

## LANCASHIRE BAP TEMPLATE FOR HABITAT ACTION PLANS

### NEW & EXISTING BUILT STRUCTURES

(Line Drawing of Habitat.)

#### **Summary**

The area of county structural built habitat has increased rapidly following the industrial revolution in the late 18<sup>th</sup> century. Built structures can provide a variety of micro-habitats and are becoming increasingly important for a significant component of the county's biodiversity resource.

The built environment is known to support over 600 species of lichen and a characteristic community of flowering plants. Additionally Pipistrelle bats which are of national concern are known to roost in buildings.

#### **Action Plan Aim**

**To assess, manage and promote biodiversity in new and existing built structures throughout Lancashire.**

#### **Habitat Description**

Built structures (together with associated gardens and other greenspace\* cover 26,652ha, which is just over 9% of the land area of Lancashire (290,388ha). This is where the bulk of the county's people live, work and have day-to-day contact with biodiversity.

\* Data relating solely to built structures is not available.

The area of the present county covered by structural built habitat has been expanding since the Neolithic, but the rate of expansion increased rapidly following the industrial revolution that began in the late 18<sup>th</sup> century. This has made the general urban environment increasingly important for a significant component of the county's biodiversity resource.

Built structures can provide a wide variety of micro-habitats which, dependent on their material components and their locations, aspects, ages and states of dilapidation, can mimic habitats such as natural cliffs, canyons and hollow trees, providing artificial alternatives for some species otherwise dependent on those semi-natural habitats.

Changes in building design and the materials used has resulted in reduced habitat potential for some species; for example, a contributory factor in the decline of the

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UK's population of swifts (a migratory bird), has been the loss of breeding sites in roof spaces through repair work and new fascias.

#### **Notable Species**

Other species of note which utilise built structures include:

- Pipistrelle bats breed and roost mainly in buildings. They have a particular fondness for those constructed in the last thirty years and have been found living in tower blocks. The two species of Pipistrelle are of national concern, having suffered up to a 70% decrease in population between 1978 and 1993. EU Directive and UK law protects these animals and their dwelling places.
- Birds such as lesser black-backed gulls, herring gulls, kestrels and peregrines have joined starlings and feral pigeons on ledges and roofs of buildings, which mimic cliff habitats.
- Walls can support a characteristic community of flowering plants, ferns and mosses.
- More than 600 species of lichen have been recorded in the UK's built environment, and built surfaces are often covered with their multi-coloured growths. The older the surface, the less it is disturbed, and the cleaner the surrounding air, the richer the lichen flora.
- Many invertebrates are associated with walls. These include species of slug, snail, spider, beetle, wasp and bee.

Active and redundant transport infrastructure, mill ponds ("lodes"), reservoirs, sea walls and flood defences are not included in this HAP as they are, or will be, addressed elsewhere in the Lancashire BAP. The NE Irish Sea Regional BAP will cover built structures at sea (e.g. cables, oil & gas platforms, pipelines, wind and tidal turbines).

#### **National Status**

See *Over-arching Urban Biodiversity Action Plan* for Lancashire.

#### **Regional Status**

See *Over-arching Urban Biodiversity Action Plan* for Lancashire.

#### **Local Status**

See also *Over-arching Urban Biodiversity Action Plan* for Lancashire.

Although many animal species make use of built structures nationally (see above) none are especially characteristic of Lancashire.

Trailing Bellflower and Rusty Back Fern are examples of flowering plant species making particular use of this habitat in Lancashire.

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Lancashire's lichen flora was markedly depleted as a result of air pollution associated with the Industrial Revolution, but improvements in general urban air quality since the 1950s seem likely to result in some recovery.

#### **Current factors affecting the Habitat**

The main threats to wildlife that is dependent on new and existing built structures are:

- Missed opportunities in the design and construction of new structures
- Reduction of opportunities for habitat retention and development as an unplanned consequence of unsympathetic urban regeneration
- Unsympathetic maintenance, repair and restoration
- Lack of awareness of the importance of habitats and species within the built environment.

Less direct threats include:

- Lack of ecological information on built structures.
- Disturbance, destruction and unsympathetic change in management of habitats adjacent to built structures.
- Lack of a coordinated approach to the protection and enhancement of microhabitats and associated species on and within built structures.

#### **Indicators of Habitat Quality**

The following would provide some indication of habitat quality:

- Populations and distributions of urban bats, swifts, house martins and swallows.
- Diversity and distribution of flora associated with built structures.
- Diversity and distribution of invertebrate fauna associated with built structures.

However, monitoring of all of these could be resource intensive.

#### **Important Sites**

The major conurbations in Lancashire lie on the west coast of the Fylde Peninsula (Lytham St Annes, Blackpool, Cleveleys, Fleetwood), on the Lune Estuary (Lancaster, Morecambe, Heysham), in the East Lancashire valleys/M65 corridor (Blackburn, Accrington, Burnley, Rawtenstall, Nelson), and in central Lancashire along the A6/M6/West Coast main line corridor (Preston, Leyland, Chorley). Carnforth, Clitheroe, Garstang, Ormskirk, and Skelmersdale form significant outliers. Smaller settlements are found throughout the county, but none lies above 320m (Bacup).

Large areas of urban built structure habitat lie just south and southwest of the county boundary, in Greater Manchester and in Merseyside.

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#### Current Action / Mechanisms

There is no co-ordinated work on the biodiversity of built structures in Lancashire, so the extent of work relating to it is currently unknown. What follows is likely to be an incomplete picture.

No built structure (in the sense of this HAP) has been designated as a cSAC, SPA, SSSI, or LNR or part of one.

The introduction to the Lancashire Biological Heritage Site (BHS) Site Selection Guidelines states that, "*certain types of sites and features have generally been excluded. These include buildings, and usually also operational quarries or tips. Whilst such sites can and do sometimes have significant wildlife interest, it is felt that this may best be addressed in other ways*". Consequently, there is no existing criterion for identification of a building or other urban built structure as a BHS or as part of one.

- *Policy*
- *Site Safeguard*
- *Building Management*

In Lancashire, Wildlife Trust projects operate, or are planned to operate in urban Blackburn with Darwen, East Lancashire and Preston City; and, with BTCV, in urban Burnley. BTCV (Lancashire) projects and Groundwork-Lancashire projects also operate in urban areas, as do local authorities' projects and local community organisations' projects. However, so far as the author is aware, there are no measures in any of these projects specific to the biodiversity of built structures. No other Lancashire projects are known to the author.

- *Advisory*

No steps specific to built structures are known to be being undertaken to systematically advise relevant landowners/managers on appropriate management, except for a section in Blackburn with Darwen Borough Council's Supplementary Planning Guidance on Species Conservation dealing with bats and barn owls.

- *Research and Monitoring*

None is known specifically, though the five bat groups operating wholly or partly in Lancashire are likely to monitor bat roosts in built structures as and when they have the resources to do so.

- *Public Relations*

No general initiatives are known.

#### Habitat Targets

Target	Area	Measure	Timescale
Secure local policy change favourable to the conservation of biodiversity in	Lancashire	Policy change in all plans	2010

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Lancashire's built environment			
Identify key areas in Lancashire for the biodiversity of the built environment	Lancashire	Areas identified	2010
Ensure that the built environment of Lancashire is managed to maximise its value to biodiversity	Lancashire	Built environment managed to maximise biodiversity	2012

### Proposed Actions

Action (priority: H, M, L)	Area	Measure / Milestone	Partners	Timescale
<b>Research and monitoring</b>				
Target research to identify the range of species using the Built Environment and increase understanding of the development of plants and animal communities living within the built environment. (L)	Lancashire	Research commissioned	LAs, NE, LBRC, TWT	2010
<b>Site safeguard and monitoring</b>				
Identify and record relevant habitats and localities within the built environment used by protected or relevant Biodiversity Action Plan species,	Lancashire	100% of sites known to be used by protected and relevant species mapped to establish biodiversity hotspots.  Management implemented	LAs, LCC, NE, TWT, RSPB, Bird Clubs, Bat Groups, Natural History Societies, County Recorders	2010  2012

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identify biodiversity 'hotspots' and encourage appropriate management (M)		in 100% of mapped biodiversity hotspots		
Develop partnerships with key organisations to explore ways in which good examples of the built environment can be retained (M)	Lancashire	Partnerships developed	TWT, LCC, LAs, NE	2010
<b>Habitat protection and management</b>				
Encourage conservation measures to improve existing buildings and built structures for targeted species (M)	Lancashire	Advice given to 100% of relevant cases	TWT, NE, Bat Groups, Bird Clubs, LCC, LAs	2008
Encourage Lancashire's local authorities to adopt biodiversity-friendly maintenance practices on all their owned and managed properties (M) <b>Add something in here about biodiversity and regeneration (e.g. with reference to Elevate's remit)</b>	Lancashire	100% of local authorities to implement biodiversity-friendly maintenance practises.	LCC, LAs, TWT, NE	2010
Ensure that		20% of	LCC, LAs,	2012

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the planned built environment will be constructed to maximise its attractiveness to biodiversity <b>(H)</b>		planning applications to identify construction methods beneficial to wildlife.	TWT, NE	
<b>Advisory</b>				
Encourage the incorporation of biodiversity measures such as bird and bat roosting / nesting sites into new / converted buildings, through development plans and other policy documents, strategies and guidance	Lancashire	100% of associated planning documents to highlight the importance of biodiversity measures in the built environment.	TWT, RSPB, LCC, LAs, NE, Bat Groups	2010
Produce and disseminate guidance for householders and businesses on biodiversity opportunities in, on and around their premises <b>(H)</b>	Lancashire	Advisory leaflet produced and publicised.	TWT, NE, Bat Groups, Bird Clubs, LCC, LAs	2010
<b>Publicity</b>				
Promote public awareness of the biodiversity of the built environment <b>(M)</b>	Lancashire	Awareness raised through a variety of media	TWT, LCC, LAs, NE	Ongoing
Encourage local communities to participate in surveys of the biodiversity of	Lancashire	Survey undertaken (as part of gardening survey).	TWT, NE, LCC, LAs	2010

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their built environment (M)				
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#### Abbreviations:

BAP = Biodiversity Action Plan

EN = English Nature

HAP = Habitat Action Plan

GWK = Groundwork Lancashire

LA = Local Authority

LBRC\* = Local Biological Record Centre

LCC = Lancashire County Council

RSPB = Royal Society for the Protection of Birds

SAP = Species Action Plan

TWT = The Wildlife Trust for Lancashire, Manchester & North Merseyside.

#### Related Action Plans

Over-arching Urban Biodiversity Action Plan, Pipistrelle SAP

#### References and additional reading

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Author: David Dunlop

\* There is currently no integrated and networked Local Biological Record Centre system covering Lancashire. In 2003, LCC commissioned a study to examine the feasibility of establishing such a system.