“Because it has never been more important for us to build up our relationship with the *natural world*”

Lucy Shepherd, Secret Amazon: Into the Wild, Channel 4, 2024

THARSTON & HAPTON PARISH COUNCIL

Habitat Management Plan

2025 onwards

Table of Contents

Special thanks go to Will Daniels, who did a lot of research that went into section 4 (and subsequent action points), and to Forncett Nature Matters, for reviewing draft versions of this document and providing several valuable suggestions.

Overview

The parish of Tharston & Hapton has a population of around 800 and is in close proximity to the town of Long Stratton, population nearly 4,500. The area is mostly rural, but a large housing development planned for the town of Long Stratton, of 1,800 new homes[1] will extend into the parish and increase the populations of both significantly.

The 2017-18 Active Lives Survey indicated residents in South Norfolk are more active than the national average, and the most active in Norfolk[2] yet the current Long Stratton Neighbourhood Plan shows that more needs to be done in order to meet the minimum requirements for all types of open space[3]. A doorstep survey, carried out for South Norfolk Council during June & July 2019, found that 30% of people want to see improved activities for teenagers[4]

The Parish Council is custodian of four distinct parcels of land:

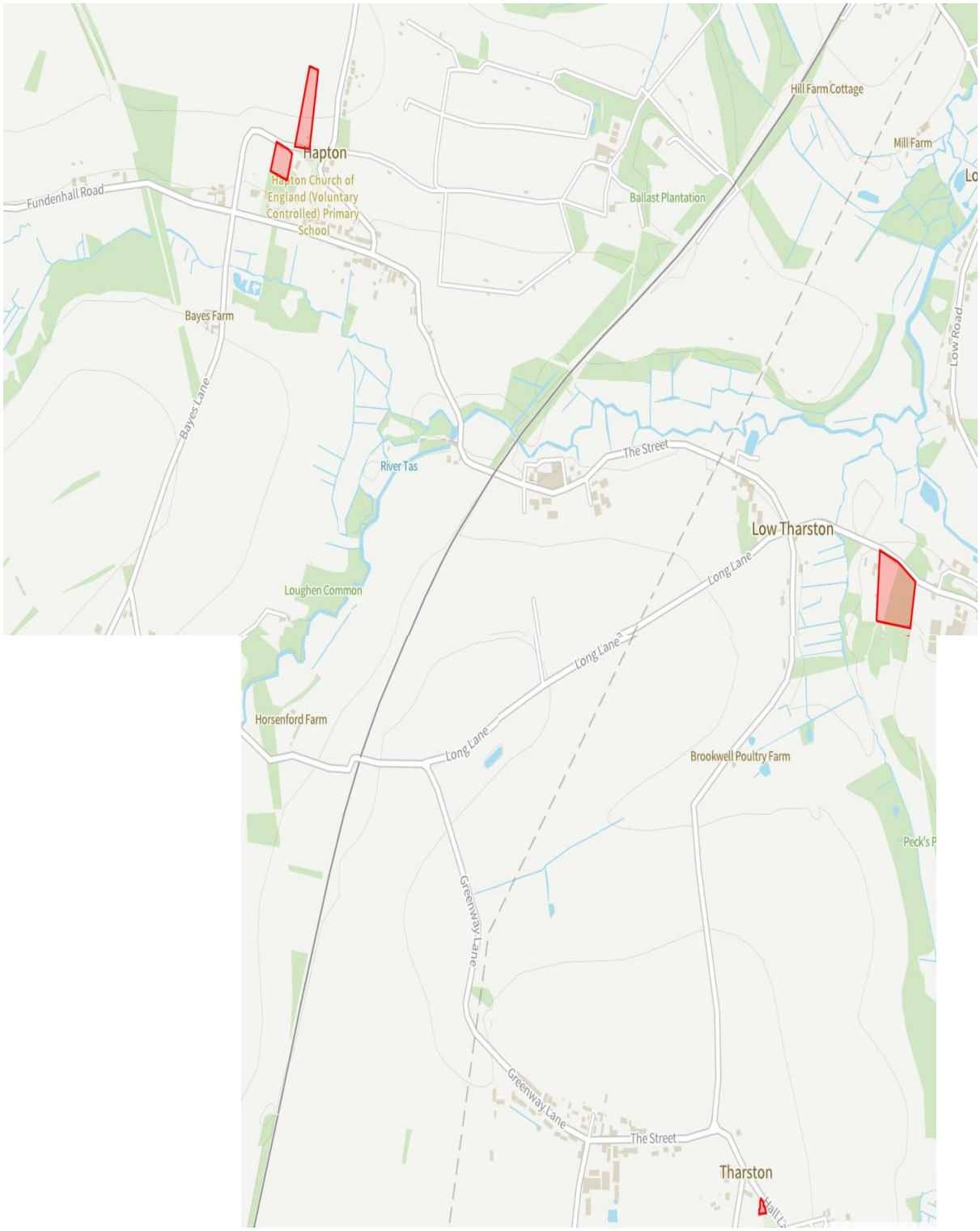
- Hapton Meadow & Play Area
  - ✓ An area for families to play and have fun
  - ✓ Somewhere to sit in quiet contemplation
  - ✓ A site for meetings, etc.
  - ✓ An area to hold barbecues, parties, quizzes, etc.
- Meeting House Meadow, Hapton
  - ✓ A safe place to let dogs run off the lead
  - ✓ An area to enjoy wildlife
- Surveyor's Land, Low Tharston
  - ✓ A site for growing Christmas trees for sale
  - ✓ A site to walk in woodland or sit in quiet contemplation
- Tharston Orchard (site of the old Tharston Village Hall)
  - ✓ Growing community fruit trees/ bushes for residents to consume

as well as having tributaries of the River Tas – a globally important chalk stream – running through it.

The wildlife in the parish ranges from rare to commonplace, with each of the Parish Council's areas offering a different type of habitat, all to be enjoyed by parishioners and visitors and will therefore require its own long-term plan, while still forming part of the Parish Council's overall goals.

This map shows those areas of the parish where these parcels of land are located, moving from North to South and in the order they are dealt with in this plan. Details of each are in section 1.

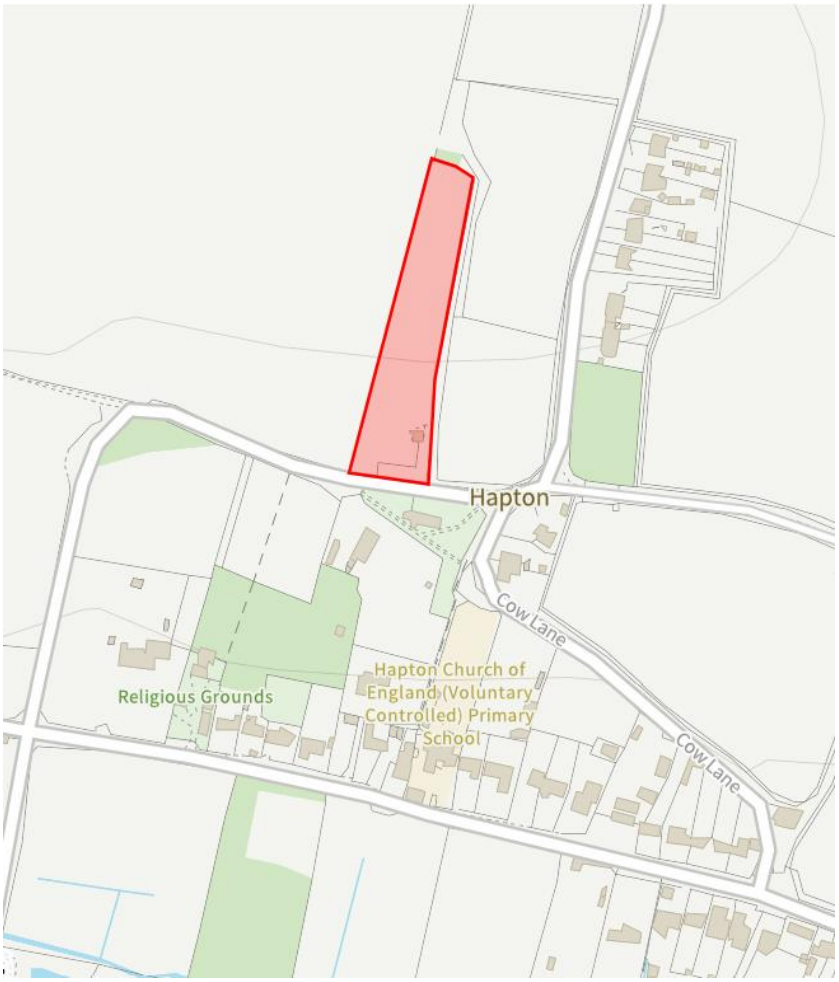
[1] Long Stratton Neighbourhood Plan (draft), foreword, https://www.lsnp.info/ (accessed 13/11/2020)
[2] South Norfolk Link magazine – Summer 2019, p. 4
[3] Long Stratton Neighbourhood Plan, version 2, December 2018, section 5.6.2, p. 48
[4] South Norfolk Link magazine – Winter 2019, p. 3 (sample size 1,148)



Section 1 – Site Descriptions

1a – Hapton Meadow & Play Area

The Hapton Meadow & Play Area (postcode NR15 1RZ – What3Words sensible.loops.covertly) is located opposite St Margaret's Church and was purchased in 2021. The field itself is approx. 1.54 acres and has been used for agriculture for over 200 years. This has been the main focus of our work for the last three years.

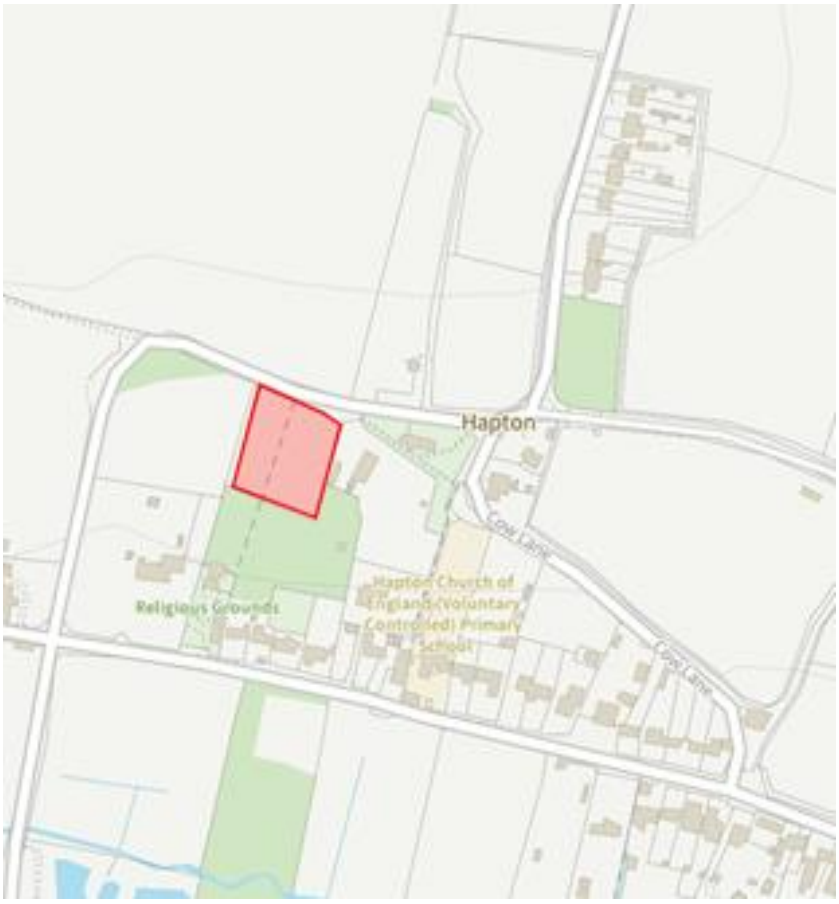


Having previously been agricultural, the flora is limited to the grass which has been sown and a limited number of natural wildflowers, but is in close proximity to both veteran ash and sycamore. The Norfolk Biodiversity Information Society (NBIS) has recorded 63 different species of flora & fauna within 1km of the field (see Appendix 2 for full details).

1b -Meeting House Meadow

The Meeting House Field was purchased in the early 2000s by the village of Hapton and was later gifted to the care of the Parish Council. The field is located next to St Margaret's Church, almost directly opposite Hapton Meadow & Play area (What3Words immediate.gravel.additives). Prior to the purchase of the latter in 2021, this field was the main area in Hapton for residents to gather together.

Its habitat is semi-improved grassland – close proximity to veteran ash & sycamore (NBIS).

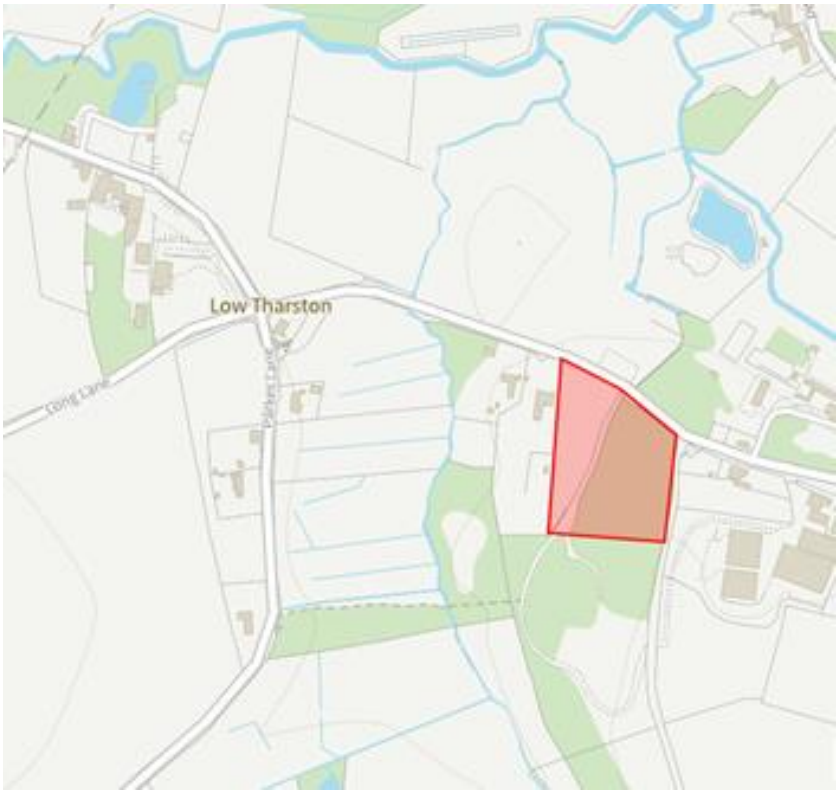


We have not carried out a full survey of the flora & fauna in the field, but there are casual observations of an abundance of Ox-eye Daisies, Autumnal Hawkbit, Self-heal, Queen Anne's lace and Ivy Bees have been spotted nesting in the ground.

1c - Surveyor's Land

This piece of land is situated along the C497, heading into Low Tharston, at What3Words location ambushed.converter.logged, and was gifted to the parish in mid-1800s, having been previously used by workers when the railway was built through the area. The land was rented out for many years but has recently been taken back over by the Parish Council and is now ready for us to start work there.

The piece of land itself is a mixture of lowland mixed deciduous wood and improved grassland (NBIS) and, as can be seen from the map below, is in very close proximity to the River Tas basin, lying next to a County Wildlife Site (Pecks Plantation). The NBIS has recorded 52 different species of flora & fauna within 1km of the field (see Appendix 2 for full details).



1d - Tharston Community Orchard

This is located on the site of old Tharston Village Hall (demolished in 2012) and next to the Grade I listed Tharston St Mary's Church (What3Words nervy.handicaps.hobbit). The field is close to veteran oak, maple & walnut trees (NBIS).

Soil Makeup

The soil to the north of the parish has moderate to high fertility, being slightly acid loamy and clayey with impeded drainage; while to the south of the parish the fertility is slightly lower, with slowly permeable & seasonally wet slightly acid but base-rich loamy and clayey soils.

Being situated in the Tas Valley, runoff is a consideration as the area is near to loamy and sandy soils with naturally high groundwater and a peaty surface. Such soil has higher carbon content, but the water resource is vulnerable to pollution from nutrients, pesticides and wastes applied to the land. For this reason it is the Parish Council's policy to only use chemicals where all other options have been exhausted.

River Tas

According to the Wildlife Trusts, there are only around 200 chalk rivers in the world with 25% of these being in Norfolk. One such river, the Tas runs through our parish, with tributaries coming from all over. The water in chalk rivers and streams is very pure & rich in minerals, accounting for a very high percentage of public drinking water in the South East, with England's being world renowned as habitats for trout and salmon fishing. They are, therefore, of high conservation value to the UK Government, with one in four freshwater animal species facing extinction.

The Tas is no exception to this, being home to a myriad of biodiversity including one species of solitary bee that relies on thistles to survive. More importantly, though, there is evidence to suggest the Tas is home to one of the few remaining pockets of native crayfish – and is being considered as an ark site for this critically endangered species.

Sadly, only one in seven of England's rivers is in good ecological health and none of them meet chemical standards[5], so there is a need for conservation strategies to protect and improve their health for nature & human uses.

Like many rivers, local folklore also surrounds the Tas, with the legend of Joe's Hole (a young lad met his demise in the river on a hot afternoon in 1884) keeping many a youngster out of the water, just in case he's still there waiting for them!

Despite its history and the abundance of flora and fauna that live in and around the Tas, it is not in as good health as it could be. Habitats are under threat from rising temperatures, putting those populations under threat of decline or even localised extinction. Careful conservation is needed to keep it alive, and can be simple things like making sure if you live along the river that your septic tank is emptied regularly.

Fallen trees, if managed carefully, can be beneficial to the river – they give off certain fungi and nutrients that help to reduce the impact of plastic and other pollutants. Those same trees also make an ideal habitat for our native crayfish to live and feed, as well as the 1,800 species of insects that rely on dead wood to survive.

[5] "State of Our Rivers", https://theriverstrust.org/key-issues/state-of-our-rivers (accessed 24/03/2025)

The Parish Council does not own any land immediately adjoining the River Tas and have limited scope to incorporate biodiversity objectives which would make a material difference to the sites. Riparian law places a responsibility on landowners on riverbeds and anything discharged into the river itself, so it is important we do our utmost to engage with them and engage them in the plan where appropriate.

Climate Change

The Met Office produced a regional report in 2024[6] giving details of potential impacts to South Norfolk from the effects of climate change, based on Global Warming Levels (GWL) of +2°C and +4°C relative to the 1981-2000 baseline. These impacts (see below) will have to be factored into this management plan over time to mitigate or adapt our responses to them.

It is conceivable that winter frosts will more than halve (+2°C scenario) and almost completely disappear (+4°C scenario) and the Parish Council will need to consider this when looking at planting regimes (some seeds require a frost to germinate).

Given the potential for more than a month's worth of days where the temperature exceeds 25°C in the summer (+2°C scenario) rising to over two months' worth (+4°C scenario), the Parish Council will have to consider how we can make a visit to any of our sites more pleasant for our residents (e.g. increased shading from trees) to help reduce significant impacts to health.

From a biodiversity management perspective, the likely change to rainfall will cause the biggest headache, with the need to bring in water to boost that which we already collect (e.g. from the cabin roof).

		Baseline (1981-2000)	Recent Past (2001-2020)	+2°C GWL	+4°C GWL
Temperature		°C	°C	°C change	°C change
	Summer maximum	29.4	31.4	+3.0	+6.4
	Summer Average	16.1	17.2	+2.1	+4.1
	Winter Average	4.1	4.9	+1.4	+2.8
	Winter Minimum	-6.9	-5.2	+2.3	+4.2
	Annual Average	9.9	10.7	+1.7	+3.4
Precipitation		mm per day	mm per day	% change	% change
	Summer Rate	1.78	1.81	+3	-19
	Winter Rate	1.66	1.69	+2	+11

Note: The +1°C recent past (2001-2020) column has been included for illustration only – it is now widely accepted that we are on course to exceed +2°C.

[6] "Climate Report for South Norfolk" (generated 09/10/2024), https://climatedataportal.metoffice.gov.uk/pages/lacs, accessed 09/10/2024

Section 2 – Vision Statement

Biodiversity is the variety (the number and types of species) of plant and animal life within an area. As living creatures, we are part of this web of life and depend on it for our existence – be that a walk down a lane abundant with flowers in spring; a robin in full song in a hedge or garden; or the pollinators we rely on for our food.

In the past century, however, more than 100 species have gone extinct in the UK and over 1,200 are on the UK priority list. The effects of some of these losses will be far reaching (BBC Future, for example, estimates that bees pollinate 70 of the 100 crop species that feed 90% of the global population[7]).

A healthy landscape that can support richly varied wildlife requires a well-connected network of habitats (such as hedgerows to allow species to move from one area to another).

The aim of this management plan is to maintain and enhance the diversity of wildlife habitats within the parish, meeting our objectives towards green credentials, whilst improving residents' access to nature. Studies suggest that just half an hour a day spent in nature can lead to better health and well-being[8], thereby enhancing quality of life. According to insurance company Aviva, 87% of UK adults believe access to nature is important for their physical and mental wellbeing[9]

As well as a moral obligation, there are regional and local planning policies which attach legal duties to biodiversity.

The Parish Council wants to support those in our community (and beyond) to realise their potential and assist with their mental health.

It is the aim of the parish council to provide areas to make a difference to people's lives on a local scale, whatever their desire or need at the time.

This management plan is a continuing process and will take several years to reach the Parish Council's vision. It is therefore important that the actions are monitored for effectiveness. The Parish Council will need to review this plan throughout its life – amending its actions and aims where necessary – and should continue to make use of all funding opportunities to deliver the actions set out in this document.

[7] "What would happen if bees went extinct", https://www.bbc.com/future/article/20140502-what-if-bees-went-extinct (accessed 03/10/2024)
[8] "Want to feel less anxious? Get outside for 23 minutes a day", gq-magazine.co.uk 1st March 2023 (accessed 18/09/2024)
[9] "Nine out of ten UK adults believe nature is important to wellbeing", https://www.aviva.com/newsroom/news-releases/2025/01/nine-out-of-ten-adults-believe-nature-is-important-to-wellbeing/ (accessed 05/01/2025)

Section 3 – Objectives

3a – Hapton Meadow & Play Area

Having bought the land, the first job we took on was the native hedging. Our tree warden was able to secure free trees for us and we arranged to have these planted along the eastern boundary:

- Hawthorn (600)
- Wild privet (100)
- Hornbeam (100)
- Guelder Rose (40)
- Dogwood (40)
- Crab Apple (20)
- Wild Cherry (20)
- Spindle (40)

6 Play equipment installed in 2021

The following year we ran a community consultation with parishioners to look at what provision was needed for the play area. Once complete, we arranged a meeting to ensure we ordered the correct play equipment from the correct provider for our needs and then arranged the purchase and installation of play equipment.

Encouragingly, we quickly found that, with the number of local children using the play area, and parents watching them, that we needed to provide a compostable toilet for anyone using the area to access. Again, we were able to find a cost-effective solution. We also needed to install an area for the parish council to hold their meetings, so we again found a local supplier and between them purchased both a community cabin and compostable toilet in early 2022.

7 Cabin and toilet installed in 2022

The parish council then installed a rainwater harvesting system that we could use to water the new and existing plants and trees, plus it met the council's green goals. In order to make the cabin a more useable space (including parish council meetings), a solar panel system was installed, with battery storage, to allow us to have LED lights put up. The system was installed by volunteers and parish councillors.

8 Marquee and some of the new benches

With the cabin now being used for events and parish council meetings it was quickly getting full, so the council looked at the provision of storage shed, a defibrillator, tables and chairs and marquees for the many events we looked to hold. We also funded a security camera.

To complete the project we were delighted to be successful in our request for additional funding of £25,000 via the Pride in Place grant. This grant is for providing a sensory and commemorative garden, with a disabled path providing access to all parts of the project.

9 Two of the memorial benches

In preparation for the planting of the sensory garden, two large water tanks have been installed at the top of the meadow, with a pump to transfer rain water from the cabin water butts when the latter are full.

Further, due to increased incidents of vandalism, an additional three cameras have been installed, looking over each of the areas that people use, to either deter or catch the culprits.

We are anticipating a further 20% footfall once the project outputs are completed - we currently see over 300 people use the area for play from our parish and neighbouring parishes. We hold all our parish events here including events (e.g. Queen's Jubilee, King's Coronation, Pub in the Park, children's parties, quiz, and

chips etc.). We have further new events planned such as D-Day WW2 Commemoration.

3b - Meeting House Field

Fencing has been installed all around the perimeter, for residents to allow their dogs to run freely, whilst supervised. It is not, however, suitable to rent out as a 'dog field' – not least because a Public Right of Way runs through the middle of it.

A dead hedge has been created along the north roadside edge, as a linear eco-pile, which provides protection from predators and wind/rain for wildlife. A 1m wide strip is left uncut along the eastern and western boundaries for invertebrates to shelter (and consequently, birds of prey to hunt).

A couple of patches of wild flowers have been identified, to be left uncut each summer, to the benefit of pollinator species – see Community Engagement for more details..

In 2024 barn owls were seen hunting in the uncut margins and across the road near the meadow, which is encouraging and shows some of the plans are starting to have effect.

3c – Surveyor's Land

The Surveyor's Land has a public bridleway running through the middle of it and is made up of two distinct areas – grass/scrubland on one side and woodland on the other.

We have so far managed to secure 290 free trees (50 from the South Norfolk Claylands Project and 240 from The Woodland Trust) to enable us to begin expanding the hedgerow around the total area. The offering from the Woodland Trust is ongoing, so we hope to be able to secure more trees in the coming years. These hedges will be allowed to grow for 5-10 years before being laid – a standard approach for the Parish Council.

We have confirmed that badgers are active in the area.

Grass/Scrubland

The Parish Council has identified Christmas Trees as a viable option for this area, which will produce regular income within the next five years. The species considered most suitable are:

- Nordman Fir – holds needles well; most popular
- Norway Spruce – quick to drop needles
- Fraser Fir – pine fragrance; holds needles well
- Douglas Fir – strong scent
- Noble Fir – holds needles well
- Blue Spruce – more prickly than others; holds needles well
- Silver fir – holds needles well

Over winter 2024/25 the Parish Council will plant approximately 20 of each species, across, say, five different areas of the scrubland to determine how successful each one will be.

We should be able to plant approx. 1,500 trees per acre, over a three year cycle and could consider taking in people's old trees for a short period each year, with a view to composting (this would require the purchase of a wood chipper), for the following reasons:

- Local companies can be engaged to help (e.g. Notcutts give away broken pallets, by prior arrangement, for creating compost bins)
- By the time the needles have composted they will have lost most of their acidity[10]
- Compost could be sold on to parishioners after a couple of years, creating a mini circular economy
- Larger trunks could be sold for firewood

Work is due to start at the back end of 2024 to tidy up along the bridleway and begin the scheme of planting a new native hedge.

Woodland

Works planned for 2025 include:

- Clear deadwood into fewer piles for insects & invertebrates
- Begin regime of reducing the height of ivy growing in the trees to open the canopy
- Design walkways around the wooded areas for parishioners to explore
    - Proven to be good for mental health
    - Include benches for a sit & natter?
- Identify partially fallen trees that need to be removed
- Mark out pathways for people and equipment

[10] 'Composting at Christmas', https://www.lesswaste.org.uk/2023/11/27/composting-at-christmas/, accessed 17/10/2024

In the longer term consideration will be given to:

- Free firewood for parish/trade for labour?
- Clear out dead Alder & thin Sycamore
- Hazel coppicing – local hurdle maker?
- Local charcoal maker?
- Woodland days for parishioners?
- Other?

3d – Tharston Community Orchard

In 2023 the Parish Council took the decision to create a community orchard on the site, starting with fruit bushes in spring:

- Glen Ample raspberry
- Autumn Bliss raspberry
- Buckingham tayberry
- Merton Thornless blackberry
- Adriene Thornless blackberry
- Big Ben blackcurrant
- Red Lake redcurrant

In the winter of 2023 the fruit trees were planted in the rest of the orchard:

- Victoria plum
- Norfolk Royal dessert apple
- Norwich Pippin dessert apple
- Robin dessert pear
- Colney cherry
- Nelson apple
- Hacon's Incomparable dessert pear
- Adams Pearmain apple

A native species hedge was also planted alongside the driveway to Tharston Church. Finally in 2023, we engaged with Hapton Primary School to design a banner to be displayed at our new orchard

Section 4 – Joining the Plots

What if we tried to navigate our way around the country, but 90% of the road and rail network wasn't there? This is the situation faced by wildlife, much of which is crucial to our survival. Since most habitats are fragmented, it has left many species unable to easily move around the landscape.

Our countryside has been shaped by human activity for thousands of years, and this must be borne in mind with any scheme of rewilding, but many of the traditional practices for maintaining it have been lost. Good habitat management is vital to the diversity of our sites and increasing the movement of species across the landscape.

Maintaining connectivity between the Hapton Meadow & Play Area and the Meeting House Meadow is simple, as the two are on opposite sides of Holly Lane, Hapton.

Connecting the remaining fragmented habitats, owned by the Parish Council, for species survival & provision of ecosystems is much more challenging, since they are disparate and we do not own any land in between. We must, therefore, rely on the goodwill of individuals and businesses in the parish to help achieve this aim, as well as making use of any initiatives run by third parties (such as Norfolk County Council or Wildlife Trusts, etc.).

Norfolk is mostly agricultural, so we must recognise the trade-offs between conservation & other commercial uses of land in the parish, striking a suitable balance. This section looks at ways we may, collectively, be able to protect & restore ecosystems, connecting them via corridors – composite habitats that enable the movement of species between larger areas.

The realisation that biodiversity has been in rapid decline led to a shift in focus from preserving landscapes purely for their beauty to prioritising that biodiversity. Defra has a 25-year plan in place for England, whose overarching aim is to help address biodiversity loss; climate change; public health & wellbeing.

What follows is not an exhaustive list of options, rather the key areas we have identified and where our focus will be for the initial life of this plan.

- Norfolk Wildlife Trust and the Diocese of Norwich are involved in managing churchyards for conservation
- Hapton Chapel Graveyard is managed by the Octagon Church, under a separate charity
- Norfolk Highways and Norfolk Wildlife Trust are involved in managing roadside verges for wildlife
    - 700 species of wildflowers grow on road verges
    - Transport corridors provide variety & high density of flowers from spring to autumn
    - Often a source of food for early pollinators
    - Support larval & over-wintering phases of pollinators' lifecycle
- Redwings undertook major hedge installation works when they took over Hapton Hall
- Buglife run the B-Lines project for the preservation of all pollinators

    - Both Tharston and Hapton are within the local B-Lines corridor
- Norfolk and Suffolk County Councils have been working together to produce the Norfolk & Suffolk Nature Recovery plan
- Footpaths are within the purview of the Parish Council, although owned by separate landowners
- Wildlife friendly features for private gardens are widely available

Good conservation is a social function, informed by facts & data. It cannot be understated the importance of co-operation between the Parish Council and local landowners, whose willingness to participate with conservation efforts is imperative. The choices made by those involved will directly affect the success of this plan.

A survey carried out by Norfolk and Suffolk County Councils (for their Local Nature Recovery Plan, and aimed at both land managers & the general public) highlighted rivers, hedgerows, woodland & grassland as the habitats most important to focus on[11]. The most important species to focus on were thought to be birds & invertebrates – mammals also scored highly with the public.

[11] "LNRS Public and Land Manager Survey Results for Norfolk and Suffolk", https://www.nsnrp.org/publications (accessed 13/03/2025)

Section 5 – Community Engagement

The Parish Council appreciates the amount of effort that will be involved in achieving the aims of this plan and it is ultimately community appreciation that will dictate its degree of success. We have already had great reactions to the Meeting House Field and Hapton Meadow and Play Area and it is our aim to replicate some of that success in the remaining areas.

Communication is vital to keeping parishioners informed of each stage of this plan and we have several means open to us (the parish quarterly newsletter, parish council website, notice boards, site specific notices).

As a council we absolutely MUST learn from the communication mistakes made with the Meeting House Field in 2024, despite this not being deliberate. It was unfortunate that we were struggling to find someone to cut the grass at the same time that some notes for our biodiversity plans were published.

Even though some of the objectives on that field were achieved (Barn Owls were witnessed hunting in the long grass), we must NOT allow this to happen again.

Large or important works (such as the Meeting House Field or the Surveyor's Land) will be advertised via an article in the newsletter, accompanied by appropriate signage (see Appendix 3 for example). The article will be reproduced for pinning to the various noticeboards around the parish.

For some of our upcoming works we will invite the community to contribute to the plan and share their ideas, perhaps looking at volunteer opportunities at the same time.

Section 6 – Action Plan

Based on the results of the background data search and discussions with the Parish Council, suitable actions have been developed that will improve the biodiversity interest and focus on providing a connected space for wildlife across the parish, whilst improving access to wildlife for all parishioners to help improve their mental wellbeing.

Some of the actions listed are already underway; others are potential projects, while others are aspirational, but all represent the current priorities of the Parish Council. Priorities will, however, change for many reasons, hence the need for regular review of this plan.

The action table has been divided into site specific actions for the sites surveyed and more generic actions that can be applied parish-wide.

Each action table is divided into 5 main columns; Objective, Action, Outcome, Targets and Reporting Method.

- Objectives are the overall aim of undertaking the action; actions are the key activities that need to be undertaken
- Outcomes are the benefits to biodiversity and wellbeing that will be achieved
- Targets are the steps that need to be fulfilled by the end of the stated years
- Reporting method identifies how progress towards the final objective is going to be monitored

Key: Hapton Meadow & Play Area | Meeting House Field | Surveyor's Land | Tharston Community Orchard | All sites

Objective	Action	Outcome	Target (Years) 1-2	3-5	6-10	Reporting Method
More space for wildlife	Encourage natural regeneration by a managed mowing regime in appropriate areas	Shelter and food source for invertebrates, birds and small mammals	Reduce mowing frequency of specific areas to allow wildflowers to grow and set seed (see Community Engagement). Areas retained for overwintering invertebrates and seed source for birds. Management: Cut each autumn, but retaining an area of approximately 25% uncut			Annual biodiversity check

Objective	Action	Outcome	Target (Years) 1-2	3-5	6-10	Reporting Method
	Wherever possible, retain important existing dead and decaying trees and fallen and standing dead wood Bury wood in the ground for stag beetle larvae	Retention of trees as habitat for invertebrates, birds and bats	Management: Additional holes drilled to create cavities and stimulate rotting			Annual biodiversity check
	Allow leaf litter to accumulate at the base of hedgerows and in areas of scrub to benefit of insects, birds and hibernating hedgehogs.	Increased cover for invertebrates and small mammals Food source for invertebrates, birds and small mammals				
	Increase trees population with managed planting regime to include planting shrubs for nectar	Replace any trees removed for safety or other reasons Enhance native tree cover in the parish (e.g. pears or walnut trees)				
	Identify potential locations for roost creation opportunities including trees, buildings and other structures and Install appropriate bat boxes or roost features across identified features – built and natural environment	Increased roosting provision for bats Increased nesting provision for birds	Install 5 bat boxes across the parish Erection of at least 4 boxes across the parish	If bat boxes not being used by year 5, site in a different location		Bat box check Bird box check
	Identify areas of grassland to be managed as wildlife areas	Increased cover for invertebrates and small mammals Food source for invertebrates, birds and small mammals				
	Identify and provide extra pollinator habitat with revised maintenance schedule to specific areas	Encourage natural pollination Provide early food source for pollinators	Identify areas in the parish for planting Baseline pollinator status?	Pollinator numbers increased?		Annual biodiversity check
	Engage Buglife re. expansion of B-Lines project in the parish	Increased cover for pollinators				

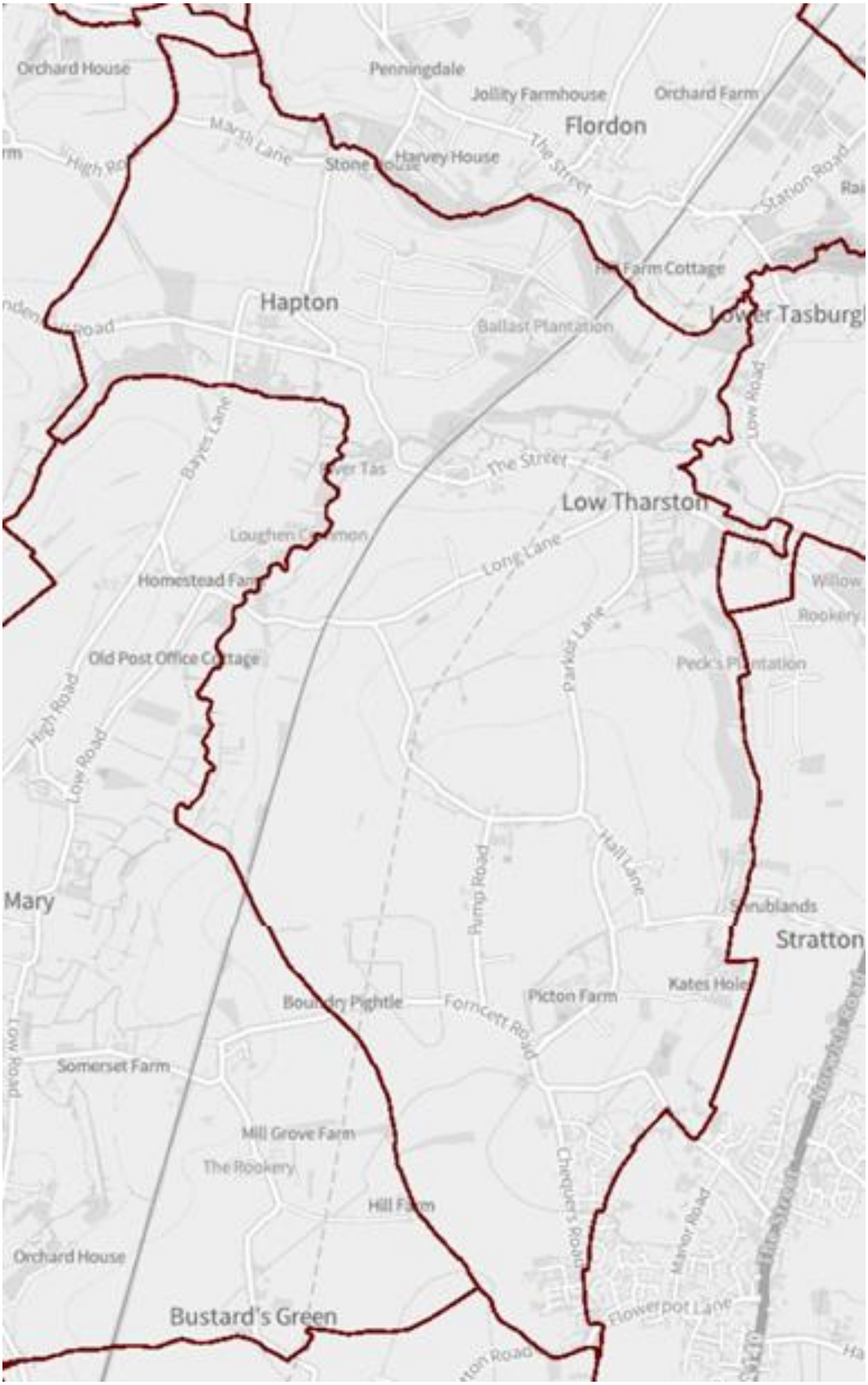
Objective		Action	Outcome	Target (Years) 1-2	3-5	6-10	Reporting Method
		Engage with Norfolk Wildlife Trust to discuss - graveyard conservation - roadside nature reserves - engaging in NSNRP	Increase wildflower cover in areas not owned by the council NSNRP creates opportunities for access to other groups & funding	Agree plan for maintaining wildflower habitats			Annual biodiversity check
	Improve parishioner experience	Create woodland walkway, with seating	Formal access paths to manage access and protect ground flora from trampling and reduce disturbance to breeding birds.	Clear areas for creation of pathway	Install edging and mulch Install benches where appropriate		
	Create ecotones	Map and measure all hedgerows to establish a baseline measurement. Ensure the total length of hedgerow on Parish Council land does not fall below this length	Connected habitats to aid movement of wildlife through the landscape Enhance parishioner experience	Detailed plan of existing hedgerows produced			Annual biodiversity check
		Reduce management around hedge bases to soften edges and vary structure	Increased cover for invertebrates and small mammals Food source for invertebrates, birds and small mammals	Where appropriate reduce mowing Frequency along hedges to develop gradient in vegetation from shrubs to tall ruderals, herbs, long grass and amenity grassland			Annual biodiversity check
		Create new native species-rich hedgerow	Make use of free trees (e.g. from Claylands Project or Woodland Trust) to supply native species at zero cost Connected habitats to aid movement of wildlife through the landscape	Whips delivered each November for planting at appropriate time	Manage new hedgerow for losses and weed suppression	Maintain hedgerow at agreed height After 10-12 years consider having hedge laid	Annual biodiversity check Agreement with local hedge laying contractor

Objective	Action	Outcome	Target (Years) 1-2	3-5	6-10	Reporting Method
Remove non-native species	Clear Hemlock plants from bridleway and maintain regime to ensure no return	Invasive, toxic plants completely removed	Cut before flower heads have gone to seed Dig out roots wherever possible	Monitor for recurrence, and remove/treat as necessary	More aggressive treatment for persistent plants?	Annual biodiversity check
Woodland management	Reduce the height of ivy in the growing trees to open up the canopy	Allow more light for understorey plants and attract invertebrates	Assess scale and set plan for removal	Gradually reduce ivy as part of maintenance regime, so as not to stress trees Understorey developing	Understorey developing	Annual biodiversity check
	Consider appropriate tree hazard and risk assessments where public safety is an issue to prevent unnecessary felling and/or removal of dead wood	Protection of important trees in the parish Parishioner safety	Assess scale and set plan for management before creating woodland walkway			Detailed plan Annual biodiversity check
	Introduce limited coppicing regime	Increased diversity of habitats	Create 8-10 year coppicing plan	Fill gaps by planting additional trees suitable for coppicing, if required	Cut wood available for various uses	Annual biodiversity check
	Clear deadwood into fewer piles	Increased cover for invertebrates and small mammals Food source for invertebrates, birds and small mammals	Part of overall woodland plan for clearing trees/scrub			Annual biodiversity check
Christmas Tree "business"	Test planting of samples from each chosen species, planted across various areas	Confirms suitability of species by area	Test beds planted and monitored for success			
	Plant, say, 800 new trees per year	Once final species decided on	Planting regime started	Harvest can start after approx. 3 years	Larger trees available for sale	Annual monitoring

	Objective	Action	Outcome	Target (Years) 1-2	3-5	6-10	Reporting Method
	Community Engagement	Information exchange – contact local Wildlife Trust for press releases and suitable news articles that cover topics such as disposal of garden waste, etc.	Awareness of wildlife issues e.g. effects of non-native species on local wildlife, value of wildlife gardening etc.	Regular articles in Parish magazine and on website on relevant topics			Publications in magazine and webpage
		Create page on parish website for recording species and links to useful information and websites	Increased engagement and sense of ownership of green spaces	Develop page to allow submission of records and photos. Link to online recording systems (e.g. NBIS)	Update with articles or links to local/national projects and sightings of interest		Webpage counter
		Invite specialist groups to survey a site e.g. bat groups	Generate more species records for the parish	Investigate possible groups and invite to site walk-arounds			Number of species records for parish
		Citizen science to look at water quality in River Tas					
		Create a volunteer team to do a water clean up					
		Community recycling scheme	Encourage parishioners to dispose of hard to recycle products in a green way	Blister pack recycling	Type 5/6 plastics?		Use of collection points placed around parish

Appendix 1

Map showing Tharston and Hapton Parish Boundary



Appendix 2

Species mix around each location

Search area: within 1km of each site

Unless stated, information has been provided by the Norfolk Biodiversity Information Service (NBIS).

Key: Hapton Meadow & Play Area; Meeting House Field; Surveyor's Land; Tharston Community Orchard

Group Name	Common Name	Notes				
Amphibians	Great Crested Newt		y	y		
Arachnid	Arachnid		y	y	y	y
Birds	Barn Owl		y	y	y	
	Blackbird		y	y		y
	Blackcap		y	y	y	
	Black-headed Gull		y	y		
	Blue Tit		y	y	y	
	Brambling				y	
	Bullfinch		y	y	y	
	Buzzard		y	y	y	
	Canada Goose		y	y		
	Carrion Crow				y	
	Chaffinch		y	y	y	
	Chiffchaff				y	
	Coal Tit		y	y		
	Collared Dove				y	
	Cuckoo		y	y		
	Dunnock		y	y		
	Egyptian Goose		y	y		
	Fieldfare		y	y		y
	Goldcrest		y	y		
	Golden Plover					
	Goldfinch		y	y		
	Great Grey Shrike		y	y		
	Great Spotted Woodpecker		y	y	y	
	Great Tit		y	y	y	
	Green Woodpecker		y	y	y	
	Greenfinch		y	y		
	Grey Heron		y	y		

Group Name	Common Name	Notes				
	Grey Wagtail				y	
	House Sparrow		y	y	y	
	Jackdaw					
	Jay		y	y		
	Kestrel		y	y		
	Kingfisher		y	y		
	Lesser Whitethroat		y	y	y	
	Little Owl				y	
	Long-tailed Tit		y	y	y	
	Magpie		y	y	y	y
	Mallard		y	y	y	
	Marsh Tit		y	y		
	Mistle Thrush		y			
	Moorhen		y	y		
	Pheasant		y	y	y	y
	Pied/White Wagtail					
	Red Kite		y	y		
	Redwing		y	y		
	Reed Bunting				y	
	Reed Warbler		y	y	y	
	Robin		y	y	y	y
	Rook		y	y	y	y
	Sand Martin				y	
	Skylark				y	
	Song Thrush		y	y		
	Sparrowhawk		y	y		
	Spotted Flycatcher		y	y	y	
	Starling		y	y	y	y
	Swallow				y	
	Swift		y	y	y	
	Tawny Owl				y	
	Tree Pipit				y	
	Treecreeper		y	y		
	Turtle Dove		y	y	y	
	Waxwing				y	
	Whitethroat		y	y		
	Willow Warbler		y	y	y	
	Woodpigeon		y	y		
	Wren		y	y		
	Yellow Wagtail				y	
Butterflies & Moths	Black-barred Fungus Moth		y	y		
	Bramble Blotch Miner Moth		y	y		
	Hop Beauty					y

Group Name	Common Name	Notes				
Fungi	Coleroa robertiani					y
	Dialonectria episphaeria					y
	Entomophthora aphrophorae					y
	Gibellula aranearum					y
	Peronospora sordida					y
	Puccinia calcitrapae					y
	Puccinia calthicola					y
	Puccinia difformis					y
	Puccinia lapsanae					y
	Ramularia didyma					y
	Ramularia lacyae					y
	Thyronectria sinopica					y
	Uromyces acestosa					y
	Uromyces junci					y
	Uromyces polygoni-avicularis					y
Insects	Common Ground Hopper		y	y		
	Dark Bush Cricket					
	Field Grasshopper		y	y		
	Ivy Bee	Spotted on field walk-round (not NBIS data)		y		
	Red-tailed Bumblebee		y	y		
	Slender Ground Hopper		y	y		
	Trioza urticae				y	
Mammals	Badger	Picked up on security camera (not NBIS data)			y	
	Bat (Natterer's Bat)	Found dead on field (not NBIS data)	y	y		
	Brown Rat					y
	Common Shrew		y	y		
	Fox				y	

Group Name	Common Name	Notes				
	Grey Squirrel		y	y	y	y
	Hare		y	y	y	y
	Hedgehog		y	y		
	Mole		y	y		
	Muntjac		y	y	y	
	Otter		y	y	y	
	Pygmy Shrew		y	y		
	Rabbit		y	y	y	y
	Roe Deer					y
	Water Vole		y	y		
	Wood Mouse					y
Plants	Blunt-flowered Rush				y	y
	Cleavers				y	y
	Giant Hogweed				y	y
	Herb-Robert				y	y
	Holly				y	y
	Ivy				y	y
	Knotgrass				y	y
	Marsh Thistle				y	y
	Marsh Marigold				y	y
	Nipplewort				y	y
	Red Bartsia				y	y
	Sweet Violet				y	y

Appendix 3

Example Newsletter Article

Wildflower Haven: Two Small Patches for Biodiversity

Creating a Haven for Wildlife

In a couple of small areas of the Meeting House Field a transformation is underway. Two small patches of land have been carefully chosen and will be left uncut, their green expanse a stark contrast to the surrounding mowed grass. This seemingly simple act holds a significant purpose: to create a haven for wildflowers and the diverse wildlife they attract.

A Haven for Biodiversity

Uncut areas like these provide a vital source of nectar and pollen for pollinators such as bees, butterflies, and hoverflies. These insects play a crucial role in our ecosystem, pollinating crops and wild plants alike. Additionally, the wildflowers themselves offer food and shelter for a variety of other creatures, including birds, small mammals, and insects. Once the flowers have finished, well, flowering, the areas will be cut again.

Addressing Concerns: Ticks and Poisonous Plants

Some may worry about the potential for ticks or poisonous plants to thrive in these uncut areas. However, these concerns can be easily addressed. Regular mowing of the surrounding areas will help to deter ticks, as they prefer tall grass and brush. Furthermore, the careful selection of wildflowers can ensure that poisonous plants are not introduced or allowed to spread.

A Small Step for a Big Impact

By leaving just one patch of our field uncut, to encourage invertebrates for barn owls to hunt, we are taking a significant step towards promoting biodiversity and protecting our natural environment. These tiny havens for wildflowers will not only enhance the beauty of our local landscape but also contribute to the health and well-being of countless species.