

Creating a national habitat network map

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Purpose

For many years we have wanted to create a straight-forward and repeatable method to produce habitat network maps that include components that address where there is potential to create or restore habitat and elements that help identify priorities for action. We created a project to develop a series of national habitat network maps for England based on priority habitat inventories. Our habitat network mapping approach seeks to apply the best evidence and principles and to use the best available nationally consistent spatial data to create a series of maps that can then be used, alongside local knowledge, to plan habitat creation and restoration at a landscape scale. We have done this for 19 priority habitats so far.

Approach

Our approach has been to create a framework that consists of five key components;

- 1) **Primary habitat** – Our first step is to identify the location of existing patches of priority habitat for which the network is developed e.g. lowland heathland.
- 2) **Habitat group** – We then identify the location of other habitat types that form a mosaic or an ecologically coherent grouping that is used by species associated with the primary habitat.
- 3) **Restorable areas and areas under restoration** – Next we identify two more helpful spatial elements, a) areas that are classed in habitat inventories as degraded habitat types associated with the primary habitat and b) areas that are currently undergoing appropriate habitat restoration work.
- 4) **Network enhancement zone** – These three components are then buffered using a variable buffering process to identify clusters and create the 'network enhancement zone' where actions to enhance current habitat networks could be targeted. This zone captures areas of degraded habitat, and areas with suitable soils etc. surrounding existing priority habitat that are likely to be suitable for habitat restoration/re-creation and are in good locations to enhance and build the resilience of the current habitat network.

5) Priorities for restoration –

Finally we identify two elements that help highlight priorities for restoration, a) smaller fragmented areas of existing habitat that have the potential to be enlarged or joined with other habitat patches and b) links between sections of the network enhancement zones that have potential to join up parts of the network.

Uses

The maps can be produced at a range of scales. Initially we are producing them at the national scale which will help our ecological network planning at a strategic level.

We also expect these maps will help our Area Teams by contributing to their work on prioritising action to enhance habitat networks at a landscape scale. The approach provides the ability to include locally derived data and for the process to be carried out at a local scale. This enhances its flexibility and responsiveness.

