The Royal Fern

The Royal Fern, *Osmunda regalis,* could be found as a wild plant in Berwickshire on Coldingham Moor until 1871 and at Flass Wood until 1885 but has not been since those dates and is now extinct in the County. Land management and farming finished it off, sheep find it very palatable and probably grazed it to extinction. It is a plant which requires wet conditions such as rocky stream sides or very wet woodland and the edges of pools and lochans. It is widespread down the west coast of Britain and found over much of Ireland.

Ferns reproduce by spores rather than the seeds produced by normal flowering plants. Most ferns produce their spores on the underside of the green fern fronds but this Royal Fern grows a big brown spike separate from the green fronds,see photo, and here produces and sheds its spores. The ripe spores are very short lived and are dispersed in mid summer, they must blow onto wet ground if they are to have any chance of growing. I occasionally find young plants in my garden as I have a big mature plant growing in full sun at the edge of the pond. The green fronds turn into nice shades of brown in the autumn and by mid winter the plant is more or less leafless and then I cut back the old stems.

The Royal Fern can be found as a wild plant across Europe, parts of North Africa and Asia. Several other species can be found in North America, Japan and the Himalaya. One of the species, Osmunda claytoniana, is known as the Interrupted Osmunda and is rather unusual in that half way up the foliage of the frond, it is interrupted by a spore baring section with brown fruiting bodies, then a green section at the top, therefore there are three sections on one frond, green at the top, brown in the middle with the spores and green again on the lower section. This species grows in North America and in Asia and I have seen large colonies in the moist wooded slopes in the western Himalaya. Fossils show that it has changed little in the past 180 million years. One of the species, Osmunda cinnamomea was dug up for its fibrous roots and was available to buy as Osmunda fibre and was used as a medium in the compost in the cultivation of tropical orchids. It is said to grow in huge colonies in swamp areas in North America and can also be found in South America and Eastern Asia.

The taxonomy of Osmunda has resulted in many name changes and many of the species are no longer in the genus Osmunda.

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