

Cornfield Flowers Project



Species Cards: non-arable



Royal fern (*Osmunda regalis*)

Least Concern

An impressive fern of fen-carr woodland and wetlands; one of the non-arable species the CFP conserves

Locally rare in the National Park, previously considered extinct

REASONS FOR DECLINE:

Victorian collection; habitat loss and drainage

Our Royal fern experience...

In 1953 the Scarborough Naturalists described Royal fern as rare, only known historically from Harwood Dale in 1915-16, and stating: 'has now disappeared from the area owing to the depredations of collectors'.

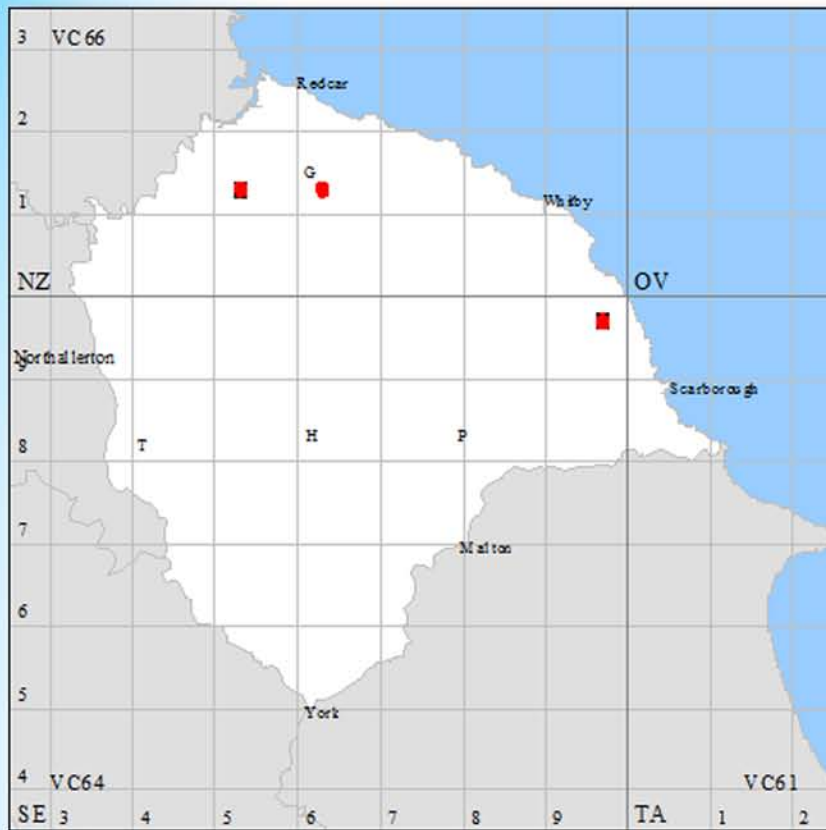
In 1989 Nan Sykes and Chris Wilson were surveying the plants in the Forestry Commission woodland at Harwood Dale when they found a good strong colony of over 18 plants, of which the older ones were very mature, later estimated to be 80-120 years old. Prior to this discovery it was believed extinct in the area.

In the early 1990s Chris took spores from these plants and attempted to grow them on, but the Royal fern has a complicated two stage growth cycle; although he managed to grow them to the sporophyte stage, they could never be persuaded to change into the gametophyte stage from which the adult ferns develop.

These things stuck until the late 1990s when fern expert Ken Trewran moved into the area. Ken gathered some more spores, and managed to get them to carry out their full cycle. A large number of small plants were then sent to the Wildflower Ark botanical gardens, Middlesborough, to grow on.

By 2010 the plants were considered big enough for a reintroduction programme to start. Ken sent 15 plants for the Scarborough area, and planted around 50 himself in Eskdale and Barnscliffe. Unfortunately Ken died in the autumn of 2010 and the remainder of the plants were passed on to the Cornfield Flowers Project to finish off the reintroduction programme. Many of the remaining plants were very small so the last three years have been spent repotting. By 2014 the largest four plants were deemed big enough to fend for themselves and were reintroduced to Forge Valley. There are 17 plants now left, which will be found suitable sites when big enough.

Distribution in north-east Yorkshire: Royal fern (*Osmunda regalis*)



Key

● Post-2000 records
(inc. CFP introductions)

■ Pre-2000 records

G: Guisborough T: Thirsk

H: Helmsley P: Pickering

Data: BSBI, 2014 Maps produced by MapMate®

Key Facts - Royal fern (*Osmunda regalis*)

- A marked preference for wet soils - wet woodland, grassland, mires and ditches
- Reach impressive sizes when mature, but difficult to find in younger stages as easily overwhelmed by other vegetation
- A deciduous fern, with all above-ground vegetation dying back for winter
- Heavily collected by Victorians, resulting in large declines; cultivated garden plants are still popular

UK Conservation Designations

The Vascular Plant Red Data List for Great Britain (2006) designates all UK wildflowers by their rarity, and hence conservation importance, in the following order:

Extinct → Extinct in the wild → Critically Endangered → Endangered
Vulnerable → Near Threatened → Least Concern

The Cornfield Flowers Project is spearheaded by the Carstairs Countryside Trust, Ryedale Folk Museum, North Yorkshire Moors Association and North York Moors National Park Authority. It has a demonstration field and nursery at Ryedale Folk Museum and a working arable field at Silpho, near Scarborough. It is supported by the North York Moors National Park Sustainable Development Fund, North York Moors Coast & Hills LEADER Programme and the Heritage Lottery Fund.

