# **EASTFIELD PARK NORTHAMPTON**

# **STATE OF THE PARK**

# (Water Resources & Vegetation)

# November, 2018



Eastfield Park Management Committee Friends of Eastfield Park

V G F SMITH (November, 2018)

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#### **Preface**

This is the 4th *State of the Park* report produced since the formation of the Eastfield Park Management Committee in June 2014. The first two reports, written in February 2016 and February 2017, followed inspections carried out in January/February of those years and attempted to cover all aspects of the Park. The third report, however, written in February 2018 and based on an inspection carried out in January 2018, dealt only with the Park's footpaths, facilities and ground conditions. It had little to say about other aspects of the Park unless they were relevant to those themes.

This report deals with issues not covered in the February report, specifically the Park's water resources and vegetation. It is not based on a single inspection but on observations made throughout the year.

As pointed out in the February report, in 2017 the 'Urgent Planning Objectives' in Section 1 of the Park's Action Plan were replaced with 'On-going Planning/Management Objectives'. Whereas the February report linked closely to the last two of these new objectives, this report links to the first five:

- i. Report on condition of park grasslands, including set-aside areas. Review management policy and agree set-aside areas for less frequent mowing for following year.
- ii. Report on condition of wooded areas including 'weed trees' and undergrowth. Review management policy and agree actions for following year.
- iii. Report on number and condition of trees in the Park Heritage Zone. Review management policy and agree actions for following year.
- iv,a. Report on condition of Lake and ponds especially reed beds and other flora including surrounding vegetation. Review management policy and agree actions for following year.
- iv,b. Report on water levels in ponds & Lake and consider ways of improving water retention and/or water quality, including possible dredging or raising/repairing outfalls. Agree necessary actions.

(NB: Unfortunately, there was an error in the numbering of these objectives in the Action Plans from December 2017 to June 2018 with both the third and fourth objectives being numbered as iii. In order to preserve the numbers allocated to objectives v and vi, referred to in the February report, the fourth objective has now been numbered iv,a and the fifth objective as iv,b. Conveniently, both of these objectives refer to the lake and ponds.)

# EASTFIELD PARK NORTHAMPTON STATE OF THE PARK - November, 2018

#### A. Introduction

As mentioned in the Preface, unlike earlier *State of the Park* reports, this report is not based on a single inspection but on observations made throughout the year. Similarly, the photographs illustrating the report were taken at various times during the year.

Also explained in the Preface, the report links particularly to the first five 'Ongoing Planning/Management Objectives' in the revised Action Plan (now numbered i to iv, b). However, this report also includes a consideration of the gardens created by the Friends of Eastfield Park (FoEP) not mentioned in these objectives.

Two circumstances have had a significant impact on park management during the year, one positive the other negative. In June a new contractor, *i*dverde, became responsible for grounds management within the Park. Almost immediately, improvements were noticed, particularly with regard to grass cutting. The negative impact came from a shortage of volunteers working with the FoEP.

The annual community clean-up days in spring and autumn were well attended by local volunteers but turnout for community gardening events was less than satisfactory. The usual input from voluntary groups from business and industry was lacking (although a church group carried out useful work in June and students from Northampton College made helpful contributions to improving the Park on a number of occasions). Some of the FoEP's key workers suffered prolonged illness during the year and, despite a strong input from at least three other members, maintenance of gardens, the planted meadow, informal pathways and hedges was much slower than intended.

### B. Grassland and 'Set-asides' (Annual Planning/Management Objective i)

Whereas March and April were wetter and cloudier than average, May, June and July were exceptionally dry and sunny. March was also unusually cold although average temperatures from April through to August were two to three degrees warmer than usual. These unusual weather conditions had a considerable impact on the growth of grass in the Park and also on the capability of mowers to efficiently cut the grass.

Early in the year there were frequent complaints about grass not being cut; later these changed to complaints about the standard of grass cutting but, by July, most people were very satisfied with the standard of mowing. In late October, the FoEP even received a complaint that the grass was being cut unnecessarily! While weather conditions partly account for the variations during the year, there can be no doubt that the standard of mowing improved after *i*dverde took over the contract for grounds maintenance.

In accordance with plans agreed at the September 2017 EPMC meeting, two areas in the Parkland Zone were 'set aside' from the usual mowing regime and not mowed at all until late in the year (Area A2 and D in Fig. 1). The areas were discussed with Wayne Wright from Amey plc and then marked out by FoEP volunteers in March. Because of the unusually wet weather, the markings had almost disappeared by the time the grass came to be cut but the areas actually left were very similar to those requested by the FoEP. As planned, the diagonal pathways were cut through Set-aside Area A3.



**Fig. 1:** Set-aside areas agreed for 2018. Set-aside Area B (2017) was abandoned and replaced with a new Set-aside Area D for 2018; Set-aside Area A2 (2017) was modified to form the extended Set-aside Area A3 (2018) with paths running diagonally across the area.



Fig. 2: Set-aside Area A3 in July with Area D in the background. Note the diagonal path for walkers.



Both areas (Figs. 2 & 3) were examined by Matt Johnson (the local Wildlife Trust's Living Landscapes Manager) accompanied by Vic Smith (FoEP Chair) on 7<sup>th</sup> August 2018, rather later than preferred. Because of the hot dry weather during May, June and July, vegetation in the set-aside areas was stunted and withered and many of the plants were difficult to identify. It was therefore decided not to compile a list of species as in previous years but simply to recommend that the same two areas be set aside in 2019.



Fig. 4: Deep cracks along the lines marked out for the football pitches (September, 2018).

Although August and September were not as dry as the preceding three months, they also had less than average rainfall. On 2<sup>nd</sup> October 2018, Vic Smith walked around the Park with Nicola Clarke (Midlands Horticultural Manager for idverde). During this time they noted deep cracks in the Park's surface caused by the extremely dry conditions. Although this relates to ground conditions rather than vegetation, it is relevant to mention it here since many of the deepest cracks followed the white lines marked out for the football pitches (Fig. 4). The mixture used to mark out the lines kills the grass, the roots of which would otherwise bind the soil together and significantly reduce the chance of cracks developing. There is probably little that can be done about this but it does illustrate the importance of the Park's grass cover. The lines used to mark out the set-aside areas do not kill the grass but they are deliberately much less permanent.

### C. Wooded Areas (Annual Planning/Management Objective ii)

The wooded areas include the Buttermere Scrub, Booth Lane Spinney, Squires Spinney, Lakeview Spinney, the Pond Area and parts of the Lake Margin. The first two of these areas are within the Sports and Games Zone; the remaining areas, together with the Lake itself, make up the Wildlife Appreciation Zone. Management of these areas should bear the zonation in mind. However, these areas still lack a detailed management plan although certain management principles have been established.

Many of the pine trees in the old spinneys are diseased and dying. Gaps in the woodland are being filled by self-seeded 'weed trees', brambles and nettles. Management by contractors in the last few years has concentrated on felling dangerous trees, leaving trunk sections in piles for the benefit of wildlife. Management by the FoEP has concentrated on maintaining pathways through the spinneys and Buttermere Scrub. This has included removing nettles and brambles along pathways and cutting back overhanging branches. Paths are also being covered, where possible, with wood chippings. Considerable progress has been made during 2017 and 2018 on the pathway from the Skiddaw Walk entrance, through the Lakeview Spinney, to the Booth Lane Entrance. The whole of this pathway was cleared in 2017 and chippings are being added in 2018 (Figs 5 & 6).



Fig. 5: FoEP volunteers collect chippings left at a convenient site by *i*dverde contractors (Nov. 2018).



During 2017 and the first half of 2018 a considerable number of bushes and smaller 'weed trees' were removed by FoEP volunteers from the margins of the wooded areas, particularly the lake embankment and the areas between the ponds and the open parkland. This was done to open up these areas, making it safer for walkers using the Park and generally improving the appearance of these areas. This work, however, generated a considerable quantity of brushwood, some of which was used to create new habitats such as hibernacula and 'hedgehog hotels' or build 'dead hedges' (Fig. 7), but which was mostly piled up in the wooded areas near to the ponds (Fig 8). This brushwood presented a fire hazard during the hot dry summer in 2018 and is possibly detrimental to trees it is piled against.



Fig. 7 Brushwood used to create 'dead hedge' to protect culvert near top pond (July, 2018).



rig. 8: Piles of brushwood accumulated from bush clearance by FoEP vol;unteers.

It has long been the policy of the FoEP not to export green waste from the Park. If the brushwood can be chipped or shredded it will take up much less room and can possibly be used elsewhere in the Park as mulch or a dressing for pathways. There are numerous locations in the Park where bushes or trees need to be cut down or coppiced and this cannot be done because the waste piles should not be added to. A high priority therefore needs to be given to dealing with this issue.

A high priority also needs to be given to the precise management of these areas, particularly the Lakeview Spinney and the area around the ponds, the two wooded areas most frequently visited by local residents, especially dog walkers. In the case of the Pond Area, the FoEP would like to see woody vegetation between the ponds and the open parkland reduced, leaving only the larger trees separated by grass, herbs and a few shrubs, whereas the area between the ponds and the northern perimeter of the Park should have a thick coverage of trees and bushes providing cover for wildlife and a barrier between the Park and houses to the north.

Lakeview Spinney should also form a barrier between the Park and the houses to the north but should contain a greater range of habitats and plants for both wildlife and people to enjoy. Future management should aim to achieve a well-defined vertical structure to the woodland with ground, field and shrub layers as well as taller trees. There should be a greater diversity of trees including both pines and broad-leaved trees.

At present all of the wooded areas in the Park areas are more or less left to go wild; it seems they are not included in the management contract and the FoEP does not have the resources or the expertise to manage them. It is important that the EPMC addresses this issue, possibly by setting up a sub-committee with co-opted experts to draw up detailed management and action plans for at least the two areas discussed above.

#### D. Heritage Zone Trees (Annual Planning/Management Objective iii)

The extremely dry weather during the first part of the 2018 summer undoubtedly stressed many of the large trees in the Park's Heritage Zone making them vulnerable to later storms. In some cases large branches split off trees even in the absence of strong winds, a phenomenon known as 'sudden branch drop syndrome'. It was pleasing to note how rapidly major incidents were dealt with by *i*dverde.

Sometime between 25th and 26th July, a large beech tree in Eastfield Park suffered major damage (Fig. 9). The two main branches of the tree split away from the trunk but remained resting against it in a precarious position. The situation was potentially dangerous, especially to any children attempting to climb the branches. The situation was reported to NBC Street Services on-line on Thursday, with a follow up call and pictures on Friday morning. The tree was made safe later that Friday by specialists from idverde (Fig 10). The smaller branches were chipped and the chippings left in the Park for FoEP volunteers to use.



Fig. 9: Damaged beech tree in the Park's Heritage Zone (27 July, 2018).



Fig. 10: Damaged tree made safe within two days of being reported (30 July, 2018).

A similar incident occurred in October when a major branch broke off an oak tree close to the MUGA. On this occasion tree inspectors from *i*dverde decided that there was no imminent danger to the public. Nevertheless, the tree was dealt with within two weeks and the *i*dverde operatives were extremely helpful in moving the chippings from the site to a convenient location near the Lakeview Spinney to be used by FoEP volunteers.

Another casualty during 2018 was the dead tree used in 2015 by a family of greater spotted woodpeckers (Fig 11). The tree fell sometime during November 2018 (Fig 12).



Fig. 11: Woodpecker nest in dead tree in Heritage Zone (02 June, 2015).



The Eastfield Park Management Plan calls for trees lost from the Heritage Zone to be replaced with new trees. In recent years a number of trees have fallen or been cut down and the FoEP were given permission to plant four tree whips (two oak and two beech) in specified locations in October 2017. Originally, the trees were surrounded by wire cages put in position with help from NBC Park Rangers (Fig. 13). The cages were, however, repeatedly pushed over and it was eventually decided to abandon them but to mark circles around the whips (Fig. 14) to make them conspicuous to tractor drivers mowing the Park.





The tree whips did well during the wet spring. By May, one of the oak whips had been damaged and had to be replaced but both beech whips and the other oak were doing well (Fig. 15). The whips were watered heavily every two to three days during the drought period (May to July) and grass and weeds removed from the area surrounding them.



Fig. 15: Oak whip planted in October, 2017, doing well in May, 2018.

However, by the end of July, one of the beech whips and the original oak whip had disappeared. A local resident planted an oak from her own garden to replace the missing one but the beech has not, so far, been replaced. Further damage occurred to the all three remaining whips throughout late summer and autumn, including one of the oaks being driven over by a contractor (not from *i*dverde) working in the Park!

In summary, of the four whips planted in October 2017, only one remained in October 2018. Both oaks had been replaced by young trees planted at an unfavourable time of the year.

In November, all three remaining trees appeared to be in poor condition. It must be emphasised that this has nothing to do with poor planting or lack of care by the FoEP; it has everything to do with accidental (and possibly some deliberate) damage by Park users.

Consideration needs to be given to providing better protection for any additional trees planted in this part of the Park. Trees planted in the spinneys are less likely to suffer this kind of damage but are more likely to suffer from competition with other plants.

### E. Lake and Ponds (Annual Planning/Management Objective iv, a & b)

At Easter, water was flowing swiftly through the pond system and into the Lake. The Lake itself was full and rapidly overflowing. However, the pipe carrying overflow water from the Lake to the main surface water drain across the Park was fractured and water was leaking out onto the 'dry' side of the lake embankment and flowing down to a very large 'puddle' at the foot of the embankment (Figs 16 & 17.) It is possible that a blockage further along the pipe was also contributing to the leak. The FoEP was asked by NBC to liaise with Anglian Water to solve the problem and, after several visits by engineers, the issue was dealt with.





formed at the bottom of the Lake embankment.

This leakage does raise issues about the structural integrity of the embankment. Apart from underground channels caused by water flow, the bank is riddled with rat holes. As reported

in the February 'State of the Park' report, the lake side of the embankment is badly eroded and the structure needs to be examined professionally and further erosion prevented.

By the end of July, after three months with very little rain, the water level in the Lake was very low revealing serious damage to the lake side of the embankment (Fig. 18). The top surface was also beginning to crack (Fig. 19), further emphasising the need for urgent repair.



Fig. 18: Lake embankment in July showing severe erosion into Lake.



Fig. 19: Top of the Lake embankment in July showing cracks in surface.

Some parts of the embankment are much less badly damaged than shown in Figure 18 because tree roots have helped to stabilize the structure. Although some trees along the embankment should be coppiced to improve the view of the Lake, care should be taken not to damage the root structure.

The park management plan calls for the lake reed beds to be monitored annually. Currently, the beds are in a satisfactory condition and are beneficial to wildlife. If there is a sufficient demand by anglers, swims could be cut through the reedbeds on the north and south sides of the Lake. At present, fishermen seem to be doing this for themselves and there should be no objection to this provided most of the beds remain intact. If the beds become colonised by woody vegetation such as alder, it should be removed.

Water that enters the Park from the culvert carrying surface water drainage from the Manfield Grange area flows through four ponds before draining into the Lake. These ponds are usually referred to as top, upper middle, lower middle, and bottom.

The top pond never dries out and contained water even at the height of the 2018 drought. In contrast, the upper middle pond rarely contains more than damp mud even in winter, though it does often have a stream of water flowing through it. The lower middle pond (Fig. 20) is seasonal, usually with some standing water in winter and only wet mud in summer. Both middle ponds dried out completely in 2018. The bottom pond (Fig. 21) usually contains water throughout the year but at the height of the 2018 drought it contained only wet mud.

The long term plan for these ponds is that the upper middle pond should be kept as a wet habitat without standing water, whereas the three other ponds should be dredged and the water level raised somewhat by damming the outlets. All three ponds are heavily shaded and would benefit if surrounding trees were heavily pruned and most of the self-seeded





'weed trees' removed. These improvements all have cost implications and the FoEP is seeking to obtain estimates for the work and then investigate the possibility of obtaining grants to meet the costs. Progress in this endeavour has been slowed by the illness of some FoEP members.

### F. Gardens (Not covered by Annual Planning/Management Objectives)

Three areas are considered in this section of the report: the 'Crescent Rock Garden' to the south of the bottom pond, the 'Eleonore House Insect-friendly Herbaceous Border' against the west-facing fence between Eleonore House and the Park, and the 'Seeded Meadow' against the north facing fence between Eleonore House and the Park. These gardens were created by the FoEP and are their responsibility; failure of the FoEP to maintain the gardenes would result in the gardened areas reverting to their original conditions.

**1. The Crescent Rock Garden** (Figs. 22 & 23) was started in 2011 on an area that was a rockery in the Weston Favell House Estate during the first part of the 20<sup>th</sup> Century. The rock garden had been built on an embankment facing the bottom pond but had long been abandoned. It was covered in weeds and partly shaded from sun and rain by a number of undesirable self-seeded 'weed trees' as well as desirable specimen trees. Ground conditions were also very poor, the soil being rich in clay and covered in pine needles from surrounding trees.



**Fig. 22:** The Crescent Rock Garden (22<sup>nd</sup> March, 2018).



Fig. 23: Flowers on the Crescent Rock Garden (22<sup>nd</sup> March, 2018).

Over the years the area has been weeded several times, compost has been incorporated into the soil and a few of the smaller weed trees have been removed. The area has been planted with, among other things, spring bulbs, cyclamen, wood anemones and primroses. The plants have not done particularly well in the dry, shaded (and probably acidic) conditions but several park users have commented on the improvement that the plants make to the area (Fig 23). The garden would benefit if more of the self-seeded trees were removed but, at present, this is beyond the scope of the FoEP. Even if such trees were removed, the area would still be shaded by desirable species.

In recent years the garden has been extended to include part of the 'back' of the embankment (i.e. the side facing the open parkland). Growing conditions on the northern part of this area (Figs. 24) are better than on the slope facing the pond but are still problematic. Further along, in the area currently being developed, the bank is even more heavily shaded though, as the picture shows, some sunlight does get through (Fig. 25).



**Fig. 24:** Northern end of the 'back' of the Crescent Rock Garden (26<sup>th</sup> March, 2018).



Fig. 25: Area currently being developed further along the 'back' of the Crescent Rock Garden.ch,

It is hoped that, as this area is developed, plants can be found that will thrive under the unfavourable conditions. Some years ago, a visitor from the RHS recommended hellebores but when two were planted one was stolen and the other trodden down. Any plants chosen therefore need to be inexpensive or donated.

**2.** The Eleonore House Insect-friendly Herbaceous Border was started in March, 2014, originally as a Sunflower Garden. The border is situated against a west-facing fence in full sunshine. Since 2014, the border has been extended, regularly weeded and planted with pollinator-friendly flowering plants (plus a few other donated plants). The soil has been improved with the addition of sand and compost.

This year, being the 100<sup>th</sup> anniversary of the ending of World War I, the border also served as the FoEP's own 'Remembrance Garden' with forget-me-nots planted along the front of the garden and a few poppies added to the general mix. Park users were invited to place crosses in the border to remember friends or relatives who have died (Fig. 26).

The plants in this garden are doing well (Fig. 27) though their arrangement could be improved. This will be achieved as the garden is developed further. The FoEP is also

involved in discussions regarding the possibility of extending the garden *inside* the Eleonore House fence if residents would like this.





well in 2018 (21<sup>st</sup> June, 2018).

**3.** The Seeded Meadow originated as a narrow wildflower border along the north-facing fence between Eleonore House and the Park in 2015. In spring, 2017, a large semi-circular area in front of the fence was seeded with a mix containing meadow grasses and wildflowers, the original grasses having been poisoned the previous autumn. The sowing had only limited success and the area became colonised with a mix of plants from the original wildflower border, meadow plants already present in the Park and common weeds, as well as plants from the seed mix. (This has been described in more detail in previous reports on 'Eastfield Park Meadows'.)

This year, the meadow had a better balance of plants (Fig 28) but, as in 2017, large areas were dominated by chicory which grew very tall. The meadow was attractive to pollinators (Fig. 29) but it received a mixed reception from residents, some of whom took a particular dislike to the chicory. When the contractors cut the meadow at the end of the season, a strip of mainly chicory was left against the Eleonore House fence. It is currently being cut down by FoEP volunteers (Fig 30).



**Fig. 28**: Seeded Meadow on the right, uncut grass on the left (21<sup>st</sup> June, 2018).

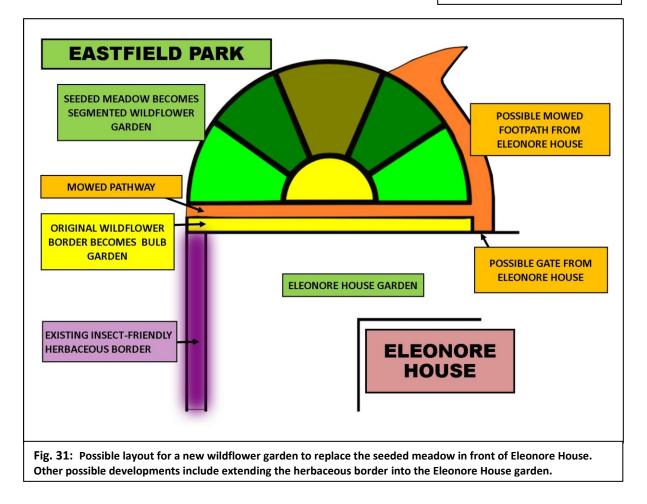


Fig. 29: Hover fly on Yarrow in the Seeded Meadow (21<sup>st</sup> June, 2018).

After careful consideration I now believe that the seeded meadow should be redeveloped as a wildflower garden. Instead of a wide mix of grasses and wildflowers such as might be found in a natural meadow, the area could be planted with carefully selected wildflowers with possibly a few grass species. Such a garden would need continuous maintenance to prevent it from becoming colonised by other plants (especially those introduced in previous seasons). The garden may be too large to be maintained by the available volunteers so it is recommended that it be divided into sectors. Each year, some sectors could be maintained but others could be left uncultivated to see what develops. This would be no worse than the present situation and could be much better. A possible layout for a new garden is shown in Fig. 31).



Fig. 30: Tall vegetation (mainly chicory) currently being cut down by FoEP (26<sup>th</sup> Nov., 2018)



If the EPMC agrees to the FoEP creating such a wildflower garden, the FoEP would seek external funding to purchase the necessary plants plus a lawnmower and other tools to maintain the garden. It is already involved in negotiations to get more volunteers (including student volunteers) to create and maintain gardens in this part of the Park.

#### **G.** Conclusions & Recommendations

- 1. The grassland areas in the Park are now being well managed by *i*dverde. It is recommended that the same areas set aside in 2018 be set aside in 2019 and that they be surveyed in July of that year.
- 2. Attention needs to be given to the management of the wooded areas of the Park and detailed management plans for each wooded area produced, commencing with Lakeview Spinney and the Pond Area.
- 3. A strategy should be implemented for dealing with branches and other green waste produced when pruning and coppicing bushes and trees in the Park. (At present most of it is stored in the wooded areas where it presents a fire risk.)
- 4. Once such a strategy is implemented, the FoEP should continue to remove bushes and self-seeded trees from the west side (the parkland side) of the Lake Embankment. Trees on the east side of the embankment (the lake side) should be coppiced but not removed, leaving their roots intact to reduce erosion of the bank.
- 5. Contractors are responding rapidly to seriously damaged trees in the Parkland Zone and it is hoped that they will be proactive in identifying hazardous trees throughout the Park.
- 6. More trees should be planted in the Parkland Zone but greater attention needs to be given to protecting new trees from deliberate and accidental damage.
- 7. NBC should arrange for the Lake Embankment to be inspected by suitably qualified engineers and any necessary remedial action taken before further damage to the structure occurs.
- 8. The FoEP should pursue its aim of getting estimates for dredging three of the ponds and other suitable work in the Pond Area, including removing many of the selfseeded 'weed trees' that shade the ponds and the Crescent Rock Garden. Plans for improving the ponds and the surrounding area should be produced by the FoEP, and agreed with the EPMC, before seeking external funds to implement the plans.
- 9. Planting on the Eleonore House Insect-friendly Border has been very successful; planting on the Crescent Rock Garden, less so. The FoEP should continue to improve both gardens, taking expert advice on the best plants to add the more shaded area of the rockery and the 'back' of the embankment facing the bottom pond.
- 10. The Seeded Meadow has been successful in attracting pollinators but some residents do not like the taller plants such as chicory. The FoEP should pursue its plans to convert the Seeded Meadow into a Wildflower Garden which, it is hoped, will benefit wildlife but also be appreciated by park users.