very rare; East Falkland (Mount Kent, Mount Pleasant Complex, Stanley)

Distribution: Native to southern Europe

Naturalisation Notes: Naturalised; Factsheet; High risk; Some plants controlled (R. Lewis 2013); Not cultivated

***Senecio sylvaticus* L.**

Species Plantarum 2: 868. 1753.

Local name: Heath groundsel

Description: Annual herb; erect stems to 70 cm.

Phenology: Nov, Dec, Jan, Feb, Mar

Habitat: Predominantly found on bare ground; dwarf shrub heath; improved grassland; Tussac; also occurs in strandline vegetation; introduced vegetation; built up areas and gardens; rarely in coastal (saline) grassland; acid grassland; maritime cliff and slope; fern beds; marshy grassland; stream margin; cushion heath; rarely in coastland shingle; pool margin; sand dunes; inland rock (cliff); Fachine scrub; 0-200 m

Status: Introduced; Occasional; Widespread across the Falkland Islands

Distribution: Native to temperate Europe

Naturalisation Notes: Naturalised; Not cultivated

Notes: Misrecorded as *Senecio viscosus* prior to 2009 (R. Lewis 2012) Widely misrecorded as *S. viscosus*; misidentified voucher at FINH. *S. viscosus* not found by recent surveys, *S. sylvaticus* widespread and in same locations as records for *S. viscosus* (R. Lewis 2012)

***Senecio vaginatus* Hook. & Arn.**

J. Bot. (Hooker). 3: 331. 1841

Local name: Smooth Falkland Daisy

Description: Biennial herb; erect stem to 25 cm.

Phenology: Nov, Dec, Jan, Feb, Mar

Habitat: Predominantly occurs in acid grassland; dwarf shrub heath; *Blechnum penna-marina* fern beds; inland rock (outcrop, stone run); also occurs in coastal (saline) grassland; neutral grassland; marshy grassland; Fachine scrub; Tussac; maritime cliff and slope; rarely in coastland shingle; pond margin; *Blechnum magellanicum* fern beds; 0-459 m

Status: Endemic; Occasional; Widespread across the Falkland Islands

IUCN Red List Category: LC

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Endemic to the Falkland Islands

Senecio vulgaris* L. subsp. *vulgaris* var. *vulgaris

Species Plantarum 2: 867. 1753.

Local name: Groundsel

Description: Annual herb; erect stem to 45 cm.

Phenology: Sept, Oct, Nov, Dec, Jan, Feb, Mar, Apr, May

Habitat: Predominantly in built up areas and gardens; dwarf shrub heath; improved grassland; introduced vegetation; also occurs in Tussac; strandline vegetation; bare ground; acid grassland; maritime slope; coastland rock; coastland shingle; sand dunes; rarely in marshy grassland; standing water margin; inland rock (outcrop);

cushion heath; fern beds; coastal (saline) grassland; 0-240 m

Status: Introduced; Frequent; Widespread across the Falkland Islands

Distribution: Native to southern-temperate Europe; widely naturalised outside this region, particularly within Northern Hemisphere southern-temperate areas.

Naturalisation Notes: Naturalised; Not cultivated

Sonchus asper (L.) Hill subsp. *asper* var. *asper*

Fl. Brit. 395. 1760

Local name: Prickly Sow-thistle

Description: Overwintering annual herb; stems erect, branched near top, 20-100 cm.

Phenology: Dec, Jan, Feb, Mar, Apr

Habitat: Predominantly found in built up areas and gardens or near the coast on maritime cliff and slope; coastland rock; sand dunes; coastland shingle; improved grassland; also occurs in dwarf shrub heath (coastal); strandline vegetation; introduced vegetation; marshy grassland; rarely in coastal (saline) grassland; 0-60 m

Status: Introduced; Occasional; Widespread across the Falkland Islands

Distribution: Native to southern-temperate Europe; widely naturalised outside this region.

Naturalisation Notes: Naturalised; High risk; Some plants controlled (R. Lewis 2013); Not cultivated

Sonchus oleraceus L. var. *oleraceus*

Species Plantarum 2: 794. 1753.

Local name: Smooth Sow-thistle

Description: Overwintering annual herb; stems erect, branched near top, 20-100 cm.

Phenology: Dec, Jan, Feb

Habitat: Built up areas and gardens and a single coastal site on West Point Island; < 5 m

Status: Introduced; Very rare; East Falkland (Stanley) and West Point Island

Distribution: Native to southern-temperate Europe; widely naturalised outside this region, particularly within Northern Hemisphere southern-temperate areas.

Naturalisation Notes: Naturalised; High risk (R. Lewis 2013); Not cultivated

Symphotrichum vahlii (Gaudich.) G.L.Nesom

Phytologia 77: 294 (1994)

Local name: Marsh Daisy

Description: Loosely clump-forming perennial herb with rhizomes; erect/ ascending stems to 35 cm.

Phenology: Dec, Jan, Feb, Mar

Habitat: Damp areas of many habitats: predominantly grows in marshy grassland; damp places in dwarf shrub heath and acid grassland; also occurs in improved grassland; coastal (saline) grassland; cushion heath; bogs; Fachine scrub; standing water (seasonal pool; pond; pond/ lake margin); marginal vegetation; neutral grassland; running water (small stream; stream bank); sand dunes (dune slacks); rarely on in land rock (inland cliff); strandline vegetation; bare ground; fern beds; flush vegetation; introduced vegetation; maritime cliff; 0-610 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Chubut, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VII, Región VIII, Región IX, Región X, Región XI, Región XII), Falkland Islands

Nomenclature Notes: N Hind confirms *Symphotrichum vahlii* is the accepted name; referred to by the synonymous name *Aster vahlii* (Gaudich.) Hook. & Arn. in Broughton and McAdam (2005) and Moore (1968, 1983) (R, Upson 2012).

Tanacetum parthenium Sch.Bip. cv. '*Aureum*'

Tanacet. 55

Local name: Golden Feverfew

Description: Strongly scented perennial herb; erect stems to 30 cm.

Phenology: Unknown

Habitat: Built up areas and gardens (in Fox Bay West settlement and along coast near Chartres settlement); 1-11 m

Status: Introduced; Very rare; West Falkland (Chartres, Fox Bay West)

Distribution: Cultivar

Naturalisation Notes: Naturalised; Cultivated ornamental

Notes: All records for this species outside of cultivation appear to refer to this yellow-leaved cultivar. Both this and the green-leaved type variety are present in cultivation.

***Tanacetum vulgare* L.**

Species Plantarum 2: 844. 1753.

Local name: Tansy

Description: Strongly scented perennial herb with rhizomes; erect stems to 1.2 m.

Phenology: Feb

Habitat: Built up areas and gardens; improved grassland; 0-15 m

Status: Introduced; Rare; East Falkland (Mount Pleasant Complex, Stanley, Orqueta House, Sound House, Wreck Point); West Falkland (North Arm, Port Howard, Fox Bay West, South Harbour); Pebble Island.

Distribution: A Eurasia Boreo-temperate species that is extensively naturalised in N. America.

Naturalisation Notes: Casual & Persisting (Taxa); Cultivated ornamental

***Taraxacum gilliesii* Hook. & Arn.**

Comp. Bot. Mag. 1: 31. 1835 31 1835.

Synonym(s): *Taraxacum magellanicum* Comm. ex. Sch. Bip.

Local name: Gillie's Dandelion

Description: Perennial herb; erect flowering stem to 12(-17) cm.

Phenology: Nov, Dec, Jan, Feb

Habitat: Predominantly grows in dwarf shrub heath; also occurs on maritime cliff and slope; coastland rock; rarely in acid grassland; cushion heath; bare ground; coastal (saline) grassland; Fachine scrub; fern beds; neutral grassland; 0-300 m

Status: Native; Scarce; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Unvouchered DNA sample; MSB seed collection (364)

Distribution: Argentina (Chubut, La Pampa, La Rioja, Mendoza, Neuquen, Río Negro, Santa Cruz, San Juan, Tierra del Fuego), Chile (Región XII, Región Metropolitana de Santiago), Falkland Islands

***Taraxacum officinale* G. Weber ex F.H. Wigg.**

Prim. Fl. Holsat. 56. 1780.

Local name: Dandelion

Description: Perennial herb; erect flowering stem to 21 cm.

Phenology: Sept, Oct, Nov, Dec, Jan, Feb, Mar, Apr

Habitat: Predominantly found in built up areas and gardens; sand dunes; maritime cliff and slope; coastland rock; coastland shingle; dwarf shrub heath; improved grassland; also occurs in acid grassland; marshy grassland; Fachine scrub; bare ground; rarely in Tussac; coastal (saline) grassland; strandline vegetation; 0-150 m

Status: Introduced; Occasional; Widespread across the Falkland Islands

Distribution: Native to circumpolar temperate areas in the Northern Hemisphere

Naturalisation Notes: Naturalised; Not cultivated

Nomenclature Notes: Author incorrect in The Plant List (2010). Correct in Stace (2012). (R. Lewis 2012). *Taraxacum officinale* is an aggregate taxon comprised of many microspecies. Further work is required to determine which microspecies are present in the Falkland Island

***Tripleurospermum maritimum* (L.) W.D.J.Koch subsp. *inodorum* (L.) Appleq.**

Taxon 51(4): 760 (2002) (2002)

Synonym(s): *Tripleurospermum inodorum* (L.) Sch.Bip.

Local name: Scentless Mayweed

Description: Annual herb; erect/ ascending stems to 60 cm.

Phenology: Jan, Feb, Mar

Habitat: Built up areas and gardens (includes roadside verge); arable and horticulture; 1-20 m

Status: Introduced; Rare; East Falkland (Stanley, Mount Pleasant Complex); Carcass Island; Weddell Island; Saunders Island

Distribution: A Eurosiberian Temperate archaeophyte species; widely naturalised in the temperate circumpolar region of the Northern Hemisphere

Naturalisation Notes: Naturalised; Not cultivated

Nomenclature Notes: As subsp. in The Plant List (2010). Stace 2010 is equivocal about status as species or subspecies. Suggest follow The Plant List (2010) (R. Lewis 2012). Referred to as *Triplospermum inodorum* in Broughton and McAdam (2002).

***Tussilago farfara* L.**

Sp. Pl. 2: 865. 1753

Local name: Colt's foot

Description: Perennial herb with rhizomes; erect stems to 15 cm.

Phenology: Nov, Dec

Habitat: Built up areas and gardens; 1-20 m

Status: Introduced; Very rare; East Falkland (Stanley)

Distribution: A Eurosiberian Boreo-temperate species; widely naturalised outside of this area.

Naturalisation Notes: Naturalised; Possibly locally extirpated; Factsheet; High risk; All plants controlled (R. Lewis 2013); Not cultivated

BERBERIDACEAE

Berberis microphylla G. Forst.

Commentationes Societatis Regiae Scientiarum Göttingensis 9: 29. 1787.

Synonym(s): In Broughton and McAdam (2002) as *Berberis buxifolia* Lam.

Local name: Calafate

Description: An erect shrub up to 4 m tall; stems with diameter of up to 3 cm.

Phenology: Nov, Dec

Habitat: Predominantly recorded in built up areas and gardens; dwarf shrub heath; improved grassland; also occurs in Blechnum penna-marina fern beds; acid grassland; neutral grassland; rarely on coastland rock; 0-30 m

Status: Introduced; Rare; East Falkland (Bluff Cove, Cantera, Ceritos House, Cortley Hill, Darwin, Egg Harbour, Fitzroy, Head of the Bay, Island Harbour, Port Sussex, Salvador, Stanley, Teal Creek, Teal Creek House), West Falkland (Fox Bay West, Hill Cove Forest, Port Stephens), Keppel Island

Distribution: Southern South America: native to Argentina and Chile

Naturalisation Notes: Naturalised; Action Plan; High risk; Some plants controlled (R. Lewis 2013); Cultivated ornamental

BORAGINACEAE

Myosotis arvensis (L.) Hill subsp. *arvensis*

Veg. Syst. 7: 55. 1764

Local name: Field Forget-me-not

Description: Annual - biennial herb; erect/ ascending stems up to 40 cm

Phenology: Nov, Dec, Jan, Feb, Mar

Habitat: Built up areas and gardens; 0-20 m

Status: Introduced; Very rare; East Falkland (Stanley)

Distribution: A Eurosiberian Boreo-temperate archaeophyte species that has naturalised extensively outside this range

Naturalisation Notes: Naturalised; Not cultivated

Myosotis discolor Pers. ex Murray

Syst. Veg. 190. 1797

Local name: Changing Forget-me-not

Description: Annual herb; erect stems up to 25 cm

Phenology: Nov, Dec

Habitat: Predominantly recorded in built up areas and gardens; also occurs in acid grassland; improved grassland; dwarf shrub heath; rarely maritime cliff and slope; 0-15 m

Status: Introduced; Scarce; Widely scattered across the Falkland Islands

Distribution: A European Temperate species

Naturalisation Notes: Naturalised; Not cultivated

Myosotis ramosissima Rochel

Oestr. Fl. ed. II. i. 366, in obs.

Local name: Early Forget-me-not

Description: Annual herb; erect/ decumbent stems up to 25 cm

Phenology: Nov

Habitat: Built up areas and gardens; c. 60 m

Status: Introduced; Very rare; East Falkland (Mount Pleasant Complex)

Distribution: A European Southern-temperate species

Naturalisation Notes: Naturalised; Not cultivated

BRASSICACEAE

Armoracia rusticana G.Gaertn., B.Mey. & Scherb.

Oekon. Fl. Wetterau 2: 426. 1800

Local name: Horseradish

Description: Perennial herb with deep tuberous roots; stems to 1.5 m

Phenology: Dec

Habitat: Built up areas and gardens; neutral grassland; 1-11 m

Status: Introduced; Very rare; East Falkland (Stanley)

Distribution: Garden origin; widely naturalised in temperate areas of Europe, N. America and elsewhere

Naturalisation Notes: Naturalised; Cultivated herb

Brassica napus L. subsp. ***rapifera*** Metzg.

Syst. Besch. Kohllart. 46. 1833.

Local name: Swede

Description: Biennial herb; erect stems up to 1.5 m

Phenology: Dec, Jan

Habitat: Built up areas and gardens; maritime rock, shingle, cliff and slope; 0-3 m

Status: Introduced; Very rare; Widely planted as fodder crop, rarely escaping cultivation.

Distribution: Origin in cultivation; naturalised in temperate areas around the world

Naturalisation Notes: Naturalised; Cultivated vegetable

Brassica oleracea L.

Species Plantarum 2: 667. 1753

Local name: Cabbage

Description: Biennial to perennial herb up to 2 m

Phenology: Dec

Habitat: Built up areas and gardens; improved grassland; rarely maritime cliff and slope; coastland rock; coastland shingle; 1-10 m

Status: Introduced; Very rare; East Falkland (Stanley), Saunders Island, Pebble Island

Distribution: Horticultural origin; brought into cultivation from wild field cabbage native to Suboceanic Southern-temperate regions

Naturalisation Notes: Naturalised; Cultivated vegetable

Brassica rapa L. subsp. ***rapa*** L.

Species Plantarum 2: 666. 1753

Local name: Turnip

Description: Biennial to perennial herb; erect stems up to 1.5 m

Phenology: Mar, Apr

Habitat: Built up areas and gardens; arable and horticulture; maritime slope; 1-40 m

Status: Introduced; Very rare; East Falkland (Cape Pembroke, Stanley), West Falkland (Hill Cove, Shallow Bay)

Distribution: Native to Eurasia; widely naturalised outside this range in Africa, N. and S. America and Australasia

Naturalisation Notes: Naturalised; Cultivated vegetable & fodder

Capsella bursa-pastoris (L.) Medik.

Pfl.-Gatt. 85. 1792

Local name: Shepherd's-purse

Description: Annual/ biennial herb; erect stems 3-40 cm

Phenology: Oct, Nov, Dec, Jan

Habitat: Predominantly in built up areas and gardens; also occurs in coastland shingle; sand dunes; strandline vegetation; improved grassland; rarely in bare ground; acid grassland; coastland rock; dwarf shrub heath (coastal); 0-60 m

Status: Introduced; Occasional; Widespread across the Falkland Islands

Distribution: A Eurosiberian Wide-temperate archaeophyte species that has naturalised extensively beyond this range to become Circumpolar Wide-temperate

Naturalisation Notes: Naturalised; Not cultivated

Cardamine glacialis (G. Forst.) DC.

Syst. Nat. 2: 264. 1821

Local name: Bitter-cress

Description: Perennial herb; erect/ ascending stems to 25 cm

Phenology: Nov, Dec, Jan

Habitat: Predominantly in dwarf shrub heath; acid grassland; inland rock (outcrop, cliff, stone run); also occurs in *Blechnum penna-marina* fern beds; maritime slope; rarely in Tussac (Beauchene Island); 0-675 m

Status: Native; Occasional; Widespread across the Falkland Islands, including Beauchene Island

National Red List Category: LC

Conservation measures: Unvouchered DNA sample; MSB seed collection (>770)

Distribution: Argentina (Chubut, Santa Cruz, Tierra del Fuego), Chile (Región X, Región XI, Región XII), Falkland Islands, Tristan da Cunha (introduced to South Georgia)

Cardamine hirsuta L.

Species Plantarum 2: 655. 1753

Local name: Hairy Bitter-cress

Description: Annual to biennial herb; erect/ ascending stems to 30 cm

Phenology: Nov, Dec, Jan

Habitat: Built up areas and gardens; 0-10 m

Status: Introduced; Very rare; East Falkland (Stanley), West Point Island

Distribution: A Eurosiberian Wide-temperate species that has naturalised extensively beyond this range to become Circumpolar Southern-temperate

Naturalisation Notes: Naturalised; Not cultivated

Cochlearia officinalis L. subsp. *officinalis*

Species Plantarum 2: 647. 1753

Local name: English Scurvygrass

Description: Biennial/ perennial herb; procumbent/ ascending stems to 25 cm

Phenology: Dec, Jan

Habitat: Naturalised in coastal areas including coastland rock; coastland shingle and sand; maritime cliff; strandline vegetation; coastal (saline) grassland; Tussac; dwarf shrub heath (coastal); 0-60 m

Status: Introduced; Rare; East Falkland (Smylies), N of West Falkland, Saunders Island, Keppel Island, Pebble Island, River Island

Distribution: Circumpolar Wide-boreal

Naturalisation Notes: Naturalised; Not cultivated

Draba funiculosa Hook.f.

Fl. Antarct. 238 1845.

Local name: Whitlowgrass

Description: Perennial herb; erect flowering stems 1-4 cm tall

Phenology: Oct, Nov

Habitat: Open habitats, predominantly coastal in dwarf shrub heath; also occurs in inland rock; *Blechnum penna-marina* fern beds; maritime cliff and slope; strandline vegetation; 1-60 m

Status: Native; Scarce; Widely scattered across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Santa Cruz, Tierra del Fuego), Chile (Región XII), Falkland Islands

Draba magellanica Lam.

Encycl. 2: 328 1786

Local name: Fuegian Whitlowgrass

Description: Perennial herb; erect flowering stems 2.5-7 cm tall

Phenology: Unknown

Habitat: Coastland; recorded close to beach; probably < 5 m

Status: Native; Very rare; Last recorded on NW West Falkland (Roy Cove) in 1914 - not relocated in 2001 or 2009 (R. Upson, pers. comm.)

National Red List Category: CR [B1ab(i,ii,iii,iv,v)]

Conservation measures: Action Plan; ID guide

Distribution: Southern South America: Argentina (Catamarca, Chubut, La Rioja, Mendoza, Neuquen, Santa Cruz, Tierra del Fuego), Chile (Región XI, Región XII), Falkland Islands

Erophila verna (L.) DC.

in Mem. Mus. Hist. Nat., Paris, vii. 251 (1821)

Local name: Introduced Whitlowgrass

Description: Annual herb; erect flowering stems to 10 cm

Phenology: Nov

Habitat: Built up areas and gardens; c. 60 m

Status: Introduced; Very rare; Recorded on East Falkland (Mount Pleasant Complex)

Distribution: European Southern-temperate

Naturalisation Notes: Naturalised; Not cultivated

***Hesperis matronalis* L.**

Species Plantarum 2: 663. 1753

Local name: Dame's-violet

Description: Biennial/ perennial herb; erect stems to 1.5 m

Phenology: Dec, Jan, Feb, Mar, Apr

Habitat: Built up areas and gardens; 0-15 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley) and West Falkland (Fox Bay West, Port Howard)

Distribution: Native of Southern Europe and Western Asia but extensively naturalised outside this range

Naturalisation Notes: Naturalised; Cultivated ornamental

***Lepidium didymum* L.**

Mant. Pl. 92 (1767)

Local name: Lesser Swine-cress

Description: Annual/ biennial; procumbent/ ascending stems 2-25 cm

Phenology: Dec, Jan, Feb

Habitat: Predominantly coastal in strandline vegetation; littoral sediments; sand dunes; also in built up areas and gardens; improved grassland; coastland rock; maritime cliff; coastal (saline) grassland; rarely in dwarf shrub heath (coastal); Tussac; pond margin; 0-10 m (up to 200 m on New Island)

Status: Native; Occasional; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Origin is uncertain but may be South America (Preston et al. 2002); also native to Europe

***Nasturtium officinale* R.Br.**

Hortus Kew. 4: 110 1812.

Synonym(s): *Rorippa nasturtium-aquaticum* (L.) Hayek

Local name: Water-cress

Description: Perennial herb; procumbent/ ascending stems to 1 m

Phenology: Feb

Habitat: Built up areas and gardens; 1-10 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley)

Distribution: A Eurosiberian Southern-temperate species that has naturalised extensively so that it is now Circumpolar Southern-temperate.

Naturalisation Notes: Naturalised; Probably locally extirpated (R. Lewis 2013); Cultivated herb

***Phlebotobium maclovianum* (d'Urv.) O.E. Schulz**

Notizbl. Bot. Gart. Berlin-Dahlem 11: 641. 1932

Synonym(s): In Moore (1968) as *Arabis macloviana* (d'Urv.) Hook. f.

Local name: Falkland Rock-cress

Description: Glabrous perennial herb; erect stems up to 45 cm.

Phenology: Nov, Dec, Jan

Habitat: Predominantly associated with inland rock (outcrop); maritime cliff; on ungrazed islands also in *Blechnum penna-marina* fern beds; coastal (saline) grassland; Tussac; Native Boxwood scrub; *Hierochloa redolens* neutral grassland; dwarf shrub heath (coastal); 0-287 m

Status: Endemic; Scarce; Widely scattered across the Falkland Islands

IUCN Red List Category: EN

National Red List Category: EN [B2ab(iii)]

Conservation measures: Listed on the Conservation of Wildlife and Nature Ordinance (FIG, 1999); vouchered DNA sample; MSB seed collection (>1000); ID guide

Distribution: Endemic to the Falkland Islands

Nomenclature Notes: Sole species in the genus *Phlebotobium*

CALCEOLARIACEAE

Calceolaria biflora Lam.

Encycl. (Lamarck) 1(2): 556 (1785)

Local name: Yellow Lady's Slipper

Description: Perennial herb; erect flowering stems 9-14 cm

Phenology: Dec

Habitat: Dwarf shrub heath (coastal); c. 1 m

Status: Native; Very rare; *C. biflora* is currently only known from one historic herbarium record from West Falkland (Roy Cove, Vallentin, 1911). This species may now be extinct from the wild. One observational record and one word-of-mouth record on Pebble Island were not relocated in 2007 (R. Upson, pers. comm.) or 2011 (M. Morrison, pers. comm.), respectively. An observational record from West Falkland (Stephens Peak) has not been relocated during two field trips (2008) and is thought to be a misidentification (R. Upson, pers. comm.). A plant previously attributed to this species and collected from Hummock Island is now known to a misidentification (R. Woods, pers. comm. 2012).

National Red List Category: CR [B1ab(i,ii,iii,iv,v) + D]

Conservation measures: Listed on the Conservation of Wildlife and Nature Ordinance (FIG, 1999); Action Plan; ID guide

Distribution: Southern South America: Argentina (Chubut, Mendoza, Río Negro, Santa Cruz, San Juan, Tierra del Fuego), Chile (Región IV, Región V, Región VI, Región VII, Región VIII, Región IX, Región X, Región XI, Región XII, Región Metropolitana de Santiago), Falkland Islands

Calceolaria fothergillii Sol.

Hortus Kew. (W. Aiton) 1: 30, t. 1 (1789)

Local name: Lady's Slipper

Description: Perennial herb; flowering stems up to 16 cm.

Phenology: Nov, Dec, Jan, Feb

Habitat: Predominantly coastal on maritime cliff and slope; dwarf shrub heath (coastal); cushion heath - coastal; also occurs in inland rock (outcrop); rarely in *Blechnum penna-marina* fern beds; 0-174 m

Status: Endemic; Occasional; Widespread across the Falkland Islands

IUCN Red List Category: LC

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Endemic to the Falkland Islands

CALYCERACEAE

Nastanthus falklandicus D.M.Moore

Bot. Notiser. 120: 18. 1967

Local name: False-plantain

Description: Perennial rosette to c. 10 cm in diameter and 6 cm tall

Phenology: Jan

Habitat: A coastal species found predominantly on bare sand/ mineral substrate on maritime cliff and slope; open coastal (saline) grassland; rarely in open cushion heath - coastal; 5-100 m

Status: Endemic; Rare; Restricted to south coast of West Falkland, Cross Island, Tea Island

IUCN Red List Category: EN

National Red List Category: EN [B1 ab(i,ii,iii,v) + 2ab(i,ii,iii,v)]

Conservation measures: Listed on the Conservation of Wildlife and Nature Ordinance (FIG, 1999); Action Plan; unvouchered DNA sample; MSB seed collection (>1000); ID guide

Distribution: Endemic to the Falkland Islands

Nomenclature Notes: Govaerts made no comment on this - TPL lists this as an unresolved name - from WCSP (in review)

CAMPANULACEAE

Lobelia pratiana Gaudich. ex Lammers

Novon 8(1): 34. 1998.

Synonym(s): *Pratia repens*

Local name: Berry-lobelia

Description: Creeping perennial herb; prostrate, branched stems to 25 cm, rooting at nodes.

Phenology: Dec, Jan, Feb

Habitat: Moist places predominately in dwarf shrub heath; acid grassland; improved grassland; neutral grassland; sand dunes; marshy grassland; also occurs in cushion heath; running water (bank/ stream); Blechnum penna-marina/ Sticherus cryptocarpa fern beds; coastal (saline) grassland; Fachine scrub; standing water (margin/ seasonal pool/ small pond); maritime cliff and slope; inland rock (outcrop); rarely in bogs; flush; Tussac; strandline vegetation; 0-705 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: South America: Argentina, Chile, Falkland Islands Restricted naturalised in South Georgia (Osborne et al. 2009)

Nomenclature Notes: The Plant List (2010) recognises this as an accepted name but Flora del Cono Sur (2009) recognises Lobelia pratiana as a synonym of Lobelia oligophylla. We follow The Plant List here (R. Upson, 2012)

CAPRIFOLIACEAE

Lonicera periclymenum L.

Species Plantarum 1: 173. 1753.

Local name: Honeysuckle

Description: Deciduous climber to 6 (10) m

Phenology: Feb, Mar

Habitat: Built up areas and gardens, including hedgerows; 0-15 m

Status: Introduced; Rare; Widely but sparsely scattered across the Falkland Islands

Distribution: Northern Hemisphere Suboceanic Southern-temperate

Naturalisation Notes: Persisting (Taxa); Cultivated ornamental

Valeriana sedifolia d'Urv.

Fl. Iles Malouin. 44. 1825.

Local name: Valerian-bog

Description: Dioecious cushion-forming perennial herb; cushions 15-60 cm in diameter

Phenology: Nov, Dec, Jan

Habitat: Predominantly found amongst rocks/ sands in montane and coastal feldmark; also occurs in dwarf shrub heath; maritime cliff and slope; inland rock (cliff, outcrop); 5-705 m

Status: Native; Scarce; Sparsely scattered across the Falkland Islands

National Red List Category: LC

Conservation measures: Unvouchered DNA sample

Distribution: Southern South America: Argentina (Santa Cruz, Tierra del Fuego), Chile (Región XII), Falkland Islands

Valerianella locusta (L.) Betcke

Animadv. Bot. Valer. 10. 1826.

Local name: Lamb's Lettuce

Description: Annual herb; erect, dichotomously branched stems 6-30 cm tall

Phenology: Nov, Dec, Jan

Habitat: Built up areas and gardens; c. 2 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley)

Distribution: European Temperate species that has naturalised extensively outside this range

Naturalisation Notes: Status unknown; Possibly locally extirpated (R. Lewis 2013); Cultivated vegetable

CARYOPHYLLACEAE

Cerastium arvense L.

Species Plantarum 1: 438. 1753.

Local name: Field Mouse-ear

Description: Loosely matted to densely tufted perennial herb; stems to 20 cm

Phenology: Nov, Dec, Jan

Citation: Upson R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

Habitat: Predominantly in dwarf shrub heath; acid grassland; *Blechnum penna-marina* fern beds; also occurs in *Fachine* scrub; improved grassland; neutral grassland; coastal (saline) grassland; cushion heath (coastal, inland); marshy grassland; maritime cliff and slope; rarely in inland rock (cliff, other); 0-447 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Flora del Cono Sur (2009) regard *C. arvense* as naturalised to South America. We follow Quiroga et al. (2002) who provide evidence that *C. arvense* is native to temperate regions of North and South America as well as the north of Eurasia.

Cerastium fontanum Baumg. subsp. *vulgare* (Hartmann) Greuter & Burdet
Willdenowia 12(1): 37. 1982.

Local name: Common Mouse-ear

Description: Loosely tufted perennial herb; stems to 20 cm

Phenology: Nov, Dec, Jan, Feb

Habitat: Predominantly in built up areas and gardens; acid grassland; dwarf shrub heath; also in improved grassland; neutral grassland; marshy grassland; sand dunes; introduced vegetation; littoral sediments; rarely on inland rock (cliff/ outcrop); *Blechnum penna-marina* fern beds; arable and horticulture; coastal (saline) grassland; *Fachine* scrub; cushion heath (coastal/ inland); strandline vegetation; 0-423 m (700 m on Mt Adam summit)

Status: Introduced; Frequent; Widespread across the Falkland Islands

Distribution: A Euro Siberian Boreo-temperate species that has naturalised extensively to become Circumpolar Boreo-temperate.

Naturalisation Notes: Naturalised; Not cultivated

Cerastium glomeratum Thuill.

Fl. Env. Paris (ed. 2) 226. 1799

Local name: Sticky Mouse-ear

Description: Loosely tufted/ matted perennial herb; stems to 15 cm

Phenology: Nov

Habitat: Predominantly in built up areas and gardens; also occurs in improved grassland; 0-21 m

Status: Introduced; Very rare; Widely scattered across the Falkland Islands

Distribution: Native to European Southern-temperate areas but has naturalised extensively beyond this range to become Circumpolar Southern-temperate

Naturalisation Notes: Naturalised; Not cultivated

Colobanthus quitensis (Kunth) Bartl.

Reliq. Haenk. 2: 13, t. 49. 1831

Synonym(s): *Colobanthus crassifolius* (D'Urv) Hook. f.

Local name: Andean Pearlwort

Description: Glabrous mat/ loosely cushion-forming perennial herb; stem branches 0.5-2.0 (-5.0) cm

Phenology: Oct, Nov, Dec, Jan

Habitat: Predominantly coastal in strandline vegetation; maritime cliff and slope; sand dunes; also in dwarf shrub heath (coastal); coastland rock; coastland shingle; littoral sediment (beach, saltmarsh); strandline vegetation; coastal (saline) grassland; rarely in acid grassland (by stream); cushion heath - coastal; inland rock (cliff); 0-152 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Unvouchered DNA sample; MSB seed collection (>1000)

Distribution: Native to Falkland Islands; South Georgia; South Shetland Islands; South Orkney Islands; Antarctic Peninsula; southern South America (Argentina and Chile) and north along the Andes to Mexico

Colobanthus subulatus (d'Urv.) Hook. f.

Flora Antarctica 1: 13. 1844.

Local name: Emerald-bog

Description: Glabrous perennial herb forming compact cushions; stem branches (2-)5-11 cm

Phenology: Oct, Nov, Dec, Jan

Habitat: Predominantly coastal in cushion heath - coastal; dwarf shrub heath (coastal); coastal (saline) grassland; maritime cliff; coastal feldmark; *Blechnum penna-marina* fern beds; strandline vegetation; also in Tussac; inland rock (outcrop); coastland rock/ boulders; rarely in acid grassland (coastal); improved grassland (coastal); neutral grassland; montane; marshy grassland; littoral sediment - saltmarsh; 0-300 m (700 m on Mt

Usborne)

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Chubut, Mendoza, Neuquen, Río Negro, Santa Cruz, San Juan, Tierra del Fuego), Chile (Región XI, Región XII, Región Metropolitana de Santiago), Falkland Islands, South Georgia

Notes: 'Bog' is the Falkland term for any cushion or densely tufted plant.

Sagina filicaulis Jord.

Obs. Pl. Crit. vii. (1849) 16

Local name: Annual Pearlwort

Description: Annual herb; branched erect stems to 15 cm

Phenology: Jan, Feb

Habitat: Built up areas and gardens; 15-60 m

Status: Introduced; Very rare; Recorded on East Falkland (Fitzroy, Mount Pleasant Complex)

Distribution: Native to European Southern-temperate areas

Naturalisation Notes: Naturalised; Not cultivated

Nomenclature Notes: Unresolved in The Plant List (2010), accepted in Stace 2010 (R Lewis 2012)

Sagina procumbens L.

Species Plantarum 1: 128. 1753.

Local name: Procumbent Pearlwort

Description: Tufted perennial herb; short main vegetative stem with many lateral branches that reach up to 20 cm

Phenology: Dec, Jan, Feb, Mar

Habitat: Predominantly in built up areas and gardens; improved grassland; dwarf shrub heath; strandline vegetation; coastland rock/ boulders; coastland - shingle; maritime cliff and slope; littoral sediments; also occurs in sand dunes; cushion heath; Tussac; coastal (saline) grassland; acid grassland; rarely in marshy grassland; neutral grassland; stranding water; running water; 0-300(-610) m

Status: Introduced; Frequent; Widespread across the Falkland Islands

Distribution: Native to Eurosiberian Boreo-temperate areas but has naturalised extensively beyond this range

Naturalisation Notes: Naturalised; Not cultivated

Silene uniflora Roth

Ann. Bot. (Usteri) 10: 46. 1794.

Local name: Bladder Campion

Description: Perennial herb; procumbent/ ascending stems to 30 cm

Phenology: Dec, Jan, Feb, Mar, Apr

Habitat: Built up areas and gardens; coastland rock; maritime cliff and slope; 0-10 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley) and West Point Island

Distribution: Native to Suboceanic Boreo-temperate areas

Naturalisation Notes: Naturalised; Cultivated ornamental

Spergula arvensis L.

Species Plantarum 1: 440. 1753.

Local name: Corn Spurrey

Description: Annual herb; ascending, branched (near base) stems 8-30 cm

Phenology: Dec, Jan

Habitat: Predominantly recorded in built up areas and gardens; also occurs in sand dunes; coastland - rock; maritime cliff; dwarf shrub heath (coastal); arable and horticulture; 0-60 m

Status: Introduced; Rare; Sparsely scattered across the Falkland Islands

Distribution: Eurosiberian Wide-temperate but naturalised extensively beyond so that distribution is now Circumpolar Wide-temperate

Naturalisation Notes: Naturalised; Not cultivated

Spergularia marina (L.) Griseb.

Spic. Fl. Rumel. 1: 213. 1843

Local name: Lesser Sea-spurrey

Description: Annual/ short-lived perennial herb; decumbent/ ascending stems 1-10 cm

Phenology: Nov, Dec, Jan

Citation: Upson R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

Habitat: A coastal species found on bare ground within sparse coastal vegetation; coastal (saline) grassland; strandline vegetation; Tussac; cushion heath - coastal; maritime cliff and slope; littoral sediments (including saltmarsh); coastland rock/ boulders; 0-98 m

Status: Native; Occasional; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Flora del Conosur lists this as introduced to southern South America however we follow Broughton and McAdam (2002) and Moore (1983): "Fuegian and Falkland Islands plants are morphologically indistinguishable from European material, but they seem to be genetically distinct, hybrids between Northern and Southern hemisphere plants being almost completely sterile". This analysis is based on the work of Ratter (1973)

Stellaria alsine Hoffm.

Deutschl. Fl. (Hoffm.) 153 (1791)

Local name: Bog Stitchwort

Description: Mat-forming perennial herb; stems to 40 cm

Phenology: Jan, Feb

Habitat: Built up areas and gardens (on clay on roadside verge); marshy grassland - semi-improved (on sand); c. 1 m

Status: Introduced; Very rare; Recorded on West Falkland (Chartres, Fox Bay)

Distribution: Native to European Temperate areas, C. and E. Asia and N. America; also extensively naturalised outside this range

Naturalisation Notes: Naturalised; Not cultivated

Nomenclature Notes: Listed as synonym of *S. uliginosa* in The Plant List and Preston et al. (2002), but vice-versa in Stace 2010. Suggest use *S. alsine* (R. Lewis, R. Upson 2012).

Stellaria debilis d'Urv.

Mém. Soc. Linn. Paris 4: 618. 1826

Local name: Native Stitchwort

Description: Glabrous perennial herb; decumbent stems 4-15 cm

Phenology: Dec, Jan

Habitat: Predominantly in marshy grassland; also occurs near running water (margin/ small stream); standing water (margin/ small pond); in moist places in neutral grassland; acid grassland; rarely in Tussac; sand dunes; littoral sediments; coastal (saline) grassland; 0-15 m (to 35 m on New Island)

Status: Native; Scarce; Sparsely scattered across the Falkland Islands

National Red List Category: LC

Conservation measures: MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Catamarca, Chubut, Mendoza, Río Negro, Santa Cruz, San Juan, Tierra del Fuego), Chile (Región IV, Región VIII, Región XII), Falkland Islands

Stellaria media (L.) Vill.

Histoire des Plantes de Dauphiné 3(1): 615. 1789.

Local name: Chickweed

Description: Annual/ short-lived perennial herb; decumbent/ ascending, branched stems to 50 cm

Phenology: Oct, Nov, Dec, Jan, Feb, Mar

Habitat: Predominantly found in built up areas and gardens; also occurs in marshy grassland; coastal (saline) grassland; Tussac; improved grassland; inland rock (outcrop/ cliff/ other); running water (bank); rarely in dwarf shrub heath (coastal); maritime cliff; sand dunes; scrub; arable and horticulture; Hierochloa redolens neutral grassland; 0-60 m (to 144 m on New Island)

Status: Introduced; Occasional; Widespread across the Falkland Islands

Distribution: Native to Eurasian Wide-temperate regions, but naturalised extensively beyond this range

Naturalisation Notes: Naturalised; Not cultivated

CELASTRACEAE

Maytenus magellanica (Lam.) Hook. f.

Fl. Antarct. 2: 254. 1845.

Local name: Pickwood

Description: Tree or shrub up to 7 m; main stem up to 25 cm in diameter.

Phenology: Mar

Citation: Upson R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

Habitat: Built up areas and gardens; dwarf shrub heath; 15-23 m

Status: Introduced; Very rare; Recorded on West Falkland (Port Stephens), Keppel Island and West Point Island

Distribution: Native to southern South America: Argentina (Chubut, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VII, Región VIII, Región IX, Región X, Región XI, Región XII)

Naturalisation Notes: Persisting (Taxa); Moderate risk (R. Lewis 2013); Cultivated ornamental

CENTROLEPIDACEAE

Gaimardia australis Gaudich.

Voy. Uranie 419 1829.

Local name: Gaimardia

Description: Moss-like perennial cushion-forming herb; erect/ suberect, branched stems 2-9 cm

Phenology: Nov, Jan

Habitat: Predominantly found in bogs (*Astelia* mat); wet areas of acid grassland; also occurs in damp areas of dwarf shrub heath; inland rock (other); running water (bank); standing water (bank); 0-705 m

Status: Native; Scarce; Widely scattered across the Falkland Islands; not recorded in Lafonia

National Red List Category: LC

Distribution: Southern South America: Argentina (Santa Cruz, Tierra del Fuego), Chile (Región X, Región XI, Región XII), Falkland Islands

CORSIACEAE

Arachnitis uniflora Phil.

Bot. Zeitung (Berlin) 22: 217 (1864)

Synonym(s): *Arachnitis quetrihuensis* Dimitri

Local name: Spider-flower

Description: Myco-heterotrophic herb

Phenology: Dec, Jan

Habitat: A coastal species that grows in sandy soil and usually shares the same habitat as *Botrychium dusenii*; marshy grassland (coastal); dwarf shrub heath (coastal); 0-12 m

Status: Native; Very rare; Recorded at two sites on East Falkland

National Red List Category: EN [D1 + D2]

Conservation measures: Action Plan; vouchered DNA sample; ID guide

Distribution: Southern South America: Argentina (Chubut, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VII, Región VIII, Región IX, Región X, Región XI, Región XII, Región Metropolitana de Santiago), Falkland Islands

Nomenclature Notes: Sole species in the genus *Arachnitis*

CRASSULACEAE

Crassula moschata G. Forst.

Commentat. Soc. Regiae Sci. Gott. 9: 26 1789.

Local name: Native Stonecrop

Description: Glabrous perennial herb, forming extensive, lax mats; prostrate stems up to 30 cm, rooting at nodes, with ascending/ erect branches to 15 cm

Phenology: Dec, Jan, Feb

Habitat: A coastal species found predominantly in strandline vegetation; coastland rock/ boulders; coastland shingle; maritime cliff and slope; littoral sediments (sand/ shingle/ cobbles) also occurs in coastal (saline) grassland; saltmarsh; dwarf shrub heath (coastal); Tussac; rarely in coastal feldmark; 0-61 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Unvouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región X, Región XI, Región XII), Falkland Islands

Sedum acre L.

Species Plantarum 1: 432. 1753.

Local name: Biting Stonecrop

Citation: Upson R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

Description: Glabrous, laxly tufted perennial herb; prostrate vegetative stems, rooting at nodes, with ascending/ erect branches 5-12 cm

Phenology: Jan, Feb

Habitat: Maritime cliff; coastland rock; built up areas and gardens; 0-11 m

Status: Introduced; Rare; Sparsely scattered across the Falkland Islands

Distribution: Native to European Temperate areas but extensively naturalised beyond this range

Naturalisation Notes: Naturalised; High risk; Some plants controlled (R. Lewis 2013); Cultivated ornamental

Sedum forsterianum Sm.

Engl. Bot. t. 1802.

Local name: Rock stonecrop

Description: Glabrous mat-forming perennial herb; ascending/ erect flowering stems to 35 cm

Phenology: April

Habitat: Built up areas and gardens;

Status: Introduced; Very rare; Recorded on East Falkland (Stanley) and Pebble Island

Distribution: Native to oceanic Southern-temperate areas

Naturalisation Notes: Naturalised; Some plants controlled (R. Lewis 2013); Cultivated ornamental

CYPERACEAE

Carex acaulis d'Urv.

Mém. Soc. Linn. Paris 4: 599 (1826)

Local name: Small Dusky Sedge

Description: Perennial sedge with long rhizomes; flowering stem to 3 cm tall

Phenology: Nov, Dec

Habitat: Prefers sandy soils in wet areas of grassland, including acid grassland; beside standing water; in marshy grassland; 0-30 m (at 137 m in Hill Cove Mountain)

Status: Native; Rare; Sparsely scattered across the Falkland Islands (East Falkland, West Falkland, Weddell Island)

National Red List Category: VU [B12ab(v)]

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000); ID guide

Distribution: Southern South America: Argentina (Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región XII), Falkland Islands

Carex aematorrhyncha Desv. var. *corralensis* (Phil.) Kük.

Pflanzenr., IV, 20(38): 748. 1909.

Local name: Blood-beak Sedge

Description: Perennial sedge with long, creeping, slender rhizomes; flowering stems 20-80 cm tall

Phenology: Dec, Jan, Feb

Habitat: Predominantly in Fachine scrub; marshy grassland; moist acid grassland; running water; also occurs in marginal vegetation; fen; standing water; flush; rarely in wet dwarf shrub heath; 0-15 m

Status: Native; Rare; Sparsely scattered across the Falkland Islands (East Falkland, West Falkland, 1911 record from Saunders Island)

National Red List Category: LC

Conservation measures: Unvouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Chubut, Córdoba, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región X, Región XI, Región XII), Falkland Islands

Carex banksii Boott

Trans. Linn. Soc. London 20: 119 (1846)

Local name: Bank's Sedge

Description: Perennial sedge with stoloniferous rhizomes; flowering stems 10-80 cm tall.

Phenology: Unknown

Habitat: Grows on damp, peaty soils in acid grassland, on the margins of standing water; c. 90 m

Status: Native; Very rare; Recorded at one site on East Falkland

National Red List Category: CR [B2ab(iii,v) + D]

Conservation measures: Action Plan; vouchered DNA sample; ID guide

Distribution: Southern South America: Argentina (Chubut, Mendoza, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región V, Región VI, Región VII, Región VIII, Región IX, Región X, Región XI, Región XII, Región Metropolitana de Santiago), Falkland Islands

Carex caduca Boott

Ill. Carex 4: 157 (1867)

Local name: Caducous Sedge

Description: Tufted, perennial sedge with short rhizomes; flowering stems 6-28 cm tall.

Phenology: Nov, Dec, Jan, Feb

Habitat: Wet acid grassland; flush vegetation; moist dwarf shrub heath; standing water (bank); inland rock (outcrop/ shallow soil on wet ledges/ other); running water (bank); also occurs in turf within Fachine scrub; marginal vegetation; rarely in montane (feldmark); 0-580 m

Status: Native; Scarce; Sparsely scattered across the Falkland Islands (East Falkland, West Falkland, Saunders Island)

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Neuquen, Santa Cruz, Tierra del Fuego), Chile (Región X, Región XI, Región XII), Falkland Islands

Carex canescens L.

Sp. Pl. 974 1753.

Synonym(s): *Carex curta* Gooden.

Local name: White Sedge

Description: Tufted, perennial sedge with short rhizomes; flowering stems 12-25 cm tall.

Phenology: Dec, Jan, Feb

Habitat: Predominantly by running water (bank); wet acid grassland; standing water (bank); also occurs in Fachine scrub; fen; marginal vegetation; 0-152 m

Status: Native; Scarce; Sparsely scattered across the Falkland Islands (East Falkland, West Falkland, River Island)

National Red List Category: LC

Conservation measures: Unvouchered DNA sample; MSB seed collection (>1000)

Distribution: Bipolar distribution (Escudero et al. 2010; Moore and Chater, 1971): North America, N. Eurasia, SE Australia, New Guinea; Southern South America: Argentina (Chubut, Córdoba, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región X, Región XI, Región XII), Falkland Islands

Carex decidua Boott

Proc. Linn. Soc. London 1: 255 (1845)

Local name: Creek Sedge

Description: Perennial sedge with slender, creeping rhizomes; flowering stems 15-30 cm tall.

Phenology: Dec, Jan

Habitat: Predominantly by running water (bank); standing water; also occurs in marginal vegetation; fen; flush vegetation; acid grassland; 0-15 m (118-126 m near Double Stream)

Status: Native; Rare; Sparsely scattered across the Falkland Islands (East Falkland, West Falkland, Weddell Island)

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Chubut, Córdoba, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VII, Región VIII, Región IX, Región X, Región XI, Región XII, Región Metropolitana de Santiago), Falkland Islands

Carex flacca Schreb.

Spic. Fl. Lips., app.: 178. 1771.

Local name: Glaucous Sedge

Description: Perennial sedge with short, creeping rhizomes; flowering stems 7-15 cm tall.

Phenology: Nov, Dec, Jan

Habitat: Predominantly in improved grassland; marshy grassland; standing water (margin); also occurs in neutral grassland; dwarf shrub heath; c. 3 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley, Eliza Cove, Cape Pembroke)

Distribution: Native to European Southern-temperate areas but extensively naturalised beyond this range.

Naturalisation Notes: Naturalised; Not cultivated

Carex fuscula d'Urv.

Mém. Soc. Linn. Paris 4: 599 (1826)

Local name: Dusky Sedge

Description: Tufted, perennial sedge with short rhizomes; flowering stems (1-)5-25(-35) cm tall.

Phenology: Nov, Dec, Jan

Citation: Upson R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

Habitat: Predominantly in moist areas of acid grassland; dwarf shrub heath; Fachine scrub; marshy grassland; running water (bank); also occurs in improved grassland; standing water (seasonal pool); rarely in flush; marginal vegetation; sand dunes; bogs; coastal cushion heath; inland rock (other); littoral sediments; 0-260 m
Status: Native; Occasional; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Buenos Aires, Catamarca, Chubut, Córdoba, Mendoza, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego, Tucumán), Brazil (Rio Grande Do Sul, Santa Catarina), Chile (Región IV, Región VIII, Región IX, Región X, Región XI, Región XII, Región Metropolitana de Santiago), Falkland Islands, Uruguay (locations not known)

Carex macloviana d'Urv.

Mém. Soc. Linn. Paris 5: 599 (1826)

Local name: Falkland Sedge

Description: Tufted, perennial sedge with shortly creeping rhizomes; flowering stems 7-30 cm tall.

Phenology: Nov, Dec, Jan

Habitat: Moist areas of acid grassland; 0-30 m

Status: Native; Rare; Sparsely scattered across the Falkland Islands (East Falkland, West Falkland)

National Red List Category: VU [B1ab(iii)]

Conservation measures: MSB seed collection (>317); ID guide

Distribution: Argentina (Chubut, Córdoba, Mendoza, Neuquen, Río Negro, Santa Cruz, San Juan, Tierra del Fuego, Tucumán), Chile (Región X, Región XI, Región XII, Región Metropolitana de Santiago), Falkland Islands, W. North America, arctic-alpine Eurasia

Carex magellanica Lam.

Encycl. 3: 385 (1792)

Local name: Fuegian Sedge

Description: Perennial sedge with shortly creeping rhizomes; flowering stems 10-30 cm tall.

Phenology: Dec, Jan

Habitat: Grows on damp, peaty soils along running water (stream margin); bogs; standing water (shallow pools); wet acid grassland; also occurs in wet dwarf shrub heath; 0-60 m (92-128 m near Double Stream)

Status: Native; Rare; Currently known from five locations across East Falkland and West Falkland

National Red List Category: EN [B1ab(iii)]

Conservation measures: Action Plan; unvouchered DNA sample; MSB seed collection (>1000); ID guide

Distribution: Bipolar distribution (Escudero et al. 2010; Moore and Chater, 1971): Argentina (Chubut, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VI, Región VII, Región VIII, Región IX, Región X, Región XI, Región XII), Falkland Islands, North America, Eurasia

Carex microglochin Wahlenb. subsp. *fuegina* Kük.

Bot. Jahrb. Syst. 27: 546. 1899.

Local name: Bristle Sedge

Description: Perennial sedge with slender, short rhizomes; flowering stems 7-15 cm tall.

Phenology: Dec, Jan

Habitat: Base-enriched flushes and springhead mounds in acid grassland and neutral grassland; also occurs by running water (stream bank); bogs; inland rock (wet ledge); 2-370 m

Status: Native; Scarce; Sparsely scattered across the north of the Falkland Islands (East Falkland, West Falkland, Saunders Island)

National Red List Category: LC

Conservation measures: Unvouchered DNA sample; MSB seed collection (>1000)

Distribution: Bipolar distribution (Escudero et al. 2010; Moore and Chater, 1971): Argentina (Jujuy, La Rioja, Salta, Santa Cruz, San Juan, Tierra del Fuego, Tucumán), Chile (Región IV, Región XI, Región XII), Falkland Islands, North America, N. Eurasia

Carex sagei Phil.

Anales Univ. Chile 93: 494 (1896)

Synonym(s): *Carex barrosii* Nelmes

Local name: Sage's Sedge

Description: Rhizomatous, perennial sedge; flowering stems 3.5-9 cm tall

Phenology: Dec

Habitat: Damp depressions in acid grassland; dwarf shrub heath;

Status: Native; Very rare; Known from two sites on East Falkland and one site on West Falkland; there is also an

Citation: Upson R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

historical (1949) record for a specimen collected somewhere between Teal River & Hill Cove, West Falkland.

National Red List Category: EN [B2ab(iii)]

Conservation measures: Action Plan; vouchered DNA sample; MSB seed collection (>1000); ID guide

Distribution: Southern South America: Argentina (Buenos Aires, Chubut, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VIII, Región IX, Región X, Región XII), Falkland Islands

Notes: Falkland Islands and Fuegian plants are shorter than those found elsewhere with fertile culms 3.5-9 cm tall. This increases the risk of confusion with *Carex acaulis*.

Carex trifida Cav.

Icon. 5: 41 (1799)

Local name: Sword-grass

Description: Perennial sedge with stout rhizomes and short stolons; flowering stems 30-120 cm tall.

Phenology: Dec, Jan

Habitat: A coastal species that predominantly grows in strandline vegetation (becoming dominant in places); marshy grassland (coastal); Tussac; coastland rock; coastland shingle; maritime cliff and slope; also occurs in coastal (saline) grassland; fen; sand dunes;

Status: Native; Scarce; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Unvouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Tierra del Fuego), Chile (Región XI, Región XII), Falkland Islands, Macquarie Island, Auckland Islands, Campbell Island, Snares Island, New Zealand (South Island)

Carex vallis-pulchrae Phil.

Anales Univ. Chile 93: 487 (1896)

Local name: Marsh Sedge

Description: Tufted, glabrous, perennial sedge with short, creeping rhizomes; flowering stems to 5 cm.

Phenology: Nov (probably also Dec, Jan)

Habitat: Wet areas in acid grassland; 15-30 m

Status: Native; Very rare; Only currently known from one location on West Falkland

National Red List Category: DD

Conservation measures: Vouchered DNA sample

Distribution: Southern South America: Argentina (Mendoza, Neuquen, San Juan), Chile (Región III, Región IV, Región VI, Región XII, Región Metropolitana de Santiago), Falkland Islands

Eleocharis melanostachys (d'Urv.) C.B.Clarke

Bot. Jahrb. Syst. 30(68): 20 1902.

Local name: Spike-rush

Description: Glabrous, perennial sedge with long creeping rhizomes that produce either clusters of stems or evenly scattered, dense stands; stems (4-)9-45 cm tall.

Phenology: Dec, Jan, Feb

Habitat: Predominantly in standing water; running water (margin); marshy grassland; also occurs in fen; moist neutral grassland; flush; 0-459 m

Status: Native; Occasional; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Chubut, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región III, Región VII, Región VIII, Región IX, Región X, Región XI, Región XII, Región Metropolitana de Santiago), Falkland Islands

Isolepis cernua (Vahl) Roem. & Schult.

Syst. Veg. 2: 106. 1817.

Synonym(s): In Moore (1983) as *Scirpus cernuus* Vahl

Local name: Nodding Club-rush

Description: Delicate, tufted, glabrous annual/ biennial (D. Simpson pers. comm. 2014) sedge with rhizomes that are usually very short but sometimes vertical and longer; stems 2-13 cm tall.

Phenology: Dec, Jan, Feb, Mar

Habitat: Moist places in strandline vegetation; by running water (bank/ small stream); coastal (saline) grassland; marshy grassland; maritime cliff; coastland rock/ boulders; also occurs in standing water; littoral sediments (sand/ shingle); rarely in Tussac; in moist turf within Fachine scrub; 0-300 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Almost cosmopolitan (includes Argentina, Chile, Brazil, Uruguay)

Oreobolus obtusangulus Gaudich.

Ann. Sci. Nat. (Paris) 5: 99 1825.

Local name: Oreob/ Prickly-bog

Description: Glabrous, cushion-forming perennial sedge with rhizomes; cushions 10-25 cm in diameter and 4-10 cm tall.

Phenology: Nov, Dec, Jan

Habitat: Wet areas of dwarf shrub heath; acid grassland; bogs (*Astelia* mat); also occurs by running water (bank); flush vegetation; 0-600 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Unvouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VIII, Región IX, Región X, Región XI, Región XII, Archipiélago Juan Fernández), Falkland Islands, Ecuador to Colombia

Schoenoplectus californicus (C.A.Mey.) Soják

Cas. Nár. Mus., Odd. Prír. 140: 127. 1972.

Local name: California Club-rush

Description: Clump-forming, glabrous, perennial sedge, with creeping rhizomes; flowering stems up to 3 m tall.

Phenology: Nov, Dec, Jan

Habitat: Forms fen/ marginal vegetation on muddy edges of standing open water (ponds/ lagoons/ lakes), particularly those with a clay sediment; 1-15 m

Status: Native; Rare; Sparsely scattered across the Falkland Islands (East Falkland, West Falkland, Sea Lion Island, Lively Island)

National Red List Category: NT

Conservation measures: Vouchered DNA sample; ID guide

Distribution: From Tierra del Fuego (Isla Grande) north along the Andes to c. 10°S (Argentina, Chile, Brazil, Paraguay, Uruguay), Falkland Islands, North America

Uncinia kingii (ex Hooker) Boott

Bot. Antarct. Voy. I. (Fl. Antarct.). vol. 2: 370 (1846)

Local name: King's Hook-sedge

Description: Tufted, glabrous, perennial sedge with stoloniferous rhizomes; flowering stems 5-14 cm tall.

Phenology: Probably Dec

Habitat: Grows in moist acid grassland; inland rock (collected soil on wet ledges); 501-695 m

Status: Native; Very rare; Currently only known from a single site on East Falkland

National Red List Category: DD

Conservation measures: Vouchered DNA sample; MSB seed collection (75)

Distribution: Southern South America: Argentina (Tierra del Fuego), Chile (Región XI, Región XII), Falkland Islands

Nomenclature Notes: The Plant List and Flora del Cono Sur (2009) recognise *Uncinia kingii* as a synonym of *Carex kingii* but we will follow expert opinion (D. Simpson, 2012) that this is not yet fully accepted (R. Upson, 2012)

Uncinia macloviana Gaudich.

Voy. Uranie: 412. 1829.

Local name: Hook-sedge

Description: Tufted, glabrous, perennial sedge with shortly creeping rhizomes; flowering stems 19-40 cm tall.

Phenology: Dec, Jan, Feb

Habitat: Predominantly in wet acid grassland; Fachine scrub; marshy grassland; also occurs in dwarf shrub heath; inland rock; 0-150 m

Status: Native; Occasional; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Chubut, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VIII, Región X, Región XI, Región XII, Archipiélago Juan Fernández), Falkland Islands

Notes: Previously erroneously referred to as *Uncinia brevicaulis* by: Kükenthal, 1909; Skottsberg, 1913; Marquand, 1923; Moore, 1968

DROSERACEAE

Drosera uniflora Willd.

Enum. Pl.: 340 1809.

Local name: Sundew

Description: Perennial carnivorous herb; erect flowering stem 6-11 mm tall

Phenology: Jan, Feb

Habitat: This species is found on wet open peat, shows a strong affinity for *Astelia pumila* and is predominantly found in bogs (*Astelia* mat); also occurs in wet acid grassland; wet dwarf shrub heath; running water (bank); 0-640 m

Status: Native; Occasional; Widespread across East Falkland and West Falkland

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Santa Cruz, Tierra del Fuego), Chile (Región VIII, Región IX, Región X, Región XI, Región XII), Falkland Islands

ELATINACEAE

Elatine triandra Schkur

Bot. Handb. 1: 345 1790.

Local name: Waterwort

Description: Annual mat-forming aquatic herb

Phenology: Jan, Feb

Habitat: Found in freshwater: standing water (pond/ lake); running water (river/ margin); 0-61 m

Status: Native; Very Rare; Recorded at 4 locations across East Falkland and West Falkland

National Red List Category: EN [B12ab(iii)]

Conservation measures: Vouchered DNA sample; ID guide

Distribution: Native to Argentina (Mendoza, Río Negro, Santa Fe), Chile (Región VI, Región VII, Región VIII, Región IX, Región X), Peru, Bolivia, Falkland Islands and many other areas of both the Northern and Southern Hemispheres

ERICACEAE

Calluna vulgaris (L.) Hull

Brit. Fl. (ed. 2) 1: 114. 1808

Local name: Heather

Description: Low growing, evergreen shrub; decumbent/ ascending, branched stems to 60 cm

Phenology: Feb, Mar, Apr, May

Habitat: Predominantly recorded in built up areas and gardens; also occurs in dwarf shrub heath; acid grassland; rarely in sand dunes; 0-15 m

Status: Introduced; Rare; Sparsely scattered on East and West Falkland

Distribution: Native to European Boreo-temperate areas and also C. Asia; naturalised beyond this range

Naturalisation Notes: Naturalised; High risk; Some plants controlled (R. Lewis 2013); Cultivated ornamental

Empetrum rubrum Vahl ex Willd.

Species Plantarum 4: 713. 1753.

Local name: Diddle-dee

Description: Low growing, evergreen, dioecious shrub; procumbent to ascending, branched stems 10-50 cm

Phenology: Sept, Oct, Nov

Habitat: Occurs in an extremely wide range of habitats. Predominantly in dwarf shrub heath where it is often the dominant/ co-dominant species; acid grassland; cushion heath - coastal and inland; fern beds; improved grassland; maritime cliff and slope; also occurs on bare ground; neutral grassland; marshy grassland; coastal (saline) grassland; inland rock (outcrop, stone run, cliff, other); Fachine scrub; rarely in sand dunes; Tussac (scattered/ recovering); feldmark - coastal and inland; introduced vegetation; strandline vegetation; littoral sediment; coastland rock/ boulders; bogs; running water (bank); standing water (bank); saltmarsh; 0-607 m

Status: Native; Common; Widespread across the Falkland Islands

National Red List Category: LC

Citation: Upson R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

Conservation measures: Unvouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Chubut, Mendoza, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región V, Región VII, Región VIII, Región IX, Región X, Región XI, Región XII, Archipiélago Juan Fernández, Región Metropolitana de Santiago), Falkland Islands, Tristan da Cunha

Gaultheria antarctica Hook.f.

Fl. Antarct. t. 116 1846.

Local name: Antarctic Mountainberry

Description: Small, evergreen shrub, sometimes gynodioecious; prostrate to ascending/ erect, branched stems to 20 cm

Phenology: Dec, Jan

Habitat: Predominantly found in moist dwarf shrub heath; moist acid grassland; bogs (*Astelia* mat); rarely in association with inland rock (stone run, outcrop, other); *Blechnum penna-marina*/ *Sticherus cryptocarpa* fern beds; running water (bank); *Fachine* scrub; 0-700 m

Status: Native; Occasional; Widespread on East Falkland, West Falkland, Weddell Island and Pebble Island

National Red List Category: LC

Conservation measures: Unvouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Chubut, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región IX, Región X, Región XI, Región XII), Falkland Islands

Gaultheria antarctica x pumila

Local name: Mountainberry hybrid

Description: Small, evergreen shrub; prostrate to ascending/ erect, branched stems to 20 cm

Phenology: Dec

Habitat: Acid grassland; 137-274 m

Status: Native; Very rare; Recorded on West Falkland (Hill Cove Mountains)

National Red List Category: LC

Distribution: Unknown

Gaultheria pumila (L.f.) D.J. Middleton

Edinburgh J. Bot. 47: 298 1990.

Synonym(s): In Moore (1983, 1968) as *Pernettya pumila* (L.f.) Hook

Local name: Mountainberry

Description: Small, evergreen shrub to 4 cm tall; prostrate to ascending/ erect, branched stems to 23 cm

Phenology: Nov, Dec, Jan

Habitat: Found in a wide range of habitats but predominantly within dwarf shrub heath; also occurs in acid grassland; cushion heath - coastal and inland; bare ground; fern beds; Tussac (scattered/ regenerating); neutral grassland; rarely in improved grassland; introduced vegetation; inland rock (outcrop, stone run, cliff, other); feldmark - coastal and inland; maritime cliff and slope; rarely in *Fachine* scrub; marshy grassland; sand dunes; bogs (*Astelia* mat); strandline vegetation; coastal (saline) grassland; running water (bank); littoral sediment; 0-607 m

Status: Native; Common; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Chubut, Mendoza, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región IX, Región XII), Falkland Islands

EUPHORBACEAE

Euphorbia peplus L.

Species Plantarum 1: 456. 1753.

Local name: Petty Spurge

Description: Monoecious, glabrous annual herb with milky latex; erect stems to 30 cm.

Phenology: Unknown

Habitat: Built up areas and gardens; < 18 m

Status: Introduced; Very rare; Recorded on East Falkland in Stanley (2009-11) and Teal Inlet settlement (1949)

Distribution: A European Southern-temperate archaeophyte species that has naturalised extensively beyond this range

Naturalisation Notes: Naturalised; Factsheet; All plants controlled (R. Lewis 2013); Not cultivated

FAGACEAE

Castanea sativa Mill.

Gard. Dict. ed. 8: 1 (1768)

Local name: Sweet Chestnut

Description: Tree to 35 m; deciduous leaves

Phenology: Unknown

Habitat: Woodland - mixed (plantation); 11-20 m

Status: Introduced; Very rare; Recorded on Keppel Island

Distribution: Native to S. Europe, N. Africa and S.W. Asia but has naturalised extensively throughout W. Europe

Naturalisation Notes: Persisting (Taxa); Ornamental & windbreak

Quercus robur L.

Sp. Pl. 2: 996 (1753)

Local name: Pedunculate Oak

Description: Tree to 40 m; deciduous leaves

Phenology: Dec

Habitat: Woodland - mixed (plantation); 11-20 m

Status: Introduced; Very rare; Recorded on Keppel Island

Distribution: Native to Temperate Europe

Naturalisation Notes: Persisting (Taxa); Ornamental & windbreak

GENTIANACEAE

Gentianella magellanica (Gaudich.) Fabris

Vasc. Fl. Falkland Isl. 103 1968.

Local name: Felwort

Description: Glabrous annual or biennial herb; erect, simple/ branched stems 3-15 cm

Phenology: Jan, Feb

Habitat: Predominantly in moist areas of acid grassland and dwarf shrub heath; also occurs on sand in marshy grassland; rarely in sand dunes; 0-210 m

Status: Native; Occasional; Widely scattered across East Falkland, West Falkland and Weddell Island

National Red List Category: LC

Conservation measures: MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Chubut, Mendoza, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VII, Región VIII, Región IX, Región X, Región XI, Región XII), Falkland Islands

GERANIACEAE

Erodium cicutarium (L.) L'Hér. ex Aiton

Species Plantarum 1: 680. 1753.

Local name: Common Storks-bill

Description: Low-growing annual herb to 9 cm tall; branched creeping stems to 40 cm

Phenology: Dec, Jan

Habitat: Predominantly coastal in strandline vegetation; improved grassland; also occurs in sand dunes; coastland shingle; coastland rock; maritime cliff and slope; neutral grassland; 0-10 m

Status: Introduced; Scarce; Widely scattered across the Falkland Islands

Distribution: Native to European Southern-temperate areas but has naturalised extensively beyond this range to become Circumpolar Southern-temperate

Naturalisation Notes: Naturalised; Not cultivated

Geranium molle L.

Species Plantarum 2: 682. 1753.

Local name: Dove's-foot Cranes-bill

Description: Hairy annual herb to 40 cm; decumbent/ ascending, branched stems 6-15 cm

Phenology: Dec, Jan, Feb, Mar

Habitat: Improved grassland; built up areas and gardens; littoral sediments; sand dunes; maritime cliff and slope; 0-20 m

Citation: Upson R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

Status: Introduced; Rare; Recorded on East Falkland (Cape Pembroke, Stanley) and West Falkland (East Bay, Shallow Bay, Sound Beach, West Lagoons)

Distribution: Native to European Southern-temperate areas but naturalised extensively beyond this range

Naturalisation Notes: Naturalised; Not cultivated

***Geranium pusillum* L.**

Systema Naturae, Editio Decima 2: 1144. 1759.

Local name: Small-flowered Crane's-bill

Description: Minutely hairy annual herb to 40 cm; decumbent/ ascending, branched stems

Phenology: Dec

Habitat: Built up areas and gardens; 0-10 m

Status: Introduced; Very rare; Recorded on East Falkland (Darwin)

Distribution: Native to Eurosiberian Temperate areas but has naturalised extensively beyond this range

Naturalisation Notes: Naturalised; Possibly locally extirpated; Factsheet; All plants controlled (R. Lewis 2013); Not cultivated

***Geranium robertianum* L.**

Species Plantarum 2: 681-682. 1753.

Local name: Herb Robert

Description: Strong-smelling hairy annual herb to 50 cm; procumbent to erect, branched stems

Phenology: Dec, Jan

Habitat: Built up areas and gardens; littoral sediments; 0-5 m

Status: Introduced; Very rare; Recorded on West Point Island

Distribution: Native to European Temperate areas and C. and E. Asia; also extensively naturalised beyond this range

Naturalisation Notes: Status unknown; Possibly locally extirpated (R. Lewis 2013); Not cultivated

GROSSULARIACEAE

Ribes magellanicum* Poir. subsp. *magellanicum

Encycl., Suppl. 2: 856. 1812.

Local name: Magellanic Currant

Description: Erect shrub to 4 m tall; leaves deciduous

Phenology: Nov, Dec

Habitat: Built up areas and gardens (including in hedgerow); coniferous woodland (shelterbelt); maritime cliff and slope; rarely in dwarf shrub heath; 0-20 m

Status: Introduced; Rare; Sparsely scattered across the Falkland Islands (East Falkland, West Falkland, New Island, Keppel Island, Carcass Island, West Point Island)

Distribution: Southern South America: Argentina (Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VI, Región VII, Región VIII, Región IX, Región X, Región XI, Región XII, Región Metropolitana de Santiago)

Naturalisation Notes: Naturalised; Moderate risk; Some plants controlled (R. Lewis 2013); Cultivated ornamental

***Ribes nigrum* L.**

Species Plantarum 1: 201. 1753.

Local name: Black Currant

Description: Erect shrub to 2 m tall; leaves deciduous

Phenology: Nov, Dec

Habitat: Predominantly in built up areas and gardens; improved grassland; also occurs in dwarf shrub heath; maritime cliff (crevice ledge); fern beds; 1-60 m

Status: Introduced; Rare; Sparsely scattered across the Falkland Islands (East Falkland, West Falkland, Beaver Island, Keppel Island, Pebble Island)

Distribution: Native to Eurosiberian Boreo-temperate areas but extensively naturalised beyond this range

Naturalisation Notes: Persisting (Taxa); Cultivated fruit

***Ribes rubrum* L.**

Species Plantarum 1: 200. 1753.

Local name: Red Currant

Description: Erect shrub to 2 m tall; leaves deciduous

Phenology: Nov

Citation: Upson R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

Habitat: Built up areas and gardens; improved grassland; 1-10 m

Status: Introduced; Very rare; Recorded on East Falkland (North Arm, Port Sussex, Stanley) and West Falkland (Shallow Bay)

Distribution: Native to Suboceanic Temperate areas but has naturalised extensively beyond this range

Naturalisation Notes: Persisting (Taxa); Cultivated fruit

***Ribes uva-crispa* L.**

Species Plantarum 1: 201. 1753.

Local name: Gooseberry

Description: Spiny, erect shrub to 1(-1.5) m tall; leaves deciduous

Phenology: Unknown

Habitat: Predominantly in built up areas and gardens; also occurs in dwarf shrub heath; 0-15 m

Status: Introduced; Rare; Sparsely scattered across the Falkland Islands (East Falkland, West Falkland, Weddell Island and Saunders Island)

Distribution: Native to European Temperate areas but extensively naturalised beyond this range

Naturalisation Notes: Persisting (Taxa); Cultivated fruit

GUNNERACEAE

***Gunnera magellanica* Lam.**

Encycl. (Lamarck) 3(1): 61 (1789)

Local name: Pigvine

Description: Dioecious herbaceous perennial; stems up to 36 cm, prostrate, branched, rooting at nodes.

Phenology: Oct, Nov, Dec

Habitat: Occurs in most habitats but displays lushest growth in moist, sheltered sites; dwarf shrub heath; marshy grassland (where it can form the dominant ground cover); acid grassland (where it can be dominant in the ground layer); also occurs in fern beds; Fachine scrub; running water (bank); standing water (bank/seasonal pool); improved grassland; neutral grassland; bogs; cushion heath - coastal; sand dunes; bare ground; maritime cliff and slope; marginal vegetation; rarely on inland rock (outcrop/ cliff/ other); coastal (saline) grassland; flush; Tussac; littoral sediment; 0-705 m

Status: Native; Common; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Chubut, Mendoza, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VI, Región VII, Región VIII, Región IX, Región X, Región XI, Región XII, Región Metropolitana de Santiago) and north along the Andes to c. 1° N latitude (including Peru, Bolivia, Ecuador, Columbia), Falkland Islands

HALORAGACEAE

***Myriophyllum quitense* Kunth**

Nov. Gen. Sp. 6: 89 1823.

Synonym(s): *Myriophyllum elatinoides* Gaudich.

Local name: Water-milfoil

Description: Perennial subaquatic herb with rhizome; branched stems 10-50 cm or longer, rooting at the lower nodes

Phenology: Jan, Feb

Habitat: Freshwater standing water (seasonal pond, small pond, pond, lake, large lake); running water (small stream, stream); also occurs in fen, marsh and swamp; marginal vegetation; 0-75 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina, Chile, Uruguay and north along the Andes to c. 0° latitude, Mexico, Falkland Islands. According to Orchard (1981) there are two isolated populations of *M. quitense* in Arizona and Oregon.

IRIDACEAE

Olsynium filifolium (Gaudich.) Goldblatt

Syst. Bot. 15: 508 1990.

Synonym(s): *Sisyrinchium filifolium* Gaudich.

Local name: Pale Maiden

Description: Glabrous, rhizomatous perennial herb to 50 cm tall

Phenology: Oct, Nov, Dec, Jan

Habitat: Predominantly in dwarf shrub heath; acid grassland; also occurs in Fachine scrub; *Blechnum penna-marina*/*Sticherus cryptocarpa* fern beds; maritime cliff and slope; inland rock (stone run, cliff, other); cushion heath - coastal and inland; marshy grassland; montane; neutral grassland; running water (bank); 0-538 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Santa Cruz, Tierra del Fuego), Falkland Islands N.B. Excluded from the flora of Chile (Rodríguez and Marticorena, 2001)

Sisyrinchium chilense Hook.

Bot. Mag. 54: t. 2786 1827.

Local name: Yellow Maiden

Description: Glabrous, rhizomatous, perennial herb 4.5-13 cm tall

Phenology: Dec, Jan, Feb

Habitat: Moist places in improved grassland; acid grassland; dwarf shrub heath; built up areas and gardens; rarely in *Blechnum penna-marina* fern beds; Fachine scrub; 0-60 m

Status: Native; Scarce; Widespread across West Falkland; present on Saunders Island and Carcass Island. Also recorded on East Falkland (Saladero, Stanley, Darwin, Ramsgate); it has been suggested that East Falkland populations are introduced from West Falkland (Broughton and McAdam, 2002) however this needs investigation.

National Red List Category: LC

Conservation measures: Listed on the Conservation of Wildlife and Nature Ordinance (FIG, 1999); vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina, Bolivia, Brazil, Chile, Columbia, Ecuador, Falkland Islands, Paraguay, Uruguay

Notes: The Stanley population may be introduced from West Falkland.

JUNCACEAE

Juncus articulatus L.

Species Plantarum 1: 327. 1753.

Local name: Jointed Rush

Description: Glabrous, rhizomatous, perennial herb; erect to decumbent stems to 80 cm

Phenology: Feb, Mar

Habitat: Built up areas and gardens; rarely in coniferous woodland (planted amenity area); 15-38 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley)

Distribution: Native to Eurosiberian Southern-temperate areas but has naturalised extensively beyond this range to become Circumpolar Southern-temperate

Naturalisation Notes: Naturalised; Factsheet; Moderate risk; All plants controlled (R. Lewis 2013); Not cultivated

Juncus bufonius L.

Species Plantarum 1: 328. 1753.

Local name: Toad Rush

Description: Slender, annual herb; erect to procumbent stems usually 2-10 cm tall but up to 35(-50) cm

Phenology: Feb, Mar, Apr

Habitat: Built up areas and gardens (includes ditches and roadside verges); 15-45 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley)

Distribution: A Circumpolar Wide-temperate species that has naturalised extensively beyond this range

Naturalisation Notes: Naturalised; Not cultivated

***Juncus effusus* L.**

Species Plantarum 1: 326. 1753.

Local name: Soft Rush

Description: Densely tufted, rhizomatous, perennial herb; erect, stout stems 30-100 cm tall

Phenology: Dec, Jan, Feb

Habitat: Predominantly recorded in built up areas and settlements (includes roadside verges); also occurs by running water (stream bank); rarely in Sphagnum bog; 1-55 m

Status: Introduced; Rare; Localised records on East Falkland (Stanley, Cape Pembroke, Darwin) and West Falkland (Hill Cove, Roy Cove)

Distribution: Native to European Southern-temperate areas as well as C. and E. Asia and N. America; it has naturalised extensively beyond this range

Naturalisation Notes: Naturalised; Factsheet; Some plants controlled (R. Lewis 2013); Not cultivated

***Juncus scheuchzerioides* Gaudich.**

Ann. Sci. Nat. (Paris) 5: 100. 1825.

Local name: Native Rush

Description: Tufted, perennial herb with long-spreading rhizomes; ascending/ erect stems (1-)2-18(-20) cm tall

Phenology: Oct, Nov, Dec, Jan

Habitat: Occurs in moist areas of most habitats; predominantly recorded in dwarf shrub heath; marshy grassland; standing water (margin/ seasonal pool); as a primary coloniser of bare ground; cushion heath - coastal; acid grassland; Tussac; coastal (saline) grassland; running water (bank/ small stream); also occurs in improved grassland; introduced vegetation; strandline vegetation; sand dunes; Blechnum penna-marina fern beds; Fachine scrub; maritime cliff and slope; neutral grassland; bogs; flush; coastland rock/ boulders; inland rock (cliff, outcrop); littoral sediment; neutral grassland; saltmarsh; 0-493 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Chubut, Mendoza, Neuquen, Santa Cruz, Tierra del Fuego); Chile Región III, Región IV, Región V, Región VI, Región X, Región XI, Región XII, Región Metropolitana de Santiago), Falkland Islands; Sub-Antarctic: South Georgia, Marion Island, Iles Crozet, Iles Kerguelen, Macquarie Island, Campbell Islands, Auckland Islands, Antipodes Island

***Luzula alopecurus* Desv.**

J. Bot. (Desvaux) 1: 159 1808.

Local name: Native Wood-rush

Description: Perennial herb; erect flowering stems (5-)10-30(-35) cm tall

Phenology: Oct, Nov, Dec

Habitat: Predominantly recorded in dwarf shrub heath; cushion heath - coastal and inland; acid grassland; Blechnum penna-marina fern beds; Tussac (scattered/ recovering); inland rock (outcrop, cliff, stone run, other); also occurs in improved grassland; coastal (saline) grassland; marshy grassland; bare ground; neutral grassland; introduced vegetation; montane; sand dunes; coastal feldmark; maritime cliff and slope; rarely in Fachine scrub; 0-705 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Santa Cruz, Tierra del Fuego), Chile (Región IX, Región XI, Región XII), Falkland Islands

***Luzula campestris* (L.) DC.**

Flore Française. Troisième Édition ed. 3 3: 161. 1805.

Local name: Field Wood-rush

Description: Loosely tufted, perennial herb with short stolons; erect stems 2-15(-25) cm tall

Phenology: Oct, Nov, Dec

Habitat: Predominantly recorded in acid grassland; also occurs in improved grassland; built up areas and greens; dwarf shrub heath; marshy grassland; cushion heath - coastal; improved grassland; inland rock (cliff); sand dunes; 0-95 m

Status: Introduced; Occasional; The distribution of this species is very poorly known due to confusion in distinguishing between *L. campestris*, *L. multiflora* subsp. *congesta* and *L. multiflora* subsp. *multiflora*. Records for these taxa are therefore mapped together under the *L. campestris* agg. Widespread across East Falkland and West Falkland; also recorded on Saunders Island and Motley Island

Distribution: A European Temperate species

Naturalisation Notes: Naturalised; Not cultivated

Luzula multiflora (Ehrh.) Lej. subsp. *congesta* (Thuill.) Hyl.

Uppsala Univ. Årsskr. 1945, no. 7: 110.

Local name: Dense-headed Heath Wood-rush

Description: Loosely tufted, perennial herb with few/ no stolons; erect stems 20-40 cm tall

Phenology: Oct, Nov

Habitat: Marshy grassland; Fachine scrub; built up areas and gardens; dwarf shrub heath; standing water (margin); acid grassland; flush; Blechnum penna-marina fern beds; improved grassland; running water; 0-60 m

Status: Introduced; Very rare; The distribution of this species is very poorly known due to confusion in distinguishing between *L. campestris*, *L. multiflora* subsp. *congesta* and *L. multiflora* subsp. *multiflora*. Records for these taxa are therefore mapped together under the *L. campestris* agg. East Falkland, West Falkland (but see above)

Distribution: Native to Circumpolar Wide-boreal areas but naturalised extensively beyond this range

Naturalisation Notes: Naturalised; Not cultivated

Marsippospermum grandiflorum (L.f.) Hook.

Hooker's Icon. Pl. 6: t. 533 1843.

Local name: Tall Rush

Description: Tufted, glabrous, perennial herb with creeping rhizomes; erect flowering stems 16-30 cm tall

Phenology: Oct, Nov, Dec

Habitat: Predominantly found in dwarf shrub heath; acid grassland; fern beds; also occurs in cushion heath - inland; neutral grassland; marshy grassland; inland rock (outcrop, stone run, cliff, other); rarely on maritime cliff and slope; running water (bank); standing open water (bank); marginal vegetation; Fachine scrub; 0-610 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Unvouchered DNA sample; MSB seed collection (17)

Distribution: Southern South America: Argentina (Chubut, Santa Cruz, Tierra del Fuego), Chile (Región VIII, Región IX, Región X, Región XI, Región XII), Falkland Islands

Rostkovia magellanica (Lam.) Hook.f.

Flora Antarctica 1: 81. 1844.

Local name: Short Rush/ Brown Rush

Description: Tufted, glabrous, perennial herb usually with rhizomes; erect flowering stems 7-16(-25) cm tall

Phenology: Oct, Nov, Dec

Habitat: Predominantly found in wet areas of acid grassland; dwarf shrub heath; marshy grassland; bogs; also occurs in running water (bank/ margin); standing water (bank/ margin/ small pond); coastal (saline) grassland; flush vegetation; neutral grassland; rarely in sand dunes; neutral grassland; Fachine scrub; littoral sediments; 0-480 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Unvouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Chubut, Santa Cruz, Tierra del Fuego), Chile (Región X, Región XI, Región XII), Falkland Islands; Sub-Antarctic: South Georgia, Campbell Island, Auckland Islands; New Zealand (South Island)

JUNCAGINACEAE

Tetroncium magellanicum Willd.

Ges. Naturf. Freunde Berlin Mag. Neuesten Entdeck. Gesamten Naturk. 2: 17. 1808.

Local name: Arrowgrass

Description: Dioecious, glabrous perennial herb with ascending rhizomes; erect flowering stems 2.5-18 cm tall

Phenology: Dec, Jan

Habitat: Predominantly found in bogs; wet acid grassland; by running water (margin/ bank/ small stream); standing water (margin/ pond); rarely in dwarf shrub heath; 0-493 m

Status: Native; Scarce; Recorded on East Falkland (four locations), West Falkland (widely scattered in central/northern areas), Saunders Island, Pebble Island

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Neuquen, Santa Cruz, Tierra del Fuego), Chile (Región IX,

Región X, Región XI, Región XII), Falkland Islands

LAMIACEAE

Lamium amplexicaule L.

Species Plantarum 2: 579. 1753.

Local name: Henbit Dead-nettle

Description: Annual herb with more or less tetragonous stems.

Phenology: Dec

Habitat: Built up areas and gardens; < 15 m

Status: Introduced; Very rare; Recorded on East Falkland (Port Louis, Stanley), Pebble Island

Distribution: A Eurosiberian Southern-temperate archaeophyte species that has naturalised extensively beyond this range to become Circumpolar Southern-temperate.

Naturalisation Notes: Naturalised; Not cultivated

Lamium hybridum Vill.

Hist. Pl. Dauphiné 1: 251. 1786.

Local name: Cut-leaved Dead-nettle

Description: Annual herb with more or less tetragonous stems.

Phenology: Oct, Nov, Dec, Jan, Feb, Mar

Habitat: Built up areas and gardens; maritime rock, shingle, cliff and slope; rarely in acid grassland; 0-15 m

Status: Introduced; Rare; Recorded on East Falkland (Stanley, Goose Green), West Falkland (Fox Bay, Port Howard, South Harbour), Pebble Island

Distribution: A European Temperate archaeophyte species

Naturalisation Notes: Naturalised; Not cultivated

Nomenclature Notes: Treated as var. of *L. purpureum* in The Plant List (2010). Stace (2010) keeps as species. Suggest follow Stace. (R. Lewis 2012).

Lamium purpureum L. var. *purpureum*

Species Plantarum 2: 579. 1753.

Local name: Red Dead-nettle

Description: Annual herb.

Phenology: Dec, probably Jan

Habitat: Built up areas and gardens; 1-10 m

Status: Introduced; Rare; Recorded on East Falkland (Darwin, North Arm, Stanley, Teal Inlet - last recorded 1949), West Point Island, Carcass Island, Sea Lion Island

Distribution: A European Temperate archaeophyte species that has naturalised extensively beyond this range

Naturalisation Notes: Naturalised; Not cultivated

Mentha spicata L.

Species Plantarum 2: 576. 1753.

Local name: Spearmint

Description: Aromatic, rhizomatous, perennial herb with more or less tetragonous stems.

Phenology: Feb, Mar

Habitat: Built up areas and gardens (water tank); arable and horticulture; running water (stream side); < 15 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley), West Falkland (Little Chartres, Port Howard)

Distribution: Probably originated in cultivation

Naturalisation Notes: Naturalised; Cultivated herb

Mentha x piperita L.

Species Plantarum 2: 576. 1753.

Local name: Peppermint

Description: Aromatic, rhizomatous, perennial herb with more or less tetragonous stems.

Phenology: Mar

Habitat: Recorded by running water (margin/ spring/ small stream); in moist neutral grassland; built up areas and gardens; 0-31 m

Status: Introduced; Rare; Sparsely scattered across East Falkland, West Falkland, Saunders Island, Pebble Island

Distribution: A spontaneous hybrid originating in Europe

Naturalisation Notes: Naturalised; Cultivated herb

Mentha x villosa Huds.

Fl. Angl., ed. 2: 250. 1778.

Local name: Apple-mint

Description: Aromatic, rhizomatous, perennial herb with more or less tetragonous stems.

Phenology: Mar

Habitat: Built up areas and gardens; 7-37 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley), Weddell Island, Pebble Island

Distribution: A spontaneous hybrid originating in Europe

Naturalisation Notes: Naturalised; Cultivated herb

Prunella vulgaris L.

Species Plantarum 2: 600. 1753.

Local name: Selfheal

Description: Perennial herb; more or less pubescent; stems 4-49 cm.

Phenology: Feb, Mar

Habitat: Cortaderia pilosa acid grassland in paddock; c. 46 m

Status: Introduced; Very rare; Recorded on East Falkland (Goose Green), West Falkland (Dunnose Head - last recorded in 1911)

Distribution: A Circumpolar Wide-temperate species that has naturalised extensively beyond this range

Naturalisation Notes: Naturalised; Possibly locally extirpated (R. Lewis 2013); Not cultivated

Scutellaria nummulariifolia Hook.f.

Fl. Antarct. 2: 336. 1846.

Local name: Skullcap

Description: Creeping, perennial herb; stems 3-9 cm ascending from long, prostrate, yellowish rooting base.

Phenology: May

Habitat: Maritime shingle - found growing amid stones above the high tide mark; c. 0 m

Status: Native; Very rare; Recorded on West Falkland (Fox Bay area) in 1916

National Red List Category: CR [D1]

Conservation measures: Action Plan; ID guide

Distribution: Southern South America: Argentina (Chubut, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región XI, Región XII), Falkland Islands

LEGUMINOSAE

Cytisus scoparius (L.) Link

Enumeratio Plantarum Horti Regii Berolinensis (1822)

Local name: Broom

Description: Erect/ arching, non-spiny shrub to 2.5 m tall

Phenology: Dec

Habitat: Built up areas and gardens (including road verges); 1-60 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley, Mount Pleasant Complex), Beaver Island and Keppel Island

Distribution: Native to European temperate areas but extensively naturalised beyond this range

Naturalisation Notes: Casual; Probably locally extirpated; High risk; All plants controlled (R. Lewis 2013); Cultivated ornamental

Lotus corniculatus L.

Species Plantarum 2: 775. 1753.

Local name: Bird's-foot-trefoil

Description: Glabrous/ slightly hairy perennial herb; procumbent/ ascending stems to 50 cm.

Phenology: Dec, Jan

Habitat: Predominantly in built up areas and gardens; also occurs on maritime cliff and slope; 0-10 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley, Cape Pembroke, Darwin)

Distribution: Native to Eurasian Southern-temperate areas but extensively naturalised beyond this range

Naturalisation Notes: Naturalised; Cultivated for pasture

Lotus pedunculatus Cav.

Icon. 2: 52, pl. 164. 1793.

Local name: Greater Bird's-foot-trefoil

Description: Glabrous to hairy perennial herb; erect/ ascending stems to 100 cm.

Phenology: Jan, Feb

Habitat: Built up areas and gardens; improved grassland; 1-12 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley, Saladero) and Saunders Island

Distribution: Native to European Temperate areas but extensively naturalised beyond this range

Naturalisation Notes: Naturalised; Cultivated for pasture

Lupinus arboreus Sims

Bot. Mag. 18: pl. 682. 1803

Local name: Tree Lupin

Description: Perennial herb; erect, branched stems, woody near base, to 2 m tall.

Phenology: Dec, Jan, Feb

Habitat: Built up areas and gardens (including in hedgerow); improved grassland; 0-15 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley, Mount Pleasant Complex, Saladero), West Falkland (Fox Bay), West Point Island

Distribution: Native to western N. America

Naturalisation Notes: Naturalised; High risk (R. Lewis 2013); Cultivated ornamental

Medicago sativa L.

Sp. Pl. 2: 778. 1753

Local name: Lucerne

Description: Erect/ decumbent, hairy, perennial herb to 90 cm

Phenology: (probably Feb), Mar

Habitat: Built up areas and gardens; arable and horticulture; 11-20 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley)

Distribution: May be native to S.W. Asia however it is also extensively naturalised in both N. and S. hemispheres.

Naturalisation Notes: Naturalised; Not cultivated

Trifolium arvense L.

Species Plantarum 2: 769. 1753.

Local name: Hare's-foot Clover

Description: Erect/ ascending, hairy, annual herb to 20/(40) cm

Phenology: Jan, Feb, Mar

Habitat: Built up areas and gardens (road verge); c. 60 m

Status: Introduced; Very rare; Recorded on East Falkland at Mount Pleasant Complex (2012) and Rookery Bay (1944)

Distribution: Native to Eurosiberian Southern-temperate areas but extensively naturalised beyond this range

Naturalisation Notes: Naturalised; Not cultivated

Trifolium aureum Pollich

Hist. Pl. Palat. 2: 344. 1777

Local name: Golden Clover

Description: Erect/ ascending, sparsely hairy, annual herb to 30 cm

Phenology: Jan, Feb

Habitat: Built up areas and gardens; improved grassland; 11-50 m

Status: Introduced; Very rare; Recorded on East Falkland in Stanley (2009-2010) and Beatrice Cove (1945)

Distribution: Native to European Temperate areas but absent as a native from a great deal of W. Europe; extensively naturalised beyond this range.

Naturalisation Notes: Naturalised; All plants controlled (R. Lewis 2013); Not cultivated

Trifolium dubium Sibth.

Fl. Oxon. 231. 1794

Local name: Lesser Trefoil

Description: Hairy, annual herb; procumbent/ ascending stems to 25 cm

Phenology: Dec, Jan, Feb, Mar, Apr, May

Habitat: Predominantly in built up areas and gardens; also occurs in dwarf shrub heath; improved grassland; neutral grassland; rarely in marshy grassland; coastland shingle; 0-60 m

Status: Introduced; Occasional; Widespread across the Falkland Islands

Distribution: Native to European Temperate areas but extensively naturalised beyond this range

Naturalisation Notes: Naturalised; Not cultivated

***Trifolium fragiferum* L.**

Species Plantarum 2: 772. 1753.

Local name: Strawberry Clover

Description: Almost glabrous, perennial herb; procumbent stems up to 30 cm and rooting at nodes

Phenology: Jan

Habitat: Improved grassland; probably 1-50 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley - last recorded 1937-1938)

Distribution: Native to Eurosiberian Southern-temperate areas but extensively naturalised beyond this range

Naturalisation Notes: Naturalised; Possibly locally extirpated; All plants controlled (R. Lewis 2013); Not cultivated

***Trifolium hybridum* L.**

Species Plantarum 2: 766. 1753.

Local name: Alsike Clover

Description: Almost glabrous perennial herb; erect/ decumbent stems to 60 cm

Phenology: Dec, Jan, Feb, Mar

Habitat: Built up areas and gardens; improved grassland; 0-15 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley, Saladero) and West Falkland (West Lagoons)

Distribution: Native to S. Europe and SW Asia

Naturalisation Notes: Naturalised; Cultivated for pasture

***Trifolium pratense* L.**

Species Plantarum 2: 768. 1753.

Local name: Red Clover

Description: Hairy perennial herb; erect/ decumbent stems to 60 cm

Phenology: Jan

Habitat: Built up areas and gardens; 0-15 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley), West Falkland (Roy cove), Pebble Island, Saunders Island

Distribution: Native to Eurosiberian Temperate areas but extensively naturalised beyond this range to become Circumpolar Temperate

Naturalisation Notes: Naturalised; Cultivated for pasture

***Trifolium repens* L.**

Species Plantarum 2: 767. 1753.

Local name: White Clover

Description: Glabrous perennial herb; creeping stems to 50 cm, rooting at nodes

Phenology: Dec, Jan, Feb, Mar, Apr

Habitat: Predominantly in built up areas and gardens; improved grassland; also occurs in neutral grassland; acid grassland; dwarf shrub heath; rarely on maritime slope; 0-60 m

Status: Introduced; Occasional; Widespread across the Falkland Islands

Distribution: Native to Eurosiberian Boreo-temperate areas but extensively naturalised beyond this range to become Circumpolar Boreo-temperate

Naturalisation Notes: Naturalised; Cultivated for pasture

***Trifolium striatum* L.**

Sp. Pl. 2: 770 (1753)

Local name: Knotted Clover

Description: Hairy annual herb; procumbent to erect stems up to 30 cm

Phenology: Jan, Feb

Habitat: Built up areas and gardens (including alongside road); c. 60 m

Status: Introduced; Very rare; Recorded on East Falkland (Mount Pleasant Complex)

Distribution: Native to European Southern-temperate areas but extensively naturalised beyond this range

Naturalisation Notes: Naturalised; Not cultivated

***Ulex europaeus* L.**

Species Plantarum 2: 741. 1753.

Local name: Gorse

Description: Erect/ ascending densely spiny shrub to 2(2.5) m; branched spines

Phenology: Sept, Oct, Nov, Dec, Jan

Habitat: Predominantly forming scrub (as the dominant species) and in built up areas and gardens; improved

Citation: Upson R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

grassland; also occurs in dwarf shrub heath; acid grassland; neutral grassland; maritime cliff and slope; strandline vegetation; rarely in Tussac; running water (bank); 0-60 m (to c. 128 m on Beaver Island)

Status: Introduced; Occasional; Widespread across the Falkland Islands

Distribution: Native to Oceanic Temperate areas of Europe but naturalised in suboceanic parts of Europe and beyond.

Naturalisation Notes: Naturalised; Action Plan; High risk; Some plants controlled (R. Lewis 2013); Ornamental & windbreak

***Vicia cracca* L.**

Species Plantarum 2: 735. 1753.

Local name: Tufted Vetch

Description: Glabrous/ hairy scrambling perennial herb; stems 60-200 cm.

Phenology: Jan, Feb

Habitat: Built up areas and gardens; 1-35 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley, Goose Green)

Distribution: Native to Euroasian Boreo-temperate areas but extensively naturalised beyond this range to become Circumpolar Boreo-temperate

Naturalisation Notes: Naturalised; Some plants controlled (R. Lewis 2013); Not cultivated

***Vicia sativa* L.**

Species Plantarum 2: 736. 1753.

Local name: Common Vetch

Description: Scrambling annual herb; stems to 1.5 m.

Phenology: Jan

Habitat: Built up areas and gardens; improved grassland; < 15 m

Status: Introduced; Very rare; Recorded on East Falkland (Goose Green, North Arm)

Distribution: Native to European Southern-temperate areas but extensively naturalised beyond this range

Naturalisation Notes: Naturalised; Not cultivated

***Vicia sepium* L.**

Species Plantarum 2: 737. 1753.

Local name: Bush Vetch

Description: Scrambling perennial herb; stems to 60(100) m.

Phenology: Jan

Habitat: Built up areas and gardens; < 15 m

Status: Introduced; Very rare; Recorded on East Falkland (Goose Green)

Distribution: Native to Eurosiberian Boreo-temperate areas but extensively naturalised beyond this range

Naturalisation Notes: Status unknown; Possibly locally extirpated (R. Lewis 2013); Not cultivated

MALVACEAE

***Sidalcea malviflora* (DC.) A.Gray ex Benth**

Smithsonian Contr. Knowl. 3(5): 16 (1852)

Local name: Greek Mallow

Description: Erect perennial herb to 1.5 m

Phenology: Feb

Habitat: Built up areas and gardens - disturbed area of acid grassland; c. 50 m

Status: Introduced; Very rare; East Falkland (Stanley)

Distribution: Native to west of N. America

Naturalisation Notes: Casual; Possibly locally extirpated (R. Lewis 2013); Cultivated ornamental

MONTIACEAE

***Montia fontana* L.**

Species Plantarum 1: 87. 1753.

Local name: Blinks

Description: Glabrous herb with stems 2-7 cm, up to 20 cm or more in water.

Phenology: Nov, Dec, Jan, Feb, Mar

Citation: Upson R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

Habitat: Predominantly found in/ near running water (stream/ margin/ small stream); also occurs on wet coastland rock; wet maritime cliff; standing water (margin/ pond); moist neutral grassland; moist acid grassland; marshy grassland; 0-60 m (also 88-126 m on New Island)

Status: Native; Occasional; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (584)

Distribution: Widespread in temperate regions in both the Northern and Southern Hemispheres

MYRTACEAE

Eucalyptus gunnii Hook.f.

London J. Bot. 3: 499 (1844)

Local name: Cider Gum

Description: Tree to 5(-30) m tall; leaves evergreen, aromatic

Habitat: Built up areas and gardens; mixed woodland - plantation; 1-43 m

Status: Introduced; Recorded on East Falkland (Stanley, Darwin) and Keppel Island

Distribution: Endemic to Tasmania

Naturalisation Notes: Persisting (Taxa); Ornamental & windbreak

Myrteola nummularia (Lam.) O. Berg

Linnaea 27: 396 1856.

Local name: Teaberry

Description: Glabrous, evergreen, prostrate, woody dwarf shrub; fruit a berry. Stems up to 40 cm or more, up to 4 mm in diameter, rooting at intervals and intertwined to form often extensive patches.

Phenology: Nov, Dec, Jan, Feb

Habitat: Predominantly found in moist dwarf shrub heath; acid grassland; also occurs in bogs (Sphagnum or *Astelia* dominated); *Blechnum penna-marina* or *Sticherus cryptocarpa* fern beds; inland rock (stone run/ outcrop/ other); Fachine scrub; maritime slope; neutral grassland; running water (bank); flush vegetation; 0-701 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VIII, Región IX, Región X, Región XI, Región XII, Archipiélago Juan Fernández), Falkland Islands, Bolivia, Peru, Ecuador, Columbia, Venezuela

NOTHOFAGACEAE

Nothofagus betuloides (Mirb.) Oerst.

Bidr. Egefam. 24. 1872.

Local name: Southern Beech

Description: Evergreen tree up to 10(-30) m or shrub 1-2 m; fruit a nut.

Phenology: Unknown

Habitat: Mixed woodland - plantation; 2-20 m

Status: Introduced; Very rare; Recorded on West Falkland (Hill Cove) and Keppel Island

Distribution: Southern South America: Argentina (Santa Cruz, Tierra del Fuego), Chile (Región X, Región XI, Región XII)

Naturalisation Notes: Persisting (Taxa); Ornamental & windbreak

ONAGRACEAE

Epilobium obscurum (Schreb.) Schreb.

Spicil. Fl. Lips. 147, et Addenda, fol. K 6 (1771).

Local name: Short-fruited Willowherb

Description: Hairy perennial herb with leafy stolons; erect stems to 75 cm

Phenology: Jan

Habitat: Built up areas and gardens; c. 10 m

Status: Introduced; Recorded on East Falkland (Stanley)

Distribution: Native to European Temperate areas

Naturalisation Notes: Status unknown; Possibly locally extirpated (R. Lewis 2013); Not cultivated

Fuchsia magellanica Lam.

Encyclopédie Méthodique, Botanique 2(2): 565. 1788.

Local name: Fuchsia

Description: Deciduous shrub to 1.2 m

Phenology: Dec, Jan, Feb, Mar

Habitat: Predominantly in built up areas and gardens; rarely in fern beds; maritime cliff; < 15 m

Status: Introduced; Rare; Recorded on East Falkland (Stanley), West Falkland (Hill Cove, Shallow Bay), New Island, West Point Island, Saunders Island, Keppel Island and Pebble Island

Distribution: Southern South America: Argentina (Chubut, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego, Tucumán), Chile (Región V, Región VI, Región VII, Región VIII, Región IX, Región X, Región XI, Región XII, Archipiélago Juan Fernández, Región Metropolitana de Santiago), Falkland Islands

Naturalisation Notes: Naturalised; Cultivated ornamental

ORCHIDACEAE

Chloraea fonkii Phil.

Linnaea 29: 55 1858.

Synonym(s): *Chloraea gaudichaudii* Brongn.

Local name: Gaudichaud's Orchid

Description: Perennial herb with short rhizome; erect, flowering stem to 35 cm

Phenology: Dec, Jan

Habitat: Predominantly in dwarf shrub heath; acid grassland; also occurs in Fachine scrub; neutral grassland; 0-111 m

Status: Native; Scarce; Widely scattered across the Falkland Islands

National Red List Category: LC

Conservation measures: Listed on the Conservation of Wildlife and Nature Ordinance (FIG, 1999); MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Neuquen, Río Negro, Santa Cruz, Tierra del Fuego); Chile (Región IX, Región X, Región XI, Región XII), Falkland Islands

Codonorchis lessonii (d'Urv.) Lindl.

Gen. Sp. Orchid. Pl. 411 1840.

Local name: Dog Orchid

Description: Glabrous perennial herb with rhizome; flowering stem 6-25 cm tall

Phenology: Nov, Dec, Jan

Habitat: Predominantly in dwarf shrub heath; acid grassland; also occurs in Fachine scrub; inland rock (outcrop/ stone run/ cliff); *Blechnum penna-marina* fern beds; 0-459 m

Status: Native; Occasional; Widely scattered across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Chubut, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VII, Región VIII, Región IX, Región X, Región XI, Región XII), Falkland Islands

Gavilea araucana (Phil.) M.N.Correa

Bol. Soc. Argent. Bot. 6: 82 (1956)

Description: Perennial herb with short rhizome; erect flowering stem

Habitat: Maritime cliff and slope; 2-5 m

Status: Native; Very rare; Found at one location on West Falkland

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Chubut, Neuquen, Río Negro, Santa Cruz), Chile (Región VII, Región VIII, Región IX, Región X, Región XI, Región XII, Región Metropolitana de Santiago), Falkland Islands

Gavilea australis (Skotts.) M.N.Correa

Bol. Soc. Argent. Bot. 6: 77 1956.

Local name: Pale Yellow Orchid

Description: Perennial herb with short rhizome; erect, flowering stem to 40 cm tall

Phenology: Dec, Jan

Habitat: Dwarf shrub heath; on sand/ sandy peat in marshy grassland; maritime cliff and slope; neutral grassland; 0-79 m

Status: Native; Rare; Found at six locations across East Falkland, West Falkland, Saunders Island and Weddell Island

National Red List Category: VU [B12ab(iii)]

Conservation measures: Listed on the Conservation of Wildlife and Nature Ordinance (FIG, 1999); Action Plan; vouchered DNA sample; MSB seed collection (>1000); ID guide

Distribution: Southern South America: Argentina (Tierra del Fuego), Chile (Región XII), Falkland Islands

Gavilea littoralis (Phil.) M.N.Correa

Fl. Patagonica 2: 195 1969.

Synonym(s): *Gavilea macroptera* (Kraenzlin) Correa

Local name: Yellow Orchid

Description: Perennial herb with short rhizome; erect, flowering stem to 40 cm tall

Phenology: Dec, Jan

Habitat: Predominantly in dwarf shrub heath; maritime cliff and slope; also occurs in cushion heath - coastal; 0-72 m

Status: Native; Scarce; Sparsely scattered across the Falkland Islands

National Red List Category: LC

Conservation measures: Listed on the Conservation of Wildlife and Nature Ordinance (FIG, 1999); MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Santa Cruz, Tierra del Fuego), Chile (Región IX, Región X, Región XI, Región XII), Falkland Islands

OROBANCHACEAE

Euphrasia antarctica Benth.

Prodromus (1846)

Local name: Eyebright

Description: Annual herb; stems 2-9 cm, erect.

Phenology: Jan, Feb, Mar

Habitat: Predominantly coastal on moist sand/ sandy peat/ mud in marshy grassland; standing water (margin); also occurs in sand dunes (dune slacks); neutral grassland; littoral sediment; 0-15 m

Status: Native; Scarce; Sparsely scattered across the Falkland Islands: recorded on East Falkland, West Falkland and West Point Island

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Jujuy, Neuquen, Santa Cruz, San Juan, Tierra del Fuego), Chile (Región VIII, Región IX, Región X, Región XI, Región XII), Falkland Islands

Euphrasia confusa Pugsley

J. Bot. 57: 172 (1919)

Local name: European Eyebright

Description: Annual herb; stems up to 35 cm, erect

Phenology: Jan, Feb

Habitat: Marshy grassland; neutral grassland; dwarf shrub heath; 9-27 m

Status: Introduced; Very rare; Recorded on East Falkland (Cape Pembroke)

Distribution: Native to Oceanic Boreo-temperate areas

Naturalisation Notes: Naturalised; Factsheet; Moderate risk; Some plants controlled (R. Lewis 2013); Not cultivated

Parentucellia viscosa (L.) Caruel

Fl. Ital. 6: 482: 1885

Local name: Yellow Bartsia

Description: Annual hemiparasitic herb; erect stems to 50 cm

Phenology: Jan

Habitat: On sand/ peat in neutral grassland; dwarf shrub heath; 1-20 m

Status: Introduced; Very rare; Recorded on East Falkland (Cape Pembroke)

Distribution: Native to Mediterranean-Atlantic areas but extensively naturalised beyond this range

Naturalisation Notes: Naturalised; Factsheet; All plants controlled (R. Lewis 2013); Not cultivated

OXALIDACEAE

Oxalis enneaphylla Cav.

Icon. 5: 7, pl. 411. 1799.

Local name: Scurvygrass

Description: Perennial, rhizomatous geophyte; to c. 25 cm.

Phenology: Oct, Nov, Dec, Jan, Feb

Habitat: Predominantly found in dwarf shrub heath; acid grassland; fern beds; also occurs cushion heath - coastal; Fachine scrub; neutral grassland; coastal (saline) grassland; inland rock (outcrop/ stone run/ cliff/ other); maritime cliff and slope; marshy grassland; marginal vegetation; running water (bank); 0-399 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample

Distribution: Southern South America: Argentina (Tierra del Fuego), Chile (Región XII), Falkland Islands

PAPAVERACEAE

Fumaria muralis Sond. ex W.D.J.Koch

Syn. Fl. Germ. ed. II. 1017.

Local name: Common Ramping-Fumitory

Description: Annual herb; branched, scrambling stems

Phenology: Oct, Nov, Dec, Jan

Habitat: Predominantly in built up areas and gardens; also found on maritime slope; coastland rock; littoral sediments; 0-27 m

Status: Introduced; Rare; Sparsely scattered across the Falkland Islands

Distribution: Native to Oceanic Southern-temperate areas but extensively naturalised beyond this range

Naturalisation Notes: Naturalised; Not cultivated

Notes: Misrecorded as *F. officinalis* prior to 2009. (R. Lewis 2012)

Papaver dubium L. subsp. *dubium*

Species Plantarum 2: 1196. 1753.

Local name: Long-headed Poppy

Description: Annual herb with white/ cream latex turning brown/ black when dry; erect stems to 60 cm

Phenology: Jan, Feb, Mar, Apr

Habitat: Built up areas and gardens; 5-15 m

Status: Introduced; Very rare; Recorded on East Falkland (Darwin, Stanley), West Falkland (Hill Cove, Port Stephens) and Pebble Island

Distribution: Native to European Southern-temperate areas

Naturalisation Notes: Naturalised; Not cultivated

Papaver dubium L. subsp. *lecoqii* (Lamotte) Syme

Engl. Bot. ed. 3, 1: 30 1863

Synonym(s): *Papaver lecoqii* Lamotte

Local name: Yellow-juiced Poppy

Description: Annual herb with yellow latex turning reddish when dry; erect stems to 60 cm

Phenology: Feb

Status: Introduced; Recorded East Falkland (Stanley) and West Falkland (Roy Cove)

Distribution: Native to European Southern-temperate areas

Naturalisation Notes: Naturalised; Not cultivated

PLANTAGINACEAE

Callitriche antarctica Engelm. ex Hegelm.

Verh. Bot. Vereins Prov. Brandenburg 9: 20, f. 24-26. 1867.

Local name: Water-starwort

Citation: Upson R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

Description: Monoecious, subaquatic glabrous herb forming lax mats. Stems (2-) 4-40 cm, shorter on land than when submerged.

Phenology: Dec, Jan, Feb

Habitat: Predominantly in running water (small stream/ seasonal stream/ stream/ margin); standing water (small pond/ seasonal pool/ margin of ponds, lakes, large lakes); wet maritime cliff and slope; also occurs in Tussac; wet inland rock (cliff); rarely in strandline vegetation; acid grassland; neutral grassland; 0-125 m

Status: Native; Frequent; Widespread across the Falkland Islands, including Beauchene Island

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Tierra del Fuego), Chile (Región XII, Región Metropolitana de Santiago), Falkland Islands; Sub-Antarctic: South Georgia

***Digitalis purpurea* L.**

Species Plantarum 2: 621-622. 1753.

Local name: Foxglove

Description: Hairy biennial/ short-lived perennial herb; erect stems to 2 m tall

Phenology: Jan

Habitat: Built up areas and gardens; rarely on maritime slope; 0-20 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley, Darwin), Weddell Island and Sea Lion Island

Distribution: Native to Suboceanic Southern-temperate areas but extensively naturalised beyond this range

Naturalisation Notes: Naturalised; Moderate risk (R. Lewis 2013); Cultivated ornamental

***Littorella australis* Griseb. ex Benth. & Hook. f.**

Gen. Pl. 2: 1225 1876.

Local name: Shoreweed

Description: Monoecious, aquatic stoloniferous herb; 15-18 mm tall.

Phenology: Jan

Habitat: Standing water (pond/ seasonal pool/ margin/ lagoon); running water (bank/ river bed/ stream bed); 0-30 m (421 m in the Hornby Mountains)

Status: Native; Scarce; Sparsely scattered across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Neuquen, Tierra del Fuego), Chile (Región IX, Región X, Región XII), Falkland Islands

***Plantago barbata* Forst.**

Commentat. Soc. Regiae Sci. Gott. 9: 25 1789.

Local name: Thrift Plantain

Description: Perennial herb; stems up to 9 cm, procumbent or ascending. Scape 3-20 cm.

Phenology: Oct, Nov, Dec, Jan

Habitat: A predominantly coastal species found in coastal (saline) grassland; cushion heath - coastal; maritime cliff and slope; strandline vegetation; littoral sediment - saltmarsh; also occurs on coastland rock/ boulders; marshy grassland; standing water (seasonal pool); rivers and streams; rarely in acid grassland; neutral grassland; dwarf shrub heath (coastal); 0-125 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Chubut, Mendoza, Neuquen, Río Negro, Santa Cruz, San Juan), Chile (Región III, Región IV, Región V, Región VI, Región VII, Región VIII, Región IX, Región X, Región XI, Región XII, Región Metropolitana de Santiago), Falkland Islands

Notes: Taxonomic work is needed to elucidate which subspecies is/ are present in the Falkland Islands

***Plantago coronopus* L.**

Species Plantarum 1: 115. 1753

Local name: Buck's-horn Plantain

Description: Hairy annual/ perennial herb to 24(27) cm tall; leaves in 1 or more basal rosettes

Phenology: Jan, Feb, Mar

Habitat: Built up areas and gardens (includes roadside verge); 1-30 m

Status: Introduced; Very rare; Recorded on East Falkland (Mount Pleasant Complex, Stanley)

Distribution: Native to Eurosiberian Southern-temperate areas but extensively naturalised beyond this range

Naturalisation Notes: Naturalised; Factsheet; Moderate risk; All plants controlled (R. Lewis 2013); Not

cultivated

***Plantago lanceolata* L.**

Species Plantarum 1: 113-114. 1753.

Local name: Ribwort Plantain

Description: Glabrous to hairy perennial herb to 54(58) cm tall; leaves in 1 or more basal rosettes

Phenology: Dec, Jan

Habitat: Predominantly in built up areas and gardens; improved grassland; also in dwarf shrub heath (coastal); rarely on coastland shingle; maritime cliff and slope; 0-60 m

Status: Introduced; Rare; Sparsely scattered across the Falkland Islands

Distribution: Native to Eurosiberian Southern-temperate areas but extensively naturalised beyond this range

Naturalisation Notes: Naturalised; Cultivated for pasture

***Plantago major* L.**

Species Plantarum 1: 112-113. 1753.

Local name: Greater Plantain

Description: Glabrous to hairy perennial herb to 60 cm tall; leaves in 1 basal rosette

Phenology: Jan

Habitat: Built up areas and gardens (includes roadside verge); 11-64 m

Status: Introduced; Very rare; Recorded on East Falkland (Mount Pleasant Complex, Stanley)

Distribution: A Eurasian Wide-temperate species that has naturalised extensively in N. America

Naturalisation Notes: Naturalised; Factsheet; High risk; All plants controlled (R. Lewis 2013); Not cultivated

***Plantago maritima* L.**

Sp. Pl. 1: 114-115 114 1753.

Local name: Sea Plantain

Description: Glabrous perennial herb to 37(40) cm tall; leaves in 1 or more basal rosettes

Phenology: Nov, Dec, Jan

Habitat: Maritime cliff; coastland rock; 0-5 m

Status: Native; Very rare; Native subpopulations recorded on West Falkland (Chartres); however individual of probable European origin located near MPC, on side of ditch near road

National Red List Category: CR [B12ab(iii)]

Conservation measures: Action Plan; vouchered DNA sample; MSB seed collection (122); ID guide

Distribution: Subcosmopolitan in temperate and Arctic regions; Europe, northwest Africa, northern and central Asia, northern North America, and southern South America

Notes: Should this be listed as being of uncertain status on introduced checklist? (R Lewis 2013)

***Plantago media* L.**

Sp. Pl. 1: 113 (1753)

Local name: Hoary Plantain

Description: Hairy perennial herb to 46 cm tall; leaves in 1 or several basal rosettes

Phenology: Unknown

Habitat: unknown; Unknown

Status: Introduced; Very rare; Occurs on West Falkland (Fox Bay)

Distribution: A Eurasian Temperate species that has naturalised extensively beyond this range

Naturalisation Notes: Naturalised; Factsheet; All plants controlled (R. Lewis 2013); Not cultivated

***Plantago moorei* Rahn**

Nordic J. Bot. 4: 624 1984.

Local name: Moore's Plantain

Description: Perennial cushion-forming herb; cushions up to 25 tall.

Phenology: Nov, Dec

Habitat: A coastal species predominantly found in dwarf shrub heath (coastal); coastal cushion heath; also occurs in coastal feldmark; rarely in coastal (saline) grassland; *Festuca magellanica* acid grassland; 10-150 m

Status: Endemic; Very rare; Restricted to south-west Falkland Islands (Port Stephens, Weddell Island)

IUCN Red List Category: EN

National Red List Category: EN [B1ab(i,ii,iii,v)]

Conservation measures: Action Plan; vouchered DNA sample; MSB seed collection (>1000); ID guide

Distribution: Endemic to the Falkland Islands

Nomenclature Notes: Govaerts made no comment on this - TPL lists this as an unresolved name - from WCSP (in review)

***Veronica agrestis* L.**

Species Plantarum 1: 13. 1753.

Local name: Green Field Speedwell

Description: Hairy annual herb; procumbent to ascending stems to 30 cm

Phenology: Dec, Jan

Habitat: Coastland shingle; built up areas and gardens; 0-2 m

Status: Introduced; Very rare; Recorded on East Falkland (Darwin), West Falkland (Fox Bay West) and Saunders Island

Distribution: A European Temperate archaeophyte species that has naturalised extensively beyond this range

Naturalisation Notes: Naturalised; Not cultivated

***Veronica arvensis* L.**

Species Plantarum 1: 13. 1753.

Local name: Wall Speedwell

Description: Hairy annual herb; erect to decumbent stems to 30 cm

Phenology: Feb, Mar

Habitat: Built up areas and gardens; improved grassland; 1-45 m

Status: Introduced; Rare; Recorded on East Falkland (Darwin, Stanley), West Falkland (Shallow Bay) and Saunders Island

Distribution: A European Southern-temperate species that has naturalised extensively to become Circumpolar Southern-temperate

Naturalisation Notes: Naturalised; Not cultivated

***Veronica elliptica* G. Forst.**

Fl. Ins. Austr. 3. 1786

Synonym(s): *Hebe elliptica* (Forst. f.) Pennell

Local name: Native Boxwood

Description: Evergreen shrub; up to 3 m.

Phenology: Dec, Jan, Feb

Habitat: A coastal species usually found on maritime cliff and slope; also occurs in dwarf shrub heath (coastal); coastland shingle; coastland rock; inland rock (outcrop/ cliff/ stone run); forms Boxwood scrub as the dominant species; strandline vegetation; rarely in coastal (saline) grassland; neutral grassland; 0-170 m

Status: Native; Occasional; Predominantly in the west of the archipelago but widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Tierra del Fuego), Chile (Región XI, Región XII), Falkland Islands, New Zealand

Nomenclature Notes: *Veronica elliptica* is the accepted name and *Hebe elliptica* is a synonym (Govaerts, pers. com)

***Veronica officinalis* L.**

Species Plantarum 1: 11. 1753.

Local name: Heath Speedwell

Description: Hairy perennial herb; procumbent to ascending stems to 40 cm

Phenology: Dec, Jan

Habitat: Built up areas and gardens; dwarf shrub heath; 1-30 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley), West Falkland (Dunbar)

Distribution: A European Boreo-temperate species that has naturalised extensively beyond this range

Naturalisation Notes: Naturalised; Factsheet; Some plants controlled (R. Lewis 2013); Not cultivated

Veronica serpyllifolia* L. subsp. *serpyllifolia

Species Plantarum 1: 12. 1753.

Local name: Thyme-leaved Speedwell

Description: Almost glabrous perennial herb; decumbent stems to 30 cm, rooting at nodes

Phenology: Oct, Nov, Dec, Jan, Feb

Habitat: Predominantly in dwarf shrub heath; built up areas and gardens; maritime cliff and slope; also occurs in coastal (saline) grassland; sand dunes; improved grassland; acid grassland; 0-60 m

Status: Introduced; Occasional; Widespread across the Falkland Islands

Distribution: A Circumpolar Boreo-temperate species that has naturalised extensively beyond this range

Naturalisation Notes: Naturalised; Not cultivated

Veronica x franciscana (Eastw.) Souster

Journ. Roy. Hort. Soc., Lond. lxxxii. 498, in adnot. 1956

Local name: Hybrid Boxwood

Description: Evergreen shrub to 2 m

Phenology: Jan, Feb, Mar, Apr

Habitat: Built up areas and gardens; maritime cliff and slope; 0-30 m

Status: Introduced; Rare; Recorded on East Falkland (Stanley), West Falkland (Shallow Bay), Keppel Island, Pebble Island and New Island

Distribution: Horticultural origin

Naturalisation Notes: Naturalised; Cultivated ornamental

Nomenclature Notes: The Plant List still recognises Hebe as a discrete genus, but this an error and is being resolved (R. Lewis 2012)

PLUMBAGINACEAE

Armeria maritima Willd.

Enum. Pl. 333. 1809.

Local name: Thrift

Description: Perennial herb with basal leaves

Phenology: Nov, Dec, Jan, Feb

Habitat: A coastal species found predominantly in strandline vegetation; coastland rock/ boulders; coastland shingle; maritime cliff and slope; also occurs in dwarf shrub heath (coastal); running water (bank); coastal (saline) grassland; rarely in neutral grassland (coastal); cushion heath - coastal; inland rock (outcrop); marshy grassland; Tussac; sand dunes; < 20 m (rarely up to 60 m)

Status: Native; Occasional; Widely scattered across the Falkland Islands

National Red List Category: LC

Conservation measures: unvouchered DNA sample (R Lewis 2013) MSB (>1000) (R Lewis 2013)

Distribution: The plants that are thought to occur naturally in the Falkland Islands are listed as endemic to Southern South America by Flora del Cono Sur (2009): Argentina (Chubut, Córdoba, Mendoza, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región IV, Región V, Región VI, Región VII, Región VIII, Región IX, Región X, Región XI, Región XII, Región Metropolitana de Santiago), Falkland Islands

Notes: Native *Armeria* sp. has sometimes also been assigned to *A. maritima*, but is distinct from European and garden forms which are widely cultivated and have naturalised in Stanley. (R. Lewis 2012)

Armeria maritima (Mill.) Willd. cv. *Garden forms*

Enum. Pl. [Willdenow] 1: 333 (-334) (1809)

Local name: Thrift (Cultivated Forms)

Description: Perennial herb with basal leaves

Phenology: Nov, Dec, Jan, Feb

Habitat: Built up areas and gardens; neutral grassland; < 20 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley) - further taxonomic investigation is needed to better distinguish this form from native populations of *A. maritima*

Distribution: A Circumpolar Wide-boreal species

Naturalisation Notes: Naturalised; Cultivated ornamental

Notes: Native *Armeria* sp. has sometimes also been assigned to *A. maritima*, but is distinct from European and garden forms which are widely cultivated and have naturalised in Stanley. (R. Lewis 2012)

POACEAE

Agrostis capillaris L.

Species Plantarum 1: 62. 1753.

Synonym(s): In Moore (1968) as *Agrostis tenuis* Sibth.

Local name: Common Bent

Description: Tufted perennial grass with short rhizomes and sometimes stolons; flowering stems to 75 cm.

Phenology: Jan, Feb

Habitat: Predominantly found in improved grassland; dwarf shrub heath; built up areas and gardens; also occurs in acid grassland; Fachine scrub; marshy grassland; rarely in sand dunes; inland rock (outcrop); marginal vegetation; neutral grassland; fern beds; standing water (seasonal pool); maritime cliff; coastal cushion heath;

running water (margin, small stream); strandline vegetation; 0-140 m

Status: Introduced; Scarce; Widespread across the Falkland Islands

Distribution: Native to Boreal-temperate Europe; widely naturalised outside this area in both hemispheres.

Naturalisation Notes: Naturalised; High risk (R. Lewis 2013); Cultivated pasture & lawn

Agrostis magellanica Lam.

Tabl. Encycl. 1: 160. 1791.

Local name: Fuegian Bent

Description: Loosely tufted perennial grass; erect or spreading flowering stems to 45 cm.

Phenology: Nov, Dec, Jan, Feb, Mar

Habitat: Hygrophilous and predominantly found in marshy grassland; also occurs in moist/ wet places within dwarf shrub heath; acid grassland; sand dunes (dune slacks); standing water (seasonal pool, small pond); marginal vegetation; Fachine scrub; running water (margin, seasonal stream, stream); flush; coastland - rock; rarely within introduced vegetation; bare ground; 0-192 m

Status: Native; Occasional; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Chubut, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región IX, Región X, Región XI, Región XII), Falkland Islands, Iles Crozet, Iles de Kerguelen, Prince Edward Islands, Macquarie Island, Tristan da Cunha (but may be different subspecies)

Nomenclature Notes: *Agrostis magellanica* Lam. is unresolved: GrassBase places it in the genus Polypogon, but no name has been published for it in Polypogon. Also, other modern data systems outside Kew do accept it as a species, e.g. <http://grassworld.myspecies.info/cont>

Agrostis meyenii Trin.

Mém. Acad. Imp. Sci. Saint-Pétersbourg, Sér. 6, Sci. Math., Seconde Pt. Sci. Nat. 6(2): 312 1841.

Local name: Meyen's Bent

Description: Densely tufted perennial grass; erect or ascending flowering stems to 14 cm.

Phenology: Dec, Jan, Feb

Habitat: Found in inland rock; dwarf shrub heath; acid grassland; running water (bank); standing water (margin of seasonal pool); coastland - rock; 0-460 m

Status: Native; Scarce; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample

Distribution: Argentina (Catamarca, Chubut, Jujuy, La Rioja, Mendoza, Neuquen, Río Negro, Salta, Santa Cruz, San Juan, Tierra del Fuego, Tucumán), Bolivia, Chile (Región IV, Región V, Región VI, Región VII, Región VIII, Región IX, Región X, Región XII), Falkland Islands

Notes: Moore (1983) includes *Agrostis meyenii*, following Nicora (1978) in recognizing it as a distinct species from *A. canina*; Moore (1968) includes *A. canina*

Agrostis stolonifera L.

Species Plantarum 1: 62. 1753.

Local name: Creeping Bent

Description: Tufted perennial grass with stolons; erect/ ascending flowering stems to 40 cm.

Phenology: Dec, Jan, Feb, Mar

Habitat: Predominantly found in improved grassland; built up areas and gardens; standing water; running water; also occurs in dwarf shrub heath; coastland - rock/ boulders; maritime cliff and slope; bare ground; marshy grassland; introduced vegetation; flush; sand dunes; rarely in Tussac; strandline vegetation; coastal cushion heath; coastal (saline) grassland; 0-120 m

Status: Introduced; Occasional; Widespread across the Falkland Islands

Distribution: A Northern Hemisphere Temperate species; naturalised in temperate areas of Southern Hemisphere.

Naturalisation Notes: Naturalised; Moderate risk (R. Lewis 2013); Cultivated pasture & lawn

Aira caryophyllea L.

Species Plantarum 1: 66. 1753.

Local name: Silver Hair-grass

Description: Annual grass; erect/ spreading flowering stems to 40 cm.

Phenology: Dec, Jan

Habitat: Improved grassland; acid grassland; dwarf shrub heath; built up areas and gardens; rarely in Fachine scrub; 0-21 m

Status: Introduced; Scarce; Widespread across the Falkland Islands

Distribution: A Southern-temperate European species; naturalised outside its native range in temperate areas of both hemispheres.

Naturalisation Notes: Naturalised; Not cultivated

Aira praecox L.

Species Plantarum 1: 65-66. 1753.

Local name: Early Hair-grass

Description: Annual grass; erect/ spreading/ prostrate flowering stems to 20 cm.

Phenology: Nov, Dec, Jan, Feb

Habitat: Found in a wide range of habitats Most frequently recorded in dwarf shrub heath; improved grassland; introduced vegetation; bare ground; coastal cushion heath; Tussac; acid grassland; built up areas and gardens; also occurs in neutral grassland; marshy grassland; fern beds; coastal (saline) grassland; sand dunes; strandline vegetation; marshy grassland; Fachine scrub; maritime cliff and slope; standing water (seasonal pool); running water (margin); inland rock (inland cliff); arable and horticulture; coastland - rock/ boulders; maritime slope; coastland - shingle; 0-434 m

Status: Introduced; Frequent; Widespread across the Falkland Islands

Distribution: A Northern Hemisphere Suboceanic Southern-temperate species; widely naturalised outside its native range in both hemispheres.

Naturalisation Notes: Naturalised; Not cultivated

Alopecurus geniculatus L.

Species Plantarum 1: 60. 1753.

Local name: Marsh Foxtail

Description: Perennial grass with long stolons; decumbent flowering stems to 56 cm.

Phenology: Dec, Jan, Feb, Mar, Apr

Habitat: Built up areas and gardens; standing water; running water; improved grassland; neutral grassland; 0-15 m

Status: Introduced; Rare; Scattered across East Falkland, West Falkland and also recorded on Pebble and Speedwell Islands

Distribution: A European Boreo-temperate species that has become widely naturalised outside this area.

Naturalisation Notes: Naturalised; Cultivated for pasture

Alopecurus magellanicus Lam.

Tabl. Encycl. 1: 168. 1791.

Synonym(s): In Moore (1968) as *Alopecurus antarcticus* Vahl

Local name: Fuegian Foxtail

Description: Slender perennial grass; erect flowering stems to 138 cm

Phenology: Dec, Jan, Feb, Mar

Habitat: Predominantly found in marshy grassland; wet areas of acid grassland; Fachine scrub; running water (bank, stream); rarely in Tussac; 0-360 m

Status: Native; Rare; Known from three locations on West Falkland, one site on Weddell Island and also recorded on three ungrazed islands off the east coast of East Falkland. Three historical records need investigation.

National Red List Category: VU [B1ab(i,iii)]

Conservation measures: Action Plan; vouchered DNA sample; MSB seed collection (198); ID guide

Distribution: Argentina (Chubut, Mendoza, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VII, Región VIII, Región IX, Región X, Región XI, Región XII), Falkland Islands, South Georgia

Nomenclature Notes: May be conspecific with *A. ovatus* (syn *A. borealis*) (Cope & Gray, 2009)

Ammophila arenaria (L.) Link

Hortus Regius Botanicus Berolinensis 1: 105. 1827.

Local name: Marram

Description: Perennial grass with long rhizomes; erect/ spreading flowering stems to 120 cm.

Phenology: Oct, Nov, Dec, Jan, Feb, Mar

Habitat: Predominantly found on sand dunes; introduced vegetation; bare ground; also occurs in Tussac; dwarf shrub heath; strandline vegetation; marshy grassland (semi-improved); improved grassland; coastal (saline) grassland; littoral sediments - sand; maritime slope; rarely in coastal cushion heath; running water (margin); 0-104 m

Status: Introduced; Occasional; Widespread across the Falkland Islands

Distribution: A European Southern-temperate species that is widely naturalised outside its native range.

Naturalisation Notes: Naturalised; High risk (R. Lewis 2013); Erosion control

***Anthoxanthum odoratum* L.**

Species Plantarum 1: 28. 1753.

Local name: Sweet Vernal-grass

Description: Short-lived perennial grass smelling strongly of coumarin; erect/ spreading flowering stems to 50 cm.

Phenology: Oct, Nov, Dec, Jan, Feb

Habitat: Predominantly found in built up areas and gardens; improved grassland; also occurs in acid grassland; dwarf shrub heath; rarely in marshy grassland; Fachine scrub; inland rock (cliff); maritime cliff and slope; 0-81 m

Status: Introduced; Occasional; Widespread across the Falkland Islands

Distribution: A Eurosiberian Wide-temperate species that is widely naturalised in other temperate areas.

Naturalisation Notes: Naturalised; Moderate risk (R. Lewis 2013); Cultivated for pasture

***Arrhenatherum elatius* (L.) P. Beauv. ex J. Presl & C. Presl**

Flora Cechica 17. 1819.

Local name: False Oat-grass

Description: Loosely tufted perennial grass; erect/ ascending flowering stem to 1.25 m.

Phenology: Feb

Habitat: Built up areas and gardens; improved grassland; coastland - rock; acid grassland; dwarf shrub heath; 0-60 m

Status: Introduced; Very rare; Recorded on West Falkland (Crooked Inlet), Saunders Island and Weddell Island

Distribution: A European Temperate species that is widely naturalised beyond its native range.

Naturalisation Notes: Naturalised; Not cultivated

***Avena sativa* L.**

Species Plantarum 1: 79. 1753.

Local name: Oat

Description: Annual grass; flowering stem to 75 cm.

Phenology: Dec, Jan, Feb, Mar

Habitat: Restricted to built up areas and gardens; arable and horticulture; 0-15 m

Status: Introduced; Rare; Recorded on East Falkland (Stanley, Darwin), Pebble Island and Saunders Island.

Distribution: Probably originated through selective breeding of *Avena fatua*.

Naturalisation Notes: Naturalised; Cultivated for fodder

***Bromus catharticus* Vahl**

Symb. Bot. 2: 22. 1791.

Synonym(s): In Broughton & McAdam (2002) as *Ceratochloa cathartica* (Vahl) Herter; in Moore (1968) as *Ceratochloa unioloides* (Willd.) P.Beauv.

Local name: Rescue Brome

Description: A short-lived perennial grass; erect/ spreading flowering stem to 70 cm.

Phenology: Jan

Habitat: Restricted to built up areas and gardens; 1 m

Status: Introduced; Very rare; East Falkland (Stanley and Port Sussex)

Distribution: Part of a South American species-complex.

Naturalisation Notes: Naturalised; Not cultivated

***Bromus condensatus* Hack.**

in Magnier, Scrin. fl. select. vii. (1888) 135

Local name: Upright Brome

Description: Moore (1968) records species as a slender annual with erect flowering stem to 10 cm; no herbarium specimen available from original record.

Phenology: not known

Habitat: Strandline vegetation near built up areas and gardens; c. 0 m

Status: Introduced; Very rare; Last recorded on West Falkland (Chartres settlement) in 1949

Distribution: A European Temperate species

Naturalisation Notes: Status unknown; Possibly locally extirpated (R. Lewis 2013); Not cultivated

Nomenclature Notes: *B. condensatus* in Online Cat. New World Grasses and FI literature (Moore 1968, Broughton & McAdam 2002); *B. erectus* in The Plant List (2010). Suggest stick with old name until taxonomy has been resolved (R. Lewis 2012)

Bromus hordeaceus L. subsp. *hordeaceus*

Species Plantarum 1: 77. 1753.

Local name: Soft Brome

Description: Annual grass; erect/ ascending flowering stems to 80 cm.

Phenology: Dec, Jan, Feb, Mar

Habitat: Built up areas and gardens; improved grassland; coastland - rock/ boulders; 0-15 m

Status: Introduced; Rare; Recorded on East Falkland (Stanley), West Falkland (Fox Bay, Hill Cove) and Beaver, New, Speedwell Islands

Distribution: A European Southern-temperate species that has become naturalised widely outside its native range.

Naturalisation Notes: Naturalised; Not cultivated

Bromus sterilis L.

Species Plantarum 1: 77. 1753.

Synonym(s): In Broughton & McAdam (2002) as *Anisantha sterilis* (L.) Nevski

Local name: Barren Brome

Description: Slender annual grass; erect/ ascending flowering stem to 90 cm.

Phenology: Jan

Habitat: Restricted to built up areas and gardens; 0-21 m

Status: Introduced; Very rare; Weddell Island and Pebble Island

Distribution: A European Southern-temperate species that is widely naturalised beyond this range.

Naturalisation Notes: Naturalised; Not cultivated

Cortaderia pilosa (Urv.) Hack.

Ergebn. Schwed. Exp. Magell. 3(5): 222 1900.

Local name: Whitegrass

Description: A tussock-forming perennial grass with female and hermaphrodite flowers on separate individuals; erect flowering stems to 75 cm.

Phenology: Nov, Dec, Jan, Feb

Habitat: Acid grassland (where it forms the dominant/ co-dominant species over large areas); dwarf shrub heath; Fachine scrub; also occurs in marshy grassland; improved grassland; neutral grassland; built up areas and gardens; bogs; fern beds; running water (bank); coastland - rock; maritime cliff and slope; inland rock; flush; marginal vegetation; maritime slope; standing water (margin); littoral sediments - sand; 0-679 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Chubut, Neuquen, Rio Negro, Santa Cruz, Tierra del Fuego), Chile (Región VII, Región VIII, Región IX, Región X, Región XI, Región XII, Región Metropolitana de Santiago), Falkland Islands

Notes: Other than many small Tussac Islands, there are few Islands where *C. pilosa* is not currently thought to occur - these include Beauchene Island, New Island, Beaver Island, Middle Island, Grand Jason, Steeple Jason

Nomenclature Notes: Listed as a synonym of *Cortaderia egmontiana* (Roem. & Schult.) M. Lyle ex Connor in the Flora del Conosur; listed as an accepted name in The Plant List

Cynosurus cristatus L.

Species Plantarum 1: 72. 1753.

Local name: Crested Dog's-tail

Description: Tufted perennial grass; flowering stems to 60 cm.

Phenology: Dec, Jan

Habitat: Built up areas and gardens; improved grassland; neutral grassland; 0-60 m

Status: Introduced; Rare; Recorded from East Falkland (five locations), West Falkland (two locations), Pebble, Saunders and West Point Islands.

Distribution: A European Temperate species that has naturalised widely beyond its native range.

Naturalisation Notes: Naturalised; Not cultivated

Dactylis glomerata L.

Species Plantarum 1: 71. 1753.

Local name: Cock's-foot

Description: Coarse, tufted perennial grass; erect/ ascending flowering stems to 75 cm

Phenology: Nov, Dec, Jan, Feb, Mar

Habitat: Predominantly found in association with built up areas and gardens; improved grassland; also occurs

Citation: Upson R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

in strandline vegetation; running water (bank); introduced vegetation; coastland - rock/ boulders; maritime slope; coastal (saline) grassland; neutral grassland; acid grassland; dwarf shrub heath; 0-60 m

Status: Introduced; Occasional; Widespread across the Falkland Islands

Distribution: A Eurosiberian Southern-temperate species that is very widely naturalised outside its native range, particularly in the Circumpolar Southern-temperate region.

Naturalisation Notes: Naturalised; Not cultivated

Deschampsia antarctica E. Desv.

Flora Chilena 6: 338. 1854.

Local name: Antarctic Hair-grass

Description: Loosely tufted perennial grass; erect flowering stems to 15 cm.

Phenology: Dec, Jan, Feb

Habitat: Predominantly coastal in coastal (saline) grassland; dwarf shrub heath; coastal cushion heath; marshy grassland; also occurs in coastal acid grassland; maritime cliff and slope; strandline vegetation; littoral sediments; coastal feldmark; montane; standing water (small pond, seasonal pool, large lake margin); sand dunes (dune slacks); rarely in improved grassland (coastal); neutral grassland (upland); inland rock; built up areas and gardens; 0-473 m

Status: Native; Occasional; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina, Chile, Falkland Islands, South Georgia, Iles de Kerguelen, South Orkney Islands, South Shetland Islands, South Sandwich Islands, Antarctic Peninsula

Deschampsia flexuosa (L.) Trin.

Mém. Acad. Imp. Sci. Saint-Pétersbourg, Sér. 6, Sci. Math., Seconde Pt. Sci. Nat. 2(1): 9. 1836

Local name: Wavy Hair-grass

Description: Loosely/ densely tufted perennial grass, sometimes producing slender rhizomes; flowering stems, erect or bent at the base, up to 75 cm.

Phenology: Dec, Jan, Feb

Habitat: Predominantly found in dwarf shrub heath and acid grassland; also occurs in fern beds; Tussac; improved grassland; Fachine scrub; maritime cliff and slope; bare ground; neutral grassland; marshy grassland; sand dunes (dune slacks); running water (stream bank); inland rock; 0-459 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Native to Europe, northern Asia and N. and S. America, Falkland Islands

Deschampsia parvula (Hook.f.) E.Desv.

Fl. Chil. 6: 339 1853.

Local name: Dwarf Hair-grass

Description: Densely tufted perennial grass; erect flowering stems to 15 cm.

Phenology: Nov, Dec, Jan

Habitat: Coastal or montane - predominantly found in coastal (saline) grassland; coastal cushion heath; bare ground (clay/ sand); maritime cliff and slope; coastal feldmark; dwarf shrub heath (coastal); montane; also occurs in improved grassland (coastal); rarely inland rock; marshy grassland; stream (coastal); 0-705 m

Status: Native; Rare; Predominantly in the southwest of the Falkland Islands; also recorded on Narrows Island, Saunders Island and on the summit of Mt. Osborne, East Falkland

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Santa Cruz, Tierra del Fuego), Chile (Región XI, Región XII), Falkland Islands

Elymus magellanicus (Desv.) Á.Löve

Feddes Repert. 95: 472 1984.

Synonym(s): In Broughton & McAdam (2002) as *Elymus glaucescens* Seberg; in Moore (1968) as *Agropyron magellanicum* (Desf.) Hack.

Local name: Fuegian Couch

Description: Loosely tufted/ patch-forming, glaucous perennial grass with creeping rhizomes; erect/ ascending flowering stems to 8-115 cm.

Phenology: Dec, Jan, Feb

Habitat: Predominantly a coastal species found within coastal (saline) grassland, where it can be the dominant species; sand dunes; strandline vegetation; cushion heath - coastal; dwarf shrub heath - coastal; marshy

Citation: Upson R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

grassland - coastal; maritime cliff and slope; coastland rock; coastland - shingle; also occurs in Tussac; *Blechnum penna-marina* fern beds; improved grassland; bare ground; running water (bank, stream); neutral grassland (coastal); coastal feldmark; inland rock (inland cliff, outcrop); littoral sediment - saltmarsh; *Acaena* herbfield; fen; rarely in *Fachine* scrub; built up areas and gardens; 0-297 m (638-699 m, Mount Usborne)

Status: Native; Occasional; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Chubut, La Pampa, Mendoza, Neuquen, Santa Cruz, San Juan, Tierra del Fuego), Chile (Región XII), Falkland Islands

Elymus repens (L.) Gould

Madroño 9(4): 127. 1947.

Synonym(s): *Elytrigia repens* ssp. *repens* var. *repens*; *Elytrigia repens* ssp. *repens* var. *aristata*

Local name: Common Couch

Description: Loosely tufted/ patch-forming, green/glaucous perennial grass with creeping rhizomes; erect flowering stems to 110(160) cm.

Phenology: Jan, Feb, Mar

Habitat: Predominantly found in built up areas and gardens; rarely in improved grassland; *Ulex europaeus* scrub; coastland rock; 0-15 m

Status: Introduced; Rare; Widely scattered across the Falkland Islands

Distribution: A Euro Siberian Wide-temperate species that is naturalised widely beyond this range.

Naturalisation Notes: Naturalised; Not cultivated

Nomenclature Notes: Hubbard 1992: 97 as *Agropyron repens*. Figure p. 96.

Festuca contracta Kirk

Trans. & Proc. New Zealand Inst. 27: 353. 1895.

Synonym(s): In Moore (1968) as *Festuca erecta* D'Urv

Local name: Land-tussac

Description: Densely tufted perennial grass; erect flowering stem 6-39 cm

Phenology: Nov, Dec, Jan, (Feb)

Habitat: Predominantly in dwarf shrub heath; acid grassland; *Blechnum penna-marina* (or *Sticherus cryptocarpa*) fern beds; also occurs on inland rock (outcrop, stone run, inland cliff); cushion heath; bogs; coastal (saline) grassland; marshy grassland; Tussac; maritime cliff and slope; coastland rock; strandline vegetation; rarely in introduced vegetation; sand dunes; *Fachine* scrub; flush; built up areas and gardens (upland military site); 0-705 m

Status: Native; Occasional; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Santa Cruz, Tierra del Fuego), Chile (Región XII), Falkland Islands, South Georgia, Iles Kerguelen, Macquarie Island

Festuca filiformis Pourr.

Hist. & Mém. Acad. Roy. Sci. Toulouse 3: 319 (1788)

Local name: Fine-leaved Sheep's Fescue

Description: Densely tufted perennial grass without rhizomes; erect/ ascending flowering stems up to 45 cm.

Habitat: Improved grassland; 0-5 m

Status: Introduced; Very rare; Only a single record from Shallow Bay settlement

Naturalisation Notes: Status unknown; Unknown

Nomenclature Notes: Close to *F. ovina*, but recognised as distinct in The Plant List (2010) and Cope & Gray (R Lewis 2012)

Festuca magellanica Lam.

Encycl. 2: 461 1788.

Local name: Fuegian Fescue

Description: Densely tufted perennial grass; erect flowering stem 4-20(-30) cm

Phenology: Nov, Dec, Jan

Habitat: Predominantly in cushion heath - coastal; dwarf shrub heath; maritime cliff and slope; *Festuca magellanica* grassland where it can be the dominant/ co-dominant species (coastal and upland); also occurs in acid grassland; *Blechnum penna-marina* fern beds; bare ground; coastal (saline) grassland; montane; coastal feldmark; inland rock (outcrop, scree, stone run); marshy grassland; neutral grassland; strandline vegetation; Tussac; coastland rock; rarely in *Fachine* scrub; sand dunes; standing water (margin, small pond); running water

Citation: Upton R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

(stream); introduced vegetation (New Island) and built up areas and gardens; 0-705 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina, Chile, Falkland Islands

Festuca pratensis Huds.

Flora Anglica 37. 1762.

Local name: Meadow Fescue

Description: Loosely tufted short-lived perennial grass, without rhizomes; erect/ spreading flowering stems to 100 cm.

Phenology: Jan

Habitat: Maritime cliff & slope; 0-15 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley), Saunders Island and Pebble Island.

Distribution: A Eurosiberian Boreo-temperate species that is extensively naturalised in the Northern Hemisphere in other Boreo-temperate areas.

Naturalisation Notes: Status unknown; Not cultivated

Nomenclature Notes: As *Schedonorus pratensis* in Stace (2010), but as *Festuca* in The Plant List (2010) and Cope & Gray (2009). Suggest use *Festuca*. (R. Lewis 2012)

Festuca rubra L.

Sp. Pl. 1: 74 (1753)

Local name: Red Fescue

Description: Perennial grass with rhizomes; erect/ ascending flowering stems up to 34 cm.

Phenology: Nov, Dec, Jan

Habitat: Predominantly found in improved grassland (where it can be the dominant species); built up areas and gardens; also occurs in strandline vegetation; dwarf shrub heath; introduced vegetation; cushion heath - coastal; running water (margin/ bank); marshy grassland - semi-improved; sand dunes; 0-138 m

Status: Introduced; Widely scattered across the Falkland Islands

Distribution: A Circumpolar Wide-boreal species that is extensively naturalised beyond its native range.

Naturalisation Notes: Naturalised; Cultivated pasture & lawn

Notes: Most likely that more than one subspecies is present in the Falkland Islands (R. Upton, 2012)

Hierochloa redolens (Vahl) Roem. & Schult.

Syst. Veg. 2: 514 1817.

Local name: Cinnamon-grass

Description: Perennial grass forming lax clumps with short rhizomes; erect flowering stems 25-120 cm tall.

Phenology: Oct, Nov, Dec, Jan, Feb

Habitat: Neutral grassland where it can form the dominant species; dwarf shrub heath; acid grassland; marshy grassland (including semi-improved); Fachine scrub; *Blechnum penna-marina* fern beds; maritime cliff and slope; also occurs in improved grassland; cushion heath - coastal; running water (bank, stream); sand dunes; inland rock (outcrop, cliff, stone run, other); Tussac; bogs; strandline vegetation; coastal (saline) grassland; marginal vegetation; bare ground; rarely in built up areas and gardens; introduced vegetation (*Ammophila arenaria* stand); 0-550 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Asia-tropical: Papuaasia. Australasia: Australia and New Zealand. South America: western South America and southern South America. Antarctic: Subantarctic islands.

Nomenclature Notes: The Plant List recognises *Hierochloa redolens* (Vahl) Roem. & Schult. as an accepted name, however Flora del Cono Sur (2009) lists this as a synonym of *Anthoxanthum redolens* (Vahl) P. Royen. We are following The Plant List (R. Upton, 2012).

Holcus lanatus L.

Species Plantarum 2: 1048. 1753.

Local name: Yorkshire Fog

Description: Loosely to densely tufted perennial grass; erect flowering stems 20-75 cm tall.

Phenology: Nov, Dec, Jan, Feb, Mar, Apr

Habitat: Improved grassland where it can form the dominant species; dwarf shrub heath; built up areas and gardens; introduced vegetation; marshy grassland (semi-improved); acid grassland; also occurs in cushion heath; Tussac; Sand dunes; coastal (saline) grassland; strandline vegetation; *Blechnum penna-marina* fern beds;

Citation: Upson R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

maritime cliff and slope; running water; inland rock; scrub; standing water (seasonal pool, pond margin); bare ground; rarely in coniferous woodland; marginal vegetation; coastland (rock/ boulders/ slope); littoral sediments; 0-212 m

Status: Introduced; Frequent; Widespread across the Falkland Islands

Distribution: A European Southern-temperate species that is extensively naturalised beyond its native range.

Naturalisation Notes: Naturalised; Cultivated for pasture

***Hordeum jubatum* L.**

Species Plantarum 1: 85. 1753.

Local name: Foxtail Barley

Description: Short-lived perennial grass; erect/ bent flowering stems up to 65 cm.

Phenology: Jan, Feb, Mar

Habitat: Built up areas and gardens; improved grassland; marshy grassland; 0-9 m

Status: Introduced; Rare; Scattered records from East Falkland and single records from Beaver and Motley Islands.

Distribution: A species of N. America and E. Asia that is extensively naturalised in northern and western Europe.

Naturalisation Notes: Naturalised; Not cultivated

Hordeum murinum* L. subsp. *murinum

Species Plantarum 1: 85. 1753.

Local name: Wall Barley

Description: Annual grass; erect/ bent flowering stems up to 50 cm, long awns up to 30 mm.

Phenology: Dec

Habitat: Built up areas and gardens; < 15 m

Status: Introduced; Very rare; Occurs on East Falkland (Goose Green and Saladero)

Distribution: A Eurosiberian Southern-temperate archaeophyte species that has naturalised extensively beyond this range to become Circumpolar Southern-temperate

Naturalisation Notes: Naturalised; Not cultivated

***Koeleria permollis* Steud.**

Syn. Pl. Glumac. 1: 293. 1854

Synonym(s): *Koeleria bergii* Hieron.

Local name: Berg's Hair-grass

Description: Loosely clumped perennial grass with short rhizomes; erect flowering stems 3-30 cm tall.

Phenology: Jan, Feb

Habitat: Sand dunes; 0-13 m

Status: Native; Very rare; Recorded on East Falkland (Cape Pembroke); an historical record exists for a site south of Kidney Cove (1904)

National Red List Category: CR [D1]

Conservation measures: ID guide

Distribution: Argentina (Buenos Aires, Catamarca, Chubut, Córdoba, Entre Ríos, Jujuy, La Pampa, Mendoza, Neuquen, Río Negro, Santa Cruz, San Juan, San Luis, Tierra del Fuego), Bolivia, Chile (Región VII), Falkland Islands, Uruguay; 0-2000 m

Nomenclature Notes: Moore, 1968 as *Koeleria bergii* Hieron.

***Leymus arenarius* (L.) Hochst.**

Flora 31: 118. 1848

Synonym(s): *Elymus arenarius* L.

Local name: Lyme-grass

Description: Perennial grass with long rhizomes; erect flowering stems 60-200 cm.

Phenology: Dec, Jan, Feb, Mar

Habitat: A coastal species predominantly recorded on sand dunes; maritime cliff and slope; strandline vegetation; introduced vegetation; littoral sediments; rarely in dwarf shrub heath (coastal); Tussac; inland rock; 0-20 m

Status: Introduced; Scarce; Widely scattered across the Falkland Islands.

Distribution: A European Boreo-arctic Montane species that has become widely naturalised in N. America and E. Asia.

Naturalisation Notes: Naturalised; Not cultivated

Notes: Flora Patagonica (1978): (syn. *Elymus arenarius*) 'En las islas Malvinas se cultiva con éxito aprox. desde 1923, en mezcla con *Ammophila arenaria*.' = Successfully grown in the Falkland Islands since approx. 1923, in a mixture with *Ammophila arenaria* (R. Lewis 24.10.2012)

Nomenclature Notes: Moore, 1968 as *Elymus arenarius*

***Lolium perenne* L.**

Species Plantarum 1: 83. 1753.

Local name: Perennial Rye-grass

Description: A loosely to densely tufted perennial grass without rhizomes; erect/ spreading flowering stems 10-60 cm tall.

Phenology: Dec, Jan, Feb

Habitat: Predominantly in built up areas and gardens; improved grassland; also occurs in strandline vegetation; 0-60 m

Status: Introduced; Rare; Widely scattered across the Falkland Islands.

Distribution: A European Southern-temperate species that has naturalised extensively beyond its native range.

Naturalisation Notes: Naturalised; Cultivated pasture & lawn

***Phalaris arundinacea* L. var. *picta* L.**

Species Plantarum 1: 55. 1753.

Local name: Gardeners-garters

Description: Perennial grass with long rhizomes; erect flowering stem to 150 cm.

Phenology: Jan, Feb

Habitat: Built up areas and gardens; 1-10 m

Status: Introduced; Very rare; Recorded from East Falkland (Stanley)

Distribution: Horticultural origin

Naturalisation Notes: Casual; Cultivated ornamental

Phalaris arundinacea* L. var. *arundinacea

Sp. Pl. 1: 55 (1753)

Local name: Reed Canary-grass

Description: Perennial grass with long rhizomes; erect flowering stem to 150 cm.

Phenology: Jan, Feb

Habitat: Built up areas and gardens; 1-10 m

Status: Introduced; Very rare; Recorded from East Falkland (Stanley)

Distribution: A circumpolar Boreo-temperate species that has naturalised extensively beyond its native range.

Naturalisation Notes: Naturalised; Cultivated for pasture

Notes: This species is sown for agriculture and also naturalised. Distinct from variegated form grown in gardens (var. *picta*), which is also naturalised. (R. Lewis 2012)

***Phleum pratense* L.**

Species Plantarum 1: 59. 1753.

Local name: Timothy

Description: Loosely to densely tufted perennial grass; erect/ bent flowering stem 40-100 cm tall.

Phenology: Nov, Dec, Jan, Feb, Mar

Habitat: Built up areas and gardens; neutral grassland; improved grassland; 0-60 m

Status: Introduced; Rare; Sparsely scattered across the Falkland Islands

Distribution: A Eurosiberian Temperate species that has naturalised extensively so that it is now Circumpolar Temperate.

Naturalisation Notes: Naturalised; Cultivated for pasture

***Poa alopecurus* (Gaud.) Kunth**

Révis. Gramin. 1: 116. 1829

Local name: Bluegrass

Description: Densely tufted dioecious perennial grass; erect flowering stems 10-112 cm tall.

Phenology: Sept, Oct, Nov, Dec, Jan, Feb

Habitat: Acid grassland and coastal (saline) grassland where it can form the dominant/ co-dominant species at ungrazed upland or coastal sites; dwarf shrub heath; cushion heath; also occurs in sand dunes; marshy grassland (coastal); Tussac; *Blechnum penna-marina* fern beds; inland rock (stone run, outcrop, cliff, other); strandline vegetation; maritime cliff and slope; coastal feldmark; montane; coastland rock/ boulders; bare ground; rarely in bogs; standing water (seasonal pool, pond margin); running water (stream bank); Fachine scrub; improved grassland (Beaver, Keppel, Motley and New Islands); introduced vegetation (dominated by *Rumex acetosella* or *Ammophila arenaria*); built up areas and gardens; 0-705 m

Status: Native; Frequent; Widespread across the Falkland Islands.

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina, Chile, Falkland Islands

Nomenclature Notes: Flora Argentina (2012) splits this species into subspecies but notes that further study of the genetic and morphological variation in this species across its range is needed to fully clarify the situation. A starting point for the Falklands would be a comprehensive study of all specimens for this species. According to the key presented in Flora Argentina two subspecies are present in the Falkland Islands - subsp. alopecurus and subsp. fuegiana.

***Poa annua* L.**

Species Plantarum 1: 68. 1753.

Local name: Annual Meadow-grass

Description: Annual or short-lived perennial grass; erect/ ascending/ procumbent flowering stems 6-16 cm.

Phenology: Oct, Nov, Dec, Jan

Habitat: Predominantly found in built up areas and gardens; improved grassland where it can be dominant/ co-dominant; also occurs in strandline vegetation; dwarf shrub heath; bare ground; acid grassland; marshy grassland (semi-improved); introduced vegetation; standing water (seasonal pool/ on bank); sand dunes; running water (seasonal stream, on bank); maritime cliff and slope; littoral sediments; Tussac; coastland rock/ boulders; rarely in Blechnum penna-marina fern beds; cushion heath; inland rock (cliff); coastal (saline) grassland; 0-459 m

Status: Introduced; Frequent; Widely distributed across the Falkland Islands.

Distribution: A Eurosiberian Wide-temperate species that has naturalised extensively beyond this range to become Circumpolar Wide-temperate in its distribution.

Naturalisation Notes: Naturalised; Not cultivated

***Poa flabellata* (Lam.) Raspail**

Ann. Sci. Observ. 2: 86. 1829

Synonym(s): Parodiochloa flabellata

Local name: Tussac/ Tussac-grass

Description: Perennial grass; stems aggregating to form a stool with a crown of leaves, altogether reaching up to 3 m in height.

Phenology: (Sept-), Oct, Nov, Dec

Habitat: A coastal species forming the dominant cover in Tussac; also occurs on maritime rock, shingle, cliff and slope; coastal (saline) grassland; strandline vegetation; dwarf shrub heath (coastal); sand dunes; bare ground (coastal); neutral grassland; cushion heath; inland rock (outcrop, cliff); coastland rock/ boulders; running water (bank); marshy grassland; rarely in *Poa alopecurus*/ *Festuca magellanica* acid grassland; improved grassland (ungrazed sites); introduced vegetation (ungrazed sites); Blechnum penna-marina fern beds; built-up areas and gardens; 0-212 m

Status: Native; Frequent; Widespread across the Falkland Islands, including Beauchene Island

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Antarctica, Argentina (Tierra del Fuego), Chile (Región XII), Falkland Islands, South Georgia and the South Sandwich Islands

***Poa pratensis* L.**

Species Plantarum 1: 67-68. 1753.

Local name: Smooth-stalked Meadow-grass

Description: Loosely to densely tufted perennial grass with rhizomes; erect flowering stems 10-60 cm tall.

Phenology: (Oct-), Nov, Dec, Jan, (-Feb)

Habitat: Predominantly found in improved grassland where it can be the dominant/ co-dominant species; built up areas and gardens; dwarf shrub heath (often concentrated in animal tracks); also occurs in sand dunes; running water; standing water; acid grassland (semi-improved); coastland rock/ boulders; maritime cliff; marshy grassland; introduced vegetation; Tussac; Fachine scrub; cushion heath - coastal; littoral sediments; bare ground; rarely in Blechnum penna-marina fern beds; strandline vegetation; coastal (saline) grassland; inland rock (outcrop, cliff); saltmarsh; 0-300 m

Status: Introduced; Frequent; Widely distributed across the Falkland Islands.

Distribution: A Circumpolar Wide-temperate species

Naturalisation Notes: Naturalised; Cultivated pasture & lawn

***Poa robusta* Steud.**

Syn. Pl. Glumac. 1: 426 1854.

Local name: Shore Meadow-grass

Citation: Upson R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

Description: A perennial grass with stems often rooted at their lower end; erect flowering stems 6-29 cm.

Phenology: Nov, Dec, Jan

Habitat: A coastal species that can form the dominant cover in saltmarsh and also in coastal (saline) grassland; littoral sediments; maritime cliff and slope; coastland rock/ boulders; strandline vegetation; also occurs in coastal feldmark; marshy grassland (coastal); rarely in Tussac; standing water (coastal seasonal pool); coastal cushion heath; dwarf shrub heath (coastal); 0-177 m

Status: Native; Frequent; Widespread across the Falkland Islands.

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Tierra del Fuego), Chile (Región XI, Región XII), Falkland Islands

Nomenclature Notes: Flora del Cono Sur (2009) lists *Poa robusta* as a synonym of *Nicoraepoa robusta* (Steud.) Soreng & L.J. Gillespie; *Poa robusta* Steud. is accepted by The Plant List.

Puccinellia glaucescens (Phil.) Parodi

Notas Mus. La Plata, Bot. 2(11): 14. 1937.

Local name: Glaucous Saltmarsh-grass

Description: Perennial grass often prostrate, stems to 70cm but usually much less.

Habitat: Built up areas and gardens; c. 0 m

Status: Introduced; Very rare; Occurs on East Falkland (Stanley)

Distribution: Native to South America: Argentina (Buenos Aires, Chubut, Distrito Federal, Entre Ríos, La Pampa, Mendoza, Río Negro, Santa Cruz, Santa Fe, San Juan, San Luis, Tierra del Fuego), Chile (Región IV, Región V, Región VIII, Región X, Región XI, Región XII, Región Metropolitana de Santiago), Uruguay (Montevideo)

Naturalisation Notes: Naturalised; Not cultivated

Puccinellia pusilla (Hack.) Parodi

Notas Mus. La Plata, Bot. 2: 15 1937.

Local name: Dwarf Saltmarsh-grass

Description: A tufted perennial grass; erect/ curved flowering stems 2-4(-6) cm tall.

Phenology: (Nov-, Dec-), Jan, Feb

Habitat: Found on coastal or upland sites with low ground cover - maritime cliff; coastal (saline) grassland; coastland rock/ boulders; montane; coastal feldmark; 0-69 m, 601-700 m

Status: Native; Rare; Recorded on East Falkland (Mount Osborne, Port Harriet), Beaver Island and New Island.

National Red List Category: LC

Conservation measures: Action Plan; vouchered DNA sample; ID guide

Distribution: Argentina (south), Chile (south), Falkland Islands

Trisetum spicatum (L.) K.Richt. subsp. *spicatum*

Pl. Eur. 1: 59 (1890)

Description:

Status: Native; Unknown

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Chubut, Córdoba, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región II, Región V, Región VII, Región VIII, Región X, Región XI, Región XII, Región Metropolitana de Santiago), Falkland Islands; in Flora Argentina "Bolivia, Columbia, Ecuador and Peru; Not cultivated

Notes: Species of uncertain status. Single voucher of stunted, old plants from Sea Lion Island was determined as this species (Cope) but further investigation needed (R. Lewis 2012)

Trisetum spicatum (L.) K.Richt. subsp. *phleoides* (d'Urv.) Macloskie

Rep. Princeton Univ. Exp. Patagonia, Botany 8(1,5,1): 206. 1904.

Local name: Spiked Oat-grass

Description: Densely tufted perennial grass; erect flowering stems 5-35 cm tall.

Phenology: Nov, Dec, Jan, Feb

Habitat: Predominantly in dwarf shrub heath; also occurs on maritime cliff and slope; cushion heath - coastal; acid grassland; coastal (saline) grassland; inland rock (outcrop, stone run, cliff); *Blechnum penna-marina* (or *Sticherus cryptocarpa*) fern beds; montane; marshy grassland; bare ground; introduced vegetation (*Rumex acetosella*); rarely in Tussac; neutral grassland; improved grassland; sand dunes; bogs (*Astelia* dominant); standing water (seasonal pool); coastal feldmark; *Fachine* scrub; littoral sediments (sand); sand dunes; 0-585 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Santa Cruz, Tierra del Fuego), Chile (Región XI, Región XII), Falkland Islands

Nomenclature Notes: The Plant List recognises *T. phleoides* (d'Urv.) Kunth as an accepted name however we follow the more recent treatment of this species in Flora Argentina where *T. phleoides* is identified as a synonym of *T. spicatum* (L.) K. Richt. Ssp. *phleoides* (d'Urv.) Macloskie

***Triticum aestivum* L.**

Sp. Pl. 1: 85 (1753)

Local name: Wheat

Description: Annual grass; flowering stems 60-100 cm tall.

Phenology: Unknown

Habitat: Built up areas and gardens; 0-11 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley), Pebble Island and Weddell Island

Distribution: Originated in cultivation; grown worldwide in suitable climates.

Naturalisation Notes: Casual; Probably locally extirpated; All plants controlled (R. Lewis 2013); Not cultivated

***Vulpia bromoides* (L.) S. F. Gray**

Nat. Arr. Brit. Pl. 2: 124. 1821

Local name: Squirreltail Fescue

Description: Annual grass; erect flowering stems 10-25 cm tall

Phenology: Nov, Dec, Jan, Feb

Habitat: Predominantly on maritime slope; coastland rock/ boulders; dwarf shrub heath; improved grassland; littoral sediments (sand); sand dunes; also occurs in introduced vegetation; strandline vegetation; inland rock; 0-300 m

Status: Introduced; Occasional; Widely scattered across the Falkland Islands

Distribution: A Submediterranean-Subatlantic species that has naturalised extensively beyond this range.

Naturalisation Notes: Naturalised; Cultivated for pasture

POLYGONACEAE

***Polygonum aviculare* L.**

Species Plantarum 1: 362-363. 1753.

Local name: Knotgrass

Description: Annual herb to 2 m; procumbent to scrambling stems

Phenology: Jan

Habitat: Built up areas and gardens; 0-6 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley), West Falkland (Fox Bay East), Pebble Island

Distribution: A Circumpolar Wide-temperate species that has naturalised extensively beyond this range

Naturalisation Notes: Naturalised; Not cultivated

***Polygonum maritimum* L.**

Species Plantarum 1: 361. 1753.

Local name: Sea Knotgrass

Description: Perennial herb; creeping stems to 50 cm, woody near base

Phenology: Dec, Jan, Feb

Habitat: A coastal species found predominantly in strandline vegetation; coastland shingle; coastland rock; littoral sediments; maritime cliff; also occurs in sand dunes; rarely in coastal (saline) grassland; 0-6 m (rarely higher)

Status: Native; Occasional; Sparsely scattered across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample

Distribution: Listed as 'Adventicia' in Argentina and Chile by Flora del Conosur (2009) but may be bipolar: Argentina, Chile, Falkland Islands, coasts of Europe

***Rheum x hybridum* Murray**

Nov. Com. Soc. Reg. Sci. Goett. 5: 50. 1774 (1775)

Local name: Rhubarb

Description: Glabrous, rhizomatous perennial herb with mostly basal leaves; flowering stems to 1.5 m

Phenology: Jan

Habitat: Built up areas and gardens; improved grassland; < 15 m

Status: Introduced; Very rare; Recorded on East Falkland (North Arm, Walker Creek)

Distribution: Uncertain origin

Naturalisation Notes: Persisting (Taxa); Cultivated vegetable

***Rumex acetosa* L.**

Sp. Pl. 1: 337 (1753)

Local name: Sorrel

Description: Dioecious, perennial herb with short rhizomes; erect stems to 50(-100) cm

Phenology: Jan

Habitat: Predominantly in moist neutral grassland; also occurs by running water (stream bank); 6-16 m

Status: Introduced; Very rare; Recorded on East Falkland (North Arm) and West Falkland (Port Howard)

Distribution: A Eurosiberian Boreo-temperate species that has naturalised extensively to become Circumpolar Boreo-temperate

Naturalisation Notes: Naturalised; Cultivated herb

Rumex acetosella* L. subsp. *acetosella

Species Plantarum 1: 338. 1753.

Local name: Sheep's Sorrel

Description: Dioecious, perennial herb with some horizontal roots bearing shoots; procumbent to erect stems to 30 cm; leaves acid-tasting

Phenology: Nov, Dec, Jan, Feb

Habitat: Found in most habitats but most commonly recorded in improved grassland; dwarf shrub heath; introduced vegetation; as a primary colonist of bare ground; Tussac; also occurs in built up areas and gardens; acid grassland; neutral grassland; cushion heath - coastal; strandline vegetation; fern beds; marshy grassland; sand dunes; maritime cliff and slope; Fachine scrub; coastland rock/ boulders; coastal (saline) grassland; standing water (seasonal pool/ small pond/ margin); inland rock (cliff/ other/ outcrop); coastland shingle; littoral sediment; running water (margin/ small stream); arable and horticulture; rarely in bogs; 0-600 m

Status: Introduced; Frequent; Widespread across the Falkland Islands; the relative distributions of the subspecies are not known so these data are for both ssp. *acetosella* and ssp. *pyrenaicus*

Distribution: A Eurosiberian Wide-temperate species that has naturalised extensively to become Circumpolar Wide-temperate

Naturalisation Notes: Naturalised; Not cultivated

***Rumex acetosella* L. subsp. *pyrenaicus* (Pourr. ex Lapeyr.) Akeroyd**

Bot. J. Linn. Soc. 106(2): 99. 1991.

Local name: Round-seeded Sheep's Sorrel

Description: Dioecious, perennial herb with some horizontal roots bearing shoots; procumbent to erect stems to 30 cm; leaves acid-tasting

Phenology: Nov, Dec, Jan, Feb

Habitat: Found in most habitats but most commonly recorded in improved grassland; dwarf shrub heath; introduced vegetation; as a primary colonist of bare ground; Tussac; also occurs in built up areas and gardens; acid grassland; neutral grassland; cushion heath - coastal; strandline vegetation; fern beds; marshy grassland; sand dunes; maritime cliff and slope; Fachine scrub; coastland rock/ boulders; coastal (saline) grassland; standing water (seasonal pool/ small pond/ margin); inland rock (cliff/ other/ outcrop); coastland shingle; littoral sediment; running water (margin/ small stream); arable and horticulture; rarely in bogs; 0-600 m

Status: Introduced; Frequent; Widespread across the Falkland Islands; the relative distributions of the subspecies are not known so these data are for both ssp. *acetosella* and ssp. *pyrenaicus*

Distribution: A Eurosiberian Wide-temperate species that has naturalised extensively to become Circumpolar Wide-temperate

Naturalisation Notes: Naturalised; Not cultivated

***Rumex crispus* L.**

Species Plantarum 1: 335. 1753.

Local name: Curled Dock

Description: Perennial herb; erect stems 30-139 cm tall

Phenology: Dec, Jan, Feb

Habitat: Predominantly recorded in marshy grassland; built up areas and gardens (includes roadside verge); coastland shingle; also occurs on maritime cliff and slope; neutral grassland; littoral sediment; coastland rock/ boulders; sand dunes; rarely in Fachine scrub; 0-15 m

Status: Introduced; Scarce; Sparsely scattered across the Falkland Islands; these data are combined records for 'Rumex crispus ssp. *littoreus*' and also those records marked 'Rumex crispus ?*littoreus*'

Distribution: A European Southern-temperate species that has naturalised extensively to become Circumpolar Southern-temperate

Naturalisation Notes: Naturalised; High risk; Some plants controlled (R. Lewis 2013); Not cultivated
Notes: Records marked '?littoreus' need following up as this may signify confusion with the native *Rumex magellanicus*. All records need following up to distinguish *R. crispus*, *R. longifolius*, *R. magellanicus* and possibly *R. crispissimus*.

Rumex longifolius DC.

Fl. Franç. (ed. 3) 6: 368. 1815

Local name: Northern Dock

Description: Perennial herb; erect stems to 80(-120) cm tall

Phenology: Jan

Habitat: Built up areas and gardens (includes roadside verges, ditches); improved grassland; 4-443 m

Status: Introduced; Rare; Recorded on East Falkland (Cape Pembroke, Darwin, Mare Harbour, Mount Kent, Mount Pleasant Complex, North Arm, Stanley)

Distribution: A Eurasian Boreal-montane species that has naturalised extensively beyond this range

Naturalisation Notes: Naturalised; High risk; Some plants controlled (R. Lewis 2013); Not cultivated

Rumex magellanicus Campd.

Symb. Fl. Argent. 87

Local name: Southern Dock

Description: Perennial herb; erect/ semi-erect stems to 50 cm tall

Phenology: Dec, Jan

Habitat: A coastal species found on littoral sediment; coastland shingle; coastland sand; sand dunes; strandline vegetation; 0-6 m

Status: Native; Rare; Sparsely scattered across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Chubut, Mendoza, Neuquen, Santa Cruz, San Juan, Tierra del Fuego), Chile (Región IV, Región VIII, Región XI, Región XII), Falkland Islands

Rumex obtusifolius L.

Species Plantarum 1: 335-336. 1753.

Local name: Broad-leaved Dock

Description: Perennial herb; erect stems to 1(1.2) m tall

Phenology: Dec, Jan

Habitat: Predominantly in built up areas and gardens (includes roadside verges); neutral grassland; improved grassland; also occurs in running water (margin); arable and horticulture; maritime cliff and slope; sand dunes; rarely in acid grassland; dwarf shrub heath; 0-60 m

Status: Introduced; Scarce; Widely scattered across the Falkland Islands

Distribution: A European Temperate species that has naturalised extensively beyond this range

Naturalisation Notes: Naturalised; High risk; Some plants controlled (R. Lewis 2013); Not cultivated

Rumex x propinquus F.Aesch.

Bot. Not. 1840: 22 (1840)

Local name: Hybrid Dock

Description: Perennial herb to 90 cm

Phenology: Jan

Habitat: Built up areas and gardens; associated with disturbance; c. 68 m

Status: Introduced; Very rare; Recorded on East Falkland (Mount Pleasant Complex)

Distribution: Hybrid that arose in C. and N. Europe

Naturalisation Notes: Casual; Possibly locally extirpated; All plants controlled (R. Lewis 2012); Not cultivated

PORTULACACEAE

Calandrinia nitida (Ruiz & Pav.) DC.

Prodr. [A. P. de Candolle] 3: 359. 1828

Local name: Unidentified species

Description: Annual herb to 11 cm tall; prostrate stems

Phenology: Nov

Habitat: Dwarf shrub heath (coastal); strandline vegetation; coastland rock; maritime cliff and slope; 1-24 m

Status: Native; Rare; Found on the Beaver Island, Beef Island, Coffin Island, Grand Jason Island, Hummock Island,

Citation: Upson R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

New Island, Tea Island, Weddell Island

National Red List Category: DD

Conservation measures: Unvouchered DNA sample; MSB seed collection (710)

Distribution: Unknown

Notes: This species requires further taxonomic research; specimens and DNA at RBG Kew for study

Claytonia perfoliata Donn ex Willd.

Sp. Pl. (ed. 4) 1(2): 1186. 1798.

Synonym(s): In Moore (1968) as *Montia perfoliata* (Donn ex Willd.) Howell

Local name: Spring beauty

Description: Annual herb to 30 cm

Phenology: Nov

Habitat: Built up areas and gardens; coastland rock; coastland shingle; maritime cliff and slope; 0-20 m

Status: Introduced; Very rare; Recorded on West Falkland (Chartres, Fox Bay East, Fox Bay West)

Distribution: Native to western N. America

Naturalisation Notes: Naturalised; Not cultivated

POTAMOGETONACEAE

Potamogeton linguatus Hagstr.

Öfvers. Kongl. Vetensk.-Akad. Förh. 58: 259 1901.

Local name: Native Pondweed

Description: Aquatic perennial herb of fresh water; stems up to 20 cm.

Phenology: Nov, Dec, Jan, Feb

Habitat: Running water (freshwater rivers and streams); standing open water (freshwater lakes and ponds); < 15 m

Status: Native; Rare; Found on East Falkland (1 location) West Falkland (widely scattered) and Weddell Island (1 location)

National Red List Category: NT [NT]

Conservation measures: Listed on the Conservation of Wildlife and Nature Ordinance (FIG, 1999); vouchered DNA sample; MSB seed collection (>1000); ID guide

Distribution: Southern South America: Argentina (Chubut, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VIII, Región IX, Región X, Región XI, Región XII), Falkland Islands

PRIMULACEAE

Anagallis alternifolia Cav. var. *densifolia* Hook.f.

Bot. Antarct. Voy. I. (Fl. Antarct.). 2: 337. 1846

Synonym(s): In Moore (1968) as *Anagallis alternifolia* var. *repens*

Local name: Pimpernel

Description: Glabrous perennial herb; creeping stems up to 16 cm long, rooting at nodes

Phenology: Nov, Dec, Jan, Feb

Habitat: Predominantly recorded on moist sandy soil in marshy grassland; dwarf shrub heath; sand dunes; also occurs on maritime cliff and slope; neutral grassland; coastal (saline) grassland; moist acid grassland; standing water (seasonal pool); cushion heath - coastal; running water (bank); littoral sediment; improved grassland; rarely in Fachine scrub; 0-300 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Catamarca, Chubut, La Rioja, Mendoza, Neuquen, Río Negro, Santa Cruz, San Juan, Tierra del Fuego, Tucumán), Chile (Región III, Región V, Región VII, Región IX, Región X, Región XII, Región Metropolitana de Santiago), Falkland Islands; Not known to be cultivated

Primula magellanica Lehm.

Monogr. Primul. 62 1817.

Local name: Dusty Miller

Description: Rosetted perennial herb; flowering stem 4-15(-20) cm tall; farinaceous leaves and flowerhead

Phenology: Oct, Nov, Dec

Citation: Upson R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

Habitat: Predominantly in moist areas of dwarf shrub heath; cushion heath - coastal; coastal (saline) grassland; marshy grassland; sand dunes; also occurs in acid grassland; maritime cliff and slope; inland rock (wet cliff); fern beds; running water (bank); 0-60 m (439-459 m in Hornby Mountains)

Status: Native; Occasional; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Unvouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Chubut, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región IX, Región X, Región XI, Región XII), Falkland Islands

Samolus repens Pers.

Synopsis Plantarum (1805)

Local name: Shore Pimpernel

Description: Glabrous, mat-forming perennial herb often with rhizomes or stolons; creeping stems up to 40 cm in length, rooting at nodes

Phenology: Mar

Habitat: A coastal species, highly tolerant of salt; grows on peat or silt in sheltered saltmarsh habitat below the high tide mark; c. 0 m

Status: Native; Very rare; Currently only known from River Island

National Red List Category: CR [D1]

Conservation measures: Vouchered DNA sample; ID guide

Distribution: Argentina, Australia, Chile, French Polynesia, New Caledonia, New Zealand, Falkland Islands

RANUNCULACEAE

Hamadryas argentea Hook.f.

Flora Antarctica 227 1845.

Local name: Silvery Buttercup

Description: Dioecious perennial herb with short, stout vertical or ascending rhizomes.

Phenology: Oct, Nov, Dec

Habitat: Grows where grazing pressure is low or absent: in undisturbed acid grassland (*Poa alopecurus* often dominant); Fachine scrub; dwarf shrub heath; inland rock (cliff/ outcrop); feldmark - upland; also occurs on maritime cliff and slope; cushion heath - inland; fern beds; *Hierochloa redolens* neutral grassland; running water (bank); 0-615 m

Status: Endemic; Scarce; Widely scattered across the Falkland Islands

IUCN Red List Category: NT

National Red List Category: NT [B1b(iii)]

Conservation measures: Vouchered DNA sample; MSB seed collection (564); ID guide

Distribution: Endemic to the Falkland Islands

Psychrophila appendiculata Bercht. & J.Presl

Prir. Rostlin 1(Ranunc.): 80 1823.

Synonym(s): *Caltha appendiculata* Pers.

Local name: Dwarf Marigold

Description: Rhizomatous perennial herb. Rhizome ascending to erect, up to 8 mm in diameter.

Phenology: Oct, Nov

Habitat: A species of wet habitats: wet areas of dwarf shrub heath; wet acid grassland; bogs; running water (bank); also occurs on wet inland rock; marginal vegetation; flush vegetation; 0-459 m

Status: Native; Occasional; Widely scattered across the Falkland Islands

National Red List Category: LC

Conservation measures: Unvouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Chubut, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VI, Región VII, Región VIII, Región IX, Región X, Región XI, Región XII), Falkland Islands

Psychrophila sagittata Bercht. & J.Presl

Prir. Rostlin 1(Ranunc.): 80 1823.

Synonym(s): *Caltha sagittata* Cav.

Local name: Arrow-leaved Marigold

Description: Rhizomatous perennial herb. Rhizome horizontal to ascending, up to 15(-30) mm in diameter.

Phenology: Sept, Oct, Nov

Habitat: A species of wet habitats: running water (bank/ stream); standing open water (margin); marshy

Citation: Upson R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

grassland; also occurs in moist neutral grassland; marginal vegetation; moist dwarf shrub heath; flush vegetation; 0-44 m (rarely to 610 m - Moore, 1968)

Status: Native; Occasional; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina, Chile and north along the Andes to 31° S latitude, Falkland Islands

***Ranunculus acaulis* DC.**

Regni Vegetabilis Systema Naturale 1 1817

Local name: Skottsberg's Buttercup

Description: Glabrous perennial herb with prostrate usually underground stems up to 20 cm or more, rooting at nodes.

Phenology: Nov, Dec, Jan, Feb

Habitat: A coastal species predominantly found on sand/ sandy peat in strandline vegetation; littoral sediment; also occurs in sand dunes; coastland rock; coastland shingle; maritime cliff and slope; saltmarsh; standing water (bank); rarely in coastal (saline) grassland; Tussac; cushion heath - coastal; marshy grassland (coastal); < 10 m (to 51 m on Weddell Island)

Status: Native; Occasional; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Unvouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Tierra del Fuego), Chile (Región X, Región XI, Región XII), Falkland Islands, New Zealand, Stewart Island, Chatham Island, Auckland Island

***Ranunculus biternatus* Sm.**

Cycl. 29(2): 48. 1815

Local name: Antarctic Buttercup

Description: Glabrous perennial herb with prostrate stems up to 40 cm, rooting at nodes.

Phenology: Nov, Dec, Jan

Habitat: Found in damp places in inland rock (outcrop/ cliff/ other); dwarf shrub heath; running water (bank); acid grassland; marshy grassland; standing water (bank); also occurs in neutral grassland; sand dunes; coastland rock; Fachine scrub; strandline vegetation; Tussac; fern beds; 0-610 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina (Chubut, Santa Cruz, Tierra del Fuego), Chile (Región X, Región XI, Región XII), Falkland Islands, South Georgia, Iles Crozet, Iles de Kerguelen, Ile Amsterdam, Macquarie Island

***Ranunculus hydrophilus* Gaudich. ex Mirb.**

Ann. Sci. Nat. (Paris) 5: 105. 1825.

Local name: Marsh Buttercup

Description: Glabrous perennial herb with prostrate stems up to 10 cm, rooting at most nodes.

Phenology: Dec, Jan

Habitat: Found in wet habitats: standing water (margin); running water (margins of rivers, streams); also occurs in marshy grassland; rarely in Fachine scrub; coastland shingle/ sand; 0-15 m (rarely to 30 m)

Status: Native; Occasional; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (459)

Distribution: Southern South America: Argentina (Chubut, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VIII, Región IX, Región X, Región XI, Región XII), Falkland Islands

***Ranunculus maclovianus* d'Urv.**

Mém. Soc. Linn. Paris 4: 615. 1826

Local name: Falkland Buttercup

Description: White or yellowish hairy perennial herb with erect or ascending stems 0.5-2 cm.

Phenology: Nov, Dec

Habitat: Found in moist places by/ in running water (bank/ stream); standing water (margin/ seasonal pond); acid grassland; neutral grassland; inland rock; dwarf shrub heath; fern beds; Fachine scrub (scattered); 0-447 m

Status: Native; Occasional; Widely scattered across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (335)

Distribution: Southern South America: Argentina (Tierra del Fuego), Chile (Región X, Región XII), Falkland

Islands

Ranunculus pseudotrullifolius Skottsbo.

Kongl. Svenska Vetenskapsakad. Handl. 50(3): 32, f. 6. 1913.

Local name: False Ladle-leaved Buttercup

Description: Glabrous perennial herb with prostrate stems up to 13 cm, rooting at nodes.

Phenology: Nov, Dec, Jan, Feb

Habitat: Found in/ by standing water (seasonal pool/ pond); running water (margin/ stream); also occurs in marshy grassland (*Acaena magellanica* herbfield); 0-15 m (c. 30 m on New Island)

Status: Native; Scarce; Sparsely scattered across the Falkland Islands

National Red List Category: LC

Conservation measures: Unvouchered DNA sample; MSB seed collection (329)

Distribution: Southern South America: Argentina (Santa Cruz, Tierra del Fuego), Chile (Región X, Región XII), Falkland Islands, Iles de Kerguelen

Ranunculus repens L.

Species Plantarum 1: 554. 1753.

Local name: Creeping Buttercup

Description: Glabrous or slightly hairy perennial herb; creeping/ ascending to erect stems up to 60 cm long, rooting at nodes

Phenology: Dec, Jan, Feb, Mar

Habitat: Predominantly found in built up areas and gardens; neutral grassland; improved grassland; marshy grassland; running water (bank/ small stream); also occurs in dwarf shrub heath (coastal); 0-60 m

Status: Introduced; Rare; Sparsely scattered across East Falkland, West Falkland and Saunders Island

Distribution: A Eurasian Boreo-temperate species that has naturalised so extensively in N. America that it is now Circumpolar Boreo-temperate

Naturalisation Notes: Naturalised; Not cultivated

Ranunculus sceleratus L.

Sp. Pl. 1: 551. 1753

Local name: Celery-leaved Buttercup

Description: Erect annual herb to 60 cm.

Phenology: Dec, Jan, Feb, Mar

Habitat: Built up areas and gardens; 4-15 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley)

Distribution: A Circumpolar Boreo-temperate species that has naturalised extensively beyond this range

Naturalisation Notes: Naturalised; Possibly locally extirpated; Factsheet; All plants controlled (R. Lewis 2013); Not cultivated

Ranunculus sericocephalus Hook. f.

Bot. Antarct. Voy. I. (Fl. Antarct.). 2: 225. 1845

Local name: Silky Buttercup

Description: Densely hairy perennial herb with erect or ascending stems 0.5-2 cm.

Phenology: Nov, Dec, Jan

Habitat: Predominantly found in sheltered places on inland rock (outcrop/ cliff/ other); also occurs in *Blechnum penna-marina* fern beds; dwarf shrub heath (coastal); on gravel in feldmark - inland; maritime cliff and slope; rarely on pebbles/ gravel near standing water; *Poa alopecurus* acid grassland; neutral grassland; 0-610 m

Status: Native; Occasional; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (327)

Distribution: Southern South America: Argentina (Tierra del Fuego), Chile (Región XII), Falkland Islands

Ranunculus trullifolius Hook.f.

Bot. Antarct. Voy. I. (Fl. Antarct.). 2: 226. 1845

Local name: Ladle-leaved Buttercup

Description: Glabrous perennial herb with prostrate stems, rooting at nodes.

Phenology: Dec, Jan, Feb, Mar

Habitat: Found predominantly in/ by running water (small stream/ stream/ stream margin/ river bank); standing water (seasonal pool/ margin of pond); marshy grassland; also occurs in moist acid grassland; *Fachine* scrub; marginal vegetation; 0-305 m

Status: Native; Occasional; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Chubut, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región IV, Región IX, Región X, Región XI, Región XII), Falkland Islands

ROSACEAE

Acaena antarctica Hook.f.

Bot. Antarct. Voy. I. (Fl. Antarct.). 2: 269 (1846)

Synonym(s): In Moore (1968) as *Acaena microcephala* Schltld

Local name: Antarctic Prickly-burr

Description: Perennial herb with stems up to 15 cm, prostrate, rooting at nodes. Peduncles 5-20 mm.

Phenology: Nov, Dec, Jan

Habitat: Found inland on wet peat/ gravel/ sand by running water (stream bank); inland rock (wet cliff/ other); feldmark - inland; rarely in acid grassland; 244-675 m

Status: Native; Very rare; East Falkland (Mount Osborne) and West Falkland (Hornby Mountains, Hill Cove Mountains)

National Red List Category: VU [B1ab(iii,v) + D1]

Conservation measures: Action Plan; vouchered DNA sample; MSB seed collection (63); ID guide

Distribution: Southern South America: Argentina (Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región IX, Región X, Región XI, Región XII), Falkland Islands

Acaena lucida Vahl

Enum. Pl. 1: 296. 1804.

Local name: Native Yarrow

Description: Perennial herb; prostrate/ ascending stems up to 20 cm, rooting at nodes; flowering stems 1.5-10 cm

Phenology: Nov, Dec, Jan, Feb

Habitat: Predominantly coastal on sandy soil in dwarf shrub heath; also occurs on sand in marshy grassland (coastal); cushion heath - coastal; strandline vegetation; maritime cliff and slope; sand dunes; coastal (saline) grassland; coastland shingle; littoral sediment (sand beach); rarely by standing water (seasonal pool/ margin of lake); on inland rock (outcrop); Tussac; 0-126 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Santa Cruz, Tierra del Fuego), Chile (Región XII), Falkland Islands

Acaena magellanica (Lam.) Vahl

Enum. Pl. 1: 297. 1804.

Local name: Prickly-burr

Description: Perennial herb; prostrate/ ascending stems up to 40 cm or more, rooting at nodes; flowering stems 7-14 cm.

Phenology: Nov, Dec, Jan

Habitat: Shows a preference for damper sites; predominantly found in marshy grassland (can form *Acaena* herbfield where grazing pressure is low); dwarf shrub heath; Fachine scrub; standing water (margin/ seasonal pool/ small pond); also occurs in acid grassland; neutral grassland; cushion heath - coastal; Tussac; coastal (saline) grassland; strandline vegetation; sand dunes; running water (margin); maritime cliff and slope; 0-215 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Catamarca, Chubut, La Rioja, Mendoza, Neuquen, Río Negro, Salta, Santa Cruz, San Juan, Tierra del Fuego), Chile (Región I, Región II, Región III, Región IV, Región V, Región VII, Región VIII, Región IX, Región X, Región XI, Región XII, Región Metropolitana de Santiago), Falkland Islands; Sub-Antarctic: South Georgia, Iles de Kerguelen

Acaena ovalifolia Ruiz & Pav.

Fl. Peruv. 1: 67, pl. 103 67 1798.

Local name: Oval-leaved Prickly-burr

Description: Perennial herb; prostrate/ ascending stems up to 80 cm, rooting at lower nodes; flowering stems 3-8 cm

Phenology: Dec

Habitat: Damp areas; improved grassland alongside stream/ ditch; inland rock; dwarf shrub heath; 0-30 m (rarely to 305 m)

Status: Native; Scarce; Sparsely scattered across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Buenos Aires, Catamarca, Chubut, Jujuy, Neuquen, Río Negro, Salta, Santa Cruz, Tierra del Fuego, Tucumán), Chile (Región VII, Región IX, Archipiélago Juan Fernández), Falkland Islands

Acaena pumila Vahl

Enum. Pl. [Vahl] i. 298. (1804)

Local name: Dwarf Prickly-burr

Description: Perennial herb; prostrate stems 2-5 cm, rooting at nodes; flowering stems 2-5 mm tall

Phenology: Nov, Dec, Jan

Habitat: Predominantly found in wet areas: in bogs (*Astelia* mats); acid grassland; inland rock; standing water (margin of shallow pond); dwarf shrub heath; 0-640 m

Status: Native; Rare; Sparsely scattered across the Falkland Islands: recorded on East Falkland, West Falkland, Saunders Island and Motley Island

National Red List Category: LC

Conservation measures: Unvouchered DNA sample; MSB seed collection (163)

Distribution: Southern South America: Argentina (Tierra del Fuego), Chile (Región X, Región XI, Región XII), Falkland Islands

Aphanes arvensis L.

Species Plantarum 1: 123. 1753.

Local name: Parsley-piert

Description: Annual herb; decumbent to almost erect stems to 10(20) cm

Phenology: Unknown

Habitat: Predominantly in built up areas and gardens; also occurs in acid grassland; neutral grassland; improved grassland; rarely in coastland shingle (disturbed); 0-15 m

Status: Introduced; Rare; Recorded on East Falkland (Darwin, Walker Cree, Wreck Point), Weddell Island, Saunders Island, Sedge Island

Distribution: A European Temperate species that has naturalised extensively beyond this range

Naturalisation Notes: Naturalised; Not cultivated

Malus domestica Borkh.

Theor. Prakt. Handb. Forstbot. 2: 1272 (1803)

Local name: Apple

Description: Tree to 5 m; leaves deciduous

Phenology: Nov

Habitat: Built up areas and gardens (includes roadside verge); coniferous woodland (plantation); 1-10 m

Status: Introduced; Rare; Recorded on East Falkland (Stanley, Mount Pleasant Complex), West Falkland (Fox Bay, Hill cove), Weddell Island

Distribution: Hybrid origin from Asian species

Naturalisation Notes: Casual; Cultivated fruit

Potentilla anserina L.

Species Plantarum 1: 495. 1753.

Local name: Silverweed

Description: Perennial herb with long, creeping stolons bearing leaf rosettes at their tips; erect flowering stems to 25 cm

Phenology: Dec, Jan, Feb, Mar

Habitat: Predominantly on sand/ sandy peat in sand dunes (dune slacks); standing water (margin); littoral sediment; marshy grassland; neutral grassland; 0-10 m

Status: Introduced; Very rare; Recorded on East Falkland (North Arm)

Distribution: A Circumpolar Boreo-temperate species that has naturalised extensively beyond this range

Naturalisation Notes: Naturalised; Not cultivated

***Prunus domestica* L.**

Sp. Pl. 1: 475 (1753)

Local name: Plum

Description: Tree to 2 m; leaves deciduous

Phenology: Unknown

Habitat: Built up areas and gardens; 21-73 m

Status: Introduced; Very rare; Recorded on West Falkland (Port Howard) and Keppel Island

Distribution: Probably derived from hybrids in the Caucasus but modified extensively in cultivation

Naturalisation Notes: Casual; Cultivated fruit

Notes: Flowering/ fruiting has not been observed in wild plants, so identity cannot be confirmed. (R. Lewis 2012)

***Rosa canina* L.**

Sp. Pl. 1: 492 (1753)

Local name: Dog-rose

Description: Glabrous to hairy shrub with spiny, upright, arching stems to 3 m

Phenology: Unknown

Habitat: Built up areas and gardens; coniferous woodland (plantation); 2-18 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley) and West Falkland (Hill Cove)

Distribution: A European Temperate species that has naturalised extensively beyond this range

Naturalisation Notes: Casual; Possibly locally extirpated; High risk (R. Lewis 2013); Cultivated ornamental

***Rosa rubiginosa* L.**

Mant. Pl. Altera 564 (1771)

Local name: Sweet-briar

Description: Hairy shrub with spiny, erect stems to 2 m

Phenology: Unknown

Habitat: Built up areas and gardens (includes *Ulex europaeus* hedge); coniferous woodland (plantation - near edge); running water (stream bank); maritime slope; 1-20 m

Status: Introduced; Very rare; Recorded on East Falkland (Walker Creek), West Falkland (Hill Cove) and Keppel Island

Distribution: A European Temperate species that has naturalised extensively beyond this range

Naturalisation Notes: Naturalised; Some plants controlled (R. Lewis 2013); Cultivated ornamental

***Rosa rugosa* Thunb.**

Syst. Veg. (ed. 14) 473. 1784

Local name: Japanese Rose

Description: Deciduous, suckering shrub; spiny stems erect to 1.5(2.5) m

Phenology: Feb

Habitat: Built up areas and gardens; maritime cliff and slope; coniferous woodland (plantation - near edge); acid grassland (in cemetery); 1-24 m

Status: Introduced; Very rare; Recorded on East Falkland (Darwin), West Falkland (Hill Cove, Port Stephens) and Pebble Island

Distribution: Native to E. Asia but extensively naturalised in N. and C. Europe

Naturalisation Notes: Naturalised; High risk (R. Lewis 2013); Cultivated ornamental

***Rubus geoides* Sm.**

Pl. Icon. Ined. 1: 19. 1789.

Local name: Falkland Strawberry

Description: Perennial herb with slender, creeping, somewhat woody stems 7-72 cm, rooting at several nodes.

Phenology: Nov, Dec

Habitat: Moist places, predominantly in dwarf shrub heath; inland rock (outcrop/ stone run/ cliff); *Blechnum penna-marina* fern beds; acid grassland; Tussac; also occurs in neutral grassland; Fachine scrub; coastal cushion heath; maritime cliff and slope; 0-546 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Unvouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VIII, Región IX, Región X, Región XI, Región XII, Archipiélago Juan Fernández), Falkland Islands

***Rubus idaeus* L.**

Sp. Pl. 1: 492. 1753

Local name: Raspberry

Description: Spiny biennial shrub; erect, woody stems to 30(-150) cm

Phenology: Dec, Jan

Habitat: Built up areas and gardens; 0-20 m

Status: Introduced; Rare; Sparsely scattered across the Falkland Islands

Distribution: A Circumpolar Boreo-temperate species that has naturalised extensively beyond this range

Naturalisation Notes: Naturalised; Cultivated fruit

***Sorbus aria* (L.) Crantz**

Stirp. Austr. Fasc. 2:46 (1763)

Local name: Whitebeam

Description: Tree to 3(-15) m tall; deciduous leaves

Phenology: Unknown

Habitat: Built up areas and gardens; mixed woodland (plantation); 12-29 m

Status: Introduced; Very rare; Recorded on East Falkland (Port Sussex), West Falkland (Port Stephens) and Keppel Island

Distribution: Native to Europe

Naturalisation Notes: Persisting (Taxa); Cultivated ornamental

***Sorbus aucuparia* L.**

Sp. Pl. 1: 477. 1753

Local name: Rowan

Description: Tree to 18 m tall; deciduous leaves

Phenology: Nov, Dec

Habitat: Built up areas and gardens (includes hedgerows); coniferous woodland (plantation); 2-38 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley, Goose Green, Fitzroy) and West Falkland (Hill Cove)

Distribution: A Eurasian Boreo-temperate species

Naturalisation Notes: Casual & Persisting (Taxa); High risk (R. Lewis 2013); Cultivated ornamental

RUBIACEAE

***Galium antarcticum* Hook.f.**

Fl. Antarct. 2: 303 (bis). 1846.

Local name: Antarctic Bedstraw

Description: Perennial herb; creeping stems to 30 cm

Phenology: Dec, Jan, Feb

Habitat: Predominantly found in coastal (saline) grassland; marshy grassland; maritime cliff and slope; dwarf shrub heath; acid grassland; *Blechnum penna-marina* fern beds; improved grassland; neutral grassland; also occurs in *Fachine* scrub; inland rock (outcrop/ cliff); cushion heath - coastal; strandline vegetation; Tussac; running water (stream bank); littoral sediments - saltmarsh; sand dunes; 0-212 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Santa Cruz, Tierra del Fuego), Chile (Región XI, Región XII), Falkland Islands; Sub-Antarctic: South Georgia, Iles Crozet, Iles de Kerguelen

Galium aparine* L. subsp. *aparine

Species Plantarum 1: 108. 1753.

Local name: Cleavers

Description: Annual herb; creeping to scrambling-erect stems to 60 cm, with prickles

Phenology: Dec, Jan

Habitat: Built up areas and gardens; 5-40 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley) and Carcass Island

Distribution: A European Temperate species that has naturalised extensively to become Circumpolar Temperate.

Naturalisation Notes: Naturalised; Possibly locally extirpated; Factsheet; All plants controlled (R. Lewis 2013); Not cultivated

***Galium saxatile* L.**

Species Plantarum 1: 106. 1753.

Local name: Heath Bedstraw

Description: Perennial herb; decumbent to ascending stems to 30 cm

Phenology: Dec, Jan, Feb

Habitat: Found predominantly in improved grassland; neutral grassland; built up areas and gardens; dwarf shrub heath; also occurs in acid grassland; marshy grassland; rarely in Tussac; running water (bank); 0-90 m

Status: Introduced; Scarce; Widely scattered across the Falkland Islands

Distribution: A Suboceanic Temperate species

Naturalisation Notes: Naturalised; Not cultivated

***Nertera granadensis* (Mutis ex L.f.) Druce**

Bot. Soc. Exch. Club Brit. Isles 4: 637 1917.

Synonym(s): *Coprosma granadensis* (Mutis ex L.f.) Heads; in Moore (1983) as *Nertera depressa* Banks & Sol. ex Gaertner

Local name: Beadplant

Description: Glabrous, creeping perennial herb, with prostrate stems up to 50 cm, rooting at nodes, forming low mats

Phenology: Dec, Jan, Feb

Habitat: Found in moist areas of acid grassland; inland rock (outcrop/ stone run/ cliff/ other); dwarf shrub heath; maritime cliff and slope; also occurs by running water (stream bank); neutral grassland; rarely in Tussac; cushion heath - coastal; *Sticherus cryptocarpa* fern beds; bogs; 0-538 m

Status: Native; Frequent; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Unvouchered DNA sample; MSB seed collection (743)

Distribution: Argentina (Chubut, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región IX, Región X, Región XI, Región XII, Archipiélago Juan Fernández), Falkland Islands, Tristan da Cunha (as *N. depressa*), Auckland Islands, Chatham Islands, New Zealand, Australia, New Guinea

RUPPIACEAE

***Ruppia filifolia* (Phil.) Skottsb.**

Kongl. Svenska Vetensk. Acad. Handl. n.s., 56(5): 171 1916.

Local name: Tasselweed

Description: Perennial, submerged aquatic herb of brackish or fresh water; stems up to 40 cm.

Phenology: Nov, Dec, Jan

Habitat: Standing open water (brackish); 0-60 m

Status: Native; Rare; Six sites scattered across East Falkland and West Falkland

National Red List Category: VU [B12ab(iii)]

Conservation measures: Action Plan; vouchered DNA sample; ID guide

Distribution: Argentina, Bolivia, Chile, Falkland Islands

SALICACEAE

***Populus x canescens* Sm.**

Flora Britannica (1804)

Local name: Grey Poplar

Description: Tree up to 46 m tall; deciduous leaves

Phenology: Unknown

Habitat: Built up areas and gardens; coniferous woodland (plantation); < 15 m

Status: Introduced; Rare; Recorded on East Falkland (Stanley, Goose Green, Fitzroy, Salvador), West Falkland (Hill Cove) and Weddell Island

Distribution: A hybrid that occurs naturally from S., C. and E. Europe to C. Asia

Naturalisation Notes: Persisting (Taxa); Moderate risk (R. Lewis 2013); Ornamental & windbreak

Notes: Misrecorded as *P. alba*; misidentified voucher at FINH. *P. alba* not found by recent surveys, *P. x canescens* widespread and in same locations as records for *P. alba* (R. Lewis 2012)

Salix cinerea L.

Sp. Pl. 2: 1021 (1753)

Local name: Grey Willow

Description: Shrub/ small tree to 6(15)m tall

Phenology: Unknown

Habitat: Built up areas and gardens (includes roadside verge); c. 20-35 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley)

Distribution: A Eurosiberian Boreo-temperate species

Naturalisation Notes: Casual; Moderate risk (R. Lewis 2013); Ornamental & windbreak

Salix gmelinii Pall.

Fl. Ross. i. II. 77 (1788)

Local name: Gmelin's Willow

Description: Shrub/ small tree to 8 m tall

Phenology: Unknown

Habitat: Mixed woodland (plantation); c. 20 m

Status: Introduced; Very rare; Recorded on Keppel Island - single tree

Distribution: Native to NE Asia

Naturalisation Notes: Persisting (Taxa); Moderate risk (R. Lewis 2013); Ornamental & windbreak

Nomenclature Notes: Listed as Synonym in The Plant List (2010), but restored as species in Belyaeva & Sennikov (2008) Typification of Pallas' names in Salix, Kew Bull. (63) 277–287 (R. Lewis 2012)

Salix viminalis L.

Sp. Pl. 2: 1021 (1753)

Local name: Osier

Description: Shrub/ small tree 1.5-3 m tall

Phenology: Unknown

Habitat: Built up areas and gardens; mixed woodland (plantation); 11-20 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley) and Keppel Island

Distribution: Native to Europe and W. Asia

Naturalisation Notes: Persisting (Taxa); Moderate risk (R. Lewis 2013); Ornamental & windbreak

Salix x rubra Huds.

Fl. Angl. (Hudson) 364 (1762)

Local name: Green-leaved Willow

Description: Shrub/ small tree to 4 m tall

Phenology: Dec

Habitat: Built up areas and gardens; coniferous woodland (plantation); 1-20 m

Status: Introduced; Recorded on East Falkland (Darwin, Stanley) and West Falkland (Hill Cove)

Distribution: A hybrid that is widespread in Europe

Naturalisation Notes: Persisting (Taxa); Moderate risk (R. Lewis 2013); Ornamental & windbreak

SANTALACEAE

Nanodea muscosa Banks ex C.F. Gaertn.

Suppl. Carp. 251, pl. 225 1807.

Local name: Foxberry

Description: Hemiparasitic perennial herb with reddish erect stems 2-12 cm.

Phenology: Nov, Dec, Jan

Habitat: Predominantly in moist acid grassland; Empetrum dwarf shrub heath; also occurs in inland rock (outcrop/ stone run); Sticherus cryptocarpa/ Blechnum penna-marina fern beds; marshy grassland; by standing water (margin); rarely on wet coastland rock; bogs; Hierochloe-Marsippospermum neutral grassland; 0-705 m

Status: Native; Occasional; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (283)

Distribution: Southern South America: Argentina (Chubut, Santa Cruz, Tierra del Fuego), Chile (Región X, Región XI, Región XII), Falkland Islands

SAXIFRAGACEAE

Saxifraga magellanica Poir.

Encycl. 6: 686. 1805.

Local name: Saxifrage

Description: Densely glandular-hairy rosetted perennial herb forming clumps to 30 cm in diameter; flowering stems up to 5 cm tall

Phenology: Nov, Dec, Jan

Habitat: Maritime cliff - crevice-ledge; 1-10 m

Status: Native; Very rare; One site on East Falkland (Goose Green)

National Red List Category: CR [D1]

Conservation measures: Listed on the Conservation of Wildlife and Nature Ordinance (FIG, 1999); Action Plan; vouchered DNA sample; MSB seed collection (>1000); ID guide

Distribution: Argentina (Chubut, Córdoba, Jujuy, Neuquen, Río Negro, Santa Cruz, San Luis, Tierra del Fuego), Chile (Región VII, Región VIII, Región IX, Región XI, Región XII) and north along the Andes to c. 5° N latitude, Falkland Islands

SCROPHULARIACEAE

Limosella australis R. Br.

Prodr. Fl. Nov. Holland. 443 1810.

Local name: Southern Mudwort

Description: Glabrous rhizomatous herb; 1.5-7.5 mm tall

Phenology: Jan, Feb, Mar

Habitat: Found on wet sand or mud in/ by standing water (seasonal pool/ pond margin/ lake margin/ shallow pond); 0-60 m

Status: Native; Scarce; Widely scattered across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB seed collection (>1000)

Distribution: Argentina, Chile and north along the Andes to latitude 0° (southern Brazil), Falkland Islands, North America, Fernando Po, southern Africa, Madagascar, Iles de Kerguelen, Iles Crozet, Auckland Island, New Zealand, southern and eastern Australia, Tasmania, Europe

SOLANACEAE

Solanum tuberosum L.

Species Plantarum 1: 185. 1753.

Local name: Potato

Description: Slightly hairy perennial herb with rhizomes; erect to decumbent stems to 1 m

Phenology: Unknown

Habitat: Built up areas and gardens; arable and horticulture; also occurs on maritime slope; improved grassland; rarely in acid grassland; 1-11 m

Status: Introduced; Very rare; Sparsely scattered across the Falkland Islands

Distribution: Native to S. America

Naturalisation Notes: Casual; Cultivated vegetable

THYMELAEACEAE

Drapetes muscosus Lam.

J. Hist. Nat. 1: 189 1792.

Local name: Drapetes

Description: Perennial herb forming mats/ cushions up to 15 cm in diameter and 12 cm high; prostrate/ ascending stems; flowering stems up to 15 mm tall

Phenology: Oct, Nov, Dec, Jan

Habitat: Predominantly found in moist places in dwarf shrub heath; also occurs in acid grassland; inland rock (stone run/ cliff/ outcrop); bogs (*Astelia*); cushion heath - inland; 0-705 m

Status: Native; Occasional; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Vouchered DNA sample; MSB - CHECK

Distribution: Southern South America: Argentina (Santa Cruz, Tierra del Fuego), Chile (Región XII), Falkland Islands

URTICACEAE

Urtica urens L.

Species Plantarum 2: 984. 1753.

Local name: Annual Stinging-nettle

Description: Monoecious annual; to 60 cm.

Phenology: Oct, Nov, Dec, Jan, Feb

Habitat: Predominantly in built up areas and gardens; also occurs in Tussac; improved grassland; sand dunes; coastland shingle; strandline vegetation; standing water (margin of small pond); rarely in dwarf shrub heath (near vehicle track); coastal (saline) grassland; neutral grassland; 0-15 m

Status: Introduced; Scarce; Widely scattered across the Falkland Islands

Distribution: A Eurosiberian Southern-temperate archaeophyte species that has naturalised extensively beyond this range to become Circumpolar Southern-temperate

Naturalisation Notes: Naturalised; Not cultivated

VIOLACEAE

Viola arvensis Murray

Prodr. Stirp. Gott. 73. 1770.

Local name: Field Pansy

Description: Annual herb; more or less erect, branched, hairy stem up to 40 cm.

Phenology: Nov, Dec, Jan, Feb

Habitat: Built up areas and gardens; 1-11 m

Status: Introduced; Scarce; Sparsely scattered across the Falkland Islands

Distribution: Native to Europe, W. Asia and N. Africa

Naturalisation Notes: Naturalised; Not cultivated

Viola maculata Cav.

Icon. 6: 20 1800.

Local name: Common Violet

Description: Perennial herb; ascending to erect stems up to 11 cm

Phenology: Nov, Dec, Jan

Habitat: Predominantly on dry, peaty soil, especially near coast in dwarf shrub heath; also occurs on maritime cliff and slope; inland rock (outcrop/ cliff); rarely in open acid grassland; Fachine scrub (scattered); cushion heath - coastal; coastal (saline) grassland; neutral grassland; Blechnum penna-marina fern beds; 0-250 m

Status: Native; Occasional; Widespread across the Falkland Islands

National Red List Category: LC

Conservation measures: Listed on the Conservation of Wildlife and Nature Ordinance (FIG, 1999); vouchered DNA sample; MSB seed collection (>1000)

Distribution: Southern South America: Argentina (Chubut, Neuquen, Río Negro, Santa Cruz, Tierra del Fuego), Chile (Región VI, Región VII, Región VIII, Región IX, Región X, Región XI, Región XII, Región Metropolitana de Santiago), Falkland Islands

Viola magellanica G.Forst.

Commentat. Soc. Regiae Sci. Gott. ix. (1789) 41. t. 8.

Local name: Fuegian Violet

Description: Perennial herb; ascending to erect stems up to 16 cm

Phenology: Nov

Habitat: Sand dune slacks; c. 15 m

Status: Native; Very rare; Only known from Sea Lion Island

National Red List Category: CR [D1]

Conservation measures: Action Plan; unvouchered DNA sample; MSB seed collection (93); ID guide

Distribution: Southern South America: Argentina (Santa Cruz, Tierra del Fuego), Chile (Región X, Región XII),

Falkland Islands

Nomenclature Notes: Govaerts made no comment on this - TPL does not provide a citation and gives author as Poir.; IPNI author and citation used

Viola tricolor L.

Sp. Pl. 2: 935. 1753

Local name: Heartsease/ Wild Pansy

Description: Annual to perennial herb.

Phenology: Jan, Feb

Habitat: Built up areas and gardens; c. 60 m

Status: Introduced; Very rare; Recorded on East Falkland (Mount Pleasant Complex)

Distribution: A European Temperate species that has naturalised extensively beyond this range

Naturalisation Notes: Naturalised; Some plants controlled (R. Lewis 2013); Not cultivated

Viola tridentata Sm.

Cycl. [A. Rees], (London ed.) 37(1): Viola n. 76. 1817 [20 Dec 1817]

Local name: Mountain Violet

Description: Glabrous perennial herb, forming low mats; prostrate or procumbent stems up to 20 cm, rooted at intervals.

Phenology: Nov, Dec, Jan

Habitat: Predominantly in sheltered areas in inland rock (outcrop/ cliff/ other); on mineral substrate in fieldmark - inland; also occurs on moist peaty soils in dwarf shrub heath (inland); rarely in acid grassland; by running water (stream bank); on mineral substrate by standing water (tarn); 15-610 m

Status: Native; Scarce; Sparsely scattered across the Falkland Islands

National Red List Category: LC

Conservation measures: MSB seed collection (429)

Distribution: Southern South America: Argentina (Chubut, Santa Cruz, Tierra del Fuego), Chile (Región X, Región XI, Región XII), Falkland Islands

Viola x wittrockiana Gams ex Koppert

Ill. Fl. Mitt.-Eur. 5(1): 616 (1925)

Local name: Pansy

Description: Annual to perennial herb.

Phenology: Nov, Dec, Jan

Habitat: Built up areas and gardens (includes road verge); acid grassland (disturbed and near habitation); 12-42 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley)

Distribution: Horticultural origin

Naturalisation Notes: Naturalised; Cultivated ornamental

Nomenclature Notes: Unresolved in The Plant List (2010), accepted in Stace 2010 (R Lewis 2012)

XANTHORRHOACEAE

Phormium tenax J.R.Forst. & G.Forst.

Characteres Generum Plantarum (ed. 2) 48, pl. 24. 1776.

Local name: New Zealand Flax

Description: Perennial herb to 4 m; stemless giant rosette of leaves 1-2 m in diameter

Phenology: Unknown

Habitat: Built-up areas and gardens; marginal vegetation; inland rock; < 15 m; 1-51 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley), Sea Lion Island, New Island, Carcass Island, Saunders Island

Distribution: Native to New Zealand and Norfolk Island

Naturalisation Notes: Naturalised; Moderate risk (R. Lewis 2013); Cultivated ornamental

Notes: One large mature plant has been found 4 km from Carcass settlement where it has presumably self-sown. Stanley, on ridge behind racecourse road the plants are derived from nearby planted individuals (Broughton and McAdam, 2002)

TAXA EXCLUDED FROM ATLAS

PROBABLY LOCALLY EXTIRPATED

AMARANTHACEAE

Chenopodium album L.

Sp. Pl. 1: 219 (1753)

Local name: Fat Hen

Description: Erect/ ascending annual herb to 1.5 m

Phenology: Unknown

Habitat: Built up areas and gardens; c. 11 m

Status: Introduced; Very rare; Recorded once on Pebble Island and probably locally extirpated (R. Lewis 2012).

Distribution: A Eurasian Wide-temperate species extensively naturalised in N. America so that its distribution is now Circumpolar Wide-temperate

Naturalisation Notes: Casual; Probably locally extirpated; All plants controlled (R. Lewis 2012); Not cultivated

ASPARAGACEAE

Muscari armeniacum Leichtlin ex Baker

Gard. Chron., n.s., 9: 798. 1878.

Local name: Grape-hyacinth

Description: Bulb geophyte

Phenology: Oct

Habitat: Sand dunes; c. 5 m

Status: Introduced; Very rare

Distribution: SE. Europe to Caucasus

Naturalisation Notes: Casual; Probably locally extirpated (R. Lewis 2012); Cultivated ornamental

Polygonatum x hybridum Brügger

Jahresber. Naturf. Ges. Graubündens 29: 160 (1884-1885 publ. 1886)

Local name: Solomon's-seal

Description:

Status: Introduced

Naturalisation Notes: Casual; Probably locally extirpated; All plants controlled (R. Lewis 2013); Cultivated ornamental

ASTERACEAE

Anthemis arvensis L.

Species Plantarum 2: 894. 1753.

Local name: Corn Chamomile

Description:

Phenology: probably extirpated

Habitat: Built up areas and gardens

Status: Introduced; Very rare

Naturalisation Notes: Status unknown; Probably locally extirpated (R. Lewis 2012); Not cultivated

Anthemis cotula L.

Species Plantarum 2: 894-895. 1753.

Local name: Stinking Chamomile

Description:

Phenology: Dec, Jan, Feb

Habitat: Built up areas and gardens; 0-300 m

Status: Introduced; Very rare

Distribution: The only reliable record is from East Falkland (Teal Inlet settlement) made in 1949; status uncertain due to possible confusion with *Tripleurospermum*.

Naturalisation Notes: Status unknown; Probably locally extirpated (R. Lewis 2012); Not cultivated

***Calendula officinalis* L.**

Species Plantarum 2: 921. 1753.

Local name: Pot Marigold

Description:

Phenology: Dec, Jan, Feb, Mar

Habitat: Built up areas and gardens; < 15 m

Status: Introduced; Very rare

Naturalisation Notes: Status unknown; Probably locally extirpated (R. Lewis 2012); Cultivated ornamental

***Carduus tenuiflorus* Curtis**

Flora Londinensis 2(6,61): pl. 55. 1789.

Local name: Slender Thistle

Description:

Phenology: Dec

Habitat: Built up areas and gardens; 10 m

Status: Introduced; Very rare

Naturalisation Notes: Naturalised; Action Plan; Probably locally extirpated; High risk; All plants controlled (R. Lewis 2013); Not cultivated

***Centaurea cyanus* L.**

Species Plantarum 2: 911. 1753.

Local name: Cornflower

Description:

Habitat: Built up areas and gardens

Status: Introduced

Naturalisation Notes: Status unknown; Probably locally extirpated (R. Lewis 2012); Cultivated ornamental

***Senecio vulgaris* L. subsp. *vulgaris* var. *hibernicus* Syme**

Status: Introduced; East Falkland (Mount Pleasant Complex)

Naturalisation Notes: Casual; Probably locally extirpated (R. Lewis 2013); Not cultivated

Notes: Recorded once as a small population at MPC, though may be under-recorded for the type variety.

Nomenclature Notes: This variety differs in the presence of ray-florets and is likely to have originated through introgression with *S. squalidus*. However, it is unclear whether the variety name is validly published.

***Silybum marianum* (L.) Gaertn.**

Fruct. Sem. Pl. 2: 378. 1791

Local name: Milk Thistle

Description:

Habitat: Built up areas and settlement

Status: Introduced; Very rare

Naturalisation Notes: Status unknown; Probably locally extirpated (R. Lewis 2012); Not cultivated

BERBERIDACEAE

***Berberis ilicifolia* L.f.**

Suppl. Pl. 210 (1782)

Local name: Holly-leaved Barberry

Description:

Status: Introduced

Naturalisation Notes: Persisting (Taxa); Probably locally extirpated; All plants controlled (R. Lewis 2012); Not cultivated

BRASSICACEAE

***Erysimum cheiranthoides* L.**

Species Plantarum 2: 661. 1753

Local name: Treacle Mustard

Description:

Habitat: Built up areas and gardens

Status: Introduced; Very rare; Recorded on East Falkland (Teal Inlet settlement) - last recorded 1914

Naturalisation Notes: Status unknown; Probably locally extirpated (R. Lewis 2012); Not cultivated

***Erysimum cheiri* (L.) Grantz**

Cl. Crucif. Emend. 116. 1769

Local name: Wallflower

Description:

Phenology: Dec

Habitat: Built up areas and gardens; < 15 m

Status: Introduced; Very rare

Naturalisation Notes: Status unknown; Probably locally extirpated (R. Lewis 2012); Cultivated ornamental

***Raphanus sativus* L.**

Species Plantarum 2: 669. 1753

Local name: Radish

Description:

Habitat: Arable and horticulture

Status: Introduced; Very rare; Fitzroy, East Falkland (VC 16) - last recorded 1949.

Naturalisation Notes: Status unknown; Probably locally extirpated (R. Lewis 2012); Cultivated vegetable

***Sinapis alba* L.**

Species Plantarum 2: 668. 1753

Local name: White Mustard

Description:

Habitat: Built up areas and gardens

Status: Introduced; Very rare; East Falkland - last recorded 1904.

Naturalisation Notes: Status unknown; Probably locally extirpated (R. Lewis 2012); Not cultivated

***Sisymbrium officinale* (L.) Scop.**

Fl. Carniol. (ed. 2) 2: 26. 1772

Local name: Hedge Mustard

Description:

Phenology: Nov

Habitat: Built up areas and gardens; < 15 m

Status: Introduced; Very rare

Naturalisation Notes: Status unknown; Probably locally extirpated (R. Lewis 2012); Not cultivated

CAMPANULACEAE

Campanula rotundifolia* L. subsp. *rotundifolia

Species Plantarum 1: 163. 1753.

Local name: Harebell

Description:

Phenology: Feb

Habitat: Built up areas and gardens; < 15 m

Status: Introduced; Very rare

Naturalisation Notes: Status unknown; Probably locally extirpated (R. Lewis 2012); Cultivated ornamental

CARYOPHYLLACEAE

***Agrostemma githago* L.**

Species Plantarum 1: 435. 1753.

Local name: Corn Cockle

Description:

Phenology: Unknown

Habitat: Built up areas and gardens

Status: Introduced; Very rare; Recorded on East Falkland (Stanley) - last recorded 1945.

Citation: Upson R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

Naturalisation Notes: Status unknown; Probably locally extirpated (Broughton & McAdam, 2002; R. Lewis 2012); Cultivated ornamental

***Cerastium tomentosum* L.**

Species Plantarum 1: 440. 1753.

Local name: Snow in Summer

Description:

Status: Introduced

Naturalisation Notes: Casual; Probably locally extirpated (R. Lewis 2012); Cultivated ornamental

***Silene dioica* (L.) Clairv.**

Manuel d'Herborisation en Suisse et en Valais 146. 1811.

Local name: Red Campion

Description: Dioecious short-lived perennial herb; erect flowering stems to 70 cm

Phenology: Dec, Jan, Feb, Mar

Habitat: Built up areas and gardens; 1-5 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley, Darwin), West Falkland (Fox Bay West) and West Point Island

Distribution: Native to European Boreo-temperate regions and C. Asia

Naturalisation Notes: Status unknown; Possibly locally extirpated (R. Lewis 2012); Cultivated ornamental

ERICACEAE

***Erica arborea* L.**

Sp. Pl. 1: 353 (1753)

Local name: Tree Heath

Description:

Status: Introduced

Naturalisation Notes: Casual; Probably locally extirpated; Moderate risk; All plants controlled (R. Lewis 2013); Cultivated ornamental

ESCALLONIACEAE

***Escallonia* sp.**

Local name: Escallonia

Description:

Status: Introduced

Naturalisation Notes: Casual; Probably locally extirpated; All plants controlled (R. Lewis 2012); Cultivated ornamental

EUPHORBIACEAE

***Euphorbia helioscopia* L.**

Species Plantarum 1: 459. 1753.

Local name: Sun Spurge

Description: Monoecious, glabrous annual herb with milky latex; erect stems to 50 cm.

Phenology: Dec

Habitat: Built up areas and gardens; 0-20 m

Status: Introduced; Very rare; Recorded on West Point Island (2009)

Distribution: A Eurasian Southern-temperate archaeophyte species that has naturalised extensively beyond this range to become Circumpolar Southern-temperate

Naturalisation Notes: Casual; Possibly locally extirpated; All plants controlled (R. Lewis 2012); Not cultivated

***Mercurialis annua* L.**

Species Plantarum 2: 1035. 1753.

Local name: Annual Mercury

Description:

Habitat: Built up areas and gardens

Status: Introduced; Very rare; Stanley, East Falkland (VC 47) - last recorded 1949.

Naturalisation Notes: Status unknown; Probably locally extirpated (R. Lewis 2012); Not cultivated

IRIDACEAE

Sisyrinchium californicum (Ker Gawl.) Dryand.

Hortus Kew. 4: 135 (1812)

Local name: Yellow-eyed grass

Description: Short-lived perennial herb to 60 cm; leaves semi-evergreen

Phenology: Nov

Habitat: Arable and horticulture (weed in plant nursery); 10-20 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley)

Distribution: Native to western N. America

Naturalisation Notes: Casual; Probably locally extirpated; All plants controlled (R. Lewis 2012); Not cultivated

LEGUMINOSAE

Trifolium campestre Schreb.

Deutschl. Fl. 1: 16. 1804

Local name: Hop Trefoil

Description:

Habitat: Improved grassland

Status: Introduced; Rookery Bay, East Falkland (VC 47) - last recorded 1944.

Naturalisation Notes: Status unknown; Probably locally extirpated (R. Lewis 2012); Not cultivated

Vicia hirsuta (L.) Gray

A Natural Arrangement of British Plants 2: 614-615. 1821.

Local name: Hairy Tare

Description: Scrambling annual herb; stems to 80 cm.

Phenology: Dec

Habitat: Built up areas and gardens; 0-15 m

Status: Introduced; Recorded on East Falkland (Stanley)

Distribution: Native to European Temperate areas but extensively naturalised beyond this range to become Circumpolar Temperate

Naturalisation Notes: Status unknown; Possibly locally extirpated (R. Lewis 2012); Not cultivated

ONAGRACEAE

Chamerion angustifolium (L.) Holub

Folia Geobotanica et Phytotaxonomica 7(1): 86. 1972.

Local name: Rosebay Willowherb

Description: Perennial herb with rhizomes; erect stems to 1.5 m

Phenology: Jan

Habitat: Built up areas and gardens; moist neutral grassland; 11-31 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley, Cape Pembroke)

Distribution: Native to Circumpolar Boreo-temperate areas

Naturalisation Notes: Naturalised; Factsheet; Possibly locally extirpated; Moderate risk; All plants controlled (R. Lewis 2013); Not cultivated

Epilobium hirsutum L.

Species Plantarum 1: 347-348. 1753.

Local name: Great Willowherb

Description: Hairy perennial herb with rhizomes; erect stems to 1.8 m

Phenology: Jan

Habitat: Built up areas and gardens (includes roadside verge); moist neutral grassland; c. 10 m

Status: Introduced; Recorded on East Falkland (Stanley)

Distribution: Native to Eurasian Southern-temperate areas but extensively naturalised beyond this range

Naturalisation Notes: Naturalised; Factsheet; Possibly locally extirpated; Moderate risk; All plants controlled (R. Lewis 2013); Not cultivated

OXALIDACEAE

Oxalis articulata Savign.

in Lam. Encyc. iv. 686.

Local name: Pink-sorrel

Description: Perennial herb with stem that is a thick rhizome; flowering stems to 35 cm

Phenology: Dec

Habitat: Built up areas and gardens (flytipped rubbish near road); c. 21 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley)

Distribution: Argentina, Brazil, Chile, Uruguay

Naturalisation Notes: Casual; Possibly locally extirpated; High risk; All plants controlled (R. Lewis 2012); Cultivated ornamental

Oxalis corniculata L.

Species Plantarum (1753)

Local name: Procumbent Yellow-sorrel

Description: Perennial bulb geophyte; procumbent, branched stems to 50 cm, rooting at nodes

Phenology: Nov

Habitat: Arable and horticulture; c. 17 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley)

Distribution: Unknown native range; almost cosmopolitan

Naturalisation Notes: Naturalised; Possibly locally extirpated; Factsheet; All plants controlled (R. Lewis 2012); Not cultivated

PAPAVERACEAE

Platystemon californicus Benth.

Trans. Hort. Soc. London, ser. 2, 1(5): 405-406. 1835.

Local name: Cream-cups Poppy

Description: Annual herb

Phenology: Dec, Jan, Feb

Habitat: Built up areas and gardens; < 5 m

Status: Introduced; Very rare; Recorded on Carcass Island

Distribution: Native to western N. America

Naturalisation Notes: Naturalised; Possibly locally extirpated (R. Lewis 2012); Cultivated ornamental

PLANTAGINACEAE

Cymbalaria muralis G.Gaertn., B.Mey. & Scherb.

Fl. Wetterau 2: 397. 1800

Local name: Ivy-leaved Toadflax

Description: Perennial herb with stolons; trailing stems to 60 cm

Phenology: Jan

Habitat: Built up areas and gardens; 1-10 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley)

Distribution: Native to southern-central and southern-eastern Europe but now naturalised throughout most of temperate and southern Europe

Naturalisation Notes: Naturalised; Possibly locally extirpated; All plants controlled (R. Lewis 2012); Not cultivated

POACEAE

Avena fatua L.

Species Plantarum 1: 80. 1753.

Local name: Wild-oat

Description:

Habitat: Built up areas and gardens

Status: Introduced; Very rare; Recorded on West Falkland (Shallow Bay settlement) in 1909-1911.

Naturalisation Notes: Status unknown; Probably locally extirpated (R. Lewis 2012); Not cultivated

Cynosurus echinatus L.

Species Plantarum 1: 72. 1753.

Local name: Rough Dog's-tail

Description: Annual grass; flowering stems up to 70 cm.

Habitat: Built up areas and gardens; arable and horticulture

Status: Introduced; Very rare; Moody Valley, East Falkland and Hill Cove settlement, West Falkland (VC 37, TC 89) - last recorded 1938.

Naturalisation Notes: Casual; Probably locally extirpated; All plants controlled (R. Lewis 2012); Not cultivated

Phalaris canariensis L.

Species Plantarum 1: 54-55. 1753.

Local name: Canary-grass

Description:

Habitat: Built up areas and gardens

Status: Introduced; Very rare; Stanley, East Falkland (VC 47) - last recorded 1967.

Naturalisation Notes: Status unknown; Probably locally extirpated (R. Lewis 2013); Not cultivated

POLYGONACEAE

Persicaria maculosa Gray

Nat. Arr. Brit. Pl. 2: 269. 1821

Synonym(s): Polygonum persicaria L.

Local name: Redshank

Description: Almost glabrous annual herb to 80 cm tall; decumbent to erect stems

Phenology: Feb, Mar

Habitat: Built up areas and gardens; 5-46 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley)

Distribution: A Eurasian Temperate species that has naturalised extensively in N. America

Naturalisation Notes: Casual; Possibly locally extirpated; All plants controlled (R. Lewis 2012); Not cultivated

Rumex hydrolapathum Huds.

Fl. Angl. (Hudson), ed. 2. 1: 154 (Hydrolapatheum) (1778)

Local name: Water Dock

Description: Erect perennial herb to 2 m

Phenology: Jan

Habitat: Built up areas and gardens; 1-10 m

Status: Introduced; Very rare; Recorded on East Falkland (Darwin)

Distribution: A European Temperate species

Naturalisation Notes: Casual; Probably locally extirpated; All plants controlled (R. Lewis 2013); Not cultivated

Notes: 2 plants found and controlled, but flowering not observed. 1 plant brought into cultivation in attempt to trigger flowering for definite determination (R. Lewis 2012).

PORTULACACEAE

Calandrinia menziesii (Hook.) Torr. & A. Gray

Fl. N. Amer. 1(2): 197. 1838.

Local name: Felton's Flower

Description: Annual herb; creeping stems to 35 cm in length

Phenology: Dec, Jan, Feb, Mar, Apr

Habitat: Built up areas and gardens; dwarf shrub heath; < 15 m

Status: Introduced; Very rare; Recorded on West Falkland (Roy Cove - 1911, Hill Cove - 1895), West Point Island and Pebble Island

Distribution: Native to N. America

Naturalisation Notes: Status unknown; Probably locally extirpated (R. Lewis 2012); Cultivated ornamental
Notes: misrecorded as *Calandrinia feltonii*

ROSACEAE

Cotoneaster x suecicus G.Klotz

in Wiss. Beitr.Friedrich-Schiller Univ. Jena, Beitr. Phytotax., 10: 47 (1982) (1982)

Local name: Cotoneaster

Description: Evergreen shrub to 60 cm tall; arching stems to 2 m long

Phenology: Dec, Jan

Habitat: Built up areas and gardens; 1-50 m

Status: Introduced; Very rare; Recorded on East Falkland (Darwin, Stanley)

Distribution: Horticultural origin

Naturalisation Notes: Casual; Probably locally extirpated; All plants controlled (R. Lewis 2012); Cultivated ornamental

Nomenclature Notes: Unresolved in The Plant List (2010), accepted in Stace 2010 (R Lewis 2012)

SAPINDACEAE

Acer pseudoplatanus L.

Species Plantarum. 2: 1054. 1753.

Synonym(s): test

Local name: Sycamore

Description: Deciduous tree to 35 m

Phenology: not known

Habitat: Built up areas and gardens (includes hedgerow); c. 5 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley)

Distribution: Native to the European Temperate region

Naturalisation Notes: Status unknown; Probably locally extirpated (R. Lewis 2012); Cultivated ornamental

Notes: Mature planted trees present in Stanley gardens, but no evidence of regeneration. (R. Lewis 2013)

URTICACEAE

Urtica dioica L.

Species Plantarum 2: 984. 1753.

Local name: Perennial Stinging-nettle

Description: Strongly rhizomatous and/ or stoloniferous usually dioecious perennial; to 1.5 m.

Phenology: Dec, Jan, Feb

Habitat: Built up areas and gardens (includes roadside verge); arable and horticulture; 0-60 m

Status: Introduced; Rare; Sparsely scattered across the Falkland Islands

Distribution: A Eurosiberian Boreo-temperate species that has naturalised extensively beyond this range

Naturalisation Notes: Naturalised; Possibly locally extirpated; Factsheet; All plants controlled (R. Lewis 2012); Not cultivated

TAXA OF UNCERTAIN STATUS

DRYOPTERIDACEAE

Dryopteris filix-mas (L.) Schott

Gen. Fil. [Schott] ad t. 9 (1834)

Local name: Male-fern

Description:

Habitat: Unknown

Status: Introduced; Northern West Falkland - last recorded 1909-1911.

Naturalisation Notes: Unknown; Cultivated ornamental

Notes: Species of uncertain status. No vouchers exist. Records from 1909-11 may be from cultivated material. (R.

Lewis 2012).

PINACEAE

Pinus nigra J. F. Arnold subsp. *nigra*

Reise Mariazell 8, t. s.n. 1785.

Local name: Austrian Pine

Description: Tree; evergreen, needle-like leaves borne in pairs

Habitat: Within shelterbelt tree plantation;

Status: Introduced; Very rare; Recorded on East Falkland (Saladero) and West Falkland (Port Howard, Bold Cove Farm)

Distribution: Native to S. Europe, N. Africa and S.W. Asia.

Naturalisation Notes: Unknown; Windbreak/Forestry

Notes: Species of uncertain status. Reported from literature (Rodrigo Olave, 2007), but no specimens or field observations (R. Lewis 2012)

AMARYLLIDACEAE

Narcissus pseudonarcissus L.

Sp. Pl. 1: 289 (1753)

Local name: Daffodil

Description:

Phenology: Oct, Nov

Status: Introduced; Rare

Naturalisation Notes: Unknown; Unknown

Notes: Species of uncertain status. No voucher material exists. Reported in Broughton and McAdam (2002), but most, possibly all of these records relate to a cultivar of probable hybrid origin (RHS Division 1) with this species as a parent. (R. Lewis 2012)

ASPARAGACEAE

Hyacinthoides non-scripta (L.) Chouard ex Rothm.

Feddes Repert. Spec. Nov. Regni Veg. 53: 14 (1944)

Local name: English Bluebell

Description:

Status: Introduced

Naturalisation Notes: Unknown; Cultivated ornamental

Notes: Species of uncertain status. No voucher material exists. Voucher material at FINH and recent records are *H. x massartiana*, but *H. non-scripta* may be overlooked - dies down early in season. (R. Lewis 2012)

ASTERACEAE

Senecio jacobaea L. subsp. *jacobaea* var. *jacobaea*

Species Plantarum 2: 870. 1753.

Local name: European Ragwort

Description:

Phenology: Mar

Habitat: Greens and neutral grassland; c. 1 m

Status: Introduced; Very rare

Naturalisation Notes: Unknown; Not cultivated

Notes: Species of uncertain status. No voucher material exists and recent surveys have failed to re-find this species. Possibly misidentified for *S. squalidus* which is present in the same area (R. Lewis 2012).

CARYOPHYLLACEAE

Silene latifolia Poir.

Voy. Barbarie 2: 165-166. 1789

Local name: White Campion

Description:

Phenology: Dec

Habitat: Built up areas and gardens; < 5 m

Status: Introduced; Very rare

Naturalisation Notes: Unknown; Cultivated ornamental

Notes: Species of uncertain status. No vouchers exist and not re-found during recent surveys, original record may be from cultivated plants or misidentification (R. Lewis 2012).

Stellaria graminea L.

Species Plantarum 1: 422. 1753.

Local name: Lesser Stitchwort

Description:

Status: Introduced

Distribution: Noted in Broughton's update to ATLAS but no records present

Naturalisation Notes: Unknown; Not cultivated

Notes: Species of uncertain status. Reported in unpublished checklist (Broughton, update to 2002 atlas) but no voucher and possibly a misidentification of *S. alsine* (R. Lewis 2012).

GENTIANACEAE

Centaurium pulchellum (Sw.) Druce

Flora of Berkshire 342. 1897.

Local name: Lesser Centaury

Description:

Phenology: Mar

Habitat: Neutral grassland; c. 1 m

Status: Introduced; Very rare

Naturalisation Notes: Unknown; Not cultivated

Notes: Species of uncertain status. No voucher material exists and recent surveys have failed to re-find this species. Possibly misidentified for *Gentianella magellanica* which is present in the same area (R. Lewis 2012).

LEGUMINOSAE

Glycyrrhiza astragalina Gill.

Bot. Misc. 3: 183 (1833)

Description:

Status: Introduced

Naturalisation Notes: Unknown; Not cultivated

Notes: Species of uncertain status. Only known from Darwin voucher at CGE. Possibly collected in Chile or Argentina. Hooker notes that some Darwin specimens have inaccurate collection locations (R. Lewis 2012).

Ulex gallii Planch.

Ann. Sci. Nat. Bot., sér. 3 11: 213. 1849.

Local name: Western Gorse

Description:

Status: Introduced; Very rare

Naturalisation Notes: Unknown; Cultivated ornamental

Notes: Species of uncertain status. Recorded as part of *U. europaeus* hedges in Stanley, apparently grown from contaminated *U. europaeus* seed from UK. May also be planted/naturalised elsewhere (R. Lewis 2012).

ONAGRACEAE

Epilobium ciliatum Raf.

Med. Repos. 2(5): 361 1808.

Synonym(s): *Epilobium cunninghamii* Hausskn.

Local name: American Willowherb

Description: Hairy perennial herb with rhizomes; erect stems (10-)20-60(-90) cm tall

Phenology: Jan, Feb

Habitat: Marshy grassland; built up areas and gardens (includes roadside verge); running water; marginal vegetation; flush vegetation; rarely in sand dunes; 1-30 m

Status: Native; Rare; Localised populations on East Falkland, West Falkland, Carcass Island and Speedwell Island

National Red List Category: LC

Conservation measures: vouchered DNA sample (R Lewis 2013) MSB (>1000) (R Lewis 2013)

Distribution: Native to Argentina, Chile, Falkland Islands, North America Introduced to Eurasia, Australia and New Zealand

Notes: Should this be listed as species of uncertain status on introduced checklist? (R Lewis 2013). Some populations are in undisturbed locations and may be native, but others are in disturbed sites and may be introduced from the UK or mainland South America. Further taxonomic work is needed (R. Lewis, R. Upson, 2012).

Fuchsia 'Corallina'

Local name: Large-flowered Fuchsia

Description: Deciduous shrub

Phenology: Unknown

Habitat: Built up areas and gardens; < 15 m

Status: Introduced; Very rare; Recorded on East Falkland (Bull Point) and West Falkland (Port Howard)

Distribution: Horticultural origin

Naturalisation Notes: Unknown; Cultivated ornamental

Notes: Species of uncertain status. Reported in Broughton & McAdam (2002), but no voucher exists and possible misidentification of *F. magellanica* (R. Lewis 2012).

POACEAE

Elymus farctus (Viv.) Runemark ex A. Melderis (1978)

Bot. J. Linn. Soc. 76(4): 382. 1978

Synonym(s): *Elytrigia juncea*

Local name: Sand Couch

Description:

Phenology: Dec

Habitat: Sand dunes; c. 0-1 m

Status: Introduced; Very rare; Near Stanley, East Falkland (VC 47).

Naturalisation Notes: Unknown; Not cultivated

Notes: Species of uncertain status. No voucher, recorded once (Broughton 2000) possibly misrecorded for *E. repens* or *E. magellanicus*. (R. Lewis 2012)

Nomenclature Notes: Hubbard 1992: 103 as *Agropyron junceiforme*. Figure p. 102;

Festuca ovina L.

Sp. Pl. 1: 73 (1753)

Local name: Sheep's Fescue

Description: Densely tufted perennial grass without rhizomes; erect/ ascending flowering stems up to 45 cm.

Status: Introduced

Naturalisation Notes: Unknown; Unknown

Notes: Plant of uncertain status. No voucher material and may be misrecorded for *F. filiformis*.

Festuca rubra L. subsp. *commutata* Gaudin

Fl. Helv. 1: 287. 1828

Local name: Red Fescue

Description:

Phenology: Dec, Jan

Citation: Upson R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

Habitat: Improved grassland; built up areas and gardens; greens and neutral grassland; 0-15 m

Status: Introduced; Very rare

Distribution: The relative distributions of the subspecies is not known so these data are for both ssp. rubra and ssp. commutata; Not cultivated

Notes: Species of uncertain status. Recognition of subspecies is contentious and unresolved within this species (or species complex depending on your view) Tom Cope does not recognise ssp. Suggest do not recognise subspecies. (R. Lewis 2012)

Hordeum comosum J. & C. Presl.

Reliq. Haenk. 1(4-5): 327. 1830

Local name: Hairy Barley

Description: Perennial grass; flowering stems 7-45 cm tall.

Phenology: Jan

Habitat: Built up areas and gardens; dwarf shrub heath (coastal); 0-5 m

Status: Introduced; Very rare; Recorded on East Falkland (Stanley, Goose Green), Saunders Island

Distribution: Argentina, Chile, Falkland Islands

Naturalisation Notes: Unknown; Not cultivated

Notes: Species of uncertain status. No voucher exists. Possibly misidentified for *P. pratensis* which is widespread (R. Lewis 2012).

Lolium multiflorum Lam.

Fl. Franç. 3: 621. 1779

Local name: Italian Rye-grass

Description:

Phenology: Jan

Habitat: Dwarf shrub heath (coastal); 0-60 m

Status: Introduced; Very rare

Naturalisation Notes: Unknown; Unknown

Notes: Species of uncertain status. No voucher material exists and recent surveys have failed to find this species. Possibly misidentified for *L. perenne* which is present in the same area (R. Lewis 2012).

Poa trivialis L.

Species Plantarum 1: 67. 1753.

Local name: Rough-stalked Meadow-grass

Description: Tufted perennial grass; ascending flowering stems to 75 cm tall, that root at nodes to form short stolons

Phenology: Jan

Habitat: Maritime cliff and slope; running water (margin); standing water (margin); coastland rock/ boulders; dwarf shrub heath; littoral sediments (sand, shingle); 0-60 m

Status: Introduced; Rare; Recorded (1993) on East Falkland (Port Luis area), Calf Island, Pebble Island and Saunders Island

Distribution: A Eurosiberian Wide-temperate species that has naturalised extensively beyond this range to become Circumpolar Wide-temperate.

Naturalisation Notes: Unknown; Cultivated for pasture?

Notes: Species of uncertain status. Possibly misidentified for *P. pratensis* which is widespread. Only one voucher exists, which is filed as this species but has not been determined. (R. Lewis 2012).

Stipa neaei Nees ex Steud.

Syn. Pl. Glumac. 1(2): 126 (1854)

Description:

Status: Introduced

Naturalisation Notes: Unknown; Not cultivated

Notes: Species of uncertain status. Only known from Darwin voucher at CGE. Possibly collected in Chile or Argentina. Hooker notes that some Darwin specimens have inaccurate collection locations (R. Lewis 2012).

POLYGONACEAE

Rumex hydrolapathum Huds.

Fl. Angl. (Hudson), ed. 2. 1: 154 (Hydrolapatheum) (1778)

Local name: Water Dock

Citation: Upton R and Lewis R. Updated atlas and checklist. Report to Falklands Conservation. 2014; 226 pp.

Description: Erect perennial herb to 2 m

Phenology: Jan

Habitat: Built up areas and gardens; 1-10 m

Status: Introduced; Very rare; Recorded on East Falkland (Darwin)

Distribution: A European Temperate species

Naturalisation Notes: Casual; Probably locally extirpated; All plants controlled (R. Lewis 2013); Not cultivated

Notes: 2 plants found and controlled, but flowering not observed. 1 plant brought into cultivation in attempt to trigger flowering for definite determination (R. Lewis 2012).

SAXIFRAGACEAE

Saxifraga x urbium D.A.Webb

Feddes Repert. Spec. Nov. Regni Veg. 68: 199 (1963)

Local name: London Pride

Description: Perennial, stoloniferous herb; leaves in a basal rosette; flowering stem to 40 cm

Phenology: Unknown

Habitat: Unknown; Unknown

Status: Introduced; Very rare; Recorded on East Falkland (Stanley)

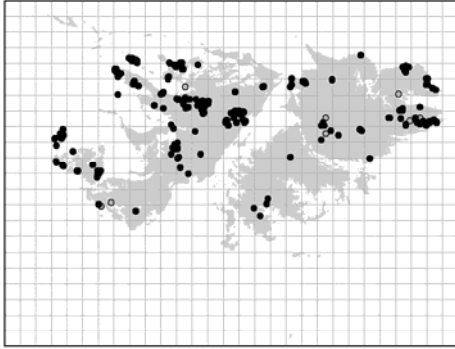
Distribution: Horticultural origin

Naturalisation Notes: Unknown; Cultivated ornamental

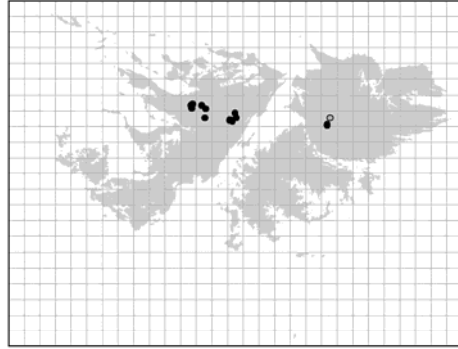
Notes: Species of uncertain status. Photo from Stanley Common appears to be this plant, but location uncertain.

Nomenclature Notes: Unresolved in The Plant List (2010), accepted in Stace 2010 (R. Lewis 2012)

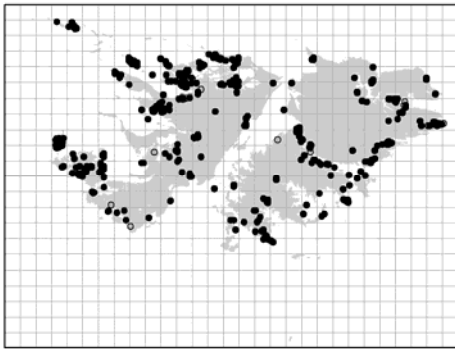
APPENDIX II: Atlas for the Falkland Islands (arranged alphabetically by genus)



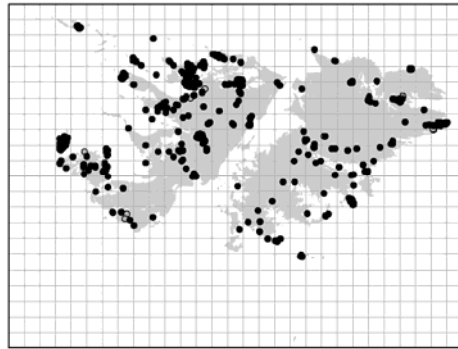
Abrotanella emarginata



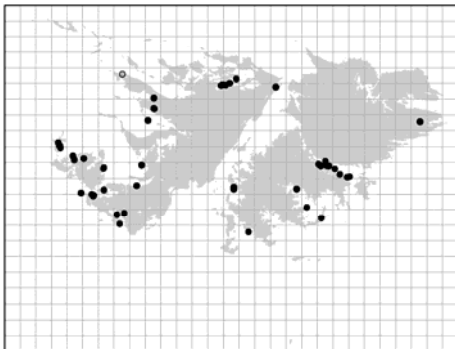
Acaena antarctica



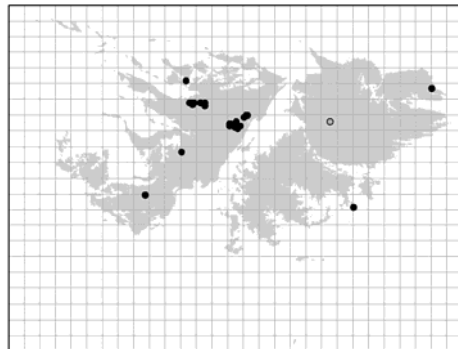
Acaena lucida



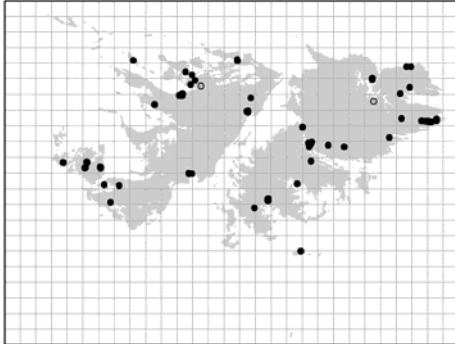
Acaena magellanica



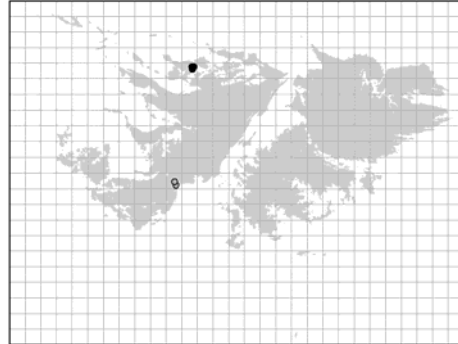
Acaena ovalifolia



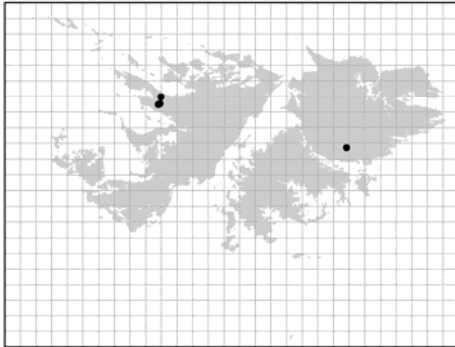
Acaena pumila



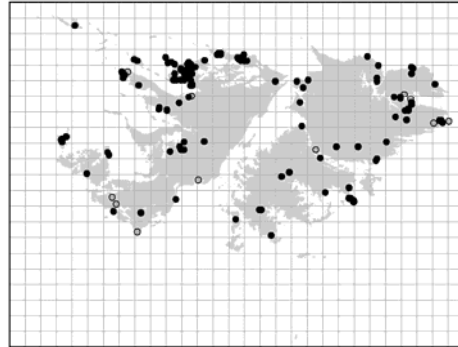
Achillea millefolium subsp. *millefolium*



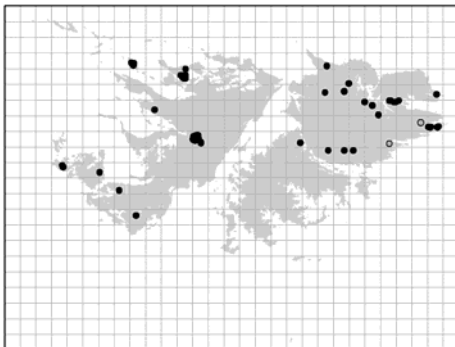
Adiantum chilense



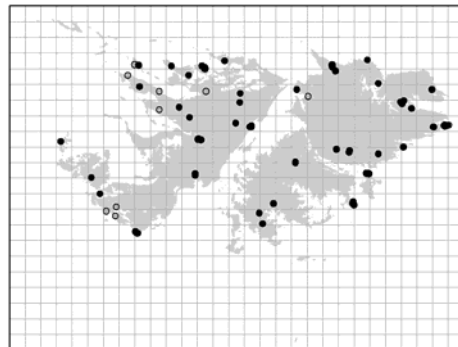
Adoxanthum odoratum



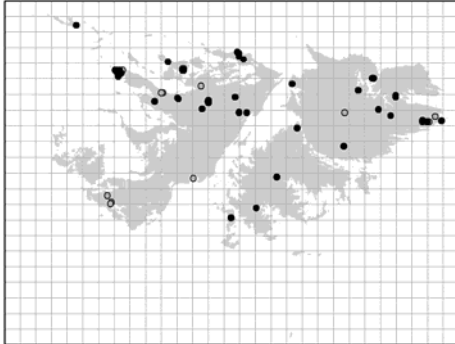
Agoseris coronopifolium



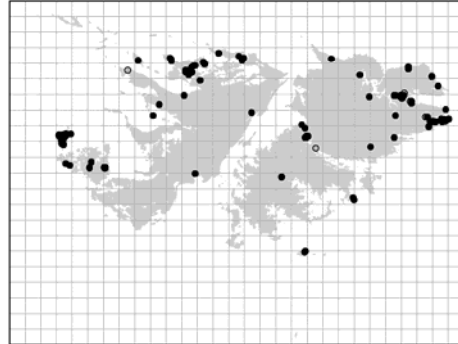
Agrostis capillaris



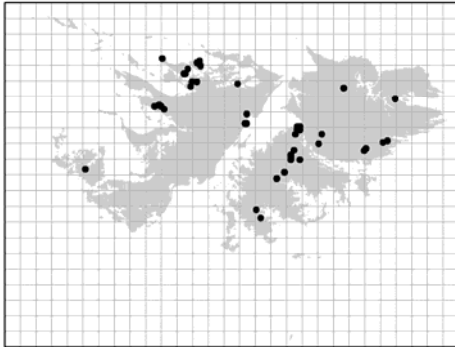
Agrostis magellanica



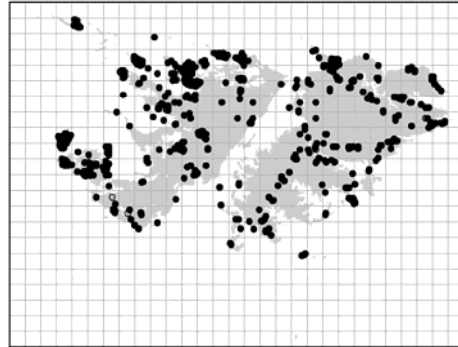
Agrostis meyenii



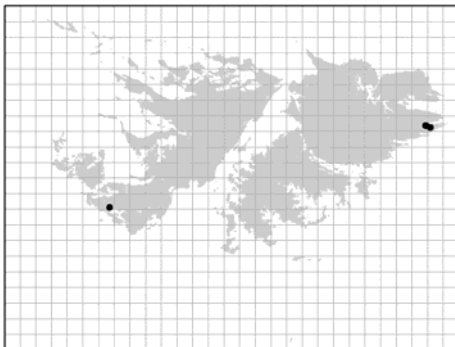
Agrostis stolonifera



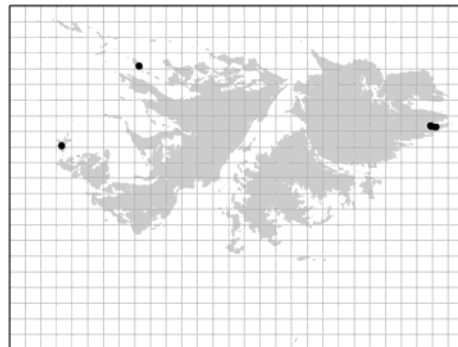
Aira caryophyllea



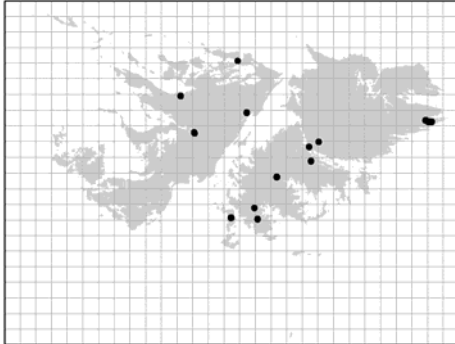
Aira praecox



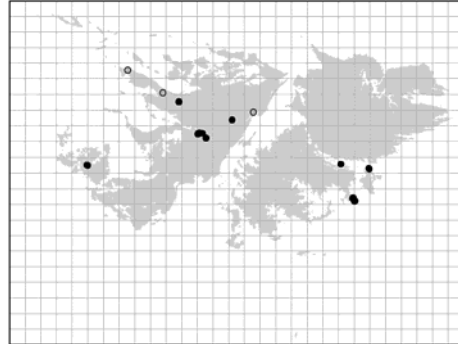
Allium schoenoprasum



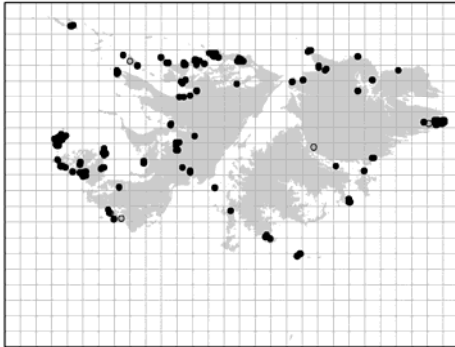
Allium triquetrum



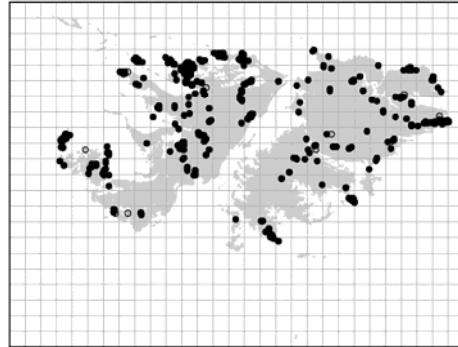
Alopecurus geniculatus



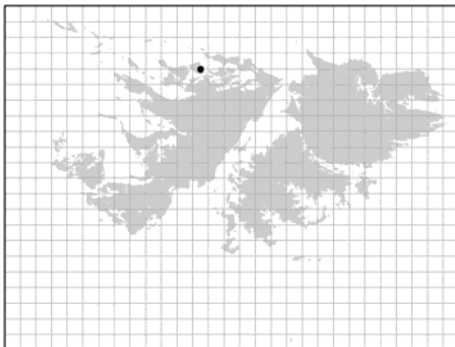
Alopecurus magellanicus



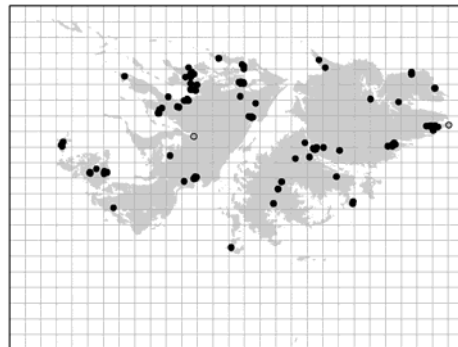
Ammophila arenaria



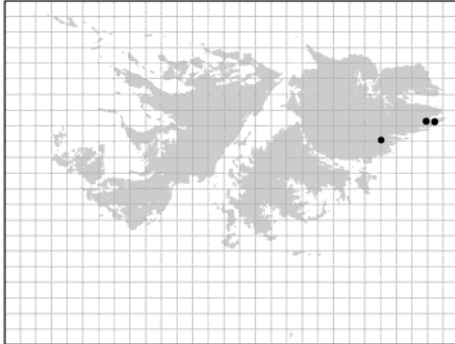
Anagallis alternifolia var. *densifolia*



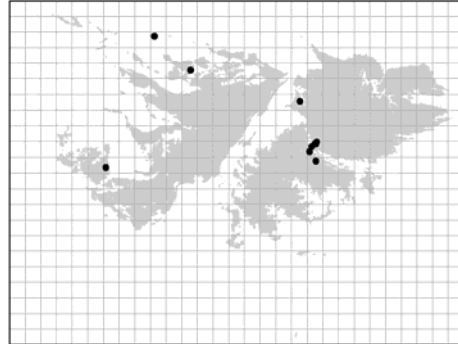
Anthemis punctata subsp. *cupaniana*



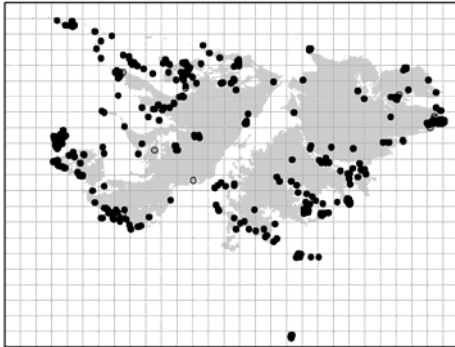
Anthoxanthum odoratum



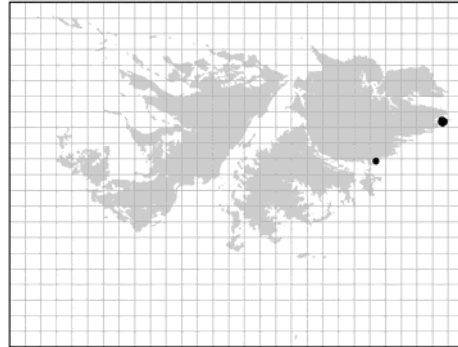
Anthriscus sylvestris



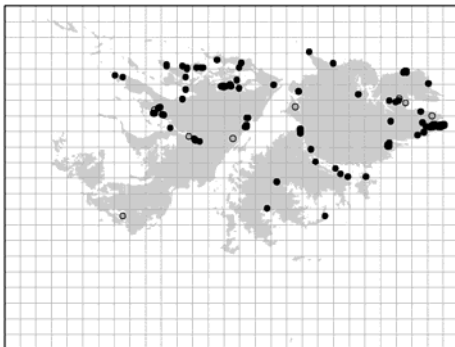
Aphanes arvensis



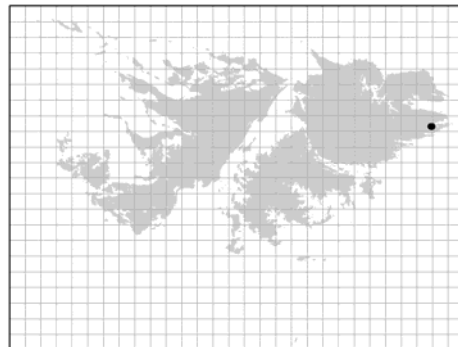
Apium australe



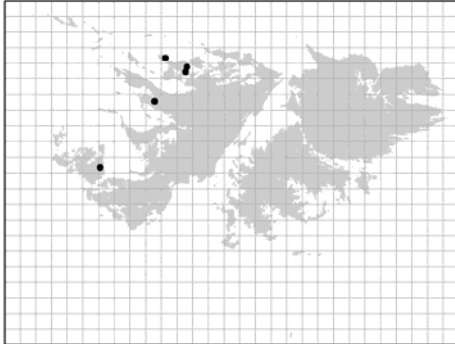
Arachnitis uniflora



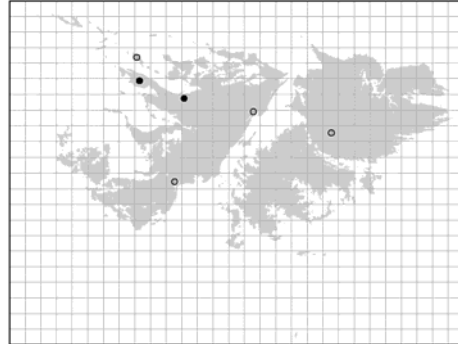
Armeria maritima



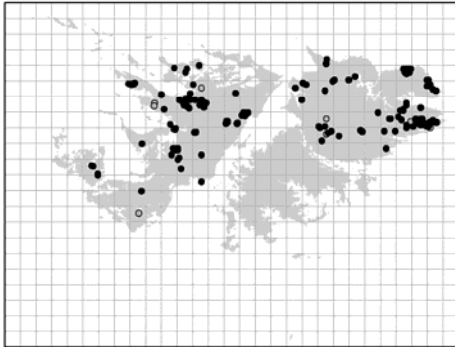
Armoracia rusticana



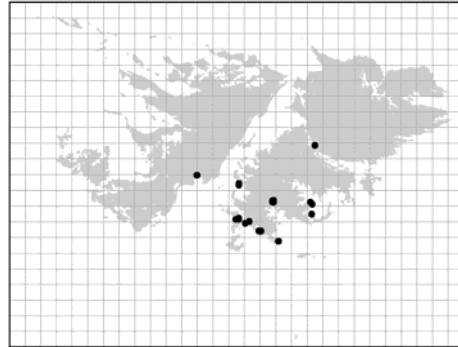
Arrhenatherum elatius



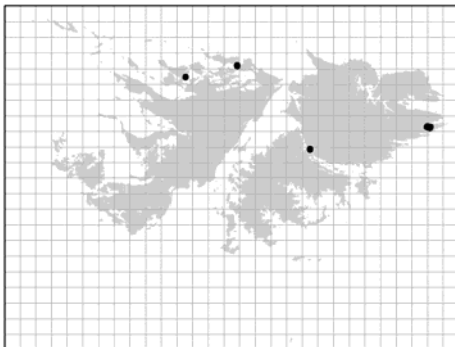
Asplenium dareoides



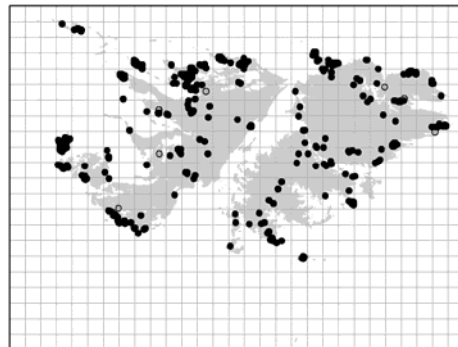
Astelia pumila



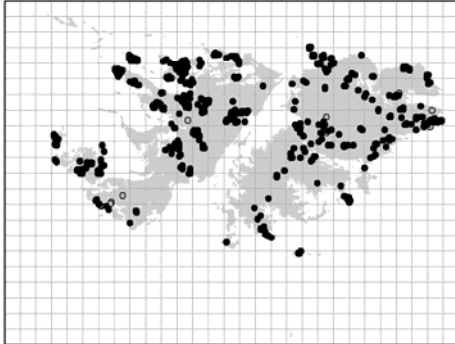
Atriplex patula



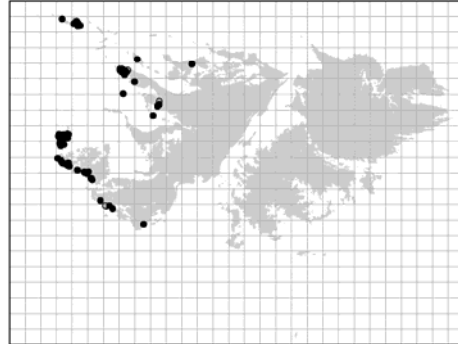
Avena sativa



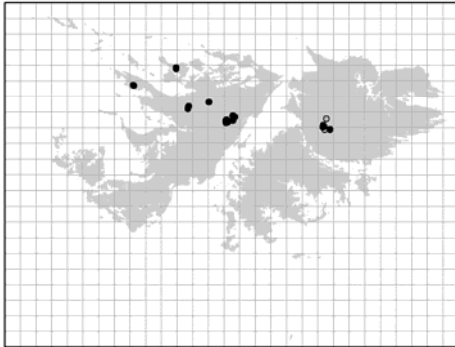
Azorella filamentosa



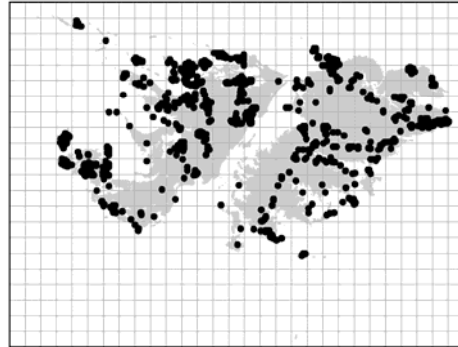
Azorella lycopodioides



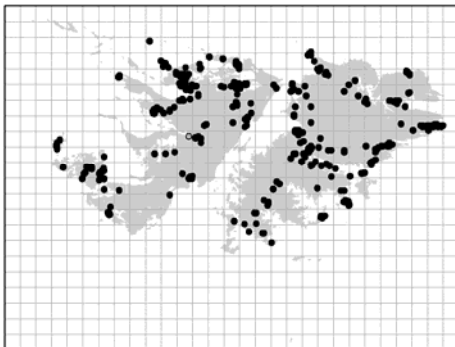
Azorella monantha



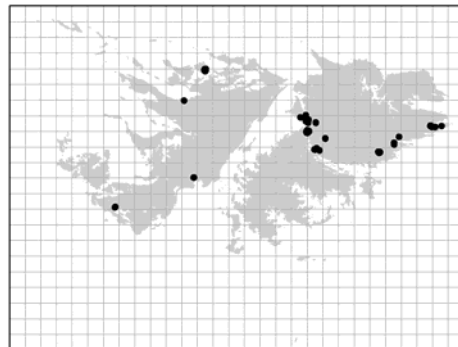
Azorella selago



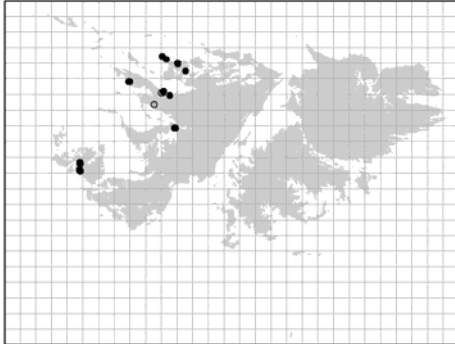
Baccharis magellanica



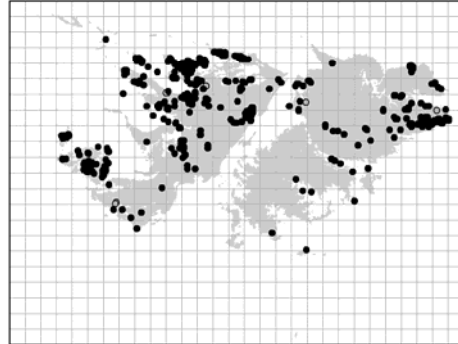
Bellis perennis



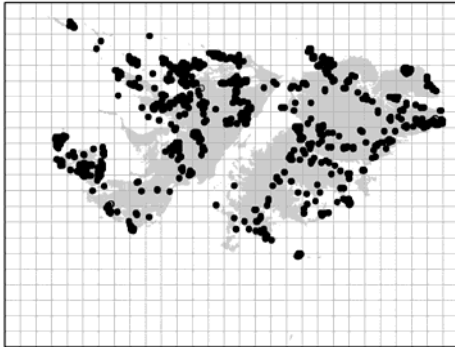
Berberis microphylla



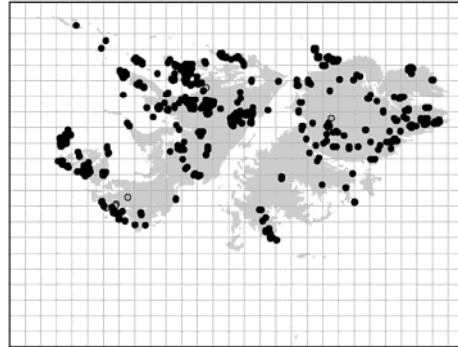
Blechnum cordatum



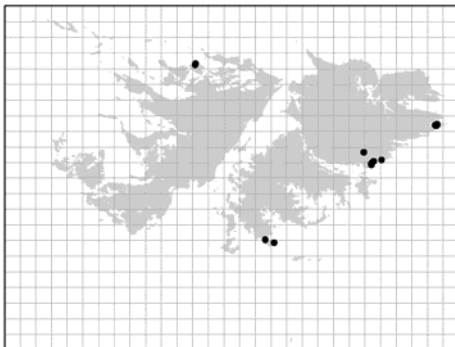
Blechnum magellanicum



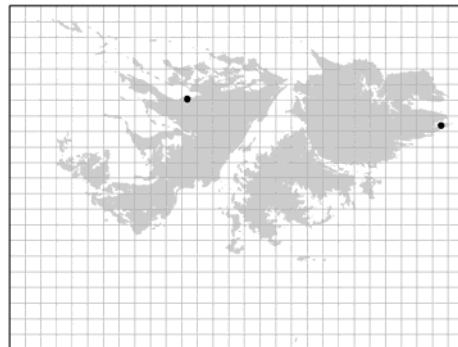
Blechnum penna-marina



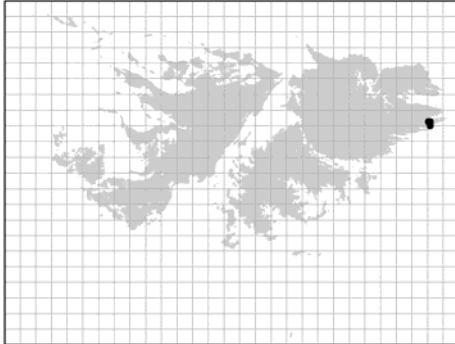
Bolax gummifera



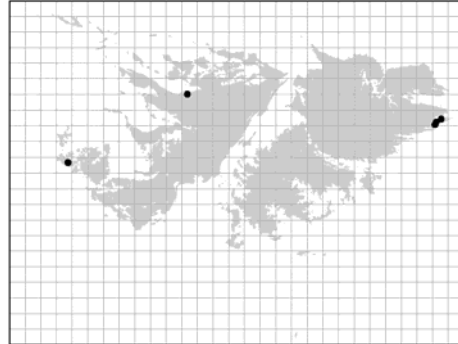
Botrychium dusenii



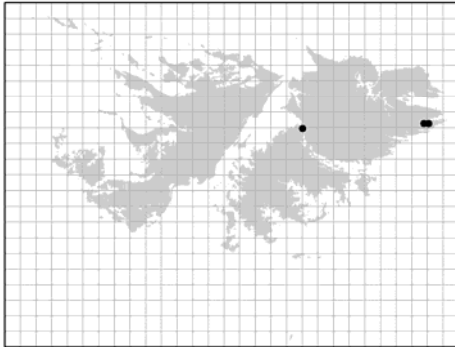
Brassica napus



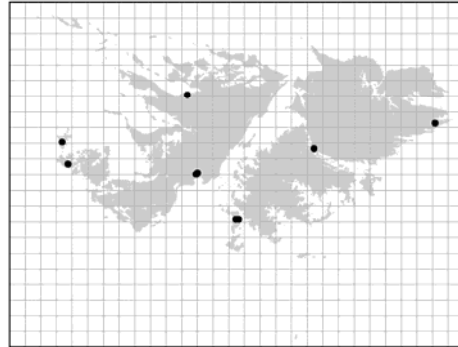
Brassica oleracea



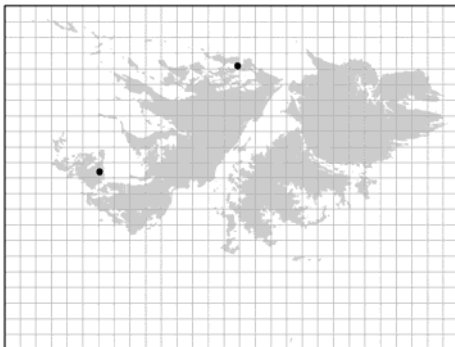
Brassica rapa subsp. *rapa*



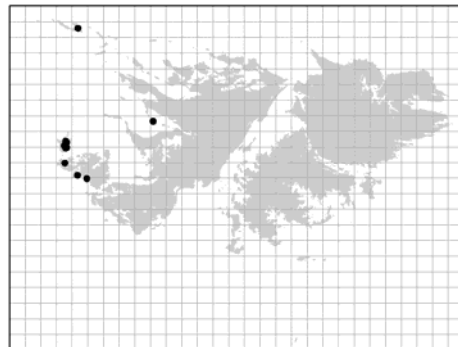
Bromus catharticus



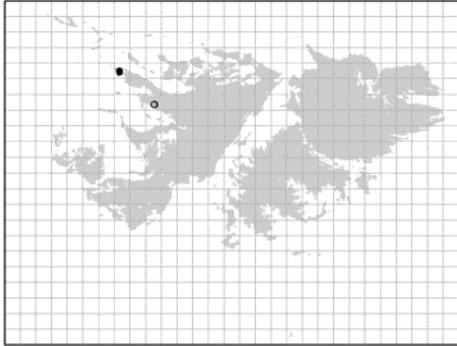
Bromus hordeaceus subsp. *hordeaceus*



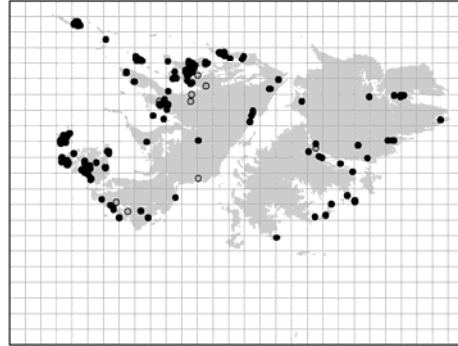
Bromus sterilis



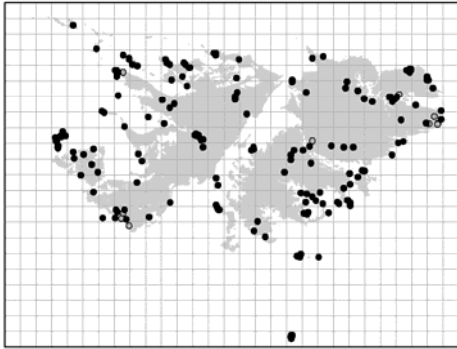
Calandrinia cf. *nitida*



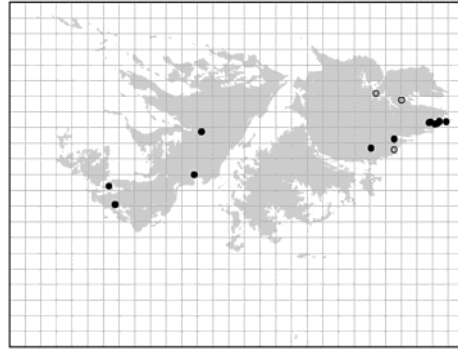
Calandrinia menziesii



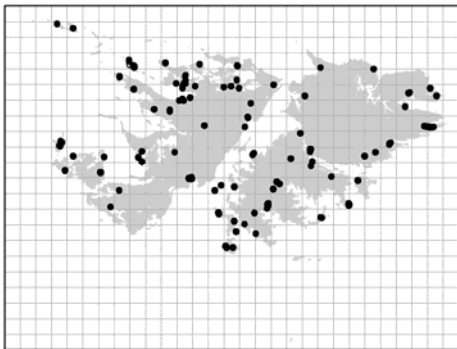
Calceolaria fothergillii



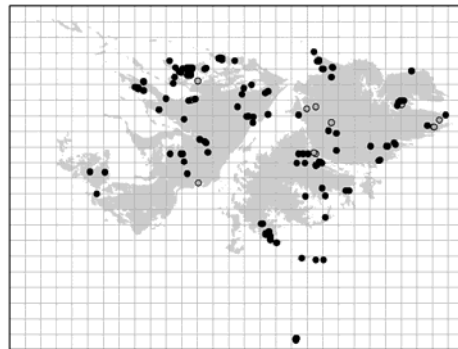
Callitriche antarctica



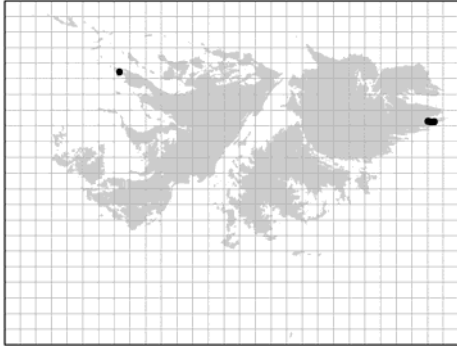
Calluna vulgaris



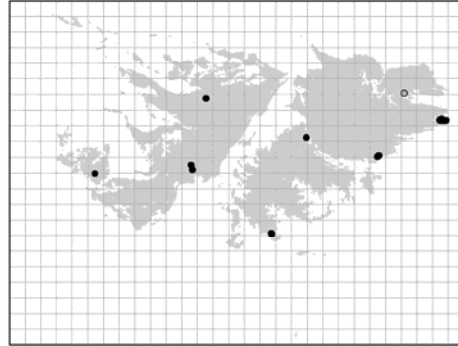
Capsella bursa-pastoris



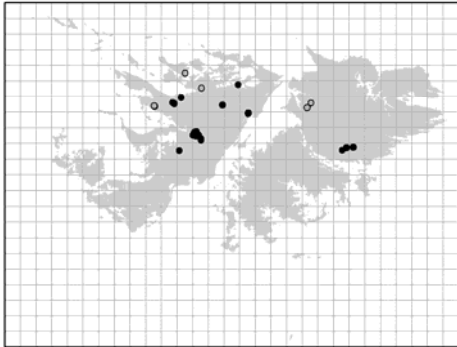
Cardamine glacialis



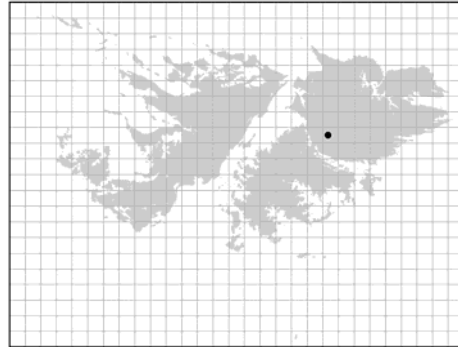
Cardamine hirsuta



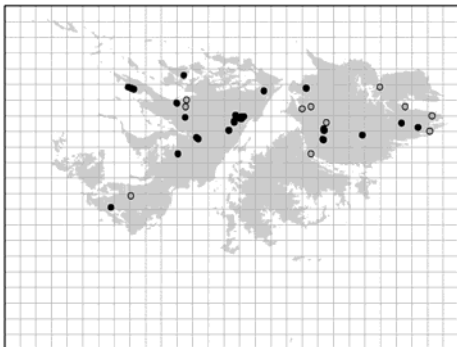
Carex acaulis



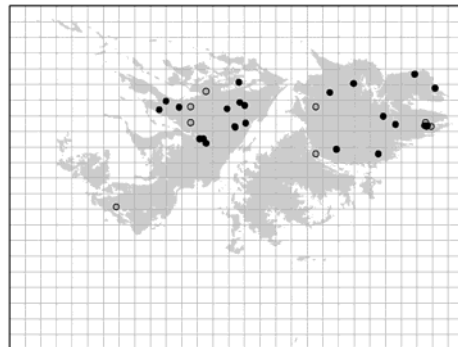
Carex aematorrhyncha var. *corralensis*



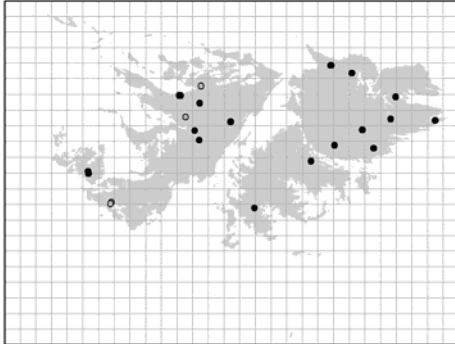
Carex banksii



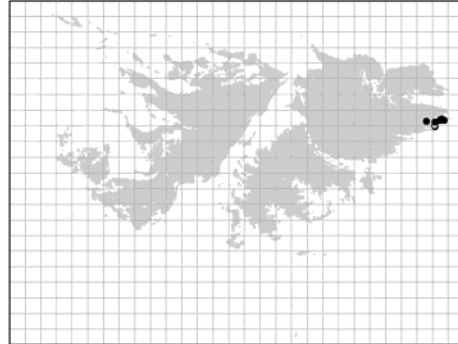
Carex caduca



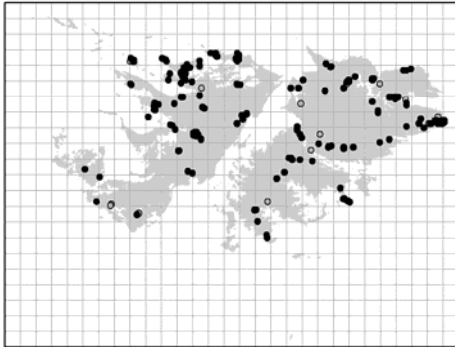
Carex canescens



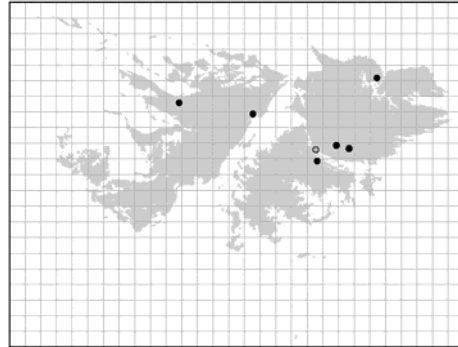
Carex decidua



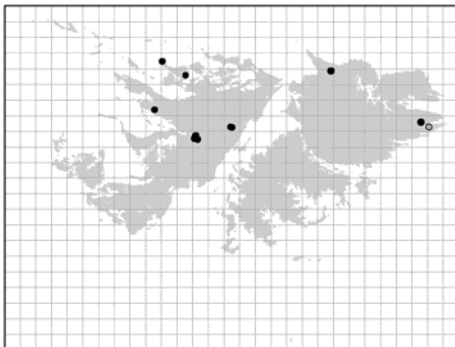
Carex flacca



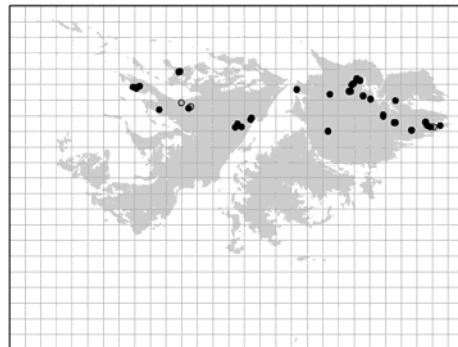
Carex fuscula



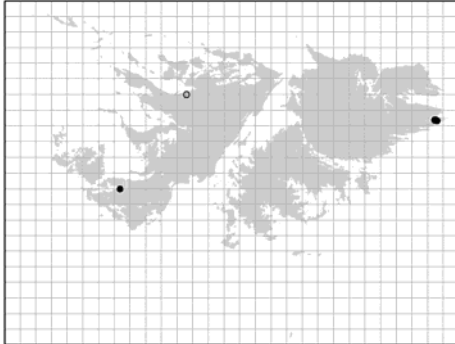
Carex macloviana



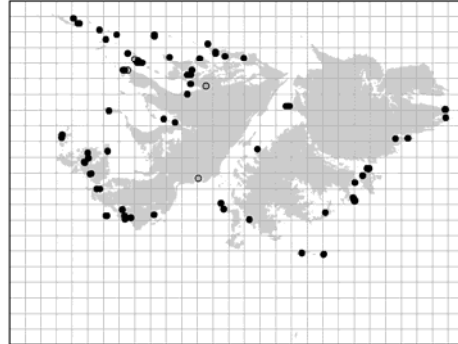
Carex magellanica



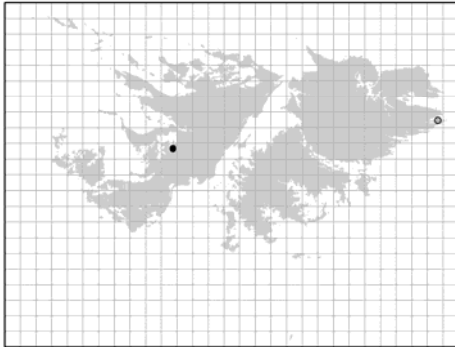
Carex microglochin subsp. *fuegina*



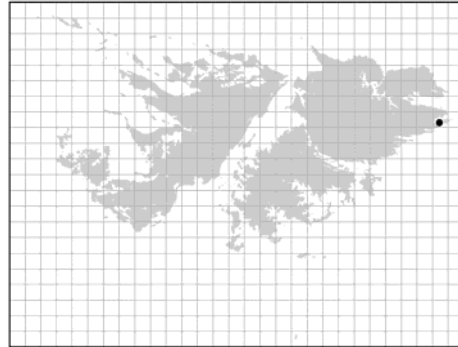
Carex sagei



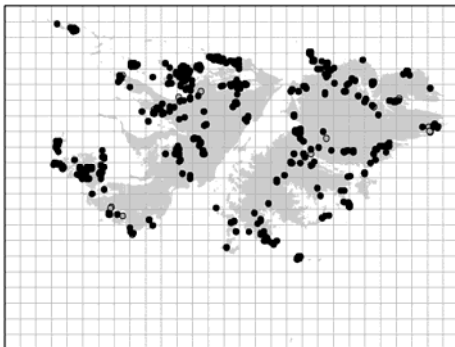
Carex trifida



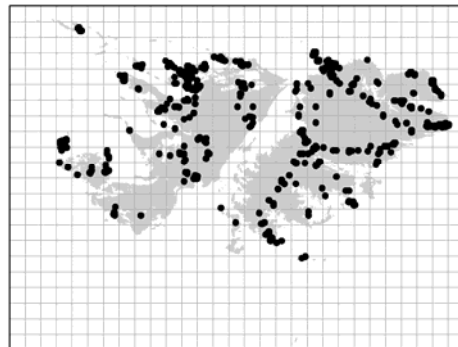
Carex vallis-pulchrae



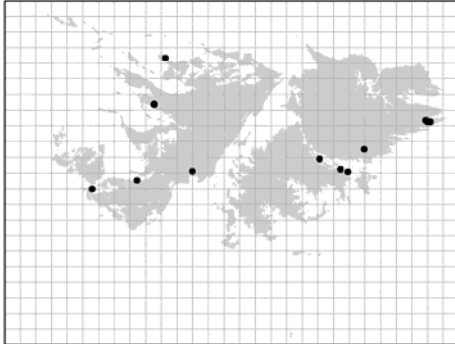
Centaurea nigra



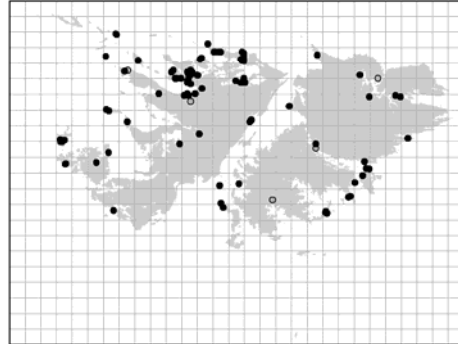
Cerastium arvense



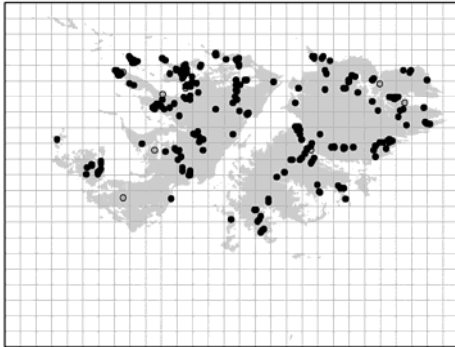
Cerastium fontanum



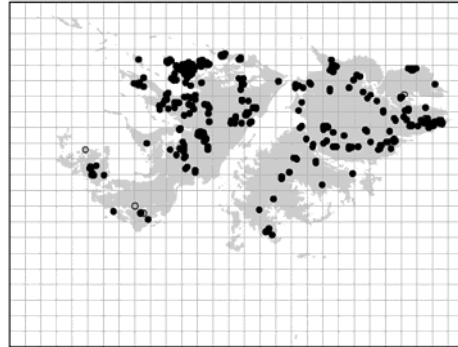
Cerastium glomeratum



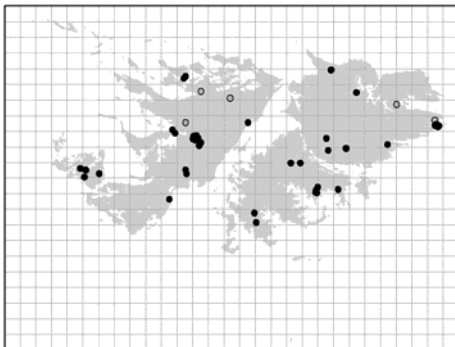
Chenopodium macrospermum



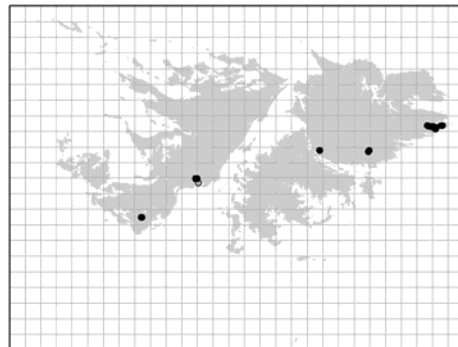
Chevreulia lycopodioides



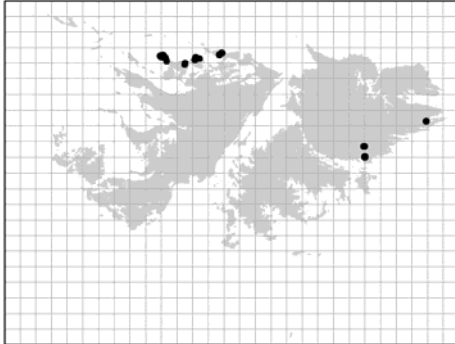
Chilotrichum diffusum



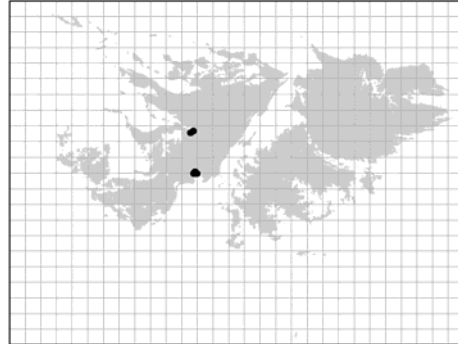
Chloraea fonckii



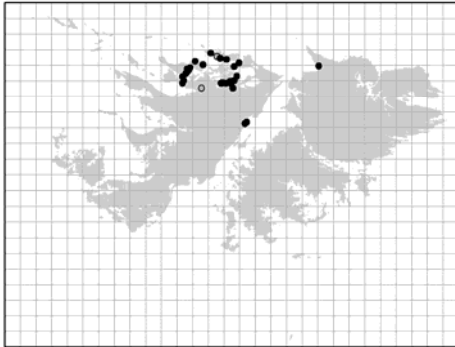
Cirsium arvense



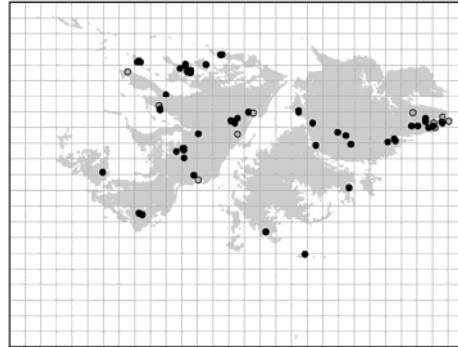
Cirsium vulgare



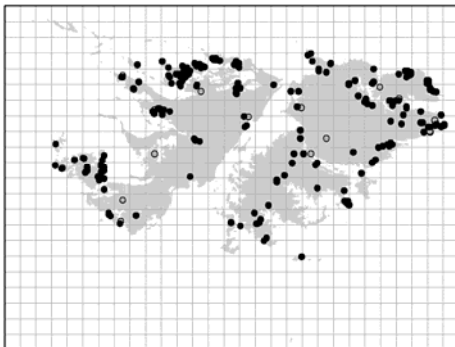
Claytonia perfoliata



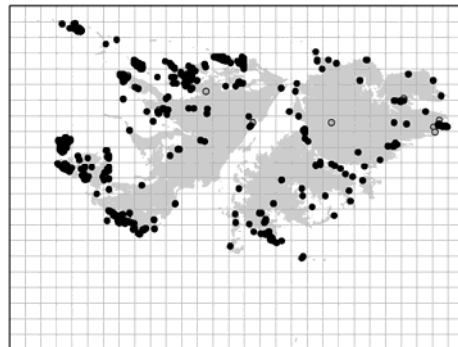
Cochlearia officinalis



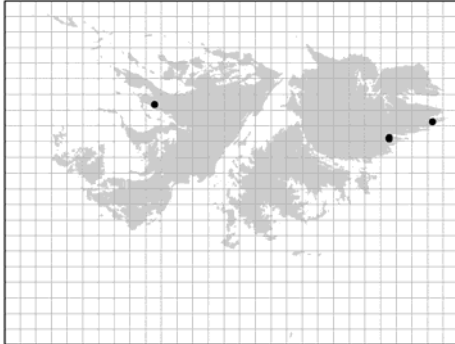
Codonorchis lessonii



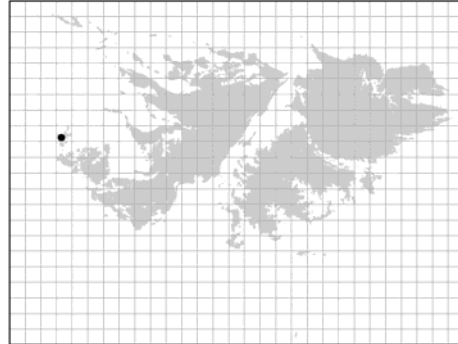
Colobanthus quitensis



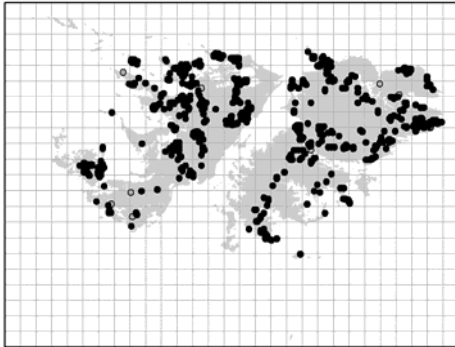
Colobanthus subulatus



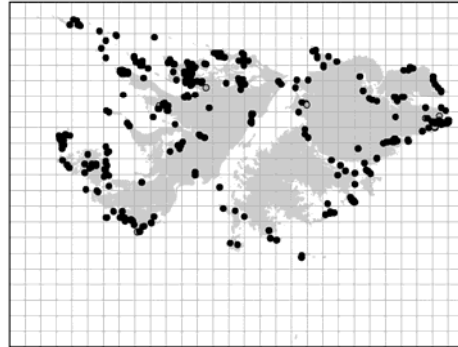
Conium maculatum



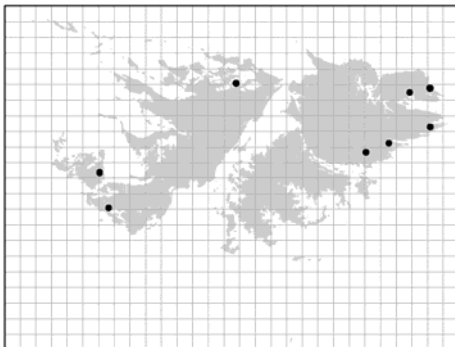
Cordyline australis



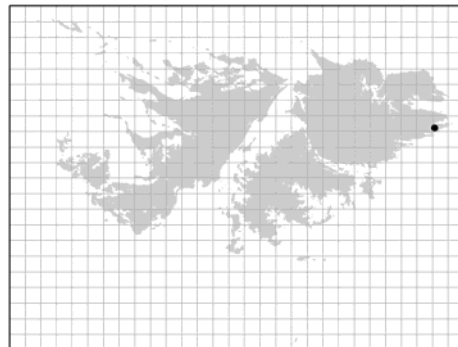
Cortaderia pilosa



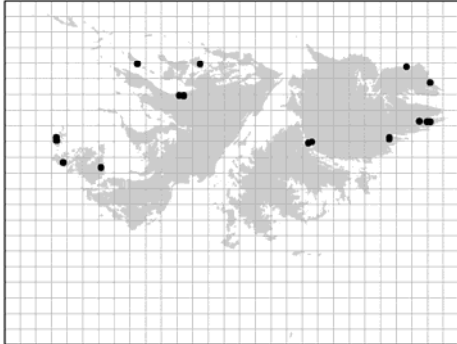
Crassula moschata



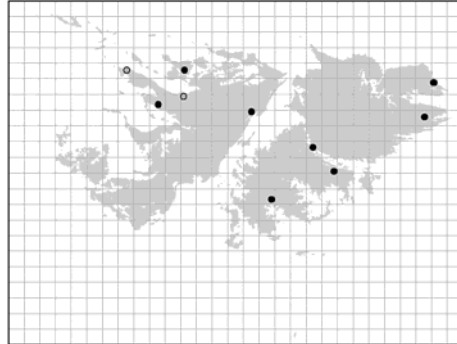
Crepis capillaris



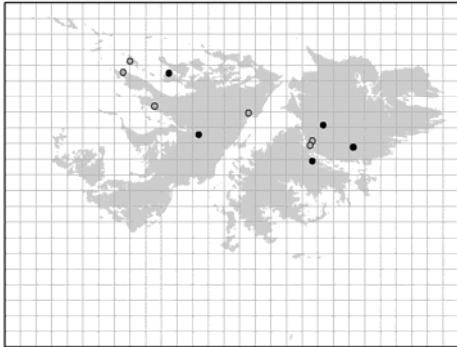
Crocus vernus



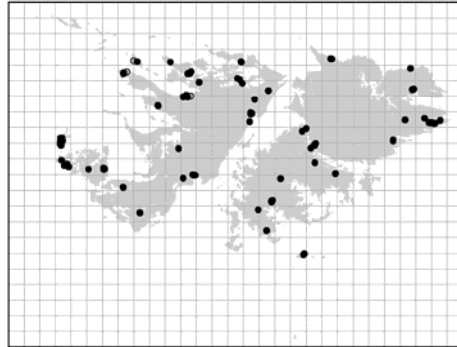
Cupressus macrocarpa



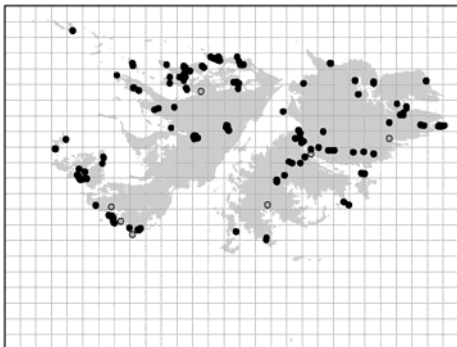
Cynosurus cristatus



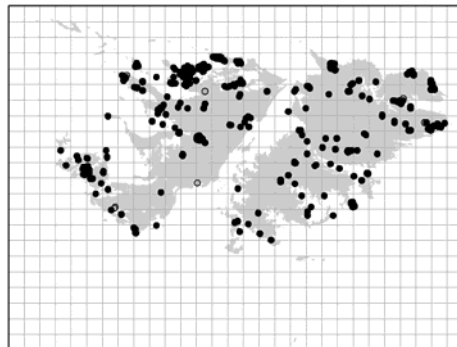
Cystopteris fragilis



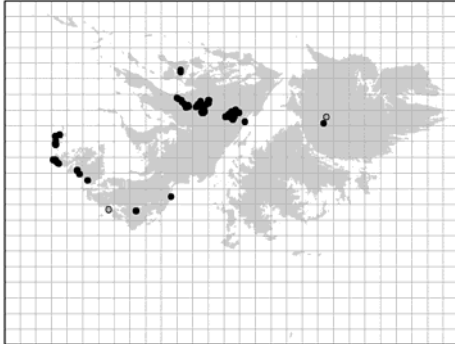
Dactylis glomerata



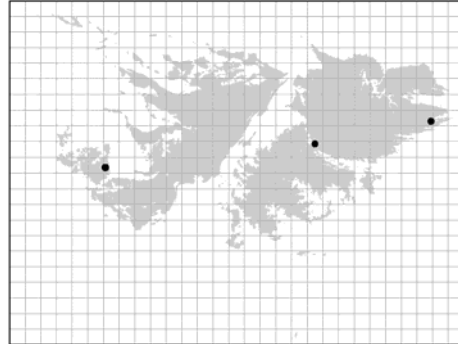
Deschampsia antarctica



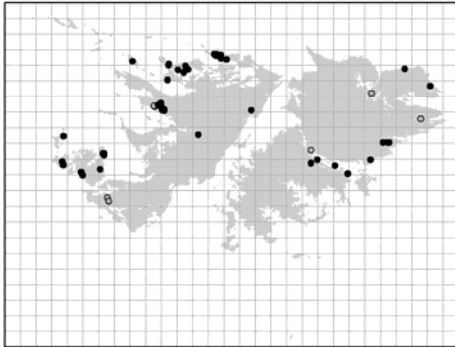
Deschampsia flexuosa



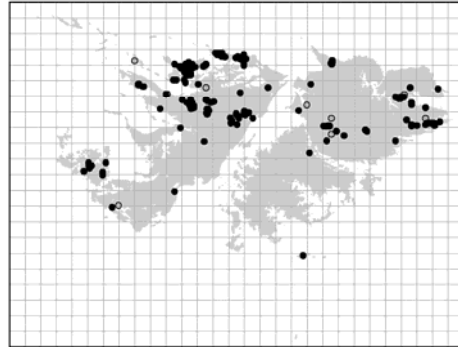
Deschampsia parvula



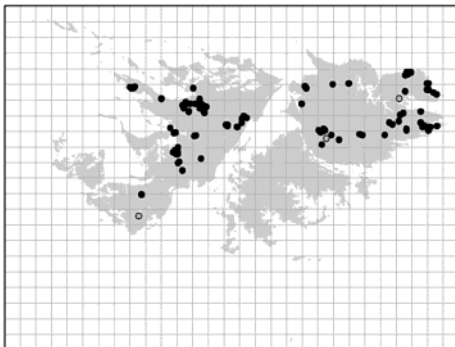
Digitalis purpurea



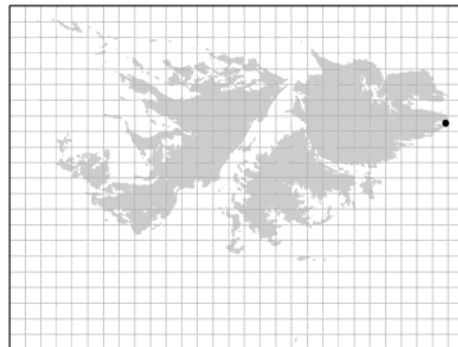
Draba funiculosa



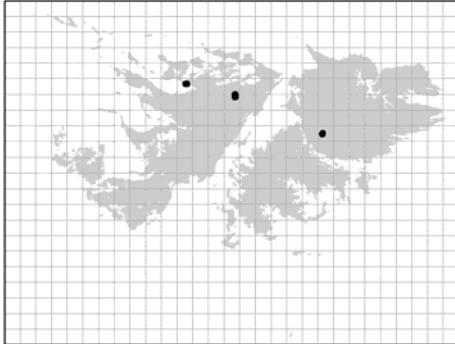
Drapetes muscosus



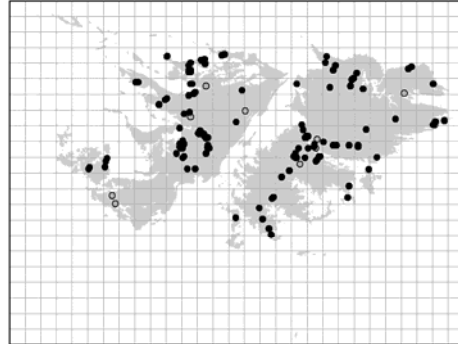
Drosera uniflora



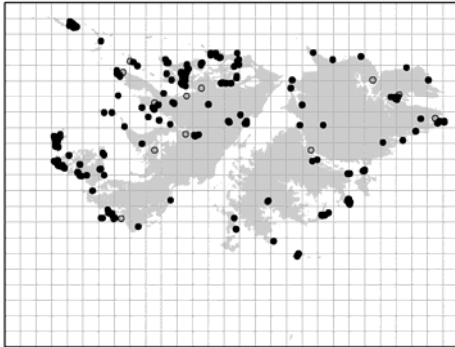
Dryopteris dilatata



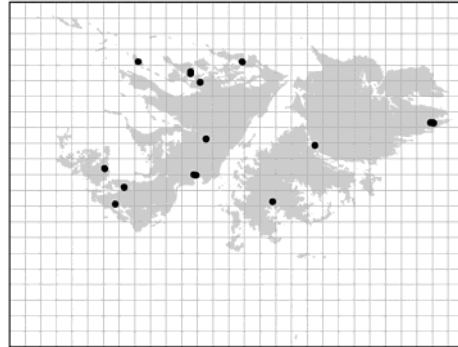
Elatine triandra



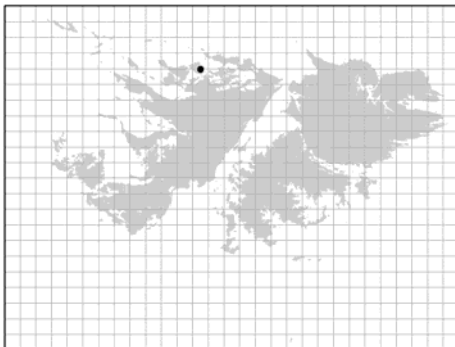
Eleocharis melanostachys



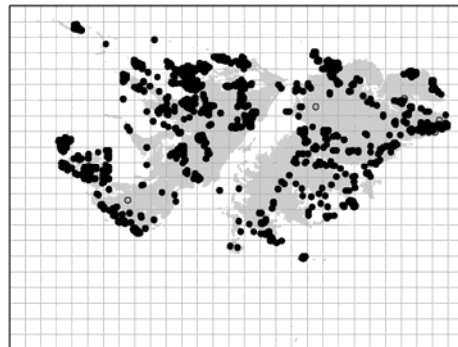
Elymus magellanicus



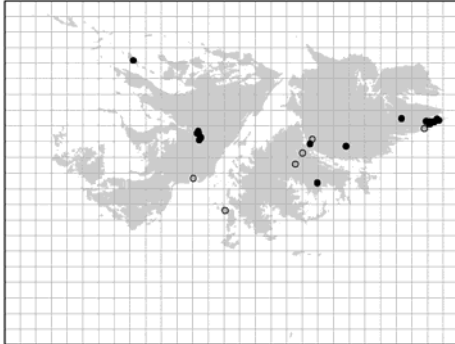
Elymus repens



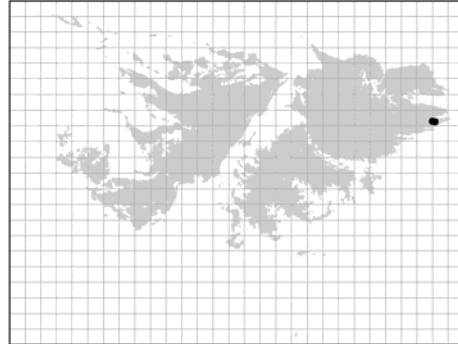
Elytrigia repens



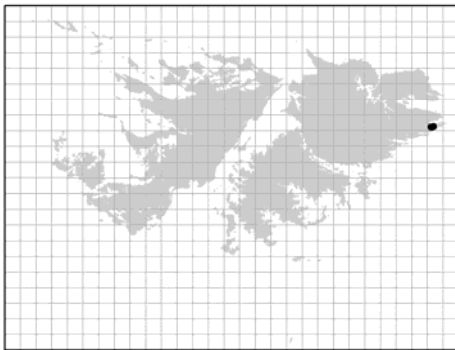
Empetrum rubrum



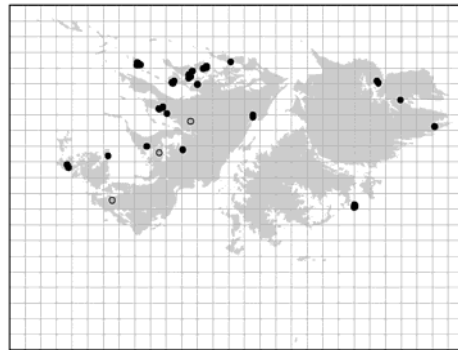
Epilobium ciliatum



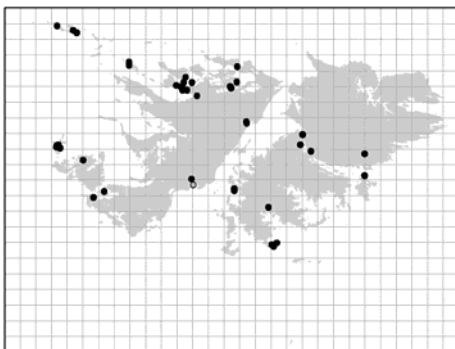
Epilobium tetragonum



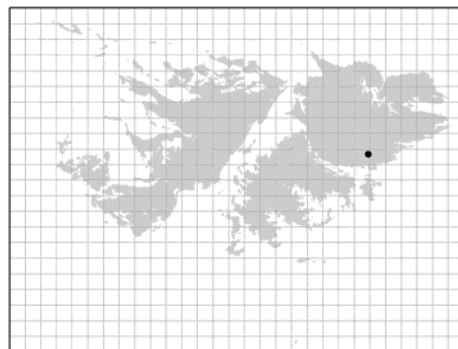
Equisetum arvense



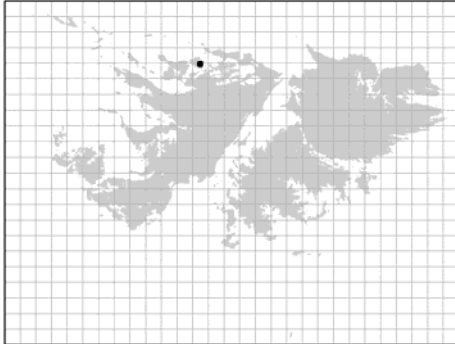
Erigeron incertus



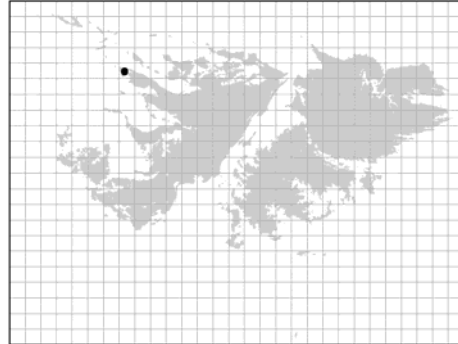
Erodium cicutarium



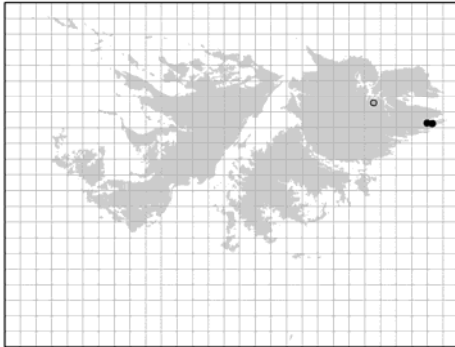
Erophila verna



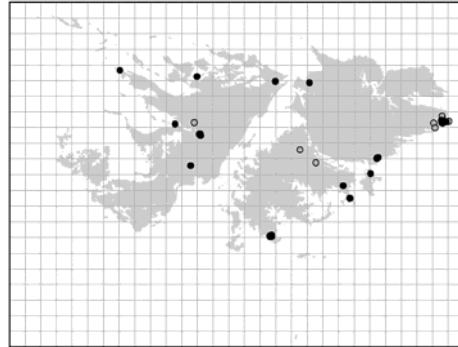
Eucalyptus gunnii



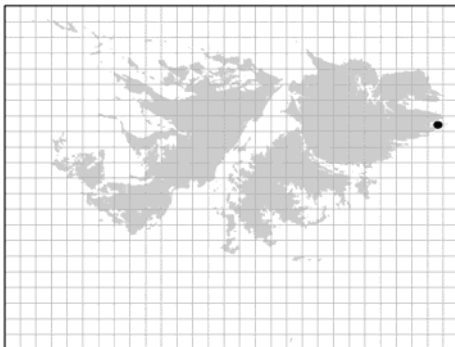
Euphorbia helioscopia



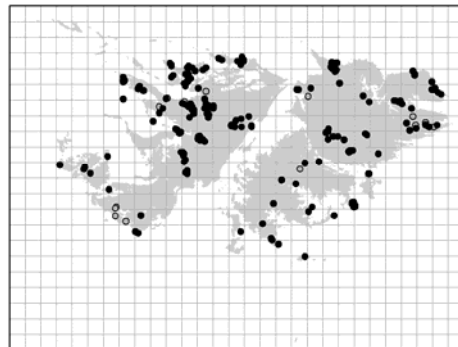
Euphorbia peplus



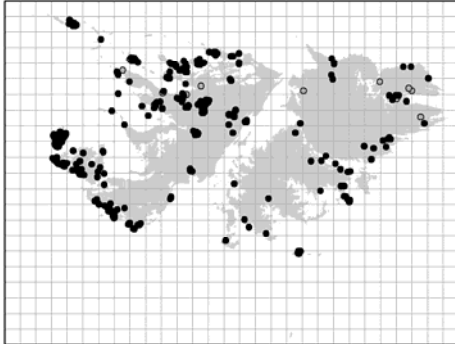
Euphrasia antarctica



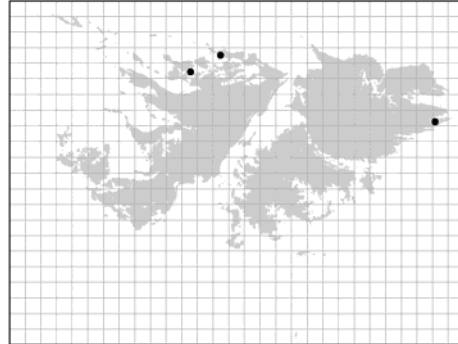
Euphrasia confusa



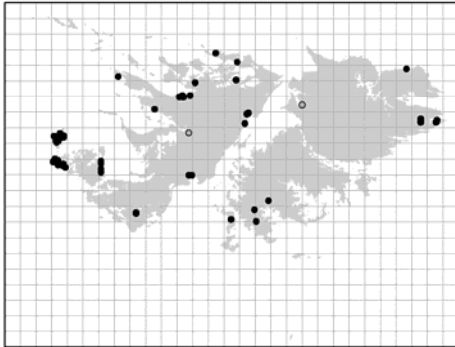
Festuca contracta



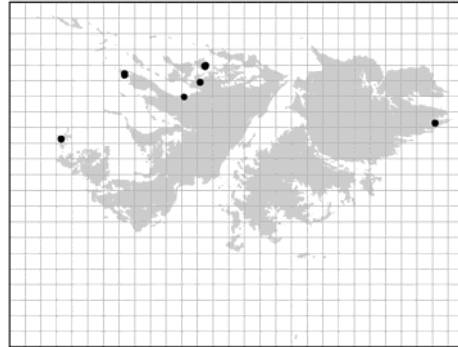
Festuca magellanica



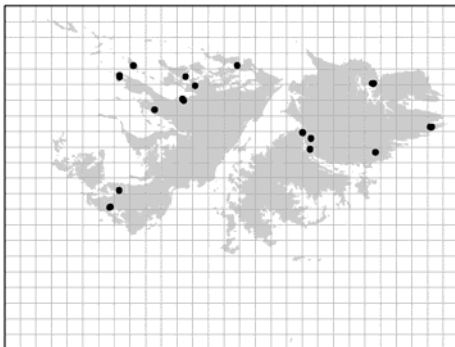
Festuca pratensis



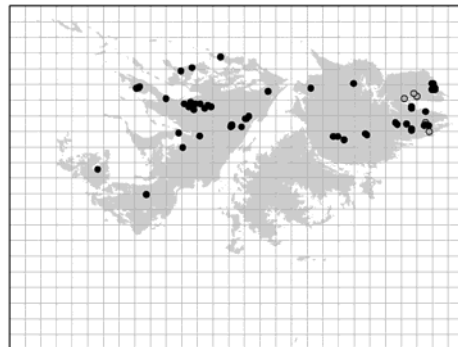
Festuca rubra



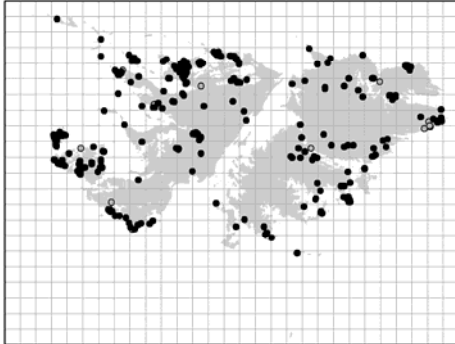
Fuchsia magellanica



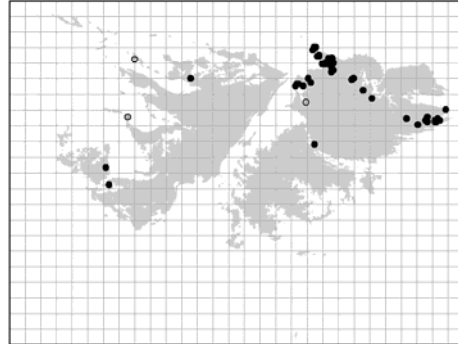
Fumaria muralis



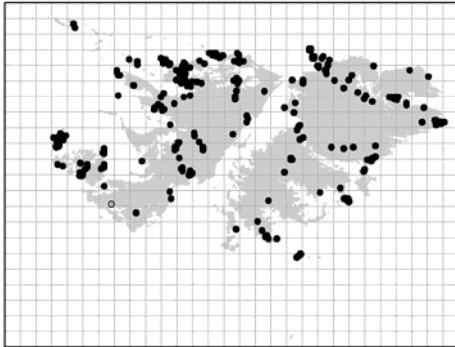
Gaimardia australis



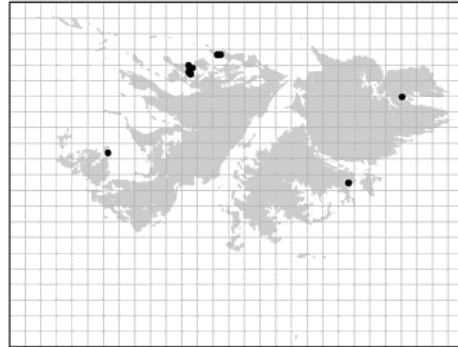
Galium antarcticum



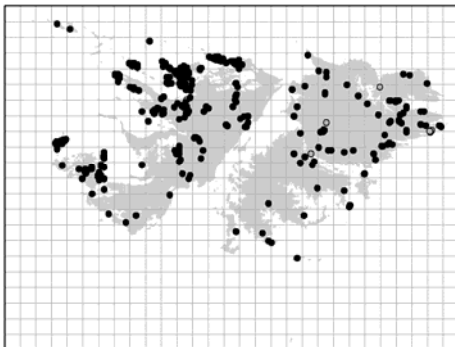
Galium saxatile



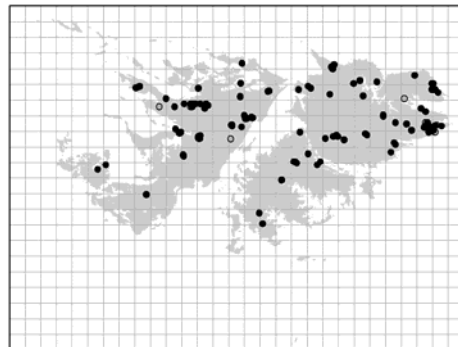
Gamochaeta americana and *G. spiciformis*



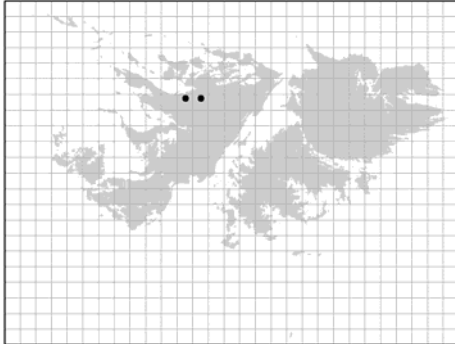
Gamochaeta antarctica



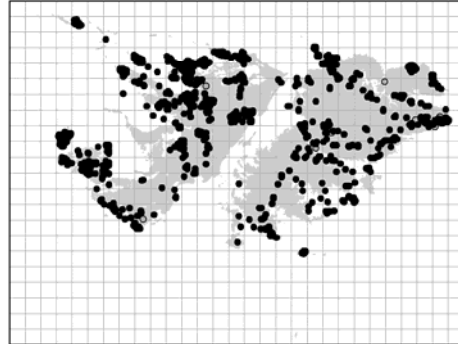
Gamochaeta malvinensis



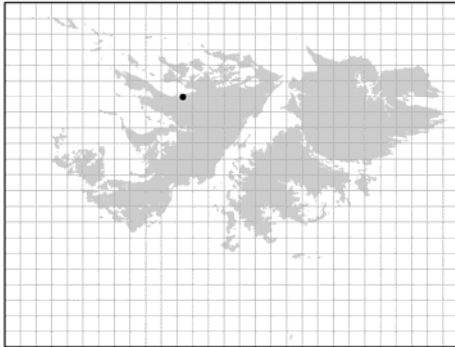
Gaultheria antarctica



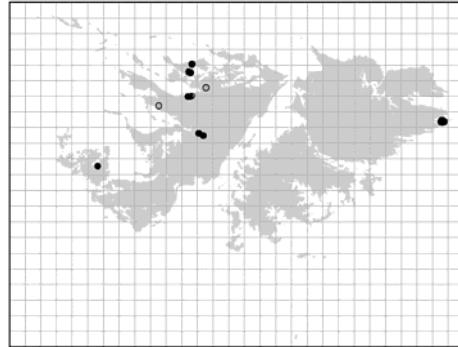
Gaultheria hybrid



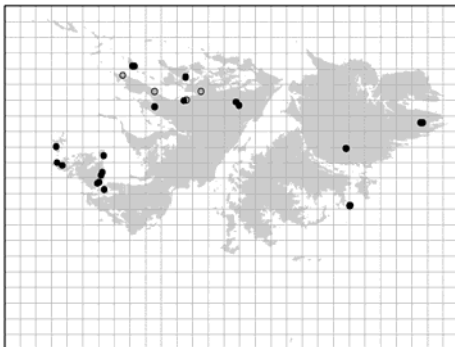
Gaultheria pumila



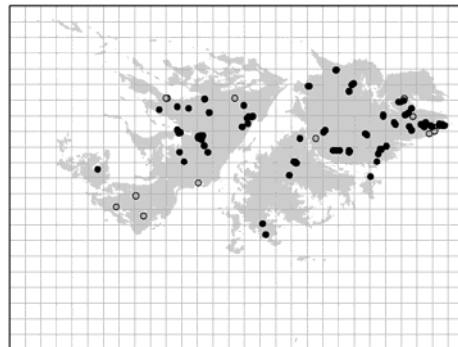
Gavilea araucana



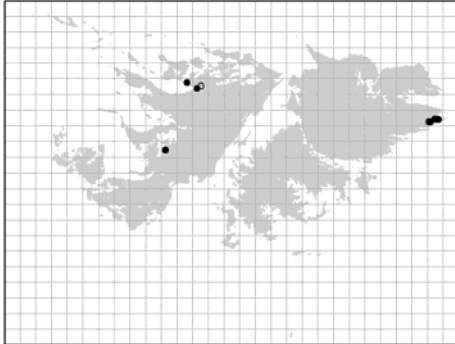
Gavilea australis



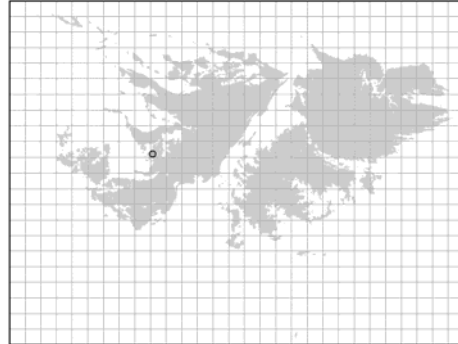
Gavilea littoralis



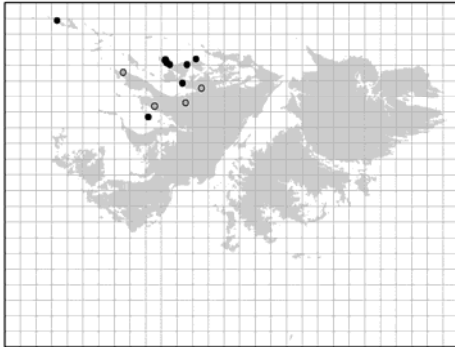
Gentianella magellanica



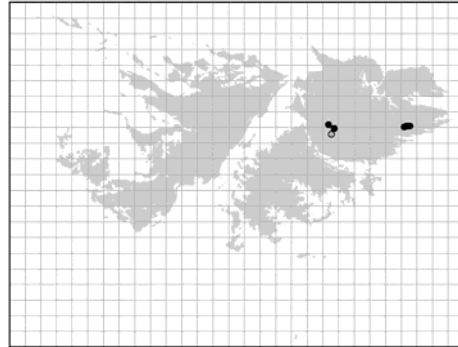
Geranium molle



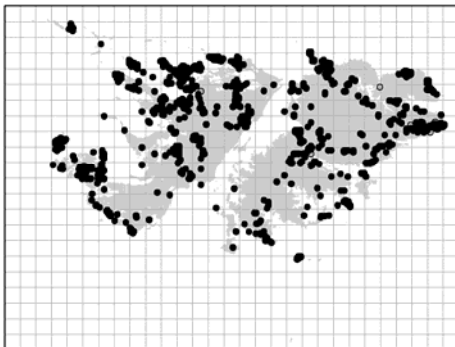
Gnaphalium americana and *G. spiciformis*



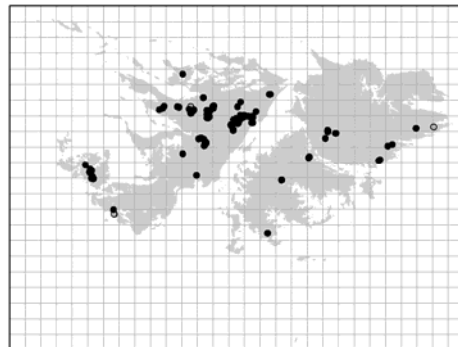
Gnaphalium luteoalbum



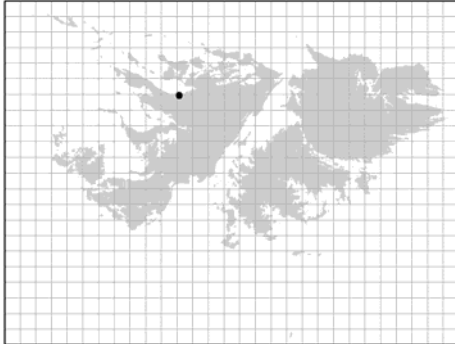
Grammitis poeppigiana



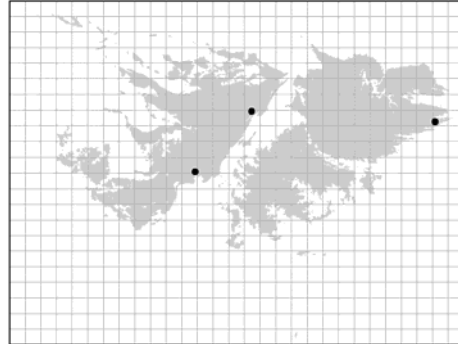
Gunnera magellanica



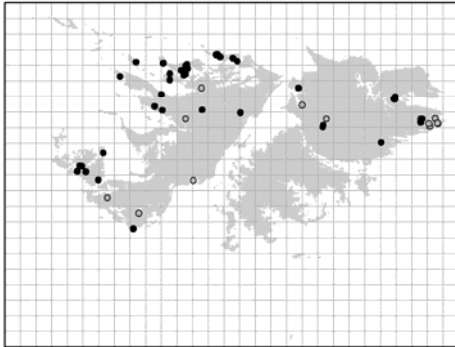
Hamadryas argentea



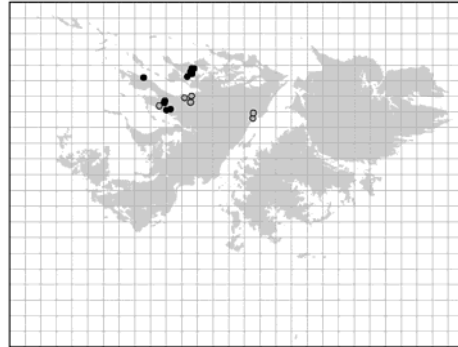
Hedera helix



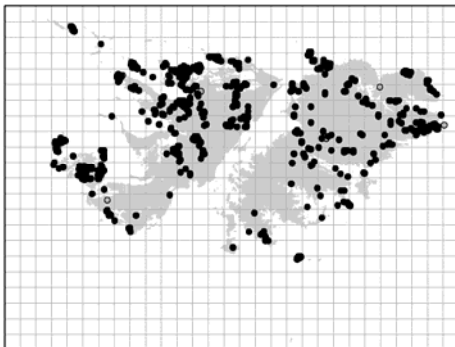
Hesperis matronalis



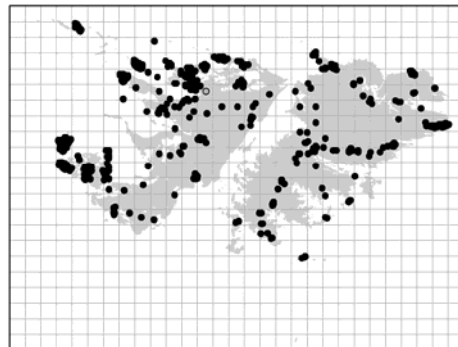
Hieracium antarcticum



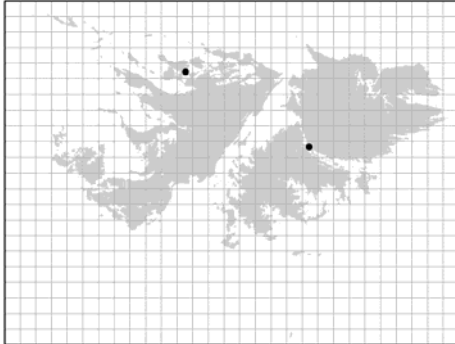
Hieracium patagonicum



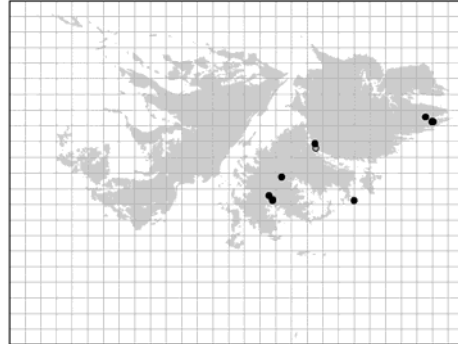
Hierochloa redolens



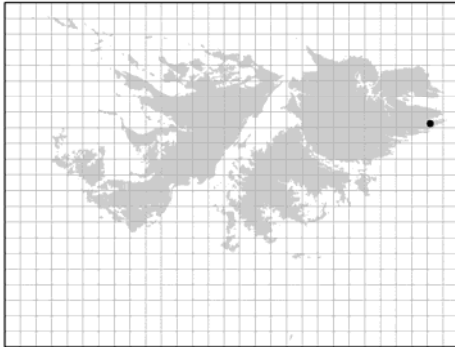
Holcus lanatus



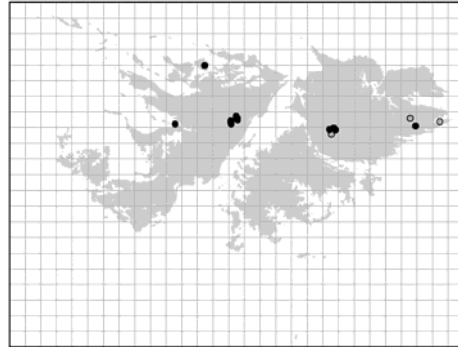
Hordeum comosum



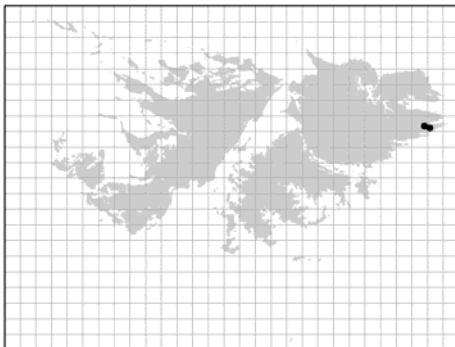
Hordeum jubatum



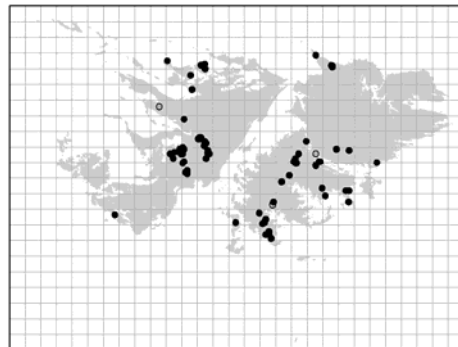
Hordeum murinum subsp. *murinum*



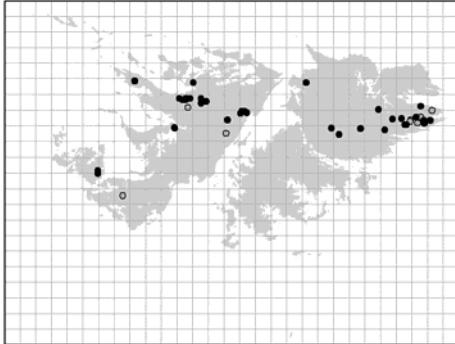
Huperzia fuegiana



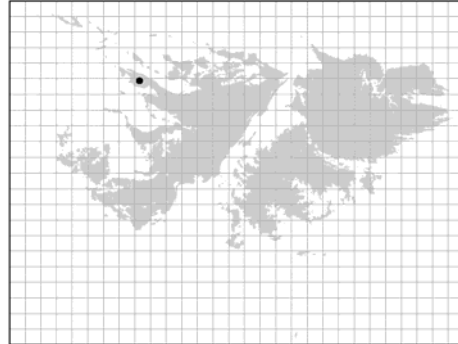
Hyacinthoides x *massartiana*



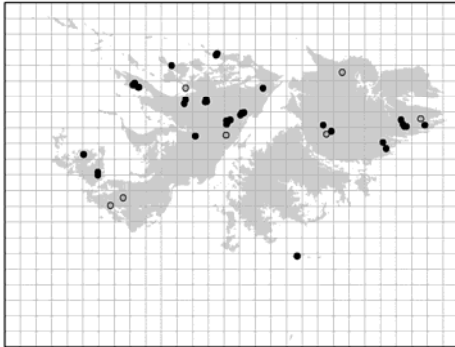
Hydrocotyle chamaemorus



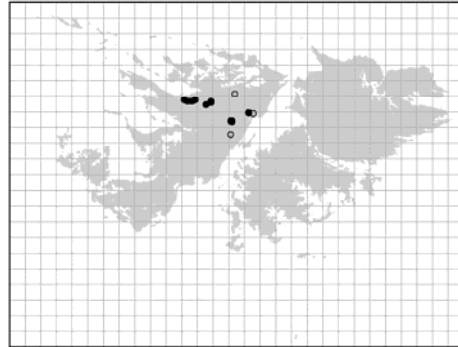
Hymenophyllum caespitosum



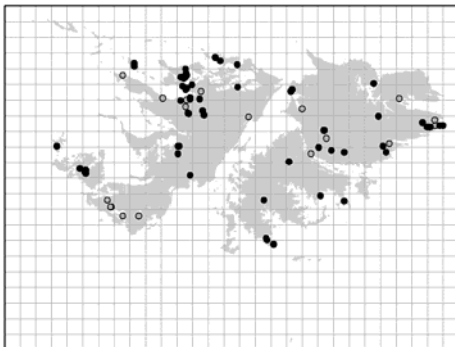
Hymenophyllum darwinii



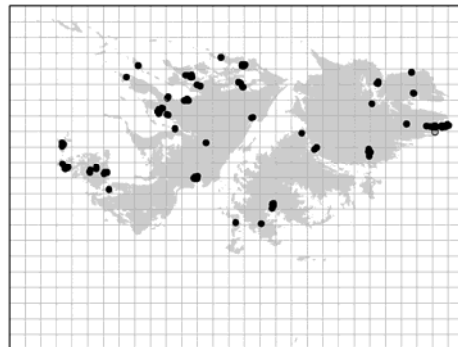
Hymenophyllum falklandicum



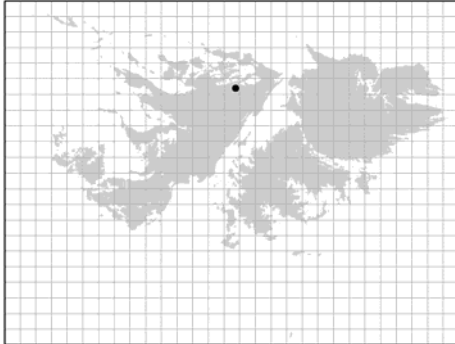
Hymenophyllum tortuosum



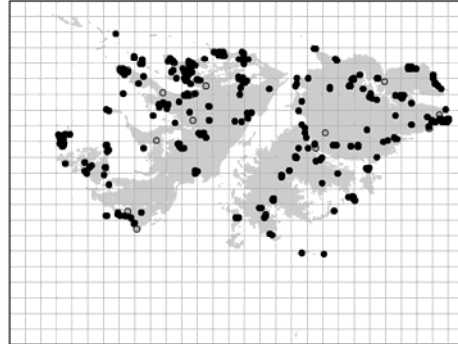
Hypochaeris arenaria



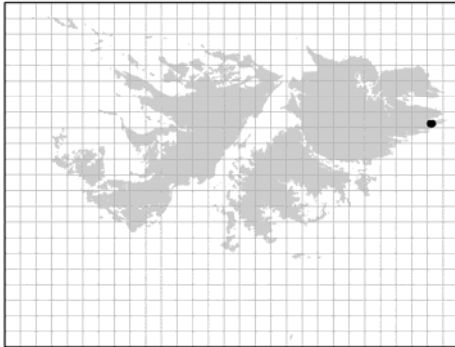
Hypochaeris radicata subsp. *radicata*



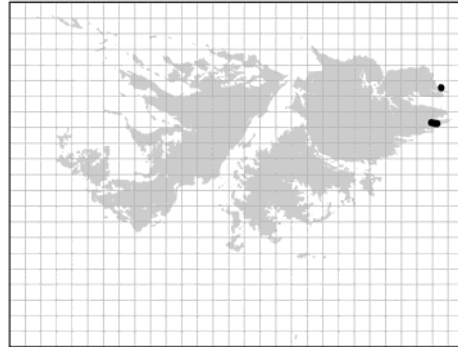
Hypolepis poeppigii



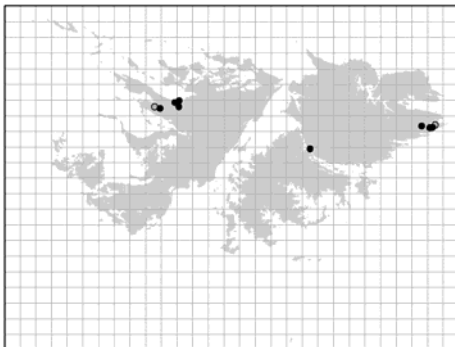
Isolepis cernua



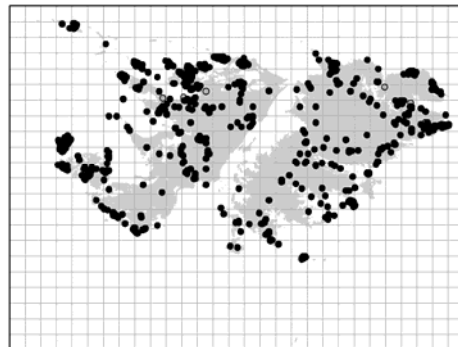
Juncus articulatus



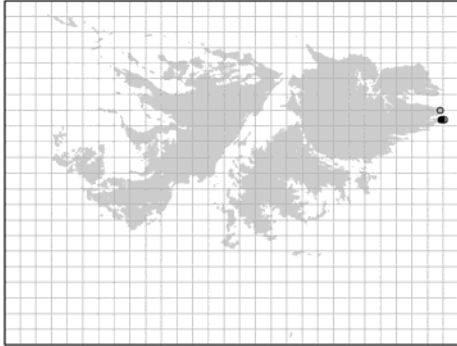
Juncus bufonius



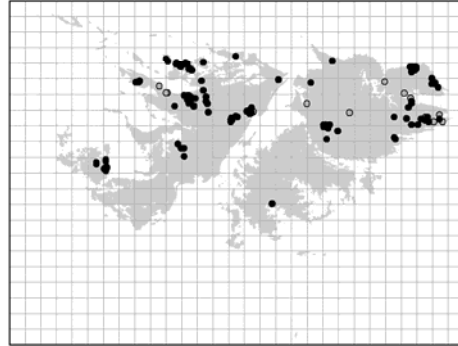
Juncus effusus



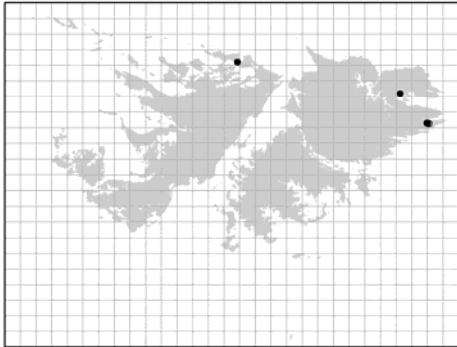
Juncus scheuchzerioides



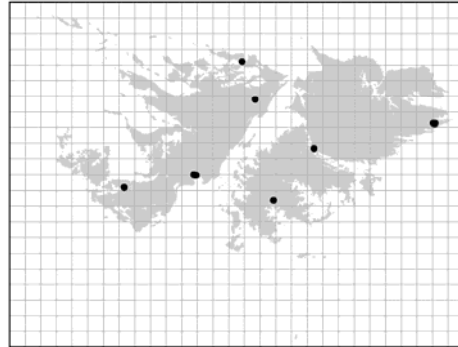
Koeleria permollis



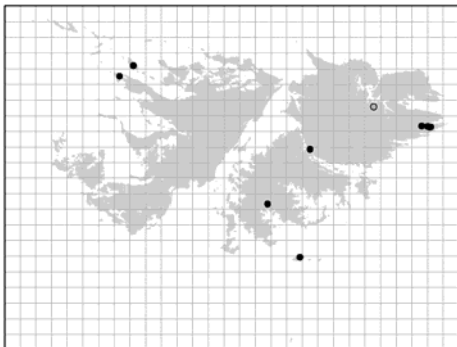
Lagenophora nudicaulis



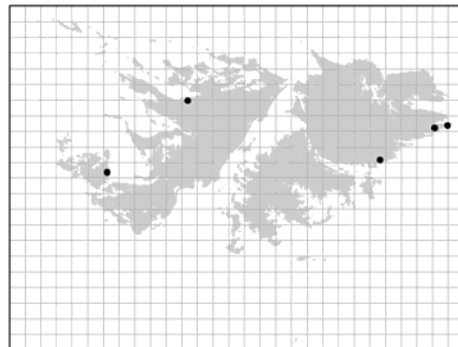
Lamium amplexicaule



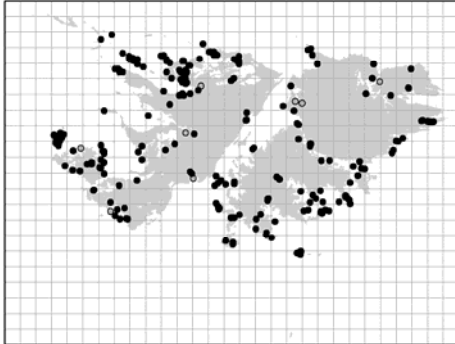
Lamium hybridum



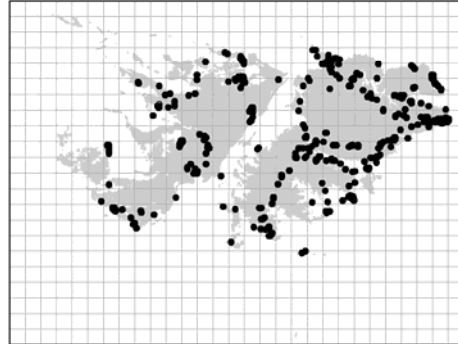
Lamium purpureum var. *purpureum*



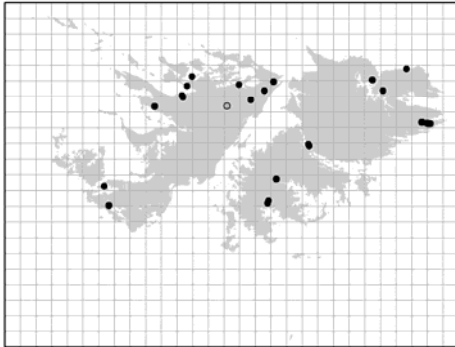
Leontodon hispidus



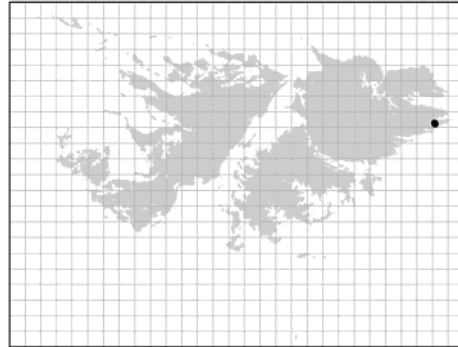
Lepidium didymum



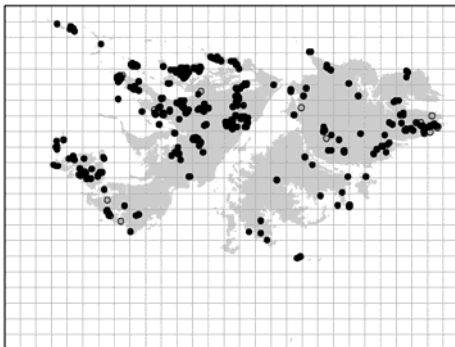
Leptinella scariosa



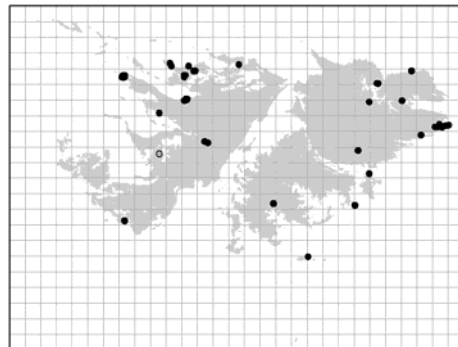
Leucanthemum vulgare



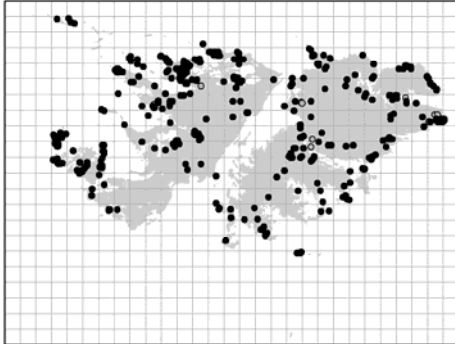
Leucanthemum x superbum



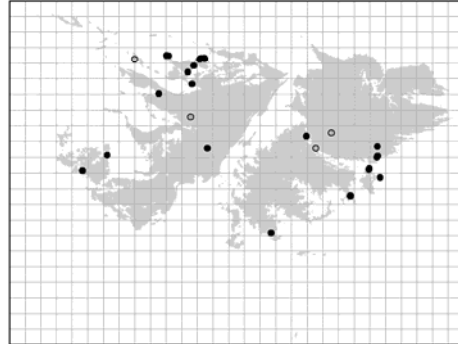
Leucheria suaveolens



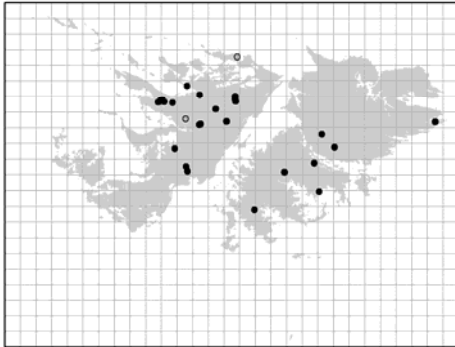
Leymus arenarius



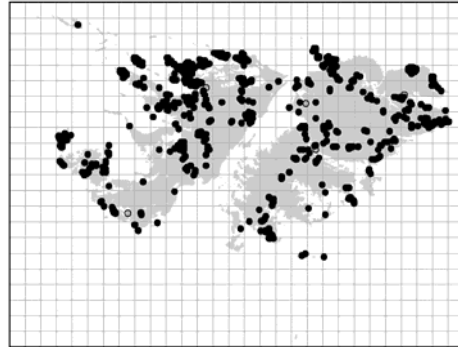
Lilaeopsis macloviana



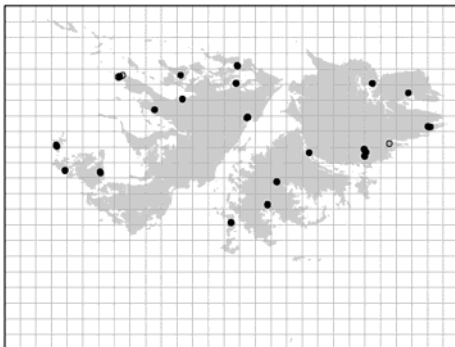
Limosella australis



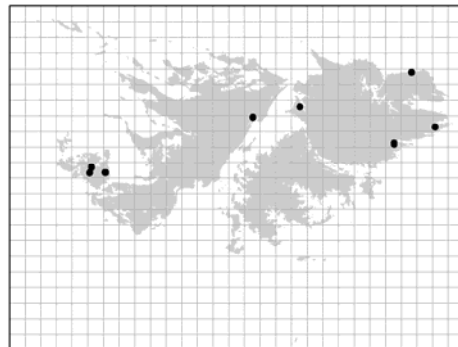
Littorella australis



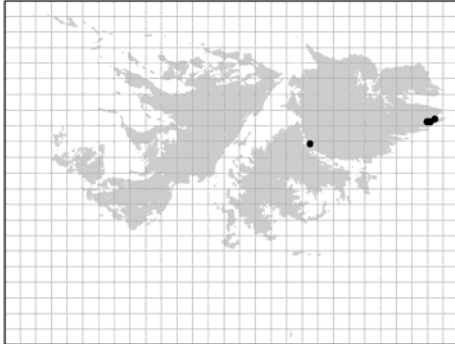
Lobelia pratiana



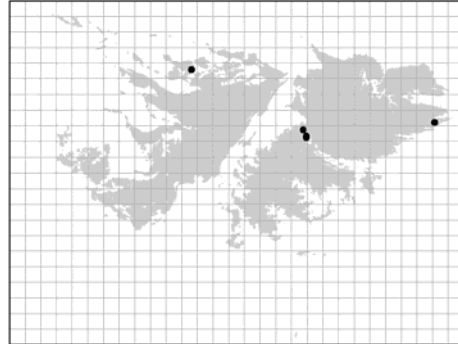
Lolium perenne



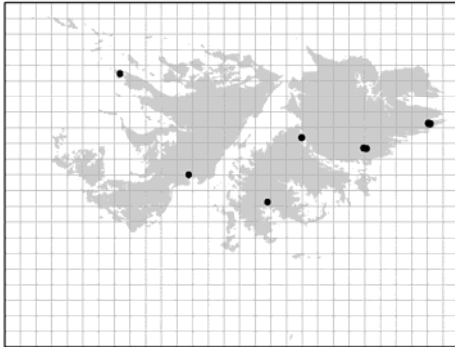
Lonicera periclymenum



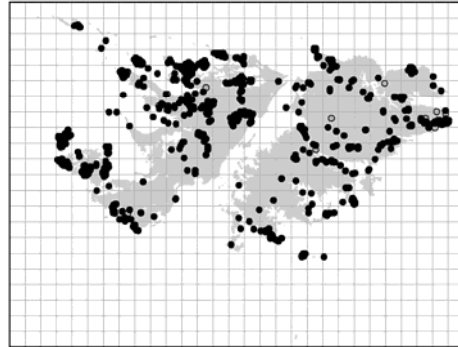
Lotus corniculatus



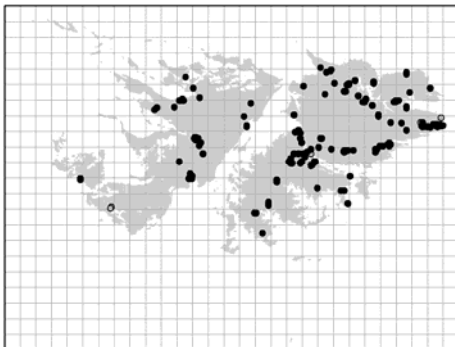
Lotus pedunculatus



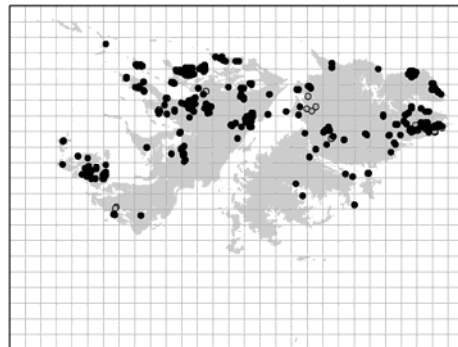
Lupinus arboreus



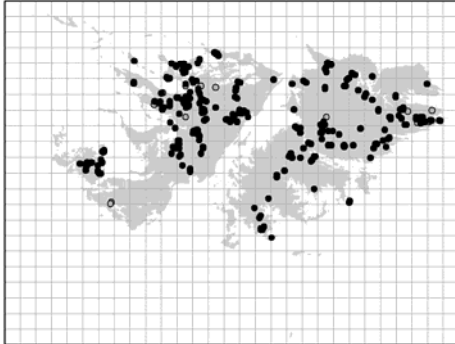
Luzula alopecurus



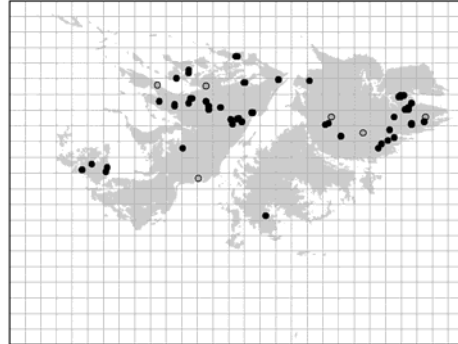
Luzula campestris agg.



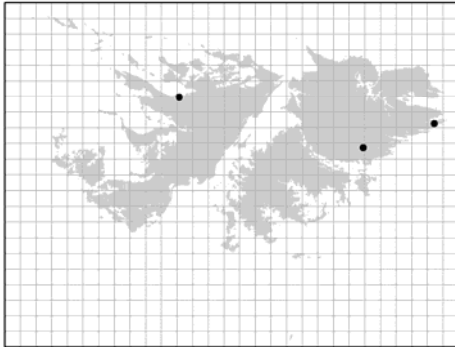
Luzuriaga marginata



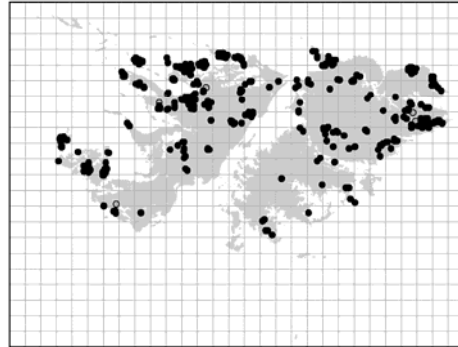
Lycopodium albofii



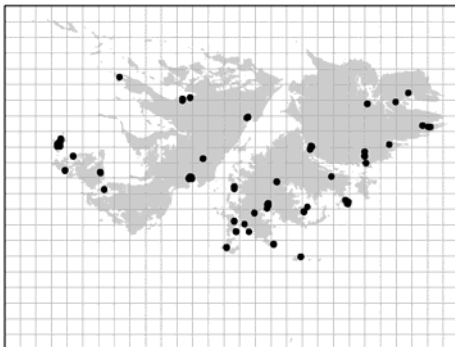
Lycopodium confertum



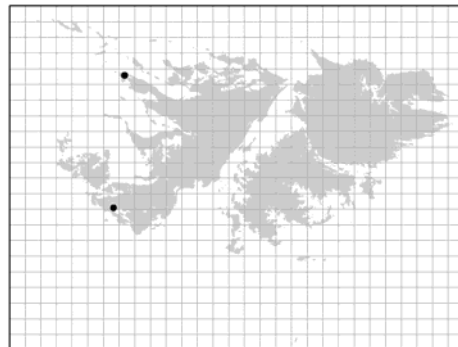
Malus domestica



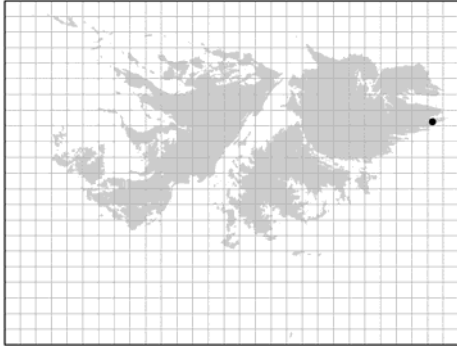
Marsippospermum grandiflorum



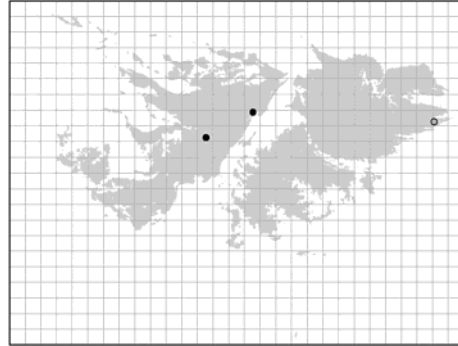
Matricaria discoidea



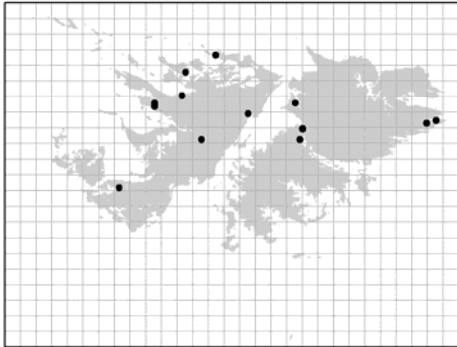
Maytenus magellanica



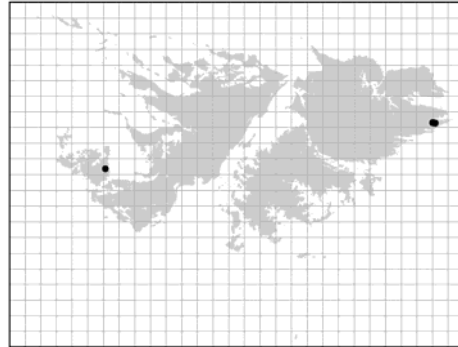
Medicago sativa



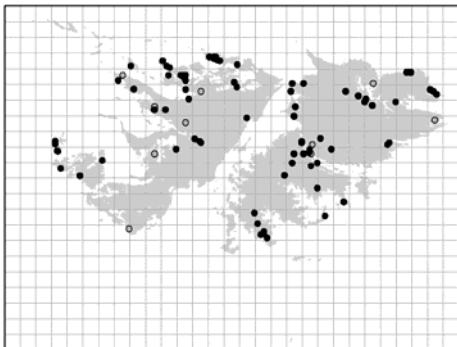
Mentha spicata



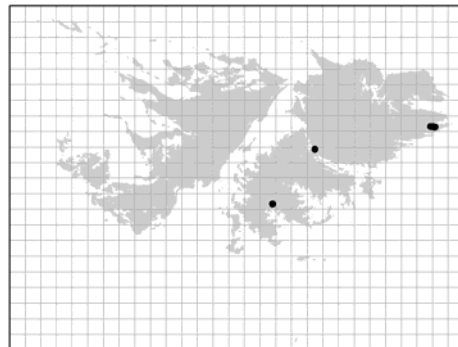
Mentha x piperita



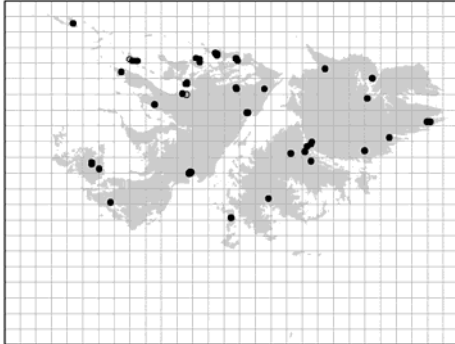
Mentha x villosa



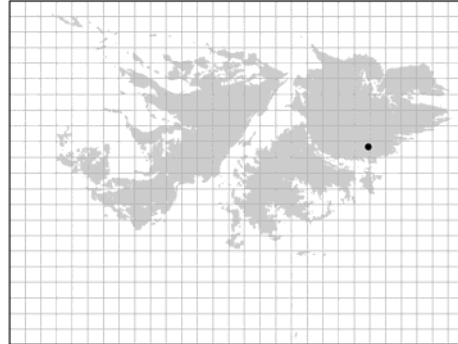
Montia fontana



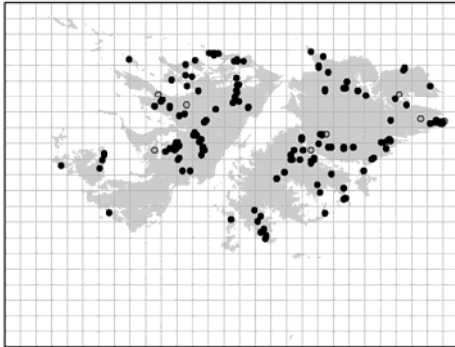
Myosotis arvensis subsp. *arvensis*



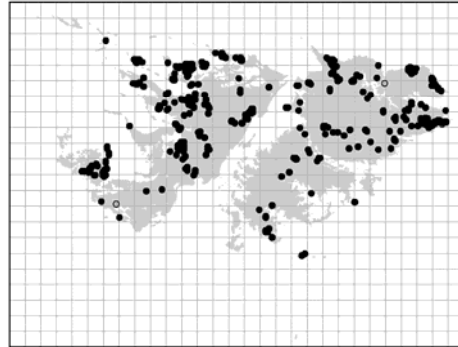
Myosotis discolor



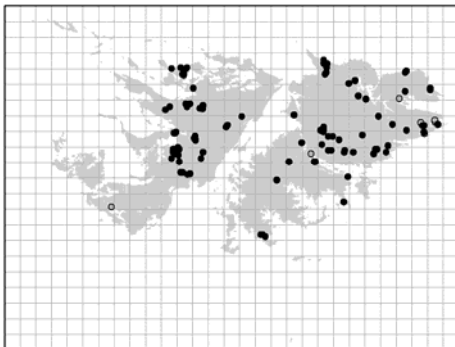
Myosotis ramosissima



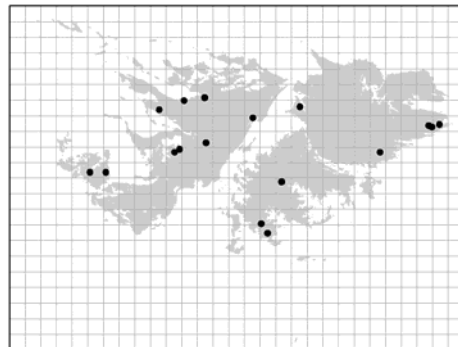
Myriophyllum quitense



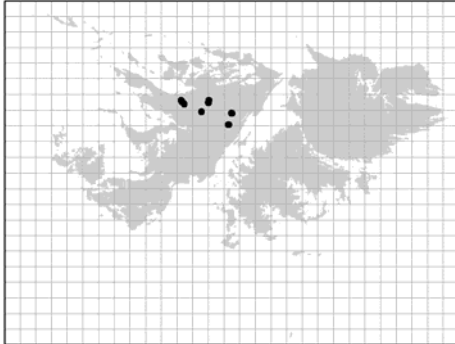
Myrteola nummularia



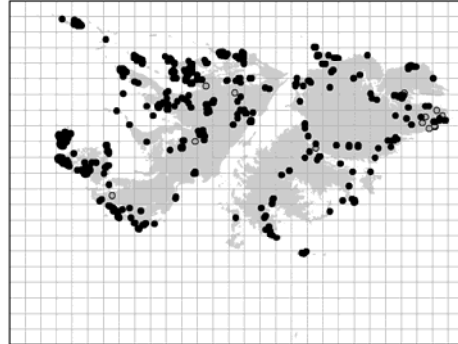
Nanodea muscosa



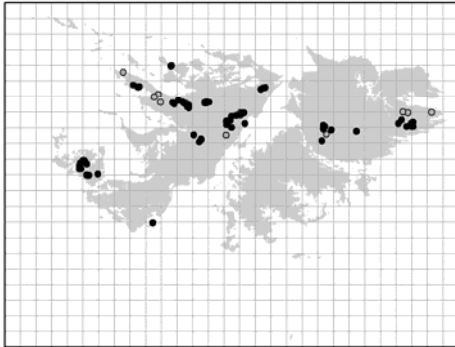
Narcissus pseudonarcissus agg.



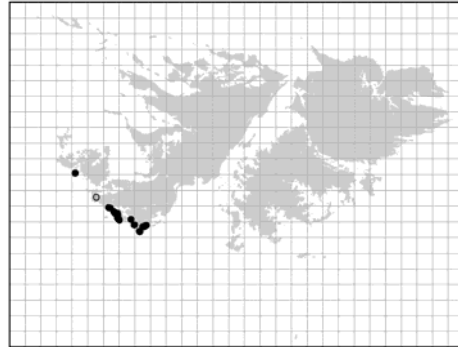
Nassauvia falklandica



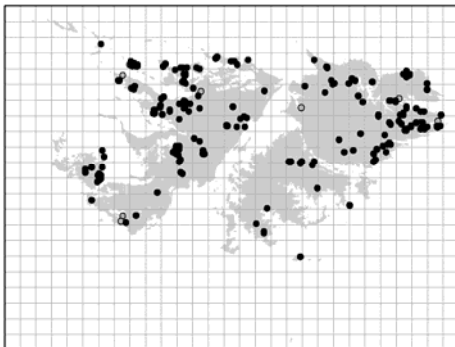
Nassauvia gaudichaudii



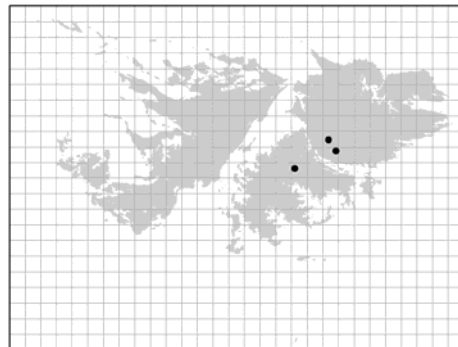
Nassauvia serpens



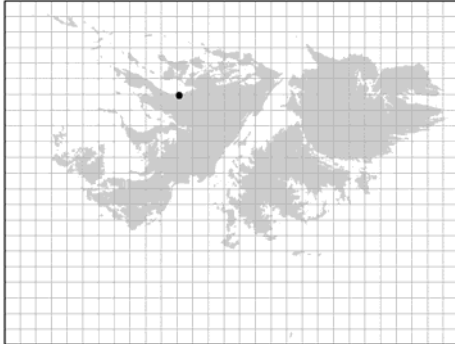
Nastanthus falklandicus



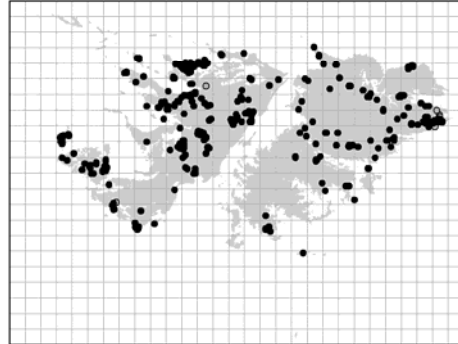
Nertera granadensis



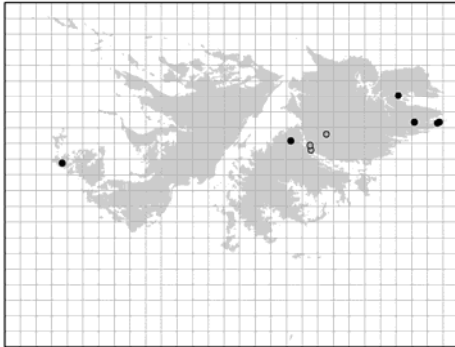
Nitella opaca



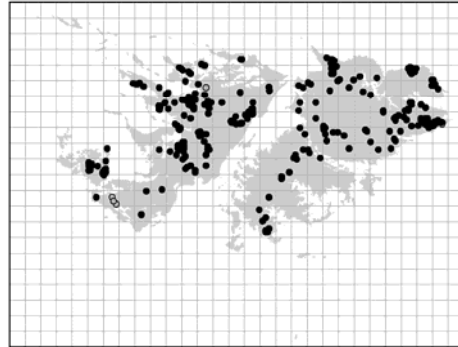
Nothofagus betuloides



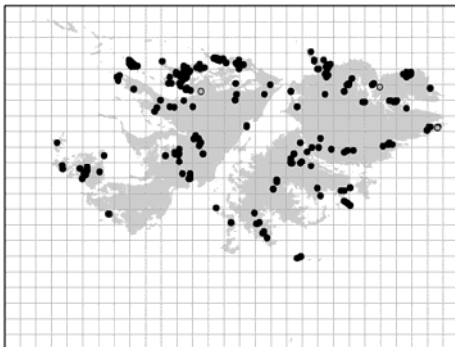
Olsynium filifolium



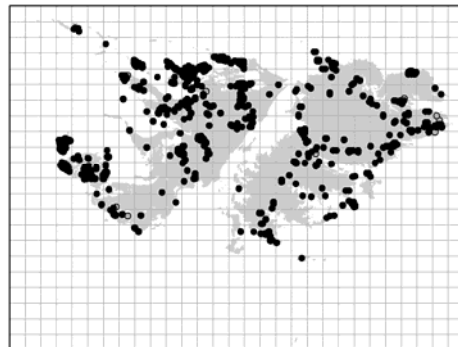
Ophioglossum crotalophoroides



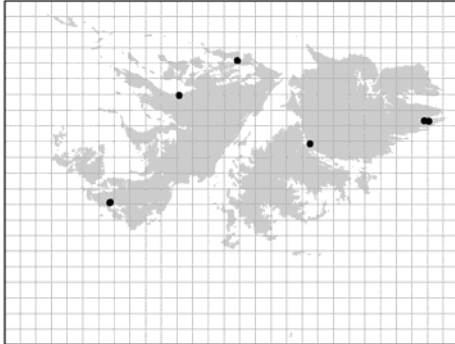
Oreobolus obtusangulus



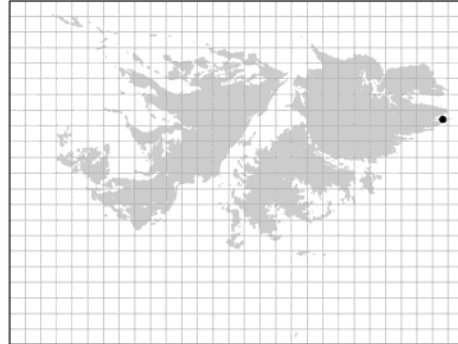
Oreomyrrhis hookeri



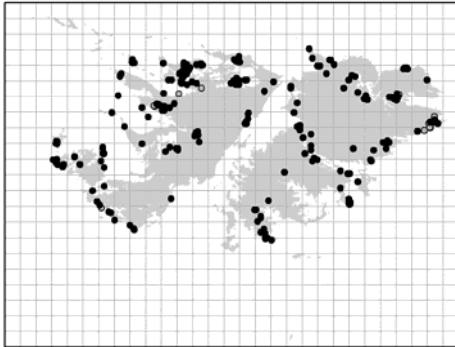
Oxalis enneaphylla



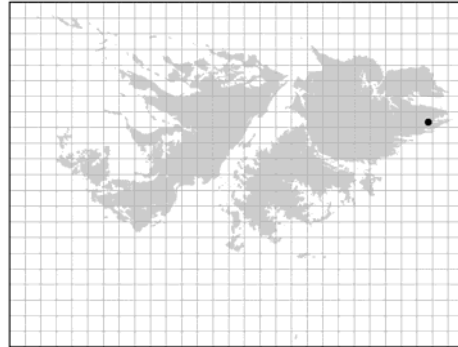
Papaver dubium



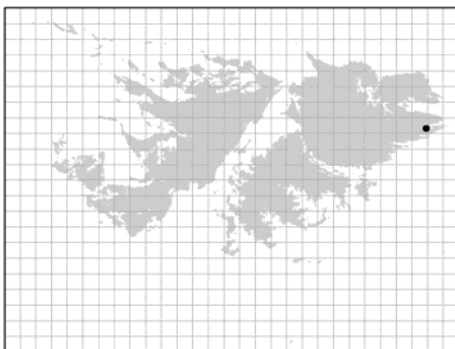
Parentucellia viscosa



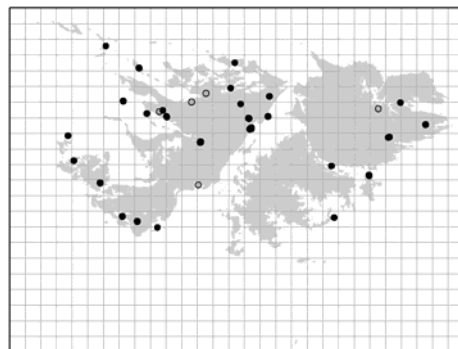
Perezia recurvata



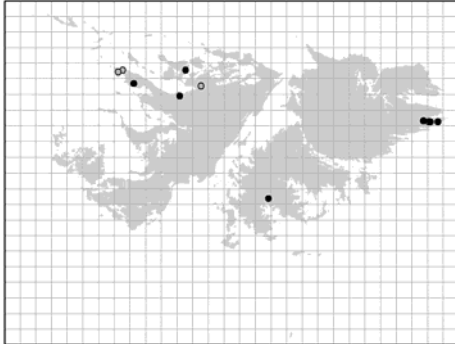
Phalaris arundinacea var. *arundinacea*



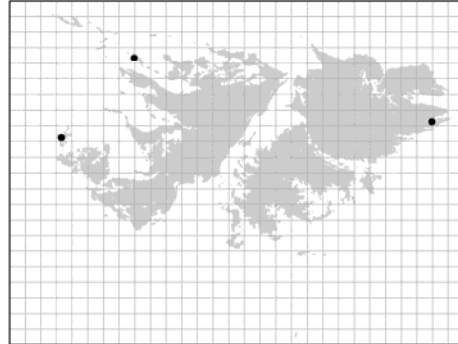
Phalaris arundinacea var. *picta*



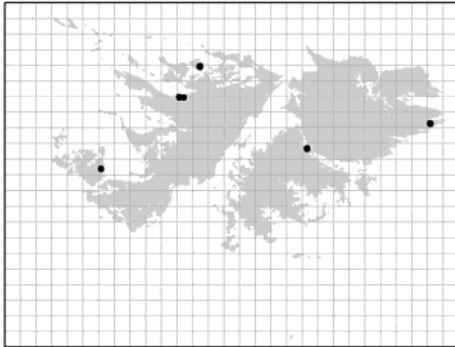
Phlebotobium maclovianum



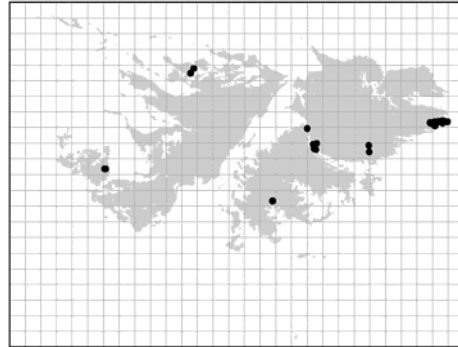
Phleum pratense



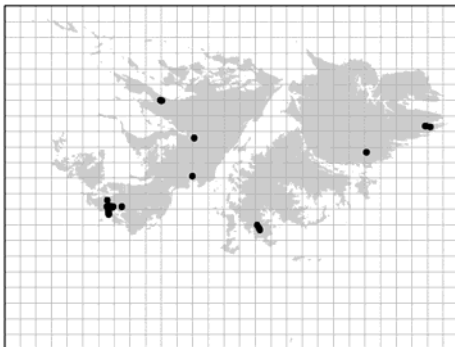
Phormium tenax



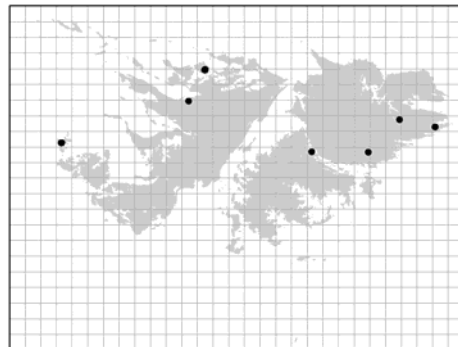
Picea sitchensis



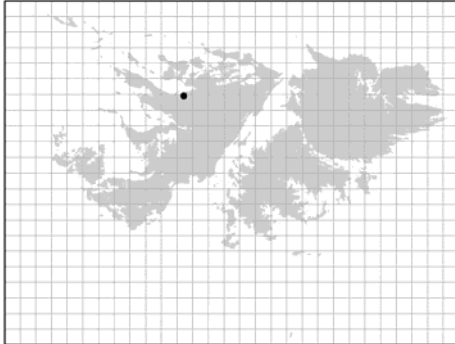
Pilosella aurantiaca subsp. *aurantiaca*



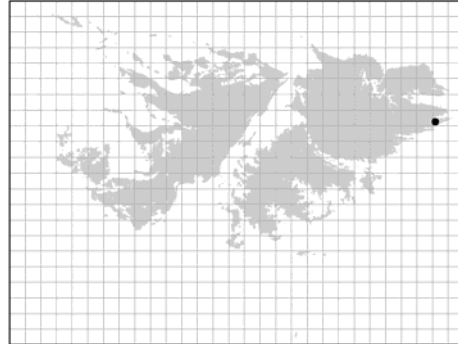
Pilosella officinarum



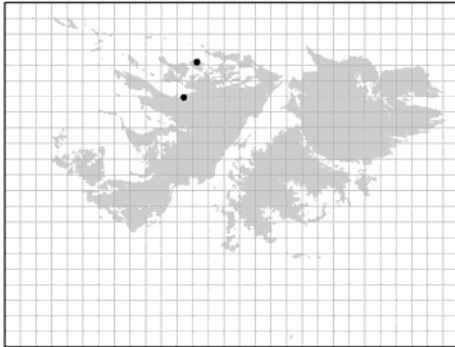
Pinus contorta



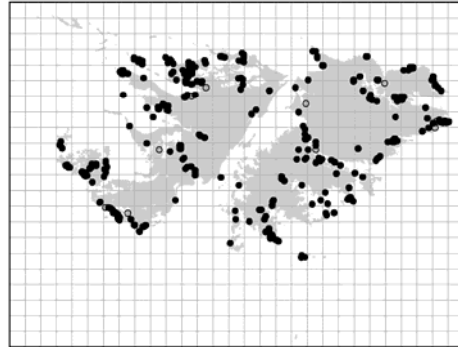
Pinus echinata



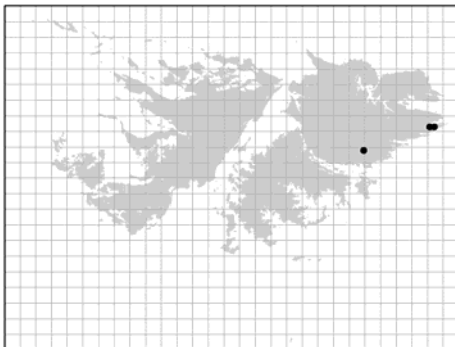
Pinus muricata



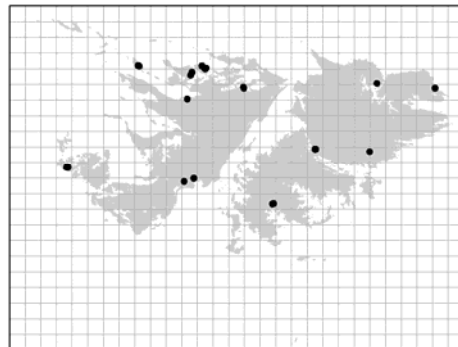
Pinus sylvestris



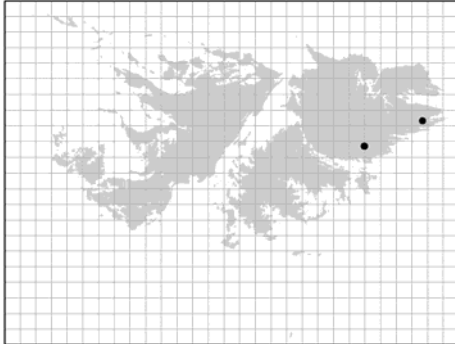
Plantago barbata



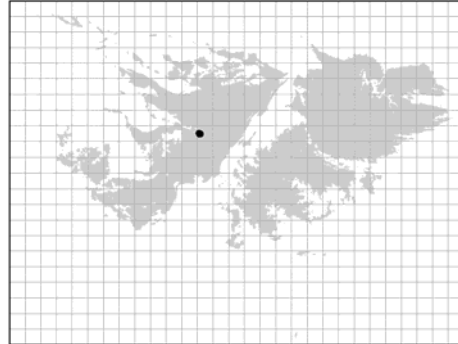
Plantago coronopus



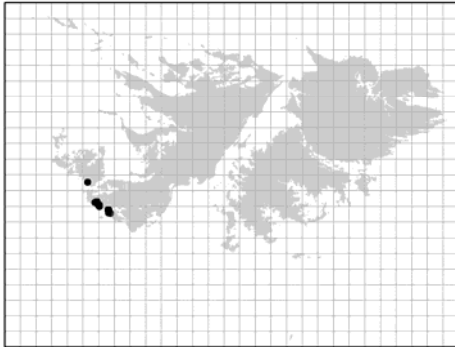
Plantago lanceolata



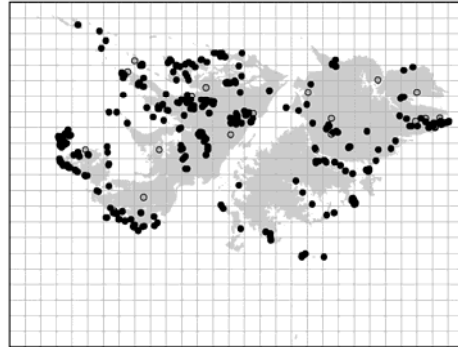
Plantago major



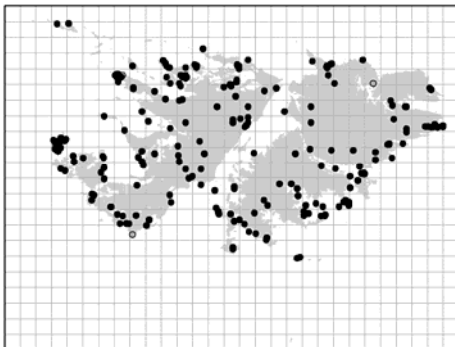
Plantago maritima



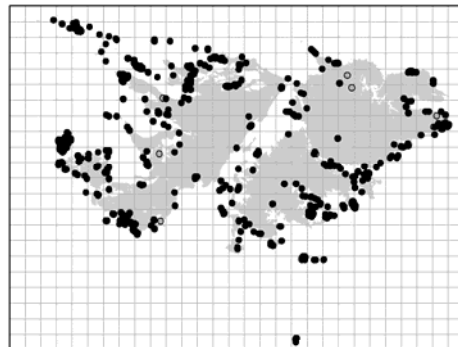
Plantago moorei



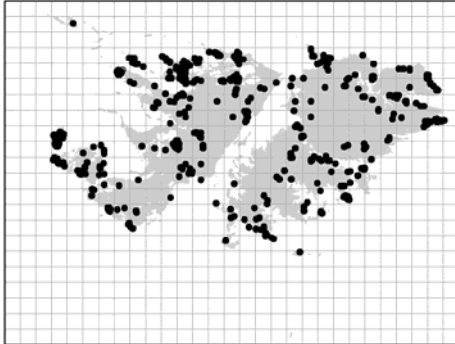
Poa alopecurus



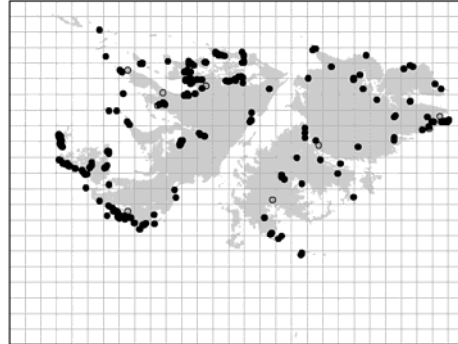
Poa annua



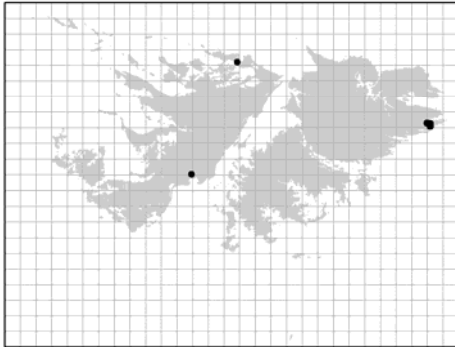
Poa flabellata



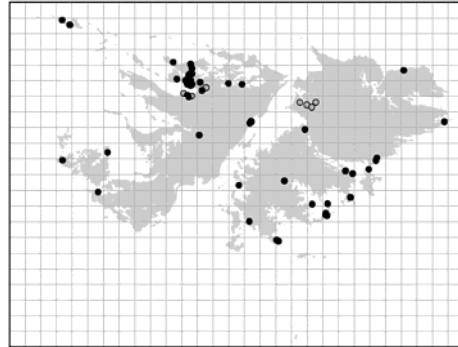
Poa pratensis



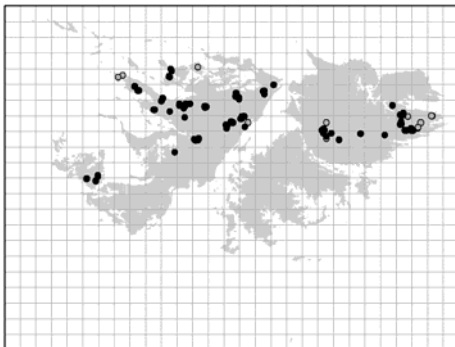
Poa robusta



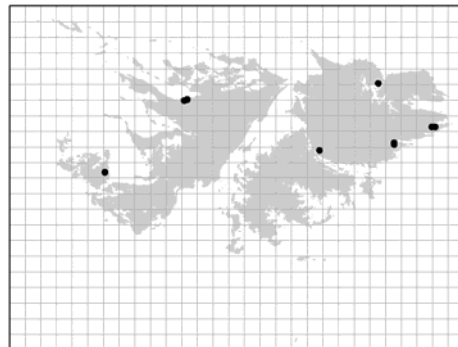
Polygonum aviculare



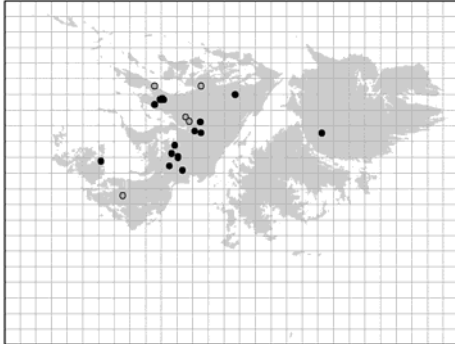
Polygonum maritimum



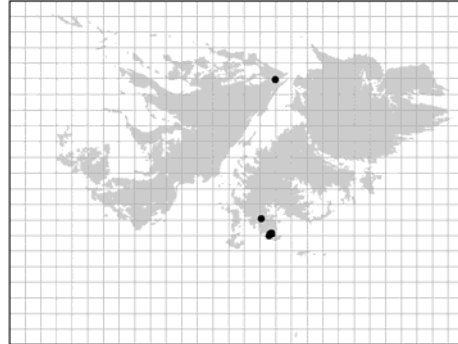
Polystichum mohrioides



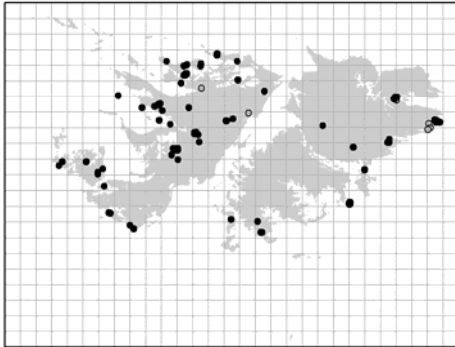
Populus x canescens



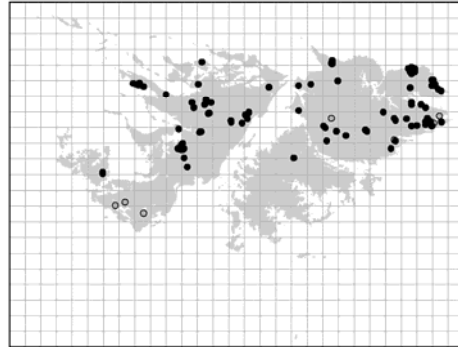
Potamogeton linguatus



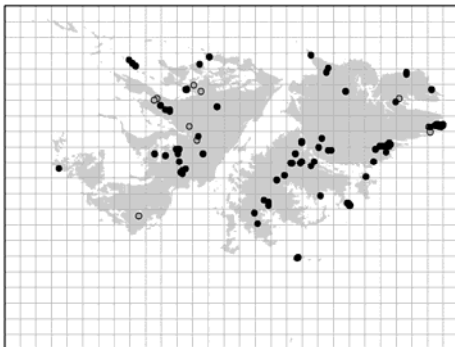
Potentilla anserina



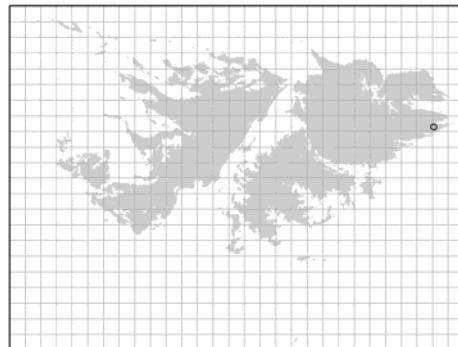
Primula magellanica



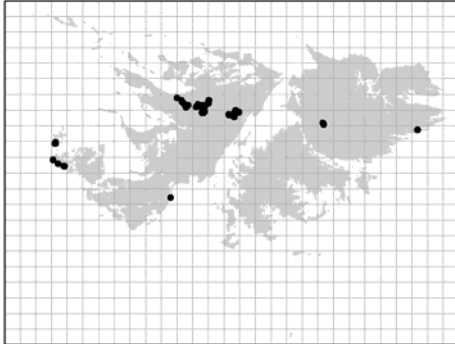
Psychrophila appendiculata



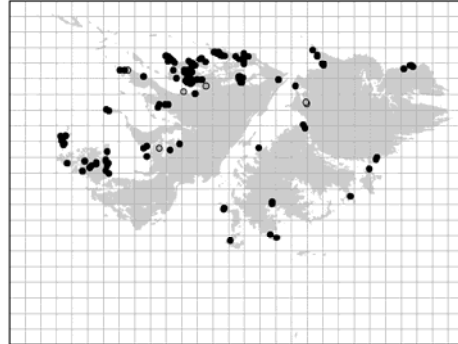
Psychrophila sagittata



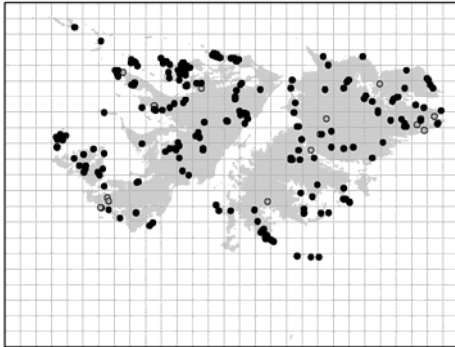
Puccinellia glaucescens



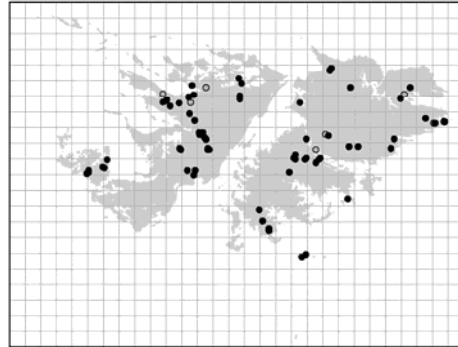
Puccinellia pusilla



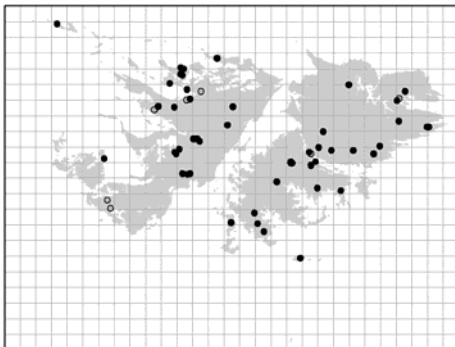
Ranunculus acaulis



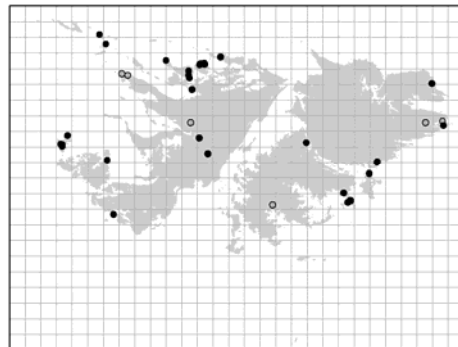
Ranunculus bitematus



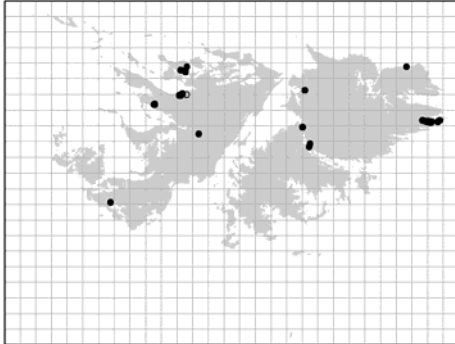
Ranunculus hydrophilus



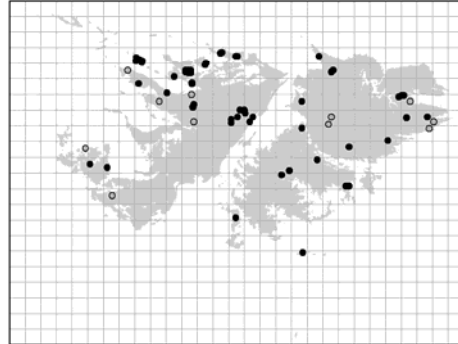
Ranunculus maclovianus



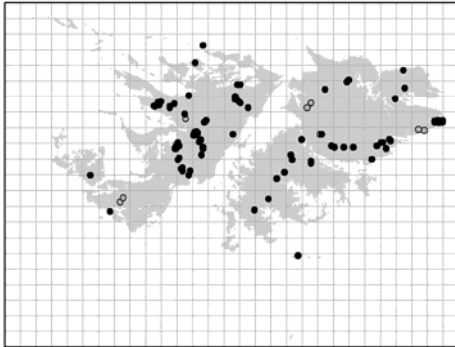
Ranunculus pseudotrullifolius



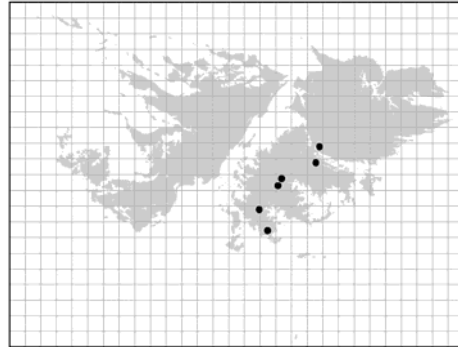
Ranunculus repens



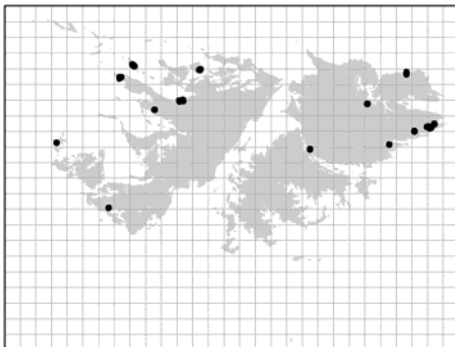
Ranunculus sericocephalus



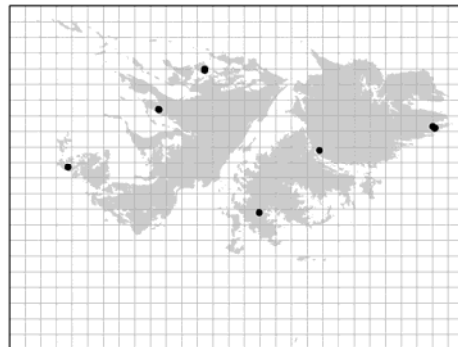
Ranunculus trullifolius



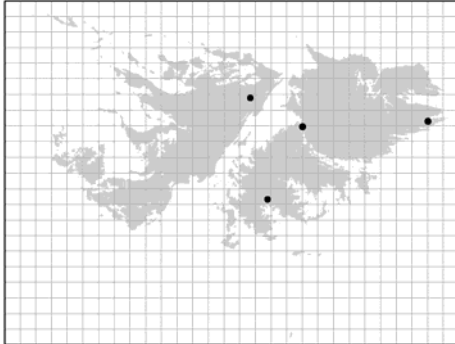
Rheum x hybridum



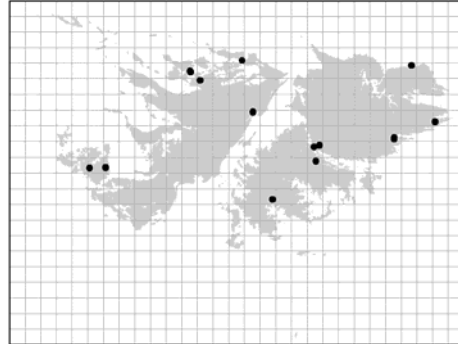
Ribes magellanicum subsp. *magellanicum*



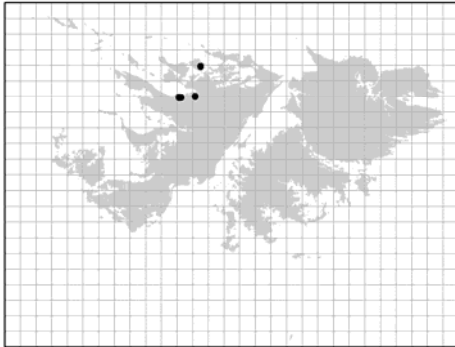
Ribes nigrum



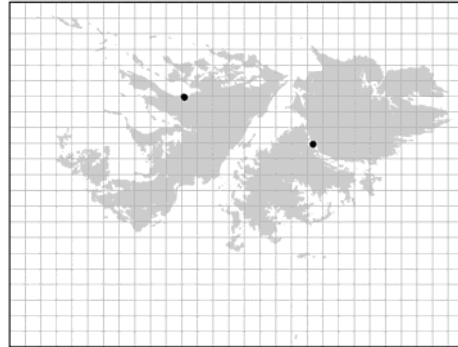
Ribes rubrum



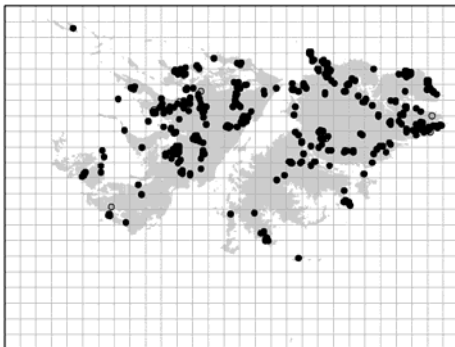
Ribes uva-crispa



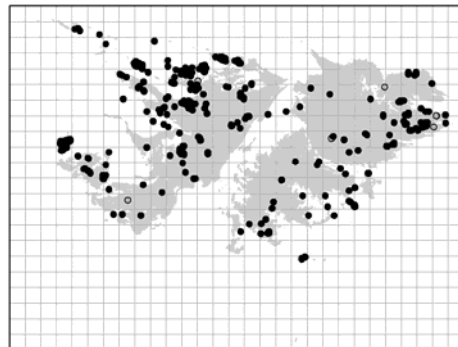
Rosa rubiginosa



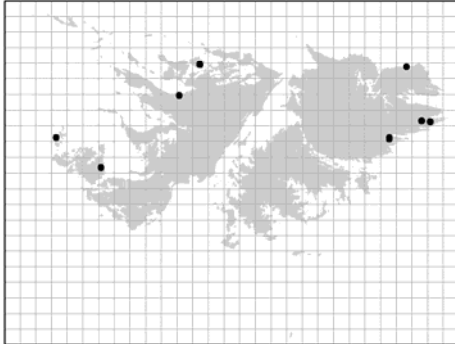
Rosa rugosa



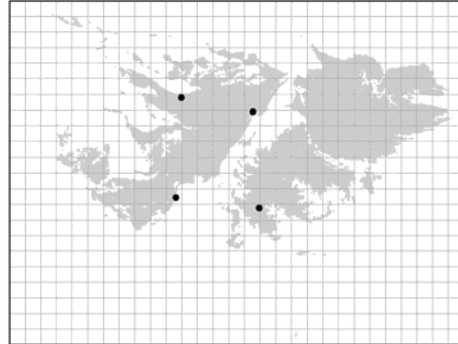
Rostkovia magellanica



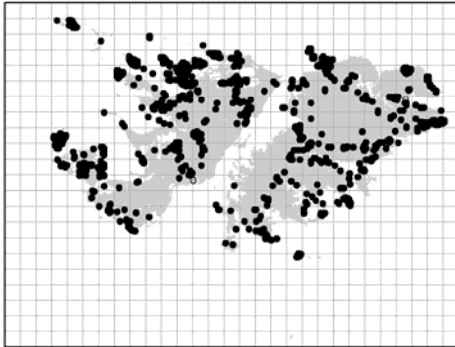
Rubus geoides



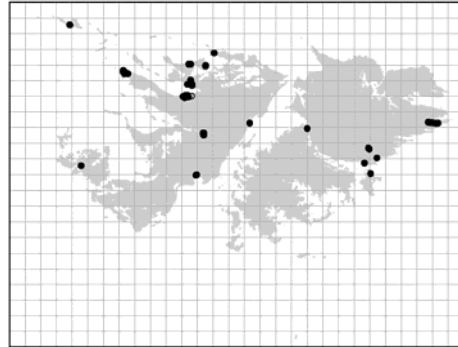
Rubus idaeus



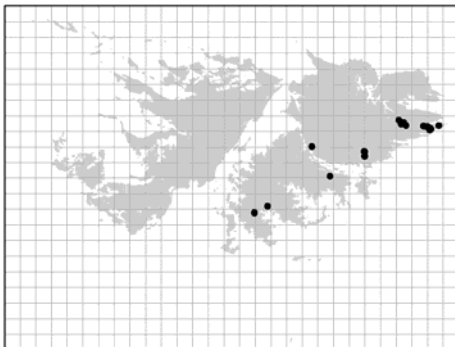
Rumex acetosa



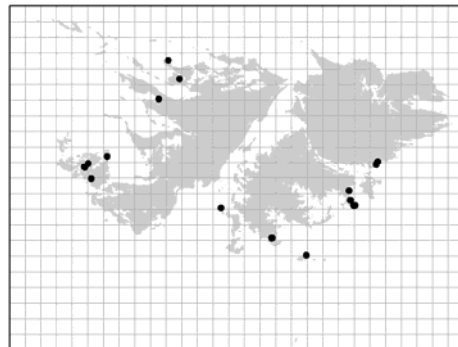
Rumex acetosella



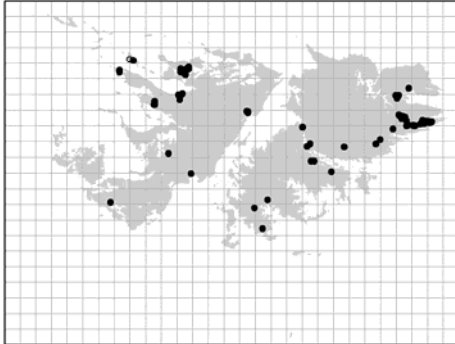
Rumex crispus



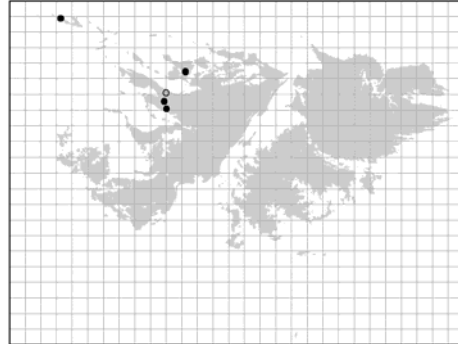
Rumex longifolius



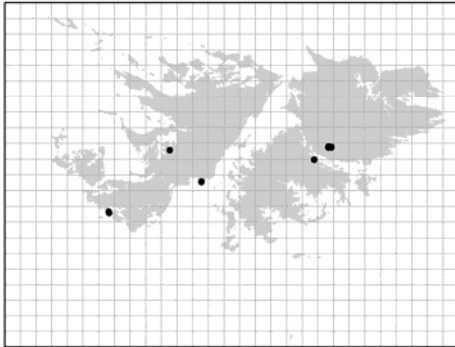
Rumex magellanicus



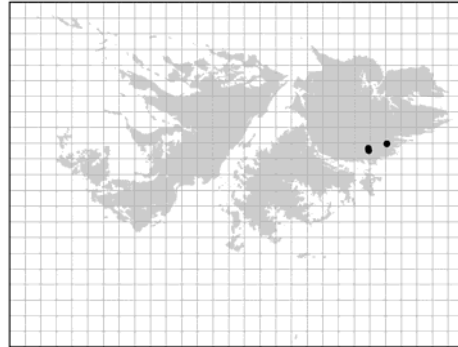
Rumex obtusifolius



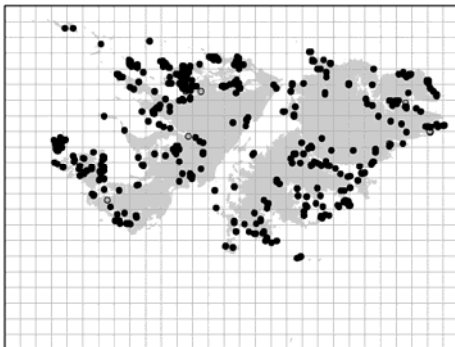
Rumohra adiantiformis



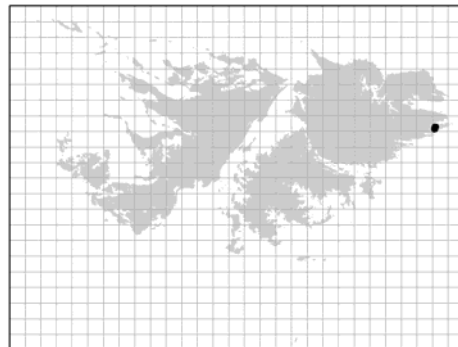
Ruppia filifolia



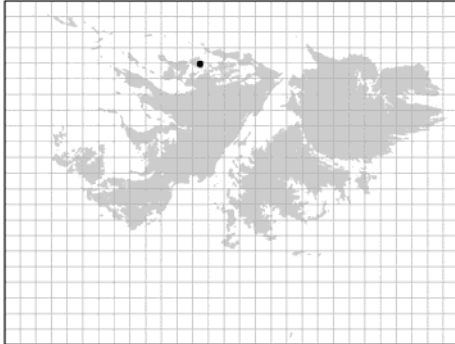
Sagina filicaulis



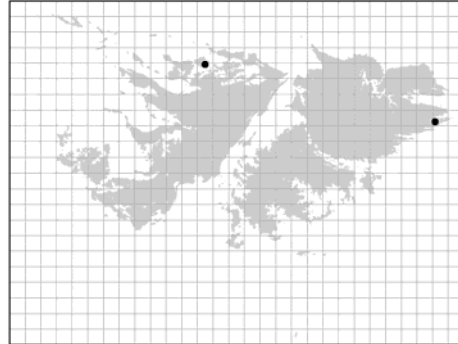
Sagina procumbens



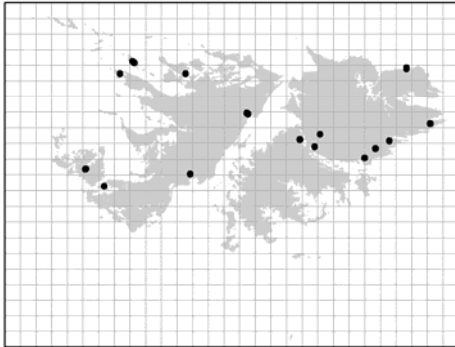
Salix cinerea



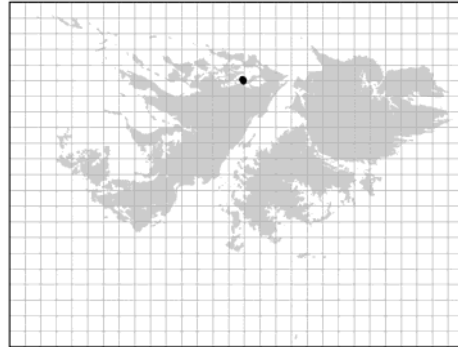
Salix gmelini



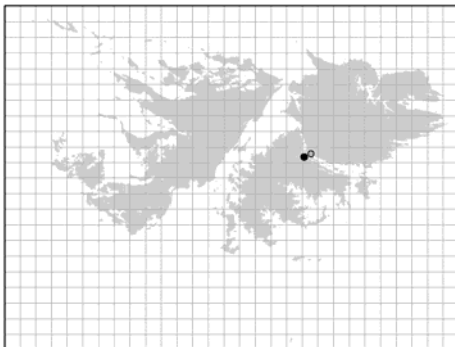
Salix viminalis



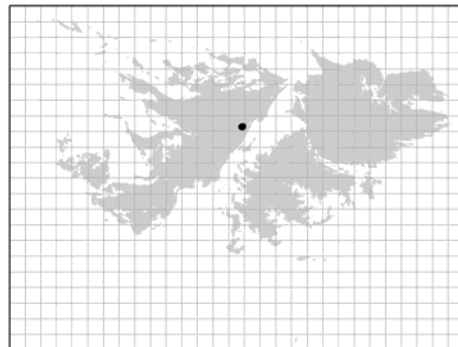
Sambucus nigra



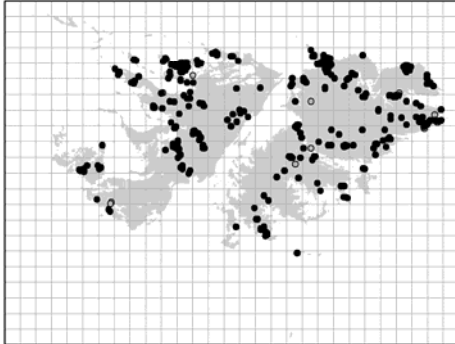
Samolus repens



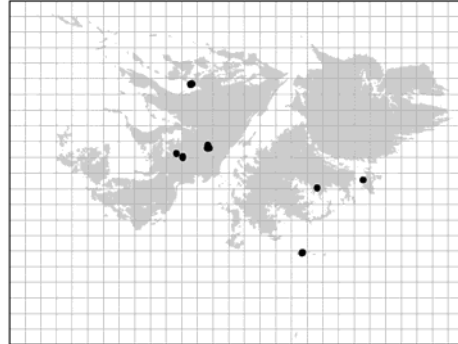
Saxifraga magellanica



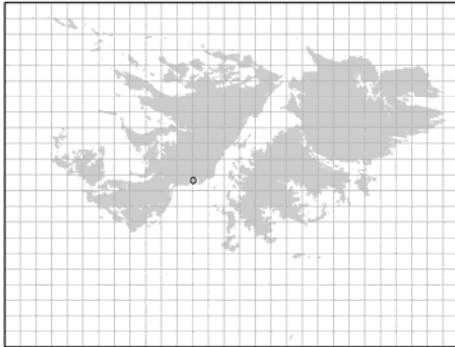
Schizaea fistulosa



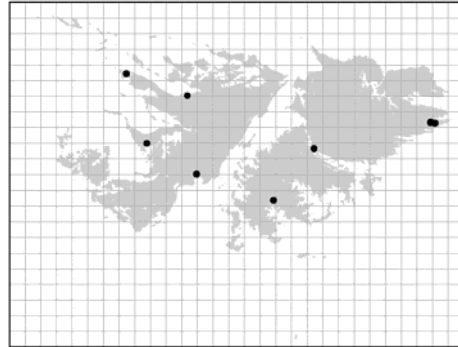
Schizeilema ranunculus



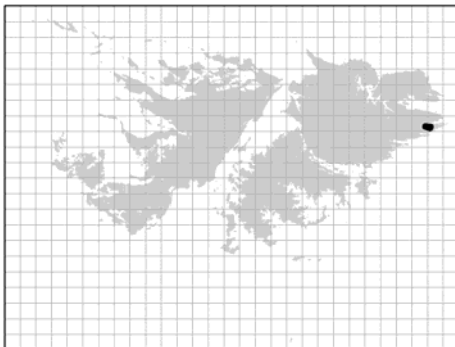
Schoenoplectus californicus



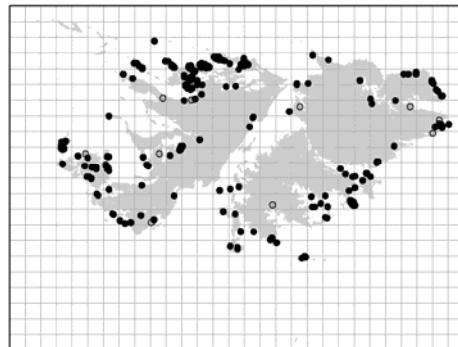
Scutellaria nummulariifolia



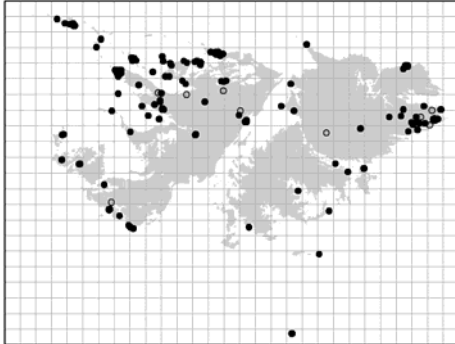
Sedum acre



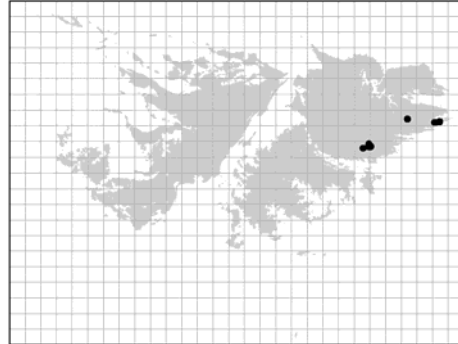
Sedum forsterianum



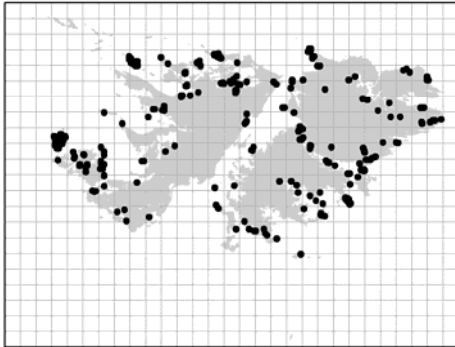
Senecio candidans



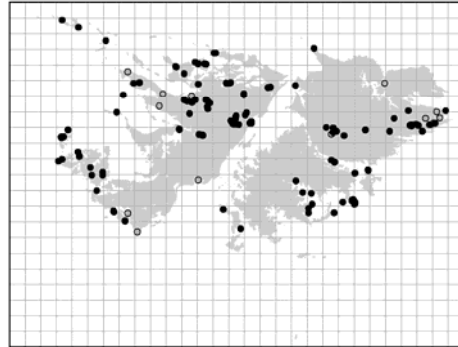
Senecio littoralis



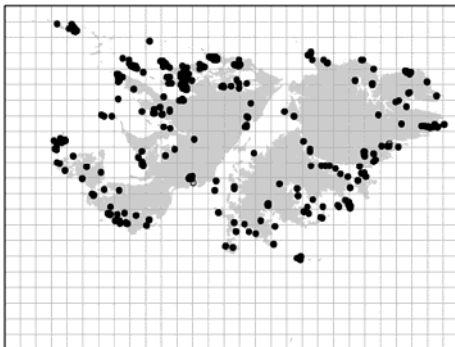
Senecio squalidus



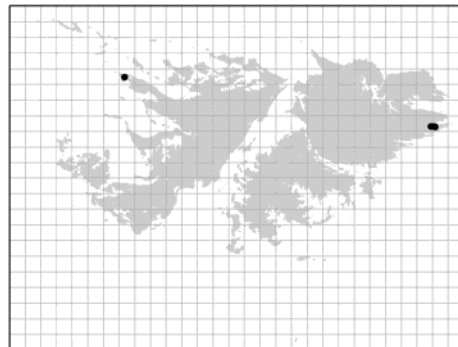
Senecio sylvaticus



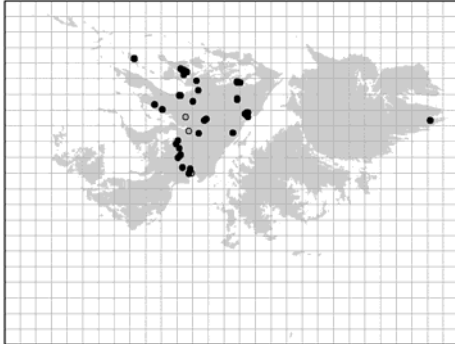
Senecio vaginatus



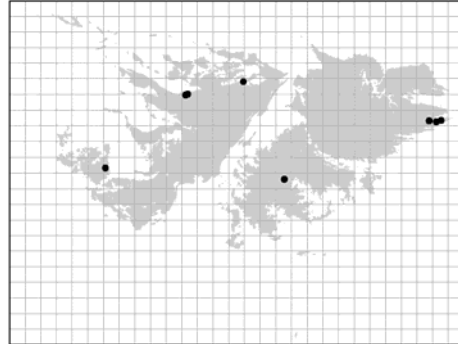
Senecio vulgaris subsp. *vulgaris*



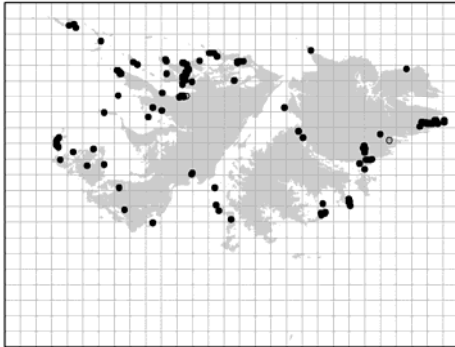
Silene uniflora



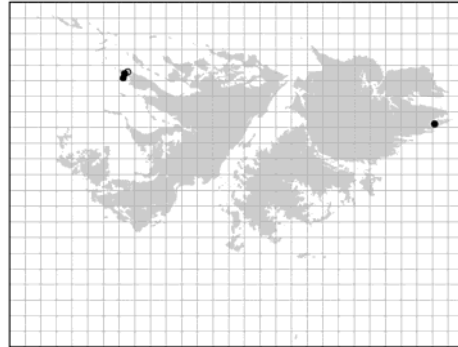
Sisyrinchium chilense



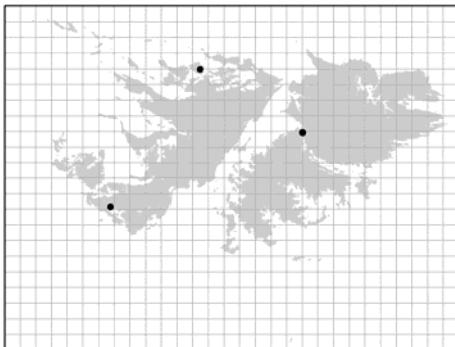
Solanum tuberosum



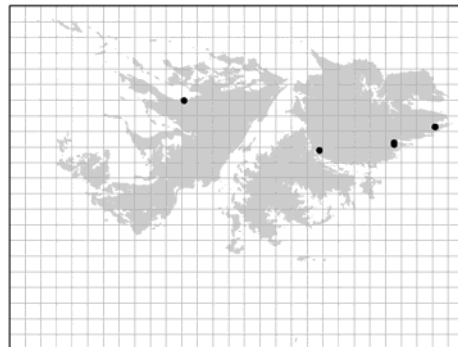
Sonchus asper subsp. *asper* var. *asper*



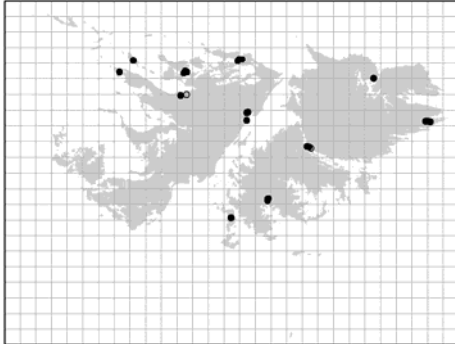
Sonchus oleraceus var. *oleraceus*



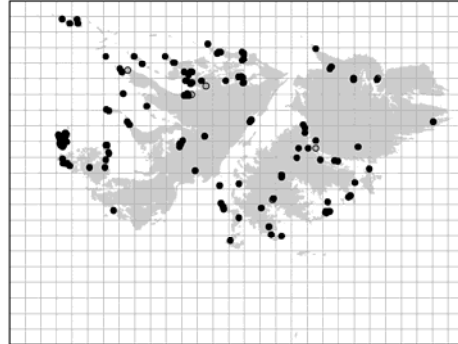
Sorbus aria



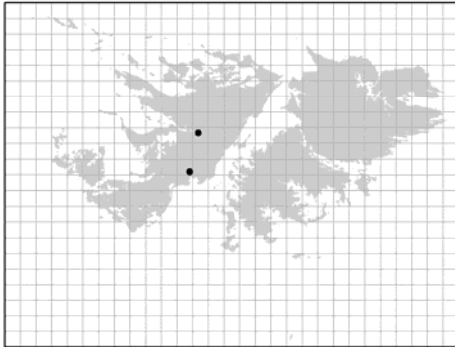
Sorbus aucuparia



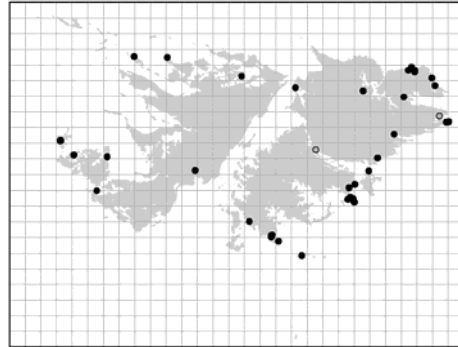
Spargula arvensis



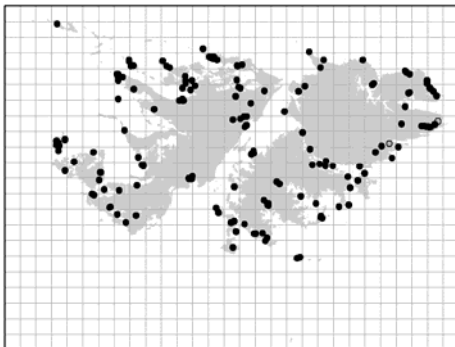
Spargularia marina



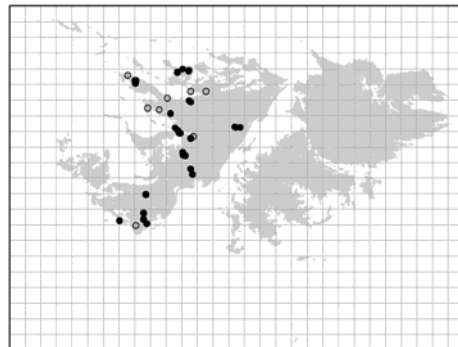
Stellaria alsine



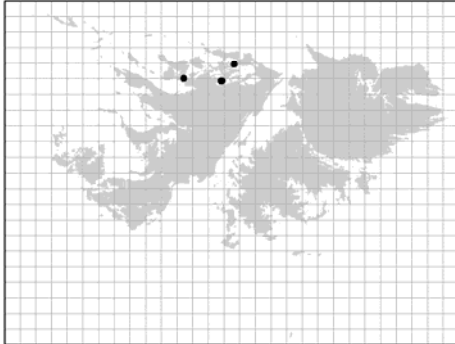
Stellaria debilis



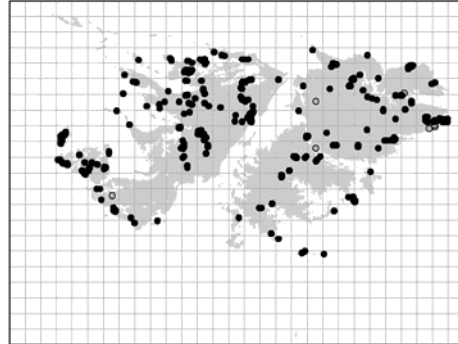
Stellaria media



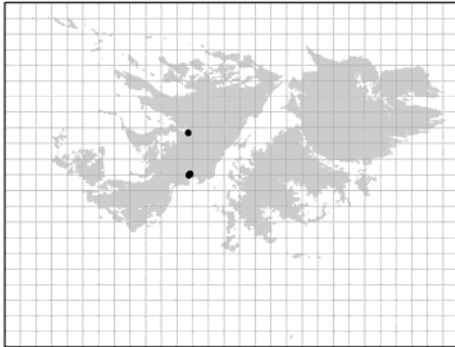
Sticherus cryptocarpa



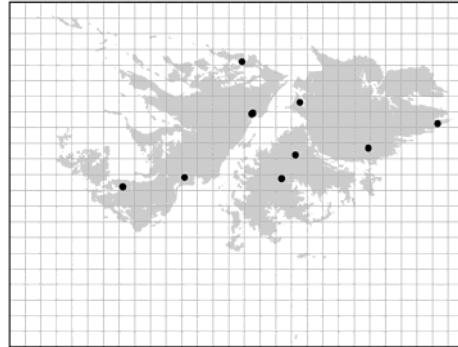
Suaeda argentinensis



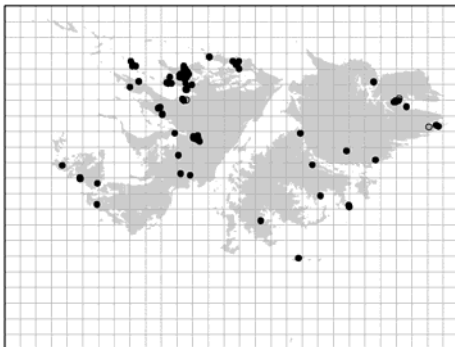
Symphyotrichum vahlii



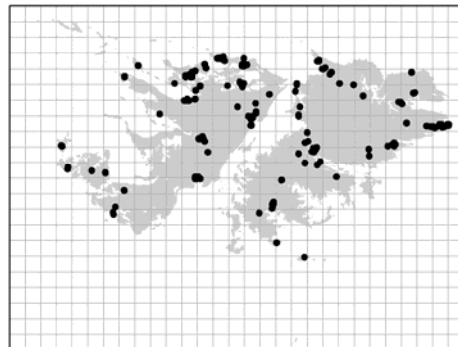
Tanacetum parthenium cv. "Aureum"



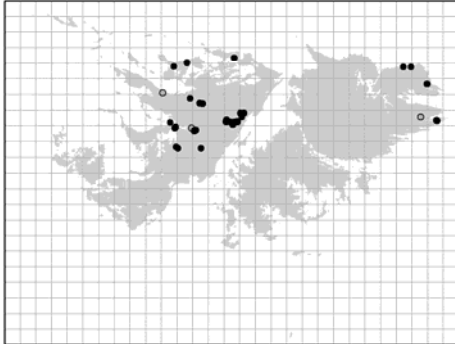
Tanacetum vulgare



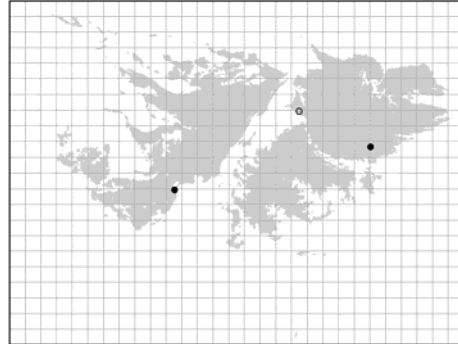
Taraxacum gilliesii



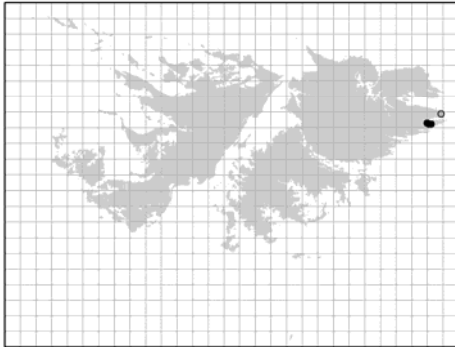
Taraxacum officinale agg.



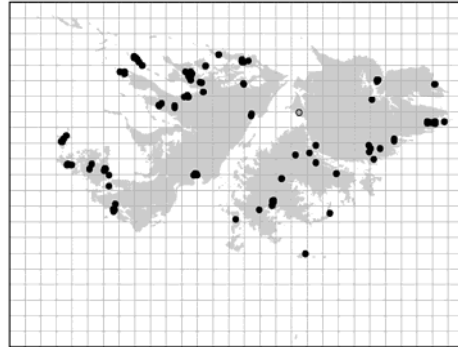
Tetroncium magellanicum



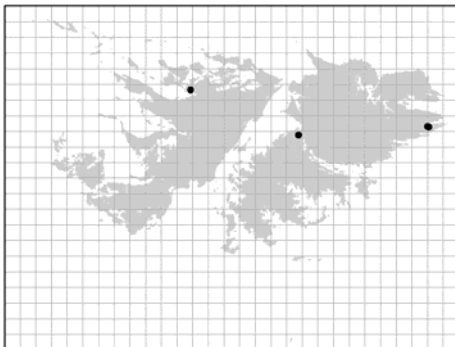
Trifolium arvense



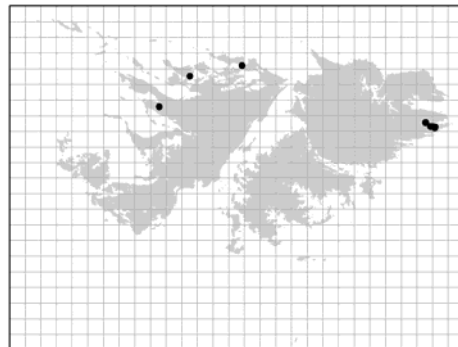
Trifolium aureum



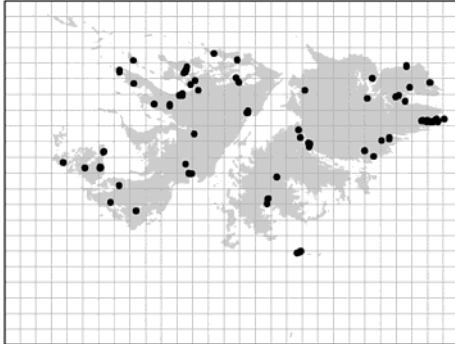
Trifolium dubium



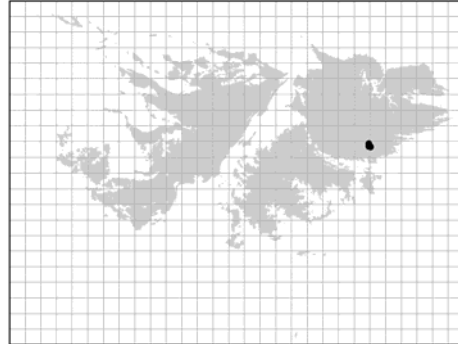
Trifolium hybridum



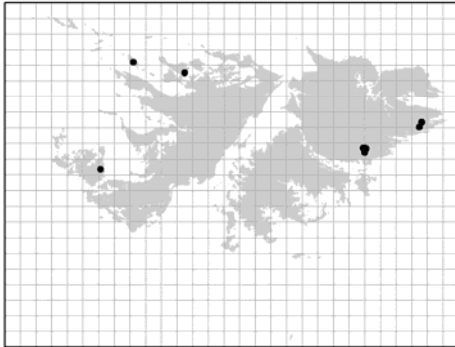
Trifolium pratense



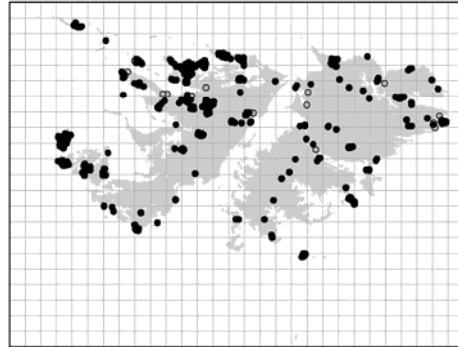
Trifolium repens



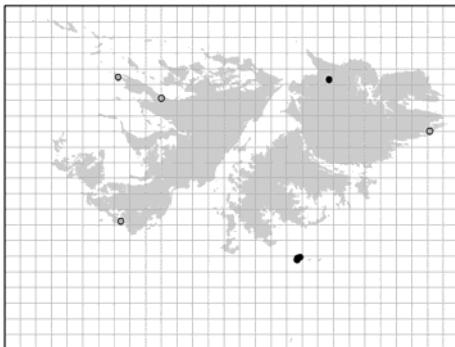
Trifolium striatum



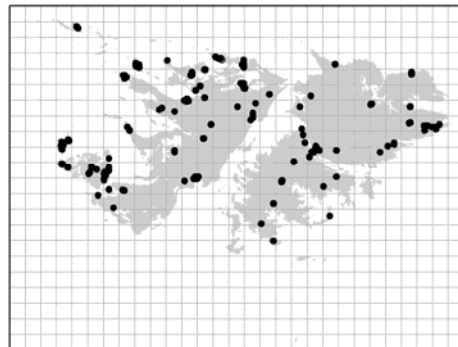
Tripleurospermum maritimum subsp. *inodorum*



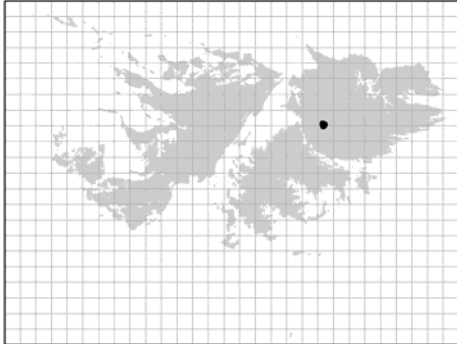
Trisetum spicatum subsp. *phleoides*



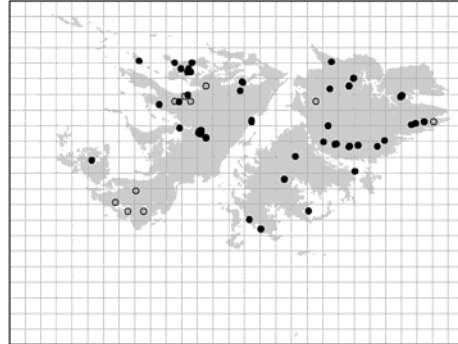
Trisetum spicatum subsp. *spicatum*



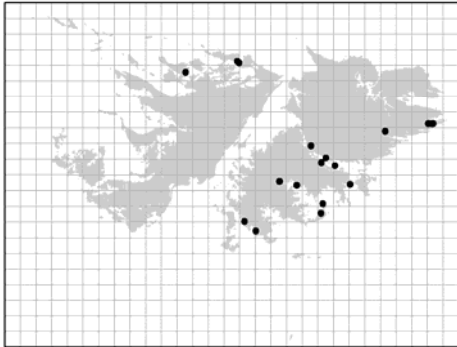
Ulex europaeus



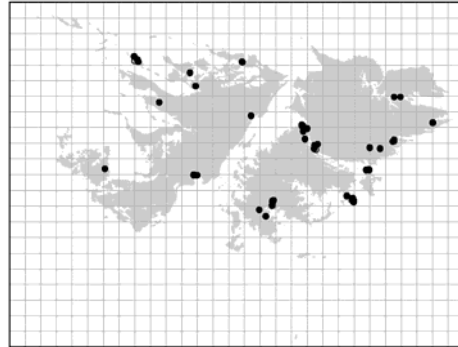
Uncinia kingii



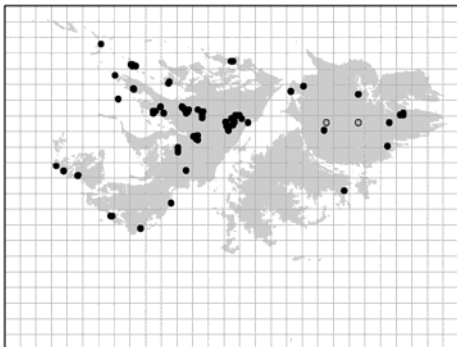
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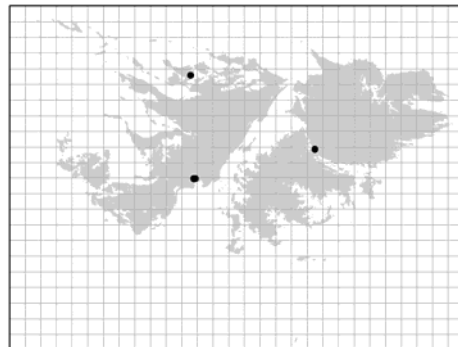
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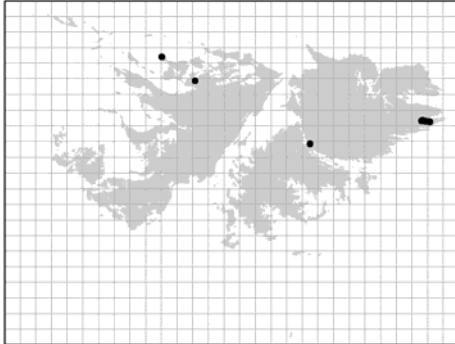
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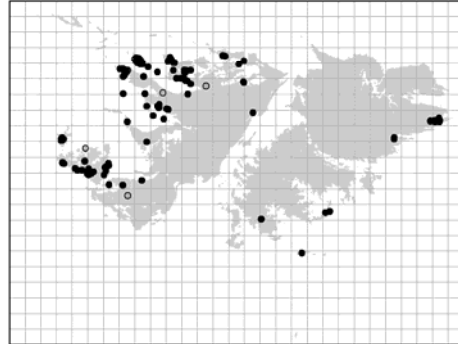
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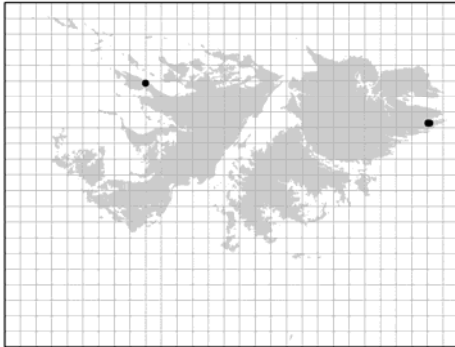
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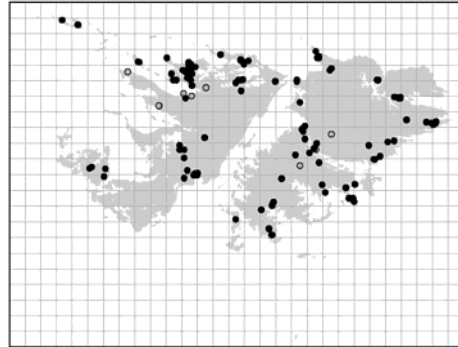
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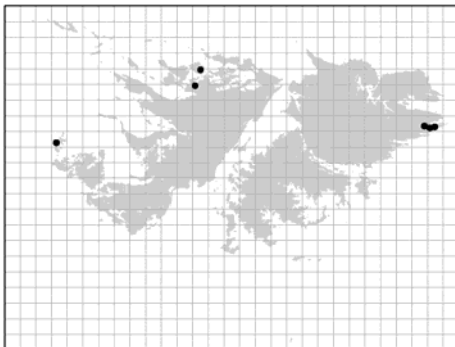
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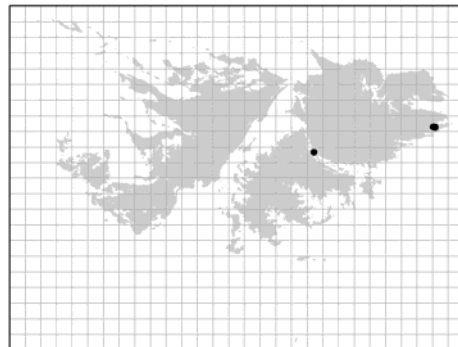
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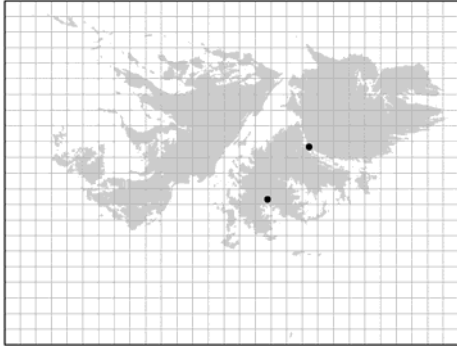
Veronica serpyllifolia subsp. *serpyllifolia*



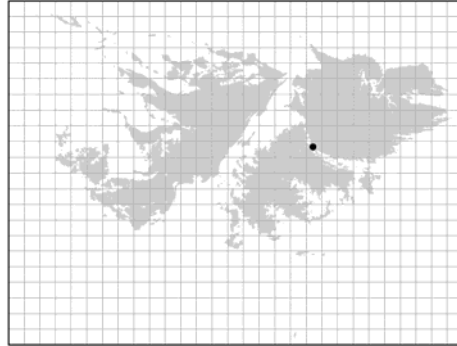
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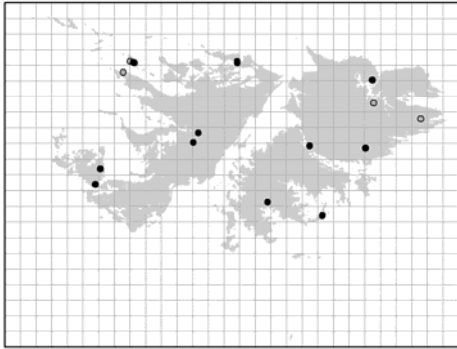
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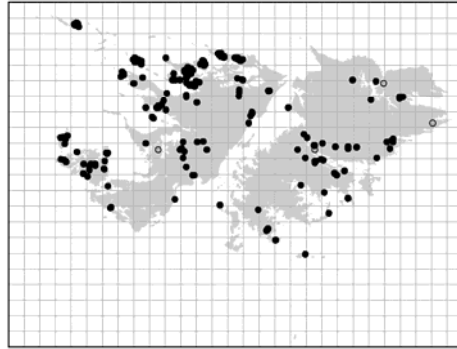
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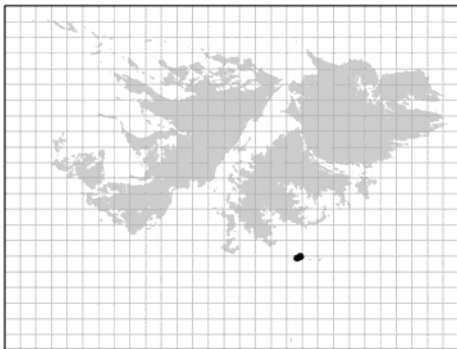
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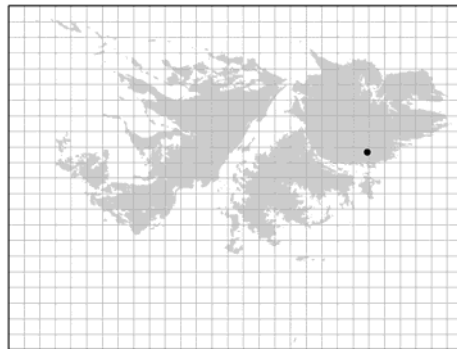
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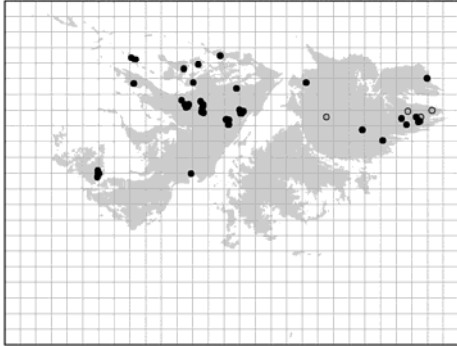
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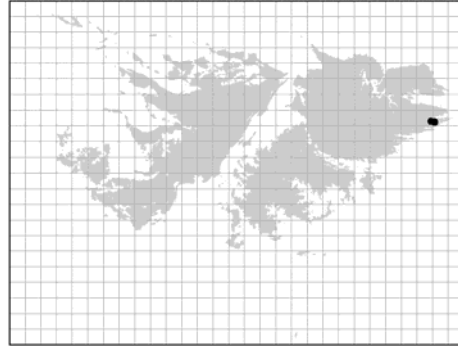
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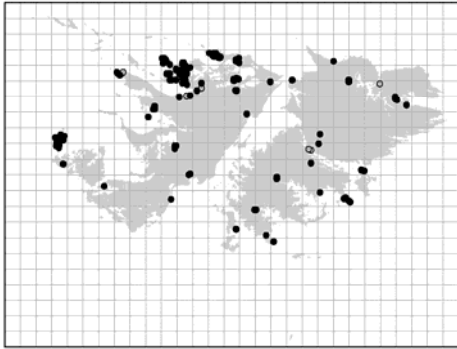
Viola tricolor



Viola tridentata



Viola x wittrockiana



Vulpia bromoides

APPENDIX III: Habitat classification for the Falkland Islands

	1 st level	2 nd level	3 rd level	4 th level	Description	Characteristic species
A	Tussac	1. Dense/ continuous 2. Scattered			This is confined to coastal areas including small offshore islands, usually below 200 m altitude. At its maximum development it comprises almost a pure stand of 'Tussac' <i>Poa flabellata</i> .	<i>Tussac grass</i>
B	Grassland	1. Acid grassland	1. Unimproved 2. Semi-improved	1. Upland 2. Lowland	This includes all semi-improved and unimproved grassland dominated by <i>Cortaderia pilosa</i> occurring on acid soils, and includes wet acidic grasslands typified by Juncaceae, particularly <i>Rostkovia magellanica</i> . Acid grassland often grades into wet or dry dwarf shrub heath, although it must always have less than 25% dwarf shrub cover.	Whitegrass Where grazing is absent or low, Bluegrass and/ or native Fescue species can be common/ dominant
		2. Neutral (including 'greens') grassland			This type includes all semi-improved and unimproved grassland occurring on soils that are closer to a neutral pH or in areas of nutrient flushing on otherwise acid soils. It includes a range of grass-dominated plant communities which are inundated with water periodically, permanently moist or even waterlogged grassland where grasses are dominant in the sward (c.f. marsh/ marshy grassland). It includes the fine grassy vegetation (often grazed) found in coastal and valley areas and in areas of flushing, and other ranker grasslands, including stands of Cinnamon grass <i>Hierochloa redolens</i> .	*Smooth-stalked meadow grass *Annual meadow grass Cinnamon grass Tall rush Native rush *Yorkshire fog *Common Bent
		3. Improved/ reseeded			This type includes species poor, grass dominated swards occurring on all soil types that have either been sown, or created by modification of unimproved grassland for agricultural or recreational purposes. It includes the species-poor 'lawn' vegetation, resulting from intensive grazing, that is associated with settlements, and grassland that has been reseeded for more than one year.	*Yorkshire fog *Common Bent *Early hair-grass *Red Fescue

C	Dwarf shrub heath	1. Dry dwarf shrub heath 2. Wet dwarf shrub heath 3. Dry dwarf shrub heath/ acidic grass mosaic 4. Wet dwarf shrub heath/ acidic grass mosaic	1. Upland 2. Lowland		This vegetation is dominated (over 25% ground cover) by dwarf shrub species, typically found overlying acid, free-draining often rather shallow soils. Diddle-dee <i>Empetrum rubrum</i> is usually the dominant species, however Christmas bush <i>Baccharis magellanica</i> and Mountainberry <i>Gaultheria</i> species can be locally important.	Diddle-dee Christmas Bush Mountainberry Small-fern Balsam Bog (e.g. at coastal sites and at higher altitude)
D	Fern beds	1. <i>Blechnum magellanicum</i> 2. <i>Blechnum penna-marina</i> 3. <i>Blechnum cordatum</i> 4. <i>Gleichenia cryptocarpa</i>	1. Continuous 2. Scattered		This vegetation type is characterised by a continuous cover of fern such as Tall fern <i>Blechnum magellanicum</i> . When carrying out broad-scale Phase I type habitat surveys areas that are less than 0.25 ha (c. 50 m x 50 m) should be included in the broad habitat type that they are associated with as they are too small to be mapped.	Tall-fern
E	Cushion heath	1. Cushion heath - coastal 2. Cushion heath - inland			This vegetation is dominated (over 25% ground cover) by cushion plants such as Balsam Bog <i>Bolax gummifera</i> or <i>Nassauvia gaudichaudii</i> Coastal Nassauvia.	Coastal Nassauvia Tufted Azorella Magellanic Fescue Native Wood-rush
F	Montane/ Feldmark	1. Cushion plant dominated 2. Moss and lichen dominated			This type includes vegetation dominated by cushion plants but with low ground cover and associated good coverage by lichens. It also includes moss and lichen dominated sites found on ridges and summits. It does not include montane dwarf shrub heaths, flushes, grasslands and rock and scree communities that can also be found at lower elevations with little change in the species composition and which should be treated as components of other broad habitat types.	Lichen species Cushion-plant

G	Bog and flush	1. Bog	1. Blanket bog 2. Raised bog 3. Wet modified bog 4. Dry modified bog		Bogs are wetlands that support vegetation that is usually peat forming and which receive nutrients only from precipitation (ombrotrophic). For example this includes cushion bog dominated by <i>Astelia pumila</i> , <i>Caltha appendiculata</i> , <i>Gaimardia australis</i> and <i>Drosera uniflora</i> covering 0.25 ha (50*50 m) or more, and valley raised bog communities dominated by <i>Sphagnum</i> , <i>Carex microglochin</i> and <i>Montia fontana</i> .	Soft-camp-bog Sundew Sphagnum species
		2. Flush			Flushes are associated with water movement and may or may not form peat. Flushes generally occur on gently-sloping ground, are often linear or triangular in shape and may include small water courses. If too small to map they should be target noted. Typically have an open or closed ground layer of <i>Sphagnum</i> and/ or other bryophytes. This well-developed bryophyte layer distinguishes flush habitats from marshy grassland and from wet acid or neutral grassland.	Well-developed bryophyte ground layer Bristle sedge
	Fen, marsh and swamp/ marginal communities	1. Fen and swamp	1. Fen 2. Swamp		Fens and swamps are fed by ground water, with permanently, seasonally or periodically waterlogged peat, peaty or mineral soils where grasses do not predominate. In this case the water table is distinctly above the level of the substrate for most of the year. This does not include wet grassland. It includes emergent vegetation e.g. 'reed beds' composed of <i>Schoenoplectus californicus</i> , or frequently inundated vegetation occurring over peat or mineral soils.	Blood-beak sedge American Willowherb California club-rush (in reed beds)
		2. Marginal			Strips of fen or swamp less than 5 m in width and bordering watercourses are termed 'marginal communities'.	Native willowherb

H		3. Marsh/ marshy grassland	1. Marsh 2. Marshy grassland		<p>A broad category covering a gradation between grasslands with a high proportion of rush (<i>Juncus</i>) or sedge species and wet vegetation where grasses are subordinate to forbs</p> <p>Includes the herb-rich, grass-poor vegetation found on damp, level ground near the coast, and dominated by <i>Juncus scheuchzerioides</i> and/or <i>Gunnera magellanica</i>.</p>	Pigvine Native rush
	Open Water	1. Standing water	1. Eutrophic 2. Mesotrophic 3. Oligotrophic 4. Dystrophic 5. Brackish	[1. Small ponds] [2. Ponds, etc <0.5 ha] [3. Lakes 0.5 ha] [4. Large lakes >0.5 ha] [5. Ditches]	<p>This type includes natural systems such as lakes (c. 0.5 ha), large lakes (> 0.5 ha), small ponds and ponds (< 0.5 ha), as well as man-made waters such as ditches. It includes the open water zone, which may contain submerged, free floating or floating-leaved vegetation, and water fringe vegetation such as <i>Ranunculus</i> spp., shoreweed <i>Littorella australis</i> & water-starwort <i>Callitriche antarctica</i>. It also includes adjacent wetland habitats with contiguous water levels that are less than 0.25 ha.</p> <p>Small areas of open water in a predominately terrestrial habitat such as bog pools or temporary pools on heaths and acid grassland should be included in the appropriate broad habitat type.</p>	Water-starwort Spike-rush Water-milfoil Tasselweed Pondweed
		2. Running water	1. Eutrophic 2. Mesotrophic 3. Oligotrophic	[1. Spring and small stream <1 m wide] [2. Streams and rivers 1-3 m wide] [3. Rivers > 3 m wide]	<p>This type includes rivers and streams from bank top to bank top. This includes the open water zone, which may contain submerged, free floating or floating-leaved vegetation, water fringe vegetation and exposed sediments.</p>	Water-starwort Spike-rush Water-milfoil

I					Relevant extra classification for open water: 1. Eutrophic – water often strongly discoloured by algae. PH usually over 7. Substrate often highly organic mud. 2. Mesotrophic – Water sometimes discoloured by planktonic algae. PH usually around or slightly below neutral. 3. Oligotrophic – Water very clear, pH usually less than 7. Substrate rocky, sandy or peaty 4. Dystrophic – Water usually peat-stained. PH very low (3.5-5.5). Alkalinity very low.			
J	Coastland	1. Littoral sediment	1. Intertidal	1. Mud	A shoreline with grains not visible to the naked eye. On lower mud flats <i>Spergularia marina</i> may be important.	Littoral sediment occurs between the upper margin of the littoral zone (corresponds to the upper limit of lichen <i>Verrucaria</i> where it occurs) to the lower margin. Thus, a wide range of communities are included from intertidal mudflats and beaches to saltmarsh.	Thrift plantain Shore Meadow-grass Andean Pearlwort Antarctic hair-grass Stonecrop Sea Knotgrass	
				2. Sand	A shoreline with visible grains averaging < 2 mm in diameter.			On these coarser sediments <i>Chenopodium macrospermum</i> & <i>Polygonum maritimum</i> may be found.
				3. Shingle/cobbles	A shoreline with stones averaging 2 - 300 mm in diameter.			
				4. Boulders	A shoreline with stones averaging > 300 mm in diameter.			
				5. Rocks	Rocky shores have exposed bedrock and rock pools.			
			2. Saltmarsh	1. <i>Plantago barbata</i> 2. <i>Poa robusta</i> 3. Other	Saltmarsh forms a very narrow fringe around the sheltered muddy mouths of larger creeks. Saltmarsh in the Falkland Islands is typified by extensive mats of <i>Plantago barbata</i> or <i>Poa robusta</i> , with <i>Colobanthus quitensis</i> , <i>Deschampsia antarctica</i> and <i>Crassula moschata</i> .			
	2. Sand dunes			Sand dunes are areas of loose, shifting or semi-stabilised sand found both in coastal areas and further inland.	Bluegrass *Marram grass Sea Cabbage Sheep's Sorrel Lyme grass <i>Leymus arenarius</i>			

				<p>These habitat types occur above the high water mark, in areas influenced by wavesplash and seaspray (supralittoral zone). Features that may be present include vertical rock, boulders, gullies, ledges and pools, depending on the wave exposure of the site and its geology.</p> <p>It also includes the variously combined communities of very-limited extent found in rock crevices, that includes taxa such as <i>Colobanthus</i> species, <i>Crassula moschata</i> & <i>Ranunculus acaulis</i>, and vegetated shingle which is often dominated by <i>Armeria maritima</i>, <i>Apium australe</i> & <i>Isolepis cernua</i>.</p>	<p>Wild celery Thrift Andean Pearlwort Emerald bog Stonecrop *Procumbent pearlwort Sea Cabbage Antarctic hair-grass</p>
		<p>1. Hard 2. Soft</p>	<p>1. Crevice/ ledge vegetation 2. Coastal heath 3. Bird cliff vegetation</p>	<p>This includes sections of maritime cliff supporting crevice/ ledge vegetation, coastal heath and bird cliff vegetation</p>	<p>Wild celery Thrift Andean Pearlwort Emerald bog Stonecrop *Procumbent pearlwort</p>
				<p>In some areas seaspray influenced coastal grassland dominated by <i>Poa robusta</i> Shore Meadow-grass occurs above the high tide mark and sometimes on exposed cliff tops (e.g. at Port Stephens, West Falkland).</p>	<p>Shore Meadow-grass Wild celery Bluegrass Fuegian Couch Antarctic hair-grass</p>
				<p>Cushion, moss or lichen dominated areas on coastal sites at low altitudes with low ground cover.</p>	<p>Coastal Nassauvia Tufted Azorella</p>

K	Inland rock	1. Natural rock exposure	1. Inland cliff 2. Scree 3. Stone run 4. Other	1. Acidic 2. Basic	This type includes both natural and artificial exposed rock surfaces where these are almost entirely lacking in vegetation, as well as various forms of excavations and waste tips. It includes inland cliffs, ledges and caves, screes, stone runs, quarries and quarry waste.	Snakeplant (stone runs) Shield fern
		2. Artificial rock exposures	1. Quarry 2. Spoil heap 3. Mine			
L	Scrub	1. Dense/ continuous 2. Scattered	1. <i>Chiliotrichum diffusum</i> 2. <i>Hebe elliptica</i> 3. <i>Ulex europaeus</i> 4. <i>Berberis buxifolia</i>		This type includes patches of scrub, which form a continuous canopy. It includes stands dominated by Fachine <i>Chiliotrichum diffusum</i> , Native Boxwood <i>Hebe elliptica</i> and Gorse <i>Ulex europaeus</i> . It does not include loose associations of bushes in a vegetation otherwise of another broad habitat type. Ideally this type would only include scrub areas over 50 m x 50 m (in line with other broad habitats) but other areas should at least be target noted.	Fachine Boxwood *Gorse
M	Woodland	1. Coniferous 2. Broadleaved (may occur in the future) 3. Mixed	1. Semi-natural (this is possible in future) 2. Plantation		This type includes all mature coniferous stands where broad-leaved trees make up less than 20% cover (effectively all woodland sites). Other integral features of woodland such as glades and rides are included. Young plantations should be considered a part of the broad habitat type they were planted in until the canopy closes over. This broad habitat type is scarce at present but may well increase in importance in the future due to forestry activity.	*Lodgepole pine *Monterey Cypress
	Other	1. Arable and horticulture			This type is of relatively minor importance but has the potential to increase with farm and economic diversification. It includes, for example, arable cropland, commercial horticultural land, freshly ploughed land, annual leys. This category does not include domestic gardens.	

		2. Built up areas and garden			This type includes urban and rural settlements, farm buildings, and other man made built structures such as industrial estates, waste and derelict ground, and transport infrastructure. It also includes domestic gardens and allotments. This type does not include amenity grassland, which should be included in the “ <i>Improved grassland</i> ” broad habitat type.	
		4. Bare ground			Patches of bare soil or other substrate more than 0.25 ha (approx 50 m x 50 m) are possible to map otherwise a target note will suffice	*Sheep’s sorrel *Early hair-grass
		5. Introduced vegetation			Covers areas dominated by introduced species that don’t fit into any of the above categories – i.e. areas dominated by almost single species stands of Sheep’s Sorrel This includes the very species-poor habitat type dominated by <i>Stellaria media</i> , <i>Rumex acetosella</i> & sparse grasses, associated with seabird colonies, particularly penguin rookeries.	*Sheep’s sorrel

¹Developed from Broughton et al. (2000b)

*Introduced species