BIODIVERSITY DISCUSSION PAPER FOR WILLAND PARISH COUNCIL – OCTOBER 2023

Contributed by B Bodkin

Following my email dated 14.9.23 to the **Parish Council** and brief paper entitled "Plea for **Willand Parish Council** to protect biodiversity", I am now providing a comprehensive paper outlining the current position, future recommendations and additional information covering weed spraying, verge cutting and green spaces, and the Willand Cemetery extension for consideration by the **Parish Council.**

CURRENT POSITION

A) WEED SPRAYING

The **Parish Council** pays a contractor to spray weeds around the Parish twice a year at a significant cost. Historically Cllr Radford has paid approximately half of the costs to the **Parish Council** from the Locality Budget he has received as a County Councillor. The DCC website states "Locality budget funding is available to projects that are beneficial to local communities and should be in line with the Council's objectives and priorities which are to: *Improve health and wellbeing; Help communities be safe, connected and resilient; Be ambitious for children and young people; Support sustainable economic recovery; Tackle poverty and inequality; Respond to the climate emergency."* On this basis, it is unlikely that Cllr Radford would be able to support further requests for funding towards weed spraying although measures that the **Parish Council** may wish to bring forward in response to the climate emergency (including nature recovery) may meet the criteria, as the DCC Strategic Plan states under "Respond to the climate emergency" that its objective is to "Lead on helping Devon respond to the climate and ecological emergency, and work to protect and improve our natural environment" for which the pledges include to"Help wildlife and landscapes to recover".
Please see https://www.devon.gov.uk/strategic-plan/
and https://www.devon.gov.uk/strategic-plan/the-best-place/responding-to-the-climate-emergency/

B) VERGE CUTTING & GREEN SPACES

The **Parish Council** pays a contractor to cut verges in the Parish. Ground maintenance of the majority of the green spaces and play parks is undertaken by either the **Parish Council** or MDDC. Again, this is at a significant cost which will be £7140 plus VAT in 2024. The Cutting Specification for verges states: "3.1 There will be a requirement for 10 cuts per year during the growing season. Flexibility of when cuts are carried out will be required to compensate for fast growing periods or times of drought. Additional cuts may be authorised by the Parish Clerk if required – the additional payment will be one tenth of the agreed contract price for the 10 cuts per extra cut. 3.3 Grass should be cut at a height of 60 to 70mm evenly all over the area leaving no prominent and unsightly grass tufts, ridges or weeds. Strimming should take place along all kerb edges, fence/hedge lines and other obstacles as required to give an even appearance. If there is an undefined edge to the verge the grass will be cut back to the hedge base, wall/fence or ditch edge. 3.4 It will be at the discretion of the contractor as to whether grass is collected or left on site. If the grass is collected it will be removed from the site before the Contractor leaves the site. If the grass clippings are left on site they must be evenly distributed across the full width of the machine swath and not left in clumps or ridges. 3.6 The type of machinery used to achieve the specification is at the discretion of the contractor and may be varied to suit conditions. 3.8 Jaycroft, Meadow Park against the woodland and fields, Dean Hill Road and the very wide areas along Somerville/Station Roads will have a meter strip regularly cut along the edge with the pavement or road edge. This will be cut much wider in some areas to allow clear visibility for traffic on junctions and bends. It will also be cut wider to give a clear margin and access to planters, dog/litter bins and seats which may be situated on the area. The rest of the area will be left wild until the last cut of the year when it will all be cut down to the specified level."

C) CEMETERY EXTENSION

The grounds maintenance in the Cemetery comprises grass cutting and hedge trimming, with the "extension" area being cut 8 times a year (less frequently than the rest of the Cemetery). In 2021 there was an attempt to create a wildflower meadow in the Cemetery "extension" but the method used was not successful and the project was abandoned.

RECOMMENDATIONS

A) WEED SPRAYING

We have already lost 80% of the world's insects – largely due to the use of chemicals. 'Pesticides', according to PAN (Pesticide Action Network UK) "is a collective term for products designed to kill pests, including (but not limited to) herbicides (designed to kill plants), insecticides and fungicides. They aren't just used on farms and in gardens but also in the amenity sector which includes towns and cities, sports pitches and transport infrastructure such as roads and railway tracks. The vast majority of pesticides used in the amenity sector are herbicides, designed to kill weeds and grasses growing in so called undesirable places. But, we no longer want manicured lawns, weed-free verges and sterile parks and playgrounds drenched in pesticides." Ending pesticide use and stopping mowing are key ways in which councils can contribute to halting the recent declines in pollinators and other insects. **Willand Parish Council** is urged to sign up to PAN's Pesticide Free Towns campaign and commit to ending the use of hazardous chemicals in our neighbourhood, in common with other communities such as Lyme Regis, the East Devon District Council area, Frome and Glastonbury (where use stopped in 2016). Other communities and towns are on their journey with this including Bradninch, Exeter City Council, Chulmleigh, Axminster etc. Incidentally, on the Sustainable Chulmleigh Facebook page there is a link to a FREE event being held via Zoom on 10 October called Making Meadows and Welcoming Wildflowers Workshop https://www.somersetwildlife.org/events/2023-10-10-making-meadows-and-welcoming-wildflowers-workshop?fbclid=IwAR0wHX1pZQFXDi3t1HovkYts_KuqhKA4T9lmNSNImEQcBwSE07wdvxqz7nA

- More information about becoming a Pesticide Free community can be found in the third section of this report under Background & Further Information etc and PAN's website has lots of useful information and resources for local authorities who want to switch to non-chemical alternatives.

B) VERGE CUTTING & GREEN SPACES

Ending the use of pesticides and stopping mowing are key ways in which **Willand Parish Council** and other councils can contribute to halting the recent declines in pollinators and other insects. (According to PAN, "In the UK, more than 65 councils, ranging from parish to district and county level, are already taking action to stop or significantly reduce their use of herbicides."

VERGES: On the subject of verges, the following information has been obtained from the Plantlife website and makes shocking reading! "*With over 97% of wildflower meadows destroyed since the 1930s, road verges are a vital refuge for bees, butterflies, birds, bats and bugs. A good verge will supply a diverse source of nectar and pollen from the first celandines in February to the last Devil's-bit scabious in September. Bird's-foot trefoil alone is a food plant for over 130 species of invertebrate. Plantlife has estimated that if cutting all road verges in Britain was reduced from four times a year to twice a year, it would save over 30,000 tons of CO2 emissions."*

The Good Verge Guide (from Plantlife) is designed to be your go-to guide for making your local verges wildlife friendly. https://www.plantlife.org.uk/wp-content/uploads/2023/03/Good_verge_guide_2021.pdf
See also: https://www.plantlife.org.uk/advice-learning/managing-grassland/
Plantlife's basic advice is "to cut less (only once or twice per year) and to change the timing of cutting from spring to late summer or autumn. If you're currently cutting verges three or more times a year, you are likely to save money by reducing the number of cuts." Plantlife adds, "Reducing the number of cuts and changing the timing of the cut is a great place to start. However, collecting grass cuttings makes a significant difference. It reduces the thick layer of thatch that builds up and prevents more delicate wild flowers from growing – only vigorous species can cope with it. It also returns nutrients to the soil, increasing fertility over time and encouraging more vigorous plants." In 2019, Plantlife published its Good Verge Guide, setting out detailed guidelines on how to enhance biodiversity along the UK's roadsides. While it contains tailored advice for specific habitats, its overriding message is that, to maximise species diversity and avoid disturbing ground-nesting birds, cutting should be left as late as possible: an ideal regime includes a first cut between mid-July and the end of September, with one additional cut before Christmas. More information on this can be found in the Background and Further Information section of this report.

GREEN SPACES: Planting trees and shrubs in green spaces provides shade, and food and shelter for wildlife. Native species of trees/shrubs have most value for wildlife. One idea if space is limited is to plant a

"hedge wedge", which is a perfect space-saving alternative to a traditional long hedge; it creates a dense food-rich haven for local wildlife. See Background and Further Information section for more details.

Nature is being pushed out of our neighbourhood which puts many species under threat. **Willand** has "green spaces" identified in the Neighbourhood Plan. The **Parish Council** has direct control over how a number of these are maintained and needs to consider how they can be made better for nature, for example:
Action 1: Leave areas/patches of grass to grow longer to allow flowers to bloom
Benefits: Food for bees and butterflies, looks attractive, cost saving.
Action 2: Connect green spaces so they are not isolated.
Benefits: Many species, such as hedgehogs, can then fulfil their need to roam to find food, shelter and a mate; connecting green spaces and removing barriers can help wildlife to move freely and flourish. In addition, the **Parish Council** can engage with the community to encourage residents to follow this example by introducing hedgehog tunnels in garden fences to allow free passage; hedgehogs can travel a mile a night and hedgehog highways are one of the most important ways of helping hedgehogs in the neighbourhood and gardens. It must be stressed that people encouraging hedgehogs into their garden by opening up a "highway" must NOT use slug pellets. See this RSPB link for further reading: https://www.rspb.org.uk/get-involved/activities/nature-on-your-doorstep/take-action-for-nature-in-your-community/
Action 3: Grow wildlife friendly flowers
Benefits: They add colour, are a lifeline for bees, butterflies and other minibeasts, and provide food for birds and small mammals.
The **Parish Council** already has a number of "planters" located in the village, run by volunteers, but the flowers are chosen for seasonal colour and are not necessarily wildlife friendly e.g. "double flowered" petunias offer NO food value to insects, as this link explains https://southwickcountrypark.com/2020/03/12/double-flowers/
Action 4: Create a wildflower meadow: this was attempted in the Cemetery extension in 2021 but the method used was not successful. **Willand Parish Council** could make this work as the site is ideal, being a relatively large open area which is in sunlight for much of the day. This topic is covered in more detail under "Cemetery Extension" next.

C) CEMETERY EXTENSION

Since the 1930s, over 97% of wildflower meadows have been lost in our countryside so growing a wildflower meadow in the Cemetery extension will help wildlife, improve biodiversity, help store carbon and provide an attractive place for visitors to the Cemetery to sit and take solace from nature. The plants in a typical meadow can support nearly 1400 species of invertebrates – bugs, beetles, flies, spiders, grasshoppers, crickets, butterflies and moths. The best time to create and sow is in the Autumn, so making a decision soon will allow plenty of time to plan and prepare to start sowing in Autumn 2024. The basic principles are cutting and mowing at the right time and allowing the flowers to bloom and set seed, so allowing them to increase year-on-year. More details on how to establish and manage a wildflower meadow successfully can be found in the Background and Further Information section of this report.

BACKGROUND AND FURTHER INFORMATION, EVIDENCE & REFERENCE SOURCES

A) WEED SPRAYING

The PAN (Pesticide Action Network UK) website is a very useful source of information and has been signposted by Devon Wildlife Trust. https://www.pan-uk.org/pesticide-free/ The following material has been taken from the PAN website.
https://www.pan-uk.org/glyphosate/

Effects of glyphosate on the environment
Glyphosate has direct and indirect effects on the environment. Indirect impacts on birds and other animals occur due to the wiping out of weeds and wild flowers, destroying habitats and food supplies. Glyphosate has also been found to have adverse effects on earthworms, beneficial insects and bees. Pesticides are toxic chemicals designed to be deliberately released into the environment. Although each pesticide is meant to kill a certain pest, a very large percentage of pesticides reach a destination other than their target.

Animals
Animals may be poisoned by pesticide residues that remain on food after spraying. An application of pesticides in an area can eliminate food sources that certain types of animals need, causing the animals to relocate, change their diet, or starve. Poisoning from pesticides can even make its way up the food chain; for example, birds can be harmed when they eat insects and worms that have consumed pesticides.

Birds
There is evidence that birds are being harmed by pesticide use. Rachel Carson's book Silent Spring discusses the loss of several bird species due to accumulation of pesticides in their tissues. Types of fungicides used in farming are only slightly toxic to birds and mammals, but may kill off earthworms, which can in turn reduce populations of the birds and mammals that feed on them. Additionally, as some pesticides come in granular form, birds and other wildlife may eat the granules, mistaking them for grains of food. A few granules of a pesticide are enough to kill a small bird. Herbicides may also endanger bird populations by reducing their habitat.

***Going pesticide-free** should result in their being more 'weeds' around our towns and cities. The point of a ban is not to just replace pesticides but to also move away from the old-fashioned 'neat and tidy' mentality, accepting greater biodiversity in our neighbourhoods. While some spaces will still need to be managed to remove all plant materials for safety issues, many other areas might be more gently managed, with some even left as wild spaces.*

In order for this change in mindsets to take hold, councils need to engage residents and bring them on board from the beginning. Communication and the strengthening of local networks are crucial to the success of going pesticide-free and avoiding complaints.

Communicating with residents
By proactively sharing their new weed management plans, explaining why certain areas will look different and describing the positive effects of these changes, councils are more likely to secure the support of local residents. It is an opportunity to demonstrate the ways in which they are helping biodiversity recover. PAN UK suggests putting up signs in relevant locations, sharing the news online and on local media, and even organizing workshops and nature walks. Councils can also consider running a few citizen science projects (for example, asking local residents to photograph and share pavement plants or local wildlife), or partnering with local green groups and organisations to deliver activities. Residents, in turn, can celebrate their local biodiversity on social media or by writing to the council, lending their support to the pesticide ban.

Strengthening local networks
There is an opportunity for councils to involve residents in caring for their own streets and green spaces. Some councils are already working closely with green groups to strengthen and make the most of existing networks to take on management of certain parks, community gardens or streets. Ultimately, these public contributions can form an instrumental part of a council's weed management plan.

Residents can also help by maintaining pressure on councils to keep their promises. Midlothian Council attempted to reverse its pesticide ban after just one season, but thanks to the dedicated efforts of local residents, they managed to overturn the decision by 'adopting their streets'. By getting involved, residents have lessened the number of spaces the council has to manage, and proved that there is a strong desire for streets to be managed without chemicals.

Through a clear pesticide policy which includes a progressive and sustainable phase-out, and a thoughtful public engagement plan which encourages a shift in mentalities and greater appreciation for biodiversity, councils can pass popular pesticide bans and help create green and diverse neighbourhoods for people and nature to thrive.

We have already lost 80% of the world's insects – largely due to the use of chemicals.

With a climate change emergency, collapsing biodiversity and a global health crisis underway it is imperative that our urban spaces become healthier places for people and wildlife. The body of evidence linking pesticides to serious human health and environmental harms is growing, as is the movement to end their use.

***'Pesticides',** according to PAN (Pesticide Action Network UK) "is a collective term for products designed to kill pests, including (but not limited to) herbicides (designed to kill plants), insecticides and fungicides. They aren't just used on farms and in gardens but also in the amenity sector which includes towns and cities, sports pitches*

and transport infrastructure such as roads and railway tracks. The vast majority of pesticides used in the amenity sector are herbicides, designed to kill weeds and grasses growing in so called undesirable places. But, we no longer want manicured lawns, weed-free verges and sterile parks and playgrounds drenched in pesticides."

In light of this, and to support local authorities and other land managers in their move to making our towns and cities pesticide-free, ***we have published a new guide on sustainable alternatives to herbicides****. The guide includes approaches to weed control ranging from letting plants grow wherever possible in order to support biodiversity to mechanical methods and new technology. It includes case studies of UK towns and cities that have already gone pesticide-free, details the benefits of switching to a non-chemical weed control approach and lists other useful resources and companies supplying herbicide-free alternatives.*

In the UK, more than 65 councils, ranging from parish to district and county level, are already taking action to stop or significantly reduce their use of herbicides. But this guide is also relevant to all land managers with responsibility for weed control. Areas such as golf courses, railways, motorways, hospitals, housing and universities, to name a few, are all major users of herbicides and we hope that this guide will benefit them too.

https://www.pan-uk.org/information-for-local-authorities/

https://issuu.com/pan-uk/docs/pft_a_toolkit_for_local_authorities?e=28041656/43992989

B Bodkin's note: See pages 6-7 of the above document "Going Pesticide Free" under "Threats to the natural environment"... "Ending pesticide use and stopping mowing are key ways in which councils can contribute to halting the recent declines in pollinators and other insects." Also page 8 "The UK National Pollinator Strategy" and "Defra guidance..."

B) VERGE CUTTING & GREEN SPACES

NATURE CRISIS: The UK's wildlife is continuing to decline according to *State of Nature Report 2023*. The 2023 State of Nature Report is a healthcheck on how the UK's wildlife is faring, comprising data from over 60 conservation organisations. Of the 10,008 species assessed, 2% (151) are now extinct in Great Britain and 16% (almost 1500) are now at risk of extinction. Pollinators such as bees, hoverflies and moths have decreased by 18% on average since 1970. Also since 1970, over half of our flowering plants, mosses etc have been lost from places where they use to thrive, even plants such as Heather. The UK has experienced a significant loss of biodiversity. Accelerating climate change is adding to the negative impacts on nature.

https://stateofnature.org.uk/ https://stateofnature.org.uk/infographics/

The UK, like most other countries worldwide, has seen significant loss of its plants, animals and fungi. The data from State of Nature cover, at most, 50 years but this follows on from centuries of habitat loss, development and persecution. As a result, the UK is now one of the most nature-depleted countries on Earth. In December 2022, the Convention on Biological Diversity (CBD) COP15 summit confirmed a global mission to halt and reverse the loss of nature by 2030, and achieve recovery by 2050. Farmland wildlife is declining due to a variety of factors including agricultural intensification since the 1950s and the use of pesticides. Trees outside woodland are an important feature, particularly for wildlife, as they offer additional foraging resources and facilitate movements across often intensively managed landscapes.

The **Parish Council** has a responsibility for biodiversity. It can be seen from the following link (https://www.gov.uk/guidance/complying-with-the-biodiversity-duty#review-internal-policies-and-processes) that "local authorities (excluding parish councils) and local planning authorities must write and publish a biodiversity report. Other public authorities must fulfil their duty, but do not need to publish a report."

Winchester City Council has just recently declared a Nature Emergency
https://www.hampshirechronicle.co.uk/news/23808657.winchester-city-council-motion-declares-nature-emergency/
The format of their Nature Emergency Motion for councillors was created by the Hampshire & Isle of Wight Wildlife Trust and has been adopted by other councils in recent years too.

https://www.hiwwt.org.uk/nature-emergency
The full wording of the motion can be found on the above link but the first paragraph of the Preamble is shown below:
"We are in the middle of a nature crisis. Almost half of all UK wildlife is in long term decline and 15% of species are at risk of extinction. The climate emergency is only hastening this destruction of the natural environment, damaging habitats and disrupting ecosystems. Yet it is these very habitats that have the potential to lock up carbon and fight back against rising global temperatures. It is essential that we not only protect these spaces, but let them thrive – for the benefit of people, planet and nature."
The second resolution of the motion reads that the council resolves to: "Commit to embedding nature's recovery at the heart of all strategic plans, policy areas and decision-making processes" and part 5c is to resolve to: "Reducing pressure on wildlife". The full text can be found via the link and it is hoped that members **of Willand Parish Council** will also recognise that action must be taken at local level in **Willand** in response to the nature crisis.

VERGES: Reducing the frequency of grass and verge cutting will allow flowers to bloom, providing vital food for insects, such as bees and butterflies. Plantlife have produced lots of helpful guidance on how to make roadside verges better for nature. The Good Verge Guide (from Plantlife) is designed to be your go-to guide for making your local verges wildlife friendly.
https://www.plantlife.org.uk/wp-content/uploads/2023/03/Good_verge_guide_2021.pdf
Information quoted below is from the Plantlife website.
"One mile of flower-rich verge can produce 20kg of nectar sugar per year, enough to feed millions of pollinators. With over 97% of wildflower meadows destroyed since the 1930s, road verges are a vital refuge for bees, butterflies, birds, bats and bugs. A good verge will supply a diverse source of nectar and pollen from the first celandines in February to the last Devil's-bit scabious in September. Bird's-foot trefoil alone is a food plant for over 130 species of invertebrate. Plantlife has estimated that if cutting all road verges in Britain was reduced from four times a year to twice a year, it would save over 30,000 tons of CO2 emissions. Biodiversity and pollinators: If we get the plants right, all other wildlife has a chance of thriving. Road verges are essential refuges for the wild flowers that support our wildlife and their value in the fight to conserve bees, butterflies and beetles cannot be underestimated. Benefits to wellbeing: Having a closer connection with nature has been shown to bring real improvements to our wellbeing. For many of us, a flash of colour on a road verge as we commute into work may be our only view of wildlife in our working day. Or, if we're lucky, a walk along a local lane might allow us to see cowslips or campions for the first time, a favourite clump of orchids or butterflies feeding from knapweed.
Will it cost more money to adopt these guidelines? *Plantlife's basic advice is to cut less (only once or twice per year) and to change the timing of cutting from spring to late summer or autumn. If you're currently cutting verges three or more times a year, you are likely to save money by reducing the number of cuts. Sometimes extra funds will be needed to restore wild flowers to verges that have been mismanaged for a long time or to buy new machinery, but these costs can be recouped in the medium to long term once more efficient management is in place. Further details on costs for better verge management projects can be found in the case studies in our technical guidance, Managing Grassland Road Verges: a best practice guide and on the Plantlife website.*
Is collecting grass cuttings essential for better management? *Reducing the number of cuts and changing the timing of the cut is a great place to start. However, collecting grass cuttings makes a significant difference. It reduces the thick layer of thatch that builds up and prevents more delicate wild flowers from growing – only vigorous species can cope with it. It also returns nutrients to the soil, increasing fertility over time and encouraging more vigorous plants. Collecting clippings (or 'arisings') can present a challenge due to budget, time or equipment constraints. However, there are exciting developments in cut-and-collect approaches being trialled by various councils and highways agencies, which are helping them save time and money. It is worth considering that cut-and-collect might be an option on a smaller scale if there is an active community or volunteer programme. Clippings can be raked by hand and composted nearby. Several verge groups have had success managing their verges this way – you'll find more information in case studies on the Plantlife website.*
Plantlife's road verge management guidelines:
Managing urban grassy road verges *Balancing the needs of wildlife and the desires of residents can be challenging. When councils implement changes to cutting regimes to make urban verges and green spaces more wild flower and wildlife-friendly, they can receive complaints that the grass looks scruffy and unkempt. The good news is that you can encourage flower-rich verges with visible management.*
A buzz cut for biodiversity *Road verge vegetation doesn't have to be tall to be wildlife-friendly. Species such as clovers, trefoils, dandelions, selfheal, creeping buttercup and yarrow grow quite happily at ankle height and support a huge array of pollinators. There are two key factors in maintaining short, flowerrich verges. The first is to reduce cutting to once every four weeks to a height of around 3cm to 6 cm; Plantlife's Every Flower Counts survey has shown this rate of cutting allows short-grass plants to flower abundantly between the cuts,*

and the plants themselves survive and continue growing. The second is cut-and-collect, whereby the grass cuttings are removed from the site. Collecting the thatch of decaying grass removes nutrients and, over time, allows more wild flowers to thrive and less vigorous grass to dominate.
Framing verges *Cutting a one-mower-width along the front edge of a verge encourages wild flowers and wildlife, while helping to keep the verge looking tidy – it lets people know that the longer grass is being left intentionally and hasn't just been neglected. This approach also has two other important benefits:*
Keeping roads safe*: The area of shorter grass at the front of the verge can preserve good visibility and ensure safety at junctions. It also keeps footpaths through green space open and accessible.*
Structural diversity*: The two different heights of vegetation – short in the front and long at the back – are great not only for plant diversity (some species are naturally low growing, others tall), but support lots of insect life, too.*
Signage *Flower-rich verges are increasingly popular with local communities and are a great way of encouraging wildlife into the heart of the built-up environment. Putting up signs on verges makes it clear that wilder verges are international and are part of a management plan.*

More info is available on this link: https://www.inkcapjournal.co.uk/how-is-your-local-council-managing-its-roadside-verges/
And on https://www.devon.gov.uk/environment/wildlife/managing-verges-for-wildlife which is **Devon County Council's** "Life on the verge in Devon" website.

GREEN SPACES: if more habitat is desirable, consider planting a "hedge wedge": A hedge wedge is a block of hedging plants for those who don't have the space for a long hedge, ideal for a corner or edge of a garden or green space. It can be planted as a triangle or rectangle of hedging plants such as hawthorn, dogwood, field maple or hazel. Best planted between November and February, it creates a dense, food-rich, safe place for wildlife such as nesting birds. See this example via the RSPB
https://www.youtube.com/watch?app=desktop&v=8OMGn3TXbJU&ab_channel=TheRSPB

https://www.rspb.org.uk/get-involved/activities/nature-on-your-doorstep/garden-activities/grow-a-hedge/

C) CEMETERY EXTENSION

There is so much information available to the **Parish Council** to enable a flourishing wildflower meadow to be created on the Cemetery extension ground and it is the ideal location so I would urge you to give it another go.

https://www.goren.co.uk/pages/moremeadows-forum This forum is full of useful advice and local contacts of people based in and around Devon for creating a wildflower meadow. Highly recommended for all those looking at starting a meadow or managing land for wildlife etc.

https://rspb.org.uk/get-involved/activities/nature-on-your-doorstep/garden-activities/create-a-wildflower-meadow/ provides a step-by-step guide

https://meadows.plantlife.org.uk/wp-content/uploads/2021/11/Plantlife-The-Good-meadow-guide-English_WEB.pdf

https://cdn.buglife.org.uk/2019/07/2.BuglifeCommunityMeadowspackHOWTOCREATEACOMMUNITYMEADOWweb.pdf

https://www.youtube.com/watch?v=CYcTwE9AT3E&ab_channel=WildYourGardenwithJoelAshton

https://wildyourgarden.com/ Another source of seeds/plants/plugs and anything else you may need

https://forum.meadowmakersnetwork.org.uk/viewforum.php?f=15

https://www.goren.co.uk/collections/wildflowers Goren Farm, near Honiton, grows acres of wildflower meadows and supplies seeds and offers advice**. B Bodkin** has visited it and would highly recommend it; the owner confirmed he would be happy to offer help and advice to **Willand Parish Council** to create a wildflower meadow.

Meadows that bloom are really fantastic sources of food for pollinators, probably the most cost-effective way that you can help. That's the beauty of reducing mowing – we can move really easily from an area of shortly mown grass into a naturally regenerated meadow really easily – you just need to be patient, you need to manage it properly and you need to let those flowers grow again. There are two types of meadows you can create: Meadow Type 1: SHORT-flowering Meadow - where you just reduce your mowing, so you're mowing every 4 or 6 weeks, instead of really regularly, and that allows flowers like Clover and Dandelion to grow and provide food for pollinators. Meadow Type 2: LONG-flowering Meadow, when you just cut once a year, in September and you remove the cut away again. With long-flowering meadows, there are three things you have to remember in terms of management: 1: Always remove grass cuttings to reduce soil fertility 2: Remove fast-growing/noxious plants 3: Please be patient! 4. Choose the correct location 5. Cut paths through meadows 6. Put up signage 7. Plan your annual cut and removal of cuttings 8. Again try to be patient, it will be worth it!

The RSPB advises, in its step-by-step guide per the link shown above, the following aftercare:
1. In the first growing season, cut growth in midsummer during a spell of hot weather and allow cuttings to dry on the ground for 2 days, allowing seeds to fall into the soil; then remove the dried material ("arisings")
2. In subsequent seasons don't mow from early April to late July, August or even September. (NOTE: the National Trust at Killerton have cut theirs just recently, as witnessed on 28.9.23). Varying the cut time gives different plants an equal chance to survive. A July cut would require an uncut area to be left as a refuge for grasshopper nymphs.
NB A special "haymower" or scythe would need to be sourced due to the length of the grass and the cut grass would need to be left on the ground ideally for a week for the seeds to drop before being cleared away for compost. Then the meadow can be mown, if needed, once or twice in early spring, along with any "spot" weeding of docks/thistles/nettles if required.
3. The meadow will evolve year by year and become more species-rich, with increasing numbers of bees, butterflies and other insects, attracting birds and bats.
WARNING: if creating a wildflower meadow on established grasses (such as the Willand Cemetery extension):
- at the end of the summer before sowing (e.g. summer 2024), cut the grass down really hard
- scarify hard
- sow yellow rattle (an annual) which is a parasitic plant which attaches to the grasses and spreads across the area over the next 2-3 years; this leaves very weakened grasses behind creating patches and a lot less vigorous grass so the wildflowers have a much better chance of establishing from seed
- sow seed the following Autumn when the Yellow Rattle has grown for a year (i.e. Autumn 2025)
- yellow rattle seed, wildflower seed and lots of advice is available from Goren Farm near Honiton.

Other information that **B Bodkin** has found out on this subject:
- When creating the wildflower meadow, you need to accept that anything you do will always disrupt some wildlife, so you need to aim for the benefits in the long run from that short-term disturbance.
- DON'T use chemicals – weed out any unwanted, invasive weeds by hand
- If the ground remains fertile, then a lot of growth in April/May/June from grasses can result in a tall "floppy" appearance: the solution would be to have a "late summer meadow" i.e. by mowing until early summer and then letting the grasses and late wildflowers grow. However you would lose the spring flowers but still have a summer meadow.
- choose native plants for native insects, particularly as we've lost 97% of our UK wildflower meadows in the last 100 years. (Keep non-native plants in garden herbaceous borders, not in wildflower meadows!)
- In September, cut the meadow down to within 2-3 inches of the ground (this is to leave some habitat for larvae of caterpillars that might be in the grasses before emerging in the Spring). NO cuts during winter. Then leave it through the summer and have one cut in September
- Starting point is "to put the mower away" as there will be lots of wildflowers already in the area
- Be patient and let the meadow develop:

Stages (i) **Species-poor**, if you've got very fertile soil to start, you'll get grasses, docks, ragwort and nettles so will need to remove the docks, ragwort and nettles by hand (NO chemicals). The mixture you take off each September will allow the soil fertility to drop. IF the grass is so strong, you may need 2 cuts (July and

Sept) and after a few years revert to only one in September. Warning – the "species-poor" stage doesn't look that good to humans!

(ii) **Species-sparse** stage; i.e. lots of buttercups and ox-eye daisies: at this stage you can add yellow rattle seed to suppress grass growth and allow wildflowers to grow.

(iii) **Moderate species-richness meadow:** looking a bit better and more colourful and bigger range of plants; could be 15-plus species in a square metre and will improve year on year and be brilliant for diversity and for people to enjoy.

TOP TIPS:

Can cut paths through for people;

Put signs up for people to know it's an action to help biodiversity;

Avoid sites which may become litter-traps as would need to be "walked and cleared" before the September cut. (Unlikely to be a litter problem in Willand Cemetery extension though).

Plan ahead for the Sept cut to have the right tools/machinery e.g. an agri-mower set at just over 3 inches for habitat preservation for larvae to over-winter

Also important NOT to clear the area absolutely, but to leave clumps/pockets of habitat if you can. Can clear the cut grass with rake/hay fork and a wheel barrow if tractor not suitable.

Check for reptiles and amphibians before mowing.

Meadows look their best in June to August but then look a bit dead-looking but people need to tolerate this, just for a short while, into September cut as the plants are dropping their seeds and MUST be left to fall to the soil so you can reap the benefits of your meadow the following year.

Aim for a prolonged nectar period to feed butterflies, bees etc as long as possible.

CONCLUSION

I hope the information I have presented is useful to aid discussion and decision-making by Willand Parish Council on these very important issues. I will be happy to provide further clarification if required.

B Bodkin
3.10.2023