

CHADDESSEN WOOD
LOCAL NATURE RESERVE
-
MANAGEMENT PLAN REVIEW
2023

On behalf of
DERBY CITY COUNCIL

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1. Introduction

1.1 Background to Management plans

The management of the LNR has been guided by two previous Site Management Plans, each covering a 10-year period. The first was produced in 1991 and provided the first full statement of the objectives for management and provided a comprehensive list of management tasks across the reserve. The plan was re-written in 2011, when Lime Lane Wood and the connecting hedgerow were added to the plan. The objectives for management were reviewed and a new 10-year task programme produced.

1.2 Purpose of review

This review comes at the end of the second Management Plan period, which expired in 2021. As management of the reserve is now stable there is no need to completely re-write the Management Plan for the next 10-year period. Instead the current state of the reserve and the completion of tasks over the previous plan period have been reviewed. This has led to minor adjustments of the plan to reflect the current situation.

1.3 The current document

This review has been produced to inform the next 10 years of management on the reserve. The previous (2011) Management Plan remains valid, the descriptions and management objectives largely remaining unchanged. In the sections that follow, each objective and the prescription they encompass have been reviewed to see what progress has been made and to make suggestions for future action in the next 10-year period. Some prescriptions have been removed, either because the work has now been achieved, or that they are simply not relevant with the current condition of the reserve. Most however remain valid, and several new tasks have been added. The review also includes a work programme covering the next 10 years.

2. Progress towards meeting objectives

2.1 Habitats

2.1.1 Woodland

Summary

Following 20 years of consistent woodland work under the management plan the woodland has now reached a satisfactory state. It should be possible to maintain this condition now with only a minimum of management input, mainly based around keeping an eye on key aspects of the woodland and scheduling work accordingly.

Prescriptions

- Remove sapling sycamore, beech, horse chestnut and rhododendron. Significant progress has been made on this with very few sapling stage plants of any of these species present. It should remain the aim to continue with this control work, though the amount of time required now will be minimal. Most of the new regeneration is likely to be sycamore and this should be removed at sapling stage. The wood contains some immature sycamore at the young tree stage, but these can be retained as replacements for the canopy trees over time, unless they can be used for tasks within the woodland such as path edging.
- Remove snowberry, *Spirea* and cherry laurel. These three species have now been removed from both woods. Future monitoring will be needed, as there is likely to be some further regeneration of these, and possibly also cotoneaster. All non-natives should be removed at the earliest stage possible.
- Coppice hazel. A certain amount of hazel coppicing has taken place over the period of the plan. Rather than being done as a series of rotational coups, as envisaged in the plan, it has been done on an individual basis, largely to supply useable timber for tasks within the woodland. Given the relatively dense nature of the current tree canopy, coppicing of large areas is unlikely to be successful, due to the degree of shade. This aim should be removed from the plan. Coppicing of hazel on an individual basis can continue, as it does at present when a supply of timber is needed. In doing this it is best to select hazel where it is growing in gaps in the canopy where there is sufficient light penetration to produce vigorous new growth from the stumps.
- Retain fallen deadwood. This prescription has been followed throughout the course of the plan. Any deadwood arising from management tasks has not been burned but has been left as habitat piles. This worked particularly well when the hedge H1 was laid, when all brash was kept within the woodland. There appears to be very little theft of firewood at present.

- Maintain gaps in the canopy. No action was required to meet this target for the period of the plan. The wood has enough natural gaps to allow sufficient light to reach the ground giving a good range of natural regeneration of trees and shrubs. Looking ahead to the next 10 years there still appear to be enough gaps in the canopy without the need for intervention. The aim to keep the canopy cover under 90% should be retained in future reviews.
- Transplant oak seedlings and Plant shrubs. A limited amount of work was done on these items, but with mixed success. An assessment of the woodland structure in autumn 2022 showed that there is now a good range of regeneration of most tree and shrub species, including oak and hazel, with plants present from new seedlings up to small saplings. On balance this is now considered sufficient to maintain the age class structure of the trees within the wood. These two prescriptions can therefore be removed from the plan.
- Allow ditch system to degrade. As this is a non-intervention prescription no action was required. It remains valid for the next 10-year period. Any opportunity to retain water on the site should be considered.

2.1.2 Woodland hedgerows

Summary

Several lengths of hedge have been managed over the course of the plan and this has led to a better understanding of the potential of each hedgerow. It is now evident that many of the woodland boundary hedges are not really suited to hedgelaying. This is principally because they are too shaded, either by overhanging branches or by shrubs outside the woodland, which prevents them from growing back successfully after laying. Hedge H1 proved to be the most successful, having been laid in 2 sections, in 2018 and 2020. The re-growth has been very good and additional shrubs that were planted in the hedge have taken well. Hedge H4 was also laid but with limited success. There was a lot of sycamore in this hedge that had to be removed, leaving it gappy. This, combined with the shading affect of the new shrub planting in the adjacent school grounds, led to very poor re-growth of the hedge. It is now considered that this hedge is not suitable for laying. Hedge H5 has also been laid at some point, but is now regularly trimmed to keep the adjacent pavement clear. This hedge could be laid again in the future, but it would need to be allowed to grow tall without trimming for several years in advance. All the other woodland boundary hedges (H2, H3, H6, H7 & H8) are not suited to being laid due to shading.

Prescriptions

- Lay hedgerows on rotation. Hedge H1: It will be several years before this hedge is ready to be laid again, the exact timing depending on just how fast the new growth develops. It can be

laid once there is substantial growth to around 4 m high throughout the hedge, so it will need monitoring each year until this height is achieved. If the growth is compromised by branches overhanging from the wood it might be beneficial to carry out some crown lifting on selected trees to allow the hedge more room to grow. To reduce the impact of the work it is best to divide the hedge into 2 sections again and carry out the work in different years. All brash left behind should be stacked neatly within the woodland edge as habitat and to rot down naturally, as was done in 2020.

Hedge H5: this relatively short length of hedge on the southern aspect of Lime Lane Wood is suitable for laying. The current annual trimming would need to stop, at least along the top of the hedge (the pavement side could be trimmed still), for several years to allow the hedge to grow taller before it could be laid.

- Remove sycamore. This prescription was concerned mainly with hedge H4, which is no longer going to be laid. It does still apply in principle, as sycamore is not a good species to have in a laid hedge.
- Plant up adjacent open areas with site-native shrubs. Shrub planting has taken place in all areas that were proposed in the 2012 plan, adjacent to both Chaddesden Wood and Lime Lane Wood. No further shrub planting is proposed so this prescription can be removed from the plan.

2.1.3 Woodland ponds

Summary

Management of the woodland ponds has been problematic and has taken up a considerable amount of the available work time. The main pond and associated scrape in Compartment 4 continue to suffer from public pressure. Despite the best efforts of the management group, including completely fencing the main pond with natural hurdles, the comments in the 2011 plan still apply. Visitor pressure, including dogs and deliberate vandalism, is still severely restricting the wildlife value of the pond. The ponds in Compartment 3 have fared better, being more secluded. One has had an artificial liner installed. Natural drying out of unlined ponds in the summer, with a suggestion that the water table may be drawing down, is an additional consideration. In future it will be more effective to minimise management input to the main pond, which will always attract disproportionate visitor pressure, and instead develop a series of lined ponds in other locations that are hidden from view.

Prescriptions

- Maintain open aspect. This applies to all ponds to be considered as a potential wildlife resource. Any bushes that start to develop around the pond margins and overhanging branches that cast too much shade should be removed. The ideal is to ensure that the pond gets at least a few hours of direct sunlight during the day in the summer.

New prescriptions

- Create additional wildlife ponds. Suitable locations should be chosen for making new ponds within the woodland. They should be situated where there are existing gaps in the canopy to let light into the woodland floor (see above) and as far as possible where they will be screened from view to visitors using the wood. The main operation will be excavating the basin for the pond and disposing of the soil. Consideration will need to be given to whether it is realistic to do this by hand or whether a machine will be needed. There is value to shallow ponds, which may be hand dug, but at least one pond would benefit from some deep water of up to 1 metre depth. Using an artificial liner will greatly increase the potential value of the pond. Liners are at risk from vandalism but this can be minimised by covering the liner with a tough grade of geotextile or a good depth of soil, or both. The design of the pond should include a variety of water depths including shallow margins. Every effort should be made to keep non-native plants and fish out of the ponds - in each case they should be removed without delay.

2.1.4 Connecting hedgerow

Summary

Integration of the connecting hedgerow into the 2001 version of the management plan was in order to recognise its significance as a feature in its own right and as a corridor connecting the two blocks of woodland. However, only relatively small sections of the hedge are in the ownership of the City Council. This has hampered progress on the hedge as liaison with the other owners, principally developers, has been slow. Restoration and sympathetic management of the connecting hedge should remain a fundamental part of the plan for the next 10-year period.

Prescriptions

- Lay hedgerow on rotation. No hedgelaying has been carried out on the hedge so far. Some lengths are suitable, as identified in the 2011 plan, particularly in Compartments 16 & 17. Ownership will need to be established and suitable approaches made before the task can go ahead. All lengths that are laid are likely to need substantial new planting as the existing hedge is widely spaced. It will also be advisable to give prior notice to homeowners who abut the hedge to establish an understanding of the process and its importance in maintaining the hedge in the long term.
- Remove non-native shrubs. Quite a lot of progress had been made already towards completing this task. Non-native shrubs still occur in some sections and these should be removed (subject to the landowners' consent). Where this leads to gaps in the hedge suitable replanting should take place (see below).

- Plant up gaps with native shrubs. There is scope to undertake new planting in the next 10-year period. This may take the form of planting associated with hedgelaying and removal of non-natives described above. There are also some more substantial gaps in the line of the hedge, in Compartments 15 & 17. It would be beneficial to reinstate these in order to restore the corridor function of the hedge.
- Retain veteran features on oaks and Develop tall grassland margins. These both involve liaison with those tasked with managing different sections of the hedge and its associated footways. The objectives of the 2011 plan still apply and these prescriptions should continue.

2.2 Survey, monitoring and research

2.2.1 *Summary*

The Management Plan includes a number of related objectives under the heading "To monitor key species and habitat condition in order to adapt future management". These include:

- To monitor all priority Biodiversity Action Plan, Derbyshire Red Data Book and locally significant species.
- To monitor the condition of the habitats in comparison with their favourable conservation status.
- To re-survey the invertebrate populations with particular reference to deadwood dependent groups.
- Modify management plan to accommodate revised list of key species.
- To encourage the use of the site for research and study by local universities, colleges and natural history groups.

These all have in common the need to enlist people with specialist knowledge of a particular area, which may not be available within the regular management group. Some progress has been made in this area since the original plan was written, partly from within the Friends' Group and partly by enlisting outside help:

- Two bird surveys have been carried out, in 2010 and 2012. A very successful bird nest box scheme has been run by the Friends' Group with a 3-year cycle of nest box cleaning and repair.
- Fungi surveys have been made on 2 occasions, in 2011 and 2013.
- A bat survey was undertaken in 2011 by a group member in conjunction with Derby University. A further bat watch was held in 2012.
- A moth watch was held in the wood in 2012 in conjunction with Derbyshire and Nottinghamshire Entomological Society (DANES)

Prescriptions

During the next 10-year period new initiatives should be sought in order to extend the amount of species recording and habitat monitoring that takes place in the wood.

- Liaise with local experts, societies, universities and natural history groups. This will be the key action in ensuring most of these objectives are met. The most helpful contacts are likely to be through Derbyshire Wildlife Trust (DWT), Derbyshire and Nottinghamshire Entomological Society (DANES), Derbyshire Ornithological Society (DOS) and departments at Derby University. In regard to species-recording the aim should be to at least review the status of the species listed in Table 2.2.2 of the Management Plan over the next 10 years. There should also be a separate initiative to survey deadwood invertebrates so that the next management plan review can make sure that any specific habitat requirements are being met.

New prescriptions

- Organise a system for recording species information and all records of management work. All sites will have a different approach to this, but the important thing is to make sure that all records are kept in a way that they can easily be found in future years. It can either be paper based or digital, but there should be one single location that holds all records for the reserve. It should encompass species records made by the management group as well as those received from outside groups. It should also aim to record all the management work that takes place in the wood each year. One important aspect for both types of record is to know exactly where it relates to on the site. A reference to the woodland compartment is a minimum and for more significant species records and management tasks a location map should be attached.
- Monitor the water table in order to detect long-term trends. This task will involve regular recording of the water table over a number of years in order to build up a picture of how it might be changing over time. The system should be designed to act as an early warning system if water levels are consistently declining. The aim is to at least maintain the established water level underlying the wood, though ideally it would be raised over time (see prescriptions under 2.1.1 above about letting the ditch system degrade). A series of dip wells or piezometers should be established across the wood and records taken at regular intervals. The initial set-up will require help and advice from a hydrology expert, after which the management group might be able to undertake the routine measurements.

2.3 To raise awareness of the nature conservation value and management of the site through formal and informal educational use.

2.3.1 *Summary*

The wood continues to be very well visited, there having been a significant increase in visitor activity during the Covid-19 pandemic. This makes the interpretation of the wildlife value and sensitivities of the site even more important, in order to ensure that visitors respect the woodland and to minimise any potential harm that might arise from such a high level of use. The Friends' Group have approached this on a range of fronts, making this site one of the best in the city in this regard. A very full programme of volunteer management tasks, lasting throughout the year, also helps greatly in fostering an understanding of the wood, not just for those involved but by giving visitors a chance to talk first hand to those involved in looking after the wood.

Prescriptions

- Promote the site through a range of informal events such as guided walks. Events have been organised at different times of year covering a range of aspects of wildlife and have been very popular. This should continue, with help brought in from available experts as well as other natural history groups in the city. Any opportunities for advertising these events should be pursued, in the press, local media and through the website and social media.
- Encourage use of the site by local schools. Direct involvement with school groups on the ground can be quite a commitment and is generally beyond the resources on the Friends' Group. A certain amount of use by local schools is happening anyway and this should be encouraged. It is sufficient just to liaise with local schools to let them know that educational activities in the wood are to be welcomed and give what support is possible, but leave the actual running of the activities to the school staff.
- Maintain the Nature Trail and supporting leaflet. The nature trail and leaflet have been kept up-to-date. The numbered posts have been maintained and replaced when necessary and the leaflet reprinted. There are also a series of related Trails within the wider area around the reserve. In addition, interpretative boards and notices at the entrances to the wood have been installed with help from the Oakwood Neighbourhood Board. As the woodland habitats are now stable, there should be little to do in the next 10-year period apart from maintenance. It may be worth re-evaluating the Nature Trail leaflet in another 5 years just to make sure it is still relevant and the features included can still be seen.
- Provide on-site interpretation and press releases prior to major management tasks. This prescription was originally put into the plan at a time when management tasks were not a regular occurrence to give people notice of work to be done in the wood. Now that the friends' Group are so active and management takes

place on a regular basis it has become a familiar site and is not a potential cause for alarm amongst the public. Given that access to the website and other interpretative material is available this specific prescription is no longer relevant.

- Maintain a community website for the wood. The Friends' Group manage a comprehensive website for the reserve covering its history, wildlife interests and details of events and projects that have taken place or are planned. It also links to features in the wider area surrounding the wood. This serves as a great resource both for introducing people to the wood for the first time and keeping anyone who is interested up-to-date.

2.4 Control public access and reduce destructive impacts

2.4.1 *Summary*

As noted above, the reserve has seen a significantly higher level of public pressure following the lockdown periods of the Covid-19 pandemic. The site has always been subject to a certain degree of impact and the potential for this has increased over the last 3 years. Fortunately this has largely been kept in check, apart from localised impacts such as to the pond and some of the bluebell areas. This has been through a combination of signage, encouraging people to use the main paths and reacting quickly when damage or undesirable activities are reported.

Prescriptions

- Maintain fences, kissing gates and chicanes around the site. This aspect of the site has been well managed over the period of the plan, with a substantial improvement of access provision over that time. The hedgelaying tasks, especially along the eastern boundary have further added to the security of the site. This has a general effect of encouraging respect for the site and deterring misuse. Keeping the hardware in good condition will be equally important over the next 10-year period. Particular attention will be needed in securing the northern boundary of the site against potential development of the adjacent land. This boundary is currently in a poor state of repair. It may be possible to increase the effectiveness of this boundary by planting a hedge along it, providing this can be done at a suitable distance from the overhanging woodland canopy.
- Reduce the network of small paths through the centre of the wood. This has been an ongoing issue for the span of the previous 2 management plans. Again the Covid-19 pandemic saw an increase in paths penetrating the centre of the wood. Substantial work has been done to upgrade the main circular path all the way around the wood and this now makes an attractive walk for the majority of visitors. Further work to discourage the minority from venturing into the more secluded parts of the reserve will probably be needed

year by year. Some judicious planting of 'hostile' shrubs, such as dog rose and hawthorn, may help discourage use of some of the paths, but this will be limited to situations where there is enough light coming through the woodland canopy to allow the plants to grow vigorously.

- Reduce the attractiveness of the wood to further vandalism. The Friends' Group have been quite successful in limiting the extent of vandalism in recent years. The key here as always is a swift response to make any damage good and remove any signs of vandalism before it attracts more. This will always be an ongoing need.
- Enforce the byelaws and patrol the wood at periods of peak pressure. Hopefully this is a last resort prescription, effective education and interpretation being the preferred antidote to halt any escalation in anti-social activity. In the current climate of general disregard for authority, wardening is something that needs to be approached carefully. If circumstances dictate that an authoritarian approach is needed this might best be coming from a recognised authority, be it the City Council or the Police.

3. 10-year work programme.

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