

Pheasant's-eye

Adonis annua



© Kate Still

An unlikely looking member of the buttercup family with deep red flowers resembling those of anemones. The central part of the flower has black anthers and a dark spot at the base of each petal. Pheasant's-eye can grow up to 50 cm in height and can be much branched. The leaves are deeply divided giving a feathery appearance. Flowers are 15-25 mm wide. Elongated oval seed heads bear approximately 30 olive green seeds, similar in shape to a grape pip.

Pheasant's-eye is unmistakable when flowering however young plants look similar to species of mayweed. They can be separated by the unscented leaves of Pheasant's-eye and hollow stems.

Lifecycle

Pheasant's-eye is an annual herb, flowering from June to July. It mainly germinates in the autumn, but it can also germinate in spring crops. It can have extremely short-lived seed, possibly just six months, but in the right soil seeds can remain viable for much longer.

Habitat

An arable species, typically found in the margins and corners of autumn (and sometimes spring) sown cereal fields. There are records of this species at sites in arable fields and at locations with regularly disturbed grassland, such as Salisbury Plain. Pheasant's-eye is found on calcareous soil, mostly of chalk origin, but can also be found on soils derived from limestone. Soil texture varies from silt to clay loams. It is found within species-rich arable plant communities with Corn Parsley and Rough Poppy. At a small number of sites this species grows alongside Narrow-fruited Cornsalad, Spreading Hedge-parsley, Prickly Poppy and Red Hemp-nettle.

GB status and rarity

Endangered

Protection under the law

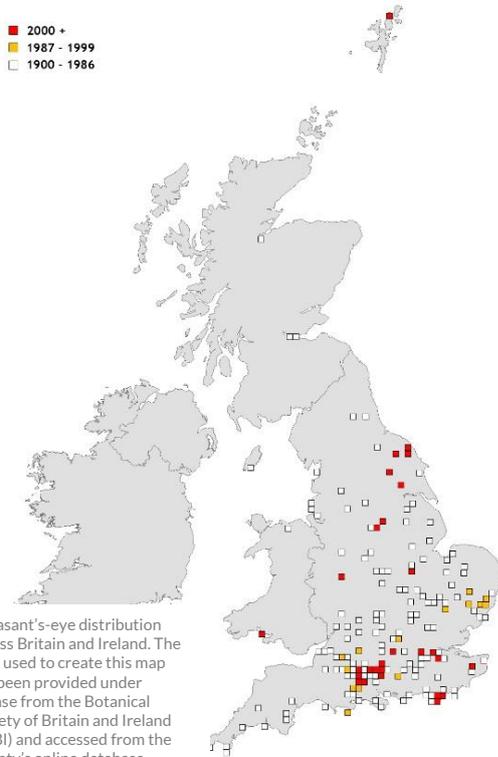
This plant is included as a species "of principal importance for the purpose of conserving biodiversity" under Section 41 (England) of the Natural Environment and Rural Communities Act 2006.

Survey method

All flowering and non-flowering individuals on a site should be counted or estimated with larger populations. Numbers of plants are likely to vary extremely between years.

Distribution

This species has always been associated with chalk soils, particularly in southern England and, as such, has never been widespread. However, it was abundant enough during the 18th century to be picked and sold as a cut flower called 'Moroccan Red'. Many of the recent records of this species are confined to southern and central England, though there are records for north-east England, south Wales and Shetland.



Pheasant's-eye distribution across Britain and Ireland. The data used to create this map has been provided under license from the Botanical Society of Britain and Ireland (BSBI) and accessed from the Society's online database.

Reasons for decline

The large seeds of Pheasant's-eye were historically spread within cereal seed and one of the main reasons for decline is seed cleaning. It is a poor competitor preferring open vegetation, low soil nutrient levels and regular cultivation. Threats include intensive farming, particularly the development of competitive cereal crop varieties that grow quickly, closing the cereal sward and preventing light reaching seedlings. Widespread use of broad-spectrum herbicides has also had a negative effect on this species.

Habitat management

Ideal management on arable land involves annual cultivation in winter (between October and early December), without subsequent disturbance until Pheasant's-eye plants have flowered and set seed. Pheasant's-eye will grow within a crop, such as an autumn sown cereal or within an uncropped cultivated area or plot.

It is highly susceptible to broad-spectrum herbicides and their use will reduce population size. However, if required, treatment of problematic weed species, particularly grasses, could be undertaken through targeted herbicide use. Fertiliser can encourage problem weeds that prefer higher nutrient soils. Fertiliser is not usually applied to uncropped areas, and application should be limited on cereal headlands, wildlife cover mixes or low-input cereals where Pheasant's-eye is present.

Using a reduced seed rate and/or a crop variety that has fewer tillers on conservation headlands will also benefit Pheasant's-eye as it is not very competitive. If this species is growing within a crop, the crop should be harvested after Pheasant's-eye has set seed, usually late July and into August.

In non-arable situations populations of Pheasant's-eye should be maintained through regular ground disturbance such as ploughing, harrowing or rotovating. Consideration of other species and habitats of conservation concern may need to be considered, such as the presence of calcareous grassland. As the seed was historically spread in cereal seed, this mechanism of unintentionally collecting and preserving seed in grain and re-sowing it with the cereal seed may have led to the large populations that were gathered for sale as a wild flower. With the introduction of seed cleaning, Pheasant's-eye has declined, and is believed to still be declining with ever diminishing numbers at sites where it's present.

A method for preserving populations of Pheasant's-eye into the future may be the collection of seed each year and sowing it into the same locations replicating the historical sowing that would have happened alongside cereal seed.