



**Cumbria Local
Nature Partnership**



Cumbria Habitat Map and Habitat Network Maps: User Guide

The **Cumbria Habitat Basemap** and **Habitat Network Maps** have been developed as part of the Cumbria **Local Nature Recovery Strategy** pilot, funded by Defra and led by Cumbria County Council in partnership with the Cumbria Biodiversity Data Centre (CBDC), Cumbria Local Nature Partnership (CLNP) and a wide range of organisations across the county. The Habitat Basemap and Habitat Network Maps will continue to be developed and improved over the coming months, including work to link them with other useful 'nature' mapping and to make them more accessible to all users. Eventually these maps will be used as the 'Spatial Plan' or 'Local Habitat Map' within Cumbria's Local Nature Recovery Strategy and will also help to guide the development of **Cumbria's Nature Recovery Network**.

The Mapping work is held and managed by the Cumbria Biodiversity Data Centre. You can access the project 'Story Map' via https://www.cbdc.org.uk/about-us/projects/clnrn_story_map/ where you can download the created maps in pdf format and download and browse the habitat networks on Google Earth.

1. The Cumbria Habitat Basemap

The Cumbria Habitat map has been developed from a large number of national (including Natural England's **Priority Habitat Inventory** and Forestry Commission's **National Forest Inventory**) and local datasets. For the first time we have created one Habitat Basemap which brings together the best of the local and national habitat data onto one Cumbria-wide map. This will be a very valuable resource for anyone wanting to find out what wildlife habitats are present in a parish, on a farm, within a valley or across the whole of Cumbria.

Using and interpreting the Habitat Basemap

Please note: Although we have used the best available information, we do not have up-to-date habitat GIS layers for much of Cumbria. Although much of the habitat recorded through older surveys is still there, it is not possible to confirm this until sites have been re-surveyed/checked. In addition, some habitats, such as wood pasture, scrub, open mosaics, and brownfield sites, have historically not been well-recognised or recorded, and therefore are likely to be significantly under-represented. Smaller-scale wildlife habitat features, such as roadside verges, streamside vegetation, areas of scrub etc. are also less likely to be included on the maps.

The maps should only be used as a guide and sites/land should be checked by further survey before the maps are used to make decisions on land management/use.

Updating the Habitat Basemap

The Cumbria Habitat Basemap layer is available to everyone and will become a very important dataset for Cumbria. It can be used to focus our Nature Recovery work, for example to help local authorities with green infrastructure and development planning, to help farmers and land managers identify opportunities for nature recovery on their land and to help local communities find out what habitats are present in their area.

It is important that we continue to improve and update the data and we aim to update the Cumbria Habitat Basemap layer as soon as new wildlife habitat data becomes available. To increase the quality of the map and to use all of our resources carefully we are looking to all partners to help supply data which they either commission or collect themselves. We would ask everyone to look for opportunities to collect new data, whether through new projects/funding applications, community effort or through surveys linked to planning development and then provide this to CBDC who can assess whether the data is suitable for inclusion into the Cumbria map.

Please ensure that you ask for permission from land owners/managers, developers and consultants to share data for use on the Cumbria Habitat Basemap layer, that you have any other permission to share the data in place, and that data is collected and digitised into a compatible format. For further information contact <https://www.cbdc.org.uk/contact-us/>. We will be developing some simple guidance outlining standards for new survey and digitisation of data so that it is possible to share this more easily.

2. The Cumbria Habitat Networks

The **Cumbria Habitat Network Maps** have been created using Natural England's England Habitat Network model. This model uses the Cumbria Habitat Basemap data and then identifies specific areas, zones or networks where we should aim to take action for nature. In particular they highlight areas where we should look to **restore habitats** and also areas where we need to **create and/or restore habitats** to help join up existing small habitat areas to allow wildlife to move more freely across the county. These maps help to identify where we need to take action for wildlife to develop a **Cumbria Nature Recovery Network**.

The Cumbria Habitat Network Maps comprise a series of individual habitat network maps and also a couple of 'Combined Habitat Networks Maps'.

Using and interpreting the Habitat Network Maps

Please note these maps are based on the Cumbria Habitat Basemap which is not 100% accurate (see advice for Cumbria Habitat Basemap). The Habitat Networks are computer models not as yet checked on the ground and therefore should only be used as a guide to where we should look for opportunities to restore and create habitats. There may be several different options suggested for each area of land, and also the needs of species which may be found there to be taken into consideration. Therefore decisions should only be made following on-the-ground checks supported by expert advice.

The maps should only be used as a guide noting they shown potential habitat options and not prescriptions for individual pieces of land.

The Habitat Network maps are made up of 8 components:

EXISTING IMPORTANT HABITAT AREAS: These are wildlife habitats which are particularly in need of being Conserved, Enhanced or Restored.

1. Primary Habitats – habitats identified on the Cumbria Habitat Basemap
2. Associated Habitats – other habitats important to wildlife using the Primary Habitat
3. Habitat Restoration/Creation Areas – areas identified as currently being restored/created
4. Restorable Habitats – existing habitats which we should look to restore to a more wildlife-rich state

HABITAT NETWORK AREAS: These are areas where we need to take opportunities to Restore and Create new habitats – helping to create a more joined up Nature Recovery Network

1. Fragmentation Action Zone – where habitat restoration and creation will be of greatest help in connecting existing fragmented habitats to develop a habitat network (note this zones is within Network Enhancement Zone 1)
2. Network Enhancement Zone 1 – where actions (habitat restoration and creation) to help join up habitat and create a network should be targeted
3. Network Enhancement Zone 2 – land which may be less suitable for habitat creation but where other actions to increase biodiversity will help to join up other habitats
4. Network Expansion Zone – Wider zones where habitat restoration and creation will support the habitat networks

If you are interested in finding out more about how the Habitat Networks have been identified please download the national guidance - [user guide](#)

3. Accessing the Mapping

The Cumbria Habitat Basemap and Cumbria Habitat Network Maps are available in several different formats:

1. Pdf versions of the maps are available here:
 - [Habitat Basemap](#)
 - [Habitat Network Maps](#)
2. Google Earth versions which allow you to view the maps over the Google Earth satellite layers are available [here](#). Please note that you will need Google Earth application to be installed on your computer (<https://www.google.co.uk/earth/download/gep/agree.html>). For guidance on how to change transparency of habitat network classes for better browsing the mapped layers on Google Earth click [here](#).
3. A 'Story Map' where you can browse the Habitat Basemap and Habitat Networks (e.g. hay meadows, woodlands) using interactive maps is available [here](#) – Please note depending on the speed of your internet you may need to give a time for the map to be downloaded.

4. Until the mapping is finalised, we are only able to make the ArcGIS layers available to key partners who are testing and improving the mapping. If you want further information or want to request the data please contact <https://www.cbdc.org.uk/contact-us/>

For technical support to use the mapping please contact <https://www.cbdc.org.uk/contact-us/>

4. Improving the mapping

This mapping process, which will support Cumbria's Local Nature Recovery Strategy and the creation of a Nature Recovery Network for Cumbria, is at its early stages and both the created maps itself, and the way it is made accessible to people/organisations will continue to develop. To ensure we produce mapping systems which work for you we would welcome feedback on how useful you find the current maps for your purposes and what changes/additions could be added to increase their usefulness. Please contact paul.evans@cumbriawildlifetrust.org.uk if you have any comments or feedback on the mapping, or if you want to discuss further issues with regards to interpreting the maps.