

The state of Belfast's brownfields: nature under threat



Family enjoying Belfast brownfield site © Conor McKinney



Summary

Brownfield sites can be havens for wildlife, supporting rare and scarce invertebrates and other species which have suffered population declines due to the loss of natural habitats in the wider landscape. However, brownfields supporting Open Mosaic Habitat on Previously Developed Land (OMHPDL) are frequently targeted for development, despite many being the sole biodiverse green spaces in urban areas.

Following the 'Desk Study of the Priority Habitat Open Mosaic Habitat on Previously Developed Land (OMHPDL) in Belfast Project' (hereafter referred to as the 2017 report) to map important brownfield habitat resources in Greater Belfast, the dataset was revisited to quantify the rate of loss of sites within the Belfast City Council area since their identification in 2017. A total of 47 sites identified in the 2017 report considered to suitably represent OMHPDL, some to a lesser degree, were investigated as part of this reanalysis. Each site was categorised depending on whether the site was still intact, partially destroyed, completely destroyed or where planning permission had been granted or is currently under consideration and was therefore likely to be lost in the near future.

This review highlights that over a seven-year period, 40% of the priority OMHPDL sites identified within Belfast have been lost, damaged or have an outstanding planning consent. If the sites with planning applications currently under consideration are granted permission, this would increase to 45%. By area, 61% of

the OMHPDL has been lost or is under immediate threat.

This report highlights that the planning system does not deliver safeguards for OMHPDL habitats, and calls for greater protection and consideration of their value for wildlife. The rate of development on OMHPDL is highly unsustainable, putting rare and endangered species at risk of local or national extinction, contrary to nature recovery ambitions.

Aims and objectives

The aim of this report is to investigate the loss of priority OMHPDL habitat in the Belfast City Council area.

The main objectives of this report are to:

- Revisit the OMHPDL database identified in 'A desk study of the priority habitat OMH on Previously Developed Land in Belfast', funded by Northern Ireland Environment Agency's (NIEA) Environment Fund to quantify the rate of loss of brownfield sites of value to invertebrates since their assessment in 2017;
- Raise awareness of the importance of OMHPDL for invertebrates and other wildlife, and the potential cumulative impacts of regeneration and development on rare populations;
- Provide recommendations to ensure brownfield habitats and species are better considered in the planning process.

Left: Grey-banded Mining Bee (*Andrena denticulata*) © Steven Falk. Right: Common Redshank (*Tringa totanus*) © Stephan Sprinz CC BY 4.0



Introduction

The ecological and social value of OMHPDL

OMHPDL is a habitat that occurs on brownfield sites and can be extremely varied, including anything from former industrial estates to quarries, spoil heaps to disused railway lines or landfill sites to disused airfields. OMHPDL sites can be havens for wildlife, supporting a huge range of species and can often be the last remaining 'wild' and unmanaged greenspaces in our congested cities. Despite their wealth of wildlife, brownfield sites are often seen as eyesores or wastelands, and considered to be of little conservation value.

Many of Ireland's most threatened invertebrate species can be found on these sites, such as the Vulnerable Grey Banded Mining Bee (*Andrena denticulata*) and Vulnerable Red-shanked Carder Bee (*Bombus ruderarius*), alongside important populations of Smooth Newt (*Lissotriton vulgaris*), Common Lizard (*Zootoca vivipara*) and Red Listed birds such as Meadow Pipit (*Anthus pratensis*) and Lapwing (*Vanellus vanellus*). Across Britain, an estimated 12-15% of nationally rare and scarce invertebrates have been recorded from OMHPDL, with some found nowhere else (Gibson 1998). In the Thames Valley alone over 7,580 species are supported at man-made sites including 1,243 species of invertebrates from Pulverised Fuel Ash (PFA) alone (McGill 2018).

As the value of OMHPDL is being recognised they are becoming regarded as "the new lowland heaths and flower-rich meadows" (Barker 2000; Jones 2003). Their value to wildlife has been noted by their inclusion in

Case Study: Sirocco

Sirocco is an 8 hectare (ha) former industrial site located at Short Strand and adjacent to Bridge End and the River Lagan. The Sirocco Ropeworks, at one time the largest rope manufacturer in the world, was located on the site for many years. Production moved overseas in 1999 and the site was sold for redevelopment.

The site has been vacant ever since and in that time has been colonised with an array of endangered and notable species. The Near Threatened Patchwork Leafcutter Bee (*Megachile centuncularis*) forages throughout the wildflower-rich habitat and utilises extant structures on the site to nest. Flocks of Amber Listed Linnet (*Linaria cannabina*) can be observed on site feeding on seed from the no less than 128 plant species that have been found throughout the site, and the Red Listed Redshank (*Tringa tetanus*) and Lapwing have been recorded nesting in the more forgotten corners of the site. Unfortunately planning has been permitted for the site and this oasis for urban wildlife could disappear at any time.



Sirocco brownfield habitat © Conor McKinney

Meadow Pipit (*Anthus pratensis*) (c) Caroline Legg CC BY 2.0



2017 by NIEA as a priority habitat. This means NIEA has a statutory responsibility to “take such steps as appear to the body to be reasonably practicable to further the conservation” of the habitat, under the Wildlife and Natural Environment (WANE) Act (Northern Ireland) Act 2011.

OMHPDL sites develop as a result of abandonment and periodic disturbance, combined with low-nutrient content soils and introduced substrates, such as PFA, chalk and river dredgings. This results in changes in hydrology and pH, preventing fast growing plant species from becoming dominant. It is this variation which allows even small sites to contain mosaics of habitats, essential to the survival of many invertebrates due to modern declines of more natural habitats, such as flower-rich grasslands. Rich plant diversity can then develop, especially where drought-stress occurs, supporting a wide range of associated invertebrate species. The structurally diverse habitats produced also benefit reptiles, amphibians, birds and small mammals.

Many invertebrates live or overwinter in plant stems or leaves and have complex life cycles with different habitat requirements at different stages of development, such as bare ground for nesting and nectar-rich flowers to feed (Bodsworth *et al.* 2005). The lack of management in the form of mowing or grazing and a mosaic of different habitats in close proximity to each other, are essential to maintaining invertebrate populations.

The degradation of the wider countryside due to agricultural improvement and development pressures means that OMHPDL sites are becoming increasingly important within ecological networks, providing refuges and linkages between other more traditional habitats to sustain biodiversity. While individual sites can support an incredible diversity of plants and animals, it is a network of sites allowing movement around the landscape which is important, providing a much more secure future for scarce invertebrates in particular.

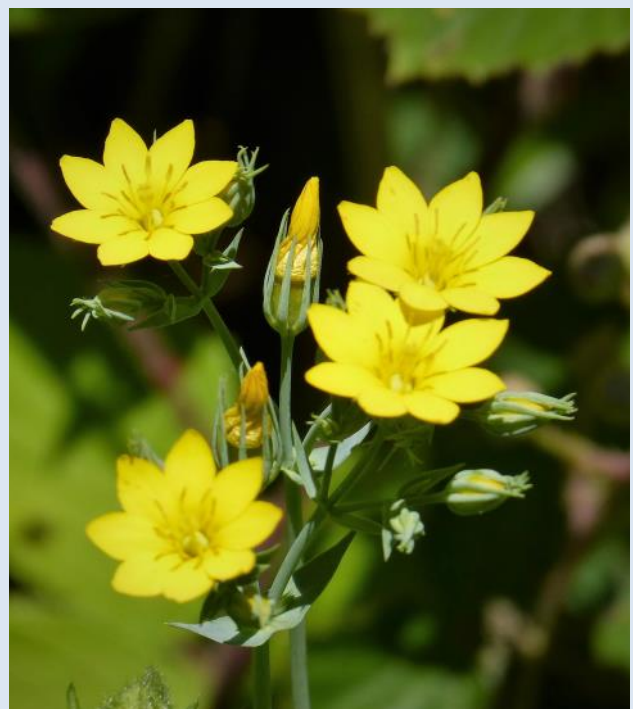
With the rapid pace of urban development, brownfield sites with OMHPDL are also often the only remaining ‘wild space’ for people to connect with nature. Over 33% of Northern Ireland’s population lives in the Greater Belfast area. Its OMHPDL offers an important

asset for the public to connect with nature and with the right protection and investment could make an important contribution to spatial green space strategies, climate resilience and nature’s recovery.

Former Orangefield High School

The site at the former Orangefield High School comprises a range of interesting habitats offering value for a range of species and also acts as a well-used recreational area for the public. Seasonal pools form in wetter seasons supplementing the willow and oak scrub habitat and neutral and dry grassland that has formed. It is home to species with restricted distributions such as Yellow-wort (*Blackstonia perfoliata*) and declining grassland sedges such as Brown Sedge (*Carex disticha*) and Hairy Sedge (*Carex hirta*).

The location of the site could also allow for the colonisation of declining species such as the priority species Narrow-bordered Five-spot Burnet (*Zygaena loniceræ*) and Agrimony (*Agrimonia eupatoria*) – an uncommon and strongly declining species in Northern Ireland. The site is used very regularly by dog walkers and other members of the community. The sports court is used by local teenagers for football. It is a logical extension of the existing and much valued Orangefield Park/Connswater Greenway system.



Yellow-wort © Gail Hampshire CC BY 2.0

Threats to OMHPDL land in Belfast

Nearly one in every six people in Northern Ireland live in Belfast, and Belfast City Council's (BCC) 'Belfast Agenda' sets ambitions to increase the number of homes across all tenures by 6,000 units by 2028. Central to these ambitions are targets set out in the Belfast Local Development Plan (LDP) to build housing on brownfield sites.

Unfortunately, many of the rare invertebrate species found in Belfast rely on a network of suitable, high-quality brownfield sites within close proximity to each other. The persistent degradation and fragmentation of habitat could lead to populations becoming isolated and cause localised extinctions. Species that are restricted to only one or two sites are even more vulnerable. The loss of a single site has the potential to bring about the national extinction of a species.

This is further exacerbated by the acknowledgement in the 2017 report that our knowledge of these sites is incomplete and that many high-quality OMHPDL sites are being lost as a result of development without their importance being fully understood. Compounding this is the failure to properly recognise OMHPDL sites on the Natural Environment Viewer, a key resource for all ecological assessment and reporting in Northern Ireland. Given the unsuitability of the Phase 1 survey methodology to adequately identify OMHPDL, these

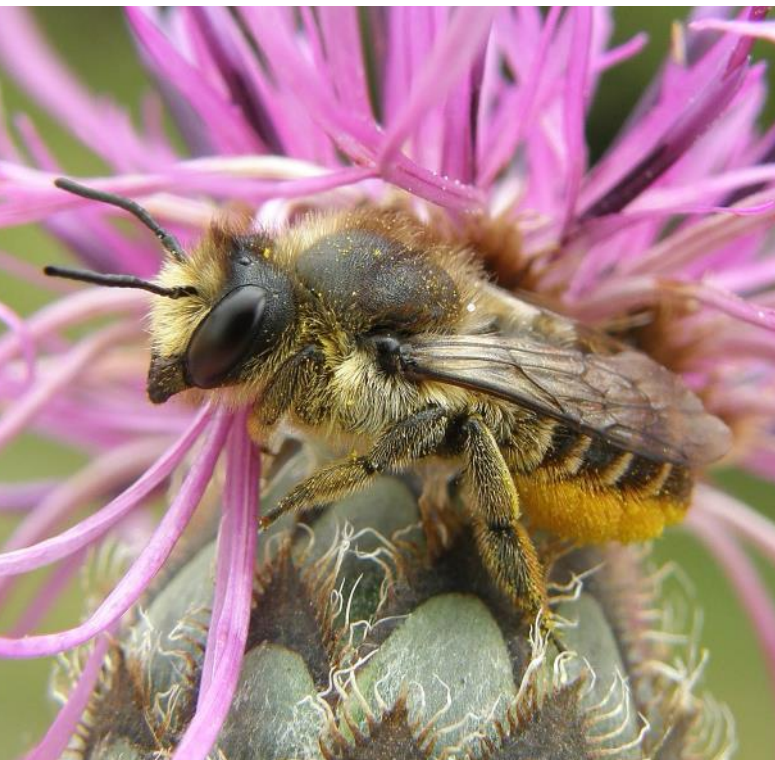
sites are routinely being missed by ecologists. This is evidenced by the fact that of all the OMHPDL sites investigated as part of this study, only one has had its OMHPDL features accurately identified on site in planning related ecological surveys.

Planning policy affecting brownfield habitats and their species

OMHPDL is a priority habitat in Northern Ireland (NIEA 2017). This habitat is concentrated in, but not confined to, urban and former industrial landscapes and has been included on this list primarily in recognition of its value for invertebrates, flora, birds and other species groups.

The Northern Ireland Assembly has recognised the importance of priority habitat sites through the Strategic Planning Policy Statement (SPSS). While the SPSS "sets a regional target of 60% of new housing to be located in appropriate "brownfield" sites within the urban footprints of settlements greater than 5,000 population" it also states that "planning permission should only be granted for a development proposal which is not likely to result in the unacceptable adverse impact on, or damage to known priority habitats; species" etc. The SPSS sets five core principles, "one of which is the preservation of the natural environment" and in policy NH1 states: "The council will adopt the

Left: Patchwork Leafcutter Bee (*Megachile centuncularis*) © Steven Falk. Right: Common Lizard (*Zootoca vivipara*) (c) Ocrdu CC BY-SA 4.0



precautionary principle when considering the impacts of a proposed development on local, national or international natural heritage resources, including designated sites, protected species and the other important interests of biodiversity and geodiversity.”

A number of species associated with brownfield land are priority species in Northern Ireland. Priority habitats, such as OMHPDL, and species have been selected as they are under threat because of their rarity and rate of decline. Article 3 of the WANE Act (Northern Ireland) 2011 places a duty on the Department of Agriculture, Environment and Rural Affairs (DAERA) to publish a list of the species of flora and fauna and types of habitats which in the Department’s opinion are of principal importance for the purpose of conserving biodiversity. DAERA are required to further the conservation of these species and habitats as far as is reasonably possible.

Priority species and habitat lists should guide decision makers and help them to fulfil their general duty *“in exercising any functions, to further the conservation of biodiversity so far as is consistent with the proper exercise of those functions”*. The priority species and habitat lists are to help Local Planning Authorities identify those species and habitats that need to be protected from harm. They are a material consideration during planning and development

control decisions. They also are a basis to enable Local Authorities to *‘to protect and enhance biodiversity, geodiversity and the environment’* as outlined in Planning Policy Statement 2 (as retained).

Identifying OMHPDL in Belfast

In 2017 Buglife collaborated with NIEA on a survey of OMHPDL in Greater Belfast. The project was the first in Northern Ireland to map OMHPDL across an entire council area.

Over 200ha of brownfield habitat was mapped throughout Belfast using the criteria in Table 1.

Sites were categorised as follows:

- Suitable OMHPDL (Site visited)
- Suitable OMHPDL (Site viewed with aerial imagery)
- Mediocre OMHPDL (Site either visited or viewed with aerial imagery)
- Sites that appear to have been sold and/or are under construction)
- Site does not support OMHPDL.

‘Suitable sites’ were considered as those supporting qualifying OMHPDL which meets the habitat definition criteria. ‘Mediocre’ sites were considered as those that met the OMHPDL criteria but were considered less favourable, such as appearing to be quite overgrown.

Criterion 1	The area must be at least 0.25ha in size - though the area in question may also be a part of a much larger site comprised of other habitats
Criterion 2	The site must have a known history of disturbance or there must be evidence that previous uses of the site have resulted in soil being severely modified or removed. Industrial spoil and other extraneous materials/substrates may have been added to the site.
Criterion 3	Some vegetation will be present on site, mostly consisting of early successional communities that contain species which are stress tolerant (e. g. indicative of low nutrient status or drought). Early successional communities are composed of 1) annuals or b) mosses/ liverworts or c) lichens or d) ruderals or e) inundation species or f) open grassland or g) flower-rich grassland or h) heathland.
Criterion 4	There will be an area/areas of unvegetated, loose bare substrate on site and pools may also be present.
Criterion 5	There will be spatial variation in the site that forms a mosaic of one or more of the early successional communities plus bare substrate, within 0.25 ha.

Table 1: Criteria for identification of OMHPDL (Riding et al. 2010) as adapted (Buglife 2017)

Methodology

Revisiting the OMHPDL in Greater Belfast dataset

The aim of reviewing the sites previously identified in the 2017 report was to examine the rate of loss of OMHPDL sites since they were identified. This exercise was limited to the OMHPDL sites within the Belfast City Council area.

The primary means of examining the current status of the previously identified OMHPDL sites was through examining contemporary aerial images and reviewing planning applications. Where necessary, comparisons were made to earlier aerial imagery, to confirm the loss of sites or important features which were identified in the 2017 report by recorders at the time of habitat assessment. These 47 sites were therefore re-examined and subsequently categorised into one of the following:

Intact- the site remains intact and retains the key features identified in habitat assessments from the original 2017 report and should remain so in the short-term as there are no outstanding planning permissions.

Destroyed- the site has been destroyed for development, site clearance, inappropriate restoration, infilling or agriculture for example, and has lost all of the features which made it valuable for invertebrates.

Partially Destroyed- a considerable area of the site has been destroyed, but some features of interest that were identified in the 2017 report remain.

Planning Permission Granted- planning permission has been granted to destroy a site, but ground works may not have started, although the loss of the site is expected imminently. Excludes sites where planning permission was either undecided by 1st June 2024 or had expired without application for a renewal. This is not confirmation that the site will definitely be lost, but suggests that the loss of the site is likely in the short-term.

Under Consideration- the site has been lodged for consideration to Belfast City Council or plans are currently being drawn up for development of the site.

Planning applications for the Belfast City Council area were monitored to enable sites to be accurately described as having 'Planning Permission Granted' or as 'Under Consideration'. Although any site described as having 'Planning Permission Granted' may be lost in the short-term, this is not a definite indication, as not all permissions are subsequently followed through. Sites

categorized as 'Planning Permission Granted' are considered alongside 'Destroyed' and 'Partially Destroyed' sites in some specific sections of the results and analysis as described.

The total area of destroyed and intact OMHPDL was also calculated by mapping the relevant areas on QGIS to quantify the impacts of development on the overall resource of the habitat type.

The results are considered to be up-to-date as of 1st June 2024. Any sites for which planning permission had been approved prior to 2017 but where development has not been initiated or completed are not included in these results to prevent overestimating rates of development. There is also the potential that currently undecided applications will be granted and that the rate of development will be an underestimate. Information on sites which were lost during the creation of the 2017 report were collated from the original GIS layers and site databases, to allow for an accurate estimate to be made of loss of sites since the project.

Limitations of the dataset and analysis

Datasets examining development are always a 'picture in time' as development is dynamic and cumulative, and there is the possibility of a number of significant brownfield sites changing status very quickly. It must be remembered that in the few years prior to the creation of the 2017 report, sites were already being lost rapidly, so many would have been excluded from assessment or assessed as being of lower value than they would have been a short time previously. It is also possible that some unpermitted development may have been overlooked given the reliance of the assessment on aerial imagery.

Flower-rich brownfield in Belfast © Claire Hutchison



Results

Of the sites identified in the 2017 report, 40% have been either destroyed or have an outstanding planning consent. If the sites with planning applications currently under consideration are granted permission, this would increase to 45%.

Over 25% of sites have been destroyed or partially destroyed across the region in just the seven years since the 2017 report. Table 2 outlines the numbers of sites that have been destroyed, partially destroyed or are at risk from development in the short term.

If only those sites considered most likely to be wildlife-rich brownfield are considered and mediocre sites are removed, the percentage for sites that have been

either destroyed or have an outstanding planning consent increases to 44%.

As part of the assessment process of this report an analysis was also undertaken of all sites to ascertain the area of OMHPDL in hectares that has been developed within the destroyed and partially destroyed sites to ascertain how much of the overall OMHPDL resource currently remains, and how much is at risk from future development in the short-term. As shown in Table 3, at present, only 20.6% of the total area of OMHPDL has been developed or has planning permission granted, suggesting smaller sites have been lost. However, if the sites with planning applications currently under consideration are granted permission, this would substantially increase the extent of losses to 61.6% of the total OMHPDL resource.

Category	Total No. of Sites	Intact	Partially Destroyed	Destroyed	Planning Permission Granted	Under Consideration
Suitable (Visited)	20	11	6	2	1	0
Suitable (Aerial)	21	10	0	3	6	2
Mediocre (Visited or Aerial)	6	5	1	0	0	0
Total	47	26	7	5	7	2
Percentage	-	55.3%	14.9%	10.6%	14.9%	4.3%

Table 2: 2024 categorisation of OMHPDL sites identified in the 2017 report.

	Intact	Developed	Planning Permission Granted	Under Consideration	Total
Area (ha)	79.5	29.6	13.1	84.8	207.0
Percentage	38.4%	14.3%	6.3%	41.0%	-

Table 3: Area of habitat in the 2024 categories of OMHPDL habitat identified in the 2017 report.

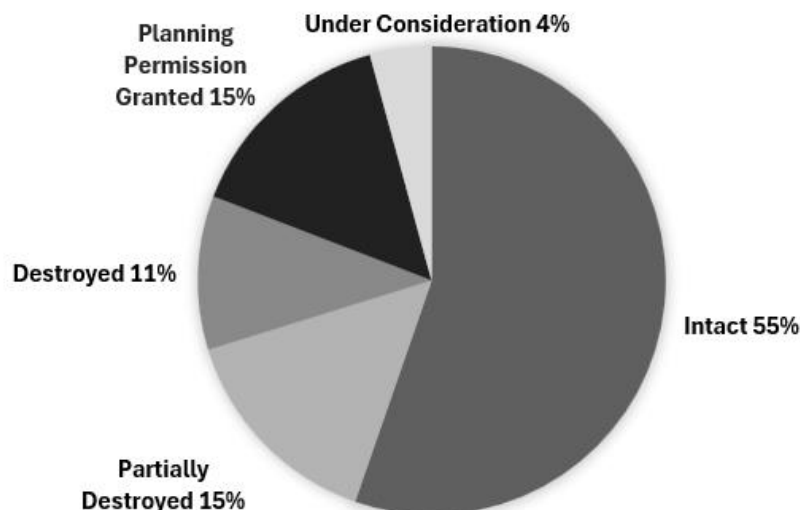


Figure 2: Pie chart showing 2024 categorisation of OMHPDL sites identified in the 2017 report.

Discussion

Current brownfield losses are unsustainable

Development and regeneration are undoubtedly resulting in the loss of a significant proportion of OMHPDL in Belfast. 40% of the sites originally identified in the original 2017 report as suitable OMHPDL were found to be destroyed, partially destroyed or with outstanding planning permission or activity likely to damage their flora and fauna.

The 2017 report highlighted the importance of sites across the Belfast City Council area, with an aim to signpost sites that should be considered as priority OMHPDL and allow planners and decision makers to be better informed of the high biodiversity value of some brownfields. However, since the report was published and OMHPDL was listed as a priority habitat in 2017 there has been little perceivable activity to ensure the protection of OMHPDL in Belfast. The majority of ecological reports and statutory commentary in the planning process continue to fail to identify OMHPDL on site and take requisite steps to protect it. It is clear that action must be taken to ensure OMHPDL is recognised in its own right, and to the same extent as other priority habitats.

Protecting wildlife-rich brownfields

The failure to protect 40% of the sites reviewed shows that there is insufficient protection of high value brownfield sites. Much of this habitat was lost despite qualifying as OMHPDL priority habitat and likely supporting the rare, endangered and priority wildlife found in the region. It is essential that brownfields are considered individually as well as a landscape-scale resource. Each site should be assessed on its own merits and assessed fully for its ecological value. This should ensure the most wildlife-rich brownfield sites are protected from development or that developments are designed sympathetically to minimise impacts with adequate mitigation and compensation secured.

Local authorities and decision makers need to be more aware of the importance of brownfields and the need for proper ecological survey work to ensure no net loss of biodiversity. It is clear from planning documentation that OMHPDL is not being picked up in ecological reporting or by statutory commentary. There are a number of opportunities arising whereby urgent action can be taken to secure the habitat and ensure it is

given requisite protection as befitting a priority habitat. Recommendations are provided in this report.

Brownfields have the potential to contribute significantly to the priorities and key actions in the Northern Ireland Biodiversity Strategy and the Conference of Parties 30 x 30 targets. Similarly, they have an important role in urban green infrastructure, sustainability, climate resilience and provide ecosystem services that are often overlooked but underpin our social and economic wellbeing.

Belfast Harbour Estate

Belfast Harbour Estate boasts a number of scattered OMHPDL sites which host a range of different habitat types and notable species. Common Toadflax (*Linaria vulgaris*) occurs at Giants Park, a large OMHPDL to the northwest of the site and the iconic and protected Bee Orchid (*Ophrys apifera*) can be found on the more unvegetated parts of the OMHPDL sites.

Amongst the more vegetated scrubber and flower rich areas the Cryptic Wood White (*Leptidea juvernica*) butterfly, a protected species, and one that only occurs in Ireland, can be seen foraging on the wildflowers that grow throughout the estate's OMHPDL. The estate also acts as one of the only areas where the Saltmarsh Crawling Beetle (*Halipplus apicalis*) occurs on the fringes of OMHPDL. Development of these sites would severely put at risk one of the last known sites for this beetle on the island of Ireland.



Cryptic Wood White (*Leptidea juvernica*) © Alastair Rae CC BY-SA 2.0

Conclusions

It is clear from this study that the planning system does not deliver safeguards for invertebrate conservation and OMHPDL. New development has resulted in over 40% of important brownfield sites in the study area being either lost or in immediate threat. Many planning permissions were granted without appropriate ecological assessment and as a consequence little, no or inappropriate mitigation was secured.

This review demonstrates that losses of OMHPDL have occurred within the Belfast City Council area. 40% of important sites have been lost, partially lost or damaged or have outstanding planning permission or are at risk from planning over a seven-year period—with live planning applications considered this equates to over 61% of Belfast's total OMHPDL resource by area being at risk.

The SPSS specifies that *“planning permission should only be granted for a development proposal which is not likely to result in the unacceptable adverse impact on, or damage to known priority habitats; species”*. The loss of 40% of brownfield sites shows that this aspiration is failing and that additional safeguards are required to ensure that important brownfield sites are not destroyed.

Outside of Belfast City Council the level of loss is unclear as the existing wildlife-rich brownfield reserve is largely unknown. However, many major urban

centres have undergone regeneration projects which have led to the losses of large tranches of brownfield, much of which is likely to have been extremely valuable to wildlife. This could be compounded by a lower awareness of the importance of brownfield land in other parts of the UK and Ireland, despite growing evidence that they are often the last remaining areas of wildlife-rich habitat.

Invertebrates make up the majority of biodiversity but are in decline with few species being actively conserved. There are an ever-increasing number of invertebrates that are, or soon could be, critically endangered. Major threats to species include habitat loss and fragmentation, climate change and, as documented by this study, cumulative development pressures.

Securing suitable management of brownfield sites is another challenge, as many brownfield sites are privately owned. Currently there are no financial incentives for site owners to retain, manage or enhance brownfield habitats for biodiversity. Future priorities include incorporating brownfield sites into the Site of Local Nature Conservation Importance (SLNCI) network (which is currently being outlined as part of the Belfast Local Development Plan process), exploring the role of biodiversity offsetting, and ensuring OMHPDL is reflected on the Natural Environment Map Viewer to highlight it in desktop surveys as a requisite for ecological reporting.

Brownfield land is of increasing value to wildlife as the wider countryside is progressively degraded. They act as refuges for species, providing linkages between other more traditional habitats and helping to sustain biodiversity. This continued loss of important sites, across the UK and Ireland, could have a disproportionately large effect on the UK's wildlife. The SPSS outlines the Government's aim to halt the overall decline in biodiversity by establishing coherent ecological networks. Increased protection of high and medium value brownfield sites would directly contribute to this aim and should be of high priority for local authorities.

Belfast brownfield © Conor McKinney



Recommendations

This report identified substantial losses of important brownfield sites as a result of new development and the failure of brownfield safeguards within the planning system. To enable better protection of these sites this report calls for:

- OMHPDL sites to be incorporated as part of the SLNCL network currently being identified by Belfast City Council and other councils as part of the Local Development Plan process and for similar exercises to be carried out throughout Northern Ireland.
- A higher level of protection for brownfield sites of biodiversity value to ensure these are not developed.
- A Northern Ireland wide inventory of OMHPDL to be developed and held by NIEA.
- OMHPDL to be represented on the Natural Environment Map Viewer to allow it to be consulted by ecologists and planners as part of future ecological assessments.

A high level of responsibility lies with local authorities to ensure that brownfield habitats and species are better considered in the planning system. Local authorities need to ensure:

- A definition of 'high environmental value' within their Local Plan or associated guidance.
- A landscape and strategic approach to brownfield redevelopment. Local authorities should identify areas of OMHPDL within their authority boundary and designate important sites. Areas of low environmental value can be put forward for development.
- Brownfield sites are assessed using OMHPDL criteria and the appropriate invertebrate surveys carried in advance of planning decisions to inform development control decisions.

Left: Smooth Newt (*Lissotriton vulgaris*) © Kristian Peters CC BY-SA 3.0. Right: Narrow-bordered Five-spot Burnet (*Zygaena lonicerae*) © Charles Sharp CC BY-SA 4.0



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Acknowledgements

This report was based on an OMH database created in the report titled "A desk study of the priority habitat OMH on Previously Developed Land in Belfast" funded by Northern Ireland Environment Agency's (NIEA).

Further information

For further information on wildlife-rich brownfields, how to identify OMHPDL and how to manage brownfields for invertebrates please see Buglife's [Brownfield Hub](#).

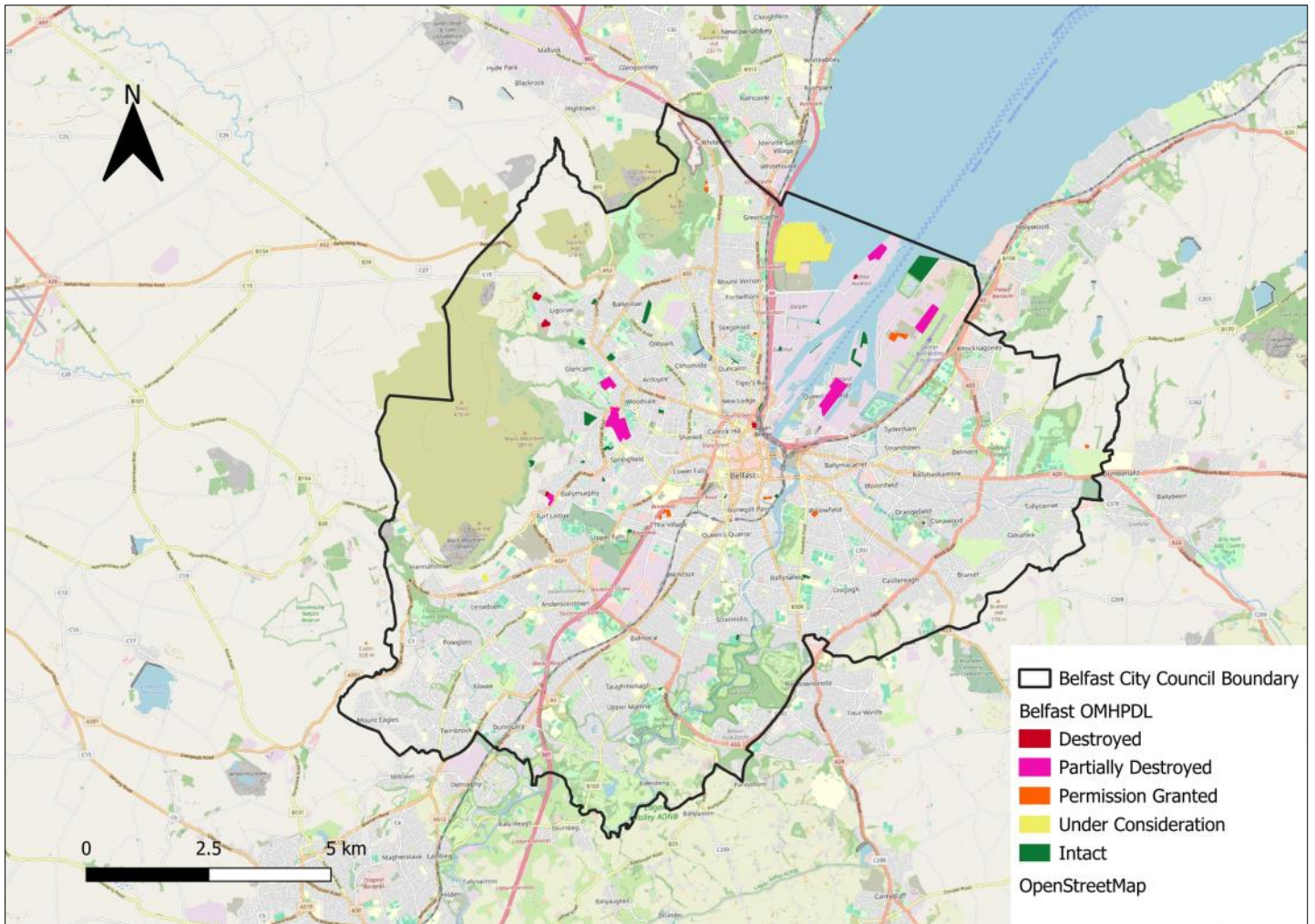
Citation

McKinney, C., & Robins, J. (2024) The state of brownfields in the Belfast City Council area. Wild Belfast & Buglife— The Invertebrate Conservation Trust.

Left: Northern Lapwing (*Vanellus vanellus*) © Frans Vandewalle CC BY-NC 2.0. Right: Red-shanked Carder Bee (*Bombus ruderarius*) © Steven Falk



Appendix: Map showing the current status of sites identified in the 2017 report



Map showing location of sites identified as being suitable OMHPDL, categorising sites as either intact, destroyed/partially destroyed or having planning permission granted or current planning activity in the Belfast City Council area. Contains Open Street Map data © <https://www.openstreetmap.org/copyright>

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