

Purple Ramping-fumitory (*Fumaria pupurea*)



Purple ramping-fumitory
Copyright: Jon Hickling

Purple ramping-fumitory was first recognised as a species separate from other fumitories in 1902. So far, it has not been found outside the British Isles. Its main strongholds in the UK are Cornwall and western Lancashire.

This plant is one of a suite of so-called 'arable weeds' whose declining fortunes have been linked with changes in farming practices over the last half century.

Purple ramping-fumitory is a branched, scrambling annual growing up to 1 metre in height. It has finely cut leaves and produces spikes of 15-25 pinkish-purple dark-tipped flowers.

Fumitory seeds appear to remain viable in the soil seed bank for many years and new plants can quickly become abundant in an area following disturbance of the soil. However, without continued disturbance (e.g. regular ploughing), or the habitat remaining open as a result of other factors, populations of plants rarely persist above ground for more than a few years.

Main Habitat(s): Arable Fields; arable field margins; other types of recently disturbed farm land (without spring/summer grazing); earthy sea-cliffs; earth works; waste ground; areas open to summer drought.

National status

Purple ramping-fumitory is a UK BAP Priority Species⁽¹⁾. It is classified as Nationally Scarce⁽²⁾ but the plant only receives general protection under the Wildlife and Countryside Act 1981.

It is difficult to tell purple ramping-fumitory apart from some other fumitories and this makes it problematic to assess population trends. However, according to maps in the current British

Red Data Book ⁽³⁾ the species has been recorded from a total of 119 10 km squares in Britain and Northern Ireland but in 75 of these squares no records have been submitted since 1970.

Regional status

Western Lancashire is the main area for this plant in the region although, since 1995, "small, transient populations" have been recorded from a number of localities in north Merseyside ⁽⁴⁾.

Local status

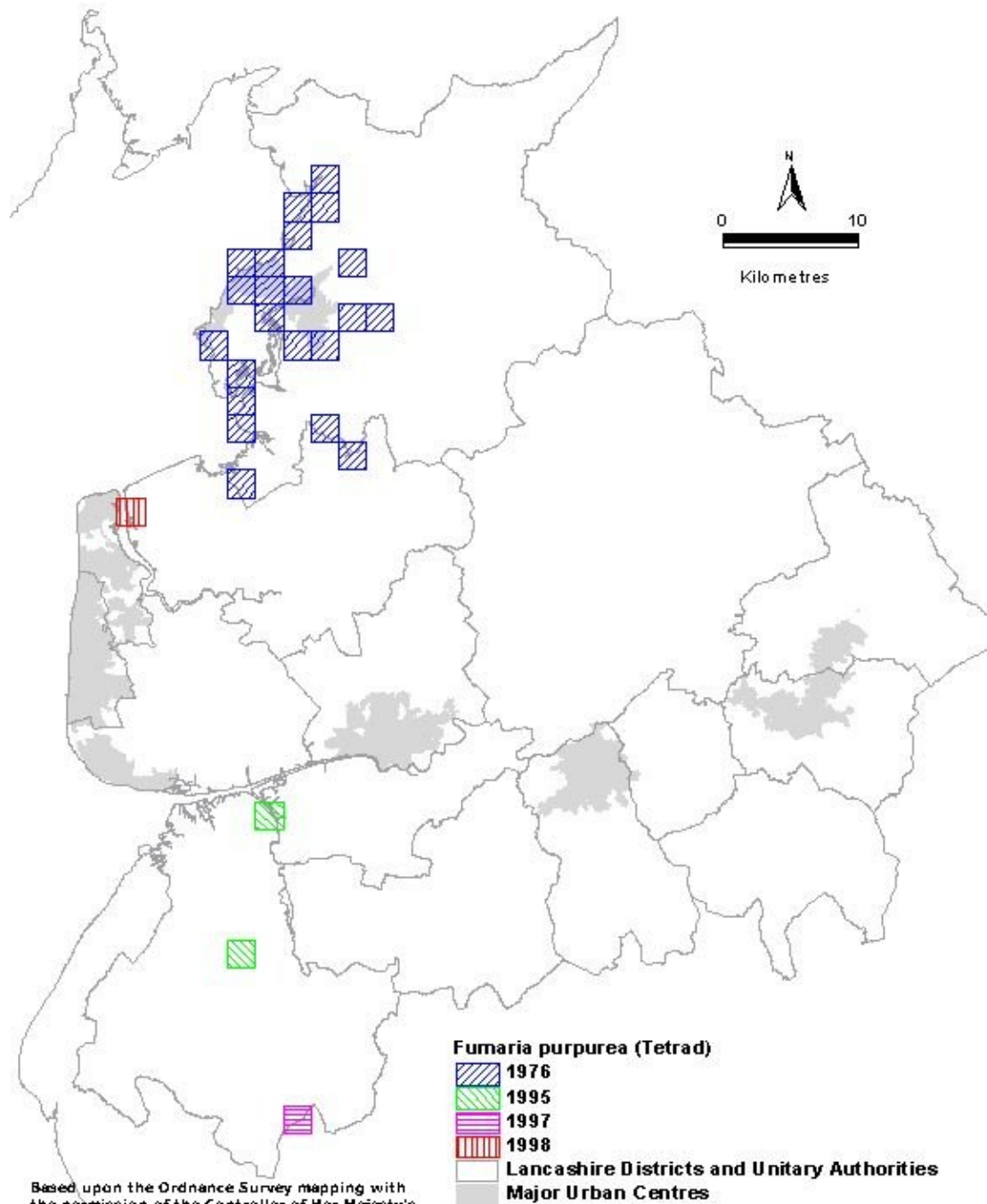
In Lancashire, most of the recent records for purple rampion-fumitory are from coastal areas between the River Wyre and the River Keer in the Districts of Lancaster and Wyre. In addition there are three scattered records from West Lancashire and South Ribble.

Data for Lancaster District ^(5, 6, 7 & 8) between 1976 and 1991 reported the species as occurring "in cultivated fields and on waste ground" in at least twenty-two 2 km squares. If this is taken into account, the Lancaster population must be considered to be of national significance.

Given that western Lancashire represents one of only two UK strongholds, western Lancashire should be the focus for particular conservation effort for the species.

Map(s):

Records by 2x2 km Tetrad of Purple Ramping-fumitory



Based upon the Ordnance Survey mapping with the permission of the Controller of Her Majesty's Stationery Office © Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings.

Lancashire County Council 100023320 2007

Current factors affecting the Species

According to the UK BAP ⁽⁹⁾, the factors causing the decline of this species are "poorly understood" but it is believed that the following have had a negative effect:

- Wider use of herbicides and fertilisers;
- Loss of hedge-banks and other field-edge habitats;
- Changes in agricultural practice favouring more highly productive crop varieties and an end to traditional crop rotations.

Additional factors identified in Lancashire include:

- Creation of grass margins around arable fields;
- Planting of new hedgerows along open field margins;
- Loss of brownfield sites;
- General loss of open ground in rural and urban habitats.

Current Action / Mechanisms

There is a national Species Action Plan for Purple ramping-fumitory. The lead organisation with responsibility to ensure the plan is implemented in England is English Nature. The conservation requirements of this species and a number of other 'arable weeds' will be investigated over the next few years. Purple ramping-fumitory along with some other plants will be the subject of surveys co-ordinated nationally by English Nature with some work being undertaken in Lancashire.

Measures to improve landholdings in ways that benefit threatened arable plant species may be eligible for funding through MAFF's Countryside Stewardship scheme.

Guideline Ff2 in the Biological Heritage Sites (BHS) Guidelines ⁽¹⁰⁾ makes it possible that non-statutory wildlife sites can be designated in the county where non-introduced populations of this fumitory are found. BHSs are recognised within the statutory land-use planning system and are used by MAFF to target Countryside Stewardship.

Objectives, targets and proposed actions for purple ramping-fumitory in Lancashire

Broad Objective:	A. Locate all key sites with significant populations.			
Operational Objective	Action Required (Priority)	Partners	Time-scale	Type
1. By 2003 identify key populations.	1. Conduct a comprehensive survey to establish the distribution and abundance of the species between 2002 and 2004. (High)	EN, JNCC, BSBI Recorders, LCC	S	RM

Broad Objective:	B Maintain viable populations at all key sites.			
Operational Objective	Action Required (Priority)	Partners	Time-scale	Type
1. Seek to protect important populations from adverse impacts due to development.	2. Ensure that all relevant Local Authorities are aware of BHSs for Purple Ramping-fumitory in their area and have local plan policies that safeguard these sites. (High)	LCC, Wyre BC, West Lancs DC, Lancaster CC	M	SS
2. Achieve beneficial management for the species at 50% of its key sites by 2004 and 100% by 2005.	1. Ensure that all relevant agri-environment project officers are advised of locations of key sites, management needs and other issues relating to the species. (High)	MAFF, EN, LCC	S	A
	2. Offer advice to owners and managers of all key sites about the presence and importance of the species, management for its conservation, potentially damaging actions and sources of grant aid. (High)	BHSP, FWAG, MAFF, EN	S	A, LM
Broad Objective:	C. Within its historic range in Lancashire, increase the number of sites supporting viable populations of the species by 25 % by 2010.			
Operational Objective	Action Required (Priority)	Partners	Time-scale	Type
1. Facilitate the regeneration from the seed-bank at former sites.	1. Identify former sites by a search through historic botanical records. (Medium)	LCC	M	RM
	2. Approach landowners of former sites to investigate possibilities of regenerating new populations from dormant seed. (Medium)	BHSP	M	A, LM
2. Encourage natural colonisation of new sites.	1. Develop a network of suitable habitats within the plant's range to provide opportunities for	See Arable HAP	L	See Arable HAP

	it to spread and colonise new sites. (Medium)			
Broad Objective:	D. Establish regular monitoring of plant populations			
Operational Objective	Action Required (Priority)	Partners	Time-scale	Type
1. Compare survey results obtained in 2001/2 with new surveys conducted on a five-yearly basis.	1. Re-survey to establish the distribution and abundance of the species in 2005/2006 (and repeat every fifth year subsequently). (Medium)	EN, WT	M	RM
Broad Objective:	E. Publicise the plight of this and other 'arable weed' species.			
Operational Objective	Action Required (Priority)	Partners	Time-scale	Type
1. Undertake, at appropriate sites, the introduction of the species for interpretative purposes.	1. Identify potential sites and initiate pilot on at least one by 2005 with the eventual aim of locating one interpretative site for the species in each appropriate local authority district. (Low)	WT, Wyre BC, West Lancs DC, Lancaster CC, FWAG, NFU	M	PR
2. Publicise the importance of the species in Lancashire.	1. Include articles in publications in Lancashire to raise interest and awareness. (Low)	WT	O	PR

Related Action Plans:

- Arable & Horticultural Farmland HAP

References & additional reading:

1. HMSO (1995) Biodiversity the UK Steering Group Report. Volume 2 Action Plans.
2. Stewart, A., Pearman, D.A. & Preston, C.D. (1994). Scarce Plants in Britain. JNCC
3. Wigginton M.J. (1999). British Red Data Books 1 Vascular Plants 3rd Edition, Joint Nature Conservation Committee
4. Environment Advisory Service (2000) Species Action Plan for Purple Rampion in Consultation Draft of North Merseyside Biodiversity Action Plan.
5. Livermore L.A & Livermore P.D (1987). The flowering Plants and Ferns of North Lancashire. L. A. & P.D. Livermore.
6. Livermore L.A & Livermore P.D (1990a). Coastal Plants and Ferns of North Lancashire. L.

A. & P.D. Livermore.

7. Livermore L.A & Livermore P.D. (1990b). Plants & Rust Fungi of the Dismantled Railway Lines in the Lancaster District. L. A. & P.D. Livermore.

8. Livermore L.A & Livermore P.D (1991). Lancaster's Plantlife- Botanical Survey. L. A. & P.D. Livermore.

9. DETR (1998) National Species Action Plan for Purple Rampion-fumitory in UK Biodiversity Group Tranche 2 Action Plans. Volume 1 (pp 173 – 175).

10. Morries G., Jepson P. & Bruce N. (1998) Biological Heritage Sites Guidelines for Site Selection. Lancashire County Council.

Date: April 2001.