# Green Infrastructure Action Plan for Pollinators

Blaenau Gwent

In SE Wales

Monmouthshire

Torfae

Jo Wall TACP (UK) Ltd
Kate Stinchcombe Monmouthshire County Council

Caerphilly











## The Green Infrastructure Action Plan for Pollinators in SE Wales

- Welsh Government's Nature Fund
- Part of the larger 'Pollinators for Life' project
- Seeks to address the decline of pollinators throughout the study area and UK









## Project Team









County Borough Council

Ariennir gan Lywodraeth Cymru Funded by **Welsh Government** 

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**Mackley Davies Associates** (Project Manager) Gill Mackley



Simon Fagg Jo Wall Dr Tim Rich (now Tim Rich Botanical Consultancy) Tim Wroblewski Emily Rui Wang

#### Partners, including:









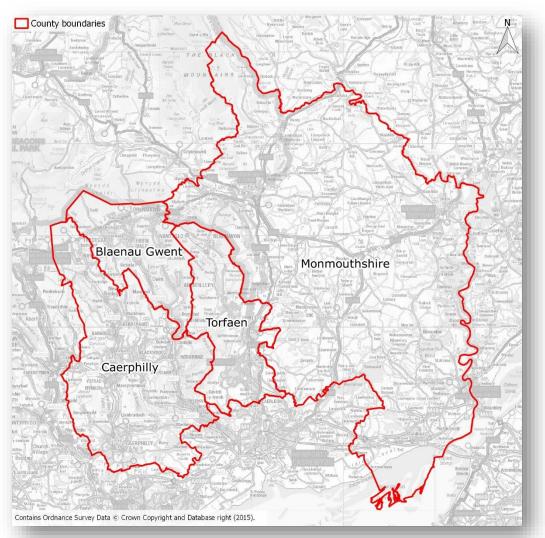








## The Green Infrastructure Action Plan for Pollinators in SE Wales













## A delivery mechanism

- Action Plan for Pollinators in Wales (July 2013)
- Welsh Government Bee Friendly Initiative
- Well-being of Future Generations (Wales) Act 2015
- Environment (Wales) Act 2016
- Monmouthshire Pollinator Policy (January 2014)
- Wales Nature Recovery Plan (December 2015)
- Southeast Wales Uplands Natural Resource Management Plan









## Why Manage for Pollinators?





- Pollination by bees worth £430 million per year to British agricultural production
- Horticultural business, fruit and vegetable production, allotments and gardens
- Pollinate many flowering plant species = long term maintenance of habitats
- Intrinsic value of wildlife to people, and part of our natural heritage



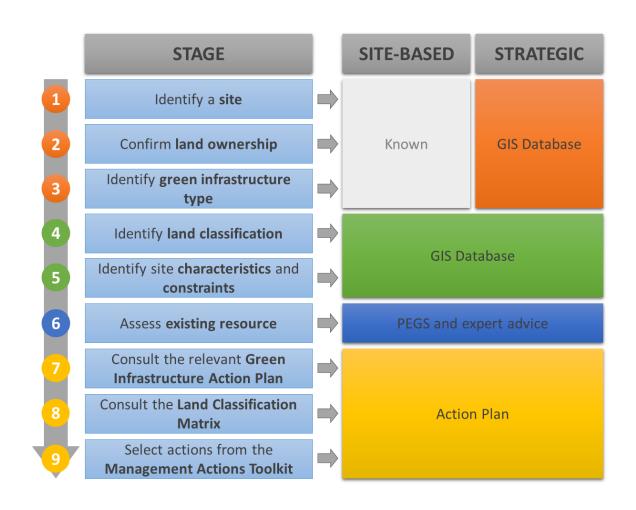
## Collaborative Working

- Recognises the importance of the urban environment for pollinators
- Integration of landscape science, design and management
- Landscape design with ecological principles
- Promotes landscape-scale thinking
- Provides value to pollinators throughout the year
- Applicable to all sites irrespective of ownership or size
- Encourages cost savings and efficiencies through cross sector/border working
- Empowers communities to take ownership of their local green spaces





## The Action Plan





### Tools

## Geographic Information System (GIS)







Pollinator Evaluation and Grading System (PEGS)

Score	VALUE FOR POLLINATORS
0-3	Poor value for pollinators, high potential for improvements
4-7	Moderate value for pollinators, room for some improvement
8-12	Good value for pollinators

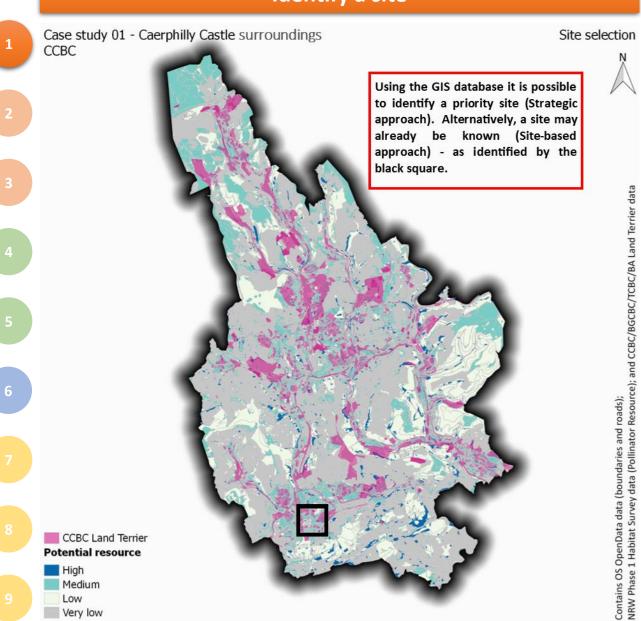
**Case Studies** 

Offices | LA/social housing partnership | Historic | Education

**Guidance** booklets

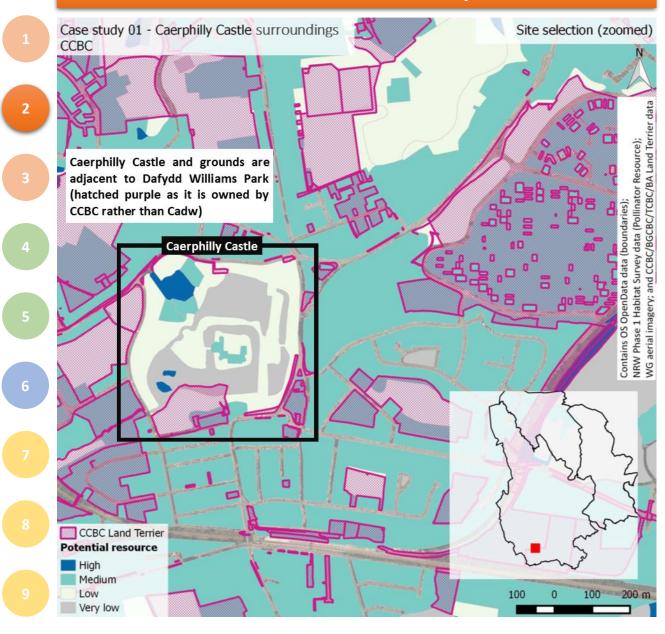


#### **Identify** a site





#### **Confirm land ownership**





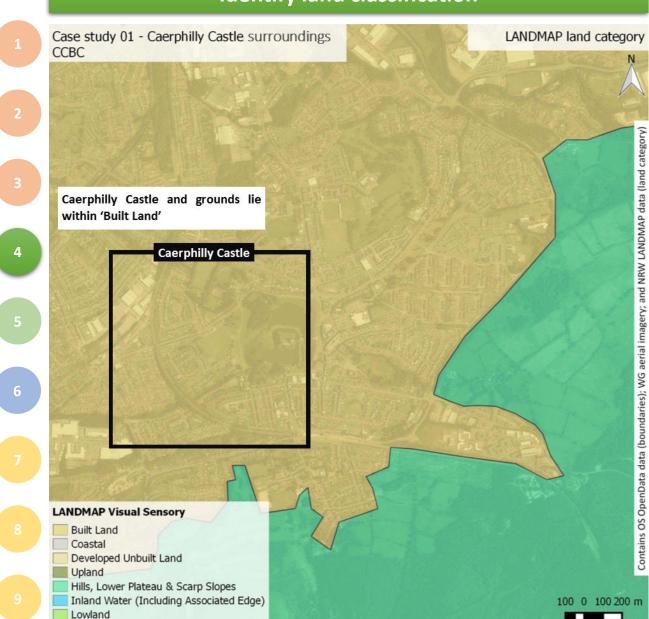




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#### **Identify land classification**





#### **Identify site characteristics and constraints**





- Designations –
   Scheduled Ancient
   Monument
- Elevation low altitude
- Temperature –
   warm
- Rainfall –moderate
- Slope –
   predominantly flat
- Soil fertility –
   low fertility soils
- Connectivity opportunities to build
   and enhance
   connectivity with
   surrounding areas

#### **Assess existing resource**



Phase 1 habitat survey indicates the area is mostly of low value for pollinators



There is considerable potential to improve the site for pollinators

**PEGS** can also be used



Consul	t the relevant Green Infrastructure Action Plan	TACP
	Green Infrastructure type: Historic Sites	18 action plans:
Aims	Manage historic sites in a way which provides greater benefit for pollinators      Ensure historic context and features are maintained.	<ul><li>Roadside verges</li><li>Public parks and gardens</li></ul>

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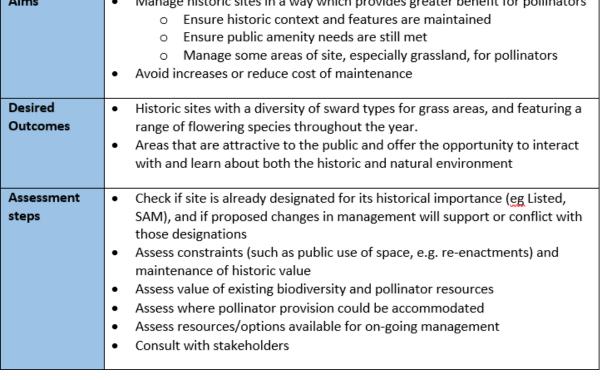








- Outdoor sports facilities
- Car parks, office grounds etc.
- Historic sites
- Civic spaces
- Housing green space
- School grounds
- Managed gardens, care homes etc.
- Other amenity green space
- Allotments and community gardens
- Churchyards and cemeteries
- Water margins
- Derelict land and demolition sites
- Provision for children and young people
- Cycle routes and other nonmotorised route ways



#### **Consult the relevant Green Infrastructure Action Plan**

Main options	Grasslands
for site	Alter mowing regimes:
	<ul> <li>Reduce cutting frequency (G1)</li> </ul>
	<ul> <li>Increase cut height (G2)</li> </ul>
	<ul> <li>Introduce rotational mowing (G3)</li> </ul>
	<ul> <li>Delay first cut (G7)</li> </ul>
	<ul> <li>Augmentation of diversity:</li> </ul>
	<ul> <li>Collect cut material from local donor meadow and spread on</li> </ul>
	recipient site to introduce seed etc. (Green Hay) (AU1)
	Medicinal herb gardens
	<ul> <li>Medicinal herbs often good context for historic site and also good</li> </ul>
	for pollinators, but may have health risk to public
	Kitchen herb garden
	<ul> <li>Again may be good for context and pollinators, though in this case</li> </ul>
	for display not food production
	Bee keeping
	<ul> <li>There may also be historic links to honey as a sweetener and</li> </ul>
	traditional beekeeping
Relevant	G1, G2, G3, G6, G7, CR1, CR4, CR5, AU3, FM1, FM2, WD1, WD2, WD3, WD4, SCR1,
Management	SCR2, SCR3, HDG1, HDG2, HDG3, HDG4, HDG5, HDG6, HDG7
Action Plans	
Risk Appraisal	Ivy is very good for pollinators but can be damaging to old masonry
	Historic tree avenues (e.g. lime avenues) should be maintained rather than
	augmented with other tree species
	Public may regard pollinator areas as unkempt; signage may be appropriate
Key	Cadw
stakeholders	Friends groups
	LA Conservation Officer and Parks Department
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#### **Consult the Land Classification Matrix**



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				Land Classification Ty	pe		
	Inland Water	Upland	Hills, lower plateaux and scarp slopes	Lowland	Coastal	Built Land	Developed Unbuilt Land
Green Infrastructure Type Sites		HDG1, HDG	G1, G2, G3, G6, G7 <u>CR4, CR5</u> <u>AU3</u> <u>FM1, FM2</u> <u>WD1, WD2, WD3, WD4</u> <u>SCR1, SCR2, SCR3</u> G2, HDG3, HDG4, HDG5, F			CR1, ( <u>£</u> FM:	G3, G6, G7 CR4, CR5 AU3 L, FM2 2, WD3, WD4





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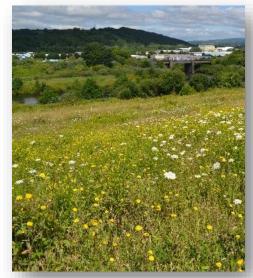
## 8 categories of management actions 35 management actions

5	CODE	ACTION	AIMS	BENEFITS TO POLLINATORS	DETAILS	RISKS/HAZARDS/ CONSIDERATIONS	COST LEVEL	RELATED ACTIONS	DELIVERY PLAN/S	BENEFITS	HOOD OF SUCCESS		TOTAL
6 7 8	<b>G1</b>	Reduce cutting frequency	Produce species rich grassland for pollinators with more flowers	allows many lower growing plants to reach flowering before being cut back providing more	to be cost effective operator need to set machinery and leave it ideally, so most suitable when cut heights can be increased across the board.	dominated with grasses - which produce no nectar. May result in larger quantities of arisings which need removal after cutting. Longer	changes needed)	<u>62, 63, 64,</u> 65, <u>AU2,</u> <u>AU3</u>	-Road verge management -Public Parks and Gardens -Outdoor Sports Facilities -Provision for Children and Young People -Car parks, Office Grounds etcHistoric Sites -Housing green space -School Grounds -Managed gardens, care homes etcother amenity green space -Allotments and community gardens -Churchyards and cemeteries -Cycle routes and other non- motorised route ways -Derelict land and demolition sites -Natural and Semi-natural Green space -Accessible areas of countryside in the urban fringe	*	**	£	6



POL	LINATOR EVALUATI	ON AND GRADING SYS	STEINI (PEGS)	
Site:		Grid reference:		
Surveyor/s:		Date:		
Site Description:	-			
Feature	0	1	2	Score
Habitats	Amenity grassland Bracken Cereal crops Conifer plantation Improved grassland Bare rocks, stone, earth, etc. (less than 10% vegetation cover) Open water	Flowering crops Heathland Hedges Marsh and swamp Mires, fen and bogs Mixed woodland Railway Riverbank Road verge Saltmarsh Semi-improved grassland Urban (including gardens, parks, churchyards, etc.)	Broadleaved woodland and scrub Orchards Sand dunes Sea cliffs Shingle Tall weedy areas Unimproved grassland Waste ground	
Adjacent habitats within 25 m	Score as for habitat; select highest score	Score as for habitat; select highest score	Score as for habitat; select highest score	
Vegetation structure	Uniform, all one height and cover	Variable in height or in patchiness (not both)	Varied in height and lots of different patches	
% vegetation covered with flowers	Less than 5%	5-20%	More than 20%	
No. different colours of flowers present (e.g. blue, pink, red, yellow)	0 or 1 colour only	2-3 colours	4 colours or more	
Clover (all types)	Absent	Small amounts present	Lots present	
			Total score:	



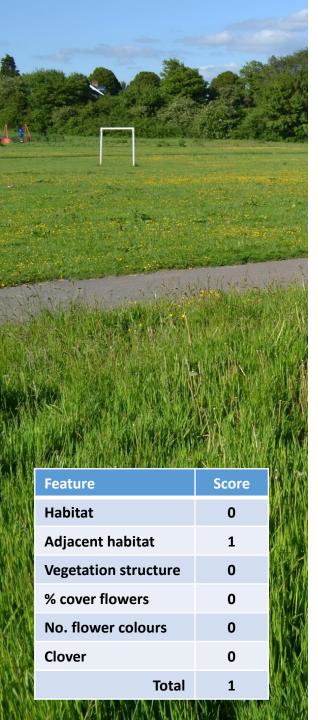


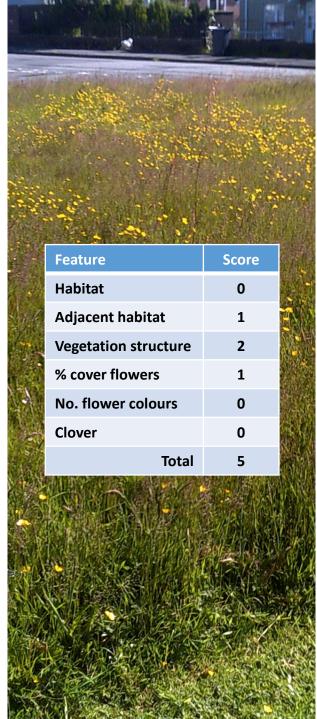
#### **Evaluation: total score**

0-3 Poor

4-7 Moderate

8-12 Good





	Feature	Score
9	Habitat	2
4	Adjacent habitat	2
	Vegetation structure	2
	% cover flowers	2
	No. flower colours	2
	Clover	0
	Total	10





TACP

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- 11	TOTAL STREET	12.14	
		ALL DESIGNATION OF THE PARTY OF	
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		2. 4%	
	Feature	Score	
	Feature Habitat	Score 0	
	Habitat	0	
	Habitat Adjacent habitat	0 1	
	Habitat Adjacent habitat Vegetation structure	0 1 0	
	Habitat Adjacent habitat Vegetation structure % cover flowers	0 1 0 0	



### Case Studies









**Historic Sites** 

Green Infrastructure Action Plan School Grounds

Other Amenity Green Space

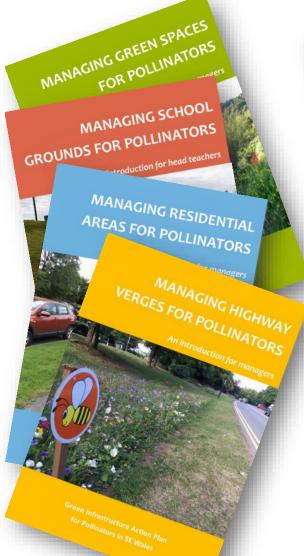
**PEGS** 

Car Parks,
Office
Grounds etc.

GIS Database



## Guidance booklets





Green Infrastructure Action Plan for Pollinators in SE Wales



## Pollinators in Action





#### **Ebbw Vale former steel works site**



#### **Sirhowy Community Orchard**





## TACP

#### **Pollinator Friendly Formal Parks**









#### Wildlife corridors



## Monmouthshire County Council



Site management rationale







## Monmouthshire County

Council

**Exemplar site for pollinators and 'Nature isn't Neat'** 





**TACP** 





## Legacy

- Reverse decline in pollinator provision
- Development of multi-functional spaces
- Promotion of health and wellbeing
- Support for greater ecosystem resilience
- Cross-border working and collaboration
- Community engagement and outreach
- Partnerships with schools delivering education programmes
- Rationale for pollinator friendly landscape design

