



St Michael & All Angels Church



Faith in Nature

PROJECT REPORT

2024 -



Written By
SMAA





Faith in Nature

Page 1 - About us

Page 2 - About the project

Page 3 - About the partnership

Page 4 - Project outcomes

Page 5 - Project activities

Page 6 - School visits

Page 7 - Love your burial ground day

Page 8 - Project surveys (house sparrow & hawfinch)

Page 9 - Project surveys (dandelion & bluebell)

Page 10 - Project surveys (noctule & speckled wood)

Page 11 - Project hopes and aspirations

Page 12 - Project data table I

Page 13 - Project data table II

Page 14 - Project data table III

Page 15 - Project data table IV

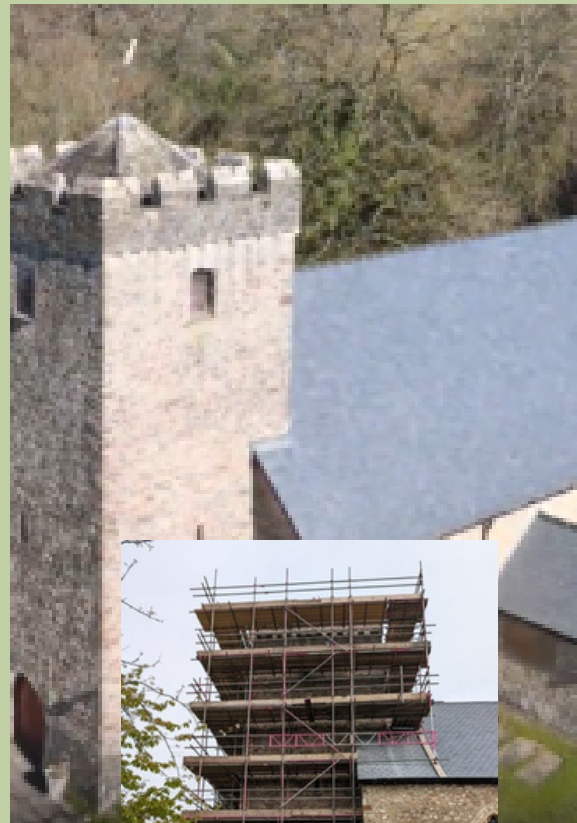


ABOUT US

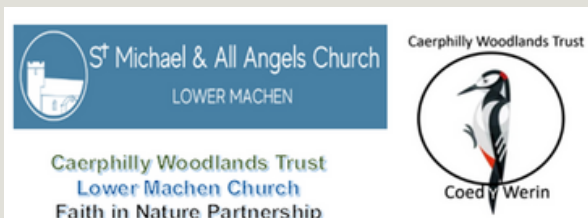
St Michael & All Angels Church, Lower Machen, received a £149k grant from the National Lottery Heritage Fund to conduct necessary repair and conservation work.

The bell tower restoration

The funding supported the preservation of vital historical structures, including the 15th-century bell tower, and will ensure the church's continued function and significance for future generations.



Partnership collaboration



In partnership with The Caerphilly Woodlands Trust (CWT) volunteers, National Lottery Heritage funding will also facilitate nature-based activities at the church, enhancing community well-being and environmental protection where the focus will be aimed at increasing knowledge of the plants & wildlife that are found within the churchyard.



Gwnaed yn bosibl gan

**Cronfa
Treftadaeth**

Made possible with

**Heritage
Fund**

FAITH IN NATURE LAUNCH GUEST SPEAKER IOLO WILLIAMS



ABOUT OUR PROJECT

Although small in size, churchyards and burial grounds harbour a disproportionate number of important species, from the smallest lichen to large ancient trees. Britain is home to far more ancient yews than any other country in Europe. The Ancient Yew Group has identified 407 ancient or veteran yews (more than 500 years old) in Wales alone, Britain being the world's stronghold for ancient yews, three-quarters of these are found in churchyards. Therefore nature has been allowed to thrive without too much interference in these wonderful havens making them perfect places to explore for all creatures great and small.

We are the project eco team.



The project team is made up from Church members of St Michael & All Angel's church, particularly the bell ringers together with volunteers of Caerphilly Woodlands Trust some of which are members of both groups.

In collaboration they have used existing skills and knowledge to share amongst their groups and the wider community whilst also using a framework devised by the 'Caring for Gods Acre' project.

The project will continue to deliver eco sessions over the summer already kicking off with a bat monitoring night.



ABOUT OUR PARTNERSHIP

The partnership launched its Faith in Nature project with CWT's patron, naturalist, author and tv presenter of BBC's 'springwatch', Iolo Williams, as guest speaker. Iolo said

"This is a fantastic project, so many churchyards are mown so that only grass survives, yet burial grounds, like Lower Machen's, are havens for wildlife. Our churchyards have so many rare or at-risk species that are so often overlooked through unsympathetic management. Through over mowing we have lost opportunities to encourage wildlife to flourish. This project makes sure that this can't happen and has captured the imagination and enthusiasm of young people, through working with the schools, in developing their understanding of the importance of protecting unique places such as these".

Friends of Lower Machen Church and other guests including children from three local schools spent the day learning about the project, building individual bug hotels to take home and undertook wildlife surveys spotting wildflowers, birds and all sorts of creatures found in this unique place.

Students also interviewed Iolo about how he became a naturalist and about his thoughts on nature and how they can contribute positively.

It was a fun-packed day. The project has already installed a giant bug hotel in the grounds from offcuts of wood, has undertaken a mowing plan to leave areas unmown for wildlife and wildflowers to flourish, already noting cowslips, red campion, lords and ladies, cuckooflower, an abundance of wild garlic and many lichens identified on the headstones, once overlooked before.



Students interviewing Iolo Williams

PROJECT OUTCOMES

Three young students, Cooper, Emilio and Francesco spent the morning interviewing Wales' nature national treasure, Iolo Williams, asking him about his journey into tv and what his concerns are for the future as far as nature and our planet is concerned. Iolo told the boys about his favourite animal, the honey badger, and how he had seen it defend itself giving it a justified fearless reputation.

SCHOOLS

Providing local schools with child focused activity, giving the children an opportunity to express their personal reactions to the features and atmosphere of a burial ground within the natural environment. Children are encouraged to explore using all of their senses.

The children will be encouraged to explore the outdoor environment using their senses to describe their emotions, identify details of their sensory experience and select words and images to describe them for example via a scavenger hunt activity and building bug hotels. They will investigate the many ways in which people use burial grounds, how they are cared for as a unique habitat and how they too can get involved. The activities also provide children with an opportunity to reflect upon different attitudes towards death and how life is celebrated and remembered by many cultures.

Community characters and their different uses and experiences of a churchyard

We introduced the children to the invented characters from their typical local community through 'community character cards'. For example as well as the expected local vicar we had characters such as Mrs Johns, whose family have been buried in the churchyard for generations, little Georgie Hughes who rang the bells and Ann Williams who lived across the road from the church amongst other characters such as bird watchers, farmers and wedding guests all having their unique use for the church grounds and surroundings.

In groups children choose a character and together they decide how they think their character would use the burial ground.

Children took on the role of that character and acted out how they would behave and what they would do there. The activity steered the debate using the character's point of view about what they would like to see happen in the burial ground and of course what they wouldn't like to see happen too and lively conversation was had over the subjects of litter and plastics.



PROJECT ACTIVITIES

Children from each of the local schools also undertook biodiversity surveys and made individual bug hotels to take back to school or for their own gardens.

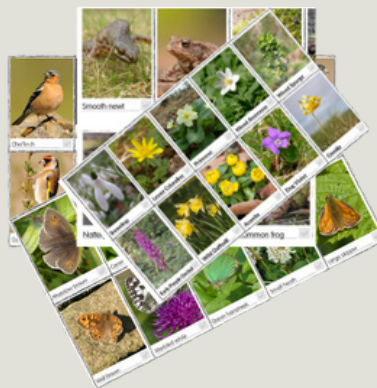




PROJECT SCHOOL VISITS



Learning about the history of the church, the ancient yews, spotting wildflowers, spying a minibeast and making a bug hotel, was all part of a great day at St Michael and All Angels church.



The project team also undertook their own survey which commenced in late Spring 2024 and they hope to survey each changing season and record their findings. Some of their findings are featured at the end of this document.

LOVE YOUR BURIAL GROUND DAY



We installed a bilingual wildlife ID panel within the church yard which the children loved.



The 'Faith in Nature' partnership hosted an eco day during 'Love your Burial Ground Week', a celebratory week which has been running for many years created by the Caring for God's Acre project which has been encouraging all who help to look after churchyards, chapel yards and cemeteries to celebrate these fantastic places in the lovely month of June.

We welcomed local residents to bring their children to explore the grounds and make their own little mini-beast habitat to take home.



Parents and grandparents helped the children find small creatures to pop inside the bug magnifiers so they could take a closer look at the features of our butterflies and other tiny insects and of course to safely set them free afterwards.

We also held a moth and bat detecting evening delivered by a local ecologist. Using hand held bat detectors capturing each individual bat species calls we were able to learn what bats lived or foraged around the church grounds.

PROJECT SURVEYS



The humble house sparrow -*Passer domesticus*.

The house sparrow is an opportunistic bird of towns and cities, parks, gardens and farmland. House sparrows feed on a variety of foods, including buds, grains, nuts and scraps, and will visit bird tables and feeders. They live in colonies and nest in holes or crevices in buildings, among Ivy or other bushes, and in nest boxes; Both parents will incubate the three to five eggs and raise the young. Because of their increasing decline in numbers they are classified in the UK as Red under the Birds of Conservation Concern 5: the Red List for Birds (2021).

Hawfinch - *Coccothraustes coccothraustes*

The hawfinch is the UK's largest finch, with an enormous bill powerful enough to crush a cherry stone. Despite their size, they are typically elusive, especially during the summer nesting season. Weighing in over twice as much as the more familiar chaffinch it uses its powerful bill to crack open seeds from trees such as cherry, hornbeam and beech, but in summer often feeds on insects as well. Shy birds, they can be extremely difficult to find in summer, remaining high in the canopy and rarely calling, easier to spot in winters leafless trees.



PROJECT SURVEYS



The common dandelion - *Taraxacum officinale*

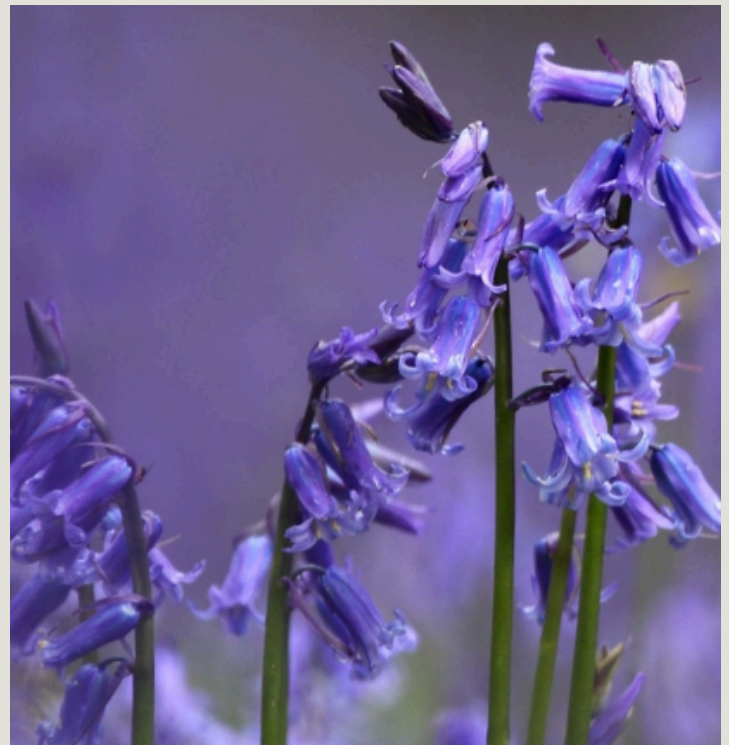
The common dandelion is a most familiar flower: counting down the 'clock', while blowing the fluffy seeds from its head, is a favourite childhood game. Dandelions are an important early source of food for pollinators. The toothed leaves of a dandelion are said to look like lion's teeth due to their jagged edges which translates to 'dent de lion' in old French and where its name comes from, as in Welsh it's 'dent y llew', again meaning lions teeth. The dandelion is also known for its celestial properties as it represents the three celestial bodies of the sun, the moon and the stars. It is said to be the only flower that does so. The yellow flower resembles the sun, whilst the puff ball relates to the moon, the dispersing seeds the stars.

Bluebell - *Hyacinthoides non-scripta*

In April and May, our ancient woodlands are awash with the much-loved, nodding heads of the bluebell. Millions of bulbs can exist in just one wood, giving rise to the 'blue carpets' that are a springtime joy.

Ode to the Bluebells. R Williams Parry

They come when the cuckoo comes
When she goes, they go too
The wild nostalgic scent,
The old enchanting hue.
Arriving, then bidding goodbye,
Ah, but their days are few.



PROJECT SURVEYS

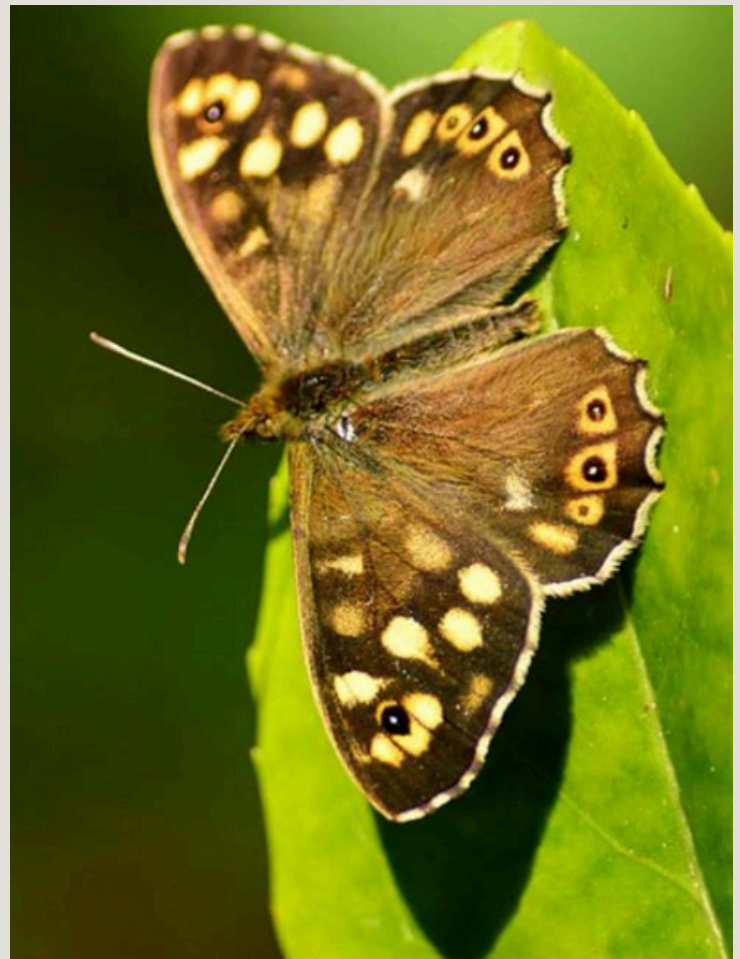


The noctule bat - *Nyctalus noctula*

Our largest bat, the noctule roosts in trees and can be seen flying over the canopy in search of insect-prey. Like other bats in the UK it is a protected species and hibernates over winter between November and April. All UK bats are nocturnal, feeding on midges, moths and other flying insects that they find in the dark by using echolocation. Noctules roost in holes in trees and bat boxes, but rarely in buildings. During the summer, females form maternity colonies and have just a single pup. The noctule has rich, golden-brown fur, with darker wings, ears and face. Its flight is characteristically strong and fast.

Speckled wood butterfly - *Pararge aegeria*

The speckled wood is dark brown with creamy yellow spots. The best way to identify the 'brown' butterflies is by looking at the eyespots on their wings. The speckled wood is the only brown butterfly with three small, cream-ringed eyespots on each hindwing and one on each forewing. A medium-sized butterfly, the speckled wood is on the wing in two or three broods between the end of March and October. It is a common and widespread butterfly of woodland edges and rides, where it flies in the dappled sunlight, and can also be seen in hedgerows and gardens. Adults feed on honeydew, while the caterpillars feed on a variety of grasses, including false broom and cock's-foot.



PROJECT HOPES & ASPIRATIONS



Our aim is to instil in people's hearts and minds the importance of the environment in their lives.

As graveyards and church land are usually undisturbed and not used for farming, they can be host to a great variety of wildlife not seen in other green spaces, particularly in urban areas. Old churchyards often have fantastic flowery and species-rich grasslands as they have been so little disturbed over the centuries. This is why they are great places to involve community and to share knowledge and experience.



Church grounds are also safe places and often in urban communities best placed to reach out and engage.

Sharing the love of nature and its wild spaces can be a great learning ground and a perfect place to fall in love with life and all its special creatures, great and small.

It's no secret that young people today spend less time outdoors and while the increased use of technology has many educational benefits, the practical and transferable skills learnt from the natural world can often be overlooked. Bringing back some of the wonder and curiosity that may be lost in the classroom helps to build self-confidence, resilience and problem-solving abilities for many that a classroom can't easily provide.



facebook.com/LowerMachenChurch/



lowermachen.church/heritage



lowermachenchurch@gmail.com



PROJECT SURVEYS

Actual_name	common_name	cat/cons' concern	group	recorded Jul 24	recorded Aug 24
Pipistrellus pipistrellus	Common pipistrelle	protected	Bats	y	
Nyctalus noctula	Noctule	protected	Bats	y	
Plecotus auritus	Brown long-eared	protected	Bats	y	
Rhinolophus ferrumequinum	Greater Horseshoe	protected	Bats	y	
Turdus merula	Blackbird	Green	Birds		Y
Cyanistes caeruleus	Blue Tit	Green	Birds	y	Y
Sylvia atricapilla	Blackcap	Green	Birds	y	
Loxia curvirostra	Crossbill	Green	Birds	y	
Buteo buteo	Buzzard	Green	Birds		Y
Fringilla coelebs	Chaffinch	Green	Birds		Y
Periparus ater	Coal Tit	Green	Birds		Y
Parus major	Great Tit	Green	Birds	y	Y
Turdus philomelos	Song Thrush	Amber	Birds		Y
Hirundo rustica	Swallow	Green	Birds	y	Y
Chloris chloris	Green finch	Red	Birds		Y
Muscicapa striata	Spotted flycatcher	Red	Birds		Y
Pyrrhula pyrrhula	Bullfinch	Amber	Birds		Y
Spinus spinus	Siskin	Green	Birds		Y
Passer domesticus	House sparrow	Red	Birds		Y
Columba palumbus	Common woodpigeon	Amber	Birds	y	Y
Dendrocopos major	Woodpecker greater spotted	Green	Birds		Y
Picus viridis	Green woodpecker	Green	Birds		Y
Accipiter gentilis	Goshawk	Green	Birds	y	
Motacilla flava	Yellow wagtail	Red	Birds		Y
Alcedo atthis	Common kingfisher	Green	Birds		Y
Coccothraustes coccothraustes	Hawfinch	Red	Birds		Y
Alauda arvensis	Skylark	Red	Birds		y
Carduelis carduelis	Goldfinch	Green	Birds	y	
Sturnus vulgaris	Starling	Red	Birds	y	
Corvus monedula	Jackdaw	Green	Birds		Y
Motacilla alba	Pied wagtail	Green	Birds		
Regulus regulus	Goldcrest	Green	Birds		Y
Phylloscopus collybita	Chiffchaff	Green	Birds		Y
Streptopelia decaocto	Collared dove	Green	Birds		Y
Sylvia borin	Garden Warbler	Green	Birds		Y
Corvus cornix	Hooded crow	Green	Birds		Y
Prunella modularis	Dunnock	Amber	Birds		Y
Turdus viscivorus	Mistle thrush	Red	Birds		Y
Motacilla cinerea	Grey Wagtail	Amber	Birds		Y

PROJECT SURVEYS

Actual_name	common_name	cat/cons' concern	group	recorded Jul 24	recorded Aug 24
Apus apus	Swift	Red	Birds		Y
Pararge aegeria	Speckled wood	low concern	Butterfly		
Maniola juritina	Meadow brown butterfly	low concern	Butterfly		Y
Coenonympha pamphilus	Small heath	priority	Butterfly		Y
Sciurus carolinensis	Grey Squirrel		Squirrel		
Ilex aquifolium	Holly		Tree	y	y
Aesculus hippocastanum	Horse Chestnut		Tree	y	y
Prunus laurocerasus 'Rotundifolia	Laurel		Tree	y	y
Quercus robur	Oak English, the pedunculate oak	common	Tree	y	y
Pinus sylvestris	Pine Scots	common	Tree		
Carpinus betulus	Hornbeam	common	Tree		
Salix cinerea	Willow Grey small tree	common	Tree		
Fraxinus excelsior	Ash tree	common	Tree		
Prunus avium	Cherry	common	Tree		
Alnus glutinosa	Alder	common	Tree		
Fagus sylvatica	Beech	common	Tree		
Corylus avellana	Hazel	common	Tree		
Taxus baccata	Yew	common	Tree	y	y
Quercus cerris	Oak Turkey	common	Tree	y	
Acer pseudoplatanus	Sycamore	non native	Tree	y	y
Sambucus	Elderberry	common	Tree	y	
Convolvulaceae	Bindweed		Vascular Plants	y	Y
Rubus	Blackberry		Vascular Plants	y	y
Dennstaedtiaceae	Bracken		Vascular Plants		y
Ranunculus repens	Creeping Buttercup		Vascular Plants	y	y
Hypochaeris radicata	Cat's-ear (false dandelion)		Vascular Plants	y	y
Ranunculus ficaria	Lesser Celandine		Vascular Plants		
Stellaria media	Chickweed		Vascular Plants		y
Potentilla reptans	Creeping Cinquefoil		Vascular Plants	y	y
Trifolium pratense	Red Clover		Vascular Plants	y	
Trifolium repens	Clover white		Vascular Plants	y	
Homogyne alpina	Coltsfoot		Vascular Plants	y	
Arabidopsis thaliana	Cress Thale		Vascular Plants		
Bellis perennis	Daisy		Vascular Plants	y	y
Narcissus	Daffodil		Vascular Plants		
Taraxacum officinale agg.	Dandelion agg.		Vascular Plants	y	y
Rumex obtusifolius	Broad-leaved Dock		Vascular Plants		y
Rumex crispus	Dock curled		Vascular Plants	y	y
Peltigera canina	Dog Lichen		Vascular Plants		
Aegopodium podagraria	Elder Ground		Vascular Plants		
Glechoma hederacea	Ivy Ground		Vascular Plants	y	
Senecio vulgaris	Groundsel		Vascular Plants	y	

PROJECT SURVEYS

Actual_name	common_name	cat/cons' concern	group	recorded Jul 24	recorded Aug 24
Asplenium scolopendrium	Harts Tongue		Vascular Plants	y	y
Crepis	Hawks beard		Vascular Plants		
Eupatorium cannabinum	Hemp-agrimony		Vascular Plants	y	y
Geranium robertianum	Herb-Robert		Vascular Plants	y	y
Heracleum sphondylium	Hogweed		Vascular Plants		y
Leontodon hispidus	Hawkbit speedwell		Vascular Plants	y	
Hedera helix	Ivy		Vascular Plants	y	y
Arum maculatum	Lords-and-Ladies		Vascular Plants	y	y
Ficus pumila	Climbing fig		Vascular Plants		t
Dryopteris filix-mas	Male Fern		Vascular Plants		y
Filipendula ulmaria	Meadowsweet		Vascular Plants		y
Urtica dioica	Common Nettle		Vascular Plants	y	y
Solanaceae	Nightshade enchanted		Vascular Plants	y	y
Lapsana	Nipplewort		Vascular Plants		
Conopodium majus	Pignut		Vascular Plants		y
Plantago lanceolata	Ribwort Plantain		Vascular Plants	y	
Primula vulgaris	Primrose		Vascular Plants	y	
Ligustrum vulgare	Privet		Vascular Plants		y
Senecio jacobaea	Common Ragwort		Vascular Plants	y	y
Anthriscus sylvestris	Cow parsley/wild chervil		Vascular Plants		y
Scabiosa Knautia	Field scabious		Vascular Plants		y
Galanthus	Snowdrop		Vascular Plants		
Saponaria	Soapwort		Vascular Plants		
Rumex acetosa	Common Sorrel		Vascular Plants		y
Veronica chamaedrys	Germander Speedwell		Vascular Plants		y
Asplenium trichomanes	Spleenwort Maidenhair		Vascular Plants	y	Y
Holcus lanatus	Yorkshire fog		Vascular Plants		Y
Agrostis stolonifera	Bent grass		Vascular Plants		y
Galium palustre	Common marsh bedstraw		Vascular Plants		y
Prubella vulgaris	Selfheal		Vascular Plants	y	Y
Galium aparine	Cleavers		Vascular Plants		Y
Hypericum maculatum	Imperforate St John's-wort		Vascular Plants		
Fragaria vesca	Wild Strawberry		Vascular Plants	y	y
Cirsium vulgare	Thistle		Vascular Plants	y	y
Geum urbanum	Wood avens		Vascular Plants	y	Y
Geum macrophyllum	Large leaved avens		Vascular Plants	y	Y
Lotus pedunculatus	Greater Bird's-foot-trefoil		Vascular Plants	y	y
Lathyrus pratensis	Vetchling		Vascular Plants	y	
Lactuca muralis	Wall lettuce		Vascular Plants		

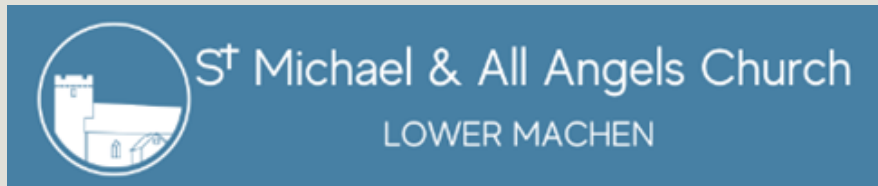
PROJECT SURVEYS

Actual_name	common_name	cat/cons' concern	group	recorded Jul 24	recorded Aug 24
Lonicera	Honeysuckle		Vascular Plants		
Epilobium montanum	Willowherb broad leaved		Vascular Plants		y
Anagallis arvensis	Scarlet pimpernel		Vascular Plants	y	
Cymbalaria muralis	ivy leaved toadflax		Vascular Plants	y	
Plantago lanceolata	Ribwort plantain		Vascular Plants		y
Epilobium parviflorum	Hoary willowherb		Vascular Plants		y
Chamerion angustifolium	Rosebay Willowherb		Vascular Plants	y	y
Stachys sylvatica	Hedge Woundwort		Vascular Plants	y	y
Eleusine indica	Goosegrass		Vascular Plants		Y
Achillea millefolium	Yarrow		Vascular Plants	y	
Asplenium ruta-muraria	Wall rue		Vascular Plants		
Sonchus oleraceus	Sow thistle		Vascular Plants	y	
Allium ursinum	Wild garlic		Vascular Plants	y	
Hyacinthoides non-scripta	Native bluebell		Vascular Plants	y	
Eurhynchium striatum	Feather moss		Vascular Plants	y	
Centaurea nigra sens. lat. (=nigra/debauxii)	Common Knapweed (Black)		Vascular Plants		y
Rhagonycha fulva	Red soldier beetle	common	Insect		Y

Anything on the table that does not have a tick beside it was already identified by the original 1988 yellow book survey report.



Produced in partnership with St Michael & All
Angels Church Lower Machen
&
Caerphilly Woodlands Trust.



Caerphilly Woodlands Trust



Coed y Werin



facebook.com/LowerMachenChurch/



lowermachen.church/heritage



lowermachenchurch@gmail.com