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# **Ecological Enhancement Strategy**

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**Land north of Farm Gate Cottage, Wicks Lane,  
Stowmarket**

**for**

**Locus Planning Ltd.**

**1 February 2021**



**Client**

Locus Planning Ltd.  
11 Charing Cross  
Norwich  
NR2 4AX


**Planning authority**

Mid Suffolk District Council  
Endeavour House  
8 Russell Street  
Ipswich  
IP1 2BX

***Time limit of reliance***

*Please note that the reported surveys were conducted on the date(s) stated in the report and that it represents site conditions at the time of the visit. The findings and recommended mitigation are based on these conditions. If site conditions change materially after the site survey, the original report cannot be relied upon and will need to be updated. Ecological reports and surveys can typically be relied on for 18 to 24 months from the date of survey.*

*Surveys supporting European Protected Species Mitigation Licence applications must be within the current or most recent survey season for bats (May to September), or within two survey seasons for great crested newts (March to June).*

Document	Ecological Enhancement Strategy
Version	1.0
Date	1 February 2021
Author	Nathan Duszynski M.Sc, B.Sc (Hons), ACIEEM, Natural England licences (Bat survey level 2, Great crested newt level 1)
Reviewer	Etienne Swarts BCompt (Hons), F.Deg.Sc, ACIEEM, Natural England licences (Bat survey level 2, Great crested newt level 2, Hazel dormouse level 1)
<b><i>Signed disclosure</i></b>	
<i>The information, data, advice and opinions provided in this report which I have provided is true and has been prepared in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. I confirm that the opinions expressed are my true and professional bona fide opinions.</i>	
<i>Etienne Swarts, ACIEEM</i>	
<b>Greenlight Environmental Consultancy Limited</b> Diss Business Hub Hopper Way Diss Norfolk IP22 4GT www.greenlightco.co.uk	

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## 1. INTRODUCTION

- 1.1. Greenlight Environmental Consultancy Limited has been commissioned to prepare an Ecological Enhancement Strategy as part of a proposed development at land north of Farm Gate Cottage, Wicks Lane, Stowmarket, IP14 5HL (grid reference: TM 09432 60099).

## 2. ECOLOGICAL ENHANCEMENT STRATEGY

### *Habitats*

- 2.1. A soft landscaping scheme to include the planting of new native species-rich ( $\geq 5$  species), hedgerows and trees around the site (see Appendix C for suggested species).
- 2.2. Construction works carried out in accordance with British Standards Institution (2012), BS 5837:2012, Trees in relation to design, demolition and construction – recommendations, to protect trees which are to be retained and their root protection areas.
- 2.3. Aquatic habitats to be protected from runoff and pollution from the proposed development by the erection of a 5m buffer zone along the southern boundary (ponds three and four).

### *Bats*

- 2.4. As a precautionary measure, the following mitigation is recommended to avoid impacts on bats from the proposed works:
  - i. Lighting schemes should follow guidance from the Bat Conservation Trust and CIE 150:2003. Warm-white (long wavelength) lights with UV filters should be fitted as close to the ground as possible. Lighting units should be angled below 70° and equipped with movement sensors, baffles, hoods, louvres and horizontal cut off units at 90°.
  - ii. A soft landscaping scheme to include the planting of new native species-rich ( $\geq 5$  species), hedgerows and trees around the site (see Appendix C for suggested species).
- 2.5. As enhancements, we recommend the installation of:
  - iii. One integrated bat box installed on the new dwelling (Schwegler 1FR Bat Tube – Appendix A).

### *Birds*

- 2.6. Any works affecting bird nesting habitat such as management of hedgerows, trees or buildings would ideally need to be conducted outside the main nesting season, which lasts from March to August. If work is planned during the bird nesting season then a precautionary check of all

habitats, should be conducted by a qualified ecologist immediately prior to starting any work. If any nesting birds are found, an appropriate protection zone from the nest will be required and should be maintained until the young have fledged.

- 2.7. As enhancements, we recommend the installation of:
- i. One integrated swift box installed on the new dwelling (WoodStone Build-in Swift Nest Box B – Appendix A).
  - ii. One small bird box (Schwegler 1B or 2H Nest Box – Appendix A).
  - iii. One barn owl box erected on a mature tree or building (Eco Barn Owl Nest Box – Appendix A).
  - iv. A soft landscaping scheme to include the planting of new native species-rich ( $\geq 5$  species), hedgerows and trees around the site (see Appendix C for suggested species).

*Herpetofauna (great crested newts and reptiles)*

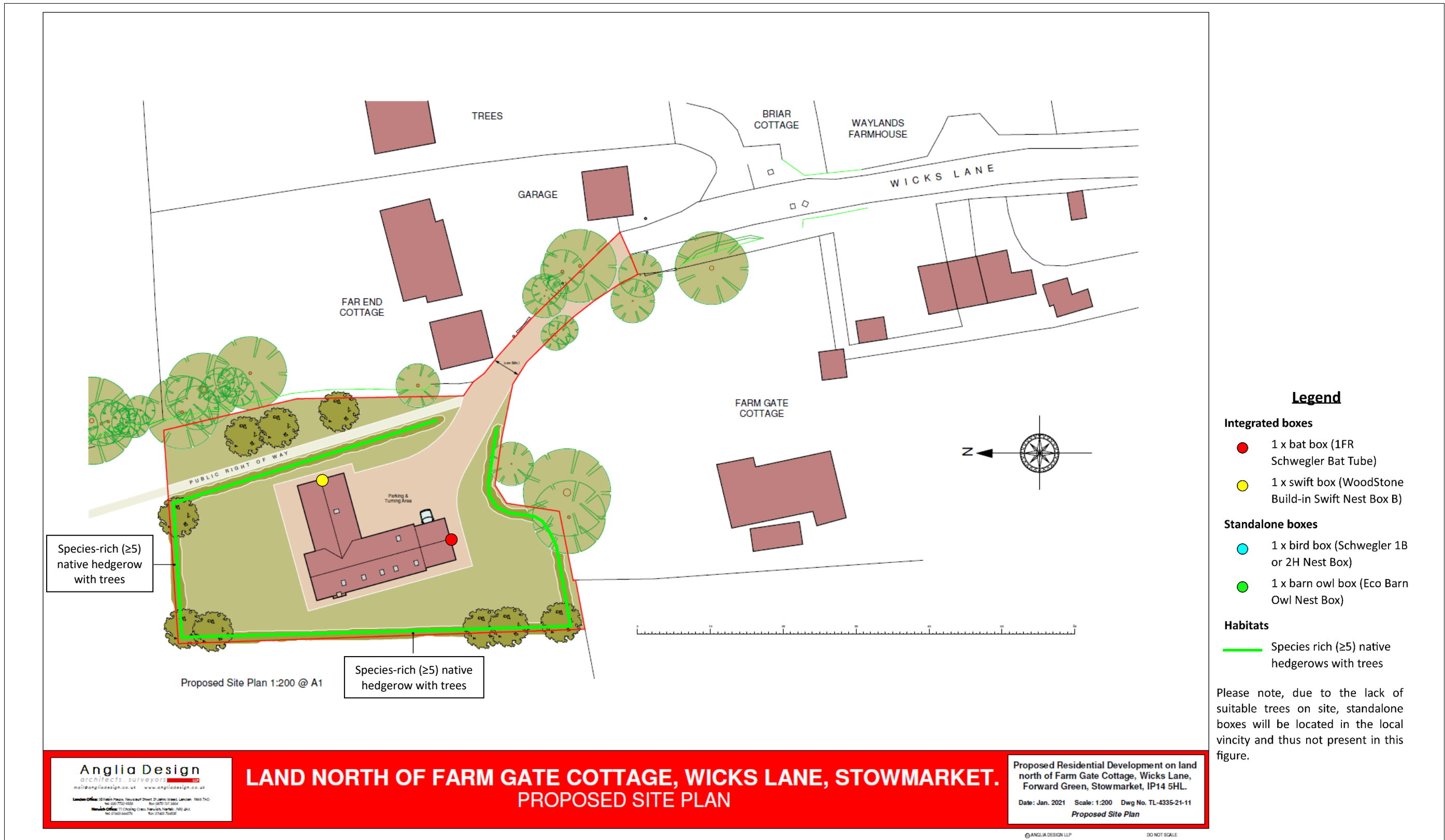
- 2.8. Vegetation on site should be cut and maintained short (maximum height of 10cm) until the start of works, to discourage animals from using these areas.
- 2.9. A hand destructive search of all suitable amphibian habitat and with an awareness that amphibians may be present. In the highly unlikely event that any GCN are found, work should cease immediately and a licenced ecologist contacted to remove any GCN to safety and advice on how to proceed.
- 2.10. Construction materials should be stored off the ground on pallets, to prevent providing shelter for animals and subsequent harm when materials are moved.
- 2.11. Any excavations should have a rough sawn plank placed inside to act as a ramp to allow any animals that have fallen in to escape. The excavations should be checked each morning works are scheduled for, to remove any animals trapped.

*Other animals*

- 2.12. The surrounding habitat of the site is considered suitable for hedgehogs. To maintain potential hedgehog routes within the site and between the site and further habitats, we recommend that any fencing installed is porous and provides access openings for hedgehogs (see Appendix B for examples).

2.13. General mitigation to protect wildlife during the construction period are as follows:

- Any excavations will be covered during the night or have a rough sawn plank placed at the end of each trench to allow any animals that have fallen in to escape. The excavations will be checked each morning works are scheduled for, to remove any animals trapped.
- Lighting of the construction site at night will be minimised as far as practicable, to reduce the risk of possible disruption to nocturnal animals such as bats and badgers.
- Construction materials will be stored off the ground on pallets, to prevent providing shelter for animals and subsequent harm when materials are moved.



**Figure 1**  
Location of mitigation and enhancement features.  
Image © Anglian Design, date accessed 31/01/21



**Anglia Design**  
 architects . surveyors  
 info@angliadesign.co.uk www.angliadesign.co.uk  
 London Office: 125 South Place, The Foundry, London EC2A 3DF  
 Tel: 020 7323 2800 Fax: 020 7323 2801  
 Norwich Office: 11 Church Close, Norwich, Norfolk, NR2 2JX  
 Tel: 01603 886275 Fax: 01603 700000

**LAND NORTH OF FARM GATE COTTAGE, WICKS LANE, STOWMARKET.  
 PROPOSED DWELLING DETAILS**

Proposed Residential Development on land north of Farm Gate Cottage, Wicks Lane, Forward Green, Stowmarket, IP14 5HL.  
 Date: Jan. 2021 Scale: 1:100 Dwg No. TL-4335-21-12  
**Proposed Dwelling Details**

ANGLIA DESIGN LLP DO NOT SCALE

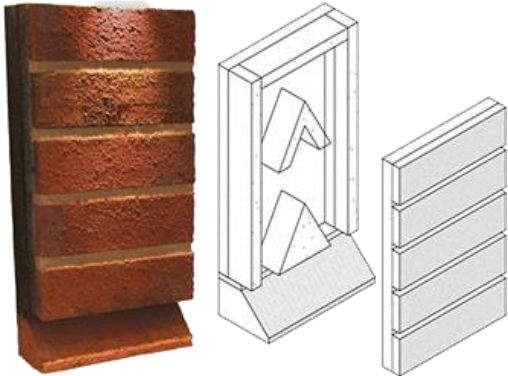
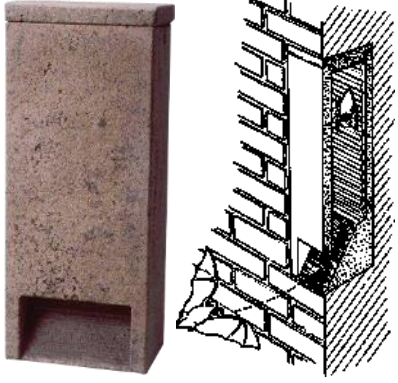


**Figure 2**  
 Location of mitigation and enhancement features.  
 Image © Edward Parsley Associates, date accessed 31/01/21



## Appendix A

### Examples of bat and bird boxes

(images sourced from [www.nhbs.com](http://www.nhbs.com) and [www.manthorpe.co.uk](http://www.manthorpe.co.uk))

<p style="text-align: center;"><b>Integrated bat box</b> Habibat Bat Box</p> 	<p style="text-align: center;"><b>Integrated bat box</b> 1FR Schwegler Bat Tube</p> 
<p style="text-align: center;"><b>Standalone bat box</b> 2F Schwegler Bat Box (General purpose)</p> 	<p style="text-align: center;"><b>Standalone bat box</b> 1FF Schwegler Bat Box with built-in wooden rear panel</p> 

#### **Recommendations for installing bat boxes:**

(Sourced from Bat Conservation Trust [www.bct.org](http://www.bct.org))

Ideally, several boxes should be put up facing in different directions to provide a range of conditions.

Locate boxes:

- Where bats are known to feed close to hedges and treelines (some bats use a treeline or hedgerow for navigation, putting boxes near these features may help the bats find the box).
- On trees: boxes should be placed on the trunk of a mature tree, where there is a clear flight line/accessible entrance.
- On buildings: boxes should be placed as close to the eaves as possible.
- As high as possible (ideally, at least 3 to 4m above the ground, where safe installation is possible).
- In sunny places, sheltered from strong winds (usually between south-west and south-east).

Make sure the boxes are secured.

Boxes can be installed on trees using adjustable ties to avoid damaging the trees. Otherwise, timber screw bolts or nails can be used. Aluminium alloy nails are less likely to damage saws and chipping machinery.

Bats need time to find and explore new homes, and it may be several months or even years before boxes have residents. Once bats find a place they want to live they can return over and over again. Droppings on the landing area, urine stains around the lower parts of the box and chattering noises from inside on warm afternoons and evenings are signs of occupation.

<p><b>Small bird nesting box</b> 1B Schwegler Nest Box</p> 	<p><b>Small bird nesting box</b> 2H Schwegler Robin Box</p> 
<p><b>Integrated swift box</b> WoodStone Build-in Swift Nest Box B</p> 	<p><b>Integrated swift box</b> Manthorpe Swift Brick</p> 
<p><b>Integrated barn owl and kestrel box</b> Schwegler Barn Owl Nest Box 23</p> 	<p><b>Standalone barn owl box</b> Eco Barn Owl Nest Box</p> 

**Recommendations for installing bird boxes:**

(Sourced from British Trust for Ornithology [www.bto.org](http://www.bto.org) and Manthorpe [www.manthorpe.co.uk](http://www.manthorpe.co.uk))

The highest priority when siting a nest box must be to provide a safe and comfortable environment in which birds can nest successfully.

Tips for putting up a nest box:

- Boxes should be sited 1-3m from the ground, ideally on tree trunks but can be placed on the side of a shed or wall. Avoid areas where foliage obscures the entrance hole.
- Don't place boxes too close to another nest box of the same type, as this may promote aggressive behaviour between neighbours.
- Shelter your nest box from prevailing wind, rain and strong sunlight. The box should face between north and east, and angled vertically or slightly downwards to prevent rain entering.
- Make sure cats cannot get into the box.
- Keep nest box away from bird feeders.
- Use galvanized or stainless steel screws or nails. If fixing boxes to trees, galvanised wire can be used to tie the box to the trunk or hang it from a branch. Make sure to regularly inspect these fittings (every two or three years) to ensure the box remains securely attached.

Tips for putting up swift bricks/boxes:

- Locate  $\geq 5$ m high on the gable wall of the property and above the level of the insulation zone.
- Where possible, install in locations that are unlikely to receive large amounts of direct sunlight during the hottest times of the day, ideal places include below the overhang of the verge and barge board.



Tips for putting up barn owl/kestrel boxes:

- The box should be installed on a building or tree in open farmland, on an isolated hedgerow or along the edge of a woodland.
- Boxes should be sited at least 4m from the ground, with a clear flight-path for entry and exit.
- Where possible, install boxes facing southeast or away from the prevailing wind.

## Appendix B

### Examples of hedgehog friendly fencing

(images sourced from [www.quercusfencing.com](http://www.quercusfencing.com) and [www.jackson-fencing.co.uk](http://www.jackson-fencing.co.uk))

<p style="text-align: center;"><b>Quercus Fencing</b> Hedgehog friendly oak woven fencing panels</p>  A photograph showing a hedgehog sitting on a wooden fence panel. The fence is made of horizontal wooden slats. There is a gap in the fence where the hedgehog is positioned, demonstrating its ability to pass through.	<p style="text-align: center;"><b>Jacksons-Fencing</b> Hedgehog friendly gravel board for use with slotted posts</p>  A close-up photograph of a gravel board installed on a fence. The board is made of wood and has a gap between it and a vertical post. The gap is large enough for a hedgehog to pass through. The ground in front of the fence is covered with fallen leaves.
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#### Recommendations for installing hedgehog friendly fencing:

(Sourced from Hedgehog Street [www.hedgehogstreet.org](http://www.hedgehogstreet.org))

A hedgehog friendly fence should have a gap measuring at least 13cm by 13cm in the gravel board. These gaps allow any hedgehog to pass through but are too small for nearly all pets.

At least one hedgehog friendly fence panel should be located on each side of your garden, to provide unimpeded access.

Almost all fencing materials can be made hedgehog friendly, but may require DIY adaptations. Please note that some concrete gravel boards contain metal rods running along the length of the boards to provide strength and rigidity, and cannot be cut. To overcome this, a gap can be left between the gravel board and post to provide the required gap.

## Appendix C

### Native species suitable for planting and sowing

Plants should be obtained from specialist nurseries and preferably be of local genetic stock.

Key: (f) – fruit and berry species; (e) – evergreen species; (se) semi-evergreen species; (d) – deciduous species

Trees	
Alder (d)	<i>Alnus glutinosa</i>
Apples (f; d)	<i>Malus spp.</i> (local varieties)
Ash (d)	<i>Fraxinus excelsior</i>
Beech (d)	<i>Fagus sylvatica</i>
Bird cherry (f; d)	<i>Prunus padus</i>
Elder (f; d)	<i>Sambucus nigra</i>
Elm (d)	<i>Ulmus procera</i>
Field maple (d)	<i>Acer campestre</i>
Pedunculate oak (d)	<i>Quercus robur</i>
Rowan (f; d)	<i>Sorbus aucuparia</i>
Pears (f; d)	<i>Pyrus spp.</i>
Silver birch (d)	<i>Betula pendula</i>
Small-leaved lime (d)	<i>Tilia cordata</i>
White willow (d)	<i>Salix alba</i>
Wild cherry (f; d)	<i>Prunus avium</i>
Walnut (d)	<i>Juglans regia</i>

Shrubs	
Blackthorn (f; d)	<i>Prunus spinosa</i>
Buckthorn (f; d)	<i>Rhamnus catharticus</i>
Crab apple (f; d)	<i>Malus sylvestris</i>
Dog rose (f; d)	<i>Rosa canina</i>
Dogwood (f; d)	<i>Cornus sanguinea</i>
Field maple (d)	<i>Acer campestre</i>
Guelder-rose (f; d)	<i>Viburnum opulus</i>
Hawthorn (f; d)	<i>Crataegus monogyna</i>
Hazel (d)	<i>Corylus avellana</i>
Holly (e)	<i>Ilex aquifolium</i>
Honeysuckle (f; d)	<i>Lonicera periclymenum</i>
Spindle (f; d)	<i>Euonymus europaeus</i>
Wild privet (f; se)	<i>Ligustrum vulgare</i>
Yew (f; e)	<i>Taxus baccata</i>

Flowering plants	
Bird's-foot trefoil	<i>Lotus corniculatus</i>
Black knapweed	<i>Centaurea nigra</i>
Common cat's-ear	<i>Hypochoeris radicata</i>
Common sorrel	<i>Rumex acetosa</i>
Common vetch	<i>Vicia sativa</i>
Cowslip	<i>Primula veris</i>
Field scabious	<i>Knautia arvensis</i>
Foxglove	<i>Digitalis purpurea</i>
Lady's bedstraw	<i>Galium verum</i>
Meadow buttercup	<i>Ranunculus acris</i>
Meadow vetchling	<i>Lathyrus pratensis</i>
Oxeye daisy	<i>Leucanthemum vulgare</i>
Primrose	<i>Primula vulgaris</i>
Red clover	<i>Trifolium pratense</i>
Selfheal	<i>Prunella vulgaris</i>
Sweet violet	<i>Viola odorata</i>
Wild daffodil	<i>Narcissus pseudonarcissus</i>
Yarrow	<i>Achillea millefolium</i>

Grasses	
Common bent	<i>Agrostis capillaris</i>
Crested dog's-tail	<i>Cynosurus cristatus</i>
Meadow fescue	<i>Festuca pratensis</i>
Red fescue	<i>Festuca rubra</i>
Rough meadow-grass	<i>Poa trivialis</i>
Small timothy	<i>Phleum bertolonii</i>
Smooth meadow-grass	<i>Poa pratensis</i>
Sweet vernal-grass	<i>Anthoxanthum odoratum</i>
Yellow oat-grass	<i>Trisetum flavescens</i>