



Wrexham Industrial Estate FI-REM Land

Habitat Management Strategy

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1 Introduction

1.1 Background

FI-REM own several sites around the southwestern quarter of the Wrexham Industrial Estate. They are currently exploring options to develop some of these sites and to manage other sites exclusively for conservation benefit. As part of this process a Habitat Management Strategy has been developed.

The key aim of the Strategy is to provide an ecological network of interlinked, wildlife sites as opposed to a series of fragmented and isolated pockets of habitat. Therefore, where possible sites have been strategically selected to fit in with the overall aim of providing a robust and ecologically valuable network.

The proposed Strategy would ensure that the sites are protected from any future development and would include commitments for both habitat creation and long-term management exclusively for nature conservation benefit for a minimum 20-year period.

This Strategy aims to allow the sustainable development of under used sites within the Industrial Estate. The Strategy will contribute towards Wrexham County Borough Council's aims to provide a functioning Green Network of interlinked conservation sites running through the Industrial Estate and also assists in meeting the goals of North Wales Wildlife Trust's 'Wrexham Industrial Estate Living Landscapes Project'.

Sites supporting existing features of ecological value have been selected including areas of woodland, scrub and grassland. Much of the existing sites are currently suffering from neglect or are being managed in a manner which does not maximise their conservation value.

Proposals will therefore comprise of some small-scale habitat creation to provide new habitats for some target species plus management of existing habitats to maximise their biodiversity potential.

The Management Strategy will include for wardening of the sites plus annual ecological monitoring and reporting.

1.2 Key Habitats and Species

The history and various land uses of the Industrial Estate has allowed certain important habitats and species to colonise parts of the Estate. Grassland habitats have largely escaped intensive agriculture and several vacant and under used plots or parts of active sites have developed into valuable wildlife habitats. The Estate supports several Local Wildlife Sites and also supports areas of woodland and watercourses which provide linkages and wildlife corridors through the Estate.

Habitats of value located within the Industrial Estate include unimproved, flower-rich grassland, early successional communities and areas of broadleaved woodland.

Through neglect areas of valuable, flower-rich grassland can be lost to scrub invasion. Likewise, the biodiversity value of woodlands can be diminished when woodland becomes too dense and over shading can occur.

The Wrexham Industrial Estate is acknowledged as maintaining important populations of the dingy and grizzled skipper butterfly. Both of these butterflies are listed as 'Species of Principal Importance' under Section 7 of the Environment (Wales) Act 2016.

These butterflies typically prefer open, sunny habitats where foodplants grow in a sparse sward, often with patches of bare ground. Such habitats are offered at the Industrial Estate within areas of waste ground, disturbed grassland, brown field sites and other places offering early successional habitats.

The Industrial Estate also supports a variety of bat species. Habitats of value to bats include the various bands of broadleaved woodland and watercourses located at the Industrial Estate.

The broad range of habitats at the Industrial Estate support a diverse range of bird species including woodland, farmland and garden bird assemblages. Barn owl also hunt over areas of tall grassland at the Estate.

Great crested newt are known to be present in high numbers within parts of the Industrial Estate, principally within the central and eastern half of the Estate. However, no great crested newt are known to be present around the southwest corner of the Estate. This is likely due to fragmentation of habitats and an absence of suitable ponds in this area.

The proposed Management Strategy will seek to provide suitable habitats for these key species and to improve the overall biodiversity of sites included within the management plans.

2 Habitat Management Strategy

2.1 Targets and Rationale

Taking account of the valuable species and habitats described above and known to be present at the Industrial Estate. The aims of the Habitat Management Strategy were as follows:-

- Where possible, retain and enhance blocks of interlinked habitat as opposed to isolated pockets of habitat;
- Maintain a variety of habitats of conservation value;
- Maximise the biodiversity value of retained habitats at the sites;
- Promote botanical diversity within grassland habitats;
- Promote and manage habitats for bats and birds including the provision of roost/nest boxes;
- Provide suitable habitat for notable invertebrate species including areas of early successional habitat and butterfly banks;
- Create new aquatic habitats;
- Ensure the long-term viability of the proposed ecology sites by appropriate, long-term management and long-term protection of the sites.

FI-REM is proposing to develop four sites at the Industrial Estate. As part of the development proposals, eight sites will be included within the wider Habitat Management Strategy.

Habitat prescriptions will aim to take advantage of existing habitats. Selected habitat areas are already of some biodiversity value with grasslands having undergone limited nutrient enrichment and improvement in the recent past and already supporting a relatively diverse seedbank of grasses and herbs of conservation value. This value can be enhanced through sensitive management as opposed to carrying out wholesale manipulation of soils and artificial re-seeding. This will allow the development of habitats most appropriate to soil conditions and promote habitats in keeping with the surrounding landscape character.

Management of grasslands will seek to retain low nutrient levels within soils. A sensitive mowing regime will seek to control scrub encroachment, prevent dominance of coarse grasses and will seek to encourage species diversity by allowing grasses and herbs to flower and set seed.

Management of woodlands will principally comprise of thinning of trees of low conservation interest to allow more light through to the field layers to promote woodland ground flora and to encourage the development of more valuable mature trees.

Management of thorny scrub habitats will seek to encourage early and middle age growth which can be of greater conservation value than older leggy stands.

Small scale habitat creation prescriptions will include the creation of butterfly banks with sparse, calcareous plant communities; the creation of areas of intermittent patches of bare ground and early successional communities; the creation of wildlife/SUDS ponds and the installation of bat and bird boxes.

Further details on sites can be found within the specific outline Habitat Management Plan accounts for each Site. Summaries of existing habitats and habitat prescriptions are provided below.

Figure 1 in the Appendix shows the proposed layout of the overall Habitat Management Strategy showing linkages between sites along with broad proposed habitat types to be managed.

2.2 Site Specific Prescriptions

Summaries of Site descriptions with existing habitats and proposed habitat creation and management prescriptions are provided below.

2.2.1 Site 1

Habitats to be managed at Site 1 comprise of a band of broadleaved woodland running along a watercourse between existing industrial units. The site is located adjacent to woodland habitats at Site 4 and further woodland outside of FI-REM ownership.

To increase the value of woodland habitats, low conservation value trees would be thinned out to allow higher value trees to come through. The thinning out of the woodland should allow more light through to the field layer potentially enhancing conditions for woodland ground flora.

There are further recommendations to provide a bat and bird box scheme and to retain dead wood and habitat piles for invertebrates.

2.2.2 Site 2

Habitats at Site 2 comprise of unimproved grassland, semi-improved grassland, woodland and scrub communities.

Habitats Management proposals will aim to maintain areas of species-rich grassland including flower-rich neutral grassland and south facing calcareous grassland on proposed butterfly banks and mounds.

2.2.3 Site 3

Habitats at Site 3 comprise of regularly mown, species-poor, semi-improved grassland. The site is located adjacent to woodland habitats at Site 5a and 5b.

Habitat Management proposals for this area will aim to maintain areas of species-rich grassland including flower-rich, neutral grassland, rank coarse grassland, south facing calcareous grassland on butterfly banks and marshy grassland habitats within a proposed SUDS attenuation basin.

2.2.4 Site 4

Site 4 comprises of areas of coarse semi-improved grassland which grades into areas of tall herb community, bramble scrub and hawthorn scrub.

There is a band of broadleaved woodland which runs along the south-eastern boundary of the site. The woodland is located either side of a watercourse. The woodland continues into Site 1 and is linked to Site 5a.

Habitat management proposals will also aim to enhance the biodiversity value of the development site through the design of a proposed SUDS pond to be of benefit to wildlife and through the management of grassland, scrub and woodland habitats.

There are further recommendations to provide a bat and bird box scheme within woodland habitats and to retain dead wood and habitat piles for invertebrates.

2.2.5 Sites 5a, 5b, 5c

Habitats present at Sites 5a, 5b and 5c comprise of unimproved grassland, semi-improved grassland, tall herb, woodland and scrub communities. All three sites are located adjacent to one another and are linked to Sites 3 and 4 plus other areas of semi-natural habitat outside of FI-REMs ownership.

Habitat Management proposals for the areas will aim to maintain areas of species-rich grassland including flower-rich neutral grassland and south facing calcareous grassland on proposed butterfly banks and mounds. There are further proposals to manage woodland and scrub habitats to optimise their conservation value.

Habitat management proposals will also include the creation of a wildlife pond and design of a proposed SUDS pond to be of benefit to wildlife.

There are further recommendations to provide a bat and bird box scheme within woodland habitats and to retain dead wood and habitat piles for invertebrates.

2.2.6 Site 6

Habitats at Site 6 comprise of semi-improved grassland, tall herb, woodland and scrub communities.

Habitats Management proposals will aim to maintain areas of species-rich grassland including flower-rich neutral grassland and south facing calcareous grassland on proposed butterfly banks and mounds. There are further proposals to manage woodland and scrub habitats to optimise their conservation value.

There are further recommendations to provide a bat and bird box scheme within woodland habitats and to retain dead wood and habitat piles for invertebrates.

2.3 Habitat Creation and Habitat Management Summary

In total, approximately 7.1ha of land would be developed at Sites 2, 3, 4 and 5b. These developments will result in the loss of semi-improved grassland, unimproved grassland and scrub habitats.

A further approximate 3.5ha of land will be developed at Site 1 however this principally comprises of amenity grassland, ornamental planting, hardstanding, existing commercial units plus a small area of plantation broadleaved woodland.

In turn, approximately 8.7ha of land would be set aside and managed exclusively for its conservation value at Sites 1, 2, 3, 4, 5a, 5b, 5c and 6. Habitats in these areas comprise of unimproved and semi improved grassland, scrub and woodland habitats.

Management proposals would aim to increase the extent of managed, unimproved grassland habitats at the Industrial Estate.

Butterfly banks would be provided at Sites 2, 3, 5a, 5b, 5c and 6. Management procedures will also aim to maintain patches of bare ground and early successional habitats.

Bat and bird boxes will be installed in woodlands across the Industrial Estate. These will comprise of 54 Schwegler 1B bird boxes and 63 Schwegler bat boxes (models 1FS, 2FN and 2F).

A dedicated wildlife ponds would be created at Site 5a and two SUDS attenuation ponds would be designed to be of benefit to wildlife (at Sites 5 and 5b).

2.4 Management Plan Delivery

FI-REM will make provision to allow the appointment of an appropriate managing organisation who will be responsible for the maintenance and management of the FI-REM owned habitat management areas across the Wrexham Industrial Estate. The detail of this will be arranged at an appropriate stage in the future.

Detail on areas of habitat creation, management prescriptions and timetabling would be provided within detailed Habitat Management Method Statements to be produced at a later stage.

Funding for the ongoing management of the sites would be secured ideally through a unilateral undertaking. The amount paid would need to take account of the following:-

- Initial habitat preparation and creation
- Ongoing management and maintenance over a 20-year period
- Wardening and monitoring of the sites
- Production of an annual report for the sites
- A contingency fund to allow for any modifications to the habitat management plans or ad-hoc remediation works

2.5 Wardening, Monitoring and Reporting

Land at Wrexham Industrial Estate can suffer some anti-social behaviour including fly tipping, unauthorised use of off-road vehicles and use of land by unauthorised gypsies and traveller encampments.

Annual monitoring and an appropriate level of wardening would be carried out at each site. Wardening visits would either be carried out on a monthly or quarterly basis depending upon the perceived risk of undesirable activities.

Where identified during wardening visits, remediation works would be promptly carried out at each site. This could include, clearance of fly-tipped debris, fence repair, litter picking etc including from within any wildlife ponds.

Monitoring of the sites would be carried out annually during the summer to assess the success of the habitat management plans, to allow for any refinement of management practices and to check on the integrity of bat and bird boxes. The monitoring works would be completed by an appropriately qualified ecologist.

An annual monitoring report with management recommendations (where relevant) would be produced.

3 Appendix

