

Increasing wild pollinators on your farm: survey booklet

March 2018

Achieving more for nature



Introduction to the survey

The National Pollinator Strategy was launched by Defra in 2015 setting out a 10 year plan to help support bees and other insects and ensure that the needs of pollinators are an integral part of land and habitat management.

Wild pollinators have three main requirements:

- Forage pollen and nectar
- Nesting habitat
- Overwintering habitat

This survey booklet has been devised to help farmers and land managers make an assessment of what they are already providing and identify potential opportunities to improve the habitat on offer. It is not intended to make comparisons between individual farms.

To assess the impact of any changes or improvements made, the initial survey should be replicated on an annual basis and the results compared. Significant changes in pollinator numbers are not anticipated in the initial 12 months, but the survey will still highlight habitat improvements that have been made which should help to support more wild pollinators in the long term.

Surveys should ideally take place in June or July between 10am and 4pm in dry, mild conditions. The survey does not require detailed species identification skills.

Site summary
Farm name:
Farm size:
Farm manager/contact:
Surveyor:
Date/time of assessment:
Temperature:
Existing agri-environment scheme details:
General notes (e.g. general overview of setting, number of crops grown)

1. Desk study of surrounding landscape features (optional)

The <u>approximate</u> % of landscape within **500m** of the farm perimeter that can be defined as semi-natural habitat e.g. woodland, wetland, unimproved grassland, hedgerow. This is unlikely to change significantly between surveys.

This part of the survey is optional as it concerns land outside of the holding, but is designed to be an approximation based on Ordnance Survey maps and local knowledge of the area.

Whether included or not, it is important to consider the potential of the surrounding landscape to impact on the pollinator community found on your farm.

SELECT ONE	Score	Tick one	Comments (e.g. all woodland)
>30%	5		
20-30%	3		
5-20%	1		
<5%	0		

2. Checklist of farm features

A summary of habitat features with benefits for pollinators which are present on the farm. Tick all boxes present, but only score one point for each grey box.

Arable fields (inc. fallows)	
Tussocky grass margins	
Pollen/nectar-rich margins	
Unsown/weedy corners	
Flower-rich/weedy game covers	
Flower-rich wild bird seed mixes	
Bare ground/banks	
Vegetated field track ways	

Meadow/permanent pasture	
Bare ground/banks	
Species-rich grassland	

Rotational grass ley	
Bare ground/banks	
Flower-rich grass mix	

Wooden structures	
Fencing	
Field gates	
Farm buildings/yard structures	

Traditional orchard	
Standing/fallen deadwood	
Bare ground/banks	
Species-rich grassland	

Hedgerows	
Trees	
Species-rich hedging mix	
Flower-rich hedge base	
Grass/weedy margins	
Pollen/nectar-rich margins	
lvy	

Ditches/drain banks	
Trees/shrubs	
Bare ground/banks	
Grass/weedy margins	
Pollen/nectar-rich margins	

Stone structures	
Dry stone walls (any condition)	
Mortar bonded walls	

Woodland/copse	
Standing/fallen deadwood	
lvy	
Grass/weedy margins	
Flower-rich margins	
Vegetated understorey	

Pond/reservoir/other waterbody	
Permanent water body	
Bare ground/banks	
Flower-rich grass banks	
Marginal shrubs/trees	

Other farm features	
Road verge	
Amenity grassland (e.g. around yard)	
Weed patches	
Traditional orchard	
Bee/bug houses	

TOTAL SCORE: / 43

3. On-farm foraging habitat

This section is designed to provide an overview of flowering plants present across the farm. For each habitat, select at least one representative example on the farm and count the number of species within a 100m section, including pollen/nectar producing trees and shrubs.

Where possible, choosing up to three sections of each habitat and averaging the number of species present will give a more informative result.

Scoring: 1-3 species = 1 point, 4-10 species = 3 points, >11 species = 5 points

HABITAT TYPE	Section	Score	Score	Score
	1	2	3	average
Arable fields	-	-	-	-
Arable fields - Grass margins				
Arable fields - Pollen/nectar-rich margins				
Arable fields - Wild bird covers				
Arable fields - Unsown/weedy corners				
Arable fields - Game covers				
Arable fields - Field tracks				
Meadow/permanent pasture				
Rotational grass leys				
Hedgerows	-	-	-	-
Hedgerows – hedging plants				
Hedgerows – hedge base flora				
Ditches/drain banks				
Woodland/copse	-	-	-	-
Tree canopy				
Ground cover				
Pond/reservoir/other waterbody				
Other farm features (specify)				

4. Insect groups present on the farm

For each habitat recorded in Section 3, choose a patch the **width of your arm span** containing flowers and count the number of pollinators present by group. Also make a note of the approximate number of flowering heads.

	Bumblebees	Other bees	Hoverflies/wasps	Other flies	Beetles	Butterflies/moths	Other insects	Flowering heads
Arable fields - Grass margins			_			_		
Arable fields – Pollen/nectar-rich margins								
Arable fields – Wild bird covers								
Arable fields - Unsown/weedy corners								
Arable fields - Game covers								
Arable fields - Field tracks								
Meadow/permanent pasture								
Rotational grass leys								
Hedgerows								
Ditches/drain banks								
Woodland/copse								
Pond/reservoir/other waterbody								
Other farm features								

Add up the total recorded for each group. Score one point for each group recorded.

N.B. After the first year, double your points if your pollinator numbers double in any group! This means that in year two the total score could be 14

	Bumblebees	Other bees	Hoverflies/wasps	Other flies	Beetles	Butterflies/moths	Other insects
Total number recorded							
After Year One – score one point extra if double previous score							

TOTAL SCORE:	/ 14	

5. On-farm nesting/over-wintering habitat

a) Sites for solitary ground-nesting bees, solitary wasps and bumblebees.

Scoring: absent = 0 points, scarce = 1 point, moderate = 3 points, abundant = 5 points

SCORE ALL THAT APPLY	Score	Comments
Areas of undisturbed tussocky		
grasses – margins/corners adjoining crop areas, hedge base		
Areas of untilled, uncompacted, well-drained ground (ideally south facing) – bare or sparsely vegetated		
North facing hedgerows/hedge banks		

TOTAL SCORE:	/ 15
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b) Sites for wood and cavity nesting bees.

Scoring: absent = 0 points, scarce = 1 point, moderate = 3 points, abundant = 5 points

SCORE ALL THAT APPLY	Score	Comments
Dead wood, woody stumps with beetle holes, dead/diseased trees, left piles of brash/cut materials. (Includes artificial bee hotels)		
Buildings with loose/crumbling mortar, old walls (including dry stone).		
Robust plants with persistent hollow stems: e.g. hogweed, cow parsley, teasel and shrubs with pithy stems: e.g. bramble, elder, currants		

TOTAL SCORE (summary table)

	SCORE
Section 1	
Section 2	
Section 3	
Section 4	
Section 5	
OVERALL SCORE	

Next steps

This survey booklet has been designed to help farmers assess the current level of habitat provision on their holding and identify potential opportunities to make improvements.

It is intended to be used alongside the document **increasing wild pollinators on your farm: a low cost approach** which sets out a range of low budget measures that can be implemented to help support wild pollinators on your farm.

This resource was produced by the Greater Lincolnshire Nature Partnership (GLNP) in 2018 with funding support from Defra. The measures included have been developed through discussion with farmers in Greater Lincolnshire to ensure they are practicable within the farm business.

The full list of measures together with information on how and why to implement them can be found at www.glnp.org.uk

Greater Lincolnshire Nature Partnership

The GLNP is a not-for-profit partnership working together to achieve more for nature.

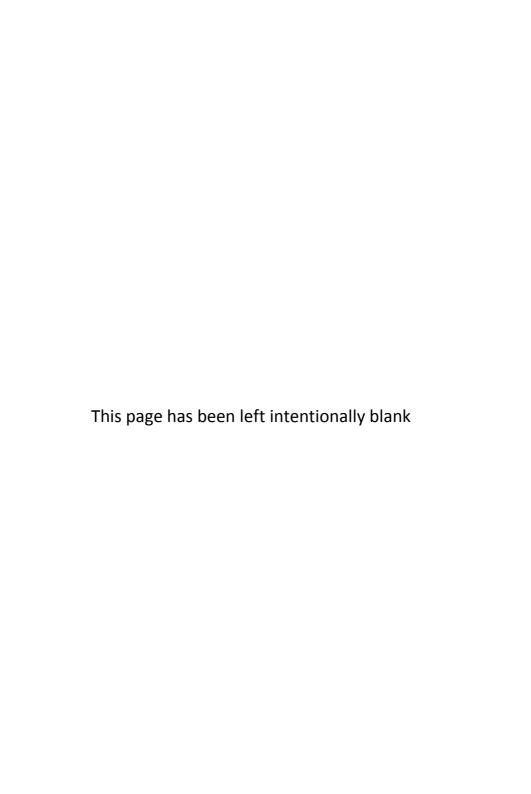
Farming with nature is one of the GLNP's key work areas, designed to build a shared understanding of the issues affecting agriculture and nature conservation and promote practices that enhance both biodiversity and farm profitability.

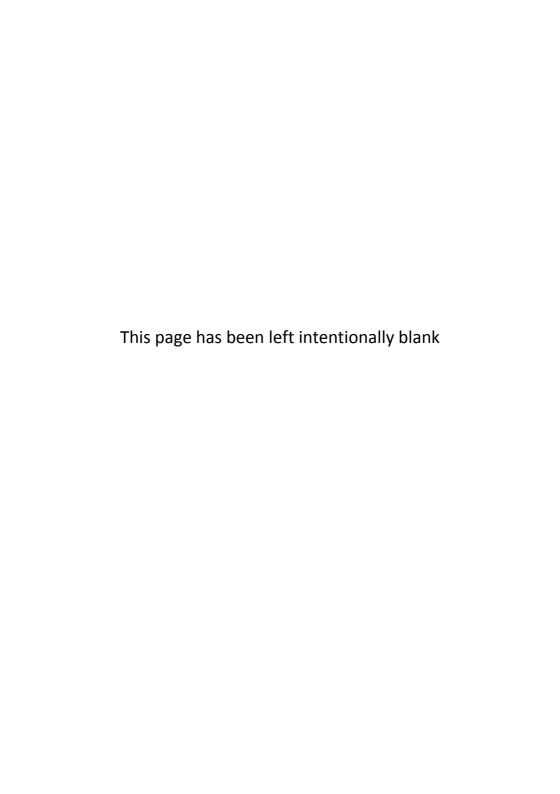
During 2016 the GLNP undertook a research study to look at how increased maize cropping in the region may be impacting on pollinators. This research provided a valuable dataset in better understanding how pollinators, and the wider invertebrate community, use a range of arable crops.

The research highlighted the need for greater support for wild pollinators, in particular bees, in the farmed environment and led to the development of this current resource.

The survey booklet has been adapted from the Pollinator Habitat Assessment Guide which was developed by the Xerces Society for Invertebrate Conservation and used as the basis for Worcestershire Wildlife Trust's Wild Pollinators Farm Health Check.

The GLNP is grateful to Defra for providing funding to support this work through the National Pollinator Strategy and to all the farms involved in the development of this resource.





Supporting wild pollinators on farmland: survey booklet

Greater Lincolnshire Nature Partnership

Banovallum House Manor House Street Horncastle Lincolnshire LN9 5HF

Tel: 01507 528398 Email: info@glnp.org.uk Web: www.glnp.org.uk

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Sarah Baker

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