

## **BARTON FIELDS WILDFLOWER MEADOW – UPDATE 2012**

The Barton Fields wildflower meadow project really got under way five years ago when we got Lottery funding, though we had been mowing the area and removing the herbage for a number of years prior to that. The aim was to increase biodiversity, for plants and insects and to create an attractive and interesting area for the public.

A half-hectare area was harrowed and sown with Yellow Rattle seed in the autumn of 2008. This annual plant is hemi-parasitic, weakening grasses by drawing nutrients from their roots. This allows a greater diversity of plants to flourish. The following year, the area was sown with a mixture of 18 native species. Pot-grown native plants of 15 species were also introduced.

For the next three years botanical surveys of one-metre quadrats have been undertaken in early summer. All herb species were counted, and the relative abundance of the various grasses was recorded also.

These surveys have show that the introduced plants have increased in abundance, and many other plants have colonised naturally. Tall growing herbs and tall grasses which once dominated have practically disappeared, allowing low-growing flowering plants to thrive. These provide nectar for bees, butterflies and other insects and the low vegetation causes higher ground-level temperatures, appreciated by the butterflies and other insects. The greater number of flowering plants in the wildflower meadow is found to boost the numbers of grassland butterflies compared with the un-treated mid-field area. In particular, the food plants of caterpillars of the Blue butterfly family: Bird's-foot Trefoil (Common Blue), Lesser Trefoil (Common Blue), Dove's-foot Crane's-bill (Brown Argus) and Common Sorrel (Small Copper) are thriving.

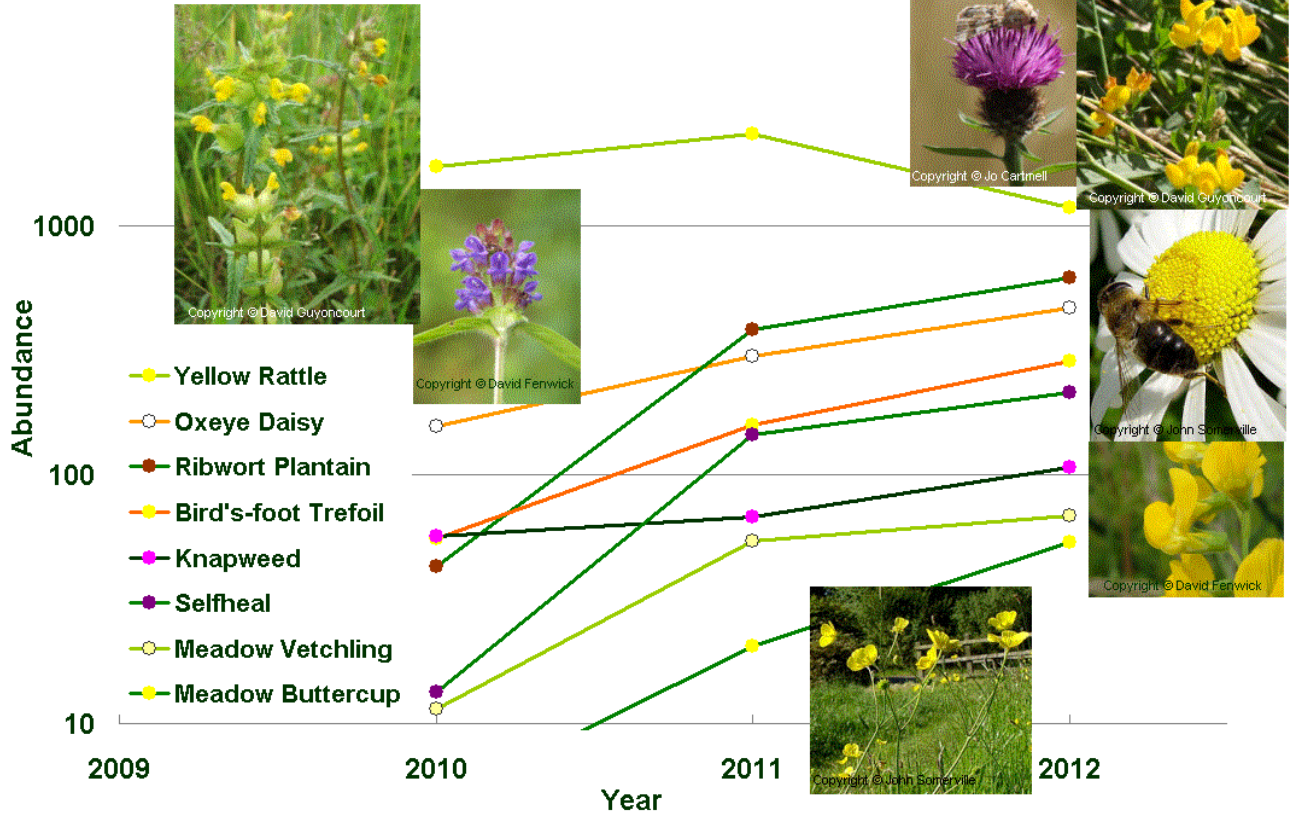
A smaller area at the western end of the field was seeded with a wildflower mixture in 2005. This too is now flourishing and supports a wide variety of butterflies and other insects. This area is not mowed, as the flora remains short, possibly due to thinner less fertile soil.

**Recorders: Jo Cartmell, David Guyoncourt & Vivienne Summers.**

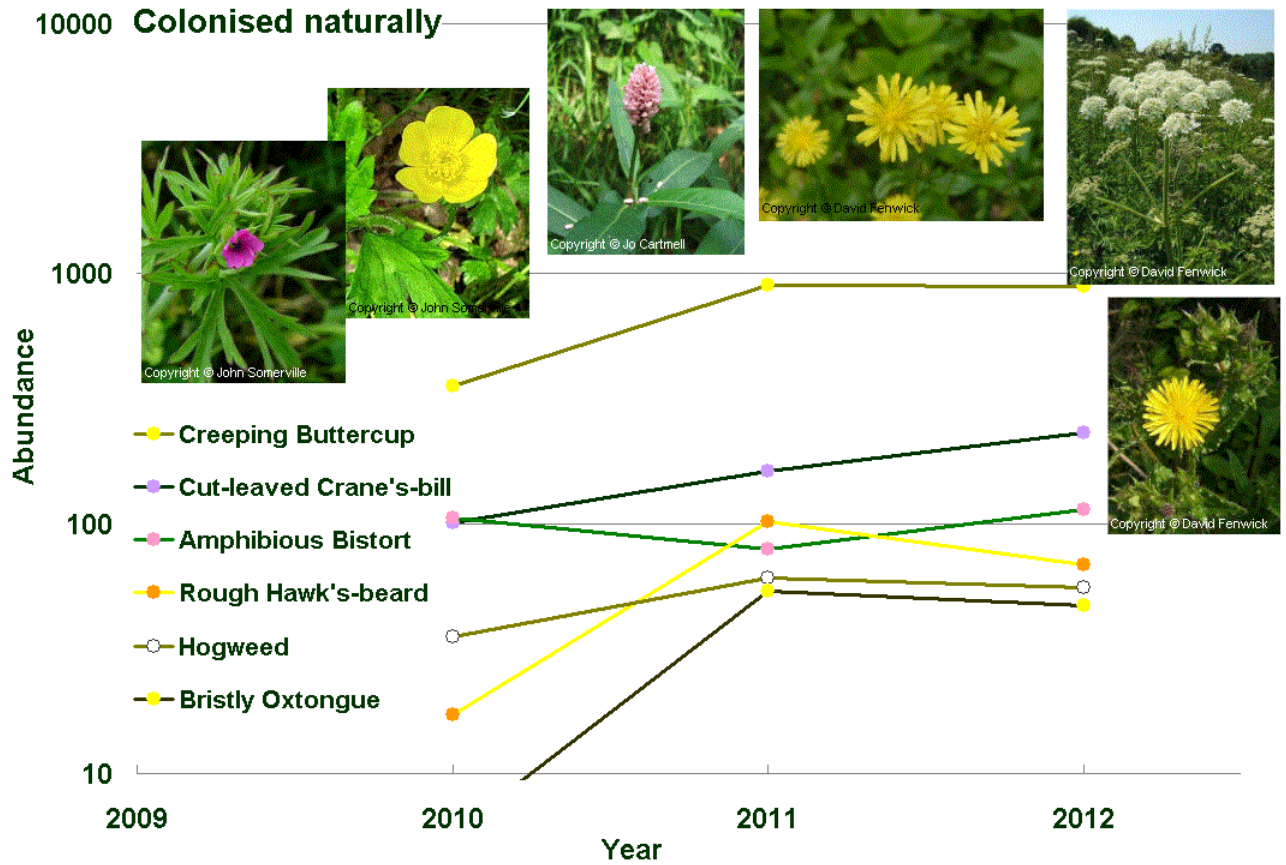
<b>Wildflower Meadow</b>			
<b>Number of plants in 42 quadrats</b>			
<b>Year:</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>Yellow Rattle</b>	1736	2326	1179
<b>Creeping Buttercup</b>	357	896	889
<b>Ribwort Plantain</b>	43	382	620
<b>Oxeye Daisy</b>	156	300	470
<b>Bird's-foot Trefoil</b>	55	158	287
<b>Cut-leaved Crane's-bill</b>	100	162	230
<b>Selfheal</b>	13	145	215
<b>Amphibious Bistort</b>	105	79	113
<b>Common Knapweed</b>	56	68	106
<b>Rough Hawk's-beard</b>	17	102	68
<b>Meadow Vetchling</b>	11	54	68

Hogweed	35	60	56
Meadow Buttercup	5	20	54
Bristly Oxtongue	6	54	47
Lesser Trefoil	?	125	41
Red Clover	3	14	38
Hedge Bindweed	137	84	36
Lady's Bedstraw	18	78	35
Meadow Crane's-bill	2	24	33
White Clover	5	P	31
Broad-leaved Dock	2	10	29
Smooth Hawk's-beard	6	P	29
Common Sorrel	5	12	17
Dove's-foot Crane's-bill	21	53	10
Greater Willowherb	6	28	10
Common Mouse-ear	0	19	9
Meadowsweet	3	P	9
Betony	0	P	4
Field Scabious	6	16	1
Yarrow	0	11	1
Dandelion	6	4	1
Greater Burnet	P	3	1
Common Vetch	9	37	P
Tufted Vetch	5	11	P
Marsh Woundwort	5	5	P
Cowslip	P	2	P
Ragged Robin	1	1	P
White Campion	1	P	?
Stinging Nettle	1	P	?
Water Figwort	1	P	P
Devil's bit Scabious	P	P	P
Musk Mallow	P	P	P
Fleabane	P	P	P
Greater Knapweed	P	P	P
Common Ragwort	P	P	P
Square-stalked StJohn's-wort	0	P	P
A Violet	0	0	P
Grass Vetchling	0	0	P
Autumn Hawkbit	?	76	?
Prickly Sowthistle	2	?	?
Kidney Vetch	0	P	0
Redshank	9	0	0
Corn Chamomile	4	0	0
Marsh Dock	4	0	0
Poppy	2	0	0
Ground Ivy	1	0	0
Chickweed	1	0	0
	P	= Present but not in surveyed quadrats	
		= Introduced	

## 10000 Introduced plants



## 10000 Colonised naturally



1000 - Other plants - introduced & colonised

