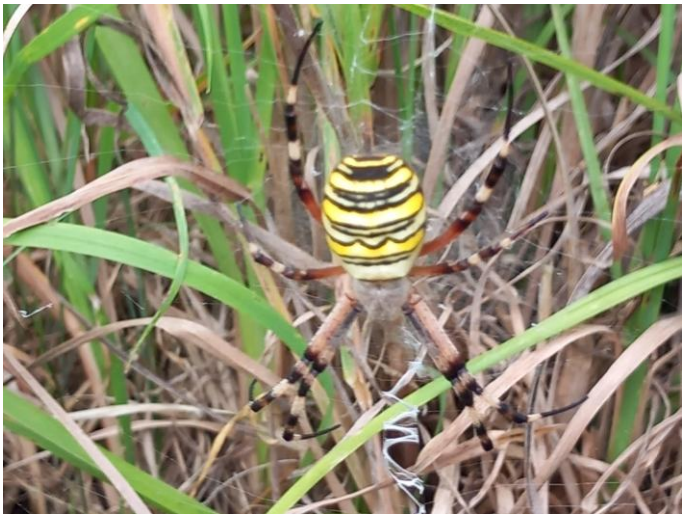
3.6 Site 5. Carr Lane/Shotesham Road, Poringland

Photos



Pale galingale in basin (non-native)

Key Facts:

- Size of the Site: 0.75ha
- Habitats present: **Modified Grassland, Other Neutral Grassland, Bramble Scrub, Introduced Shrub, Developed land; sealed surface, Artificial Unvegetated; Unsealed Surface, Individual Trees, Species-Rich Native Hedgerow and Line of Trees.**

- Tree Preservation Orders, Conservation Areas, County Wildlife Sites (CWS), Roadside Nature Reserves, Priority Habitats, Statutory Designated Sites present on site? **Strategic Area in LNRS**
- Recommended habitat measures in LNRS: **None**

Baseline Habitat Description and BNG Calculation

3.6.1 The Site comprised a soft landscaped area adjacent to residential housing and commercial premises. There was a play area in the north-east of the Site and a drainage basin to the south of the Site with pedestrian walking routes around the basin.

3.6.2 The main habitat on Site was mown modified grassland in **moderate condition** (around the basin perimeter) and **poor condition** (within the basin bottom). The grass had been left long around the perimeter of the basin and the sloped edges down to the basin. This sward had a greater botanical diversity and was assessed to be other neutral grassland in **moderate condition**.

3.6.3 The other neutral grassland contained 44 vascular plant species including the following notable plants: cowslip *Primula veris*, small catstail *Phleum bertolonii*, smooth tare *Vicia tetrasperma*, wild carrot, perforate St John's wort *Hypericum perforatum*, common vetch *Vicia sativa* and smooth hawksbeard *Crepis capillaris*. A population of wasp spider *Argiope bruennichi* (see photo above) was noted in the long grassland within the basin. Frequent scrub was also present including grey willow *Salix cinerea* and broom *Cytisus scoparius*. The only reason the other neutral grassland is not in good condition is because the cover of scrub in the grassland was more than 20%.

3.6.4 The bottom of the basin was modified grassland in poor condition due to its limited botanical diversity. There was frequent non-native (but naturalised) pale galingale *Cyperus eragrostis* present as well as frequent smooth hawksbeard, couch grass *Elymus repens*, goat willow *Salix caprea* and abundant creeping buttercup.

3.6.5 Bramble patches were present throughout the Site and a total of 18 individual trees in **moderate and poor condition** were present including: sycamore, field maple, hornbeam, wild service *Sorbus torminalis,* common walnut *Juglans regia*, Leyland cypress and newly planted domestic pear *Pyrus domestica,* Norway spruce *Picea abies* and hazel.

3.6.6 A species rich native hedgerow (recently planted) in **good condition** was on the southern boundary and young and semi-mature elm *Ulmus sp*., field maple and holly trees are present in a line of trees on the western boundary along with a single large mature oak.

3.6.7 In total, the habitats on Site represent **3.28 Habitat Units and 1.20 Hedgerow Units** as shown in Tables 6 and 7 below.

Table 6. Baseline BNG Calculation of Habitats

Habitat	Area (hectares)	Ecological Distinctiveness	Condition	Habitat Units (HU)
Modified Grassland	0.2711	Low	Moderate	1.08
Modified Grassland	0.2568	Low	Poor	0.51
Other Neutral Grassland	0.0935	Medium	Moderate	0.75
Bramble scrub	0.0387	Medium	N/A	0.15
Artificial unvegetated; unsealed surface	0.0107	Very low	N/A	0.00
Developed land; sealed surface	0.0695	Very low	N/A	0.00
Introduced shrub	0.0137	Low	N/A	0.03
Individual trees	0.0081	Medium	Poor	0.03
Individual trees	0.0895	Medium	Moderate	0.72
Total	**0.75 (excluding trees)**			**3.28***

*Please note that Habitat Units in each row have been rounded for reasons of brevity and the total Habitat Unit figure is taken from the Metric Calculation tool spreadsheet.

Table 7. Baseline BNG Calculation of Hedgerows

Habitat	Length (kilometres)	Ecological Distinctiveness	Condition	Hedgerow Units (HeU)
Species-rich native hedgerow	0.086	Medium	Good	1.03
Line of trees	0.083	Low	Poor	0.17
Total	**0.17**			**1.20**

3.6.8 A map of the baseline habitats is provided in Figure 5, Appendix 1.

Proposed Biodiversity Enhancements

- Continue hay cutting of basin;
- Remove naturalised galingale in central basin and reduce scrub to less than 20% cover. Include basin bottom in hay cut regime;

- Scarify and oversow the south-east corner with native wildflower seed or green hay (for example from Site 4);
- Plant three new native trees; and
- Install two bat and two bird boxes on trees.

Specification of Management Actions

3.6.9 A map of the proposed enhancements is shown in Figure 5, Appendix 2.

3.6.10 Basin Grassland Management (basin perimeter, sloping sides and bottom):

- Undertake the first cut in late August/early September with a scythe/strimmer/mower to a height of 50mm. Remove arisings offsite or to a dedicated compost heap.
- For the second cut, timing is very important. The second cut will be undertaken once wildflowers have flowered and set seed (it typically takes 6-8 weeks from flowering to seed set). Setting of the seed is crucial to encourage a greater abundance of wildflowers. The second cut timing will likely vary slightly from year to year but it should generally be undertaken in late August/early September when conditions are dry. The cut should be undertaken with a scythe, strimmer or other suitable mowing equipment that can cut vegetation to a height of 50mm. Cuttings must be left in situ for 1-7 days to allow seed to shed. The cuttings must then be removed offsite or to a designated compost heap.
- Small random areas of the long sward (10-20%) may be left long over winter to provide shelter for invertebrates.
- Following the second cut, the sward must be kept short throughout the winter, particularly given the milder winters and increased growing season lengths so further 'cut and collect' mowing is likely to be required from late September – November.
- No herbicides, fertilisers or commercially bought grass seed will be applied to the grassland at any time.

3.6.11 Basin scrub management and removal of galingale:

- Selectively remove individual willows to create a small groups and scattered individuals with a combined cover of the basin of no more than 20%. Willow removal should be undertaken between September-mid February inclusive in order to avoid the bird nesting season.
- Galingale within the basin bottom should be removed by repeated strimming prior to seed-set to weaken the plant and reduce its abundance within the sward. Hand pulling/digging out may be necessary should strimming prove ineffective or alternatively covering over strimmed ground with an opaque cover (for example

double layered cardboard) to prevent light from reaching the plant. Arisings should be disposed of offsite.

3.6.12 Scarification and over-sowing of wildflower mix:

- Scarify the area shown as 'other neutral grassland' in the south-east of the Site (annotation – enhanced grassland) in Figure 5, Appendix 2 to create a minimum of 50% bare ground. Once scarified a locally sourced, British origin, native wildflower seed mix will be oversown into the scarified area at the density advised by the manufacturer (an example of a suitable seed mix would be Emorsgate General Purpose Meadow Mixture EM1[12]).
- The seed mix should be spread in the autumn or spring (when there is regular rain and the ground is not frozen). The seed can be broadcast by hand and tread in lightly by foot to ensure good contact between the seed and the soil. Do not cover the seed with new soil or compact heavily.
- In the first year after sowing, a flush of annual weeds may appear which can be retained to help shelter the emerging perennial wildflowers of the seed mix. Undertake the first cut in late August/early September with a scythe/strimmer/mower to a height of 50mm. Remove arising offsite or to a dedicated compost heap.
- Keep grass short over the winter with regular mowing as required.
- In the second year and subsequent years, manage the grassland using the two-cut system (first cut late February/early March and second cut late August/early September) as described for Site 1: Knyvett Green, Ashwellthorpe.
- No fertiliser, herbicide or commercial grass mix will be applied at any time.

3.6.13 Tree planting:

- Three native trees will be planted in the east of the Site. Trees should be planted from November to March inclusive in non-frozen ground. Trees should be a minimum of standards (8-10cm stem girth) either as containerised or bare root individuals. A square planting pit the depth of the rootball and 75cm wider than the rootball must be excavated with the top-soil and sub soil separated into discrete piles. The tree (with its rootball pre-watered) will be placed in the planting pit and the subsoil and topsoil replaced in the correct order, with regular 'healing in' of the layers of soil to ensure stability of the tree. The final layer of backfill will not be consolidated. A 50-100 woodchip mulch later will be applied at a minimum radius of 0.5m from the tree stem and not touching the tree stem. A double stake and tie support system and vole/deer guard will be installed and the tree watered generously. Trees will be spaced a minimum of 10m apart.

[12] https://wildseed.co.uk/product/mixtures/complete-mixtures/general-purpose-meadow-mixtures/basic-general-purpose-meadow-mixture/

- Trees will need to be watered generously and regularly in hot dry summer spells for the first three years post planting.
- Check trees annually and top up mulch/clear weeds to limit competing vegetation.
- At Year 3, remove canes, guards and ties if trees are established. Remove and replace any dead trees.

3.6.14 Bird and bat boxes:

- Install two bird boxes and two bat boxes on suitable trees as suggested in as shown in Figure 5, Appendix 2. Guidance on suitable boxes for trees is provided in Appendix 3 along with specifications for installation heights and aspects.

Five Year Biodiversity Enhancement Plan

3.6.15 Following the management specification and guidance above, the Table below provides the timing of management actions over five years.

Habitat	Management Action and Timing				
	2025/2026	**2027**	**2028**	**2029**	**2030**
Basin Grassland (perimeter, sides and bottom)	First cut and collect in late February/ early March. Second cut in late August/early September. Remove arisings offsite or to compost pile.	Same as 2025/2026.	Same as 2025/2026.	Same as 2025/2026.	Same as 2025/2026.
Basin scrub management and galingale removal	Strim/dig out all galingale prior to seed-set. Reduce abundance of willow to <20% cover.	Strim/dig out galingale (if returned), apply opaque cover if required.	Strim/dig out galingale (if returned), apply opaque cover if required.	Strim/dig out galingale (if returned), apply opaque cover if required.	Strim/dig out galingale (if returned), apply opaque cover if required.
Scarification and oversowing long grass area	Scarify and oversow with wildflower seed mix. Cut and collect arisings in late August/early September 2026.	First cut and collect in late February/ early March. Second cut in late August/early September. Remove arisings offsite.	Same as 2027.	Same as 2027.	Same as 2027.
Trees	Plant trees from November-March. Mulch and water.	Water regularly in hot dry spells. Keep mulch topped up.	Water regularly in hot dry spells. Keep mulch topped up.	Remove canes/guards/ties in the winter. Replace any dead/dying individuals.	N/A
Bird and bat boxes	Install bird and bat boxes on trees	Check boxes remain securely attached.	Check boxes remain securely attached.	Check boxes remain securely attached.	Check boxes remain securely attached.

Annual Monitoring Checklist

3.6.16 The checklist below is devised as a quick annual check to be carried out and completed by the responsible Community Asset Manager, to ensure that the recommended enhancements measures above have taken place. The items in the checklist below have been replicated in a separate Annual Monitoring excel spreadsheet for ease of completion.

Annual Monitoring Checklist for Carr Lane/Shotesham Road, Poringland

Habitat	Management Action	Tick relevant column if completed				
		2025/2026	2027	2028	2029	2030
Basin grassland	First cut undertaken?					
	Second cut undertaken?					
	Winter cutting undertaken?					
	Scrub thinned to <20%?					
	Galingale removal activities undertaken?					
Scarify and oversow area	Scarification and oversowing undertaken?					
	First year management undertaken					
	First and second cuts undertaken from Year 2027 onwards?					
Trees	Trees planted?					
	Tree watered and mulch topped up?					
	Tree stakes/ties/guards adjusted or removed?					
Bird and bat boxes	Installed?					
	Annually checked to make sure still safely secured to tree?					

Post-enhancement BNG Calculation

3.6.19 The proposed enhancements to the grassland and hedgerow will generate a BNG uplift of Habitat Units of **16.85%** over **27 years**. No uplift in Hedgerow Units will be delivered.

3.6.20 The uplift in Habitat Units derives from the enhancement of the modified grassland in the basin bottom from poor to good condition, the planting of three new native trees and the creation of a wildflower area (other neutral grassland) in the south-east of the Site.