
Built Environment

A significant part of North East Scotland is urban in nature, with large populations of people living in the many built-up areas and urban settlements scattered across the region.

Urban and built up areas consist of a mix of semi-natural and man-made habitats, including patches of managed green spaces and gardens. Together, the mix of semi-natural and man-made habitats provides a mosaic of spaces that supports wildlife and brings people closer to nature.

Habitats in urban and built-up areas provide local communities and individuals with a number of social, economic and health benefits, such as recreation, tourism and lifestyle enhancement, contributing to a better quality of life. Equally, people and communities are important for helping to protect, preserve and enhance urban habitats and the species that depend on them.

All urban and built-up areas (small villages, towns and cities) are considered in this habitat statement.



Habitats and species of the built environment

Sample of important species associated with the Built Environment

Birds

Bullfinch
Dipper
Herring Gull
House Martin
House Sparrow
Kingfisher
Oystercatcher
Peregrine
Purple Sandpiper
Sand Martin
Skylark
Song Thrush
Starling
Swallow
Swift
Waxwing

Amphibians

Common Frog
Common Toad
Palmate Newt

Fish

Atlantic Salmon
Brown Trout
River Lamprey

Molluscs

Freshwater Pearl Mussel

Invertebrates

Striped Stretch Spider
Small Mesh-weaver Spider
Bumblebee (all relevant species)
Peacock butterfly
Small Tortoiseshell

Plants

Wych Elm
Lichen (all relevant species)

Sample of important species associated with the Built Environment (cont.)

Mammals

Bottlenose Dolphin
Brown Long-eared bat
Common Pipistrelle Bat
Soprano Pipistrelle Bat
European Otter
Hedgehog
Red Squirrel

Sample of important habitats associated with the Built Environment

Semi-natural habitats – rivers, burns, beaches, woodlands
Gardens
Allotments
Parks
Golf courses
Railway embankments
Roadside verges
Disused quarries
Landfill sites
Bridges
School grounds
Playing fields
Street, park and garden trees
Civic space
SUDs features/ponds
Buildings
Graveyards
Harbours/ports

Invasive species

American Mink
Grey Squirrel
Giant Hogweed
Himalayan Balsam
Japanese Knotweed
Spanish Bluebell
American Skunk Cabbage



Importance



High concentrations of human populations in urban areas mean that there are huge pressures on urban habitats, and these habitats are often the only interaction many people have with green spaces and wildlife. These semi-natural and man-made habitats, therefore, are of great importance for both biodiversity and people.

Around 1.5% of North East Scotland is classified as urban. There are many settlements in the region, ranging in size from the City of Aberdeen, with its population of over 200,000, to smaller towns such as Elgin,

Peterhead, Fraserburgh, Inverurie and Stonehaven, having populations of over 10,000. The urban area of North East Scotland currently comprises: -

- 13,360 hectares of urban land, with built structures that provide habitats for wildlife
- More than 225,000 households, many with private gardens which support wildlife
- Over 300 primary and secondary schools with grounds that could be managed for wildlife
- Over 60 golf courses, large areas of green space often with important remnant habitats for wildlife
- 5,200 km (3230 miles) of road, some of which have vegetated verges and trees of significance for wildlife
- 180 sites of vacant and derelict land, covering about 315 hectares and often supporting diverse flora and invertebrates
- A significant area of parks, pitches, community play areas, neighbourhood greenspace and amenity areas.

Influential factors

The quality of habitats in an urban environment may vary, but they still provide valuable homes for many species. The variation of semi-natural habitats can provide green networks for species to move between. For example, trees and shrubs, buildings, and other structures can provide shelter, roosting and feeding sites.

Private gardens are also important sites, providing havens for wildlife especially where there are, for example, ponds, bird, bat and insect boxes, feeders and a variety of plants that are attractive to birds and insects.

Many features of the built environment, including buildings, industrial sites and vacant land, can provide shelter, roosting and nesting space, plus, habitats for species such as lichen and invertebrates. In some cases, species have become adapted to use the built

environment for nesting, roosting and feeding - Swifts, Peregrines and Soprano and Common Pipistrelle bats being examples of this. Railway lines support grassland and woodland species and act as corridors for wildlife. Even roadside verges, if managed appropriately, can provide space for a number of plant, animal and insect species.

Pockets of habitats can be found at churchyards, cemeteries, allotments and urban parks, while golf courses can provide large areas of habitat for a number of species, particularly where areas have been managed more naturally.

Some species common in rural areas can also be found in urban areas, particularly in rural fringes or suburban environments. These include Badger, Otter and Red Squirrel.

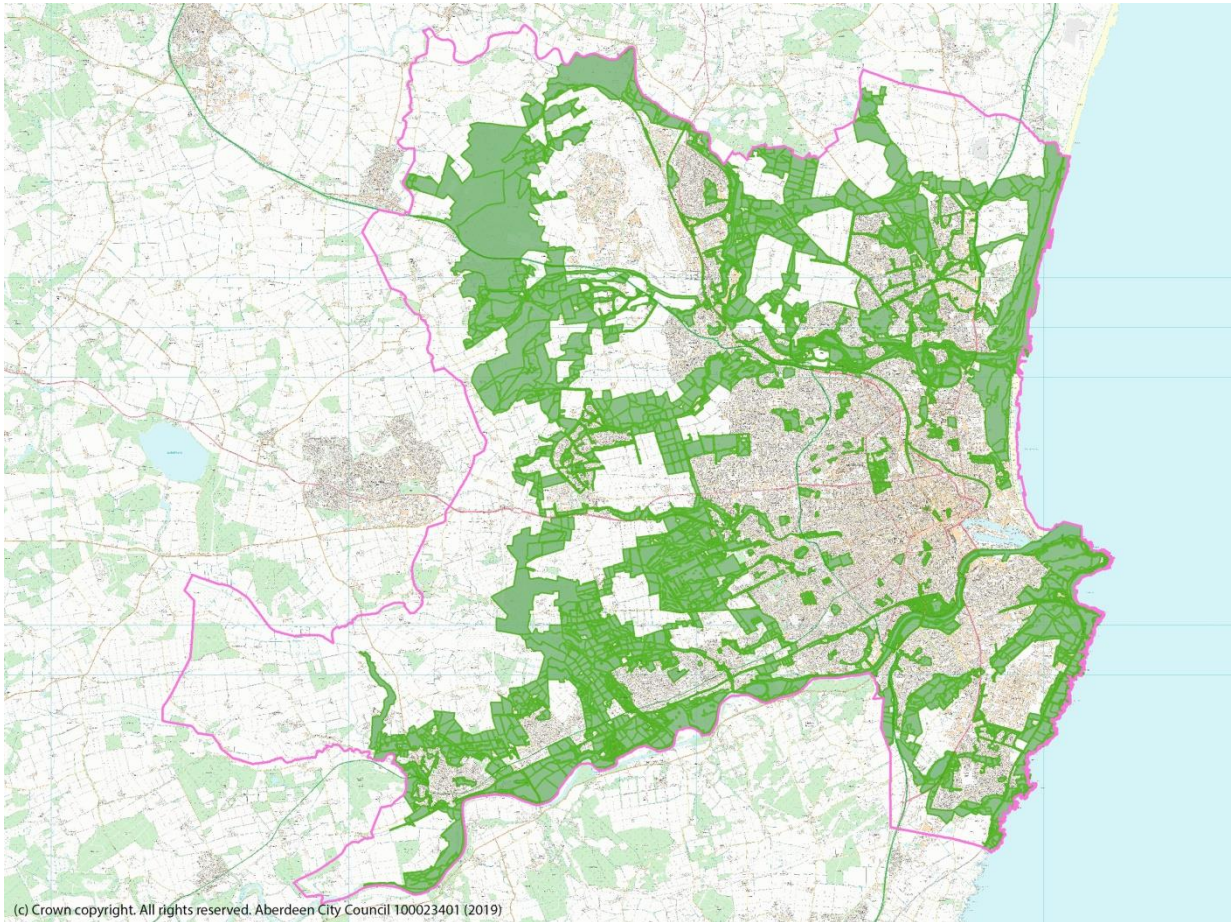
The main pressures on habitats and species in the urban environment are: -

- Encroachment from new development;
- Fragmentation of habitats and isolation of species due to new development;
- Unsympathetic management of open spaces, designated sites and private land/gardens such as over mowing of grass, applying pesticides and replacing green spaces with hard surfaces;
- Invasive or problem non-native species;
- Pollution, for example, urban run-off or atmospheric pollution; and
- Climate change, for example, increased frequency of extreme weather events, flooding and high temperatures.

Status and management

Many sites and structures which are not recognised through statutory or non-statutory designations are also important urban habitats and have specific management requirements, such as new wetlands created in Aberdeen. Local authorities continue to look at managing their open spaces in ways that benefit biodiversity, including reducing grass cutting and encouraging flower-rich grasslands and meadows. This type of management can also reduce management costs.

Green-blue networks, including rivers, parks, wetlands and woodlands, are important for providing healthy habitats for humans, wildlife and plants. These networks provide wildlife corridors which can help to prevent isolation and extinction. Green-blue networks contribute to our landscapes and townscapes, help to manage the impacts of flooding and mitigate against the effects of climate change. This is particularly important in built-up and urban areas where there can be a lot of habitat loss and fragmentation. Aberdeen City Council has developed a Green Space Network policy supported by mapping, showing its extent to help protect and enhance existing green networks.



Green Space Network throughout the City of Aberdeen

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Opportunities for Built Environment habitats

- Include biodiversity measures in designs for new development, including protecting and enhance existing habitats
- Identifying new community projects to help restore or to create a new habitat or enhance management at existing sites
- Working with schools to create wildlife gardens and to manage school grounds more naturally
- Encouraging land owners to manage their land to enhance biodiversity
- Working with local authorities to develop guidance for protecting and enhancing the biodiversity value of derelict and vacant land and of stalled spaces (sites zoned for development in the Local Plan which have outline planning permission and have been cleared but have since “stalled” i.e. no development is ongoing)
- Sharing and potentially developing online tools to help provide information on biodiversity
- Setting up or promoting a local award scheme that recognises work to increase biodiversity
- Raising awareness of and identifying methods to tackle invasive species and their prevention
- Promoting biodiversity in specific built-up and urban habitats such as graveyards
- Expanding the Green Space Network into remainder of NE Scotland
- Working with local plant shops to promote a wildlife seed mix and planting for pollinators for gardens



Case studies

Seaton Park Wetland

An area of Aberdeen's Seaton Park which regularly flooded was transformed into a wetland area surrounded by natural planting to attract more wildlife and increase biodiversity as well as encouraging greater community use. The works included digging out the wetland, repairing drainage and paths, planting and creating viewing areas. A planting event was held during the life of the project where members of the public, Friends of Seaton Park and other volunteers helped to create the wetland. The Seaton Park Wetland Project was inspired by the success of the East Tullos Burn Environment Improvements Project at St Fittick's Park in Aberdeen, where flooding was alleviated with the inclusion of wetlands to manage water levels from the burn, as well as improved access and increased biodiversity.



©Ian Talboys

Seaton Wetland

Reducing areas of close-mown grass in landscaping/creating wildflower grasslands

Aberdeenshire Council have carried out several projects to add diversity and reduce maintenance costs for areas of close-mown grassland. In general plug planting wildflower plants into suitable areas of existing grassland has proved successful. In addition, scattering Yellow Rattle seed after planting has significantly helped to suppress grass growth. These areas need to be cut once flowering is complete and the cuttings lifted and removed. In some cases, cuttings have been used to seed other areas.



Wildflower grassland at Gordon House in Inverurie © Judith Cox



Hedgehog friendly fences

In many housing proposals, fencing can present a barrier to wildlife by isolating gardens. Providing hedgehog holes/gaps underneath fencing in housing development boundary fences, or using hedging instead of fencing, can remove this problem and provide significant connected habitat.



Hedgehog hole in fence – fences can also be installed with a gap at the bottom

An example from St Cyrus used data from North East Scotland Biological Records Centre which showed Hedgehog records adjacent to a proposed development site. The boundary treatment for the proposal incorporated slightly raised fencing i.e. leaving gaps under the fencing to allow access for hedgehog.

Swifts bricks

Swifts are seriously declining in number and locating and retaining Swift nesting sites is a priority for their conservation. Nesting sites are often within buildings, for example on the wall head accessed through small holes under the eaves. Existing nest sites are present in the old Foundry building, Inverurie, which is currently being renovated. The developer is replacing the existing nest sites with 'swift bricks' spaced along the top of the renovated wall head, aiming to mirror the existing access points as closely as possible. The work takes place during the winter prior to the birds returning to nesting sites in summer.





Swift nesting sites marked by yellow arrows under eaves of the Loco Works Foundry Building, Inverurie
© Cally Smith

Resources

Wildlife in urban areas: <https://www.rspb.org.uk/fun-and-learning/for-kids/facts-about-nature/facts-about-habitats/urban-and-suburban/>

Ecological Urbanism: <https://scottishwildlifetrust.org.uk/news/living-cities-towards-ecological-urbanism/>

Green networks: <https://www.nature.scot/habitats-and-ecosystems/habitat-types/urban-habitats/green-networks>

Brownfield sites: <https://www.buglife.org.uk/campaigns-and-our-work/habitat-projects/brownfields>

For further information about how protection and enhancement of biodiversity in the urban environment is supported across North East Scotland, see also Local Development Plans for Aberdeen City, Aberdeenshire and Moray Council - see Introduction for further details.

