

IDENTIFICATION GUIDE TO GLOBALLY AND NATIONALLY THREATENED VASCULAR PLANTS OF THE FALKLAND ISLANDS

Rebecca Upson
Falklands Conservation
2012

Contents

Introduction	2
Globally threatened species	3
Hairy Daisy <i>Erigeron incertus</i>	3
Antarctic Cudweed <i>Gamochaeta antarctica</i>	4
Silvery Buttercup <i>Hamadryas argentea</i>	4
Falkland Nassauvia <i>Nassauvia falklandica</i>	5
False Plantain <i>Nastanthus falklandicus</i>	6
Falkland Rock-cress <i>Phlebotobium maclovianum</i>	6
Moore's Plantain <i>Plantago moorei</i>	7
Nationally threatened species	8
Antarctic Prickly-burr <i>Acaena antarctica</i>	8
Maidenhair-fern <i>Adiantum chilense</i>	8
Fuegian Foxtail <i>Alopecurus magellanicus</i>	9
Spider-flower <i>Arachnitis uniflora</i>	9
Spleenwort <i>Asplenium dareoides</i>	10
Chilean Tall-fern <i>Blechnum cordatum</i>	10
Dusen's Moonwort <i>Botrychium dusenii</i>	11
Yellow Lady's Slipper <i>Calceolaria biflora</i>	11
Small Dusky Sedge <i>Carex acaulis</i>	12
Banks' Sedge <i>Carex banksii</i>	12
Falkland Sedge <i>Carex macloviana</i>	13
Fuegian Sedge <i>Carex magellanica</i>	13
Sage's Sedge <i>Carex sagei</i>	14
Brittle Bladder-fern <i>Cystopteris fragilis</i>	14
Fuegian Whitlowgrass <i>Draba magellanica</i>	15
Waterwort <i>Elatine triandra</i>	15
Pale Yellow Orchid <i>Gavilea australis</i>	16
Strap-fern <i>Grammitis poeppigiana</i>	16
Patagonian Hawkweed <i>Hieracium patagonicum</i>	17
<i>Hypolepis poeppigii</i> Bramble-fern	17
Fir Clubmoss <i>Huperzia fuegiana</i>	18
Darwin's Filmy-fern <i>Hymenophyllum darwinii</i>	18
Berg's Hair-grass <i>Koeleria permollis</i>	19
Adder's-tongue <i>Ophioglossum crotalophoroides</i>	19



Sea Plantain <i>Plantago maritima</i>	20
Native Pondweed <i>Potamogeton linguatus</i>	20
Dwarf Saltmarsh-grass <i>Puccinellia pusilla</i>	21
Leathery Shield-fern <i>Rumohra adiantiformis</i>	21
Tasselweed <i>Ruppia filifolia</i>	22
Shore Pimpernel <i>Samolus repens</i>	22
Fuegian Saxifrage <i>Saxifraga magellanica</i>	23
Comb Fern <i>Schizaea fistulosa</i>	23
California Club-rush <i>Schoenoplectus californicus</i>	24
Scullcap <i>Scutellaria mummulariifolia</i>	24
Shrubby Seablite <i>Suaeda argentinensis</i>	25
Fuegian Violet <i>Viola magellanica</i>	25
Glossary	26
Photo credits.....	26

Introduction

There are 178 vascular plant species native to the Falkland Islands with 40 species currently listed as nationally threatened. This guide provides descriptions and images for all and also covers one globally and two of the nationally near threatened species.

Some of the species listed in this guide have not been recorded for over 90 years and urgently need survey work to try and relocate them. With limited time and resources, Falklands Conservation benefits greatly from volunteer recorders to help achieve their goals. In the case of plant surveys, however, information for many plant species is not currently readily available and awaits an updated field guide to the flora of the Islands.

It is hoped that in the interim this small identification guide will help residents and visitors to the Falkland Islands take part in the rewarding activity of seeking out and recording populations of our rarest native plants.

Terms in bold, red letters are explained in the glossary.

Globally threatened species

Hairy Daisy *Erigeron incertus*



Growth Habit: Perennial herb

Flowering season: November – December

Identification: Perennial grey-green daisy. It has densely hairy, obovate leaves (15-30 x 5-10 mm) in a rosette at the base from which the flower stem ascends (up to about 15 cm) and smaller, narrower leaves below the single large flower head. The compound flower is 10-15(-20) mm in diameter and surrounded by reddish-purple bracts that are hairy on the outside. The petals of outer florets are white or pinkish-purple. The petals of inner florets are yellow. The seeds are densely hairy, with a bristly, yellowish pappus (c. two-thirds as long as the seed).

Habitat: The Hairy daisy occurs in dry places within Diddle-dee heath

Looks like: This species could be confused with the Marsh Daisy *Aster vahlilii* but the latter has hairless or only sparsely hairy leaves and a pappus which is longer in length than the seed. The habitats of the two species also differ, with the Marsh Daisy being found in damp places. The hairy daisy may also be confused with the introduced daisy *Bellis perennis* however the seeds of the latter do not have a pappus and the flower head is enclosed by green, rather than reddish bracts. The introduced daisy is generally only found on greens, disturbed ground or grassland near settlements.

Status: Endemic to the Falklands and globally EN

Antarctic Cudweed *Gamochaeta antarctica*



Flowering season: December-March

Identification: Reaching only 2 to 5 cm in height the Antarctic Cudweed is a tiny and delicate perennial/ biennial herb (yet to be determined). Its leaves (5-15 x 2-6 mm) are hairless, shaped like a lance point/ spoon in outline and attached at the narrower end, with an inwardly reflexed, mucronate tip and entire margin. The inflorescence is a terminal cluster of 2-5 (rarely solitary) capitula 3-5 x 1.5-2.0 mm which are more or less cylindrical and sessile with surrounding bracts acute and up to 5 mm in length. The minute seeds are cylindrical with a feathery white parachute about 4 times the length of the seed.

Looks like: The Antarctic Cudweed could be confused with the Falkland Cudweed however the latter has leaves that are moderately hairy on both sides. Although much smaller than both the Antarctic Cudweed also bares some resemblance to the Spiked Cudweed and American Cudweed but in contrast these species have leaves that are moderately hairy above and densely hairy below giving the underside of the leaves a white appearance.

Status: Endemic to the Falklands and globally EN

Silvery Buttercup *Hamadryas argentea*



Growth Habit: Perennial herb; up to 14 cm tall

Flowering season: Oct, Nov, Dec

Identification: This species has separate male and female plants which can spread vegetatively by short underground stems. Leaves (up to 5 x 4 cm) are usually silvery-grey, three-lobed, with serrated tips and conspicuously with long golden/ silvery-white hairs. Male flowers have 10-15 narrow, pointed yellowish-brown to reddish petals (up to 13 x 1.5 mm), usually hairy on the back. Female flowers have petals which are smaller and more spoon-shaped. The fruits are small single seeds (achenes) each with a hooked beak.

Habitat: Acid grassland; dwarf shrub heath; fachine scrub; maritime cliff and slope; inland rock; cushion heath (upland); fern beds; 0-661 m.

Looks like: Its large, 3-lobed silvery leaves, make this species difficult to confuse with any others currently growing in the wild in the Falklands.

Status: Scarce, endemic to the Falklands and globally NT

Falkland Nassauvia *Nassauvia falklandica*



Growth Habit: Perennial herbaceous sub-shrub

Flowering season: Nov, Dec, Jan

Identification:

This low-growing sub-shrub usually only reaches about 6 cm in height; stems are covered with tightly packed tiny, hairless, rigid leaves 5.5–7 x 2.2–4.5 mm. Leaves are lance-shaped but with the widest point below the middle. Leaf tips are all more or less thickened and curved downwards over the underside. A key identification feature is the row of 7–13 narrow-elliptic pits (0.2–2.2 mm long) on the undersides of leaves. The flower head is composed of compound flowers clustered together into groups of around 15 to form a globe-like structure (10–13 mm in diameter) at the tips of stems. Each compound flower contains up to five tiny white flowers. Flowers have a single petal that forms a tube about 3.5 mm long and then splits into two lips. Seeds (0.7–1 x 0.4–0.6 mm) are attached to 3–5 white, pappus scales (3.5–4.4 mm long) that detach easily.

Habitat: The Falkland Nassauvia occurs in sparsely vegetated feldmark or rocky areas above 450 m. It is almost exclusively found on mineral substrates, with an apparent preference for red clay.

Looks like:

The Falkland Nassauvia could be mistaken for the Snakeplant, but is easily set apart by its shorter stems (up to 6 cm versus up to 200 cm, respectively), smaller flowerhead clusters (up to 13 mm versus up to 25 in diameter, respectively), the pits that occur on the undersides of its leaves and its hairless leaf surfaces (except for hairs within pits). In contrast the Snakeplant has leaves that are hairy on both surfaces and has no pits on its leaves. The Falkland Nassauvia is also similar to Coastal Nassauvia however in contrast the latter has solitary, rather than clustered, compound flowers and also lacks pits on the undersides its leaves.

Status: Endemic to the Falklands, known only from West Falkland and globally EN

False Plantain *Nastanthus falklandicus*



Growth Habit: Perennial rosette

Flowering season: December – March

Identification and possible misidentification: False Plantain has acquired its local name because from a distance it is possible to mistake the compact circular mounds of some smaller non-flowering individuals for particular growth forms of the native Thrift plantain (*Plantago barbata*). The False Plantain has hairless, rather fleshy leaves (12-40 mm x 2-4 mm), which are spatula-shaped and a brighter green than the Thrift plantain. Its flowers are very different from the latter species with stems up to 20 mm bearing a group of tightly packed white flowers. The cluster of flowers is 4-8 cm in diameter and most commonly hemispherical but can take on a range of beautifully abstract shapes. Each flower is a delicate five-lobed tube and at just 3 mm in length it is tiny.

Status: Endemic to the Falklands and globally EN

Falkland Rock-cress *Phlebotobium maclovianum*



Growth Habit: Perennial herb

Flowering season: November – January

Identification: An erect perennial with a distinctive growth form, it can reach at least 45 cm and sometimes 60 cm. It has simple leaves and usually more than one tough stem arising from the base. The basal leaves are in a rosette and are oblong to elliptic-lanceolate (about 32-40 x 6-11 mm) with a pointed tip, variably serrate-dentate to almost smooth margin and narrowing to a petiole. Leaves attached to the stems are positioned alternately, are much narrower and without an obvious petiole. Flowers are arranged in dense corymbs (5-20 cm in length) at the top of stems. Each tiny white flower has

four petals (each 6-8 x c. 3 mm) arranged in a cross. Sepals are 4-6 mm long and are pale to yellowish green, often purple-tinged. The seed pods are long and thin (17-25 x 2.0-2.5 mm) and open from the base to release the seeds.

Looks like: The flowers and fruits of the Falkland rock-cress could be confused with the common Bitter cress (*Cardamine glacialis*) however the latter has compound, rather than simple leaves.

Status: Endemic to the Falklands and globally EN

Moore's Plantain *Plantago moorei*



Growth Habit: Perennial rosette

Common names: Moore's Plantain

Flowering season: December - January

Identification: Moore's Plantain forms small flat groups of rosettes which grow into low cushions and large hummocks up to 1.5 m in diameter and c. 25 cm high. It is distinguished by its leaves (up to 13 mm long and 3.6 mm wide), which are densely white-hairy on the upper surface and smooth beneath. There are usually two tiny flowers, occasionally only one, below a pair of hooded bracts (about 3 mm long). The most prominent feature of this plant is the hummock of densely packed grey leaves.

Looks like: Although superficially resembling one growth form of Thrift Plantain (*Plantago barbata*), it can be identified by the hairy leaves, the generally grey appearance of the plant and the fact that the leaves are not shiny. There is also some similarity to the Balsam-bog, but the leaf shape is different, with Moore's Plantain having a simple pointed tip while the Balsam-bog has a prominently three-lobed tip which is often strongly curved.

Status: Endemic to the Falklands and globally EN

Nationally threatened species

Antarctic Prickly-burr *Acaena antarctica*



Growth Habit: Perennial herb; stems up to 15 cm, prostrate, rooting at nodes.

Flowering season: Nov, Dec, Jan

Identification: Leaves are **pinnate** and 0.8-2.0 cm long by 0.6-1 cm wide. Leaves are covered in silvery soft, shaggy hairs. The flowerhead is less than 10 mm in diameter (including spines) and the spines are usually less than 4 mm.

Habitat: Wet peat and gravel at higher altitudes; 220-685 m.

Looks like: This species can be told apart from the other burrs by its silvery hairy leaves and the size of its flowerhead.

Falkland status: Very rare, nationally VU

Maidenhair-fern *Adiantum chilense*



Identification: Individual leaves are 20-40 cm long and either 2 or 3-**pinnate** with their overall shape being ovate to ovate-lanceolate. Leaf stalks are 5-20 cm long, black and shiny. Individual leaflets are 6-15 mm in diameter, bright green and obovate to almost semicircular in shape. Clusters of **spore**-producing sacs are found at the margin of leaflets on normal foliage leaves. Leaf margins are rolled towards the lower side to protect the **spore**-producing sacs.

Habitat: Moist crevices and overhangs on sea cliffs, shaded from the midday sun; Maritime cliff and slope; c. 1 m.

Looks like: May be confused with other ferns but can be told apart by the fact that its **spores** are produced on normal leaves (unlike Small-fern, Tall-fern and Chilean Tall-fern) and are found in clusters on the margin of leaflets which have curled back margins in order to protect them.

Falkland status: Very rare, nationally EN

Fuegian Foxtail *Alopecurus magellanicus*



Growth habit: Perennial grass

Flowering: Dec, Jan

Identification: A tall grass with greenish-blue, smooth, flat/ slightly inrolled leaves 8-22 cm long, 3-6 mm wide. Flowering stems are erect, hairless and 30-70 cm tall, often rising above the surrounding vegetation. The flower head is a distinctive silvery-purple, short (1.5-4 cm), broad (0.8-1.3 cm), spike-like panicle.

Habitat: Grows on peaty soil in damp areas of marshy grassland, wet acid grassland, marginal vegetation and Fachine scrub; 0-22 m.

Looks like: Antarctic Foxtail has a much shorter, broader flower head than Marsh Foxtail and more upright flowering stems.

Falkland status: Rare, nationally VU

Spider-flower *Arachnitis uniflora*



Growth Habit: Perennial herb

Flowering season: Dec, Jan

Identification: The only part of this unusual species that emerges above ground is the flowering shoot which is brown in colour. This is owing to the fact that the Spider-flower is dependent on fungi that colonize its roots for all its carbon. This species is only visible above ground for a brief period in late December and early January.

Habitat: Usually shares the same habitat as Dusen's moonwort; coastal greens and neutral grassland; coastal marshy grassland; dwarf shrub heath; 0-10 m.

Looks like: This species might be mistaken for one of the orchids, however it contains no chlorophyll and is therefore totally brown in colour.

Falkland status: Very rare, nationally EN

Only known from East Falkland at Cape Pembroke and Bertha's Beach. Easy to overlook and likely to occur at other sites with Dusen's moonwort *Botrychium dusenii*.

Spleenwort *Asplenium dareoides*



Identification:

The leaves of this small delicate fern are 2-7.5 cm long by 1-2 cm wide, and hairless or very sparsely hairy. The leaf stalk is two-thirds the length of the leaf and is blackish-brown towards the base and green above. The leaflet lobes of each leaflet are each further divided into 2-4(-5) lobes which are sometimes toothed at the tips. There are 1-2 clusters of **spore**-producing sacs per leaflet-lobe, with each cluster partially covered by a whitish outgrowth of tissue.

Habitat:

Grows in moist and sheltered upland rock crevices; 210-460 m.

Looks like:

Most likely to be confused with the Brittle Bladder-fern; Brittle Bladder-fern leaves reach larger sizes, ranging from 4-15 cm in length and (2-)3.5-8cm wide. In addition in the Brittle Bladder-fern it is the second pair of leaflets from the base of the leaf that are usually the longest, whereas the lowest pair of leaflets is longest in the Spleenwort.

Falkland status: Very rare, nationally EN

Chilean Tall-fern *Blechnum cordatum*



Growth Habit: 'Tree' fern

Identification: Forms a short trunk that bears many leaves. The normal foliage leaves do not produce **spores** and these are dark green, with the margins rolled backwards. Fertile leaves (producing **spores**) are off-white and emerge in early summer. The base of leaf stalk is clothed in pale reddish-brown, papery scales, 12-25 mm long by 6-8 mm wide.

Habitat: Fern beds; dwarf shrub heath; acid grassland; marginal vegetation; c. 60 m

Looks like: This species could be mistaken for Tall-fern *Blechnum magellanicum*, however the latter has flat leaf edges and has leaf stalks covered with rigid dark-brown hairs, c. 1 mm wide, rather than scales.

Falkland status: Rare, nationally VU

Dusen's Moonwort *Botrychium dusenii*



Identification: Dusen's moonwort is a small perennial fern with a single above ground leaf. The leaf can reach a height of about 15 cm, is yellow green and somewhat succulent. The leaf is divided into a sterile, compound, fleshy lamina and a fertile compound spike. The fertile spike bears two rows of large, thick-walled, grape-like **spore**-producing sacs.

Habitat: Found along the coast in open sandy areas either sparsely vegetated or within marshy grassland; c. 3 m.

Looks like: This species is unlikely to be mistaken for any other plant in the Falklands owing to its unusual growth form. Young plants can look a little like Buttonweed leaves but a closer look reveals the fleshiness of the moonwort and the differentiation between fertile and sterile leaf segments.

Falkland status: Very rare, nationally EN

Yellow Lady's Slipper *Calceolaria biflora*



Growth Habit: Perennial herb; stems up to 2 cm.

Flowering season: Dec

Identification: Flowering stems are sparsely hairy and can reach 9-14 cm and bear 2 to 5 flowers. Each flower is made of 2 yellow lips, with the lower one being large and inflated. Leaves are roughly egg shaped, 15-35 mm in length and 11-20 mm in width; hairless on top and sparsely hairy along margins and veins beneath. The fruit is a brown capsule c. 8 x 3-4 mm.

Habitat: Grows within dwarf shrub heath; c. 1 m a.s.l.

Looks like: This species could be confused with the other native Lady's Slipper *Calceolaria fothergillii*, however *C. biflora* differs in having 2 or more almost pure yellow flowers on a single stalk and no white, fleshy appendage folded against the outside of the lower flower lip. The leaves are sparsely white-hairy rather than densely covered with yellowish glandular long, shaggy hairs as seen on *C. fothergillii*. It is worth noting that subpopulations of *C. fothergillii* with entirely yellow flowers are known so care should be taken to look for all distinguishing features of *C. biflora* and not just petal colour.

Falkland status: Very rare, nationally CR (possibly extinct in the wild)

Small Dusky Sedge *Carex acaulis*



Growth Habit: Perennial sedge with long rhizomes

Flowering season: Nov, Dec

Identification: Leaves 4.5-25.0 cm long, 2-6 mm wide. Leaf blades almost flat and glaucous. Flowering stems up to 3 cm high, always much shorter than the leaves. Flower head consists of a male spike at the top and 2-4 female spikes below; all with leaf-like **bracts** longer than the spikes. Male flower spike 5-6 mm long; male **glumes** 2.0-2.5 mm long, white. Female flower spikes up to 5 mm long; female **glumes** up to 5.5 mm long, white. Fruit 2-3 mm long; golden-brown and narrowing to a 'beak' up to 3 mm long.

Habitat: Prefer sandy soils, moist areas in grasslands, beside standing water and in marshy grassland; 0-137m

Looks like: Could be mistaken for reduced growth forms of the Dusky Sedge *Carex fuscula* and Sage's Sedge *Carex sagei*. Female **glumes** of *C. fuscula* have a clearly protruding midrib and the **utricle** is smooth unlike that of *C. acaulis* and *C. sagei* which is ribbed (a hand lens is needed for this observation). *C. acaulis* can be told apart from *C. sagei* by its glaucous leaves and the fact that its **utricle** has 2 stigmas rather than 3.

Falkland status: Rare, nationally VU

Banks' Sedge *Carex banksii*



Growth Habit: Rhizomatous, perennial sedge

Flowering season: Dec, Jan? (recorded in fruit late Feb 2008)

Identification: Bank's Sedge has a flowering stem 10-80 cm tall. Its leaves are shorter than the main stem and are 4-10 mm wide. Its flower head generally consists of 3 to 5 oblong spikes 1.5-3 cm in length. Leafy **bracts** occur within the flower head and extend beyond its tip. Each utricle (bottle-like structure that surrounds the fruit in all *Carex* species) is strongly flattened and papery, wider than the scale-like **bract** that covers it and 5-7 mm in length.

Habitat: Grows on damp, peaty soils in acid grassland and marginal vegetation, for example beside ponds; <10 m

Looks like: Bank's Sedge can be told apart from other sedges by its strongly flattened and papery utricle that sticks out beyond the **glume** in front.

Falkland status: Very rare, nationally CR
(Currently only known from one location on East Falkland)

Falkland Sedge *Carex macloviana*

No image available

Growth Habit: Tufted, hairless, perennial sedge with short, creeping rhizomes

Flowering season: Jan

Identification: Leaves 3.5-10.0 cm long, 2-3 mm wide. Leaf blades flat, or slightly keeled near the base; bright green and rough-feeling on the edges. Lower leaf sheaths without blades; brown. Flowering stems 7-30 cm high, usually much taller than the leaves. Flower head 10-25 mm long; a densely crowded group of 4-9 spikes, each containing a mixture of male and female flowers. Each spike with a short, glume-like bract. Male and female **glumes** 3.0-3.5 mm long, brown. Fruit 3.0-4.5 mm long; light brown and narrowing to a 'beak', 1.0-2.5 mm long.

Habitat: Damp places in acid grassland

Looks like: In overall appearance *C. macloviana* might be mistaken for *C. canescens*, however the latter has pale whitish-brown rather than dark brown spikes. Also *C. macloviana* has a winged utricle, whereas *C. canescens* does not. *C. macloviana* could possibly also be confused with *C. flacca*. However, each spike in the flower head of *C. flacca* has a long, leaf-like bract, while spikes of *C. macloviana* have short, **glume**-like bracts.

Falkland status: Very rare, nationally VU

Fuegian Sedge *Carex magellanica*



Growth Habit: Perennial sedge with short, creeping rhizomes.

Flowering season: Dec, Jan

Identification: Fuegian sedge grows from 10-30 cm with leaves as tall as or shorter than the flowering stem. Leaves are generally bluish-green and 2-3 mm wide. The flower head consists of a male spike 10-20 mm long at the top and 2-3 female spikes 6-15 mm long below. Female **glumes** taper to a fine point. Spikes are spread out from each other on long stalks of 15-30 mm, giving the flower head a 'nodding' appearance.

Habitat: Grows on damp, peaty soils in bogs, shallow pools, along stream margins and in wet dwarf shrub heath; 0-60 m above sea level.

Looks like: Fuegian Sedge is most likely confused with the introduced sedge Carnation-grass. The flower head of Carnation-grass also has a 'nodding' appearance but spikes are on shorter stalks of 5-10 mm. Also the female **glumes** of Carnation-grass do not taper gradually to a fine point.

Falkland status: Rare, nationally EN

Sage's Sedge *Carex sagei*



Growth Habit: Rhizomatous, perennial sedge

Flowering season: Dec, Jan?

Identification: Sage's Sedge has leaves which are 15-25 cm long and are the same length or shorter than the main flowering stem. Its flower head consists of 3 to 6 spikes; the top spike contains only male or both male and female flowers, the lower spikes have only female flowers. Female **glumes** have a midrib that does not or barely protrudes. Leafy **bracts** occur within the flower head and extend beyond its tip. Each **utricle** is 3.5-4.5 mm in length with a ribbed surface.

Habitat: Grows on damp, peaty soils in wet acid grassland, marshy grassland and marginal vegetation; <10 m

Looks like: Sage's Sedge is most likely confused with Dusky Sedge *Carex fuscula* and Small Dusky Sedge *C. acaulis*. However Dusky Sedge has a smooth utricle and female **glumes** with clearly protruding midribs. The Small Dusky Sedge is generally much shorter than Sage's Sedge, reaching less than 4 cm. It also has 2 stigmas attached to the utricle rather than 3.

Falkland status: Very rare, nationally EN
(Only currently known from a single site on Cape Pembroke. There is also an historical record (1950s) from West Falkland)

Brittle Bladder-fern *Cystopteris fragilis*



Growth Habit: Fern with short creeping rhizomes

Identification: Fronds arise in tufted groups from the ends of rhizomes. The rhizomes are covered in scales and old frond-bases. The leaves are 4-15 cm long, (2.0-)3.5-8 cm wide, and 2-3 **pinnate**. The second pair of leaflets from the base of the leaf are usually the longest. **Spore**-producing sacs occur in two rows, one on each side of the midrib of the leaflet-lobe. The inflated bladder-like structure that protects the **spore**-producing sacs is the source of the name 'Bladder-fern'.

Habitat: Moist shady crevices on rock outcrops; plants require calcium (lime) to thrive. So either requires calcium-rich rocks or rocks over which calcareous flushing occurs; 0-100 m

Looks like: Most likely to be confused with the Spleenwort; Brittle Bladder-fern leaves reach larger sizes, ranging from 4-15 cm in length and (2-)3.5-8cm wide. In addition in the Brittle Bladder-fern it is the second pair of leaflets from the base of the leaf that are usually the longest, whereas the lowest pair of leaflets is longest in the Spleenwort.

Falkland status: Very rare, nationally VU

Fuegian Whitlowgrass *Draba magellanica*



Growth Habit: Perennial herb, with flowering stems up to 7 cm tall

Flowering season: Oct, Nov, Dec, Jan

Identification: Plant with densely leafy short stem; short, stout flowering stalks that produce comparatively large clusters of fruit pods that are obtuse at both ends. Leaves are 6-12 mm long and c. 2 mm wide. 1 to 4 stalkless leaves occur along the flowering stems. A dense, terminal, (3-)6- to 12-flowered raceme is produced, which is almost globular in shape. Individual flowers each have 4 white petals 3-4 mm long and arranged in a cross shape.

Habitat: Coastal locations; including coastal Diddle-dee heath; 0-15 m a.s.l.

Looks like: The other native Whitlowgrass *Draba funiculosa*, produces pods that are more than 3 times as long as wide, has leafless flowering stems and generally hairless leaves. Where hairs occur they are all unbranched, whereas *D. magellanica* leaves are covered in many star-shaped hairs with only a few unbranched hairs present.

Falkland status: Very rare, last recorded at Roy Cove in 1914

Waterwort *Elatine triandra*



Growth Habit: Annual mat-forming aquatic herb

Flowering season: Jan, Feb

Identification: Hairless herb; leaves are arranged in pairs opposite each other along stem; leaves are spatula-shaped and smooth-edged, 3-10x1.5x3 mm depending on habitat, with notched tips. Fleshy and prostrate stems reach 2-10 cm in length and have upright branches. Flowers are tiny, stalkless (or almost so) and occur singly at the base of leaves. Each flower has 3 petals which are pinkish-white and slightly longer than the 2 or 3 sepals. Fruits are tiny capsules c. 1-1.5 mm in diameter, containing seeds roughly 0.5 mm long.

Habitat: Grows in shallow water or on mud at the margin of lakes, ponds and slow-moving streams; 0-61 m

Looks like: May be confused with Water Starwort *Callitriche antarctica*, however the latter has no sepals or petals.

Falkland status: Very rare, nationally EN

Pale Yellow Orchid *Gavilea australis*



Growth Habit: Perennial herb 20-40 cm tall; with short **rhizomes**, fleshy roots

Flowering season: Dec, Jan

Identification: Leaves have smooth margins, are spirally arranged around the main stem and sometimes only occurring in the lower half. The basal lowest leaves are largest at around 5-7 x 2.5-3 cm. The flower spike is 5-10 cm long, with 3 to 10 white or cream flowers with green nerves. The flowers consist of 3 outer petal-like sepals and 3 inner petals, the lowermost of which (labellum) is distinctly three-lobed.

Habitat: Coastal slopes; acid grassland; marshy grassland; dwarf shrub heath; 0-79 m.

Looks like: Yellow Orchid has yellow petals with green nerves. Gaudichaud's orchid has white petals but its labellum is entire or indistinctly three-lobed.

Falkland status: Rare, nationally VU

Strap-fern *Grammitis poeppigiana*



Growth Habit: Strap-fern

Identification: This is a diminutive little fern with a usually long and creeping rhizome, which gives rise to clusters of upright leaves. The leaves are not sub-divided, 10-40 mm long by 2-4 mm wide, leathery in texture, with an indistinct mid-vein. **Spore**-producing structures are in less than five (rarely seven) pairs and located on the underside of the leaf towards the top end, oblong in shape, and coalesce when mature.

Habitat: Found on damp rocks and rock crevices in upland areas between c. 180-485 m. This species can be found growing with filmy ferns.

Falkland status: Very rare, nationally VU

Patagonian Hawkweed *Hieracium patagonicum*



Growth Habit: Perennial herb; stems 15-35 cm.

Flowering season: Dec, Jan, Feb

Identification: Each individual has 6 to 10 (or more) flowerheads, each composed of many yellow florets. The **bracts** around each flowerhead are dark green and covered with sparse to rather frequent black, stalked glands near the mid-vein. Basal leaves are 50-100(-120) x 8-20(-30) mm and densely covered with long, white soft, shaggy hairs. This species sometimes spreads by **rhizomes**, but not **stolons**.

Habitat: Predominantly found on dry soil with high mineral content - in heathland or in association with rocky outcrops; 3-50 m a.s.l.

Looks like: There are many similar native and introduced species, including Common cat's ear and Dandelion, both of which are familiar around settlements. This species can be told apart from other yellow-flowered members of the Daisy family by a unique suite of characteristics; its branched flower stem, hairy leaves and the fact that the **bracts** around the flower heads are covered in black-stalked glands. In addition the tuft of hairs (pappus) attached to the **achene** are not feathered.

Falkland status: Rare, nationally EN

Hypolepis poeppigii Bramble-fern



Identification: This is a large fern that has creeping rhizomes with reddish, hairs. Leaves + leaf stalks are (0.2-) 0.4 to 1 (-2) m tall; leaf stalks are dark brown, usually about 1/3 the total length of the leaf + leaf stalk and with simple as well as glandular hairs that look similar to those on the rhizomes. Individual leaves are triangular in outline, are either 2 or 3-**pinnate**, light green and herbaceous to more rigid. The leaf stems to which leaflets are attached, are chestnut brown to straw-coloured and hairy. Clusters of **spore**-producing sacs are found at the margin of leaflets on normal foliage leaves.

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

Falkland status: Very rare, nationally CR

Fir Clubmoss *Huperzia fuegiana*



Identification: This clubmoss has short, ascending stems 2-5 cm in height which are divided regularly into branches of equal length. Stems are covered in many rows of small tightly overlapping golden-green leaves that are only 4-8 x 1.5-2.5 mm. Leaves are linear-lanceolate and acute, with numerous minute teeth along the margins.

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; acid grassland; 0-460 m.

Looks like: This species might be confused with one of the other clubmosses, however, it can be told apart because of its ascending rather than creeping stems and the fact that its **spore** producing structures occur scattered near the top of each stem in leaf axes rather than in terminal spikes.

Falkland status: Rare, nationally VU, likely to be vulnerable to grazing.

Darwin's Filmy-fern *Hymenophyllum darwinii*



Growth habit: Filmy-fern

Identification: A small fern that could be mistaken for a moss or leafy liverwort from a distance. Darwin's Filmy-fern has extensive, creeping rhizomes which bear black, shiny, hairless leaf stalks 5-25 mm long that have tufts of dark red hairs at the base. Leaves are translucent and reach 7-15 mm in length, 8-11 mm in width. Leaves are divided into leaflets and leaflet lobes and sometimes the latter are further subdivided. All have smooth un-toothed margins.

Habitat: Grows in moist and sheltered rock crevices; only currently recorded from 379 m a.s.l.

Looks like: Could be confused with the Twisted Filmy-fern however the latter has leaves with a toothed margin, with teeth extending into hairs.

Falkland status: Very rare, nationally CR, currently only known from a single site on West Falkland.

Berg's Hair-grass *Koeleria permollis*

Image not available

Growth Habit: A compact, tufted, perennial grass

Flowering season: Jan, Feb

Identification: Leaves often densely fringed with hairs at base of sheaths. Leaf blades 2.5-11.0 cm long, 1-2 mm wide; slightly inrolled and almost pointed, with short hairs at the edges. Ligule 0.5-1.0 mm long, blunt or pointed, membranous and often torn, fringed with short hairs. No auricles. Flowering stems 3-30 cm high; upright and slightly softly hairy. Flower head a spike-like panicle, 1.5-6.0 cm long, with main axis and branches softly hairy. Spikelets 5-6 mm long, usually containing 2 florets. Short awns (up to 1 mm long).

Habitat: Previously recorded in sandy coastal areas

Looks like: Could be mistaken for Spiked Oat-grass *Trisetum phleoides* however its flowerhead has short (1 mm long), straight awns rather than long (3-6 mm long) twisted awns. May also be mistaken for Yorkshire Fog *Holcus lanatus* however Berg's Hair-grass lacks pink strips on the base of the leaf sheaths, which are easily visible in Yorkshire Fog. Torkshire Fog also differs as it lacks awns on its flowers.

Falkland status: Very rare, nationally CR, possibly extinct

Adder's-tongue *Ophioglossum crotalophoroides*



Identification: Adder's tongue is unusual amongst the Falkland ferns in having both an undivided leaf and **spores** which are produced on distinct fertile spikes rather than on normal leaves. Plants arise from a tuberous rootstock and are 25-40 mm tall, excluding the fertile spike. The leaf is 18-14 mm wide and the fertile spike, comprised of a slender stalk and an upper fertile part, is 20-30 mm long.

Habitat: On peaty soils in Diddle-dee heathland and Whitegrass acid grassland; 15-120 m.

Looks like: This species is unlikely to be mistaken for any other plant in the Falklands owing to its unusual growth form.

Falkland status: Rare, nationally VU

Sea Plantain *Plantago maritima*



Growth Habit: Perennial herb

Flowering season: Nov, Dec

Identification: Stems up to 9 cm; leaves 30-120 x 1-5 mm, linear, smooth-edged or with a slight crenulation and without stalks. Leaves are fleshy and hairless or almost so. The flowerhead stalk is 3-20 cm tall and hairy. The flowerhead is 1-7(-9) cm long. Flowers have 4 petals and 4 sepals. Petals are joined into a tube c. 1 mm long at the base producing lobes that are 1.2-1.8 mm long. At least the outside of each petal base is hairy. Fruit is a capsule containing 2-3 seeds. Seeds are smooth, dark brown or black and flattened on one side.

Habitat: Currently only known from West Falkland growing in crevices on low cliff (c. 1.5 m high), on shaley rock, just above high tide line. Historical record from East Falkland from margin of freshwater pond near sea. In Patagonia it is found on beaches, coastal rocks, cliffs and in salt marshes.

Looks like: May be confused with Ribwort Plantain *P. lanceolata*, however the stalks of the latter are deeply furrowed whereas the stalks of Sea Plantain are not. It can be distinguished from Greater Plantain *P. major* by its narrow, linear leaves and hairy petals in comparison to the narrow elliptic to ovate leaves of the latter and petals without hairs. Buck's horn Plantain *P. coronopus* can be told apart from Sea Plantain by the fact that its petals don't have the conspicuous brown midrib seen on Sea Plantain petals.

Falkland status: Very rare, nationally CR

Native Pondweed *Potamogeton linguatus*



Growth Habit: Perennial aquatic herb of fresh water; stems 30-50 cm in length.

Flowering season: Nov, Dec, Jan, Feb

Identification: Floating leaves are 40-100x17-40 mm, roughly elliptical in shape, whereas submerged leaves are 40-70x18-25, roughly oblong in shape. Floating leaves are borne on stalks 3-8 cm long whereas submerged leaf stalks are 1-3 cm long. Flowers are tiny and arranged into cylindrical spikes (8-25x3-8 mm) on stalks (3.5-6.0 cm long) arising from leaf axils. Fruits are reddish brown disc-shaped **drupes**, 2.5-3.5x1.5-2.0 mm (no images of fruits available).

Habitat: Freshwater lakes and ponds; < 15 m.

Looks like: May be mistaken for the aquatic Tasselweed, however the latter lacks broad, floating leaves and has flowers only at the end of stems. Tasselweed fruits also differ in that they are separated from each other on long stalks and leaves only have a midrib.

Falkland status: Rare, nationally NT

Dwarf Saltmarsh-grass *Puccinellia pusilla*



Growth Habit: A very small, tufted perennial grass

Flowering season: Jan, Feb

Identification: Leaves quite stiff, very in-rolled and needle-like. Leaf blades 0.9-3.0 cm long, about 0.5 mm wide. Ligule about 1 mm long, blunt and membranous. No auricles. Flowering stems 2-3 cm high; upright or curved, often not much taller than the leaves. Flower head a panicle, 1.0-2.5 cm long, often not emerging totally from the leaf sheath, rough-feeling; greenish or silvery and often with purplish tinges. Spikelets 2-3 mm long, containing 2-3 florets. No awns

Habitat: Found on sandy soil near the coast or in low ground cover upland sites.

Looks like: Could be mistaken for other short grasses with needle-like leaves but can be told apart from the Hair-grasses (*Deschampsia* and *Aira* species) by the fact that its flowers don't have awns. It can be told apart from the introduced *Puccinellia glaucescens* by its overall smaller habit, with flowering stems less 2-3 cm tall rather than over 10 cm tall.

Falkland status: Very rare, nationally CR

Leathery Shield-fern *Rumohra adiantiformis*



Identification: Leaves arise from, and are scattered along, a long creeping rhizome, clothed in reddish-brown, peltate (with a stalk attached away from the margin), toothed scales. The leaves are tough and leathery with a glossy sheen, 5-30 cm long, and 2- to 3-**pinnate**. Leaflets are arranged alternately (i.e. not directly opposite each other) along the leaf stalk, and the basal leaflets are the longest. Clusters of **spore**-producing sacs are abundant and conspicuous with 1-3 per leaflet-lobe.

Habitat: Grows within coastal Diddle-dee dwarf shrub heath, Tall-fern stands and more rarely on coastal cliffs/ inland rock; 0-50 m.

Looks like: May be confused with other ferns but can be told apart by the fact that its **spores** are produced on normal leaves (unlike Small-fern, Tall-fern and Chilean Tall-fern) and its leaves grow from a long and creeping rhizome which is covered in reddish brown, toothed scales.

Falkland status: Very rare, nationally EN

Tasselweed *Ruppia filifolia*



Growth Habit: Perennial, submerged aquatic herb of brackish water; stems up to 40 cm.

Flowering season: Nov, Dec, Jan

Identification: This species is rooted in the substratum and has leafy submerged stems with linear leaves. Flowers are much reduced, occurring in clusters at the end of stems on a spadix-like stalk, which is initially enclosed in the sheathing base of the leaf. Each flower is naked and consists either of 2 stalkless **anthers** (each with 2 large separate sacs attached by their backs to the flowerhead stalk), or of several **carpels**. After 1-2 weeks the flower spike is pushed out of the swollen sheath by a stalk that grows rapidly in length. Fruits are groups of up to 4 **drupes**, each with their own stalk which extends upon ripening (no images of fruit).

Habitat: Ponds and lakes (brackish); 0-46 m.

Looks like: May be confused with the Native Pondweed however flowers of the Tasselweed only occur at the end of stems, fruits are separated from each other on long stalks and leaves only have a midrib.

Falkland status: Rare, nationally EN

Shore Pimpernel *Samolus repens*



Growth Habit: Creeping perennial, mat-forming herb

Flowering season: Dec?, Jan?, Feb?, Mar

Identification: Hairless herb often with rhizomes or stolons and rooting at nodes. Leafy stems can reach up to 40 cm in length. Basal rosette of leaves is sometimes present and these leaves are often spoon-like in shape; stem leaves are 0.3–3 cm long, 1–8 mm wide, quite fleshy and lance-shaped, almost attaching directly to main stem. Flowers appear singly in leaf axils or in small clusters. Flower stalks are 0.5–2.5 cm long, each with a leaf-like bract at its base. Sepals are 1.5–5(–7 in fruit) mm long. Each flower has 5 white petals that extend beyond the sepals by 2–6 mm and are joined together to form a tube in the lower third. Stamens and structures resembling stamens are attached to the petals. Fruit is a slightly woody capsule 4–5 mm long.

Habitat: Highly tolerant of salt - growing on peat or silt in sheltered saltmarsh habitat below the high tide mark.

Looks like: May be mistaken for Pimpernel *Anagallis alternifolia* however Shore Pimpernel *Samolus repens* has at least some rosettes of leaves whereas *A. Alternifolia* does not – leaves are all arranged alternately along stems.

Falkland status: Very rare, nationally CR

Fuegian Saxifrage *Saxifraga magellanica*



Growth Habit: Perennial herb, often woody at the base; flowering stems up to 5 cm.

Flowering season: Dec, Jan, Feb

Identification: This species is densely glandular-hairy and grows in dense tufts. Its vegetative stems can grow up to c. 6 cm, are somewhat woody and covered with tightly packed, overlapping leaves near the top and with a thick covering of dead leaves towards the base. Leaves are generally 3(-5)-lobed. Petals are 3.5-5.0x1.5-3.0 mm, white or cream-coloured.

Looks like: This species could be confused with the introduced London pride *Saxifraga x urbium*, however the latter has leaves with toothed margins, long stalks (3-5 cm long) and these are not tightly packed along vegetative stems but instead form a rosette at the base of the flowering stem.

Falkland status: Very rare, nationally CR, currently known from a single site on East Falkland.

Comb Fern *Schizaea fistulosa*



Growth habit: Fern

Identification: This small fern produces erect leaf stalks up to about 4 cm tall and only c. 1 mm wide. The leaf is 3-10 mm in length and bears 3-9 leaflets 1-4 mm long, incurved and with coarse hairs.

Habitat: Most recently recorded growing in sandy peat beside a river; it is also likely to occur in bogs and dune slacks; 31 m a.s.l.

Looks like: Unlikely to be confused with any other fern in the Falklands.

Falkland status: Very rare, nationally CR, currently only known from two sites on West Falkland. There is also an historical record (1825) for East Falkland.

California Club-rush *Schoenoplectus californicus*



Growth Habit: Clump-forming, perennial sedge, with creeping rhizomes.

Flowering season: Jan

Identification: Almost leafless, but some short leaf blades on upper leaf sheaths. Flowering stems up to 3 m high; upright and dark green. Flower head 2-5 cm long, with branches 0.5-5.0 cm long; appearing to be below end of stem due to lower bract extending beyond it. Many spikelets, 5-10 mm long; reddish-brown, on stalks up to 6 mm long. **Glumes** 4.0-4.5 mm long, with short protruding midrib (up to 1.7 mm long). Fruit is a nut 2.0-2.5 mm long; reddish-brown and shiny.

Habitat: Found in muddy edges of ponds and lagoons, particularly those with a clay sediment.

Looks like: Unlikely to be mistaken for any other sedge in the Falklands

Falkland status: Rare, nationally NT

Scullcap *Scutellaria mummulariifolia*



Growth Habit: Creeping perennial herb

Flowering season: Dec, Jan, Feb?

Identification: Flowers are two-lipped, with the lower lip being hairy inside. Petals are pinkish purple, often white in the throat and on short stalks 2-3 mm long. Leaves are 5-10 x 3-6 mm and somewhat oval in shape, with a rounded tip to the blade and borne in opposite pairs.

Habitat: Grows among stones on beach above the high tide mark.

Falkland status: Very rare, nationally CR, last recorded 1916 in the Fox Bay area, West Falkland, precise location unknown.

Shrubby Seablite *Suaeda argentinensis*



Growth Habit: Perennial shrub to 1.2 m; stems woody at base, 17-90 cm in length, up to 10 cm in diameter.

Flowering season: Jan

Identification: Individuals of this species have either all female or all bisexual flowers. Flowers are c. 6 mm in diameter, solitary and stalkless within the axils of upper leaves. Leaves are 4-11 x 1.2-3.0 mm, half-cylindrical, fleshy and stalkless. Its fruit is an **achene**.

Habitat: Found on sandy or shingle shores and open, clay, coastal cliffs; 0-5 m.

Looks like: This species could be confused with Goosefoot *Chenopodium macrospermum* or the introduced Common Orache *Atriplex patula*, however these latter species have stalked leaves which are not cylindrical.

Falkland status: Very rare, nationally EN

Fuegian Violet *Viola magellanica*



Growth Habit: Perennial herb; stems up to 16 cm tall.

Flowering season: Nov, Dec, Jan

Identification: Leaves with a crenulated margin, arranged so that they are all more or less basal. Flowers occur singly from the basal rosette, with 4 yellow petals arranged with bilateral symmetry.

Habitat: Sand dunes; tussac; c. 1 m.

Looks like: May be confused with the Common Violet *Viola maculata* but differs in having a lower petal longer than the other four and the leaves are almost round with a smooth stem.

Falkland status: Very rare, nationally CR, only known from a single site on Sea Lion Island.

Glossary

Achene	A dry 1-seeded fruit that remains closed when ripe
Anther	The Pollen-bearing part of a stamen
Bract	A scale-like leaf that is associated with the flowering part of the plant
Carpel	The female reproductive part of flowering plants
Drupe	A fleshy fruit, containing usually a single seed with a stony coat (e.g. plums)
Glume	One of the pair of scales at the base of each cluster of flowers in grasses, or the single scale at the base of each individual sedge flower.
Pinnate	A leaf with >3 leaflets arising in opposite/ alternate pairs along the leaf stalk
Rhizome	Underground stem
Spore	A small, usually single-celled reproductive body that is highly resistant to desiccation and heat and is capable of growing into a new adult individual. Produced, for example by bacteria, algae, mosses and ferns
Stamen	The male reproductive part of flowering plants
Stolon	Above-ground creeping stem
Utricle	Bottle-like structure that surrounds the fruit in all <i>Carex</i> species

Photo credits

Images in this guide are courtesy of the author Rebecca Upson except for the following:

<i>Erigeron incertus</i>	Tom Heller, RBG Kew (top right)
<i>Gamochaeta antarctica</i>	Tom Heller, RBG Kew (all)
<i>Nassauvia falklandica</i>	Jess Abbot (top right), Margaret Carr (bottom right)
<i>Phlebotobium maclovianum</i>	Tom Heller, RBG Kew (left), Eric Schneider (bottom right)
<i>Adiantum chilense</i>	Mike Morrison (right)
<i>Alopecurus magellanicus</i>	Alistair Wilson (left)
<i>Arachnitis quetruhuensis</i>	Andy Douse (left), Alan Henry (centre and right)
<i>Asplenium dareoides</i>	Alistair Wilson (all)
<i>Blechnum cordatum</i>	Jess Abbott (top and bottom left)
<i>Botrychium dusenii</i>	Mike Morrison (left), Chris Bell (centre), Alan Henry (right)
<i>Calceolaria biflora</i>	Alan Henry (all)
<i>Carex acaulis</i>	Colin Clubbe, RBG Kew (all)
<i>Carex banksii</i>	http://www.darwinsbeagleplants.org
<i>Carex magellanica</i>	Mike Morrison (left and top right)
<i>Carex sagei</i>	Richard Lewis
<i>Cystopteris fragilis</i>	Mike Morrison
<i>Draba magellanica</i>	Herbarium image taken from Röpert, D. (Ed.) 2000. Digital specimen images at the Herbarium Berolinense. - Published on the Internet http://ww2.bgbm.org/herbarium/ (Barcode: B 10 0242906 / ImagedId: 251480) [accessed 14-Nov-09].
<i>Elatine triandra</i>	Tom Heller, RBG Kew (bottom left and right)
<i>Huperzia fuegiana</i>	Jess Abbot (all)
<i>Hymenophyllum darwinii</i>	Alistair Wilson (all)
<i>Ophioglossum crotalophoroides</i>	Gail and Vernon Steen (all)
<i>Plantago maritima</i>	Griz Cockwell, Bill Luxton (all)

<i>Potamogeton linguatus</i>	Alistair Wilson (left and bottom right)
<i>Rumohra adiantiformis</i>	Alistair Wilson (all)
<i>Samolus repens</i>	Richard Lewis
<i>Saxifraga magellanica</i>	Richard Lewis
<i>Schoenoplectus californicus</i>	Mike Morrison (all)
<i>Scutellaria mummulariifolia</i>	http://www.flickr.com/photos/stationalpine_josephfourier/2084030328/
<i>Viola magellanica</i>	Alan Henry (all)