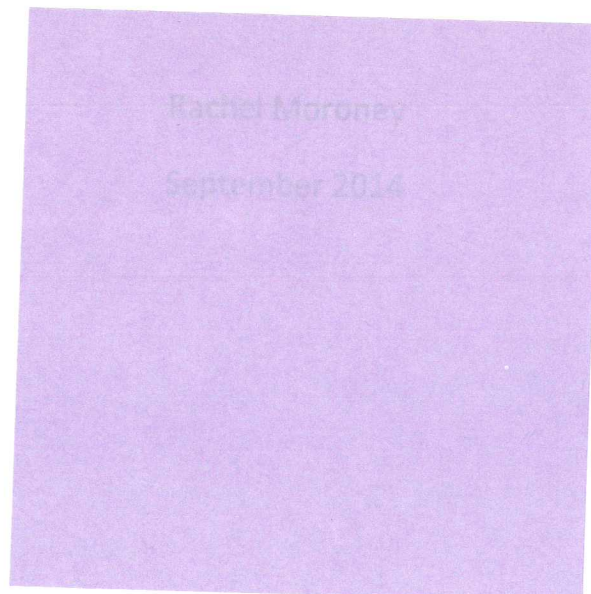




Maintenance Plans

Swanmore Parish Council



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Brook Meadow

1.1 Management objectives

- Maintain access at entrances and along path
- Maintain species diversity within the meadow
- Manage hedgerows surrounding the site

1.2 Formal path

The surface and edging boards of the gravel path that runs east to west across the site were all in good condition and currently do not require any maintenance. This path should be monitored annually, preferably after a period of rain, to check its condition. By checking the path after a period of rain you will be able to determine if there are any areas where water gathers. These areas may need topping up with extra surfacing material.



When monitoring the condition of the path surface also check for grass and other vegetation beginning to encroach onto the path. If they are then they can be scrapped back using a spade. This will help maintain the path in good condition and ensure that access is not restricted.

1.3 Site entrances

The entrances at either end of the formal path are in good condition and being kissing gates allow for users of all abilities to access the site. These gates should be checked annually to ensure they continue to remain in good condition and any repairs needed are carried out. The vegetation surrounding these entrances should be kept trimmed back in order that access is not restricted.

There are 2 wooden stiles in the hedgerow on the southern side of the site. The one on the western end also has some railway sleeper planks leading up to it; all of which is becoming over grown with brambles and other vegetation. The edge of the planks is not entirely visible and therefore could pose a trip hazard to users. It is recommended that the vegetation on the stile and adjacent planks is cut back to improve access and safety. This can be any time throughout the year and will need doing on an annual basis.



The meadow currently is cut annually in late summer. It is recommended that this regime is altered for a couple of years and reviewed again to see if species numbers have decreased, remained the same or increased.

It is recommended to either cut the meadow earlier in the late summer (by the end of July) or to have 2 cuts per year, one in early April and one in August. For either of these options it is important to remove the resulting arisings to prevent nutrient enrichment and further build up of dead vegetation. Depending on the method used for collecting the arisings it may or may not remove the build up of dead vegetation (thatch) at ground level. This may require an extra session of scarifying (raking) to remove the thatch. Depending on resources available in terms of finance or man power this could be achieved by mechanical or hand methods. Patches of bare ground will be created through this process which will allow seeds to reach the earth and germinate.

After 2 years of the altered management regime it is recommended that a species count of the meadow is conducted and compared with the list of species found in 2014. This will indicate if the altered regime has been beneficial. It is recommended that advice is sought after 2 years whether to return to the current management regime or to continue with the altered regime. Organisations such as Hampshire and Isle of Wight Wildlife Trust or Hampshire Biodiversity Information Centre should be able to give advice on this.

1.5 Tree Saplings within the Meadow

Several oak saplings were observed in the meadow, mainly around the area of the pylon, but more may be found throughout the meadow. The saplings are currently between 2 and 6 inches high. If these are allowed to grow into larger trees they will block out light to the meadow below and result in the ground flora dying off. It is recommended that these saplings are removed whilst they are small enough to be dug out and the roots removed. This can be done any time throughout the year.

There are half a dozen trees around the pylon consisting of blackthorn and oak. Currently these trees are less than 2 meters high and wide. It is likely that these trees, particularly the oak, will not be able to grow to full size as access to the pylon will need to be maintained. As the trees are small, this is not an immediate concern but rather in the future consideration should be given to keeping these trees trimmed to size that doesn't restrict access.



1.7 Hedge on northern boundary

The hedgerow on the northern boundary of the site is bordered by the formal footpath and a stream. This hedgerow is of mixed native species and is of a larger size than the one on the southern boundary. As it is larger and contains hedgerow trees it will provide a valuable habitat for wildlife and will likely have many birds nesting in it during the spring time. Any management should therefore take place during the late autumn and winter months to avoid disturbance to wildlife.

Towards the western end of the hedgerow the trees are larger. So of these are beginning to grow out towards the footpath which will eventually restrict access and any leaves falling on the path in the autumn could make it slippery. It is recommended that the branches are kept trimmed so that they don't encroach onto the path. If done on an annual basis then only small amounts will need trimming off of the branches and can be done by hand. This will cause less disturbance compared to more vigorous trimming on a less frequent basis.

Towards the eastern end of the hedgerow the plants consist more of lower growing species such as brambles, roses and hazel. The flowers and berries on the bramble and roses will provide a valuable food source for insects, butterflies, small mammals and birds as well as providing shelter. It is recommended that this mix of species is maintained and small amounts of trimming done during the late autumn and winter to cut back any branches that are beginning to grow over the footpath.

Currently the brambles and roses aren't affecting the hazel trees. However this should be monitored and if they are growing over the hazel trees and outcompeting them then they should be cut back. This should only need doing once every 2 to 3 years depending on how much they are cut back each time and how quickly they regrow.



1.10 Action Plan

Job	Suitable time of year	Frequency	To be completed by	Equipment needed
Monitor path surface to see if needs topping up	Any time of year. Best after a period of rainfall	Annually	Suitable for volunteers or grounds maintenance staff	Surfacing material, wheel barrow, rakes, shovels, vibrating plate
Remove encroaching grass from path	Any time of year	Annually	Suitable for volunteers or grounds maintenance staff	Spades
Check & clear site entrances	Any time of year	Twice a year	Suitable for volunteers or grounds maintenance staff	Loppers, secateurs
Keep stiles clear of vegetation	Any time of year	Annually	Suitable for volunteers or grounds maintenance staff	Loppers, secateurs, bow saws, spades
Implement new meadow mowing regime for 2 years	Late spring to autumn	Annually	Suitable for grounds maintenance staff or contractors	Tractor and mower
Remove thatch from meadow	After the meadow has been cut	Annually	Suitable for volunteers , grounds maintenance staff or contractors	Tractor and chain harrow Or rakes and wheel barrows
Monitor flora species in meadow & seek advice on future mowing regime	Summer months	One off task after 2 years of new mowing regime	Suitable for volunteers or grounds maintenance staff	Wildflower identification guides, notebook

2 Field adjacent to Car Park and Dew Pond

2.1 Management Objectives

- Manage hedgerows to maintain biodiversity
- Maintain summer grazing in grazed meadow
- Increase diversity in mown meadow
- Prevent the Dew Pond becoming overgrown

2.2 Hedge rows

The hedge row on the left hand side of the site (with your back to the road) has a diverse range of native hedge row plants. These are providing a valuable habitat and food source for wildlife. This hedgerow is up to 3 meters wide in places, with the edge adjacent to the field being trimmed to maintain access to the grazed meadow. Future trimming of this hedgerow should take place in late winter to allow the wildlife to make full use of the berries and if possible done once every 2 to 3 years as many species don't respond well to annual trimming. However, if access is compromised then annual trimming may need to be carried out. Mechanical trimming is a quick method which if done with the tractor driving slowly can be done without tearing the bark on the cut edges. An alternative, especially if only trimming once every 2 to 3 years, would be to do it by hand. This would be more time consuming and labour intensive but the length of the hedge row is short enough that a group of people could easily undertake this.

In a few places along this hedge row there are gappy areas where trees haven't survived. Most of these gappy areas are next to elder trees. The elder grows more quickly than other species so could of outcompeted neighbouring trees in the initial planting of the hedge row. These gaps can be replanted with new native hedgerow species, which will need protection, watering and weeding for the first couple of years. Keep adjacent established trees trimmed back around the newly planted ones to allow light and rain through. Planting of new trees can be done between November and February.



Many of the trees within the hedge row still have their spiral guards around the bases. The hedgerow is now at a stage where rabbit grazing is not an issue. It is therefore recommended that the spiral guards are removed to prevent them from restricting the growth of the trees.

Professional advice should be sought if altering the grazing regime is being considered.

Ragwort has been recorded within the grazed meadow area. This plant is poisonous to both cattle and horses. It is most palatable when it has finished flowering and is become dried out. The Ragwort Control Act 2003 imposes a duty of responsibility on landowners to effectively control this weed and prevent it from spreading to grazing land.

It is recommended that Ragwort is pulled from the grazed meadow and disposed of. The plants should be pulled in the summer before they have set seed. Where small amounts of Ragwort are present hand pulling is a viable option as this will remove many of the roots too. This will need to take place on an annual basis but will result in less Ragwort appearing each year.

It is important to dispose of the Ragwort properly as even in it dried wilted form it can still spread seed and be poisonous. Refer to Defra's publication 'Guidance on the disposal options for common ragwort' information about appropriate disposal.

2.4 Mown meadow

The mown meadow has a short sward height and less diverse species compared to the grazed meadow. This area could be made more diverse but any changes in management would need to consider the use of this area.

If the mown meadow is used by the community for activities such as football or picnics then it may need to continue to be mown frequently. If the area is predominantly used for activities such as walking then changes in the frequency of mowing could be made. By reducing the mowing frequency to once every 3 weeks and to a height of 2 inches you will allow other species to establish, flower and set seed. These could include various buttercup, birds-foot-trefoil and daisy species. The more species that are found within the area the more insects and butterflies it will support.

It is likely that other species will already be within the mown meadow area but currently do not get a chance to grow. A mowing regime of once every 3 weeks will allow these species to grow whilst still maintaining the area for people to access and for it to look tidy.

To increase the suitability of the area for wildflowers the cuttings should be removed from the area after mowing. This will prevent nutrient enrichment of the area and slow the growth of dominant grass species.

With reducing the frequency of mowing this area a saving in costs could be achieved.

Monitor the number of species in the mown meadow during the summer months for at least 2 years after a change in the mowing regime. This will indicate any changes that are taking place. Planting wildflower plug plants or sowing seed could be used if the monitoring is showing that species diversity is not increasing. This would be a costly option if doing over the entire mown meadow area but planting or sowing into half a dozen patches within the area would allow the establishment of more species which would spread to rest of the meadow.

The following species are suitable for a mowing regime of once every 3 weeks at a height of 2 inches

Traditionally the vegetation in dew ponds would have been controlled by the cattle, sheep or horses using them for drinking water. As this does not happen with this pond management by man will be needed.

Willow saplings are beginning to grow within and around the pond which if left could become dominant. These should be removed whilst they are still small to make the job easier and can be removed at any time of the year. Cut the saplings down to ground level with loppers or secateurs. This will need repeating annually as the willow saplings re-grow.

There is quite a lot of grass within the pond amongst the reeds and sedges. The grass could also become dominant if left unmanaged. Areas of grass within the pond could be pulled or cut by hand when the pond is dry at the end of the summer. It is important to do this management by hand and at the end of the summer to allow Froglets to move elsewhere. Only clear a maximum of one third of the grass from the pond at any one time. Place the cleared grass on the side of the pond for a couple of days to allow any creatures to return to the pond. In order to minimise any disturbance it is recommended that clearing of vegetation from the pond only takes place at a maximum of every 2 years.



It is likely the pond has a clay lining which holds the water. Any management of the pond needs to ensure that it doesn't pierce the lining. This is why it is advised to only cut the willow to ground level and to cut or pull the grass by hand. If when undertaking this management you cause disturbance to the clay lining you should be able to mould the clay to cover and cracks or holes.

every 3 weeks	Typically April to September		contractors	
Monitor species diversity in mown meadow	May to August	Annually	Suitable for volunteers or grounds maintenance staff	Wildflower and grass identification guide, notebook
If required add wildflower plug plants or seed to mown meadow	Plug plants after last frost Seed any time of year	One off task	Suitable for volunteers or grounds maintenance staff	Wildflower plug plants or seed, spades, forks, hand trowels, rakes
Trim willow saplings in dew pond	Any time of year	Annually	Suitable for volunteers or grounds maintenance staff	Loppers, secateurs
Remove up to one third of grass from dew pond	September	Maximum of once every 2 years	Suitable for volunteers or grounds maintenance staff	Shears

Trees up to 3 inch diameter at the base can be cut with one single upward curving cut at the base using a bow saw. For larger trees, up to 8 inch base diameter, a felling cut should be used. Start by cutting a notch (triangle) out of the front of the tree. The front of the tree is facing the direction in which you want the tree to fall. This notch should be between one quarter and one third of the width of the tree. The final cut comes from the back of the tree and meets the notch about one third of the way up. You are looking for the remaining stump to be a couple of inches above ground level. Only basic information has been given here on how to fell trees and therefore only competent workers should undertake this. Further advice and training should be sought if workers undertaking this are doing so for the first time.

Thinning of the Holly should take place in late autumn and winter, from October to March.

To enable more light onto the woodland floor and path the lower branches of the Holly trees can be removed; this also helps prevent the lower branches touching the ground and rooting, forming new trees. This should be done between June and December. Never prune during the early growing season of February to May as this is when the sap is rising fast. If you are pruning between June and September it is worth checking the trees for any nesting birds as many species could be having a second brood during this time.

Branches up to 1 inch diameter can be cut with one cut using secateurs, loppers or pruning saws. For branches over 1 inch diameter use a 3 cut process to avoid the weight of the branch ripping the bark before you have completed the cut.

If using the 3 cut process make the first cut about one third of the way through the branch from the bottom. This cut should be done a couple of inches away from the main stem. The second cut done from the top side of the branch severs it all the way through. This is done on the opposite side of the first cut from the main stem. A stump is left which your third cut is used to cut this almost flush with the main stem.

It is important not to cut the branch too close as this can damage the main stem. Similarly leaving a 'coat peg' can allow rot to set in.

3.3 Coppicing hazel and other understory trees

There are a few hazel trees in the woodland as well as some small hawthorn. Most of these trees appear to be of a similar age and size which suggests they have not been coppiced. To introduce a greater diversity within the age structure of these trees a coppicing regime should be developed.

It would be recommended to split the wood into 5 compartments, known as coppice coups. All of the hazel and other understory trees within the coup can be coppiced in the same year, between October and February. Two years later the next door coup is coppiced. This results in each tree being coppiced on a 10 year rotation as well as meaning that the amount of work involved each time is manageable.

them after periods of rainfall. New gravel can easily be added to these areas to prevent water from collecting there.

The edging boards should be monitored annually to check that none have become broken or rotten. Any that are should be replaced with new boards to maintain the integrity of the path.

3.5 Increase the amount of deadwood

At present there is not much deadwood within the woodland so it would be recommended to increase this by ensuring that the majority of timber taken down within the woodland is not removed from site. Deadwood provides valuable habitat for lichens, fungi, insects, birds and small mammals.

Deadwood can either be in the form of hanging deadwood, where a tree or branch has fallen and then become held up by surrounding trees or deadwood that is on the woodland floor. Both are valuable and ideally a mixture of the 2 should be left within the woodland.

You will need to consider the safety of visitors and surrounding houses when leaving hanging deadwood in the woodland. If the hanging deadwood is not going to fall on the paths or into neighbouring gardens/houses then it can be left in situ. If, however, it could cause damage to people or property should it fall then it would be recommended to take it down and lay on the woodland floor.

For small pieces of hanging deadwood that are already near the ground it may be possible for volunteers to take this down. Safety precautions, such as wearing a safety helmet, would be needed. For larger pieces of hanging deadwood an experienced worker should be used.

Deadwood that is in the form of a fallen mature tree should be left lying on the woodland floor and only cut up if it is blocking access paths or drainage channels.

Smaller pieces of deadwood, such as branches, could be gathered up and stacked to form habitat piles. This is a job that could be at the end of each winter by local school or scout groups.

3.6 Ground flora

During the time of the Hampshire and Isle of Wight Wildlife Trust survey in August 2014 and The Conservation Volunteers visit during September 2014 there was not much ground flora within the woodland. This could partly be due to the time of year and more may have been seen during the spring.

Large patches of the woodland floor are covered by brambles or ivy. Both of these species are valuable for wildlife providing both a food source and shelter. It would be recommended to maintain the amounts of bramble and ivy to their current levels so that there are areas where other ground flora species such as primrose, bluebell and foxglove can grow.

It would be recommended to clear patches of ivy and brambles that are near to the path. Two main benefits of this are that it keeps the path clear enabling ease of access and it will create areas of



3.8 Seasonal ponds and drainage channels

The woodland has a network of seasonal ponds and drainage channels which run into Swanmore Pond. During The Conservation Volunteers visit in September 2014 both of the seasonal ponds were damp with one having a small amount of water in it. This suggests that these areas remain wet or at least damp throughout the year. The drainage channels dry suggesting that water only flows through them after periods of prolonged rainfall and when the seasonal ponds within the woodland can't hold any further water. This network of ponds and channels move water out of the woodland preventing it from flooding.

Some of the drainage channels had recently been cleared of debris and silt. They should continue to be monitored on an annual basis and cleared again if becoming blocked.



Other drainage channels showed no evidence of being cleared. One channel runs under a section of boardwalk on the path. The section of the channel under the board walk is extremely silted up with leaf litter and soil, which will prevent future rain being able to drain through this channel and could result in the path flooding. It is recommended that this channel, and any others that may be silted up, are cleared. This can be done at any time of the year but would be completed most easily when the channels are dry.

3.10 Action Plan

Job	Suitable time of year	Frequency	To be completed by	Equipment needed
Remove Holly saplings	Any time of year	Annually	Suitable for volunteers or grounds maintenance staff	Secateurs, loppers, forks
Selectively thin Holly trees	October to end of February	Initial thinning a one off task. Review the amount of Holly every 5 years and thin small amounts if required.	Holly with a base diameter up to 8 inches suitable for volunteers or grounds maintenance staff Holly with a base diameter over 8 inches suitable for grounds maintenance staff or contractors	Bow saws, pruning saws, loppers, safety helmets, chain saw (only to be used by qualified operatives)
Remove lower branches off some Holly (those next to the path)	October to end of February	Initial removal a one off task. Trim any regrowth annually.	Suitable for volunteers or grounds maintenance staff	Loppers, pruning saw
Establish coppicing regime	October to end of February	One compartment every 2 years	Suitable for volunteers or grounds maintenance staff	Loppers, bow saws, pruning saws, safety helmets
Plant new understory trees	November to end of February	One off task	Suitable for school/youth groups, volunteers or	Trees, guards, stakes, spades

if required	Spring and summer months	monitoring		
Clear drainage channels of silt and debris	Spring and summer months	Annually		Loppers, bow saw, spade, fork, rake
Clear litter from seasonal ponds and keep drainage channel entrances clear of debris	Any time of year	Monthly		Litter sacks, gloves
Remove garden escapees	Any time of year	Initial removal is a one off task. Monitor for regrowth or new plants annually.	Small trees being cut by hand tools suitable for volunteers or grounds maintenance staff. Larger trees, use of chain saws, treatment with pesticides suitable for contractors with appropriate qualifications	Loppers, bow saws, safety helmets, chain saws, pesticide

An option that would have an immediate effect on the amount of Duckweed present would be to scrape it off of the pond surface using a rake or board. The can subsequently be left to compost down in an area where the nutrients can't return to the pond or any other water courses.

This is a job that can be done by volunteers and would need repeating during the spring and summer months. The benefits of this are that nutrients held within the Duckweed are being removed from the pond and areas of open water are being created which allow light and gases to enter the water.

This will not prevent the Duckweed from growing but does offer a cost effective way of controlling it. It would not be recommended to remove the entire area of Duckweed as it does support creatures such as Duckweed Weevil, China-mark Moth and Pond Springtail.

The amount of Duckweed could be maintained to between 50% and 75% coverage of the pond surface.

Other control methods include maintaining or adding plants that will soak up the nutrients in the pond. Submerged aquatic plants, such as curled pondweed, the water star-worts, rigid hornwort, the water-crowfoots and the water-millfoils as well as the emergent water forget-me-not will help to take up nutrients from the water.

The same issues and control methods can be applied to Water Fern.

4.3 Outflow channel

The outflow channel on the south west corner of the pond allows water to leave the pond and thus prevent the pond from flooding. In turn the water entering the pond is draining from the woodland and preventing the woodland from flooding.

It is important to keep the outflow channel clear so that water can move freely. Debris (branches, litter) and overgrowing vegetation need to be removed from the channel. This can be done throughout the year by volunteers and is especially important to check at the beginning of the autumn before prolonged periods of heavy rain are forecast.

Large amounts of fallen leaves within the channel can cause minor blockages as well as causing the channel to become silted up when they decompose. Monitor the channel to see if it is deep enough to allow excess water to run out of the pond. If the pond begins overflowing then the channel will need dredging out. When the channel is dry, at any point throughout the year, it can be dug out to deepen it and allow a greater volume of water to flow. This work can be done via volunteers and hand tools.

An area for removed sediment would need to be identified where it is not going to damage other plants or habitats.

Similar methods should be employed to keeping the inflow channel clear so that water does not become backed up in the woodland.

4.5 Ground behind benches

When The Conservation Volunteers visited here at the beginning of September the ground was fairly damp even though there had not been any significant recent rainfall. This would suggest that this area remains damp during the year. At present the ground is covered with grass, nettles, ivy and other plants that would be seen as weeds. The vegetation in this area was not tall, about 15 to 20cm high, which suggests that a combination of shade from surrounding trees and management, possibly in the form of strimming, keeps the vegetation short.

A greater floristic diversity could be added to this area which would provide more habitat for wildlife and look more appealing for visitors. Plants suited to the damp soil conditions and shady aspect should be chosen. Also plants that do not grow too vigorously and need lots of management would be most appropriate.



Any plants that are naturally found in woodland edge settings would be suitable.

A mixture of the following species would be suitable and provide interest throughout the year.

- Agrimonia eupatoria – Common Agrimony
- Alliaria petiolata – Garlic Mustard
- Allium ursinum – Ramsons/ Wild Garlic
- Angelica sylvestris – Wild Angelica
- Campanula trachelium – Nettle Leaved Bellflower
- Digitalis purpurea – Wild Foxglove
- Filipendula ulmaria – Meadowsweet
- Galium mollugo – Hedge Bedstraw
- Geranium robertianum – Herb Robert
- Geum urbanum – Wood Avens
- Hyacinthoides non-scripta – English Bluebell
- Hypericum hirsutum – Hairy St. John's Wort
- Primula vulgaris – Wild Primrose
- Prunella vulgaris – Self Heal
- Silene dioica – Red Champion
- Stachys officinalis – Betony
- Stachys sylvatica – Hedge Woundwort
- Teucrium scorodonia – Wood Sage
- Torilis japonica – Upright Hedge Parsley

the area. It would be recommended to manage the brambles in the late autumn after the berries have finished and before any creatures may use them for hibernation.

At present the understory trees around the pond are not too large and therefore not creating much shade on the pond. These trees could be coppiced on a cycle of every 8 to 10 years to prevent them from growing into mature trees. This work can be done by hand during the winter months.

		frequently			
Deepen outflow channel	When channel is dry – anytime between spring and end of summer	Clear when debris builds up Every year Monitor water levels in pond and channel biannually and after periods of prolonged rainfall Deepen channel if monitoring deems necessary	Suitable for volunteers or grounds maintenance staff	Spades and forks	
Clear entrance path of grass and ivy	Any time of year	Annually	Suitable for volunteers or grounds maintenance staff	Hand trowels, hand forks, secateurs	
Clear brambles and leaves from bridge and railings	Any time of year	Annually	Suitable for volunteers or grounds maintenance staff	Loppers, spade, rake	
Add plant diversity to the ground area by the benches	Any time of year	One off task to establish the area May need cutting every other year to prevent dead plant material building up	Suitable for volunteers or grounds maintenance staff	Black plastic or old carpet, Forks, rakes, mower or slasher.	
Manage growth of vegetation & trees around	Late autumn for tree saplings and brambles	Every 2 to 3 years for the tree saplings	Suitable for volunteers or grounds maintenance staff	Secateurs, loppers, bowsaws	

5 Balancing pond

5.1 Management objectives

- Coppice willow
- Monitor and cut back branches overhanging the footpath if required
- Prevent nettles and brambles becoming dominant
- Keep area free of litter

5.2 Coppice the willow

The pond is surrounded by willow trees with several also found within the centre of the pond. The trees currently obscure most of the pond from view and create much shade on the pond. By coppicing some of the willow trees more light would be allowed into the pond which will allow a greater variety of species to grow. Another benefit of coppicing some of the willow along the footpath would be to allow the public to view the pond as well as discouraging any anti social behaviour as it is more open.

As the willows in and around the balancing pond don't appear to have been coppiced for a long time it would be beneficial to coppice several of them in the first instance. Subsequent coppicing could be done on fewer trees.



Select a maximum of one third of the willow trees along the footpath and maximum of half within the pond to be coppiced. Also select up to one third of the trees around the remaining sides of the pond for coppicing. The trees can be coppiced between October to February. As the trees haven't been coppiced for a long time they are large and therefore would not be suitable for untrained people to coppice. For this initial coppicing it would be best done by trained grounds maintenance staff or contractors.

The trunks and branches that have been coppiced could either be cut into lengths of 4 to 6 foot and stacked to form habitat piles or chipped into bark chip, which could be used as a surface dressing on footpaths or given to the local community for use as mulch in their gardens.

Subsequent coppicing will consist of 2 elements – 1, to continue to coppice the large willow trees using trained workers and 2, to coppice the regrowth of recently coppiced willows.

Trimming the nettles and brambles should be done between October and January to allow time for wildlife to utilise the berries and nectar in the autumn and to prevent disturbance during the spring breeding season. It is likely that amphibians such as frogs will be using patches of brambles and other surrounding undergrowth to hibernate in during the winter months. It is therefore recommended that small amounts of trimming are done on an annual basis as this will cause less disturbance compared to greater clearance carried out less frequently.

5.5 Keep area free of litter

During The Conservation Volunteers visit in September 2014 a small amount of litter was observed in the pond. Litter within and around the pond should be cleared so that it doesn't harm wildlife, contribute to flooding or look unsightly to the public. The litter can be cleared throughout the year and regular monitoring should take place. Access into the pond to clear pieces of litter will be made easier when the willow trees are coppiced.

5.6 Broken fence

On the south east corner of the pond there is a small piece of post and rail fencing. The rails have come off and some of the posts are broken. Sharp edges on the wood and any nails that are sticking out could cause injury to people or wildlife. Therefore this fence should either be repaired or removed. This can be done any time of year by volunteers or grounds maintenance staff.



6 Marshes Meadow

6.1 Management Objectives

- Remove encroaching scrub
- Keep entrances and paths accessible
- Maintain species diversity within the meadow
- Reduce tree numbers in the plantation areas

6.2 Clear scrub from meadow

In both Marshes Meadow 1 and 2 there are areas where scrub is encroaching into the meadow. Much of this scrub consists of oak tree saplings ranging in size from a couple of inches to 5 foot tall. If these areas of scrub are allowed to remain they will increase in size, both height and area, block out light and moisture to the grass below and eventually alter the habitat into woodland. Whilst woodland is a valuable habitat there is more in the surrounding landscape. Therefore it is important to retain Marshes Meadow as an open grassland and meadow habitat. The areas that are affected by scrub encroachment are Marshes Meadow 1, areas 2, 3 and 4; and Marshes Meadow 2, areas 2 and 3 (The numbering of these areas follows the plans in the document Survey Summary, Hampshire Biodiversity Information Centre).



Whilst the individual trees within the scrub remain small it is possible and practical to remove them by hand using bow saws. Once the trees begin to get bigger it is likely a chainsaw, operated by a trained person, will be required to cut them down. As the aim is to remove the trees and for them not to grow back they can be removed at any time throughout the year. Normally tree work doesn't take place during the growing season as it causes stress to the trees; however, in this case this is not an issue. If cutting any of these trees down during the spring and summer months a visual check of each tree should be completed to check there are no active bird nests in them. It is unlikely that there will be in the smaller trees which are not immediately next to larger trees or hedges.

The trees will need to be cut down to ground level so that stumps do not pose a trip hazard and so that vehicles used for other site management are not restricted. The stumps will re-grow so a decision on the management of this will need to be taken. The 2 options are to cut the regrowth by hand on an annual basis or to treat the stumps with glyphosate.



6.4 Brambles adjacent to paths

The formal paths at the Foxcombe Close end of the site are adjoined by brambles which are trimmed in line with the edge of the path. On some sections there are brambles on both sides of the path which give a sense of the path feeling quite enclosed. By only trimming the brambles back in line with the edge of the path they will need trimming on a regular basis as a little growth will end up over the path. If the brambles are cut back further the time frame in which they'll need cutting again will be increased. The brambles can be cut back between 1 and 3 meters from the edge of the path. To create a natural look a scalloped edge can be created; where the brambles are cut back by 1 meter in one area, slowly increasing to 3 meters and then back to 1 meter.



As the brambles are forming a dense patch it is likely birds will use them for nesting in. Therefore the initial cutting back should be done between October and February. For future management of the brambles they can either be trimmed by a small amount annually to maintain their newly created size or they can be left to grow back in line with the path and then cut back further again.

6.5 Maintain the steps

The steps that form part of the formal footpath appear to be well used by visitors and therefore are in need of some maintenance to keep them accessible. The wooden steps and the boards appear in good condition however the surface does require some work. The grass is encroaching onto the surface of the path which will eventually make the path narrower. It is recommended that the grass is scrapped off of the steps on an annual basis. This will help prolong the life span of the edging boards too.

6.8 Alter the management of the meadow areas

The Hampshire Biodiversity information Centre survey in August 2013 found that both of the meadow areas are becoming coarse and scrubby. This is due to both under and over management through mowing. The number of grassland indicator species has declined from 7 to 3 in Marshes Meadow 1, indicating that the grasses and scrub are becoming dominant.

Hampshire Biodiversity Information Centre has recommended that the meadows in Marshes Meadow 1 and Marshes Meadow 2 are all mown 3 times a year to help reduce the vigour of the grass. After the meadows have been cut it is important to remove the arisings to prevent nutrient enrichment of the soil.

The mowing should take place early in the growing season to knock back the initial grass growth around early April. Cut the meadow to a minimum height of 2 to 3 inches as this should mean that only the grass is cut and not the wildflowers. The second and third cuts should take place in early July and late August/early September once any wildflowers have set seed.

Sources on the internet suggest cutting a meadow 3 times year is done in the first year of the meadow's establishment after which time the mowing regime changes to once or twice a year. However the meadows in Marshes Meadows are already established and it would be recommend that cutting 3 times a year is only undertaken for a maximum of 2 years. Cutting for 3 times a year for any longer than 2 years will result in the wildflowers not being able to set seed and a reduction in the seed bank.

After 2 years the mowing regime should be reduced to 2 cuts a year. The first cut should be in early April to knock back the initial grass growth. The second cut should be at the end of August/early September when the wildflowers have set seed. After each cut the arisings should be removed from the meadow to prevent nutrient enrichment of the soil. If when doing the second cut of the year the seeds have are still present in the seed heads then the arisings can be left in situ for up to a week. This will give time for the seed heads to dry out. When the arisings are collected they can be turned over before collection to allow the seeds to fall out.

Mowing the meadow twice a year should be undertaken for 2 years and then reviewed. It is recommended that the meadow is monitored each year to gauge if the number of wildflower species is increasing, staying the same or decreasing. After these 2 years advice should be sought as to what is the most appropriate mowing regime to continue with; either once a year or twice a year.

6.9 Reduce the trees in the plantation areas

There are 2 areas where trees have been planted within the meadow. The trees within these areas are all of the same age and are closely planted making for areas that are dark, inaccessible and trees that will not be able to grow to their full natural potential. The first of these plantation areas is between Marshes Meadow 1 and Marshes Meadow 2. This area is of mixed native species and is planted as close as 2 meters apart. This is too close for final spacing and the trees are already making the formal footpath that runs next to the area feel dark.

6.11 Action Plan

Job	Suitable time of year	Frequency	To be completed by	Equipment needed
Remove scrub from meadows	Any time of year	Initially a one of task. Will require monitoring to check for new tree growth	Suitable for volunteers or grounds maintenance staff	Loppers, bow saws, spades, chainsaw
Treat stumps	Within a week of cutting the trees	One off task	Qualified operative	Spot treating equipment
Clear brambles around site entrances	Any time of year	Annually	Suitable for volunteers or grounds maintenance staff	Loppers, secateurs
Cut trees down near Foxcombe Close entrance	October to February	One off task. Regrowth cut annually if stumps were not treated initially	Suitable for volunteers or grounds maintenance staff	Loppers, secateurs, bow saws
Clear brambles adjacent to formal paths	October to February	Annually	Suitable for volunteers or grounds maintenance staff	Loppers, secateurs
Clear grass off steps & top up surface material	Any time of year	Annually	Suitable for volunteers or grounds maintenance staff	Spades, wheel barrows, shovels, surface materials

MARSH'S MEADOWS 1



- AREA 1 - MATURE GRASSLAND
- AREA 2 - MATURE BUSH PASTURE
- AREA 3 - CYPERUS COMMUNITY
- AREA 4 - WETLAND SCIRUS
- AREA 5 - BROAD-LEAVED PLANTATION, IMMATURE


(1) - PHOTO POINT



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Marsh's Meadow 1
SU57401650

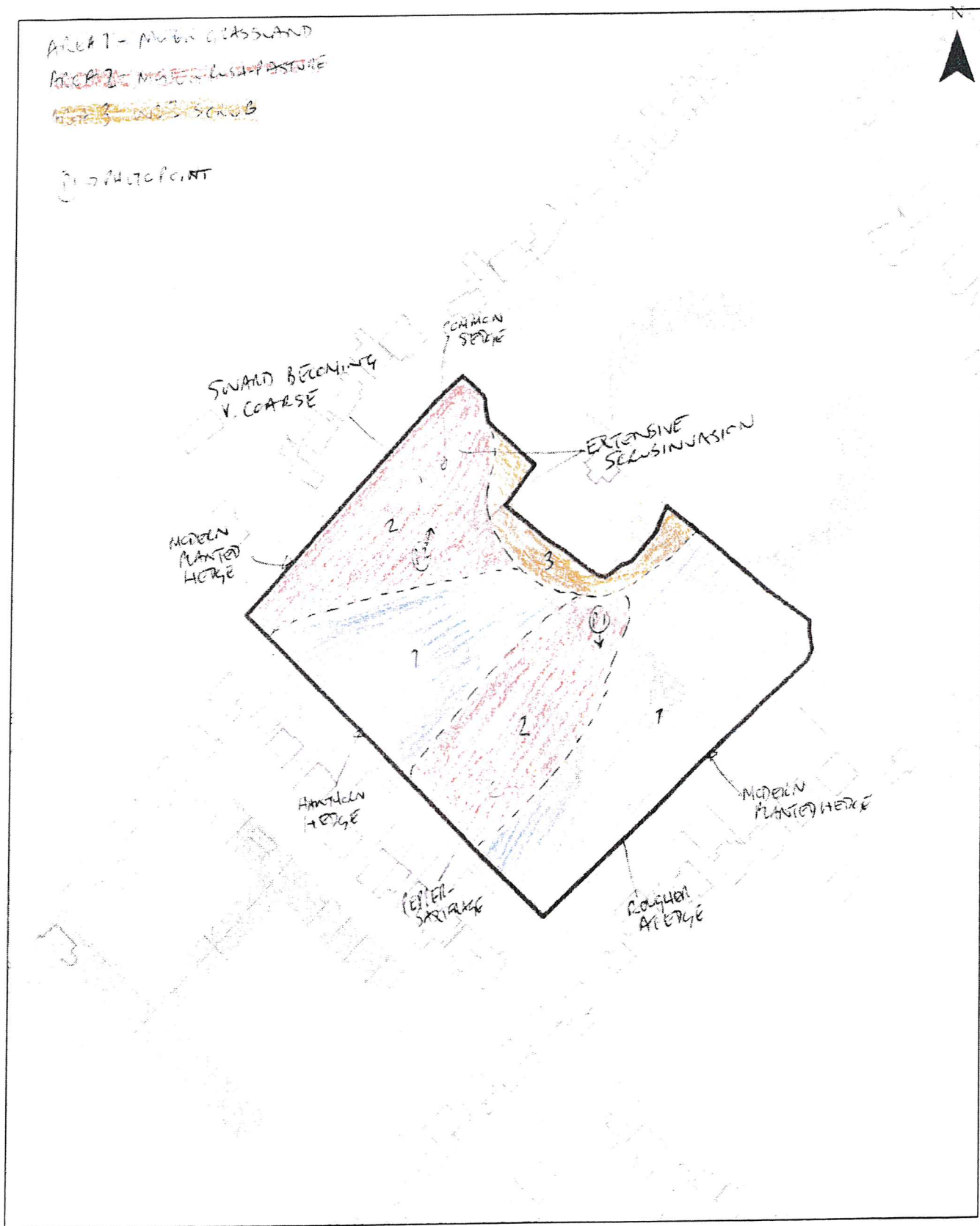
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MARSH'S MEADOWS 2



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