

St Peter ad Vincula, Coveney

Re-Wilding The Churchyard

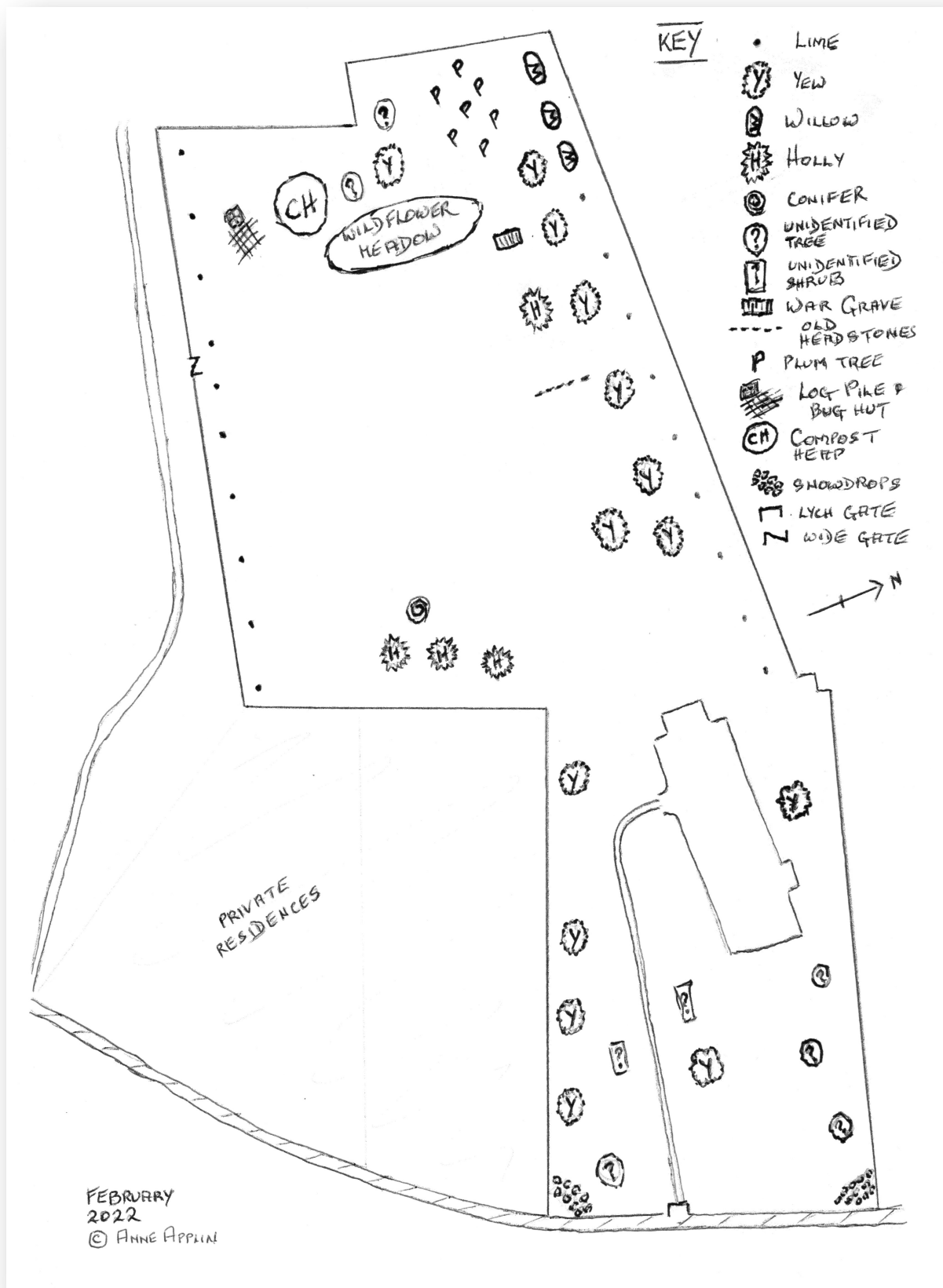
We are very grateful to Anne Applin for being the driving force behind this report in its first stages and to all those who have given up their time, expertise and enthusiasm to this project to-date: David Guyer, Lesley Wenn, Miles Foster, Tom & Leo Becker, Madeleine and Martin Becker, Harry Munt, Naomi Laredo

The church of St Peter-ad-Vincula, Main Street, Coveney, nr Ely, Cambridgeshire is a Grade 1 Listed Building. Some parts date back to Medieval times of the 13th Century, with modifications/additions up to the 19th Century. The church has 1 bell from 1847. A path from a memorial gateway leads through the church grounds to the church's main door, beyond which the grounds extend further. Part of the grounds is given to burials, but there is still much to be used. Various trees plants and shrubs grow across the site

Patronage of the church came through time with the manor until the Rokeby estate was broken up in 1883, when it was purchased by Athelston Riley. On his death in 1945 it passed on in conjunction with Lt Col C Riley, MC. Now there has been a Suspension of the Right of Patrons and the Benefice of Coveney is in the charge of the Diocese of Ely, presently in a 5-year renewal arrangement.

The decision to record and encourage wildlife in the church grounds was in response to a telephone call from a representative (Diana Cooke) of Bedfordshire, Cambridgeshire and Northamptonshire Wildlife Trusts (www.wildlifebcn.org) in February 2021, followed up by a visit in April 2021 to look at the Churchyard and make suggestions for the development of a wildlife area. This report maps the churchyard and gives some details of progress and achievements so far - one year on in February 2022.

Mapping the churchyard



The lychgate from the path at the main road serves both as an entrance to the churchyard and also a memorial of remembrance. A plaque on the wall at its side indicates the presence of a war grave.



The lychgate, which is also a war memorial. A path from it leads up to the main entrance of the church

On either side of the path that leads from it up to the church is grass and numerous trees with a few shrubs. On the day this mapping was made (11th February 2022) there were masses of snowdrops in flower in two corner areas.



Snowdrops flower in the corners each side of the gate

Other bulbs were pushing through and many other plants showing, which will be identified as they mature and flower in coming months. There are some headstones and also a few substantial memorials. The most common trees in this area are Yew with a few others to be identified as they come into leaf.

At the church the path peters out to grass and opposite the church the area widens along the back wall of a private residence. This wider area is the main burial ground with many headstones. It eventually extends beyond the church to become grassland, which in the fullness of time will have more headstones. Further beyond, at the end of the churchyard where it eventually meets the wall/fence of a private residence, is the area designated for wildlife development, across the full width of the plot. At each side of this wider area beyond the church is a row of mature lime trees, more yew trees, willows, holly, a conifer and a few others to be identified when they come into leaf. Looking from the church to this back area there is a wide gate on the left giving exit to a track that runs alongside the churchyard. On the ground are plants, some identifiable by leaf now including cuckoo pint, nettles, ivy (growing up tree trunks), fern-like ground-cover type, daisies . . . more to come with the seasons.



Ivy, cuckoo pint, nettles, fern-like ground cover and other plants grow all around

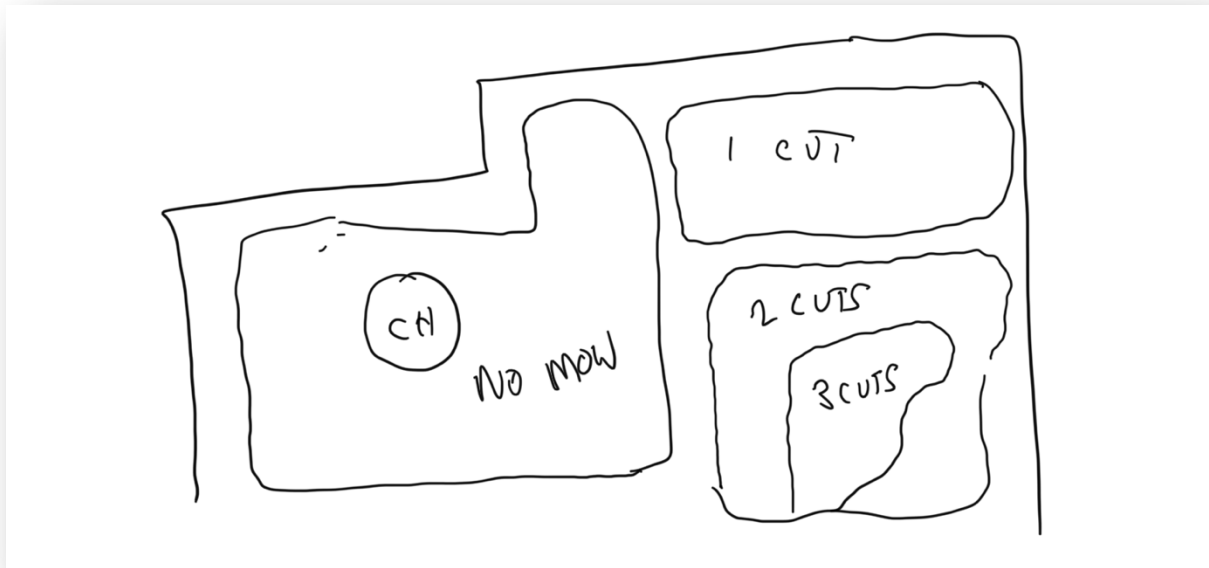
NOVEMBER
2021

In November 2021 a working party day was organised by advertising generally for volunteers to not only maintain the fabric of the church but also to help in the first stage of making a wildlife area. A strip approximately 10 metres deep and the full width of the churchyard at its western end was identified. In this area, set apart from the main area of headstones, is the sole war grave dedicated to 16303 Private G W Parson, Suffolk Regiment, 17th May 1915 Age 20, and a few old headstones left from when the churchyard was cleared in the early C20th



View looking sideways across the grounds from the wide gate at the lower end, showing lime, yew and willow trees, a few remaining old headstones, the war grave and part of the wildlife area on the left image

At the far end 7 **plum trees** have been planted. In the centre of the strip an area has been cleared and sown as a **Wildflower Meadow** with wildflower seeds that include Yellow Rattle to control the grass and allow the wildflowers to grow. These seeds have been sown in specific small areas to create 'seed nurseries' that will naturally propagate



A Sketch of the current moving plan for the small Wildflower Meadow area



The bottom of the grounds showing the war grave headstone and the wildflower plot with plum trees at the bottom in the distance



The compost heap. At its side is a small log pile and a bug hut

A little way in from the side near the gate a **compost heap** has been built. Members of the community have sponsored **11 Bird Houses** and **6 Bug Huts** which have been attached to some of the numerous **lime trees** that line the extreme side edges of the area and there is a



Bird boxes and bug hotels hand crafted and sponsored by members of the community

bug hut on the ground by a **log pile** next to the compost heap. **Bird Feeders** have also been fixed to some trees and **Water Bowls** have been placed on the ground.



Varied vegetation is all around underfoot



Bird Houses and Bug Huts have been fixed to the trees. This is a line of lime trees yet to come into leaf

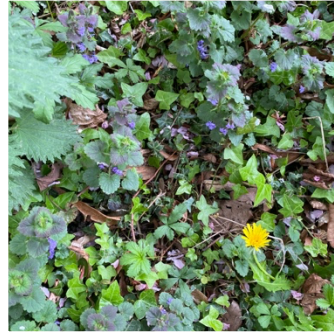


Water bowls have been placed on the ground. Here, behind the church and under the lime trees, another pile of vegetation has also been built

Other trees beside at least 18 **Lime** include many **Yew**, 3 **Willow**, 4 **Holly** and **several** with no leaves at present and 2 bushes that are **not yet identified**.

Ground vegetation that is readily identifiable includes those listed above, and other plants will be more easily identified as the seasons progress. The grass in the headstone area is regularly mown but the wildlife area will be left.

May 2022 Photos



AUGUST 2022

BRONZE AWARD SUCCESS!

In August 2021 we were visited by the judges of the Wildlife Trust Churchyard Award scheme and were delighted that they decided we had met the criteria for the Bronze Award. Here is a summary of the Judges Report highlighting areas that need continued development and attention in order to retain the Bronze Award and to help us progress towards Silver.

Short grass: this should be cut less frequently, especially in the hot, dry weather and the blades lifted to allow the grass to grow to a minimum of 8 cms, which will allow smaller flowers to appear. It will also keep the grass greener in the very dry weather and it will then have a less parched look. (You will have to restrain your enthusiastic contractor I imagine.)

Summer flower area: the long grass should now be cut and the grass removed. We recommend extending this area permanently in the future and we talked about how you might re-visit the boundary.

Yellow rattle: plant seeds in the summer flower area, in partially cleared patches, before the winter, which will reduce the grass over a period of time and thus help the wildflowers to flourish.

Water: ensure there is always water available in dry weather, which is accessible to birds, small mammals and insects.

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IN THE LOCAL NEWS

We were very grateful to Coveney resident and Copywriter Ellie Senior for putting together this PR release for the local newspapers and newsletters to help us share this news to the wider community, and to celebrate the success and hard work of the volunteers who have helped us get to this point.

St. Peter ad Vincula Church

Coveney

Churchyard haven for wildlife

Creating space for our local wildlife is as important as ever for St. Peter ad Vincula Church in Coveney who have recently become one of the first in East Cambs to be awarded Bronze in the Cambridgeshire Churchyard Conservation Award Scheme.



Tom and Leo Becker with St. Peter ad Vincula's Bronze plaque

"The whole project has been all about seeding the involvement of the community and lots of people have chosen to get involved,"

Church Warden, Chris Warner.

“Brothers Tom and Leo Becker have been regularly watering and keeping the wildlife water stations topped up. Enthusiastic horticulturalist David Guyer has supplied lots of seeds from his own garden. Edwin Palmer has been very supportive in planning a new grass cutting regime. Even the birdboxes have been handmade by Harry Munt, grandson of one of our congregation.”

Churchyards are really important places not just for wildlife but for people too and it was important for Chris and his team to balance these needs. “The churchyard at St. Peter ad Vincula is an active burial ground and people are visiting here all the time,” Chris says. “It’s important that the churchyard feels well looked after, but using information signs and plaques we have been able to explain why some areas need to be left a little more wild.”



The next step at St. Peter ad Vincula is to aim for a silver award and Chris already has plans to enhance the churchyard for wildlife further. “We are hoping to put up some swift boxes around the church tower and we will be planting a wide swathe of spring bulbs to introduce a burst of colour as people enter the churchyard,” Chris says.

Chris hopes that the improvements made for wildlife at St. Peter ad Vincula will be an inspiration to others too. “The changes are really quite simple,” he says, “but have enormous impact. They are things many of us could do in our gardens too.”



Chris Warner, Miles Foster, Rebecca Mundy, David Guyer, Lesley Wenn

SEPTEMBER
2022

Wardy Hill resident and wildlife expert Miles Foster has reported back the results of the first camera trap survey to be undertaken in the Church Grounds

COVENEY CHURCHYARD CAMERA TRAP SURVEY INITIAL SURVEY REPORT September 2022

INTRODUCTION

The survey took place between 03.09.22 and 28.09.22 during a period of fairly settled, warm dry weather with some rain, following an exceptionally hot, dry summer. This was the initial phase of a continuing, long term survey which has the purpose of informing conservation strategy by monitoring

- the species and numbers of terrestrial wildlife using the churchyard,
- which areas of the churchyard are used by wildlife, and
- the impact of conservation measures undertaken.

85 images of wildlife were captured over 25 days.

REPORT AUTHOR

Miles Foster enquiries@peregrinetheatre.co.uk

I am experienced in interpreting camera trap images and contribute to a citizen science project which involves examining 100s of images to identify a wide range of native species.

METHODOLOGY - EQUIPMENT and SETTINGS

Camera: Swann

Media: Transcend SD 2GB

Operated by: Miles Foster

Video / Photo: Video

IR LED Mode: 19

Video size: FHD (1920x1080P) - the highest definition available with this model

Video Frame Rate: 30

Digital Zoom: Off

Video Length: 10 Secs

PIR Sensitivity: High

Timer: On - 20.00 to 06.00

Delay: 1 Min

Audio: On

LOCATION

The camera was positioned about 600 mm / 2' above the ground on the trunk of a lime tree immediately west of an approx. 10' gap in the fence on the northern boundary of the churchyard, between the churchyard and the rear garden of the Old Rectory, and angled so as to detect any wildlife coming or going through the fence gap.

USE OF CAMERA TRAPS

A camera trap or trailcam is a device which is triggered to record still or moving images when it detects movement, making it an extremely useful tool for monitoring wildlife. However, they have their limitations, especially when recording at night when many species are most active - images are often blurred, grainy, over exposed and generally indistinct. Often it is only possible to determine the species of animal recorded, so distinguishing sex or individual features can be challenging. Recording

video rather than stills can ameliorate some of these difficulties and reveals useful information about the subjects' behaviour.

RESULTS

With that caveat in mind, during the survey period the churchyard was regularly used by:

- A mated pair of muntjac
- 1 or possibly 2 foxes, possibly a male and female
- 2 badgers (probably a male and female)
- 3 domestic cats

This was, of course, only a brief, initial survey but results are encouraging. However, no hedgehogs were recorded, though they are seen in gardens in the village, and only 2 rabbits and 2 mice.

As anticipated, it is clear that the gap in the fence is an important point of ingress and egress for animals using the both the churchyard and the adjacent garden. On entering the churchyard most individuals turned west, away from the church and towards the lower end of the churchyard. On leaving the churchyard most individuals also came from that direction, suggesting that the lower churchyard, which has been designated the 'never mow' area, is an important habitat for local wildlife. The next phase of the survey will focus on this area.

The presence of the cats is of course of no conservation value, indeed it can be problematic, but may indicate a population of small animals as yet undetected by the survey. The survey will continue over the coming months which should help to establish a more detailed picture.

Foxes visit nearby gardens and a family of foxes denned in a nearby hedgerow the previous summer. It is reasonable to conjecture that the individuals recorded were members of that family.

RECOMMENDATIONS

Despite the early stage of the survey it is possible to make some preliminary recommendations.

1. Hedgehogs are in decline and the unusually dry summer will not have helped. At present the water bowls provided for hedgehogs etc. are only replenished sporadically and it would be useful if a rota could be established for this during the drier months.
2. Most of the grass in the churchyard is at present kept very short and, as discussed, allowing it to grow longer would certainly benefit hedgehogs as well as wildlife in general, such as foxes and badgers which were recorded foraging for small food items in the grass. I am aware that this is the long term intention.
3. The gap in the fence is clearly an important thoroughfare for wildlife and should if possible be kept open.

ANALYSIS

Camera retrieved 16.10.22

112 files recorded over 03.09.22 to 28.09.22 (stopped recording as media full)

85 contained images of wildlife, of which the following positive ID's were possible:

29 images of foxes (prob. all of the same 2 individuals, poss. a male and female)

25 images of muntjac (prob. all of the same 2 individuals, a mated pair)

16 images of cats (3 individuals were identified)

13 images of badgers (prob. a sow and a boar, and poss. a 3rd individual)

2 images of small rodents (prob. wood mice)

2 images of rabbits (1 or 2 individuals)

NOVEMBER 2022

Operation Spring Bulb!

Four volunteers spent several days planting over 2000 bulbs throughout the Churchyard. Operation 'Spring Bulb' grew out of a desire to create a blanket of colour and interest at the front entrance to the Churchyard to make a much more attractive and inviting outward facing approach. With some planning this then grew into a plan to create a number of other planting areas at other key locations in the grounds.

David Guyer's Spring Bulb Action Plan

On the South side of the path, mass planting of daffodils thinning as it approaches the church porch. These will be clump and naturalistic plantings of two yellow Daffodils (500 of each) i.e. clumps of single variety thinning to surrounding area, these thinnings will intermingle with the thinnings of the other variety. There will then be clumps of single types with mixed areas between. A limited number of groups will be added on the North of the path, near the Yew tree, for easier mowing free zone. These areas will need to be left from cutting until May /June, for the bulbs to feed, while the leaves die down. We can accommodate either. A strimmer wide strip **must** be left both sides the path as the dying leaves, 40 cm long, will fall over the path and can turn it into a skating rink.

Future Planting Plans

Proposed by David Guyer, Miles Foster, Naomi Laredo



Miles Foster, Andrew Gibbon, David Guyer, Tim Bourne

Front of Church: Bulb planting snowdrops, daffodils, bluebells, crocus etc and other pleasant plants such as Ice plants, Evening primrose. The aim to make an attractive and enticing approach to the top feeder wildlife of Coveney (AKA humans) as well as providing some early spring bite for insects.

Around bell tower: Easter garden and tomb stones a general planting of flowering plants tending towards native and wilder - there are several that might be native or garden escapees, Carex grass, some euphorbias and Buddleia. Occasional planting within grave stone areas and in front of the trees along the Vicarage boundary; between the trees and the fence Miles has reserved for small mammal activity. Areas of easier cultivation will be seeded with wild flower seeds.

Below the War Grave: will be kept for native wild plants. Plans are to clear some areas of the tough Cocksfoot grasses and plug plant with wild flowers and maintain these areas free from grass for the coming year to allow the establishment of non-grass growth. The various

cutting regimes and areas will be maintained, with the addition of a path from the main area towards the compost heap.

The general effect, it is hoped, will provide a peasant and enticing entrance and then a gradual introduction to the 'wild' native area at the end. This will all be changed and updated as we see it develop and people have varying views but it seems plan.

COVENEY CHURCHYARD CAMERA TRAP SURVEY

PHASE 2

28 Oct – 4th Nov 2022

Area Surveyed: Compost Heap

INTRODUCTION

This phase of the survey took place between 28.10.22 and 04.11.22 during a period of fairly settled mild weather, with some distinctly colder periods and some rain. This was the 2nd phase of a continuing, long term survey with the purpose of informing conservation strategy by monitoring

- the species and numbers of terrestrial wildlife using the churchyard,
- which areas of the churchyard are used by wildlife, and
- the impact of conservation measures undertaken.

1 image of wildlife in the area monitored (see below) was captured over the 7 nights.

LOCATION

The camera was positioned about 1400 mm / 55" above ground on the trunk of a tree in the south west corner of the churchyard (below left) overlooking the compost heap (below right). An active underground wasps' nest was observed between the camera and the compost heap.



RESULTS

The camera was triggered once on 28.10.22 at 18.02 by 2 or more wasps patrolling the entrance to their nest. The camera was set to high sensitivity in the hope of capturing images of small rodents and it is not unusual for camera traps to be triggered by insects.

The failure to record any other wildlife during this phase might be explained as follows. Unlike a household compost heap, which may contain food waste, fallen fruit etc. the one in question is essentially a brash pile with a few bunches of discarded flowers. As such it is less likely to attract small rodents, hedgehogs etc. or to support a healthy population of invertebrates. However, it was thought that it might form a refuge for such creatures and the failure to record any does not necessarily rule this out, especially with regard to hedgehogs. Local night-time temperatures at the time of the survey had fallen below the level at which

hedgehogs usually hibernate (5 degs.) so they are less likely to have been detected. Moreover, at this time of year mice are more likely to be found in the lofts and outbuildings of the surrounding houses.

RECOMMENDATIONS

1. A 'real' compost heap of modest size would benefit conservation by encouraging invertebrates such as worms, woodlice, centipedes, beetles etc. which in turn would benefit birds and small mammals. This might consist of fallen leaves etc., discarded floral tributes (minus non-compostable materials) and a small amount of grass clippings.
2. For the same reason, one or two log piles would also be of great benefit as well as providing potential hibernacula in addition to those already created by the project. If agreed, I can supply the logs.

ANALYSIS

Camera retrieved 04.11.22

Files recorded over 7 nights - 1 as ff.

28.10.22 at 18.02 - 2 or more wasps (*Vespula* species) patrolling entrance to underground nest

REPORT AUTHOR

Miles Foster enquiries@peregrinetheatre.co.uk

I am experienced in interpreting camera trap images and contribute to a citizen science project which involves examining 100s of images to identify a wide range of native species.

METHODOLOGY

EQUIPMENT and SETTINGS

Camera: Swann

Media: Transcend SD 2GB

Operated by: Miles Foster

Video / Photo: Video

IR LED Mode: 19

Video size: FHD (1920x1080P) - the highest definition available with this model

Video Frame Rate: 30

Digital Zoom: Off

Video Length: 10 Secs

PIR Sensitivity: High

Timer: On - 18.00 to 07.00

Delay: 1 Min

Audio: On

USE OF CAMERA TRAPS

A camera trap or trailcam is a device which is triggered to record still or moving images when it detects movement, making it an extremely useful tool for monitoring wildlife. However, they have their limitations, especially when recording at night when many species are most active - images are often blurred, grainy, over exposed and generally indistinct. Often it is only possible to determine the species of animal recorded and distinguishing sex or even individual features can be challenging. Recording video rather than stills can ameliorate some of these

difficulties and reveals useful information about the subjects' behaviour.

COVENEY CHURCHYARD CAMERA TRAP SURVEY

PHASE 3

6th Nov 2022 – 12th November 2022

Area of Survey: Long Grass behind War Grave

INTRODUCTION

This phase of the survey took place between 06.11.22 and 12.11.22 during a period of unseasonably mild weather. The camera was set to operate 24 hrs. a day to detect diurnal as well as nocturnal activity. This was the 3rd phase of a continuing, long term survey with the purpose of informing conservation strategy by monitoring

- the species and numbers of terrestrial wildlife using the churchyard,
- which areas of the churchyard are used by wildlife, and
- the impact of conservation measures undertaken.

LOCATION

The camera was positioned about 1000 mm / 36" above ground on the trunk of a tree close to the boundary fence in the south of the churchyard (below left) to monitor the area of long grass behind the war grave (below right).



This area of the churchyard has been left uncut and some small trees have been planted in the hope of encouraging wildlife, in particular insects. The intention of this phase of the survey was to detect any wildlife using the area by day or night.

RESULTS

A fox/es was recorded twice apparently foraging in the area and a domestic cat passing through without any hunting activity. There were a number of false triggers due to wind etc.

ANALYSIS

Camera retrieved 12.11.22

14 files recorded over 7 days between 06.11.22 and 12.11.22

4 contained images of wildlife and a domestic cat/s, of which

2 images of foxes (prob. of the same individual)

2 images of cats (prob. both of the same tabby recorded previously)
There is an oak tree close to the survey area which produced abundant acorns in early autumn of which few if any remain, so that the area may offer little attraction to small rodents at this time of year, a fact that the cat seemed to be aware of. Squirrels are known to frequent the churchyard and, again, under the circumstances the failure to record any is not surprising.

RECOMMENDATIONS

This area of the churchyard forms an important element of the project and as the conservation measures undertaken so far are at an early stage, it will be crucial to continue monitoring at different times of year as the project develops.

REPORT AUTHOR

Miles Foster enquiries@peregrinetheatre.co.uk

I am experienced in interpreting camera trap images and contribute to a citizen science project which involves examining 100s of images to identify a wide range of native species.

METHODOLOGY

EQUIPMENT and SETTINGS

Camera: Swann

Media: Transcend SD 2GB

Operated by: Miles Foster

Video / Photo: Video

IR LED Mode: 19

Video size: FHD (1920x1080P) - the highest definition available with this model

Video Frame Rate: 30

Digital Zoom: Off

Video Length: 10 Secs

PIR Sensitivity: High

Timer: Off - i.e. 24-hr operation. Camera installed at 11.50 hrs. on 06.11.22

Delay: 1 Min

Audio: On

USE OF CAMERA TRAPS

A camera trap or trailcam is a device which is triggered to record still or moving images when it detects movement, making it an extremely useful tool for monitoring wildlife. However, they have their limitations, especially when recording at night when many species are most active - images are often blurred, grainy, over exposed and generally indistinct. Often it is only possible to determine the species of animal recorded and distinguishing sex or even individual features can be challenging. Recording video rather than stills can ameliorate some of these difficulties and reveals useful information about the subjects' behaviour.

COVENEY CHURCHYARD CAMERA TRAP SURVEY

PHASE 4

14th Nov 2022 – 22th November 2022

Area of Survey: Short Grass in Front of Metal Gate

INTRODUCTION

This phase of the survey took place over 8 days and nights between 14.11.22 and 22.11.22 during a period of cold, wet weather with some heavy rain. The camera was set to operate 24 hrs. a day to detect diurnal as well as nocturnal activity. This was the 4th phase of a continuing, long term survey with the purpose of informing conservation strategy by monitoring

- the species and numbers of terrestrial wildlife using the churchyard,
- which areas of the churchyard are used by wildlife, and
- the impact of conservation measures undertaken.

LOCATION

The camera was positioned about 600 mm / 24" above ground on the trunk of the second tree to the east of the metal field gate in the southern boundary hedge of the churchyard (below left) to monitor the area of uneven grass west of the main area of grave stones (below right).



This area of the churchyard is close cut regularly during the growing season. However, at the time of the survey the grass had grown to a height of ca. 100 – 200 mm / 4 – 8".

ANALYSIS

Of 125 files recorded over 8 days and nights between 14.11.22 and 22.11.22, 80 contained definite images of wildlife. There were also a number of 'false triggers' caused by wind, fluctuations in temperature, unidentifiable insects etc. as well as a small number of images of humans. Files containing images of individual species are as follows:

31 images of badger/s

26 images of fox/es
19 images of muntjac
1 image of woodpigeons - a flock of 8 feeding mostly on fallen holly berries
1 image of single magpie?
1 image of single bird or bat

RESULTS

The survey confirms and amplifies the findings of the Initial Survey of September 2022 that the area of short grass west of the modern gravestones and between the metal field gate in the southern boundary and the gap in the northern boundary of the churchyard is an important wildlife corridor and foraging area for badgers, foxes and muntjac. Although neither the metal field gate in the southern boundary nor the gap in the northern boundary were 'visible' to the camera, all three species were regularly recorded moving quickly and determinedly between these two access points. Moreover, even when foraging slowly on a more meandering route they often tended to make their way between gate and gap.

A **significant difference** was noted between the September and November surveys. In September the grass in the survey area was extremely short and the ground hard following a hot, dry summer. Comparatively little foraging activity by any species was recorded in September - 10 instances in 25 nights, or once every 2.5 nights. By contrast, at the time of the November survey the grass had not been cut for some weeks and the ground was wet following greatly increased rainfall. 27 instances of foraging were recorded over just 8 days and nights. So that, bearing in mind that mammals were only recorded at night, the foraging rate in the November survey was **more than 7 times the rate** recorded in September.

There may be a number of reasons for this and further surveys will help to clarify the picture. However, it is likely that the longer grass coupled with the damp conditions is a major factor. Longer grass provides better conditions for invertebrates which are preyed on by both badgers and foxes, and badgers in particular were recorded foraging in the area. Nonetheless, it appears that at present the churchyard is less important as a foraging area than as a wildlife corridor for animals visiting the rear garden of the Rectory, where a crop of windfall apples was likely to be attracting all 3 species of mammal recorded.

Given the quality of nocturnal camera trap recordings, it can be difficult to distinguish between individuals. However, it is likely that all the mammals recorded were the same individuals observed in September. So that it appears that at the time of the November survey the churchyard was still regularly visited by:

A mated pair of **muntjac**, displaying courtship behaviour towards the end of the survey period

A pair of **badgers**

One or more **foxes**

Badgers were recorded about 20% more often than foxes. Like foxes, they are opportunistic omnivores, with earthworms forming as much as 60% of their diet - during the survey at least one recording shows a badger eating an earthworm. 2 badgers were recorded in company or in close proximity on a number of occasions as well as individually. Badgers can sometimes be distinguished by differences in their tails and one large adult, probably a boar, was identifiable by a somewhat thin, pale tail.

Very little daytime activity was recorded and very few **birds**. Many species of bird feed on lawns and short pasture, including starlings, rooks, jackdaws, gulls and green woodpeckers, all of which are recorded in the

area. So it is disappointing to find so few visiting the churchyard. This suggests that the churchyard in general, and the monitored area of short grass in particular, do not offer the resources that these species require, specifically food in the form of invertebrates such as worms, larvae, spiders, beetles and other insects.

RECOMMENDATIONS

If possible and following guidelines recommended by the RSPB:

- this area should never be cut shorter than 40 - 50mm / 1.5 to 2"
- in dry weather and / or May to September it should be cut no more than approximately once per fortnight
- in periods of very low rainfall / drought it should not be cut at all

This has a number of benefits, including:

- helping to **retain moisture** in the soil
- **encouraging invertebrates**, including insect larvae, caterpillars, etc. on which a wide range of birds and mammals feed.
- strengthening grass roots
- encouraging regrowth
- **reducing greenhouse gas emissions** from garden machinery

In addition, anything that can be done to **encourage invertebrates**, and in particular insects, in the churchyard as a whole should be considered. Flying insects, including butterflies, have declined by almost 65% in England in less than 20 years (Kent Wildlife Trust / Buglife). Insects are essential to functioning eco-systems and their numbers are a measure of the health of the environment.

Finally, this phase of the survey also underlines the importance of maintaining a gap in the boundary between the churchyard and the Rectory. Since the survey was carried out, contact has been made with the owners of the Rectory who intend to repair the fence within the next 6 months and are amenable to allowing **a badger flap to be installed** at the same time. This will allow foxes and muntjac as well as badgers to pass to and fro but will **prevent rabbits**, which is of concern to the owners of the Rectory.

Hedgehogs are in long-term decline and classified as vulnerable to extinction. Though they are present in local gardens, they were not detected in the churchyard prior to hibernation. Allowing the grass to grow in this area during the summer would very probably **encourage hedgehogs**.

METHODOLOGY

EQUIPMENT and SETTINGS

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Media: Transcend SD 2GB

Operated by: Miles Foster

Video / Photo: Video

IR LED Mode: 19

Video size: FHD (1920x1080P) - the highest definition available with this model

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COVENEY CHURCHYARD CAMERA TRAP SURVEY

PHASE 5

30th Nov 2022 – 7th December 2022

Area of Survey: Old Grave Stones West of Church

INTRODUCTION

This phase of the survey took place over 8 days and nights between 30.11.22 and 07.12.22 during a period of mostly calm, dry weather with a light to moderate wind and temperatures in the range of 0 to 8 °C. The camera was set to operate 24 hrs. a day to detect diurnal as well as nocturnal activity. This was the 5th phase of a continuing, long term survey with the purpose of informing conservation strategy by monitoring

- the species and numbers of terrestrial wildlife using the churchyard,
- which areas of the churchyard are used by wildlife, and
- the impact of conservation measures undertaken.

LOCATION

The camera was positioned about 1500 mm / 60" above ground on the trunk of the third tree to the east of the gap in the northern boundary fence of the churchyard (below left) and tilted downwards to monitor the area of grave stones west of the church (below right).



RESULTS

This area of the churchyard was found to be used by wildlife significantly less than the area of grass between the metal gate and the gap in the

fence. No foraging activity was recorded and only one instance of active hunting - by a domestic cat.

As with earlier surveys, it is likely that all the individual mammals recorded were the same as those observed hitherto. However, given the quality of nocturnal camera trap recordings, it can be difficult to distinguish between individuals.

Again, very little daytime activity was recorded, and **very few birds and no badgers**. However, a **squirrel/s** was very much more apparent in this area than elsewhere in the churchyard.

It was observed that on retrieval of the camera on 07.12.22 almost all **yew and holly berries** in the churchyard had been stripped by birds. Clearly this is an important resource.

ANALYSIS

Of 64 files recorded over 8 days and nights between 30.11.22 and 07.12.22, 34 contained definite images of wildlife or domestic cats. There were a number of 'false triggers' caused by wind, fluctuations in temperature etc. as well as 14 of images of humans. Files containing images of individual species are as follows:

14 of squirrel
9 of muntjac
4 of cats
3 of fox
0 of badger/s
1 of pigeon or sim.
3 of magpie

RECOMMENDATIONS

Take measures to increase the diversity of plant and invertebrate species in this area and increase cover and foraging opportunities for small birds, insects and mammals without encroaching on the gravestones, e.g. by planting native or naturalised seed- and / or nectar-bearing wildflowers and bushes to create a woodland under-storey between the line of lime trees and the northern boundary fence, and with further planting in front of the trees. The lime trees provide nectar in mid-summer but there is nothing in this area to attract foraging wildlife at other times of year. As the row of mature lime trees will tend to take up most of the available nutrients and moisture, preference should be given to woodland species and those requiring less moisture. All plants will need to be watered during dry weather in the first season after planting and young bushes will need protection from muntjac etc. Most if not all of the plants could be sourced from parishioners' gardens.

Plants that meet these criteria include but are not limited to:

Hazel, *Corylus avellana* - moist but well-drained, **well-drained**, full sun / partial shade

Elder, *Sambucus nigra* - moist but well-drained, **well-drained**, full sun / partial shade

Guelder Rose, *Viburnum opulus* - moist but well-drained, **well-drained**, **full shade** to full sun

Common hawthorn, *Crataegus monogyna* - moist but well-drained, **well-drained**, full sun or partial shade

Common honeysuckle, *Lonicera periclymenum* - moist but well-drained, full sun / partial shade

Common mallow, *Malva sylvestris* - moist but well-drained, **well-drained**, full sun - suitable for planting on the **southern side** of the line of lime trees

Field Rose, *Rosa arvensis* - moist but well-drained, **well-drained**, full sun, partial shade
Dog Rose, *Rosa canina* - moist but well drained, full sun
Common knapweed, *Centaurea nigra* - moist but well-drained, full sun / partial shade
Primrose, *Primula vulgaris* - moist but well drained, full sun, partial shade
Cowslip, *Primula veris* - moist but well drained, full sun, partial shade
Bluebell, *Hyacinthoides non-scripta* - moist but well-drained, **well-drained**, partial shade
Foxglove, *Digitalis purpurea* - moist but well-drained, **well-drained**, full sun, partial shade
Comfrey, *Symphytum officinale* - moist but well-drained, poorly-drained, full sun, partial shade
White deadnettle, *Lamium album* - moist, full sun, part shade
Great Mullein / Aaron's rod, *Verbascum Thapsus* - **well drained**, full sun - suitable for planting on the **southern side** of the line of lime trees
Stinking Hellebore, *Helleborus foetidus* - moist but well-drained, full sun / partial shade
Catmint, *Nepeta cataria* - **well drained**, full sun - suitable for planting on the **southern side** of the line of lime trees
Pulmonaria, *Pulmonaria officinalis* - moist but well-drained, full sun / partial shade (introduced before 1597)
Lily of the Valley, *Convallaria majalis* - moist but well-drained, poorly-drained, **full / partial shade** (native to N. Europe)
Welsh poppy, *Papaver cambricum* - moist but well-drained, partial shade
Columbine, *Aquilegia vulgaris* - moist but well-drained, full sun / partial shade
Bugle, *Ajuga reptans* - moist but well-drained / poorly-drained, partial shade
Dog violet, *Viola riviniana* - moist but well-drained, **well-drained, full shade** to full sun

METHODOLOGY

EQUIPMENT and SETTINGS

Camera: Swann

Media: Transcend SD 2GB

Operated by: Miles Foster

Video / Photo: Video

IR LED Mode: 19

Video size: FHD (1920x1080P) - the highest definition available with this model

Video Frame Rate: 30

Digital Zoom: Off

Video Length: 10 Secs

PIR Sensitivity: High

Timer: Off - i.e. 24-hr operation. Camera installed at 11.50 hrs. on 06.11.22

Delay: 1 Min

Audio: On

USE OF CAMERA TRAPS

A camera trap or trailcam is a device which is triggered to record still or moving images when it detects movement, making it an extremely useful tool for monitoring wildlife. However, it has its limitations, especially when recording at night when many species are most active - images are often blurred, grainy, over exposed and generally indistinct. Often it is only possible to determine the species of animal recorded and distinguishing sex or even individual features can be challenging. Recording video rather than stills can ameliorate some of these difficulties and reveals useful information about the subjects' behaviour.

REPORT AUTHOR

Miles Foster enquiries@peregrinetheatre.co.uk

I am experienced in interpreting camera trap images and contribute to a citizen science project which involves examining 100s of images to identify a wide range of native species.

DECEMBER
2022

Planting update from David Guyer, 4th December.

“I started the establishing of an area beneath the limes bordering the front wall and that of the Rectory. This consists of a variety of native plants and semi-native such as woodland euphorbia, red campion, borage - flowers good for Pimm's, therefore a must. We are planning infilling with buddleia to increase interest for insects. By the lime tree, just Pollarded, there is a group of cyclamen. I have now cleared the broadleaf and clump forming grasses couch grass, cocksfoot and rye grasses, from the flower area behind the war grave but left the finer creeping bents and fescues. A general guide to the churchyard could be a good idea. This could include what flower types are present and any particular insects associated with them what birds are in what tree types etc. “

JANUARY 2023

**COVENEY CHURCHYARD CAMERA TRAP SURVEY
PHASE 6
8th – 19th January 2023**

Area of Survey: Long Grass behind War Grave

INTRODUCTION

This phase of the survey took place over 11 nights between 08.01.23 and 19.01.23 during a period of cold, windy, mostly dry weather with temperatures frequently below 0° C. The camera was set to detect nocturnal activity only. This was the 6th phase of a continuing, long term survey with the purpose of informing conservation strategy by monitoring

- the species and numbers of terrestrial wildlife using the churchyard,
- which areas of the churchyard are used by wildlife, and
- the impact of conservation measures undertaken.

LOCATION

The camera was positioned about 600 mm / 24" above ground on the trunk of a tree close to the boundary fence in the south of the churchyard (below left) to monitor the area of long grass behind the war grave (below right).



This area has been left uncut and some small trees have been planted in the hope of encouraging wildlife, in particular insects.

RESULTS

Considerably more activity was recorded than when the area was last surveyed in early November, even taking account of the longer survey period. However, only 2 species of wild animal were involved - fox and muntjac. Two wildlife routes were found to be well used by both foxes and muntjacs:

1. in front of the war grave (the front being the inscription side) running more or less N to S
2. in front of the yew trees beside the war grave and running more or less at right angles to the route above, leading more or less west towards Old Coach House.

On retrieval of the camera on 19.01.23, it was observed that No. 1 (above) was visible as a narrow track with some fresh muntjac spoor. This track leads ultimately to a gap in the fence at the south-west corner of the Vicarage garden which is an important foraging area for foxes, badgers and muntjac and it is likely that the individuals recorded were using the track to access this garden.

All individuals foraged only briefly in the survey area, if at all, and it may be that the rear garden of the neighbouring Vicarage continues to be a more attractive resource.

Given the quality of nocturnal camera trap recordings, it can be difficult to distinguish individual animals. However, as in previous surveys, an adult male and female muntjac were frequently recorded in close proximity as were an adult male and female fox and, as with earlier surveys, it is

likely that all the individuals recorded were the same as those observed previously. The images of the foxes in particular correspond with those previously recorded and it is likely that this pair, a gracile or slender female and a bulkier male, include the churchyard in their territory.

ANALYSIS

Of 63 files recorded over 11 nights between 08.01.23 and 19.01.22, 36 contained definite images of wildlife or domestic cats. There were a number of 'false triggers' due to wind etc. Files containing images of individual species are as follows:

20 of muntjac

14 of fox

1 of cat

No other animals were recorded including badgers

RECOMMENDATIONS

The survey area has been left uncut and measures have been taken to increase the diversity of plant species and to increase cover and foraging opportunities for small birds, insects and mammals. As the project matures it is likely to prove to be of considerable benefit to wildlife. At the time of the survey there was little of interest to foraging muntjac but it may be necessary to protect young trees in the spring and summer.

METHODOLOGY

EQUIPMENT and SETTINGS

Camera: Swann

Media: Transcend SD 2GB

Operated by: Miles Foster

Video / Photo: Video

IR LED Mode: 19

Video size: FHD (1920x1080P) - the highest definition available with this model

Video Frame Rate: 30

Digital Zoom: Off

Video Length: 10 Secs

PIR Sensitivity: High

Timer: 18.00 to 06.00

Delay: 1 Min

Audio: On

USE OF CAMERA TRAPS

A camera trap or trailcam is a device which is triggered to record still or moving images when it detects movement, making it an extremely useful tool for monitoring wildlife. However, it has its limitations, especially when recording at night when many species are most active - images are often blurred, grainy, over exposed and generally indistinct. Often it is only possible to determine the species of animal recorded and distinguishing sex or even individual features can be challenging. Recording video rather than stills can ameliorate some of these difficulties and reveals useful information about the subjects' behaviour.

JANUARY 2023

Spring bulbs

Cutting bed

Rock store

Native hedging

Extension of 2 cut grass

Apple Rowan

Buddleia

Wild flower grave

Amplified wild flower

KEY

- LIME
- Y YEW
- W WILLOW
- H HOLLY
- C CONIFER
- U UNIDENTIFIED TREE
- Q UNIDENTIFIED SHRUB
- I UNIDENTIFIED SHRUB
- WG WAR GRAVE
- OH OLD HERDSTONES
- P PLUM TREE
- LP LOG PIKE & BUG HUT
- CH COMPOST HEAP
- SN SNOWDROPS
- L LICH GATE
- W WIDE GATE



Report on the plant and grass environment in the churchyard of St Peters Coveney.

By David Guyer

Autumn 2022 / Spring 2023

Eastern area of the churchyard

The main entrance to the church through the war memorial gate, to left and right of the path was planted with three varieties of daffodils, crocus, grape hyacinth and bluebells to add to the snowdrops and sparse ornamental planting already present. The aim is to enhance the approach to the church and churchyard for visitors and increase the early food source for insects thus utilising this comparatively barren area for both human and insects enjoyment. Due to this planting the mowing regime has been changed to a later cutter season, until May when the bulb leaves have died, and this will increase the habitat for smaller mammals and as a reminder to visitors of the eternal cycle of life.

At the moment there is an upper canopy and ground cover only. To increase layering in this area of the churchyard, Buddleja have been planted under the upper canopy of Lime trees along the northern wall, next to the Rectory. Other indigenous plants have also been planted in the northeast corner, once more to increase diversification.

Northern area, behind the church bordering the Old Rectory

The embryo of a cutting garden, for church decoration, has been started with arum lilies on a newly cleared area close to the vestry door. Whether this is a suitable site remains to be seen due to the shady nature of the site. The proposed planting is for hardy perennials for greenery and floral additions to the church displays.

Further west a 'rock store' of large stones and rocks suitable for church restoration, as required, had been formed by gathering all such pieces together. In so doing this provides a temporary environment for a wide range of insects and small mammals. Alpine plants have also been added to increase interest to visitors and wildlife.

Continuing west along the Old Rectory fence it is proposed to add native hedging shrubs, hawthorn, field maple etc. to, once more, increasing the layer beneath the tall mature Lime trees and provide better habitat for birds, insects and mammals.

Western end of the churchyard

This area has now been developed as an area of predominantly permanent grass the southwestern area, around the compost heap, is left uncut at all times. The area behind the war grave is cut in sections some no cut, some two and some three times throughout the year to increase wildflower diversity. Camera footage shows there is comparatively little

foraging of higher end mammals using this area except whilst passing through to the Old Rectory orchard that is now being fenced against them. Therefore, it is felt that this area needs to be made more enticing with a wider diversity of planting. Once more layering is seen as the possible solution but this time from the ground up, as there is little upper cover provided. Some greengage shrubs have been added but the introduction of an open canopy tree, such as an apple would provide a more natural and favorable environment, especially in autumn with fallen fruits as an incentive to foraging.

During the autumn removal of the more tussocky grasses, such as cocksfoot, were removed from the three cut areas, to encourage the more creeping grasses, such as creeping bent, to get better establish and allow an increasing variety of wildflowers to flourish. Natural development is supplemented by addition from local gardens of native grasses and plants.

A hedgehog home has been created from large pieces of old brick wall, excavated during grave digging, with the hope of encouraging some permanent residents to find a home.

Graveyard area

It is planned that the active graveyard area be kept neatly trimmed and respectful for visitors to the resting place of their loved ones, although one old grave, (over 100 years old) near the church with a wide stone edge is planned to be planted with wildflower seed to give a display that will be hopefully regarded as joyful, pleasing and at the same time respectful.

Future proposals

Around the compost heap in the far south-eastern area of the churchyard. A hedge of native hedging trees/bushes could be planted, hawthorn, gelder rose, field maple along the boundary fence to provide nesting and foraging sites for birds and other wildlife. The open area beside the compost heap would be a suitable site for a rowan (mountain ash). This is an attractive compact middle level tree that gives profusion of sweet-smelling spring flowers and an abundance of autumn berries (it is also renowned for keeping witches away). Within this site it is hoped to add some wild honeysuckles and wild clematis (old man's beard) in the existing walnut tree and rowan.

It is proposed that the churchyard may be further enhanced by an extension of the reduced mown area. The main addition would be a strip from the lower side of the graveyard gate to the present no-mow area around the compost heaps and across to the holly tree and then curved up to a row of old gravestones, beside a yew tree. In so doing this will encompass the 'war grave' and so there would then be a meter wide curved path cut through the new reduced cut area and around the back of the grave. It is felt this will enable the grave to be highlighted, rather than as it appears at the moment, alone and abandoned stone. It is further suggested that this area be dedicated to the propagation and encouragement of wildflowers, such as cornflowers and poppies, dog daisies and corn cockle.

Continuing east up the graveyard along the the Old Rectory/Church fence, as previously mentioned, it is thought that an intermediate height level of canopy be provided beneath the mature lime trees and for this native hedging would once again be suitable, hawthorn, field maple, gelder rose to supplement the existing elder bushes. If it felt that this might increase future maintenance unacceptably, multi-stem pruning could take place in a few years to ensure the planting remains at about the height of the present fence or a little above. The recently greatly increased brushwood heap would be re-sited behind the new planted hedge plants and so providing a hibernation and refuge area for small mammals and insects whilst retaining a respectful area around the old gravestones that are beside the present site.

These proposals are to try to further enhance the church and churchyard for both visitors and wildlife and help for an increasing understanding and enjoyment for all of God's creation.

Spring Bulbs 2023







Installing Swift Boxes April 2023





Wildflower Meadow Summer 2024







MARCH 2024

Churchyard flower and grassland update 2024.

General overview

Since last autumn, changes have developed in the churchyard with an extension of the wildflower area and development of a pond area. These changes along with the bulb planting, last year, have meant that all the grass cutting is no longer to be done by Mr Edwin Palmer. After very many years, much appreciated, stalwart mowing and churchyard maintenance, wishes to restrict his cutting to the present Cemetery Area, the Garden of Remembrance and connecting paths. Other area will thus require other arrangement for their maintenance.

These arrangement will have to remember that the main aim of the churchyard is as a fitting place of remembrance for both the departed and visitors.

Eastern Entrance

This year the daffodils are getting established and giving a welcome entrance to the church. A cutting regime is in place to cut around the groups of bulbs. After flowering and dieback it is planned to tighten the grouping, by moving outliers into the groups.

Signage has been provided by Miles Foster explaining the planting and after flowering, the necessity of allowing a natural dieback until the end of 'No Mow May'.

Western Bell Tower area

Mr Palmer is maintaining a wide and easily accessible path to the main cemetery area. This leaves the older graves, on the Northside, in need of cutting and maintenance along with the more naturalised strip by the Old Rectory fence.

With the possible removal of the first Lime tree and addition of a more ornamental tree, plans are evolving.

The Becker family are considering maintaining the area of the Old Graves on the Northern side, for which we are most grateful.

Beneath the yew on western end of this are, aka 'Primrose corner', further planting of primroses have been added to the now establishing groups of flowers.

There are also plans to place a bench in this area, at the end of the closed cropped grass, facing south.

Middle area

The strip, nearly the full width of the churchyard, of open grassland, on the south side of the most recent New Graves, is to be a little longer than that of the cemetery area but no more than 2 inches in length; thus retaining a respectful aspect and visual progression to the now enlarged wildflower planting. A mowing regime and responsibility will be needed for the area.

A close cropped path is to be maintained through this grass to the War Grave, around which will be kept a mown lawn. It is hoped this will help to highlight the sacrifice that was made.

A division along the path will lead through the wildflowers to the more naturalised area, at the south end of the churchyard.

Wildflower and Naturalised area.

The Brash heaps of last year are well signed, once more by Miles Foster, who with Tim Whitehand and his digger, along with the Becker family, Martin, Madaline, Tom and Leo valiantly extended the wildflower beds to provide more feed and attraction to the wildlife of Coveney.

Due to the changes in the overall mowing of the grass, new areas of cutting need to be agreed within this area.

Miles kindly provided a liner to built a new pond in this section for the encouragement of wildlife. It is planned to provide a seat in the this region on the other side of to a Bumble Bee Bank.

This 'Bumble Bee Bank' is being prepared beside the pond with good pollinator flowers nearby.

The earlier mentioned close cropped path will be continued from the open grassland area, to go around the south side of the lone Yew tree to the pond region. From here it will connect up with a membraned and wood chipped woodland path, running East/West, between the boundary Lime trees and churchyard Yew trees. This make a suitable circular walk for most seasons and footwear.

It is hoped these paths, in combination with the log seating, already established and the new additional seats, will provide a meditative environment for visitor.

We would like to thank all those who have contributed, in so many ways, for their help and encouragement in these endeavours.

Enlarging Wildflower Meadow area and site of new pond



