



Mixed fern planting in a shady area



Emerging croziers of *Osmunda regalis*  
(Mature fronds on front cover)



*Dryopteris kuratae* with a *Camassia*

## The British Pteridological Society For Fern Enthusiasts

Further information is obtainable from:

[www.ebps.org.uk](http://www.ebps.org.uk)

Copyright ©2016

British Pteridological Society

Charity No. 1092399

Patron: HRH The Prince of Wales

c/o Dept. of Life Sciences, The Natural History Museum,  
Cromwell Road, London SW7 5BD



Some further reading:

Indoor ferns: caring for ferns.

Boy Altman. (Rebo 1998)

House Plants

Loren Olsen. 2015.

Gardening with Ferns

Martin Rickard (David and Charles)

From Timber Press:

Encyclopaedia of Garden Ferns

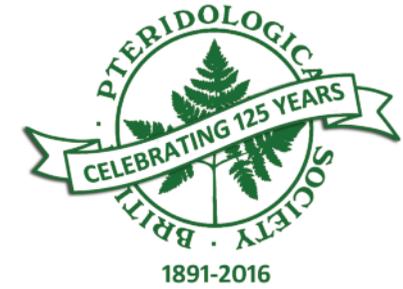
Sue Olsen

Fern Grower's Manual

Barbara Hoshizaki and Robbin Moran

The Plant Lover's Guide to Ferns

Richie Stefan and Sue Olsen



## The British Pteridological Society For Fern Enthusiasts

125<sup>th</sup> Anniversary 1891-2016



Ferns for damp or wet conditions

RHS Chelsea Flower Show 2016

## Ferns for damp or wet conditions

Most ferns require well-drained moist conditions but some will tolerate standing in water in a bog-garden or at the edge of a pond. Cultivars are offspring that have been selected and propagated to display special features, a Victorian passion!

British wet-tolerant ferns include:

*Athyrium filix-femina* Lady fern and cultivars

*Dryopteris cristata* Crested buckler fern

*Equisetum hyemale* Dutch rush

*Osmunda regalis* Royal fern and cultivars

*Thelypteris palustris* Marsh fern

British native ferns for moist acidic sites:

*Blechnum spicant* Hard fern

*Gymnocarpium dryopteris* Oak fern

*Phegopteris connectilis* Beech fern

Foreign ferns for moist sites:

*Athyrium niponicum* Japanese fern

*Athyrium* species, of which there are many

*Matteuccia struthiopteris* Ostrich fern

*Matteuccia orientalis* Oriental Ostrich fern

*Onoclea sensibilis* Sensitive fern

*Woodwardia fimbriata* Giant chain fern

*Woodwardia unigemmata* Jewelled chain fern



## Ferns for damp or wet conditions

Ferns have adapted over many millions of years to most environments but all require moisture to thrive and to reproduce. Some will tolerate drier conditions but the majority require a constant supply of moisture either from damp ground or from very humid air. Generally, the best way to achieve a good growing environment for damp loving ferns is to select a site in full or dappled shade and to increase the organic content of the soil by digging in leaf-mould, garden compost or a peat-substitute. Some native British ferns require that the soil is also on the acidic side of neutral and that may require using peat or other specialist ericaceous composts. Such ferns include *Blechnum spicant*, the Hard fern, *Gymnocarpium dryopteris*, the Oak fern, and *Phegopteris connectilis*, the Beech fern. The latter is easy to grow, the other two can be challenging!

A few ferns will tolerate standing in boggy, water-logged ground so long as the crown of the plant is well above water level. These ferns are suitable for wet areas of the garden or as poolside plants. No garden fern will tolerate prolonged submersion of the crown. Most ferns that will grow as bog-plants are deciduous and will lose their leaves in the winter. This is the case for the magnificent *Osmunda regalis*, the Royal fern which, in the spring, has very architectural new croziers, often covered in a protective web, which give rise to pale green foliage. This turns brown in the autumn and falls away, leaving the crown exposed. These ferns are well suited to the larger garden where they can grow to a height of 60-180cm. *Athyrium filix-femina*, the Lady fern, will grow in damp or wet areas and occurs widely in the UK countryside. It is a delicate-looking plant and there are some attractive cultivars. It too is deciduous as is *Thelypteris palustris*, the Marsh fern, which is not so widely available. A peculiar plant, *Equisetum hyemale*, the Dutch Rush, used to be listed as a fern-ally but is now recognised as a true fern. It can grow to 100cm and is a striking plant if protected from wind and passers-by so that the tubular 'fronds' are not broken. This will grow in boggy areas but should be restricted by being planted in a container as the underground rhizomes can spread far and wide and can be difficult to remove!

In better-drained areas the *Matteuccias* can do well and also spread vigorously by underground rhizomes. Both *Matteuccia struthiopteris*, the Ostrich fern and *Matteuccia orientalis*, the Oriental Ostrich fern, are striking deciduous plants that can grow to 100cm high and leave their attractive spore-bearing fronds erect throughout the winter. *Onoclea sensibilis* is a much

smaller, damp-loving, deciduous fern that can spread widely. It has attractive pale green foliage and is the first to die back in the early winter, hence the name 'Sensitive fern'. *Woodwardia fimbriata* and *W. unigemmata* are large 'Chain' ferns that are evergreen and have low, shiny, spreading fronds. *W. unigemmata*, the Jewelled Chain fern, has very attractive red and bronze new growth in the spring turning dark green as the season progresses. It can also reproduce from bulbils on the tips of the fronds, although in the garden, this normally requires layering a bulbil into a pot of moist compost.

Many of the species that will grow in drier conditions will also grow in moist but not water-logged sites. Therefore, many *Polystichum* and *Dryopteris* species (listed in our leaflet on 'Ferns for Drier Conditions') can be planted successfully in moist sites. The *Athyrium* family is very large and is currently undergoing some re-classification with new botanical names. However, there are many very attractive ferns sold as *Athyrium* species and there are many cultivars and hybrids. A widely available cultivar is *A. niponicum pictum*, the Japanese Painted Fern, which has foliage of green, silver and red. Amongst the hybrids is *Athyrium* x 'Ghost' (x indicates a hybrid origin in a plant) which is a tall finely-cut fern in a pleasant silvery-green. *Athyrium* species generally spread quite easily by rhizomes without being too invasive. They are all deciduous.

Companion planting can be attractive in itself but can also set-off the colour and detail of the fern foliage around it. There are many plants that will grow in these moist conditions and it would be hard to recommend any one plant in particular. However, as a general rule, it is best not to use companion plants that are very hungry for water and dry out the soil, that require staking, or that spread vigorously. Also, it is important that those deciduous ferns that die-back to soil level are not disturbed by digging in the spring as the new fronds can be very brittle and snap off.

There are few pests that cause much trouble to garden ferns. However, the deciduous ferns, such as the *Athyriums*, can have very soft new growth that is susceptible to slugs and snails. Vine weevil larvae can cause damage to fern roots below the ground and the adult weevil can damage mature fronds. There are both chemical and biological methods of controlling vine weevil and any new plant imported from a garden centre should be inspected for the presence of pests.