



Nottinghamshire Wildlife Trust

10 September 2019

Habitat Management Advice for Green Southwell

I am very supportive of the group's plans to maximise wildlife opportunities within Southwell's green spaces. I have the following suggestions.

Froggatts Field



I recommend cutting in late August or even early September if ground conditions allow. This will allow native herbaceous species in the sward to flower and set seed. This in turn will provide food for butterflies and other insects. Arisings (cuttings) should be left to dry for 24-48 hours to allow invertebrates to escape, before being removed from site or placed in an area of low botanical interest such as under the adjacent hedgerow. The arisings should be collected and removed to avoid an increase in soil fertility. This will encourage a greater diversity of plant species. High nutrient levels benefit a few nitrogen hungry species that then out compete other plants in the meadow. You may find that following a cut there will be a flush of new growth, particularly vigorous grasses. A cut in October or in late March can reduce the vigour of grasses reducing their competitiveness.

Cutting the whole of the meadow in one go can take away all the food and shelter required by invertebrates and small mammals. So you may wish to consider cutting the main area but leaving areas uncut around the edge of the meadow for them. The best way to do this is to cut the edges of your

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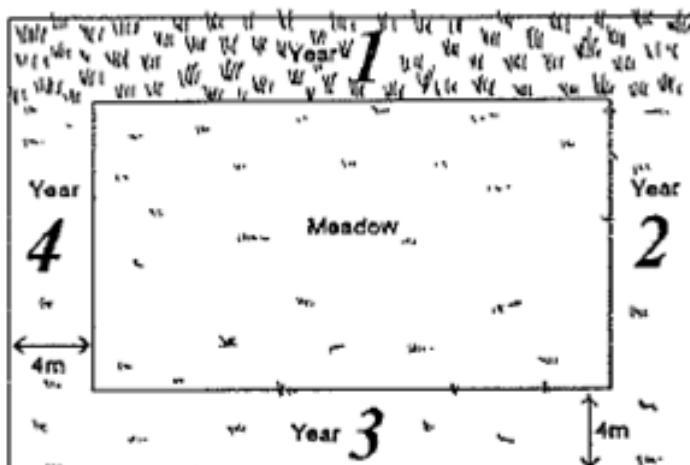
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grassland on rotation. Leave a different side uncut each year. A four metre margin is ideal but will depend on the overall size of the meadow.



I have spoken to Rob Johnson at the Biological and Geological Records Centre (NBGRC) and he confirmed that the site has not been designated a Local Wildlife Site (LWS) because it is relatively species poor. However, this means that there may be an opportunity to increase its botanical richness by introducing plug plants that are suitable for the soil type and characteristic of the area. Plug planting could be carried out by Friends of Potwell Dyke and local school children. The apple trees within the field look like they are struggling. Cutting the grassland around them may be beneficial by reducing competition.

Higgins Mead

There is an existing area of reed-swamp. This area is likely to have value for wildlife but could be enhanced by removing areas of vegetation to create patches of open water. Willow is establishing and this should not be allowed to become dominant.

The adjacent grassland is botanically poor. The following steps are useful in planning the creation of larger wildflower meadows:

- Contact the Potwell Dyke Grasslands Action Group (PODGAG) to discuss taking green hay from their site and using Higgins Mead as a receptor site. Use natural seeding techniques such as green hay and brush harvested seed collected from a local meadow conserves the character and identity of our wildflower meadows.
- In July and August take a cut of hay from Higgins Mead, remove the bales. The aim should be to get the grass as short as possible.
- Prepare the ground by using a Ryetech, power harrow or tine harrow to open up as much bare ground as possible – aim for over 50% bare earth.



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- The next day, collect the green hay or brush harvested seed and scatter on the prepared ground. Use rollers to push the seed into the soil.
- Leave the meadow alone from March until the late summer hay-cut (mid-July-September), allowing flowers to set their seeds.

The number and diversity of wildflowers will increase over time. All you need to do is follow an annual cycle of late summer hay-cut followed by aftermath grazing with livestock until late winter if possible or mow the site and remove the arisings.

Alternatively, the ground could be prepared as above and a suitable wildflower seed mixture appropriate to the soils of this part of the county could be sown.



How to grow a wildflower meadow in your garden

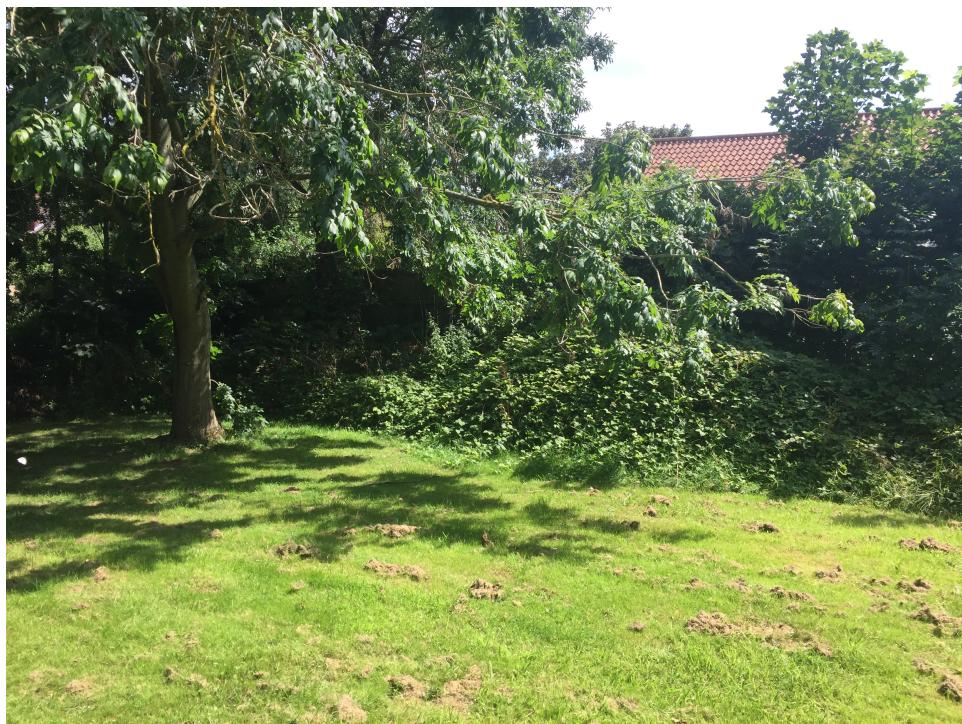
[https://plantlife.love-wildflowers.org.uk/wildflower_garden/
how_to_grow_a_wildflower_meadow/](https://plantlife.love-wildflowers.org.uk/wildflower_garden/how_to_grow_a_wildflower_meadow/)

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Little Burgage



Restore the south-west boundary hedgerow by plugging gaps with a range of native species. This should be undertaken in the spring but avoid periods of potentially frosty weather. If the remaining shrubs are casting shade, I recommend cutting these back to give the new plants a better chance of establishment. Manage to a height and width of around 2m x 2m. Ideally, hedgerows should be cut during January-February to allow over wintering thrushes and blackbirds to take advantage of the berry resource. The following shrubs are characteristic of the landscape character area; blackthorn *Prunus spinosa*, hawthorn *Crataegus monogyna*, holly *Ilex aquifolium* and hazel *Corylus avellana*, rose *Rosa canina*, common buckthorn *Rhamnus cathartica* and wild privet *Ligustrum ovalifolium*. Ideally, the plants should be of local provenance and of 45-60cm in height. Plant at a density of eight plants per/m using a staggered double row with about 25cm between plants in the row and 20-30cm between rows. Plant groups of the same species together to reduce the risk of less competitive species being crowded out by more competitive adjacent plants. Planting should be carried out in good weather conditions between October and March. Growth alongside plants should be strimmed initially, to reduce competition. I would recommend well-rotted bark chippings to suppress competition and retain moisture to allow the plants to establish successfully. Do not use tree guards unless rabbits are likely to be present.

I suggest high pruning semi-mature trees where they are creating deep shade. This will help the establishment of a more diverse ground flora. The botanical interest could be enhanced by introducing plug plants of species that are tolerant of shade or partial shade:



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<https://www.naturescape.co.uk/product-category/wildflower-bulbs/wildflower-bulbs-in-the-green-spring-planting/>

Ivy is a native evergreen climber that has an outstanding value for birds and other wildlife. It is not parasitic, only using the tree for support, nor harmful to healthy trees. There should rarely be any reason for removing it from trees. If ivy encroaches into the tree canopy it can act like a sail and cause branches to break but the resulting dead wood and cavities provide additional habitat and would be a part of semi-natural woodland. Ivy provides nesting opportunities for spotted flycatcher, hawfinch, robin and wren. Its abundant berries ripen in late winter, which is valuable to thrushes when other food can be scarce. It flowers in the autumn, when few other species do, is rich in nectar and attracts many late flying insects, which are valuable prey for insectivorous birds. Dense ivy can also provide roosting sites for bats. However, where ivy is dominating the ground layer it will prevent establishment of other woodland plants and therefore it should be removed by hand. This is a labour intensive method but is preferable to using chemicals that could have a negative impact on other flora. I fully accept that in public areas falling branches are a hazard. If you wish to prevent ivy reaching the canopy and potentially smothering trees, I recommend cutting at the top rather than the base to maintain it on the trunk. The latter strategy would kill the plant.

We noted that pruning of boundary trees has been undertaken. The brash was left in situ. I suggest using the brash to create a habitat stack within the tree-line.



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Habitat stacks provide habitat for invertebrates and shelter for a variety of wildlife, including hedgehogs. A good example can be seen below.



As part of your campaign to encourage residents to manage their gardens with wildlife in mind you could suggest that they create hedgehog highways. The Hedgehog Street website states '*We now know that one of the main reasons why hedgehogs are declining in Britain is because our fences and walls are becoming more and more secure, reducing the amount of land available to them.*'

<https://www.hedgehogstreet.org/>

Wildlife Area off Farthingate Close

This area will benefit from a fresh approach to management as it does not seem to be reaching its wildlife potential currently. There is a significant amount of bare ground. It is noticeable that thistles are establishing and if not controlled they could have a detrimental impact on the grassland. They should be hand pulled or topped before they set seed. Bare areas should be seeded with an appropriate mix for the conditions. This mix should comprise 80% grasses and 20% broadleaved plants. Alternatively, plug plants offer an effective means of enhancing grassland. Plug plants appropriate to the area can be sourced from Naturescape at Langar, www.naturescape.co.uk Tel: 01949 860592. Using plants rather than seeds is reliable, offers total control over planting arrangement and flowering normally starts within the first season. Plants may be used both to enrich the existing flora and in conjunction with seed on bare sites. Typical wild flower planting densities range from 6/m² to 10/m². Examples of appropriate broad-leaved plants include yellow rattle *Rhinanthus minor*, common knapweed *Centaurea Nigra* and ox-eye daisy *Leucanthemum vulgare*. Given the present conditions in this area, I suggest cutting all of the main area of meadow and removing the arisings in late August or

early September. Two boundaries of the site comprise trees, shrubs and grassland. I suggest using the illustration included in the 'Linear Habitats' section below as a guide to the structure of the boundaries. Occasional scrub management should be undertaken in order to maintain the current area of grassland and prevent it from encroaching into the central meadow area. In addition, I suggest removing lower limbs from a couple of trees on the south-eastern boundary to allow more light to reach the ground layer in order to increase the area of grassland.

General Advice

Linear Habitats

The footpaths that we walked along are valuable wildlife habitats in their own right and also act as wildlife corridors that connect with gardens and other green spaces. Below is an illustration of an ideal structure for the corridor. It provides a diverse range of ecological niches that comprises ground flora, dense scrub and taller trees.



Ideally, a wildlife corridor should reflect and compliment the areas of habitat that it is linking. The illustration above depicts a simple example of a wildlife corridor that would provide good connectivity between areas of woodland or grassland. The corridor would have to be managed to maintain this structure.

Dead Wood Habitat

Every effort should be made to increase amounts of standing and fallen deadwood where it is considered safe to do so. The following provides some useful background information on the importance of deadwood:

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"All forms of deadwood are valuable for invertebrates, and the more varied the deadwood resource the better. Deadwood on trees is overwhelmingly more valuable than deadwood on the ground, and large pieces of deadwood are more valuable than small pieces. Good deadwood sites are characterised by trees living into old age, dying natural deaths, and being left." (Kirby 1998).



Avoid impacting on the ground layer where there is known botanical interest. Standing dead wood provides excellent habitat for invertebrates and foraging and nesting habitat for woodpeckers and nuthatch.

Value of Nettles for Wildlife

Stinging nettles support more than 40 kinds of insects, for whom the sting can form a protective shield against grazing animals. Many nettle patches hold overwintering insects which swarm around fresh spring nettles and provide early food for ladybirds. These same aphids are eaten by blue tits and other woodland birds. In late summer the seeds produced are food for many seed-eating birds, such as house sparrows, chaffinches, and bullfinches. Nettles are also a magnet for other insect-eaters like hedgehogs, shrews, frogs and toads, at all times of year. Certain moths like nettles, as do many of the UK's most colourful and best known butterflies, such as the Small Tortoiseshell and Peacock butterflies. Their larvae feed in large groups in silken tents at the top of the nettle stems. Nettles are often regarded as a weed, and are removed as soon as they appear, but they are excellent for many different types of garden wildlife.



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Interpretation

It is important to provide interpretation and engage with the local community to get the message across that sites are not being neglected; it is being managed with consideration for wildlife. Installation of an interpretation panel can be a good way to give a site an identity, indicate how it is being managed and why and highlight wildlife that can be seen there. I am happy to provide a Blue Butterfly Scheme plaque that I hope will help to convey that message.

I hope you find my advice helpful. If you would like to discuss anything in this report please do not hesitate to contact me on 0115 9588542 or mspeck@nottswt.co.uk. I am keen to hear about any progress.

Yours sincerely,

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