Crouch, H.J. & Shellswell, C.H. (date accessed). Somerset Rare Plant Register account: Lithospermum arvense. Somerset Rare Plants Group, www.somersetrareplantsgroup.org.uk [Last amended 18-02-2018]

Lithospermum arvense L.

Field Gromwell

Archaeophyte
GB & England: Endangered
VC5 Scarce; VC6 Scarce

An annual plant of arable fields and disturbed ground, particularly on light, dry calcareous soils. Although described by Babington (1834) as frequent in cornfields, Murray (1896) described this species as rather rare, White (1912) as "sparingly and infrequent" and Roe (1981) as "very rare and decreasing" noting that it was formerly more widespread in some areas, but had declined since 1946, no doubt due to the increased use of weed killer.

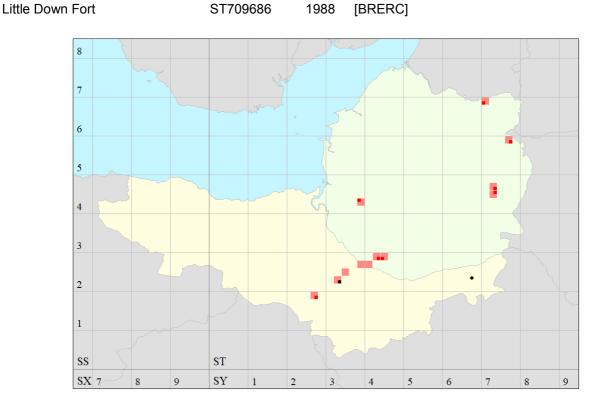
In VC5 Murray (1896) noted records only from between Taunton and Kingston, near Yeovil, and at Cucklington, in the far east of the county. Roe listed six records from the 1920s in his card index, but when he wrote his flora (Roe, 1981), there had only been one recent record for VC5, at Porlock in 1965, found by N.G. Hadden. In 1982 *Lithospermum arvense* was recorded at Fivehead Arable Fields, where it has subsequently been seen occasionally, but not since 2004. In 1986 Caroline Giddens recorded it near Curry Rivel (ST382261). In the 1990s it was recorded by Sidney Fisher at three locations near Fivehead and Curry Rivel. All these sites fall within the Mid-Somerset Hills Important Arable Plant Area. In 1990 this species was found at Staple Fitzpaine, at the edge of the IAPA. The most recent record for VC5, however, was outside this area, near Charlton Horethorne in the east of VC5 (between former sites at Yeovil and Cucklington), where six plants were found by John Poingdestre in 2008.

In VC6 the earliest record was from Charlton Adam, in the south, where Lithospermum arvense was collected in 1822 (specimen in TTN). Murray (1896) noted two records for that area: in a cornfield near Kingweston and a garden at Baltonsborough. He also listed records for Uphill, Hutton, Easton and Winscombe, and gave rather more sites for the north of VC6, where it was more plentiful. There, White (1912) listed sites around Chew Magna, Stanton Drew, Stanton Wick, Clutton, Norton Malreward and Norton Hautville, all south of Bristol. Around Bath, he had found it at Odd Down and Combe Hay, D. Fry recorded it at Corston, A.E. Burr in cornfields near Bath and Dunn (1897) found it in a quarry at Twerton. Miss Livett recorded it near Wells (White, 1912) and H.F Parsons found it at Standerwick in the east of VC6 (Murray, 1896). There were a few records in the 1920s and 1930s, and three in the 1940s around Bath. In his flora Roe (1981) mentioned only a record from a disused railway yard at Pitcombe, found by C.A. Howe in 1964 and "several localities in the north-east corner of the county round Bath", which included plants found in 1978 at Hinton Charterhouse by Rob Randall and Dave Green, at Wellow by Tom Cairns and on Bannerdown by Dave Green. In 1985 it was found at Tucking Mill (Compton Dando) and by Rob Randall at Little Down Fort, Lansdown. Between 1987 and 1993 this species was recorded at only six sites in VC6: in 1987 on disturbed ground on Chilton Moor; in 1988 at Little Down Fort; in 1989 along the edge of an arable field west of Nunney; in 1990 on the edge of a cornfield near the pond at Hinton Charterhouse where seen previously; in 1991 on an old wall at Low Ham and in 1993 on a disturbed road bank at Pitney. There have been no further records for VC6.

Lithospermum arvense has declined substantially since the 1950s due to susceptibility to herbicides. In Somerset it has always been rare, with records scattered spatially and chronologically. Seed is relatively short-lived, so populations require regular soil disturbance for survival (Preston *et al.*, 2002). Last recorded in 2008, it may now be lost to the county.

VC5					
Staple Fitzpaine		ST271180	1990	JP	1 plant at edge of bean field
Fivehead Arable Fields	SSSI	ST33772233	1997	JNC	In Field 3
Fivehead Arable Fields	SSSI	ST33812235	1997	JNC	In Field 3
Fivehead Arable Fields	SSSI	ST33822235	1997	JNC	In Field 3
Fivehead Arable Fields	SSSI	ST33832237	1997	JNC	In Field 3
Fivehead Arable Fields	SSSI	ST33832241	1997	JNC	In Field 3
Fivehead Arable Fields	SSSI	ST33842231	1997	JNC	In Field 3
Fivehead Arable Fields	SSSI	ST33842232	1997	JNC	In Field 3
Fivehead Arable Fields	SSSI	ST33842239	1997	JNC	In Field 3
Fivehead Arable Fields	SSSI	ST33692272	1999	JNC	In Field 1
Fivehead Arable Fields	SSSI	ST33742224	1999	JNC	In Field 3
Fivehead Arable Fields	SSSI	ST33842229	1999	JNC	In Field 3
Fivehead Arable Fields	SSSI	ST33842232	1999	JNC	In Field 3
Fivehead Arable Fields	SSSI	ST33692225	2003	JNC	In Field 3
Fivehead Arable Fields	SSSI	ST33862262	2004	JNC	In Field 2
Fivehead Arable Fields	SSSI	ST33872253	2004	JNC	In Field 2
Fivehead Wood		ST32M	1990	SRF	
Curry Rivel, N of		ST32Y	1994	SRF	
Langport / Curry Rivel		ST42D	1990	SRF	Edge of arable field
Charlton Gorse		ST67222337	2008	JP	6 plants in fruit in weedy wheat field
VC6					
Chilton Moor		ST383433	1987	RSC	Disturbed ground
Low Ham, Hext HIII		ST433288	1991	JP	12 spikes on top of old farm wall
Pitney		ST446284	1993	IPG	2 plants on disturbed road bank, N side
Nunney		ST730459	1989	JFM	
Nunney		ST730460 -	1989	PRG	100+ plants, edge of arable field
		ST732462			and road verge

Abundant on the edge of cornfield by pond



1990

1988

RDR

[BRERC]

ST771579

ST707688

Hinton Charterhouse

Little Down Fort

Distribution of *Lithospermum arvense* in Somerset, mapped using MapMate. Black dots are post-2000 records; red squares are 1987-1999 records