*A tired and cynical teacher once dismissed history as merely “one damn thing after another”. Those of similar sentiment may wish to jump the first six pages and head straight to the heart of the matter, namely Pat Mansfield’s* Wildlife Assessment *and following from this* Suggestions Towards a new Management Plan*. The various headings have been laid out with Wordmap text headings to make navigation easier.*

*Before registering agreement, indifference, condemnation or impassioned hostility on particular matters, it is strongly suggested that interested persons should join together to discuss details where it most matters –* ***on site****.*

**Some History of Boundary Brook Nature Reserve**

**Once Upon a Time**

Once upon a time, what became Boundary Brook Nature Reserve was a small part of an extensive marshland on the north-western side of Headington, a royal manor that covered a much larger area than today’s suburb. The term ‘marshland’ might conjure up images of economically useless wasteland, but in medieval times and long after this could be a valuable asset, worth considerably more than the best arable. If the water didn’t lie all year round, well managed marshland produced heavy crops of hay and this was key to keeping farm animals alive over winter. Not all the marsh that straddled the Boundary Brook was suitable; an area a few hundred yards north east of the nature reserve was known historically as ‘The Lakes’, where flooding was apparently endemic throughout the seasons and further south, in Temple Cowley, waterlogging was sufficient to promote peat formation and this was regularly cut for fuel.

Like many thousand acres along the Thames Valley and its’ tributaries, the site of our nature reserve was managed as ‘lammas lands’, whereby individuals could cut a hay crop from designated parts of the marsh on or before Lammas Day (August 1st); the marsh was then opened up to sheep, cattle and horses owned by anybody with common rights and they could remain upon the marsh until it was ‘closed’ at the onset of winter to avoid broaching as the ground became wetter. The right to cut a hay crop on lammas land might be owned communally, with allocation of designated strips to commoners decided each year by lottery, or the right to cut hay on a particular strip might be owned by individuals. On the Cowley lammas lands, it seems there was a gradual shift towards private hay cutting over the centuries, but communal grazing of the ‘aftermath’ remained a feature that cut across outright ownership up until enclosure in 1853.

At one time, it’s likely the lammas land commoners included people from the wider realms of Headington but in 1004 King Ethelred, he of supposedly unready fame, granted the northern part of Headington to the monastery of St Frideswide; the effect was to detach what we now call Cowley from the parent territory. The monks in turn leased, sublet and granted parts of this domain to third parties with a result that Temple Cowley and Church Cowley became separate manors - but both continued to enjoy common rights on Cowley Marsh. They also continued a vestigial connection with some, at least, of the wooded part of Headington manor.

There’s at least one palpable remnant of this ancient link between meadow and forest - Boundary Brook Nature Reserve’s near neighbour, the Elder Stubbs allotments and new woodland on the eastern side of Rymer’s Lane. This 11 acre site was compensation made to ’the poor of Cowley’ under the 1853 Inclosure Act for the loss of their right to cut ‘bushes’ in an ancient coppice of this name. The original Elder Stubbs was a 33 acre detached part of ‘extra parochial’ Cowley, that lay entirely within Headington; at one time it was also within the royal forest of Shotover. In fact, the Cowley commoners not only cut wood there, they drove their cattle through Open Magdalen to browse in Elder Stubbs – a legacy of old custom, whereby cattle fed in coppices after the new ‘spring’ growth had been protected from browse damage for a set period by temporary fences. Almost forgotten today are the riots that ensued when Magdelen and Brasenose colleges attempted to padlock new gates on the eponymous coppices they were claiming as their private property. On-site protest in the 1870s began with music and dancing but culminated in mayhem and arson while a crowd of two thousand people from Headington and Cowley looked on. No doubt there was some element of traditional ‘town and gown’ animosity in all this, but indignant claims of ancient rights played a part.

The modern Elder Stubbs site complements Boundary Brook well. Boundary Brook has a sharper divide between woodland and allotments and has a greater emphasis on biodiversity; Elder Stubbs has a clear lead in matters cultural and artistic. Both are excellent habitats for people and wildlife with scope for becoming still better. And both play their part in a corridor of green spaces such as the Iffley meadows lands, Aston’s Eyot and the Lye Valley that have the potential to join riverside and upland once again. This isn’t to suggest that folk in Howard Street might start keeping cows, but it’s likely that an holistic approach to urban nature conservation, joining green spaces together, can create mosaics that are far richer in aggregate than the sum of their parts. ‘Wild Oxford’ may provide the means to achieve some steps towards this ideal.

Cowley Marsh’s long history as lammas land ended in 1853 with an Enclosure Act: the lion’s share, including the East Ward site, went to Christchurch College, successor to St Frideswide after the wholesale dissolution of monasteries in the 16th century. Improved drainage, probably linked to the lowering of water levels on the Thames above Iffley Lock, enabled some conversion to arable land – in **‘***Rambles and Rides around Oxford*’, published in 1885, the author ‘H.H.’ talks of nightjars *“*prowling for the moths that hover over the newly-blown wheat, or the flowery margins of the road and brook.”. He also implies that the East Ward allotments dated back to at least 1880, were once known as ‘The Milking Place’ and the meadows hereabouts were the site of bull-baiting until the mid-19thcentury. In a later account, Phyl Suman in “*Pride of the Morning*” recalls her childhood in newly-built Howard Street during the years before the First World, when the land behind her house was busy with allotment plots. They may have been larger than today’s 10 pole plots – she talks of pigs and chickens housed among the vegetables.

Exactly when ownership changed from Christchurch College to Oxford City Council isn’t yet known, but for most of the 20th century, up until the late 1960’s, the 33 acres of ‘former floodable meadows’ bounded by Howard Street, Cricket Lane, the Boundary Brook and what is now the Boundary Brook Estate and Lark Rise School were cultivated as allotments. In addition, 20 acres of land once owned by the Donnington Hospital Charity extended the area of spade cultivation down to Iffley Road. The larger site was managed by the East Ward Allotment Association, most recently under a leasing agreement with the City Council dating from 1939 and the former charity lands by Donnington Allotment Association, who held a lease from the Council that began in 1944 – possibly the year when Donnington Hospital sold the land. Together, these 53 acres provided an estimated 750 plots that engaged the interest and labour of successive generations, helping to feed them through good times and bad, including two World Wars.

The first seeds of change were sown by a Mr Murray, Oxford City Architect and Planning officer, in 1953. His report, approved by other City departments, proposed that all but twelve and a half acres of this entire site should be developed for housing and education. And, in due course, up to 25 years later, that is more-or-less what happened, except that the allotments comprised 14 acres. Over half of the old Christchurch land was set aside for building Cowley St John School; a large part of this was initially laid out as sports ground, bounded by a mixed species ‘countryside’ hedge but in a classic example of creeping development most of this has now been built on and the hedge largely destroyed. The Donnington Lands became the Boundary Brook Estate and Lark Rise School, but after some protest in the 1960’s, the Council provided imaginative mitigation – a large volume of top-soil was moved to cap an old land-fill site at Meadow Lane and there are now attractive and well used allotments here. As part of the overall scheme, the City Engineers made provision for improved drainage; this included the curiously austere concrete path running towards Florence Park – it’s actually covers a large-diameter storm drain - and the transformation of Boundary Brook from a pleasant, tree-lined stream, running down to the Thames, into a concrete trough.
Pete Byfield

**Building the Nature Park**

The Urban Wildlife Group was launched in the summer of 1988. In the autumn of that year, the chair of the City Council Allotment sub-committee had an article published in the Oxford Mail, in which he said that interest in allotments was at a low ebb. He said that the result was that there were lots of disused allotments within the city boundaries and so the Council were considering giving up some designated allotment land for development.

As someone who had two allotments in different parts of East Ward allotments in Cricket Road, and had visited other allotment sites, I was aware that allotment sites are a very valuable resource for wildlife. At around the same time, the secretary of our allotment association started talking about giving up the top corner of our allotment site (where the nature park is now) to be made into a car park. I was so concerned by these two proposals that I wrote a letter to the Mail to say that allotments sites could be good for wildlife and suggesting alternative, wildlife-friendly, uses for allotment sites if they were no longer needed by the general public.

After publication of my letter, in October 1988, the chair of the Council committee attended the OUWG meeting to say that he wrote the article to try to drum up support for allotments and to invite me, and any other interested members of the Group, to attend the next sub-committee meeting to put our views forward.

Three of us attended the meeting, where we found some sympathetic councillors, to put our ideas forward and it was agreed at the next OUWG meeting to set up a working group to come up with ideas for proper proposal to the Council, using my allotment site as a test case. It was agreed to ask the Council Ecology officer, responsible for leading OCC Countryside service to chair a working group.

After much discussion with the Council, in March 1990 they formally offered OUWG an 11yr lease at a peppercorn rent and fenced off the area. We signed the lease in June 1990. An important clause of the lease was that the use of the site was for OUWG members only – this was because of access to the nature park gave access to the allotments and the allotment Association were concerned about the security of their site.

At the time of us taking over the lease, the area of the nature park consisted largely of rough grass and flowers (that the allotment holders would have considered as weeds!) with the odd clump of nettle and self-sown hawthorn tree dotted around and only a few allotments. Between the bird orchard and cycle track fence were some plum trees and there was a stand of blackthorn to the right of the entrance gate. The abundance of open grassland meant that there were good populations of the butterflies whose larvae feed on grass; ant hills, which attracted the green woodpecker and voles, mice and shrews, which attracted in their turn kestrels and foxes.

Our first activities were surveys of the site; litter blitzes - leafletting the Boundary Brook estate; putting up posters around the area and informing Larkrise school to get local people involved. In the end, we had about 50 people turn up for our litter blitzes. We also began preparation of a management plan for the site, which we were required to present to the relevant council officer for approval. The Group’s other main activity, carried out mainly by our secretary, Janet Keene, was application for grants. She was very successful and secured sufficient money for our initial needs, plus an offer of free native trees from the Countryside service.

The South-west corner of the site was the wettest, with water lying as late as May most years, so we decided that we would have a pond and marsh in that area. Pond Action gave valuable advice on design and management and Janet secured a grant for us to hire White Horse Contractors to dig the pond and marsh and deposit the spoil in two mounds to the north of the pond and east of the marsh. The work was completed in October 1990.

In November 1990, we began with the help of local parents and their very enthusiastic children to plant up our native woodland. The work was completed in early January 1991 and we then began planning for the creation of some paths through the site. (Being former allotment land, the area had lots of hazards in the form of mini-trenches alongside the former allotments, ideal for twisting the ankles of the unwary, and these were often hidden by long grass). The site of the path from the entrance gate to the pond was dug out in late spring 1991, by members of the group and the Oxford Conservation volunteers. Children from a local church group then helped with spreading the aggregate.

In the autumn of 1991, we began planning for work to create a wildlife garden on the top half of my former allotment; and also began preparations for planting the bird orchard in National tree week. Work began on planting the boundary hedge (to the north and east of the Nature Park) and local children helped mulch the trees with newspaper, topped with wood chip. Planting of the hedge was completed by February 1992.

Work began on the wildlife garden in the autumn of 1991. A post and rail fence was erected around the perimeter of the garden and the conservation volunteers helped the members with the heavy digging work.

By the spring of 1992, the main areas completed were the pond and marsh, woodland and hedge and the bird orchard. This work was done by OUWG members; local children and their parents and a variety of local groups.

Work began in the spring of 1992 on digging out a path into the bird orchard and digging out a shallow circular area at the end to line so that a wet meadow could be created. Either side of the path was planted up with primroses and wild daffodils and some woodland plants were planted among the trees around the same time

The wildlife garden was largely finished in 1993, with the last job being the creation of a wheelchair suitable ramp into the wildlife garden by the Young Farmers group, who used crushed concrete donated and delivered by the organisation responsible for dismantling the Rover site in Cowley.

The remainder of 1993 was taken up with:

1. Creating an organic kitchen garden
2. Cultivating, raking and sowing an area of ground facing the entrance gate to create a cornfield so that visitors would see a colourful area when they enter.
3. Building a ramp and pond platform to enable pond dipping at the large pond.

During the spring of 1994, work began on creating the hay-meadow on the area of rough grass to the north of the wildlife and kitchen gardens. The ground here was very uneven and a good amount of top-soil was bulldozed out to reduce fertility; level the area and to create a mound between the hay-meadow and cornfield. This was the last major work to complete the Nature Park. From later 1994 onwards, general maintenance of the site was the focus of work parties.
Pat Mansfield

Original Site –Some Details

This comprised I hectare. The land was leased to the Urban Wildlife Group for a peppercorn rent in April 1990. The site is divided into several compartments:

1. Pond and Marsh with spoil formed into 2 mounds to the North and East of the area – these were created in October 1990
2. Open Grassland – to the north of the pond and marsh, divided into 2 by a gravel path from the entrance gate to the pond
3. A Bird orchard in the corner to the east of the pond and marsh and abutting the cycle track. Planted in winter 1992
4. wildlife garden to the East of the open grassland. This was begun about spring 1993
5. An organic kitchen garden to the east of the wildlife garden
6. To the west of the pond and grassland, a fenced-off area in the corner of the site and abutting the cycle track alongside Larkrise school. This is 900 square metres in area and belongs to the school. Between the fenced off area and the entrance gate is a hazel copse.
7. North of the grassland is a hay meadow and cornfield, divided by a mound formed by spoil from the hay meadow
8. Behind the hay meadow and cornfield is a woodland, planted in the winter of 1990/1

A native hedge was planted along the northern and eastern borders of the site in the winter of 1990.

The founding principle of the site was to protect the existing wildlife while increasing the diversity of habitats to encourage more wildlife to visit and possibly breed on site. The new habitats to be created would be what one would expect to find in Oxfordshire on our type of soil – a rather heavy clay with a high water-table in winter. There were to be regular fortnightly work parties at which local residents would be encouraged to join in and quarterly open days for the general public to visit. It was felt that such a small site could not accommodate too much disturbance without damaging the wildlife.

\* Grassland to north of pond: Because butterflies seemed to be doing well on the site, especially the ones that feed on nettles and on grass, it was decided to keep a good part of the site as flowery meadow. However, much of the grassy areas have been allowed to be taken over by scrub and bramble

\* Bird Orchard: This was planted up with native berry-bearing trees to provide nectar and pollen for insects and berries for the birds. A path was created through the centre of the orchard, up to a circular area that had been lined and designed as a wet meadow area. The borders of the path through the orchard were planted up with primrose and wild daffodils; and violets and other woodland flowers were planted between the trees. The orchard has become overgrown and the canopy is cutting out virtually all light in the summer months.

\* Wildlife Garden:- This was designed to show that it was possible to have an attractive garden that could still be wildlife friendly. The garden was bounded by a hedge that was laid once the trees were large enough. The garden has been allowed to become overgrown so is no longer a ‘demonstration’ wildlife garden.

\* Organic Kitchen garden: This was designed to show that crops could be grown, organically, without doing too much harm to wildlife. The garden was made up of several narrow beds for vegetables with a larger, square bed at either end. The square bed at the orchard end was planted up as a herb bed and the square bed at the path end was a fruit bed.
Between the fruit bed and the path, a willow fence was planted a few years later. To either side of the garden area were two strips where the soil had been robbed for the kitchen garden beds. The strip between the beds and wildlife garden was planted up with plants that grow in soil that was waterlogged for much of the year – purple loosestrife; hemp agrimony; meadowsweet; greater burnett, etc. The strip between the garden and the boundary hedge was sunny and had more soil so was planted up with sun-loving wild flower plants.

\* Hay-meadow and mound: This was created by removing some topsoil and creating the mound. Some taller meadow plants were introduced, along with cowslips and fritillaries in a few places. Because of the nature of the flowering plants that were growing there, the meadow was cut much later than a normal hay-meadow: often as late as September, when most of the flowers had gone to seed.
Because the hay-meadow had not been cut and the hay removed systematically for about a decade, it has been invaded by nettles; great willowherb; common vetch and meadow vetchling

\* Cornfield:-.

\* Woodland: This was planted up with forest trees and some smaller trees at the beginning of 1991. A path was put through the woodland and the borders were planted up with wood anemone from the hay-meadow end and with primroses at the visitor centre end. Bluebells and snowdrops were planted among the trees in the compartment behind the visitor centre and lesser celandine and wild garlic in the compartment behind Boundary Brook road
The plan was that a section of the woodland would be coppiced or pollarded each year, once the trees had reached a certain level of maturity, in order to allow light in so that the ground flora was able to recover. Two sections of the woodland were managed in this way but I am not sure if the whole woodland has had this treatment.

\* Hazel Copse:This was planted up with primrose; foxglove and other appropriate plants. The plan was that about a quarter of the copse would be coppiced each year in rotation.

\* Blackthorn stand: To the right of the entrance gate was a stand of blackthorn that pre-existed the Group’s leasing of the site. This was damaged in the mid-90s by a fire deliberately started by local children. Some of the trees died and the gaps were replanted later. The area has now become overgrown with ivy.
Pat Mansfield

**Extensions – Some Details**

The two extensions were rather more haphazard: these areas had no formal status and there was some urgency to get trees planted and growing simply to minimise the chance this land might be earmarked for some other use. Somewhere in the background was the notion that saplings are easier to fell than to establish and, with the exception of two large butterfly glades (behind Boundary Brook Road and behind Howard Street, it was thought possible to work out the details in years to come. At this stage, little consideration was given to the long-term consequences of shade cast upon allotments! As it turned out, changes in the OUWG management committee meant that no more glades were created and other projected changes were never implemented. One change has had an impact: the coups of birch were underplanted with a variety of native hardwoods and the growing tubes removed after 2 years of reasonably successful growth. For reasons not clearly understood these hardwoods that were to comprise the woodland were subsequently cut down with a scrub cutter and any re-gowth (with a few exceptions) did not recover against a combination of the rapidly growing birch ‘nurse’and bramble.
The cycle track side of the extension was planted first and the species used largely determined by what was left from contractual schemes elsewhere. The considerably larger second phase (the remainder of the extension) was more carefully considered. Most of the hazel (excepting some early planting near the corner gate done by EWAA) was from plants derived by layering from apparently old stools in two Worcestershire woodlands. The birch was purchased as whips locally and other hardwoods were bought as year-old old root-trained transplants. The birch were tightly planted in an effort to simulate natural seeding and they were mulched; other hardwoods were placed inside a total of 240 metre-high growing tubes with cleft oak stakes. Sod’s Law provided two exceptionally dry subsequent summers and extensive watering was needed. Most of the extension boundary hedges were planted 3 years later; this was mostly done with an ‘native’ hedge mix, although the first retch planted was in pure hazel.

The original intention was that the birch would be thinned in favour of the underlying hardwoods and in some cases ring-barked to provide some early ‘dead wood’ and nesting niches. The hazel was meant to be coppiced at 4-5 years growth as the prelude to established good straight stool stems for harvesting on rotations made according to future need. None of these intentions have, as yet, been fulfilled.

In recent years, allotment holders close to Boundary Brook have been increasingly concerned about shade and it is suggested that this should now be taken into account; See ‘Woodland Scrub and Grass: The Balance’. The original warden of the nature park had promised the allotment association in the early 1990s that any trees causing shading of the allotments would be coppiced or pollarded to reduce their height, as appropriate. Due to good relations between the two organisations at the time, this was never put in writing and has subsequently not honoured.

**Boundary Brook – a Wildlife Assessment**

**In 1990**

In 1990, when the site was acquired, it consisted of large amounts of open grassland with flowers. As a result, insect life was abundant, especially butterflies whose larvae fed on grass or nettles; solitary bees and bumblebees and hoverflies. With lots of seeds and insects around, the birds attracted were mainly seed and insect-eating ones, such as various finches; members of the tit family, with warblers; swifts and house martins in summer. The common garden birds were to be found on site throughout year.

Grouse and pheasant would occasionally be seen foraging in the autumn and winter and would often stay around for many weeks.

Lots of grass in open sunny areas meant that anthills were abundant on site and these attracted regular visits from the green woodpecker.

Foxes were the only large mammal living on site, along with small mammals, such as common vole; house and long-tailed field mouse and shrews. The small mammals attracted kestrels to hunt

**After 5yrs**

By 1995, all the main areas of the original site were starting to mature.

The pond and marsh area were a huge success and we quickly had large populations of frogs and common newts breeding. Toads were also seen but either more secretive or in lower numbers. Several species of dragonflies and damselflies started breeding in the summer following creation. Heron started making regular visits and snipe and reed buntings were occasionally spotted in winter. One winter, we had a Bittern turn up in January and it stayed until after the frogs had finished spawning in early April

The native planting started to attract more wildlife, the first and most obvious being the Brimstone butterfly which bred on the buckthorn planted in the hedge.

Bullfinches were attracted by the new shrubs and trees – no doubt to eat the buds in spring.

**After 10yrs**

By 2000, some of the trees and shrubs were sufficiently developed to attract a bigger variety of breeding birds, such as blackcap; willow warbler and chiffchaff. Sparrow-hawks also started making regular hunting trips into the developing woodland.

The downside was that, with more tree cover, there was less grass and so the abundance of some of the butterfly and other insect species diminished somewhat.

**In 2018**

The lack of adequate management of the grasslands in recent years has resulted in bramble and hawthorn scrub colonising large areas, with a considerable diminishing of the numbers of butterflies and other insects. The only butterfly species that doesn’t seem to have been affected is the speckled wood.

Loss of grassland, in turn, has led to a considerable reduction in the numbers of birds that feed on insects and seeds and, in the case of linnets, their disappearance from the site altogether.

Birds that have benefitted from the increased tree cover are crows; magpies and wood pigeons, which now breed on site, and the latter now represent a considerable nuisance to allotment holders, as do the squirrels which are now hibernating and breeding in the woodland trees.

With willows having been allowed to grow up in the marsh, this is now of less value and a lot of the marsh flowers seem to have disappeared due to the willows taking all the water. The pond appears to be silting up and this is probably having a negative effect on the invertebrate life, though only a proper survey could confirm this.
Pat Mansfield

**Butterflies on Boundary Brook**

|  |  |
| --- | --- |
| Large white | Mainly visitors from allotments |
| Small White | Mainly visitors from allotments |
| Green-veined white | Breeding – on garlic mustard |
| Orange tip | Breeding – on garlic mustard |
| Small Tortoiseshell | Breeding – on nettles |
| Peacock | Breeding – on nettles |
| Red Admiral | Breeding – on nettles |
| Comma | Breeding – on nettles |
| Holly Blue | Breeding – probably only on ivy on the cycle track trees until we planted some holly in 1991. |
| Common blue – not seen for some years | Used to breed – possibly on clovers (and the medics and trefoils?) until we planted birds foot trefoil |
| Brown argus – not seen for some years | Used to breed, possibly on cut-leaved cranesbill, which was abundant on disturbed ground |
| Small copper – not seen for some years until this summer | Not known if breeding but possibly on docks, which are scattered around the site |
| Large skipper | Breeding – numbers much reduced with loss of grass |
| Small skipper | Breeding – numbers much reduced with loss of grass |
| Marbled white | Breeding – for a few years from the mid-90s but only seen occasionally in recent years |
| Speckled wood | Breeding – doing well |
| Meadow Brown | Breeding – numbers reduced with loss of grass |
| Gatekeeper | Breeding - numbers reduced with loss of grass |
| Ringlet | Breeding - numbers reduced with loss of grass |
| Brimstone | Breeding since we planted buckthorn in woodland and boundary hedge |
| Clouded yellow | Seen a couple of times |
| Painted lady | Seen in hot summers |
| Hairstreaks | Brown hairstreak eggs said to be found on blackthorn scrub |
|  |  |
|  |  |

Pat Mansfield

**Bird Species on Boundary Brook in 1990**

|  |  |
| --- | --- |
| **Birds** |  |
| Goldfinch | Original inhabitant, numbers much reduced |
| Greenfinch | Original inhabitant, numbers much reduced |
| Chaffinch | Original, never in large numbers |
| Bullfinch | Later visitor, once trees had grown up a bit |
| Linnet | Original but now gone from site |
| Great tit | Original |
| Blue tit | Original |
| Long-tailed tit | Later visitor, when trees grown a bit, possibly breeding now |
| Coal tit | Occasional winter visitor |
| Dunnock | Original - breeding |
| Wren | Original – breeding |
| Robin | Original - breeding |
| House sparrow | Original – feeding only |
| Siskin | Colder winters – feeding only |
| Willow warbler | Regular summer breeding |
| Chiffchaff | Regular summer breeding |
| Blackcap | Winter visitor at first now breeding |
| Garden warbler | Occasional visitor – not known if breeding |
| Lesser whitethroat | Occasional summer visitor for breeding |
| Spotted flycatcher | Seen only a few times |
| Reed bunting | Hard winters only |
| Song thrush | Breeding but only one or two pairs |
| Fieldfare | Hard winter |
| Redwing | Most winters |
| Blackbird | Breeding – increase in numbers with more scrub and bramble |
| Starlings | Feeding only; numbers much reduced |
| Wood pigeon | Numbers rocketed once the trees became reasonably large – breeding |
| Collared dove | Breeding – recent years |
| Green woodpecker | Feeding |
| Great and lesser spotted woodpecker | Seen or heard a few times over the years |
| Magpie | Numbers much increased with tree size – breeding |
| Jays | In recent years – feeding only? |
| Crow | Feeding and possibly breeding |
| Jackdaws | Occasional visits in the last few years |
| Partridge | Seen a few times |
| Pheasant | Seen a few times |
| Kestrel | Seen less often, due both to reduction in grass and great increase in corvid populations |
| Sparrowhawk | Hunting – quick in and out visits |
| Red kite | Patrolling – but usually driven off by corvids |
| Snipe | Occasional winter visitor to marsh in early years |
| Heron | Occasional spring feeding visits |
| Bittern | One sighting from Jan to early April in early years of site |
| Mallard | Spring visitors – not sure if breeding |
| Cuckoo | Summer visitor in early years |
| Swifts and house martins | Used to feed over the site in summer – not sure if still visiting |
| Gold and Fire crests | Occasionally seen – possibly passing through |
|  |  |

**Suggestions Towards a New Management Plan**

The late Oliver Rackham said that nature reserve management plans were a fine thing in principle but they tended to suffer from a singular weakness. After they were agreed upon and written up, they were usually forgotten and ignored. This certainly applies to the last known management plan for Boundary Brook, produced in 2006.

Nevertheless, on a small and largely ‘artificial’ site such as Boundary Brook some continuity of management is a necessary part of moving towards greater biodiversity and a written plan is the obvious way to achieve this. Furthermore, there are potential conflicts of interest which are best resolved and agreed as far in advance as possible.

For example, previous plans for Boundary Brook didn’t take sufficient account of growing trees and the effect shade would have on the productivity of nearby allotments; this now needs to be addressed to avoid souring relations between Oxford Urban Wildlife Group and East Ward Allotment Association. And very recently, Forest Schools have taken a welcome role in using Boundary Brook resources. Giving children extensive access to Boundary Brook without diminishing the natural features that are part of their enjoyment requires careful thought and, possibly, compromise. And it seems inevitable that Boundary Brook needs to open its gates to more people than it has done in the past – this requires careful consideration and planning.

What follows isn’t intended as a panacea, but rather a framework for further discussion, not only among OUWG’s membership but with allotment holders, Wild Oxford, Oxford City Council and – well, anybody who might make a useful contribution.

**The Wider Picture**

OUWG welcomes the Wild Oxford initiative and recognises the importance of being part of a wider network both as part of the City’s ‘green fabric’ and in the exchange of ideas, experience, expertise and material and human assets.

As a counterpart to this, OUWG should seek to incorporate other local green spaces into this wider mosaic – for example by encouraging local gardens and allotment holders to take wildlife into account in their planting schemes and general maintenance.

**Public Access**

From the beginning, East Ward allotment holders have enjoyed *de facto* access to Boundary Brook Nature Reserve, subject only to the reasonable rules set out by OUWG for all visitors. This arrangement might now be formalised with EWAA. No reciprocation of access is intended.

Local schools have long enjoyed supervised access to Boundary Brook for nature study lessons. This should be actively encouraged but the Nature Park is not an adventure playground or a place to let off steam. Practical implications include maintenance of a multi-level platform to provide pond-dipping access and reasonably wide paths cleared of intrusive summer bramble growth.

Access by Forest School groups are now a feature of Boundary Brook. At present, they focus upon the large glade at the Howard Street side Boundary Brook. This was intended to be (in the 2006 management plan) and is also proposed below, as a major ‘butterfly’ glade and these two uses are incompatible. It is suggested that a new open space on the cycle path side of the ‘bridge pond’ be set aside and cleared as a semi-permanent home for Forest School use. It is understood that fires can be an important focus of FS activity and the cycle track proposed area would enable this to take place without causing nuisance to householders or allotment holders. Provision for fires should be made, including an arrangement for using suitable fuel derived from clearance work elsewhere. Rules to be agreed with FS using BB might include a general restriction to paths wherever practical, outside their own designated area, particularly in the nesting season.

Wider public access is a difficult issue. In an ideal world it would be nice to remove the gates and allow unfettered access, but this would have a detrimental effect on biodiversity on such a small site and lead to security problems with the adjacent allotment site. Conversely the permanently locked gates, restricted membership and only very occasional ‘open days’ were equally unsatisfactory. Suggestions for compromise include:
\* Continue the present situation whereby individual access is limited to members, but with a far more proactive policy in recruiting members, in particular, from the local area.
\* Maintaining a founding principal of OUWG – a very low membership subscription and free to those under 16 or on very low incomes.
\* Invite more general access to the site whenever people are working here. Allowance would need to be made for when only one or two people are on site and they don’t feel comfortable with leaving the gate open to unknown visitors.
\* Increase the number of ‘open days’.
\* Through the good offices of Wild Oxford, and possibly other organisations and individuals, Boundary Brook should maximise the opportunities for individual education and training. This might include onsite ‘evening classes’ in managing small sites (such as gardens) for wildlife, the certification needed for starting a career in practical conservation management (eg various kinds of power machinery) and more general ‘hobby’ related short courses such as bird-watching and recording. This would not only increase Boundary Brook’s usefulness to the community at large, but also provide a means to encourage active involvement in managing our nature reserve.
\* Introduce a ‘key’ system (such as a digital code that is regularly changed and announced to membership) that makes wider access more practical i.e. without the expense of traditional keys.
\* While sceptical of any cynical ‘rebranding’ exercise, it’s suggested that the title of our nature reserve be amended to ‘Boundary Brook Community Nature Park’.

**Governance**

This isn’t a subject that would normally feature on proposals for site management but it is suggested here that the governance and management of Boundary Brook have been inextricably linked in the past and there’s a case to be made for closer integration in the future.

For example, in the early days of Boundary Brook, a working party was set up to co-ordinate the development and management of the site. Any member who was interested in the management of the nature park was invited to meetings, along with non-members who had attended work parties. It was easy to become involved and virtually anyone who became a volunteer could feel they had some influence in the work they were doing. Committee meetings became forums for the exchange of ideas, enabling new faces to learn more about the Group’s work and nature conservation generally. As far as possible, decisions were made by consensus and formal voting was rare.

At that time, a number of members had particular skills and expertise – the warden at Shotover, members of the Oxford City Rangers team, the City arborist, Oxford County Council’s forestry officer and a couple of university students who were pursuing advanced studies in ecology were able to participate alongside newcomers. Where specialized knowledge was required, the BTO; BBONT; Pond Action; Butterfly Conservation and the Forest of Oxford were available locally to advise. Most important of all, there were strong links between people doing work on-site and the development of policy.

Change came when the Group became a registered charity and the ‘Extensions’ were formally taken in-hand by Oxford Urban Wildlife Group. Trustees of the Group quickly became the sole arbiters of policy. Thanks to Janet Keene, OUWG became a very effective fund-raising machine but after the Group became a charity and involvement in OUWG policy making was restricted to a few named Trustees and meetings became closed, various schisms and fallings-out occurred and volunteers lost agency. Ultimately, the only link between volunteers and the OUWG Committee became the warden. Getting things done became increasingly reliant upon organised groups such as probation service work parties and work-place team building exercises.

None of this brief historical account should be taken to suggest a return to some idealised past, but it might provide some cautions for the future. The following suggestions take account of this:
\* OUWG will be greatly enhanced and strengthened by close association with Wild Oxford. The mechanics of this we leave to others more familiar with the current situation, but in the past all Council officers concerned with wildlife management were, in effect, ex officio committee members of the Nature Park working group. The late David Steel chaired meetings in the early years. Could this be a pointer for the future?
\* While there might be occasional exceptions, the principal of open meetings for, at least, the nature park working group/committee should be restored. We don’t go so far as to suggest that attendance automatically conveys formal voting rights (as was once the case) but we see no reason why, on most practical matters, the Chair shouldn’t act upon the general consensus of the meeting.
\* Meetings should be held as close to Boundary Brook as practicable. In summer, this might be on-site.

Suggestions have been made that OUWG should hand over responsibility for Boundary Brook to Wild Oxford and relegate its own role to that of a ‘Friends’ group. There are some obvious benefits to this, but we suggest these are outweighed by the long-term disadvantages:-
\* While Wild Oxford has rapidly acquired a good reputation, it is ultimately dependent upon the vagaries and budgets of Oxford City Council. Political enthusiasm and funding for ‘green spaces’ has waxed and waned over the lifetime of Boundary Brook whereas OUWG, whatever its shortcomings, has managed to maintain some measure of consistency and stability.
\* If Boundary Brook is to be more closely wedded to the local community, there’s no reason to doubt that Wild Oxford have the commitment to help achieve this. However, having forged those links there’s still the problem of durability over time. With the best will in the world, schemes can become fossilised, dependent upon volatile Council grants, too closely involved in local politics and susceptible to changes in the individuals involved. Without doubt, Wild Oxford can help OUWG to become more effective in their management of Boundary Brook for the benefit of everyone but we should aim to have the best of both worlds.

**Work Parties**

In the early years, regular, WELL ADVERTISED Work Parties at weekends and during non-winter evenings were a crucial factor in building up and maintaining Boundary Brook. Some of the conditions that we believe helped to develop this volunteering spirit have been mentioned or implied under the heading of ‘Governance’; here we suggest some other factors.
\* Tea and biscuits can play an important part of the voluntary experience. A break for refreshment was a regular part of work parties in the early years and was sometimes organised by someone who was not fit enough to do any physical work. They should be part of the budget!
\* A friendly welcome, efficient organisation, an element of training and the active pursuit of conviviality are all part of good leadership and Boundary Brook should cherish and nurture people who are able and willing to take on this role.
\* The safe and efficient use of tools should be axiomatic and every work party needs an individual responsible for the dissemination of these virtues – without being too bossy! We suggest the development of a “Good Practice Guide” to be pinned up in the tools shed and used on websites.

**High Canopy, Coppice and Grass– The Balance**From the beginning, OUWG considered that balance between open grassland, maturing woodland and coppice as the best foundation for high biodiversity at Boundary Brook. The suggestions made under the next 3 headings (High Canopy, Coppice and Grass) are intended to re-state this formula – while taking account of the need to avoid excessive shade for allotment holders. This last consideration involves moving some areas of coppice towards allotment boundaries (not the plants themselves but the regime under which they’re managed!!), where they will create less shade, and possibly converting some scrub areas (such as that behind the Organic Allotment) to high-canopy woodland.
Initial reaction to these suggestions has evoked opinion that this would be a very substantial project, beyond OUWG resources. This view can easily be exaggerated – as pointed out elsewhere, establishing woodland is a far more challenging task than converting it to coppice – at least given the present state of growth. Successful completion would honour our commitments to EWAA, made soon after the original woodland was planted; provide good conditions for bird life in particular; help towards more diverse vegetation both in the scrub and ground layers; provide good opportunities for interesting and rewarding volunteer work with good training opportunities and probably make a few bob in the sale of seasoned birch and ash logs!

**High Canopy**

With the exception of established hazel coppice, all areas of woodland that are not within the ‘excessive Allotment shade’ zone should be considered as prospective high-canopy woodland. An exception might possibly be made for limited areas (such as Pat’s old allotments near the Howard Street Gardens) that were originally intended as ‘Wild Bird Orchard’ ie stocked with fruit trees providing good food resources for birds that were capable of naturalisation and grown on non-dwarfing stocks eg apple, crab, rowan and pear.
In the past, OUWG has been able to obtain the advice of highly experienced forestry officers free of charge and it’s suggested that something similar be done again – possibly as a half-day course in forest management such as thinning and high pruning.

**Coppice**

Hazel Coppice A large part of this category comprises coppice hazel and this can be cut at any time that suits the need for coppice material. We suggest three cautions:
\* In the past there was a temptation to cut stools in small areas, with the result that not enough light gets to the ‘spring’ and new growth is poor and straggly. The larger the coup the better!
\* With the exception of the coup behind the shed area, none of the hazel has been previously cut – at least, not on any systematic basis. Hence the first crop of rods will not be of the straightest and best – but they will improve considerably for the second cut.
\* As well as providing a useful crop, the hazel coups should serve as cover for birds during part of their cycle. This involves keeping stool density fairly tight and we suggest the layering of new plants to fill any gaps at each harvest.

Ash Coppice There are some small area of ash within the Howard Street extension that are very close to allotments and will become a shade problem in the near future. Most are set out in two rows. We suggest:
\* Cutting down to ground level and subsequent maintenance as coppice of the rotation that suits the need of both poles and sunshine.
\* Note: ash regrowth from the stool is particularly sensitive in low-light conditions - cutting is best done as part of a wider clearance

Coppice Scrub We suggest a third category of coppice in areas currently occupied by standard trees – particularly birch - that cast unreasonable shade on allotment plots. We propose the following management:
\* Cutting down of virtually all these shade trees (we suggest detailed further survey, close consultation with EWAA and marking out with stakes) before the nesting season of 2020. It has been suggested that this is too large as project in a relatively short time, but all these areas, excepting for some thorny material, are at just the right age for easy felling whether this is done with power or hand tools. The birch, in particular, will be much easier to fell than it was to clear the ground, plant them and keep ‘em growing through two dry summers! We suggest a tree felling course.
\*Birch, like ash, re-growth from the stool in anything other than full light conditions can be erratic, but a near 100% recovery should be possible in the first season after clear felling– muntjac permitting. \* We suggest these felled areas be restocked with a wide range of native trees and shrubs, similar to those originally planted with the birch. (See ‘Extension Some Details’)
\*Birch spring and the new stock can subsequently be clear felled at intervals of 5-10 years, depending upon proximity to allotment plots.
\* The aim, apart from satisfying our obligation to EWAA, should be a regular rotation of dense scrub that will provide a similar habitat for birds to the original woodland planting that achieved this effect before the canopy developed.

**Hay Meadow**

The hay meadow has only been cut ‘properly’ (cut low towards the end of summer and with the hay taken off after a few days) perhaps one or twice at most during the past decade, but we suggest that even with more disciplined cutting the results are a poor return upon the effort involved. Arguably, the top soil initially bulldozed to reduce nutrient levels and raise the relative water table wasn’t taken deep enough; this could be rectified but examples of successful flower-rich meadows on this scale and without aftermath grazing remain hard to find.
Apart from this, a new problem arose in 2018 the meadow was rough cut with the motor scythe (only a bit late) but strimming closer to ground level was curtailed because recently introduced slow-worms need longer grass.! We suggest that the maintenance of a specific ‘hay meadow’ category be ended and the meadow site incorporated into the scheme that might be applied to grass more generally. See “Grass” below.
See also suggestion for a small scrape mentioned under “Open Water”

**Grass**

According to British Butterfly Conservation, 3 years is the ideal rotation for a grass-cutting regime aimed at maximising the number of Butterflies and other invertebrates. Each cut destroys most lava and pupae, whereas a 3-year rotation always provides for two thirds of a grass area from which re-colonising can take place. Such a scheme was used in the early days.

There are problems on parts of Boundary Brook with such a long period between cutting. Woody shrubs such as Blackthorn grow into grassland quickly and need a scrub cutter if they are to be cut after two or three years; brambles are endemic in many areas and require almost annual cutting if they aren’t to predominate (but see under “herbicides”)

As suggested above, we believe the hay meadow should be lumped in together with the generality of grassland which would all be managed in the same way, excepting that time scales would be judged pragmatically. This would mean:
\* Boundary Brook grassland would comprise all the central part of the original nature reserve, the ‘buffer’ lands, that part of the extension that has been used as a ‘bramble dump’ in the past and the large glade close to the Howard Street gardens.
\* It’s likely that the ‘ideal’ regime of cutting every 3 years will be difficult to attain in many areas. Two years should certainly be possible, although exceptions might include parts of the butterfly mounds and the buffer lands. See also ‘Paths’
\* Raking up within a few days of cutting is important and the ideal disposal is to allotment holders for composting. Difficulties arise with a high bramble content. Though the original practice of digging up bramble roots after cutting could be resumed as this did stop the widespread colonising by bramble that ensued when the practice ended.

**High Canopy and Coppice Ground Cover**

It’s a good rule of thumb that any ivy-dominated woodland ground layer indicates previous planting on a non-woodland site. Already, much of the ‘old’ nature reserve wood has acquired this give-away and there are early signs in the extensions. It wasn’t supposed to be like this: early pioneers of Boundary Brook imagined bluebells and primroses! There are some good examples of successful introduction of flora, mostly the consequence of planting in the early years, but these have spread only very slowly.

Good examples of large-scale ground flora introduction to secondary woodland are hard to find: Plant Life has developed some good techniques for introducing bluebells, but they require some expertise and a time span of at least five years between seed and flower. In Milton Keynes they have been successful on an almost industrial scale but similar limitations apply. Pending more widely-available (and cheaper) strategies – as has happened with Corn Field mixes – the following is suggested:
\* Provide seed to volunteers for germinating and growing on at home (see also under ‘Organic Allotment’ heading) prior to planting out in woodland sites.
\* ASK Oxford City or BBOWT about the POSSIBILITY of taking SMALL quantities of bluebell bulbs from selected sites (this has been proven to work well, but is now a criminal offence without the landholders authority!)
\*Consider that the ideal conditions for ground flora establishment are the sudden removal and slow regrowth of a stultifying canopy – such conditions will shortly be met by some of our coppices. They’re a good place to start!

**Pollards**

The pollard willows alongside the cycle track are possibly the oldest trees on the site; they have been cut twice by OUWG and are scheduled for another cut this winter. Partly to avoid the expense of hiring arborists, it’s suggested they are cut more frequently in future – four to five years at most. This would accord fairly closely with the sort of regime that would have been practised when pollard willows were often an integral part of lammas land.

At one time there was a noted pollard willow opposite the entrance to the ‘organic allotment’ but the bole was split during a storm and this was cut down to ground level. Subsequent regrowth has produced three large stems and they occupy a large footprint; it’s suggested these are now pollarded at c 2.5m and possibly converted to a single upright stem.

Trees planted as whips along the boundary of the wildlife garden were intended for creating a laid hedge, with some selected for growing on and pollarding when they began to cast significant shade. They hedge was only laid the once and many trees are far past this stage and the wildlife garden is almost non-existent in the ensuing gloom. If this is to be resurrected, the laid hedge with some pollarding at c2.5 m should be undertaken.

The only other pollarding done on Boundary Brook has been 3 field maples in the original woodland; they were intended to be part of a small light-well within the woodland to encourage ground flora but they’re now heavily overcast and almost dead.

Elsewhere, pollarding was planned but deferred until suitable trees had matured after planting. This is now possible and it’s suggested that pollarding is an ideal formula for obtaining mature wood with a relatively small and easily controlled shade factor. If Boundary Brook might last a thousand years, there’s no reason why some of our pollards might not! The boundary hedges with EWAA are ideal candidates and hedge-layers might take this into account – probably by promoting selected trees within the hedge line for later pollarding. Other possible sites are path margins and junctions, the edges of glades and the pond sites.

**Boundary Hedges**

Were planted to be coppiced or laid in the traditional manner. Also hedges are ideal for selected pollards - see above.

**Cornfield**
After various false starts, OUWG managed to grow attractive and rich nectar and pollen sources on a plot at the main entrance side of the hay-meadow butterfly mound. Whether this is still a suitable site might be discussed and – if not – whether this might be attempted elsewhere, possibly within other ‘grass’ zones on a rotating basis. Discussion might consider:-
\* Previous success was largely dependent upon the use of Roundup and a rotovator. The general formulae being (i) cut the area to be treated as close to ground as possible (ii) spray first early spring growth with Roundup (iii) rotovate and (iv) seed. Then stand well back!

**Some Artificial Aids**

Apart from the general habitat management proposed elsewhere, Boundary Brook might offer more particular enhancements such as following:
\* Bird feeding on Boundary Brook pioneered by a RSPB member should be reconsidered. The advantage is getting birds to come to an area where they can be easily seen by visitors. The downsides are that they led to a considerable increase in the rat and grey squirrel problem. Possible dangers should also be considered. Artificial feeding encourages a much higher population of seed eating birds than a site can sustain naturally and this means that feeding must take place every day because the birds come to rely upon the seed. Also, unless kept scrupulously clean, bird feeders can harbour diseases that are fatal to the birds.
\* Until recently, a dearth of suitable sites precluded the use of nest boxes; with a maturing tree population, this should now be considered – although high populations of domestic cats and grey squirrels will need to be taken account of in choosing sites and nest-box design.
\* Similarly, there’s now scope for a limited number of bat boxes
\* The move to Boundary Brook of a refugee slow-worm populations suggests further quasi-commercial opportunities for BB to act as a home for other species displaced by development eg amphibians such as Great Crested Newts.

**Paths**

In past time money has been spent on the purchase and transport of hardcore to make paths more accessible throughout the site, but with only limited exceptions this material hasn’t been used and two ‘dump’ sites now provide some interesting micro-habitats in their own right. Nevertheless, in winter some paths become difficult for those less ambulant and it is suggested that a principal that ‘all paths should be accessible to everyone’ should be adopted and put into practice. The direct benefit of this for people of all ages and conditions is apparent, but a more subtle outcome is to encourage the focus of footfall on robust surfaces and discourage random shortcuts, ‘desire lines’ and unnecessary intrusion into more sensitive areas. Suggestions for path improvement include:
\* The incremental purchase when finances permit of further stocks of chipped limestone with the long-term aim of surfacing all paths around Boundary Brook, though possibly wood chip could be used for the paths through stands of trees.
\* Regular maintenance should include the mowing of a c.0.5 metre strip (depending on particular mower used) on either side of every path where light conditions permit grass.
\* An additional c. one metre on either side of most paths should be cut back each winter using a scrub cutter or motor scythe to maximise the ‘corridor’ effect of paths for flying insects, including butterflies; improve the prospects of floral margins and minimise the need for cutting back summer encroachments by brambles.
\*Trees growing within the path margins suggested should be assessed on an individual basis.

**Water Management**

One of the most successful projects undertaken by OUWG in the early days was the water table pond dug by contractors in the SW corner of the site. Countless school children have pond-dipped there, it is always a popular feature on open days and one young bittern was so impressed with the place that he (she?) came over from the continent (BTO suggested The Netherlands as the most likely source) to spend part of the winter here. Water levels inevitably rise and fall with the seasons but there has been a gradual overall diminution in recent years, almost certainly the consequence of increased vegetation, especially willow, around the margins.
\*The willow and bramble needs cutting back more regularly. If one or two stool stems can be ‘stored’ and subsequently pollarded this would be a useful and attractive feature.
\* Reed beds are slowly encroaching upon open water and need some control; at this stage it can probably be done with chromes, augmented by a tow rope – a fine job for summer months.

The ‘bridged’ pond in the extension also needs some small attention.
\* Again, more regular cutting back of marginal vegetation.

Less successful in the longer term has been the small pond hand-dug and lined with thin butyl in the ‘wild flower garden’. For many years, it was an attractive feature, with yellow flag iris at the margin and prodigious quantities of frog spawn in season. However, trees on the garden boundary, intended to be laid or pollarded, have gradually shaded out the entire Wildlife Garden and this pond became a black, stinking mess. According to fairly reliable anecdote, the lining was deliberately breached in order to stop the smell. If, as is suggested below, the demonstration Wildlife Garden is restored, relining and stocking this pond would be a significant part of the project.

A small circular pond dug by machine in the NE extension, between some half allotments and the cycle track, was intended as a reed bed and no maintenance is proposed for the foreseeable future, except to remove any invading trees to prevent drying out.

A very small, hand dug scrape close to the cycle track behind the ‘Organic Allotment’ has always required constant ‘topping up’ and is now heavily shaded; no further maintenance is suggested.

If suggestions to abandon the hay meadow, as such, are carried out a small ‘scrape’ in one part, perhaps an average of o.5 m deep would get close enough to the average water table to act as a zero maintenance refuge for some typical meadow plants. Such a scheme would be cheap and easy if machine excavation was available from some other nearby project. The centre of the ‘hay-meadow already contains water for long periods in the winter and Pond Action advised, at the time the large pond was dug, that temporary water bodies are very valuable for wildlife and tend to contain a different type of fauna from that found in permanent ponds.

**Wildlife Garden**

An early Boundary Brook success was the Wildlife Garden. Half of a derelict 10-pole allotment plot was fenced off, a pond dug towards one end and the spoil from this used for landscaping. Raised beds for growing vegetables were built at the cycle track end; these were made from creosoted scaffold board and lasted for about 5 years; they have been replaced with expensive but highly effective synthetic boards. Along either side of the wildlife garden trees suitable for pollarding, such as hornbeam and lime, were planted as part of the garden boundary hedge.

The overall intention was to provide a demonstration model of how relatively small gardens could be enhanced to improve their value for wildlife while still looking very attractive to the human population. This included hard evidence that native hardwood trees could be grown in small gardens and kept within bounds by coppicing and pollarding. Whether large swathes of Oxford City garden were transformed as a consequence isn’t known, but for the first few years the garden was a great success, especially on Open Days. Decline set in when a new regime stopped pruning the boundary trees and management of the 2 flower beds at the front of the garden. These two management changes meant that a dark shade eventually enveloped the entire garden.

We believe strongly that the Wildlife Garden should become once again a key feature of Boundary Brook. If this sentiment is taken onboard, we suggest the following sequence:
\* Pollarding or otherwise heavy pruning trees and shrubs throughout the site and re-laying the hedge around the garden.
\* Relining the pond with heavy duty butyl.
\* Rather than the ad hoc planting scheme used previously, we suggest an agreed plan in advance.
\* The raised beds might now be used primarily as a herb garden and the two flower beds at the path end be reinstated.
\* In the past, the Wildlife Garden was the most labour intensive part of Boundary Brook. However, it also attracted practical interest from a significant number of volunteers who would not otherwise have become engaged.

**Organic Allotment**

More preparation went into this site than any other part of Boundary Brook. Because the ground was subject to flooding, the entire site was built up with top soil scavenged from nearby derelict allotments (later to become part of the extension). Individual plots were then double dug, rivetted with tanalised boards and provided with ‘leaky pipe’ irrigation. Headlands on either side were sown with wildflowers and a larger plot planted with soft fruit bushes.

The only successful aspects of this hard work were a geometric herb garden laid out and maintained by Sue Heeks and her daughter and the soft fruit garden at the other end. Both were subsequently destroyed as part of an unknown project.

Following on from this dismal experience, the following suggestions are made:
\* A revival of the Organic Allotment should only be countenanced if a credible person or group of people wants to take it on as such. This might be a topic for our first open day.
\* More probably, we suggest conversion to an orchard, with the planting of 2 or 3 suitable trees on non-dwarfing stocks. This would involve removing the present bed surrounds and rough levelling the ground. This might then be sown with a wild flower grass mix and managed as part of the grass area.
\* An alternative possibility: one very much dependent upon interest from Wild Oxford. Apart from the presence of muntjac (and these would require fencing out), this would be an ideal site, once cleared, for the establishment of a tree/wild flower nursery. This might be especially relevant in view of modern research concerning the advantages of local provenance for seeds and the extreme hazards of imported tree material (eg Ash Dieback).

**Herbicides**

For the most part, we suggest there’s no need for the use of herbicides at Boundary Brook. However, their may be extenuating circumstances that may be considered:-
\* There is a small clump of Japanese Knotweed at the Howard Street end of one of what used to be Pat’s allotment. This has survived many attempts at eradication over the years, but the occasional and minimal use of Roundup has provided an effective check. Continued use may be considered.
\* Upon occasion, Ground Elder has spread, particularly around the path junction close to the corner gate and on the north side of the butterfly mound alongside the large pond. In the past, Roundup has been effective and future use may be considered if needed.
\* Dense stands of bramble, that might otherwise be managed as grassland – the ‘butterfly mounds are a good example – might be controlled by painting Roundup onto new growth from the stump after winter clearance. Some consideration might be given to this. An alternative would be to dig out the bramble roots after cutting.
\* In the event that it is decided to reinstate a Cornfield Mix, possibly on a shifting site, Roundup has proved in the past to be the only practical way of achieving the ‘clean’ ground necessary.

**Fire**

One of the most persistent problems in managing Boundary Brook in the past has been the disposal of brash and, in particular, bramble. While some ‘habitat heaps’ made of brash and small wood are useful, this has been taken to extremes in the past with the result that great mounds of bramble have eclipsed entire glades and areas of grassland. Fire provides a quick and straightforward remedy, with few adverse local consequences if the material has been seasoned – even for a short period. Fire can also be welcomed by winter work parties. The following may be considered:
\* Whether fire should be permitted at all
\* Possible limitations upon location eg not within a set distance of Howard Street or Boundary Brook Estate gardens and perhaps even allotment sites
|\* A dry summer moratorium on all fires**.**\* An area worth investigating is ‘bio-charcoal’ This is charcoal made from woody material primarily for use as a horticultural fertiliser and it’s typically made (on a small scale) in pits or open kilns that have the form of an inverted cone. Pundits claim only minimum smoke emission and excellent results when applied to horticultural soils.

An alternative or additional action is to chip some bramble and brash and use for the paths through trees.

**Give Us the Tools……!**

At the beginning of 2018, the various tool sheds acquired by OUWG over the years were a mess. A large quantity of hand tools, few displaying sign of recent loving care, were mixed with junk of various vintage. Various broken power tools – mowers, chain saws and generators lay neglected and a fairly new Stihl strimmer with multi-tool attachments couldn’t be used because the lower transverse gear was broken. There was no sign of the heavy-duty Stihl brush-cutter or the 10hp rotovator/power scythe purchased some years ago. A relatively new equivalent of this last machine was found and after some cleaning and oiling coaxed into life. Although difficult to handle, it tackled the task of cutting the hay meadow very effectively; John Willis completed the job in well under 2 hours – rather less than it took to rake up and clear away the hay.

At present, it’s likely OUWG will enjoy some assistance from Oxford City staff with their own equipment. However, if a significant maintenance role falls to OUWG volunteers in the future it’s crucial that tool selection and care is given a much higher priority. Suggestions follow:
\* There is no immediate use for generators and unless one is found to work – and might be kept for some future use – these should be disposed of.
\* Power saws present endless problems of training, certification, protective clothing and insurance; chain saws used by more than one person create further difficulties. Although suitably trained individuals with their own chain saw might be a potential asset, it’s unlikely OUWG will benefit from having its own in the present circumstances. There are a considerable number of small and medium sized trees to be cut down over the next couple of years but most of these – birch in particular – will present few difficulties for volunteers making proper use of hand tools.
\* The Stihl multi-tool is a useful piece of equipment that’s well within the capacity of an average volunteer and this should be repaired and suitable stored.
\* The rotovator/power scythe has demonstrated its usefulness but against this is long-term cost. Any future breakdown would require movement to a specialist and expensive bills; future replacement would be the equivalent of a good second-hand car. Disposal might be considered, although this present machine might be a useful asset to Wild Oxford and could be shared. If it’s decided to reinstate the tradition of a Cornfield, access to this machine would undoubtedly be very useful – and arguably indispensable – in rotovator mode.
\* Far and away the most useful single piece of machinery on Boundary Brook in past years has been a heavy-duty Stihl scrub cutter (other brands, eg Husqvana are available; choice should be conditioned by the nearest convenient dealership). Such a machine powered through the deep 3 metre drifts of dead bramble when preparing the part of the extension nearest Howard Street for planting, using a 3-legged steel blade; cut the hay meadow and long grass areas with a plastic-bladed turret and maintained the paths using heavy-duty strimmer line. With a saw head, it will easily cut scrub up to 2 inches diameter. When used on path corridors and long grass areas (invariably mixed with more woody material) a scrub cutter gives the operator greater flexibility and choice than the motor scythe.

Scrub cutters are undoubtedly noisy and many volunteers don’t like using them, but the same applies to a motor scythe. Recent innovation in lithium ion battery strimmers is getting closer to the power of a large scrub cutter but isn’t there yet. Scrub cutters can be taken for repair in a domestic car, are inherently more reliable and easier to maintain. Boundary Brook should consider having one again! Or, failing this, enter into an agreement with a small contractor who can offer the services of a scrub cutter for 2 or 3 days on an annual basis.
\* A 21-inch rotary mower is the best tool for the regular cutting of path margins (see “Paths”). Cheap mowers have many disadvantages and not least of these is an ability to fill the grass box reliably. This makes ‘taking off’ more difficult. Around 20 years ago, OUWG were given a good-quality Hayter mower that may still be within economic repair.
\* A particular source of difficulty in the past with all power tools has been confusion between different fuels. It is suggested that OUWG are at some pains to store petrol and 2 -stroke mixture separately from other tools in well-labelled containers. Such a store might include any power machinery and protective accessories.
\* Edge tools. A small number of sharp edge tools is considerably more useful than large numbers of blunt tools! The following are suggested: (i) 2 or 3 small billhooks suitable for hedging (ii) 2 or 3 Yorkshire-type billhooks (they have longer blades and handles); these are a useful multi-purpose tools and especially as a replacement for axes for volunteers engaged in felling, snedding and brashing. (iii) 1 or 2 long-handles slashers of the ‘dunce’ variety (these have short, relatively straight blades; often called ‘hedging knives’); very god at coping with small thickets of bramble. (iv) 3 or 4 good quality spades. (v) Scythes and sickles are a fine thing in principal – and it’s was a real pleasure some years ago to watch a competent mower laying half the hay meadow down in neat swathes – but considerable skill and experience is needed in their use and sharpening. Unless somebody with these attributes presents themselves, we suggest they’re best avoided
\*Sharpening. Edge tools are only of any use if they’re sharpened. The ideal for this purpose is a water-bath grindstone wheel but the only models now obtainable, new at least, are electric powered. A credible alternative is a good work-bench with a heavy-duty engineers vice and a decent file.
\* Other tools should include the following: Hay rakes are immensely useful; the wooden variety are most pleasant to use, but they require some care to avoid breakage. 2 or 3 wheelbarrows are indispensable, but punctures can be a plague on Boundary Brook; Kevlar-tyoe ‘puncture proof’ tyres are a good investment. 2 or 3 pairs each of secateurs, lopping shears and garden shears are especially useful for older, younger and less experienced volunteers. Two kinds of bow-saw are ideal: small ‘triangular’ 21-inch Sandvik saw for general use and (if felling of birch is done by volunteers) a 36 inch saw which can used by two people as a cross-cut; both need spare disposable blades.

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