Summary of Assigning Habitat Condition at a County Scale

Introduction

There are a variety of ways to assess the condition, quality or health of a habitat and its features. For this study, we were using condition as a proxy for the ability of that habitat to provide ecosystem services (ES) relative to the range of ES it can provide at its full potential, i.e. when it is in good or favourable condition. It is important to understand the condition of habitats if we are to understand ecosystem service provision and to determine which habitats need intervention to fulfil their potential of supporting flora and fauna. We generally have good records for broad habitat locations, but for many habitats there is no information on condition or the information available is out of date. Accurate assessment of habitat condition usually requires a site visit, but this is time-consuming, costly and not always possible due to access restrictions.

The aims of this project were:

1. To determine if it was possible to assess condition of habitats at a landscape scale, using existing data and inferences.
2. To bring together a wide range of data from different sources to create maps of natural capital assets and environmental quality.

Through this project Natural Capital Solutions (NCS) were able to assign a condition to 95.4% of the total area of Northamptonshire & Peterborough study area. The aim was to try and assign a condition rating to each of the polygons in the Nat Cap (Habitat Based) baseline map which matches the condition categories for applying the Biodiversity Metric 2.0:

Good   Fairly Good   Moderate   Fairly Poor   Poor   N/A – Agriculture   N/A - Other

Summary of results

Low quality habitats where condition could be applied automatically.
83.4% of the study area

E.g.   Any agriculture = N/A – Agriculture
              Any building /road = N/A - Other

Designated sites where condition is available:
3.50% of the study area

SSSI	1.62%
Northamptonshire: Local Wildlife Sites (LWS) where condition assessment taken place and not overlapping with a SSSI	1.23%
Peterborough: Local Wildlife Sites (LWS) where condition assessment taken place and not overlapping with a SSSI	0.65%

Inferred habitat conditions (Fairly broad assumptions)
8.7% of the study area

Habitat	Rating	Reason
Broadleaved woodland	Moderate	NFI Stat 92% of broadleaved woodlands in England are given a condition score of intermediate – assume best more favourable will be in designated sites
Coniferous woodland	Poor	Almost all coniferous woodlands in the study area are plantation woodlands – Biodiversity metric assigns poor
Mixed woodland on ancient woodland sites	Moderate	Because they are likely to be PAWS (Plantations on Ancient Woodland Sites)
Amenity grassland	Poor	Following Biodiversity Metric 2.0 - although there is a chance some of these could be being managed for biodiversity but felt that would be a small minority.
Quarries / mineral extraction sites	N/A – Other	Assumed that these habitats are unlikely to provide much value
Water	Variable	Water Framework classification

Unassigned

4.6 % of study area

Rough grassland, scattered trees (not historic parkland), allotments, linear features, floodplain grazing marsh, reed beds, fen, unimproved neutral grassland, scrub

Take Away Messages

This approach to strategic assessment of habitat condition can give you a good picture of your area to be used at a strategic scale, but should not be used for more localised projects.

The unassigned habitats could provide a targeted set of sites that you could prioritises for site-based habitat condition assessments

Some of the most interesting sites (un-designated but potentially good quality habitats) are vulnerable to being destroyed as they might not be well recorded. It would be a priority to map these so that they can be investigated further or at least we can make the planning process aware of them.

Because the basemap is based on OS Mastermap which uses field boundaries, the sweeping agricultural N/A assessment will not take into account well managed field borders, which could downplay the value and hard work of some land managers.

Designated site data is often out of date. So although this project paints a picture of a widespread condition assessment, there should also be a record of how old the data is that is used to create it.

Assumptions were made to match up the different condition assessments – SSSI, LWS and Biodiversity metric. It would be good to standardise the translation of these condition assessments or use a standard approach to condition assessment for different habitats and designations.