

Marsh Green Nature Reserve

Aim

The church nature reserve is being managed to promote a wide diversity of native flora and fauna, to demonstrate our Christian commitment to care for God's creation / our planet.

Introduction

The St John's URC Nature Reserve is an L shaped plot of about 0.13 ha, located behind the former Marsh Green URC Primary School, which is now a private house, next to the church. It was used as a play area by the school, thus kept closely mown and probably with fertiliser and selective weed killer applied. The land also included a range of trees and sparse hedging when we began to manage it as a nature reserve in 2010, with a very limited range of wildflowers (dandelions, thistles and clover) but was dominated by various grasses, indicative of relatively high fertility – which is considered unfavourable for wildflowers. The area (field) was periodically being used as a car park.

Our Rewilding Journey

Initially our priority was to create a wildflower meadow. Unable to afford to get all the topsoil removed and re-sow the whole area with costly wildflower seed, we have been following approaches to reduce the vigour of the grasses and help wildflowers thrive:

- * stopping using the land as a car park, to reduce tyre damage to the plant life and reduce compaction of the soil;
- * sowing yellow rattle (*Rhinanthus minor*), which is "semi-parasitic" (reducing the vigour) of grasses which unchecked outcompete wildflowers;



- * scattering native wildflower seeds (either bought or kindly donated) suited to the heavy clay soil of the meadow to progressively increase in the number of wildflowers recorded in flower in spring / early summer. Also mowing a windy path has been made to encourage people to walk through and appreciate the wildflowers;



- * reducing the numbers of invasive weeds (dandelions, thistles and bind weed), to reduce competition for other native wildflowers and also reduce the seeds blowing into our neighbour's garden;
- * mowing the meadow after the wildflowers have set their seed (late July / early August and removing the cut material, as farmers manage a hay field, to promote the wildflowers;
- * having groups of lambs / sheep in the reserve to graze several times each year to help manage the meadow – and avoid costly mowing;



We have also established a log pile to which fallen branches are continually being added, providing cover for various mammals, reptiles, amphibians and insects.

Bird boxes and insect hotels were attached to some of the trees and hedgehog boxes have recently been added.



Having been successful in securing a grant to pay for a liner, in late in 2021 we dug a small pond to provide a perennial water source in the nature reserve – something which is so widely recommended to support wildlife.



Some Results

Wildflowers

Since 2013, we have been trying to keep track of the number of different species of wildflowers in our meadow. Although not experts in identifying wildflowers, this has been very encouraging as we have seen an increase in the wildflower biodiversity, from 14 species in 2023 to 48 species in 2023.

Butterflies

We have begun to record butterfly numbers on sunny days in the reserve – and spotted 12 species in 2019, only 9 species in 2023 but this could be due to the poor weather.

Other Insects

The pond is attracting a wider range of insects and pleasingly in both 2022 and 2023 we have recorded 4 groups of species of insect at the pond, including damselflies, dragonflies, pond skaters and water boatmen.

Amphibians

When we started digging out our nature reserve pond in October 2021, we were optimistic it would attract more wildlife to the nature reserve, and this was proved to be true, within less than a year we had spotted frogs and even a grass snake at the pond. But I don't think any of us imagined that within 18 months the pond would have been colonised not only by the common smooth newts but also by the great crested newts (GCNs), which are the biggest of the three newt species in the UK (reaching a maximum adult overall length of up to about 170mm) and have been around for approximately 40 million years. An amphibian expert from Kent Wildlife Trust did a torch survey of the pond in May 2023 and we counted at least 6 smooth newts, also 2 GCNs, including a pregnant female. Like nearly all amphibians, the great crested newt is dependent on waterbodies for breeding but usually spends most of its life on land. GCNs have suffered a massive population decline and are now protected by law, officially classed as an endangered species, which will affect how we manage the pond and wider reserve.

To find out more about GCNs, see <https://www.arc-trust.org/great-crested-newt> and <https://www.froglife.org/info-advice/amphibians-and-reptiles/great-crested-newt/>



Great Crested Newt (photo from <https://www.arc-trust.org/great-crested-newt>)

Hedgehogs

For several years we have added several hedgehog boxes to the nature reserve and several of the church young people have been very keen to have rescued hedgehogs released in the reserve. Last summer we did a survey to ensure that we had suitable habitat, including hedges as hogs like to keep to these linear habitats on their nocturnal foraging. However, until June 2023 we had no proof of hedgehogs in the village – so were never considered as a release site. All this changed in June, just days before the summer tea which had a hedgehog theme, we heard from Lin in the village who reported having been *“woken up by some horrendous noises early hours in the morning. We thought perhaps a cat was injured. However, it turned out to be a ball of hedgehog! In the end we put our guinea pig run over it ... we gave the hedgehog a dish of water and some of our cat’s food.”* It was later released where it had been found.

About the same day, Justin in the village *“sadly spotted a hedgehog that had been run over just outside our house”* which he assumed to be the same hedgehog he had seen a few times and had caught on his garden trail cam. *“The morning after we found a hoglet wandering around by the back door which we took into care and fed and watered, we took the little one to a wildlife rescue for proper care. To cut a long story short over that weekend we found 5 more little ones that needed care.”* (photo 2)

After about a month of care at the wildlife rescue centre, 2 of the hoglets were ready to be returned to the wild and at Justin’s request they were returned to Marsh Green for release. Again after the publicity around hedgehogs by the Eco Group, Justin asked if they could be released in the nature reserve, further from the busy road than his garden. It was a huge pleasure to watch the hoglets being placed in a brand new hedgehog box - seeing how big they had grown by photo 3)!



Photos copyright Justin Walker and Ruth Woodfine

We initially left out some cat and hedgehog food for the hoglets and saw it was rapidly eaten the following day. Since, there have been no further sightings of the hoglets – but I think this is not a worry, as they are nocturnal and can forage up to a mile each night searching for food. We hope the remaining hoglet will also be returned to March Green for release soon.

Swifts

Many common birds are seen in and around the nature reserve, but we have not yet done any specific surveys of them.

However, swifts, swallows, house martins and sand martins are all summer migrants, flying in from Africa to raise their young and feast on insects snatched from the sky. Swifts are very sociable and can often be spotted in groups wheeling over roofs and calling to each other with high-pitched screams. Swifts are included in the Target 25 project (see below) so it is very fortunate that the church has received a very kind donation of three swift boxes. These are very specific instructions where to fix swift boxes, including that they must be fixed facing between north and east (for shade), at least 5m above the ground. Fortunately, scaffolding is being put up on the church tower during August for some maintenance work, so the builders have been asked to also attach the boxes. Swifts will be migrating south soon, so we will have to be patient and wait to see if any swifts want to make the St John's church tower their home.

Target 25 (<https://arocha.org.uk/what-we-do/target-25/>)

Target 25 is A Rocha UK's project to help a range of declining species, taxonomic groups, and threatened habitats that are struggling with the effects of climate change, habitat loss and pollution. Gold Awarded Churches like ours have been asked to get involved in the project and for Marsh Green

we are fortunate that I think we can say we are already contributing to protecting many of the habitats and species in Target 25 (marked below with a *)

Target Habitats

- T1 Grassland habitat *
- T2 Hedgerows habitat *
- T3 Freshwater habitat *
- T4 Woodlands habitat *
- T5 Coastal habitat

Target Groups

- T6 Native Wildflowers *
- T7 Farmland & garden land birds *
- T8 Dragonflies & Damselflies *
- T9 Butterflies *
- T10 Bees *
- T11 Bats
- T12 Grassland fungi *
- T13 Macro Moths *
- T14 Amphibians *
- T15 Small Mammals *

Target Species

- T16 House Martin
- T17 Common Toad
- T18 Spotted Flycatcher
- T19 Lesser/Greater Horseshoe Bat
- T20 Red Squirrel
- T21 Common Oak *
- T22 Common Swift *
- T23 Bullfinch
- T24 Hedgehog *
- T25 Marsh Tit

The project website does ask us which targets we wish to “focus on” - so ideas are very welcome.

The project suggests that in addition to making our own records, we monitor our wildlife sightings around the church and nature reserve using irecord (<https://irecord.org.uk/>) - a website and app for managing and sharing your wildlife records. The Eco Group will try to do this as a routine – and encourage anyone else who wishes to contribute to.