

Friends of Eastfield Park
Eastfield Park Management Committee
Set-aside Areas and Created 'Meadow' – 2017

Introduction

During 2017, two areas within Eastfield Park were 'set aside' from the regular mowing regime. Both areas were located in the Parkland Area within the Park's Heritage Zone (Fig. 1). One area, labelled A2 on Fig. 1 and in Table 1, overlapped with the area set aside during 2016 (A1 in Table 1) but was much smaller being approximately 1,600 m² compared to around 2,800 m² in 2016. It did not extend as far under the trees to the south but was somewhat wider at the north end. The second area, labelled B on Figure 1 and in Table 1, was smaller (around 400 m²) and had not previously been set aside. Both areas were inside the area designated by the Wildlife Trust as species rich grassland.



Fig. 1: Locations of set-aside areas A2 and B and created meadow - 2017

Also during 2017, an attempt was made to create a wildflower-rich, meadow-like habitat in the area adjacent to the north-facing fence separating the Park from Eleonore House. The majority of plants in this area were poisoned late in 2016 and most of the surviving vegetation scraped off early in 2017. The area was sown with 1kg of meadow seeds on 26th and 28th April, later than intended because of the dry weather and hardness of the ground in March and April. Even so, conditions were far from ideal when the area was seeded and this has undoubtedly impacted on the success of the project. The created meadow is semi-circular in shape and approximately 130 m² in area. The meadow seeds were obtained from Naturescape British Wildflowers, Langer, NG13 9HP, (Meadow Mix N4: Summer flowering butterfly & bee meadow mixture). Full details of the species composition of the mix used are available on record.

The reasoning behind the creation of the set-aside areas and created meadow is given in a document produced by Dr Vic Smith for the Friends of Eastfield Park and the Eastfield Park Management Committee in 2016: *Eastfield Park Meadows including a Report on the 2016 'Set-aside' Area*.

Outcomes

Figures 2 & 3 illustrate the two set aside areas (A2 & B respectively) as they appeared in August, 2017. Figures 4 to 7 illustrate various stages in the development of the created meadow.



Fig. 2: Set-aside A2 in August 2017



Fig. 3: Set-aside B in August 2017

All three areas were examined by Matt Johnson and Chris French from the Wildlife Trust on 31st July, 2017. A list of the species noted in each area compared to those recorded in set-aside A1 in August, 2016, is provided in Table 1. Altogether 50 species are listed including 12 species of grass. Fewer species were recorded in A2 in 2017 than in A1 in 2016 (21 compared to 27) but the lists are not exhaustive so the apparent absence of certain species in 2017 may not be of any significance. Only 17 species were recorded in set-aside B and this probably does reflect a less diverse flora. Not surprisingly, the 30 species recorded in the created meadow (including only four grasses) make up a very different species composition to the more natural set-asides.

Fig. 4: The area for meadow creation on 6th April 2017 before seeding. Most of the pre-existing vegetation had been poisoned or stripped away.



Fig. 5: The created 'meadow' on 7th June 2017 with plants beginning to grow but not necessarily from the sowing carried out at the end of April.

Fig. 6: The created 'meadow' on 10th August 2017 with considerable plant growth. The taller plants nearer the fence (including chicory with the blue flowers) are self-seeded from the pre-existing wildflower border.



Fig. 7: The created 'meadow' on 18th August 2017 after cutting down the taller plants in the area closest to the fence.

Table 1: Species recorded by Wildlife Trust staff in set-aside areas A2 & B and the created meadow in 2017 compared to the species found in the original set-aside area (A1) in 2016. Red ticks: species recoded in 2016; blue ticks: species recorded in a set-aside area for the first time in 2017; green ticks: species only recorded in the created meadow; black ticks: species added to list by V Smith after 2017 survey.

Species	Year / Area			
	2016: A1	2017: A2	2017: B	2017: C
Agrimony (<i>Agrimonia eupatoria</i>)	✓			
Autumn Hawkbit (<i>Leontodon autumnalis</i>)	✓	✓	✓	✓
Black Medick (<i>Medicago lupulina</i>)				✓
Bulbous Buttercup (<i>Ranunculus bulbosus</i>)	✓			
Burnet-saxifrage (<i>Pimpinella saxifraga</i>)	✓			
Cat's-ear (<i>Hypochaeris radicata</i>)	✓			
Chicory (<i>Cichorium intybus</i>)				✓
Cock's-foot (<i>Dactylis glomerata</i>)*				✓
Common Bent (<i>Agrostis capillaris</i>)*	✓	✓	✓	
Common Bird's-foot-trefoil (<i>Lotus corniculatus</i>)	✓	✓	✓	✓
Common Knapweed (<i>Centaurea nigra</i>)	✓	✓	✓	✓
Common Mouse-ear (<i>Cerastium fontanum</i>)	✓	✓	✓	✓
Common Ragwort (<i>Senecio jacobaea</i>)	✓			
Cornflower (<i>Centaurea cyanus</i>)				✓
Creeping Buttercup (<i>Ranunculus repens</i>)				✓
Creeping Cinquefoil (<i>Potentilla reptans</i>)				✓
Crested Dog's-tail (<i>Cynosurus cristatus</i>)*	✓		✓	
Daisy (<i>Bellis perennis</i>)				✓
Dandelion (<i>Taraxacum</i> sp.)			✓	✓
Dove-leaved Cranesbill				✓
Dwarf Thistle (<i>Cirsium acaule</i>)	✓	✓	✓	
Field Poppy (<i>Papaver rhoeas</i>)				✓
Germander Speedwell (<i>Veronica chamaedrys</i>)			✓	
Greater Knapweed (<i>Centaurea scabiosa</i>)				✓
Greater Plantain (<i>Plantago major</i>)				✓
Greater Willowherb (<i>Epilobium hirsutum</i>)				✓
Lady's Bedstraw (<i>Galium verum</i>)	✓	✓		
Lesser Hawkbit (<i>Leontodon saxatilis</i>)	✓	✓		
Lesser Stitchwort (<i>Stellaria graminea</i>)	✓	✓		
Meadow Barley (<i>Hordeum secalinum</i>)*			✓	✓
Meadow Buttercup (<i>Ranunculus acris</i>)	✓	✓		
Meadow Foxtail (<i>Alopecurus pratensis</i>)*		✓		
Oxeye Daisy (<i>Leucanthemum vulgare</i>)				✓
Pepper Saxifrage (<i>Silene silaus</i>)		✓		
Perennial Rye-grass (<i>Lolium perenne</i>)*	✓	✓	✓	
Quaking-grass (<i>Briza media</i>)*	✓	✓		
Red Clover (<i>Trifolium pratense</i>)	✓	✓	✓	✓
Red Fescue (<i>Festuca rubra</i>)*	✓		✓	
Ribwort Plantain (<i>Plantago lanceolata</i>)	✓	✓	✓	✓
Scarlet Pimpernel (<i>Anagallis arvensis</i>)				✓
Scented Mayweed (<i>Matricaria chamomilla</i>)				✓
Selfheal (<i>Prunella vulgaris</i>)	✓	✓	✓	✓
Smaller Cat's-tail (<i>Phleum bertolonii</i>)*	✓			
Spear Thistle (<i>Cirsium vulgare</i>)				✓
Sweet Vernal-grass (<i>Anthoxanthum odoratum</i>)*	✓	✓		
Timothy grass (<i>Phleum pratense</i>)*		✓	✓	✓
Upright Hedge Parsley (<i>Torilis japonica</i>)				✓
White Clover (<i>Trifolium repens</i>)	✓	✓		✓
Yarrow (<i>Achillea millefolium</i>)	✓	✓		✓
Yorkshire-fog (<i>Holcus lunatus</i>)*	✓		✓	✓

Discussion & Recommendations

Set-aside Areas: The plant species found in the set-aside areas in both 2016 and 2017 confirm that this part of Eastfield Park is a species-rich grassland habitat with indications of neutral to slightly alkaline conditions, consistent with the known geology and history of the area. Both areas provide habitats for a range of invertebrates especially insect pollinators. The areas also add beauty and interest to the Park and suggest what the area might have been like before urban expansion.

The Chair of the FoEP and the Wildlife Trust staff responsible for evaluating the set-aside areas suggest that Area A2 should be extended to the west and set-aside again in 2018. The new set-aside (A3) would be approximately 2,000 m³ in area. There would be no objection to people walking through the extended area but to avoid inconveniencing park users diagonal pathways could be cut through the extended area (Figure 8).

Area B has served its purpose in demonstrating that the species-rich area extends to that part of the Park. We therefore suggest that it should be mowed normally in 2018. Instead, a similar sized area in a different part of the Park (Area D in Figure 8) should be left unmown until August or September. This will help to further determine the limits of the species-rich area and advance our knowledge of parks natural flora.

Created meadow: This did not develop as expected, mainly because of the poor germination and growth of meadow plants early in the season when the weather was unseasonably dry and the clay soil was baked hard. The plants that did eventually grow seem to consist of four types: first, plants self-seeded from the wildflower border created along the fence in 2015; second, plants that have good powers of dispersal and rapidly colonise bare ground; third, plants that occur naturally in the Park's grassland and either survived the poisoning or else rapidly colonised the exposed area; and finally, plants that grew from the meadow seeds scattered on the area in April. The dense growth of chicory undoubtedly belongs to the first category and greater willowherb to the second, but several of the recorded species (such as common knapweed and yarrow) occur naturally in the Park and were present in the meadow mix, so could belong to either the third or the fourth group. Many of the species supplied in the mix (such as meadow cranesbill, *Geranium pratense*) have not yet been recorded in the meadow but may well appear next year (Dove-leaved Cranesbill, *Geranium molle*, was recorded but is probably one of the plants that spread from the wildflower border).

Despite a certain degree of disappointment, the created meadow, like the set-aside areas, has provided a good habitat for a range of animals especially insect pollinators. When the chicory was cut down in August to allow a better mix of plants to develop, one newt, three toads and innumerable frogs were disturbed.

The meadow creation is a long term project and the plan is to continue to micromanage it on an *ad hoc* basis, encouraging or adding desirable species and cutting back or removing less desirable ones. We hope to create a meadow-like habitat which is rich in species, attractive to look at and beneficial to a wide range of animal species especially insect pollinators.



Fig. 8: Proposed set-aside areas for 2018. Set-aside Area B is abandoned and replaced with a new Set-aside Area D; Set-aside Area A2 is modified to form the extended Set-aside Area A3 with paths running diagonally across the area.

End note / Acknowledgements

This document has been produced for *The Friends of Eastfield Park* (FoEP) and the Eastfield Park Management Committee (EPMC) by Dr Vic Smith, Chair of both groups. Except where otherwise stated, the views expressed are Vic's own and not necessarily those of *The Friends* or the Management Committee. The recommendations, however, are made for consideration by both groups for possible incorporation into the Park's Management Plan.

Vic would like to thank Matthew Johnson and Chris French from the Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire for their contributions as described in the report.