

Marshfield Blue Heart Verges Management Plan

By Martin Smith on behalf of Sustainable Marshfield
Version 2 March 2021



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Introduction

A group of local residents has promoted the Blue Heart scheme in Marshfield as part of a wider Biodiversity Action Plan. In summer 2019 a series of pilot Blue Heart verge areas was agreed in the village through discussions with experts in South Gloucestershire Council, the Parish Council, landowners and adjoining residents. The Marshfield Parish Council voted to implement this management plan in September 2020.

Many of the verges within the Parish of Marshfield have been intensively managed for a long period, perhaps greater than 50 years. Subsequently, the verges are in a poor botanical condition, with high fertility levels. Because of this, the verges will take time to restore into a good ecological condition and many will contain rank and dominant grasses which outcompete the herbaceous species that we aim to bring back. The verges within this plan were chosen for their specific qualities, such as their slope, existing management, and their amenity value.

This scheme has developed over the last year with eight sites now included. There is great variation in the verges, ranging from the steep banked verge in Little End to a large rural verge in Ayford Lane. This report details the specific management of the verges, the responsible persons for each verge and includes monitoring remedial actions to ensure the long-term management of the verges.

The grasslands will be managed as per the recommendations provided within table 7 of the St Mary's Church Management Plan produced by Sally Kerr, 2021.

For further information on this document or to comment or share your thoughts please email info@sustainablemarshfield.org with subject line 'Blue heart verges' or send a letter via Tolsey Hall for attn 'Sustainable Marshfield/Blue heart verges'.

Aims and Objectives

The main aim of the Blue Heart Verges Management Plan is to provide sustainable cyclical management of the verges which includes removing and composting the arisings. This would effectively allow the flowering plants to set seed and reduce the fertility in the soil to suppress the growth of the more dominant grasses. Specific aims and objectives include:

- Increase herbaceous diversity of the verges in order to preserve and restore local biodiversity.
- Increase the habitat suitability for a range of wildlife including birds, small mammals, and insects.
- Undertake the management of the verges using a low-cost, and sustainable management regime that supports local biodiversity.
- Provide aesthetic verges which are managed for their amenity value (particularly within the village).
- Engage and work alongside Marshfield Mowers and Parish Council, and members of the community
- Monitor the verges to record effects of management plan and be adaptable to change.
- Provide a network of wildlife corridors within Marshfield and improve ecological connectivity
- Ensure road safety is considered, for example visibility and safe roadside walking
- Share this management plan widely and promote involvement in the project

Background

There has been a huge growth in awareness about the importance of biodiversity on which human life depends. UK State of Nature Reports have highlighted that in the last 30 years we have lost 40 million birds, 70% of our insect and butterfly population, 80% of our bees, 97% of our wildflower meadows and 50% of small mammals such as hedgehogs.

Central Government has created frameworks for conserving and enhancing biodiversity. It has called on all parts of society to engage with the issue and take action. All public authorities have a legal duty to have regard to conserving biodiversity while carrying out their activities (Section 40 Natural Environment and Rural Communities (NERC) Act 2006).

South Gloucestershire Council created a Biodiversity Action Plan for 2016-2026. A part of this calls on Parish Councils and communities to write their own action plans.

The Blue Heart Campaign launched in South Gloucestershire in 2014 was one response to the dramatic decline in biodiversity. It aims to encourage communities to set aside parts of gardens, road verges and school grounds to grow through the Spring and summer, encouraging pollinating species and raising awareness.

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Location of Verges

The surrounding parish is dominated by agricultural land comprising a mix of arable and pastoral land to the north and abundant permanent pasture with woodland copses and sections of ancient semi-natural woodland to the south. There is an extensive network of rural road verges particularly to the north of the village such as the verges along Rushmead Lane and to the west and east of Tormarton Road. The location of all of the blue heart verges is displayed below and the individual verges are provided within appendix I of this report.



The Blue Heart Verges Management plan

Name	Description	Management	Photo
<p>Sheepfair Lane</p>	<p>The northern section is a grassland verge on a slight gradient, bordered by a drystone wall. This section was dominated by grasses with little herbaceous cover. Herbs included wild carrot, nipplewort, ribwort plantain, dandelion and white clover.</p> <p>This section was scarified, and a St Catherine’s seed mix from Emorsgate Seeds was sown in 2019. Subsequently, additional species such as cornflower, oxeye daisy, fox and cubs and opium poppies, and crocus have been observed.</p> <p>The southern section was dominated by hawksbeard and red valerian and includes a buddleia shrub and several stands of monbretia/crocosmia.</p>	<ul style="list-style-type: none"> • Biannual cut with scythe (Feb – March and August – September). • Remove clippings and compost. • Remove monbretia and buddleia. • Plant dog rose in place of buddleia • Sow St Catherine’s seed mix • Control species such as ragwort, thistles, and nettles. • A refugia of deadwood could be created to replace the stones to prevent cars parking on the verge. 	 <p><i>Photo 1 Sheepfair Lane (north)</i></p>

Name	Description	Management	Photo
<p>Weir pool</p>	<p>The weir pool verge consists of two sections of grassland either side of the weir pool. These grassland sections provide suitable terrestrial habitat for amphibians such as frogs and potentially great crested newts. The grasslands also contain several damp-favouring plants such as hemp agronomy and marshmallow.</p> <p>The eastern grassland was flooded this winter (2021).</p> <p>Currently these sections of grassland are cut annually. However, an additional cut in late winter would likely reduce the dominance of grass and would reduce the fertility within the soil.</p>	<ul style="list-style-type: none"> • Sow with a marshy grassland mix such as the Emorsgate EG8. • Scythe between Feb -March and late July – September. • Leave 1 m wide sections of long grass which will be cut on rotation (biennially) for amphibians. • Remove clippings and compost. • Manage invasive or undesirable species. • Check the grassland for reptiles and amphibians before summer cut. • Create refugia from deadwood for reptiles and amphibians. 	 <p><i>Photo 2: Western section</i></p>  <p><i>Photo 3: Eastern section</i></p>

Name	Description	Management	Photo
<p>Little End</p>	<p>The grassland verge is located to the east of the church and north of Pitt Farm. The steep gradient has resulted in a species herb-rich bank with several stands of marjoram and yarrow. However, the western section is dominated by false oat-grass.</p> <p>Yellow rattle has established on the eastern side of the bank.</p>	<ul style="list-style-type: none"> • Three cuts a year: winter cut (Feb – March), summer cut (July – August), and autumn cut (September – October). • Remove clippings and compost in local residents compost bin • The grasslands will be cut to remove the dominant grasses. The methods used will be dependent on the growth of the grasses but could include strimming, using shears, or mowing. • Plant cowslips plugs in spring. • Retain areas of marjoram to the west of the bank. • Remove monbretia, buddleia, nettles, and brambles. • Ensure stone steps are level and safe. • Trim edges along road and steps. • The flat section on top can be cut as required. 	 <p><i>Photo 4 Little End bank post-management</i></p>

Name	Description	Management	Photo
<p>Hayfield and Community Centre</p>	<p>This includes two verges that are split by a road. The western verge is a small bank with a flat area adjacent to the road which is dominated by grasses including false oat-grass and fescues. The eastern verge borders the community centre.</p> <p>The first sowing of wildflower seeds in the verges at the Community Centre was done by Sustainable Marshfield volunteers on 21 September 2019. Two mixes from Emorsgate were used: standard cornfield mixture (value in one season only) and the St Catherine’s mixture (lasting value).</p> <p>The existing grass was cut prior to seeding and the ground was roughly scraped and raked on the day, before scattering the seed. The steep slope may have resulted in some seed being washed off in the rain.</p> <p>In July 2020, yarrow, fox-and-cubs, lady's bedstraw, herb-robert, pineapple weed, groundsel, shepherd's purse, cranesbill and greater plantain were evident. There is also a patch of nettle and broad-leaved dock to the rear of the bank (valuable to insects).</p>	<p>Hayfield</p> <ul style="list-style-type: none"> • Three cuts a year: winter cut (Feb – March), summer cut (July – August), and autumn cut (September – October) • Remove clippings and compost in community centre compost bins. <p>Community Centre</p> <ul style="list-style-type: none"> • Three cuts a year: winter cut (Feb – March), summer cut (July – August), and autumn cut (September – October) • Remove ragwort flowers before they set seed • Remove clippings and compost in community centre compost bins. 	 <p><i>Photo 5 Hayfield</i></p>  <p><i>Photo 6 Community Centre</i></p>

Name	Description	Management	Photo
<p>High Street Alms Houses</p>	<p>This is a verge of regularly managed short mown grassland which is dominated by grasses with a poor botanical diversity and low potential for wildlife. There is a stand of nettles to the rear of the verge and some bramble encroaching from the field.</p> <p>This verge will be kept clear of brambles. Native spring bulbs were planted along the verge in winter 2020.</p> <p>The nettles at the rear of the verge were removed 2020 and fox gloves were planted at the rear of the bank.</p>	<ul style="list-style-type: none"> • Cease mowing during Feb- March to allow spring bulbs to flower. • Cut and remove arisings throughout the remainder of the year to create amenity lawn style verge. Welcome dandelions, daisies and other wild flowering plants that thrive in low-cut grass. • Compost grasses? • Remove invasive species such as monbretia and control nettles adjacent to the stonewall. 	 <p><i>Photo 7 Opposite Alms houses</i></p>

Name	Description	Management	Photo
<p>Ayford lane</p>	<p>This is a rural verge located on Ayford Lane. The verge is approx. 1320 m sq. with a width of up to 6 m. It is dominated by false oat-grass, creeping bent and cock's foot, with some Yorkshire fog and Timothy grass. Herbs include rosebay willowherb, beaked hawksbeard, meadow vetchling, bush vetch, ribwort plantain, meadow buttercup, bird's-foot trefoil and hedge bedstraw.</p> <p>This verge is to be divided into three sections: 1) biennial cut of grasses at rear of verge, 2) annual cut within centre, and 3) 1 m strip regularly cut adjacent to road for visibility and walkers.</p> <p>The hedgerow to the rear of the verge was replanted with a species-rich hedgerow mix winter 2021.</p>	<ul style="list-style-type: none"> • Cut with scythes according to management section. • Remove clippings and compost. 	 <p><i>Photo 10: Ayford lane just been scythed</i></p>

Mowing Schedule

Management schedule

Site	Timing	Action	By Whom
Sheep Fair	2 cuts: March – Feb and July - Aug	Scythe, Rake, Collect	Sustainable Marshfield
Weir Pool	2 cuts: March – Feb and July - Sept	Scythe, Rake, Collect	Sustainable Marshfield
Little End	3 cuts: Feb- March, July – August, and September - October	Scythe, Rake, Collect	Sustainable Marshfield and Local Residents
Hayfield	3 cuts: Feb- March, July – August, and September - October	Mowing, collect	Soiuth Glos
Community Centre	3 cuts: Feb- March, July – August, and September - October	Mowing, collect	Marshfield Mowers and Sustainable Marshfield
Alms houses	No cut Feb – March regular cutting thereafter	Mowing	Marshfield Mowers
Ayford Lane	Regular 1m strip, main section cut Sep – Oct, and rear biennial cut	Scythe, Rake, Collect Mowing	Sustainable Marshfield

The cutting regime and the organisation cutting the verges: sustainable Marshfield (SM), Marshfield Mowers (MM), and South Glos (SS)

Cutting Regime	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sheepfair		SM	SM				SM	SM				
Weir Pool		SM	SM				SM	SM	SM			
Little End		SM	SM				SM	SM		SM		
Hayfield		SG	SG				SG	SG		SG		
Community Centre		MM	MM				SM	SM		MM		
Alms Houses				MM								
Ayford Lane							SM	SM	SM			

Monitoring and Remedial Actions

Monitoring

- Annual botanical species lists will be kept up for each verge.
- Other notable species will be recorded, and the data sent to the local biodiversity records centre.
- This report will be updated annually if changes are required.
- Annual check of the verges will be undertaken in Feb – March.

Remedial Actions

- The persons responsible for the verges will communicate any changes or updates to the Sustainable Marshfield Group.
- The group will be open to the public and community and will discuss any changes to the management plan if considered appropriate.
- Reactive management may be required regarding the presence of undesirable species such as invasive agricultural weeds (for example, creeping nettle, spear thistle, and ragwort and invasive non-native species).

Community Involvement

- This plan will be shared widely and made available to all interested.
- We aim to work alongside other interested parties such as the Cotswold Wardens and the Marshfield Mowers.
- Volunteers will be encouraged; safety guidelines to be followed and records kept.
- We aim to be sympathetic to the whole of the community and are willing to listen to ideas about restoring new verges within Marshfield, cutting the verges because of safety, or suggestions regarding the current management.

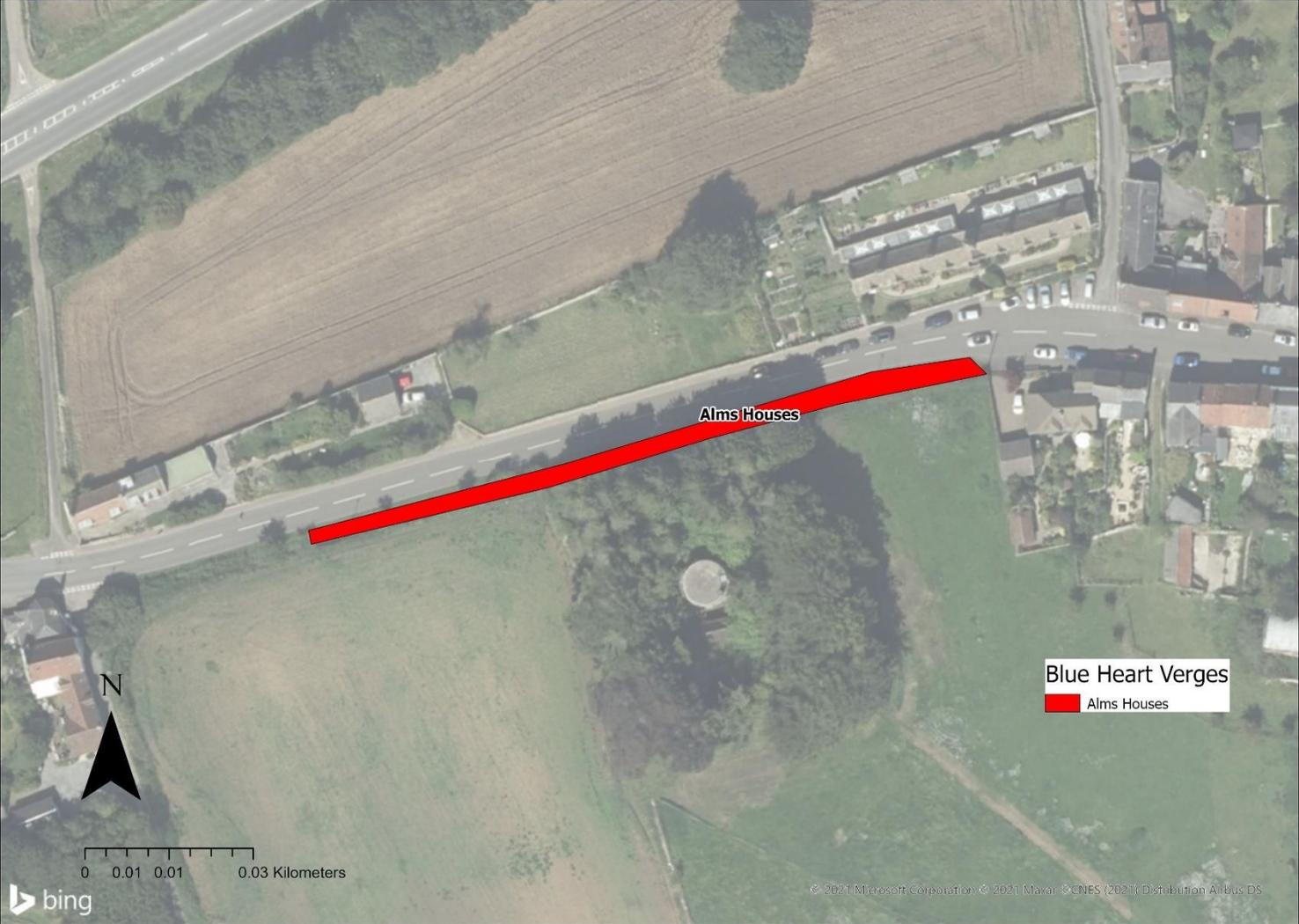
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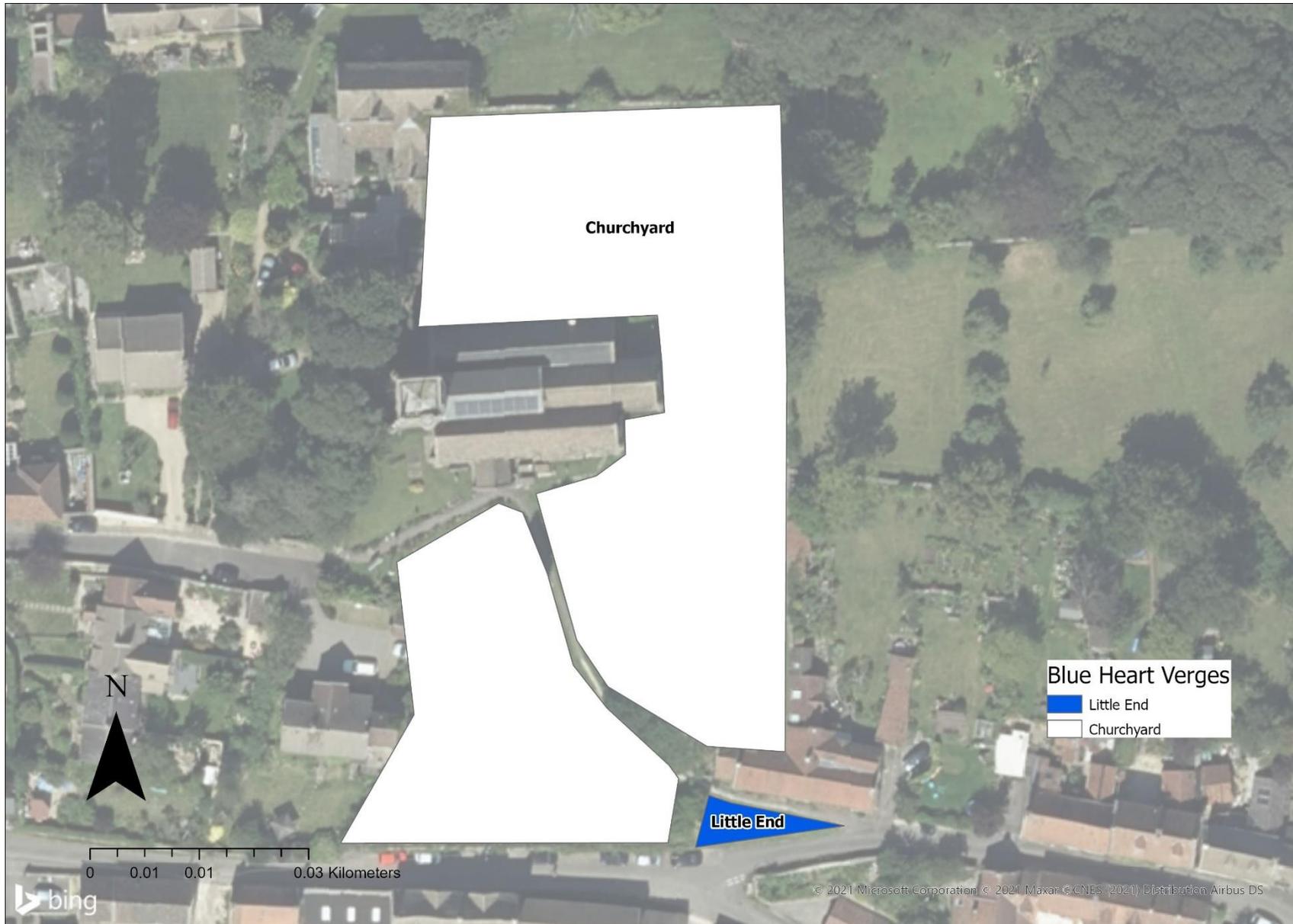
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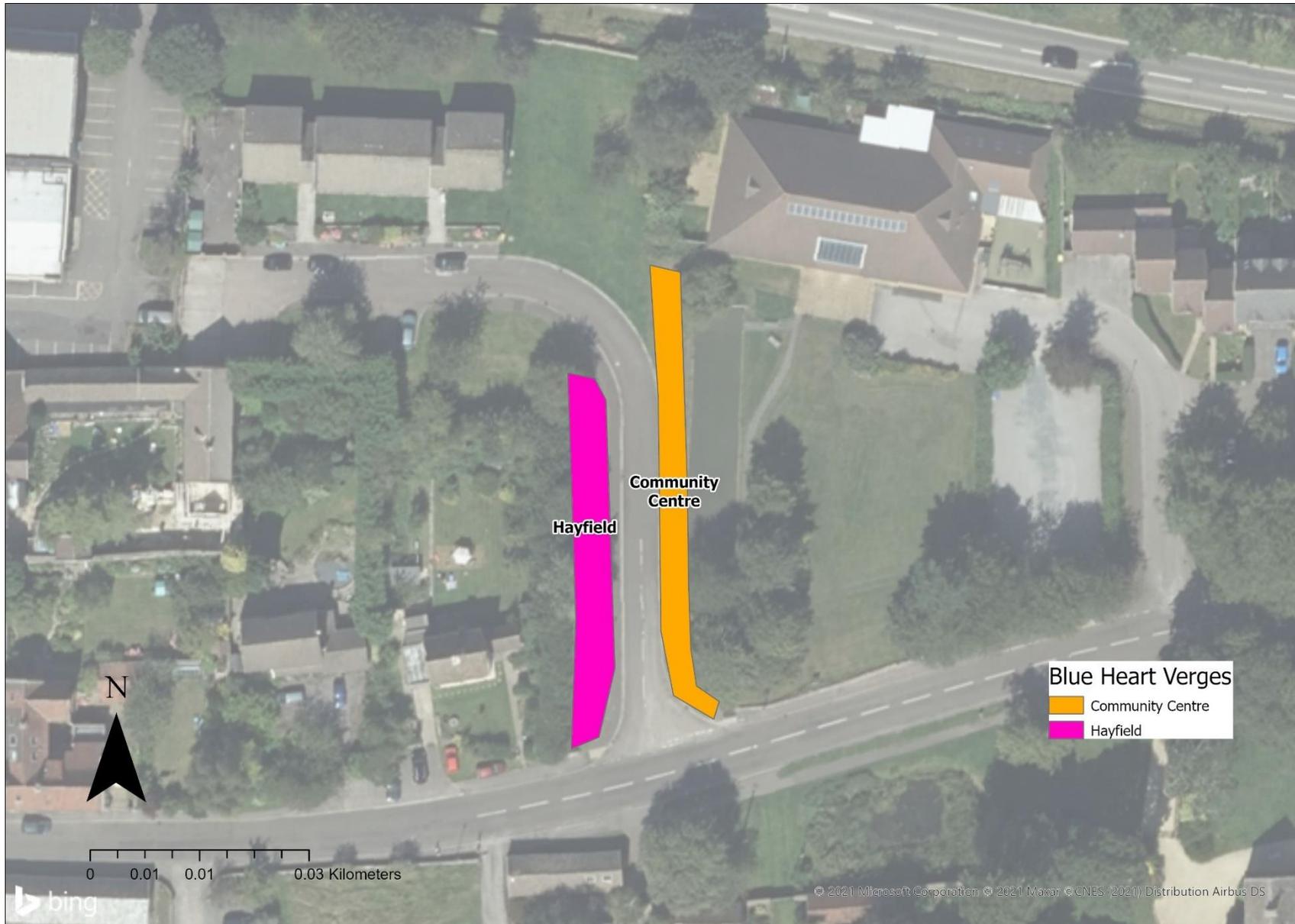
We welcome your ideas and would also be glad to hear from anyone who would like to be involved.

Appendix I Verge Maps











Appendix II Marshfield Blue Heart Verges plant identification

This survey was undertaken by John Barnett in **July 2020**

Little End

Yarrow	<i>Achillea millefolium</i>
Black harehound	<i>Ballota nigra</i>
Cornflower	<i>Centaurea cyanus</i>
Chamomile	<i>Chamaemelum nobile</i>
Spear thistle	<i>Cirsium arvense</i>
Mexican Fleabane	<i>Erigeron karvinskianus</i>
Pencilled cranesbill	<i>Geranium versicolor</i>
Nipplewort	<i>Lapsana communis</i>
Pineapple weed	<i>Matricaria discoidea</i>
Love in a mist	<i>Nigella damascena</i>
Marjoram	<i>Origanum vulgare</i>
Pink purple sorrel	<i>Oxalis debilis</i>

Community Centre

Chamomile	<i>Chamaemelum nobile</i>
Beaked hawksbeard	<i>Crepis capillaris</i>
Lady's bedstraw	<i>Galium verum</i>
Hedgerow cranesbill	<i>Geranium pyrenaicum</i>
Bird's-foot trefoil	<i>Lotus corniculatus</i>
Fox and cubs	<i>Pilosella aurantiaca</i>
Meadow buttercup	<i>Ranunculus acris</i>
Yellow Rattle	<i>Rhinanthus minor</i>

Sheepfair Lane

Corncockle	<i>Agrostemma githago</i>
Chives	<i>Allium schoenoprasum</i>
Buddleia	<i>Buddleja davidii</i>
Red valerian	<i>Centranthus ruber</i>
Chamomile	<i>Chamaemelum nobile</i>
Beaked hawksbeard	<i>Crepis capillaris</i>
Cornflower	<i>Centaurea cyanus</i>
Spear thistle	<i>Cirsium vulgare</i>
Smooth hawksbeard	<i>Crepis capillaris</i>
Wild carrot	<i>Daucus carota</i>
Ivy	<i>Hedera helix</i>
Nipplewort	<i>Lapsana communis</i>
Oxeye daisy	<i>Leucanthemum vulgare</i>
Common mallow	<i>Malva moschata</i>
Corn poppy	<i>Papaver rhoeas</i>
Fox and cubs	<i>Pilosella aurantiaca</i>
Ribwort plantain	<i>Plantago lanceolata</i>
Common knotgrass	<i>Polygonum aviculare</i>
Meadow buttercup	<i>Ranunculus acris</i>

Bramble	<i>Rubus fruticosus</i>
Corn ragwort	<i>Senecio jacobaea</i>
Dandelion	<i>Taraxacum officinale</i>
White clover	<i>Trifolium repens</i>
Cornsalad sp	<i>Valerianella locusta</i>

Weir pool

Cow parsley	<i>Anthriscus sylvestris</i>
Daisy	<i>Bellis perennis</i>
Buddleia	<i>Buddleja davidii</i>
Red valerian	<i>Centranthus ruber</i>
Canadian fleabane	<i>Conya canadensis</i>
Wall cotoneaster	<i>Cotoneraster horizontalis</i>
Smooth hawkbeard	<i>Crepis capillaris</i>
Ivy-leaved toadflax	<i>Cymbalaria muralis</i>
American willowherb	<i>Epilobium ciliatum</i>
Great willowherb	<i>Epilobium hirsutum</i>
Mexican Fleabane	<i>Erigeron karvinskianus</i>
Hemp agrimony	<i>Eupatorium cannabinum</i>
Small-flowered cranesbill	<i>Geranium pusillum</i>
Ivy	<i>Hedera helix</i>
Bristly oxtongue	<i>Helminthotheca echioides</i>
Oxeye daisy	<i>Leucanthemum vulgare</i>
Common mallow	<i>Malva moschala</i>
Pineapple weed	<i>Matricaria discoidea</i>
Black medic	<i>Medicago lupulina</i>
Early forget me not	<i>Myosotis ramosissima</i>
Marjoram	<i>Origanum vulgare</i>
Ribwort plantain	<i>Plantago lanceolata</i>
Hoary plantain	<i>Plantago medid</i>
Knotweed	<i>Polygonum aviculare</i>
Selfheal	<i>Prunella vulgaris</i>
Meadow buttercup	<i>Ranunculus acris</i>
Bramble	<i>Rubus fruticosus</i>
Smooth/rough sow-thistle	<i>Sanchus sp</i>
Common ragwort	<i>Senecio jacobaea</i>
Dandelion	<i>Taraxacum officinale</i>
White clover	<i>Trifolium repens</i>
Garden Verbena	<i>Verbena hybrida</i>
Water plantain	<i>Alisma plantago-aquatica</i>
Least duckweed	<i>Lemna minuta</i>
Flowering rush	<i>Butomus umbellatus</i>