Cuttle Brook Local Nature Reserve

Management Plan
2020 - 2024

Preface

Since its formal designation as a Local Nature Reserve in 1993, Cuttle Brook LNR has developed as: a local biodiversity hotspot, home to a number of emblematic species as diverse as orchids and otters; a recognised and appreciated green resource for an expanding Thame; and a honeypot for dog-walkers.

While some development has been more welcome than others, this on-going evolution is set against a backdrop of increasing threats: plant diseases; climate change; people pressure, with and without dogs; and pollution from a number of sources.

With the continued growth of the town, it is likely that the threats and pressures facing the Reserve will only increase. It is especially important, therefore, that it is kept in mind at all times that the primary aim of the Reserve's management must be to protect and enhance its biodiversity and conservation interest. Designation as a Local Nature Reserve was made under the National Parks and Access to the Countryside Act 1949. The Act lays down that recreation is a legitimate adjunct to conservation but only, "*if the management of the land for the recreational purpose does not compromise its management for the conservation purpose"* (S.15(1)(b)).

Main Aims

A. To protect, maintain and, wherever possible, enhance the conservation and biodiversity interests of the Reserve and its local environment.

B. To maintain public access to the Reserve, consistent with biodiversity and conservation.

C. To foster understanding, appreciation and enjoyment of the Reserve.

D. To enhance community involvement in the Reserve.

A. Protecting and Enhancing Conservation Interest

The Meadows – see Fig.1

The simple practice of annual meadow cuts and removal of the arisings has been a great success, reflected in an ever-increasing floristic diversity and almost annual recording of new species – including four species of orchids to date (2019). The priority action has to be continuation of the annual meadows cut and removal.

With increasing levels of visitors, especially dog-walkers, there has been a loss of quiet areas, including grassland. Nontron meadow offers an opportunity to go some way to re-dressing this loss.

1. Cut the western and town-side meadows for hay each July or August and remove hay from site.
2. Investigate and, if feasible, introduce aftermath grazing of the meadows.
3. Spring cut the wildflower seeded parts of the Family Area and cut and rake off the 'hay crop' in late July/August.
4. Work towards establishing Nontron meadow as a quiet, 'wild' area by:
   - Allowing the mown paths to grow out;
   - Encouraging walkers to use the lane rather than the meadow;
   - 'Beating up' the meadow-side hedgerow;
   - Putting up notices to explain to regular visitors the reasons for the change in management.
5. Given the success of the management regime to date, any introduction of new species should only be undertaken where there is a specific conservation need. Any introductions should be of local provenance seed, or plants grown on from locally sourced seed of a species suitable to the location.
6. The bramble patches on the western meadows will be encouraged as cover and food sources for wildlife. However, they will be cut back as required to prevent their uncontrolled expansion and to keep their height to acceptable limits.

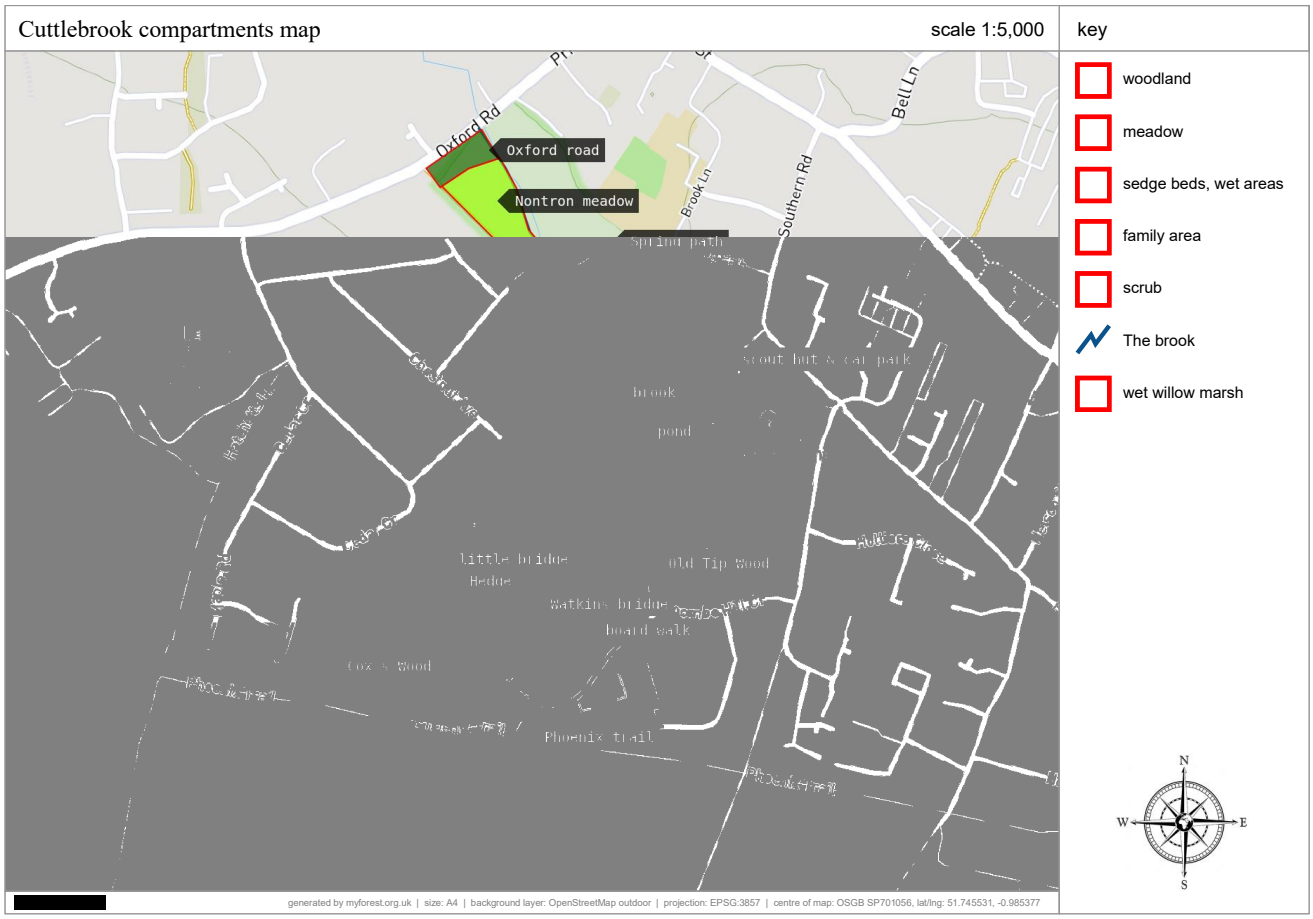

Fig. 1 Compartments map with meadows in light green

Sedge beds, reed beds and marsh communities – see Fig. 2

There are on-going changes to the distribution and floristic make-up of the reed, sedge and marsh communities, probably reflecting the changing hydrological conditions on the Reserve and CBCV's attempts to address these. The marsh area around the main pond is largely a result of the 1994 work to construct the pond itself and the more recent need to artificially enhance the water supply to the pond following changes to the springs that have previously kept the pond topped up. The pond is now augmented by water piped underground from the inspection chamber near to the tip site. The water is discharged onto the fen so that its heavy nutrient load can be absorbed and the soil water level raised – in turn raising the level of water in the pond.

There has been a notable loss of bird life using the reed beds in recent years. On reason for this could be an increase in the number of dogs running through the area and flushing out sensitive species such as snipe. This disturbance needs to be addressed as a matter of concern.

1. Sedge beds and associated tall herb communities to be cut on a six-year cycle, with approximately one third being cut every other autumn. Arisings to be collected for reptile hibernation and brooding sites.
2. Reed areas to be allowed to develop further and managed on a 10-year cutting cycle.
3. Reed development to be monitored.
4. Water level to be managed to maintain water-logging. Water level to be close to soil surface at the board walk and 30-45cm deep at the downstream end.

5. The reed and sedge beds should be made less accessible to dogs by continuing to develop a ‘dead hedge’ alongside the perimeter adjacent to the footpath.
6. Dog-walkers to be encouraged to keep their dogs out of the reed and sedge beds.

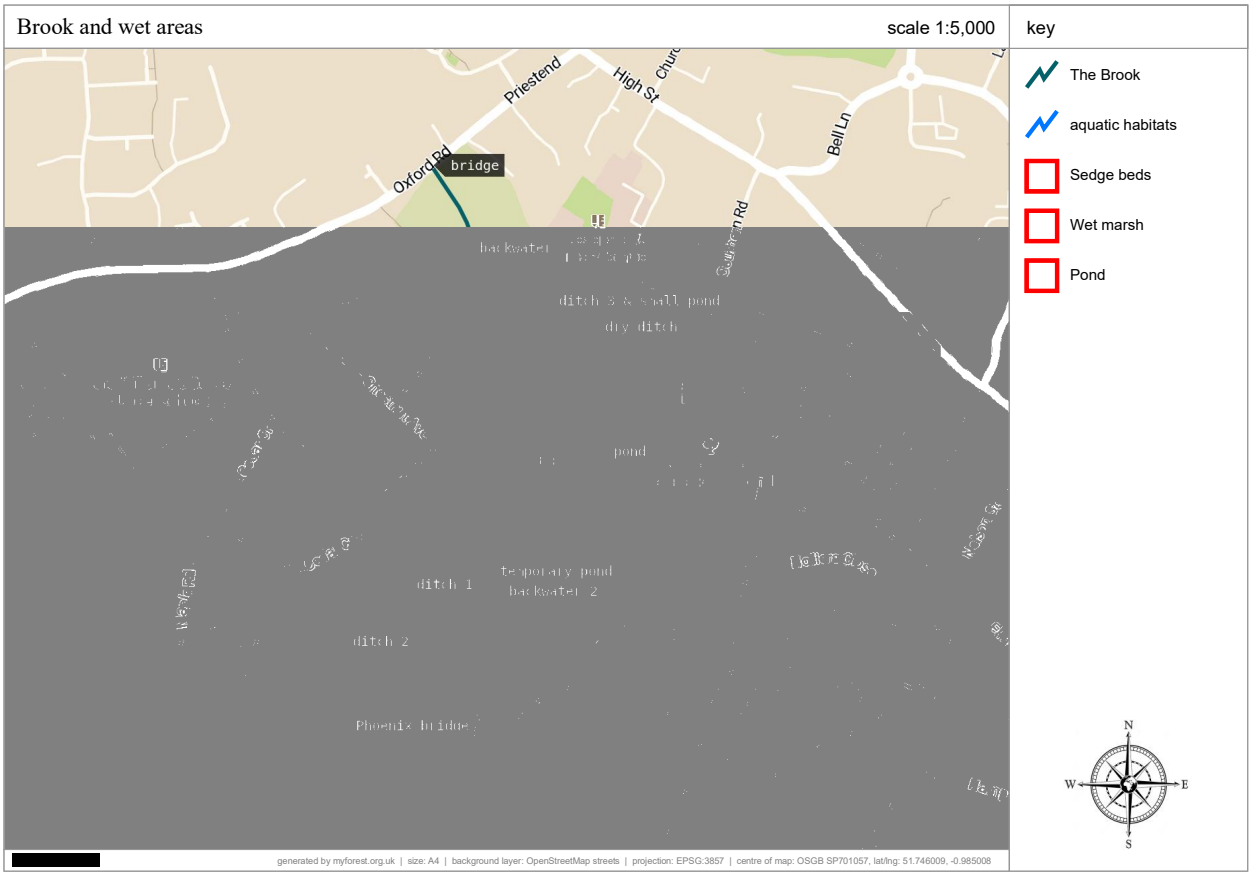

Fig. 2 Showing aquatic features and wet areas

The Brook, ponds and ditches – see Fig. 2

For the first twenty years or so of the Reserve’s designation, the focus of attention has been predominantly land-based. More recently there has been a deliberate shift towards enhancement of the aquatic environment. An on-going project has seen the recent creation of two back-waters as fry refuges off the main river, along with spawning bed enhancement and vegetation management to allow more light onto the brook.

Visitors’ dogs are presenting a number of threats to the river water quality and riverside habitats, including: bank erosion – from scrabbling in and out, siltation - from disturbance of the bed and banks, pollution – from flea and tick treatments, and disturbance of wildlife.

The brook is regularly used by otters; a European Protected Species. We must be mindful of the needs of this species in our management of the brook.

The other great threat to the aquatic environment is from inappropriate responses to flooding. The Reserve lies in a flood plain and inundation has always been a natural feature, doing no harm at all to the conservation interest of the site. However, occasional severe floods, have, unfortunately, impacted upon some neighbouring houses, resulting in calls for damaging engineering works which do nothing to address the causes or alleviate the symptoms. As the town expands, the brook’s peak flows can be expected to increase, potentially leading to more extensive flooding. Natural flood alleviation techniques offer a win-win solution but would require a degree of control over land upstream of the current Reserve boundary.

1. Maintain close links with the Environment Agency to ensure sympathetic future management of the Cuttle Brook and its banks.
2. Continue the programme of aquatic habitat improvement and look for further opportunities to enhance the aquatic environment of the Reserve and the river generally.
3. Practice minimal vegetation management in the brook in accordance with EA guidance. In particular; aim to keep about 25-30% of the channel clear of vegetation in order to concentrate low flows and reduce siltation.
4. Maintain a fringe of coarse, bankside vegetation alongside most of the length of the Brook to provide cover and a relatively undisturbed 'corridor'.
5. Keep the pond litter free.
6. Keep a clear, typha-free area of water for pond-dipping in front of the dipping platform on the main pond.
7. Ditches are important linear habitats for amphibians and for aquatic flora and should be recognised as such and managed sensitively, ensuring that they are only 'cleaned' sufficiently to drain water as is strictly necessary.
8. Opportunities should be taken to create new ponds, backwaters, scrapes and ditches (or extend existing ones).
9. Maintain an active involvement in the Thame Catchment Partnership and cooperative links to the River Thame Conservation Trust and Freshwater Habitats Trust.

Trees, woodland, hedgerows and scrub – see Figs. 3 & 4

Most of the Reserve's stock of trees is now in a semi-mature state and successfully established, with little space for additional planting. The focus of our tree work will therefore be on management of the existing tree stock.
The trees face a number of threats, including: new tree-diseases, pests, and climate change. These require us to be mindful of the current stresses and to plan for resilience in the near-future.

1. The Town Council will apply for a 5-year Felling Licence from the Forestry Commission to enable the staged removal of diseased ash and alder, and also to allow for selective thinning, in accordance with good practice.
2. Grant aid may be sought for re-planting following the felling of diseased trees. Re-planting will be with trees expected to be suitable for the site and its wildlife, and which offer a degree of resilience to pests, disease and climate change.
3. All trees will be monitored for disease and other safety considerations on an annual basis.
4. Where it will not be a hazard felled timber may be left as habitat piles to increase the amount of valuable deadwood on the Reserve.
5. Where the opportunity presents itself and it is safe to do so, deadwood will be left standing as it can be an important habitat supporting different flora and fauna to stacked deadwood.
6. Rides to be mown on a two-year rotation in Cox's Wood, with the northern and eastern rides being mown in alternate years.
7. Hedgerows will be encouraged to thicken by laying as and when necessary. There will be no routine cutting of hedges, apart from alongside the track in from Oxford Road to Spring Path, so that the hedges can become wildlife corridors with good cover and supplies of fruit and berries.
8. Blackthorn and hawthorn scrub in 'The Triangle' to be managed to maintain a variety of ages and a high edge to area ratio.

9. Scrub and small trees alongside the brook will be managed so that there is an overall level of shading of not more than 40% of the length of the brook through the Reserve.
10. Requests from the public to plant memorial trees will be accommodated wherever possible. However, this will not be where there may be detriment to other valuable habitats or where the species requested are non-native or have no benefit to native biodiversity.
11. Special care will be taken to promote the well-being of trees important for biodiversity, including the site's nationally scarce black poplars.
12. Trees under the electricity wayleaves will be left for management by the transmission company. (See Fig. 4)

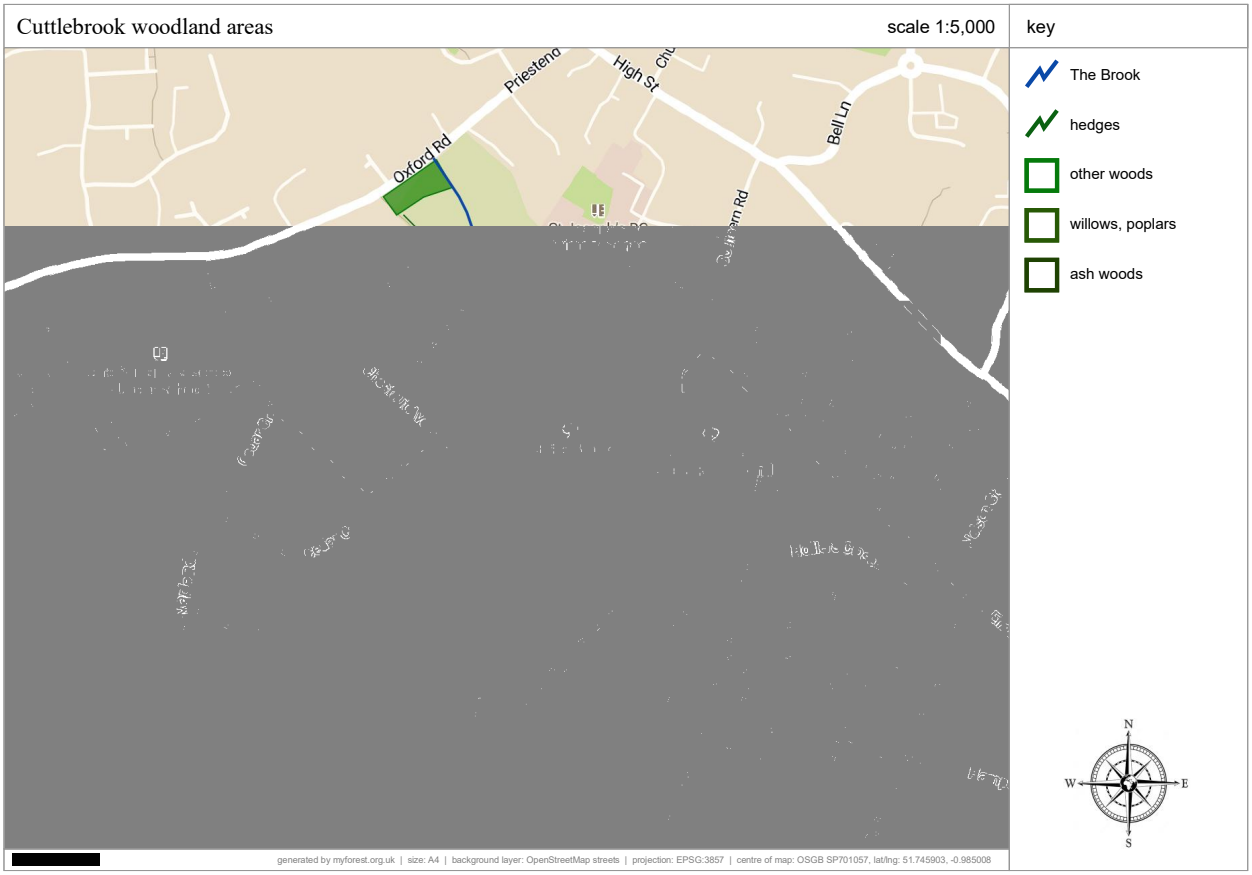

Fig. 3 Woodland and hedges

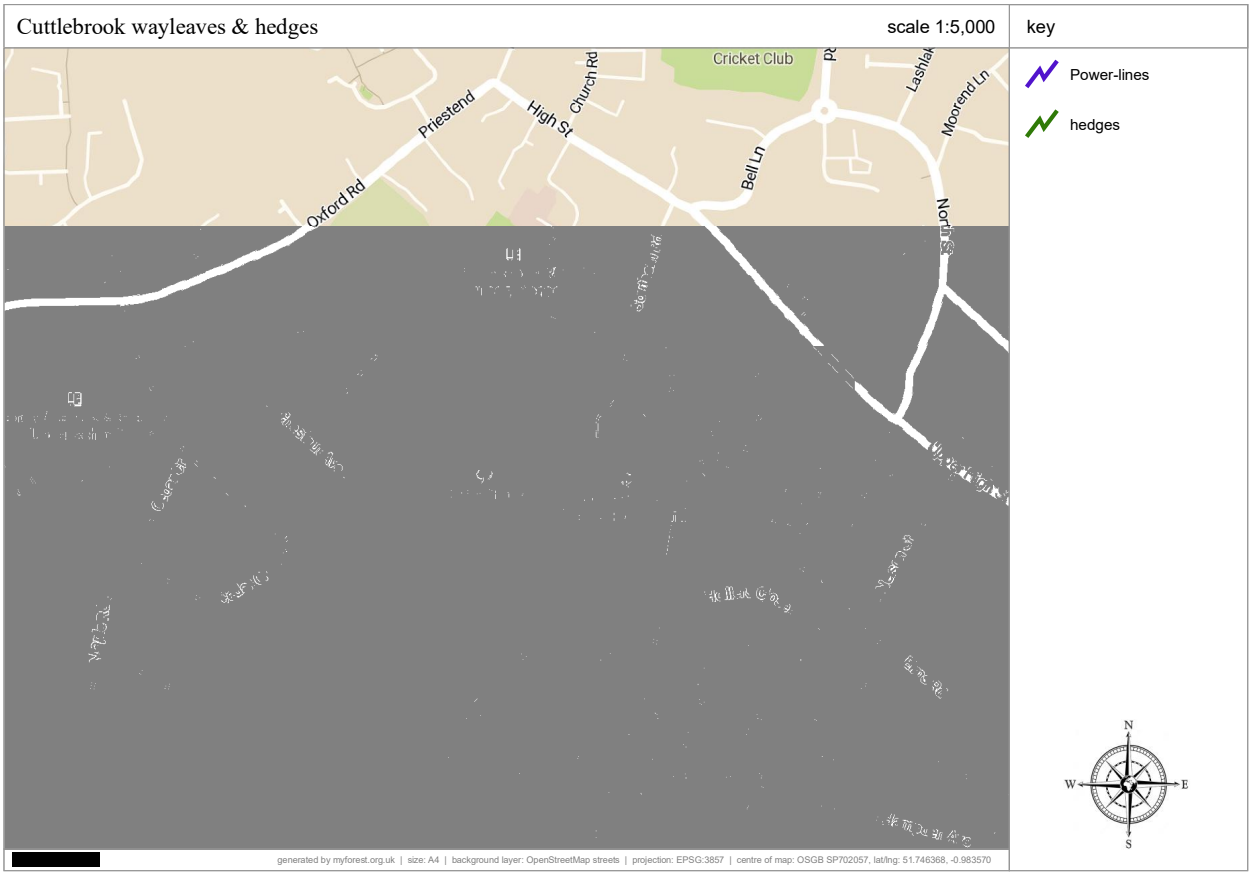

Fig. 4 Wayleaves and hedges

Flagship species

The Reserve now boasts a number of important and flagship species, including otter, four species of orchid, and black poplar. These species are all important in their own right and their well-being must be the top priority for management. However, they are also very important as representatives of the general importance of biodiversity and conservation and should be promoted as such where this will not jeopardise the species concerned.

The management to date has been successful in allowing the natural recolonization of the Reserve by a variety of species. However, it is recognised that not all important species will be able to make their own way here and that there may be a role for careful introductions.

1. Suitable species appropriate to the site which are nationally threatened or scarce may be introduced onto the Reserve, due regard being taken to any licence arrangements pertaining to those species.
2. Where locally or nationally important species or habitats are known to be present on the Reserve, management should be directed at maintaining and enhancing that feature, with advice being sought from the relevant experts.

Monitoring

Having good information about what is on the Reserve is important for understanding how our management is doing and also potentially for informing the management or development of

related land. For the latter purpose, it is useful that the data collected is publicly available, especially through the Thames Valley Environmental Record Centre.

1. The LNR Management Committee, administered by Thame Town Council, should convene twice yearly to oversee the implementation of the management plan.
2. The Management Committee to visit the Reserve at least once per annum.
3. Regularly survey the aquatic invertebrates in the brook.
4. Develop further survey techniques, such as camera traps, moth-trapping, hedgehog tunnels, bat detection and the like.
5. Organise annual botanical surveys of the meadows and the sedge and reed bed areas.
6. Continue annual monitoring of 'common' birds each May, replicating the established method.
7. Set up a species recording system compatible with the Thames Valley Environmental Records Centre and encourage members of the public to record and report sightings.
8. The management plan is to be kept under continuous review in the light of ongoing monitoring. However, any proposed changes must be with due regard to any contractual and legal obligations.
9. Encourage recording on the Reserve by experts and specialist societies. Relevant bodies or individuals should be sought to help with recording of 'difficult' taxonomic groups.
10. A photographic survey to be carried out each year.

Reserve enlargement

With the continuing expansion of the town there is generally a corresponding loss of green space and biodiversity resources; there is potentially an increase in run-off from hard surfaces, notwithstanding the requirements for 'sustainable drainage' systems, leading to an increased likelihood of flooding. As noted in the Brook, Ponds and Ditches section above, natural flood alleviation techniques offer viable mitigation while also providing biodiversity opportunities. However, to achieve this would require land upstream of the Reserve to be brought into suitable management.

An overall ambition for enhancing biodiversity potential is to provide as continuous a protected habitat as possible along the Cuttle Brook from its confluence with the River Thame to its re-emergence into countryside south and east of the enlarged town.

A(vii) To acquire or manage additional land, particularly where this is adjacent to or of benefit to the purposes of Cuttle Brook local nature Reserve and / or the people of Thame

1. With Thame TC, seek to expand the Reserve alongside the Cuttle Brook both downstream to the River Thame and upstream towards Moreton.

2. Resist development on land where this may adversely affect the conservation or amenity value of the Reserve.

B. Improving public access to the Reserve

A lot of work has been done to provide the paths, bridges and boardwalks that now facilitate comprehensive access around the Reserve. Not all areas are fully accessible all of the time but the emphasis now is on maintenance of the existing infrastructure rather than further creation.

Maintaining routes through the Reserve – See Fig. 5

1. When necessary, seek grant aid through an appropriate source.
2. Implement works to maintain the surfaced, but unsealed, route along the Townside meadows to the wooden bridge and on to the Phoenix Trail.
3. Maintain a mown grass path along the western meadows.
4. Carry out an annual inspection of all built structures and plan and carry out timely repairs as necessary.
5. Replace bridges and other structures as required for public safety and convenience.
6. Carry out litter-picking exercises as necessary.
7. Work with the Town Council's maintenance team to ensure that bins are regularly emptied. Volunteers will continue to empty the bins at each Sunday work party.

Fig. 5 Paths

Improve access for special needs

1. Regularly consult with representatives of local special needs groups to appraise the potential of the Reserve and the access improvements required.
2. Work up schemes and bid for grant aid to achieve improvements identified by special needs group representatives.

3. Improve steps from the Old Tip Site to the sedge beds.

Information

1. As necessary, update the Reserve leaflet and ensure that it is available in a print-ready format via the Cuttle Brook website.
2. Maintain and regularly refresh the content of the Reserve's website and Facebook pages.
3. Maintain and update notice-boards and information displayed
4. Publish current items as appropriate on the Reserve notice-boards and/or website.
5. Publish regular press releases to maintain the Reserve profile locally.

C. Fostering understanding, appreciation and enjoyment of the Reserve

Multi-purpose usage

1. Maintain links with the local schools to encourage usage of the Reserve as an educational facility.
2. Foster links with arts, drama and photography groups.
3. Maintain links with scouting and youth groups.
4. Work with the Town Council to ensure that any sporting or commercial events held on the Reserve are compatible with its primary purpose for conservation.

Dog-walking

The Reserve has become a honeypot for dog-walkers, including professional dog-walkers, to the extent that this is having serious implications for the continued success of the Reserve for conservation. As the population of the town increases, it is expected that the number of dogs being brought to the site will continue to increase. This growing threat must be addressed as a matter of urgency.

1. Carry out a survey of dog-walking on the Reserve to fully understand numbers, patterns of use, and the attributes of the Reserve from the owners' perspective.
2. Consult with the Kennel Club to seek its advice and support.
3. Develop and implement a strategy for the management of dog-walking.

D. To increase community involvement in the Reserve

Volunteering

1. All Reserve literature is to encourage volunteer involvement with the Reserve and to include contact details for the Town Council or CBCV.
2. Tasks to be designed for volunteer action wherever possible and appropriate.
3. Opportunities should be sought for publicity for volunteer working through the local and social media.
4. Organise specific skills and tool training as necessary.

Education

1. Develop and maintain links with all local schools.
2. Maintain and improve facilities for education, such as the pond dipping platform .
3. Encourage schools to take part in long-term monitoring of Cuttle Brook.
4. Assist students with special studies undertaken on the Reserve.
5. Continue to welcome and support Duke of Edinburgh Award students.