

A Revised Strategy for Restoring Peatland Habitats



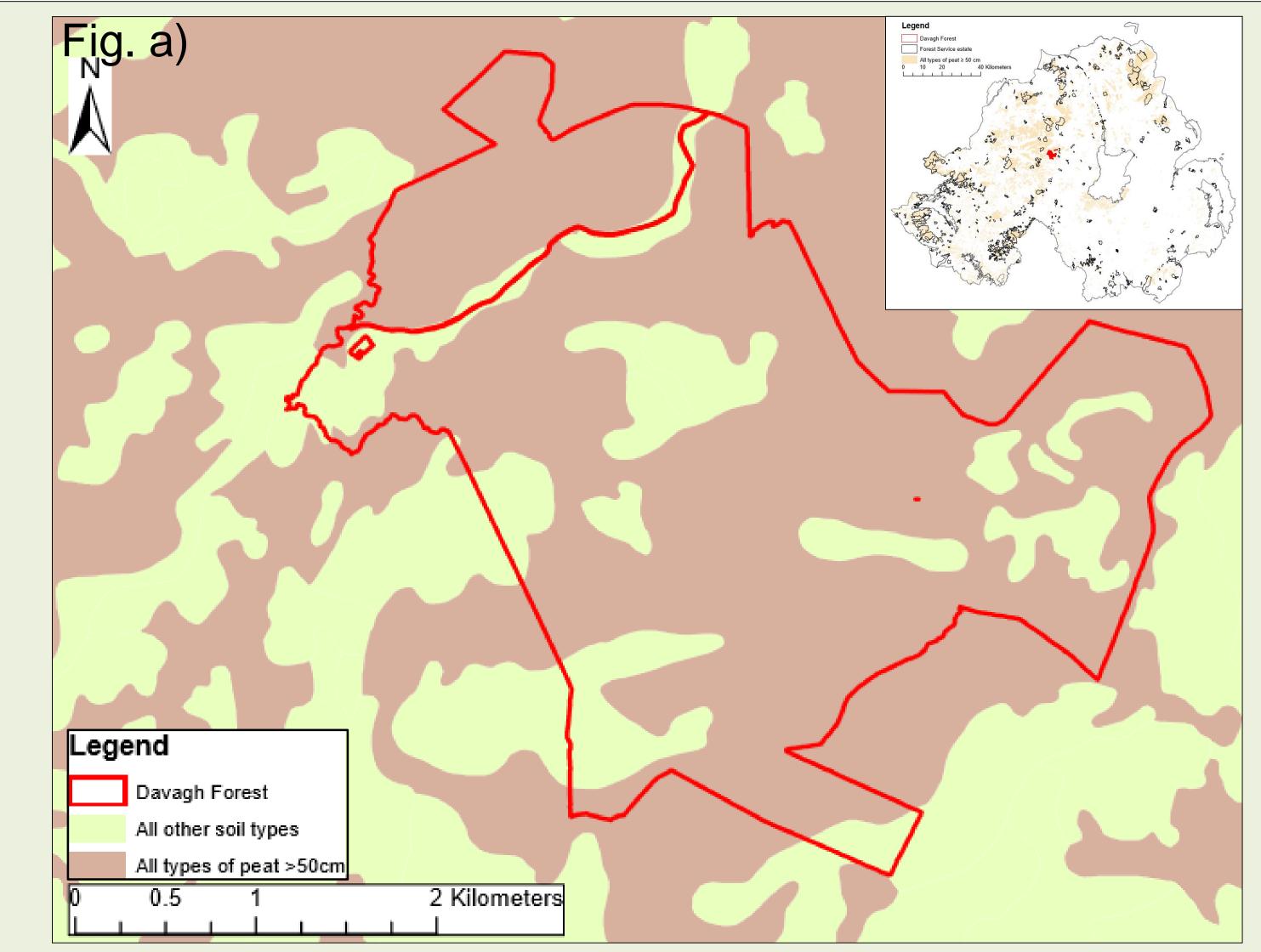
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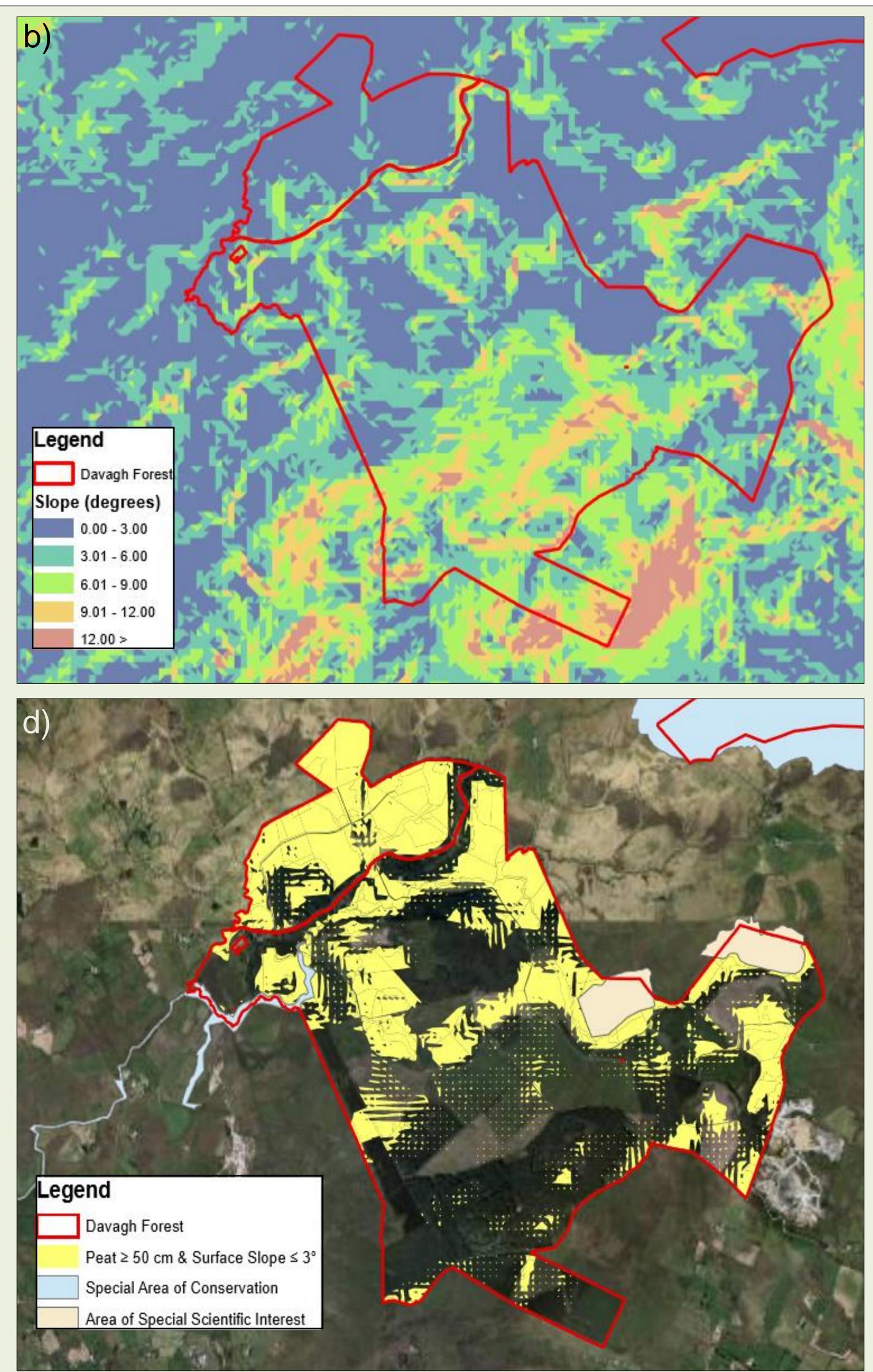
1. Introduction

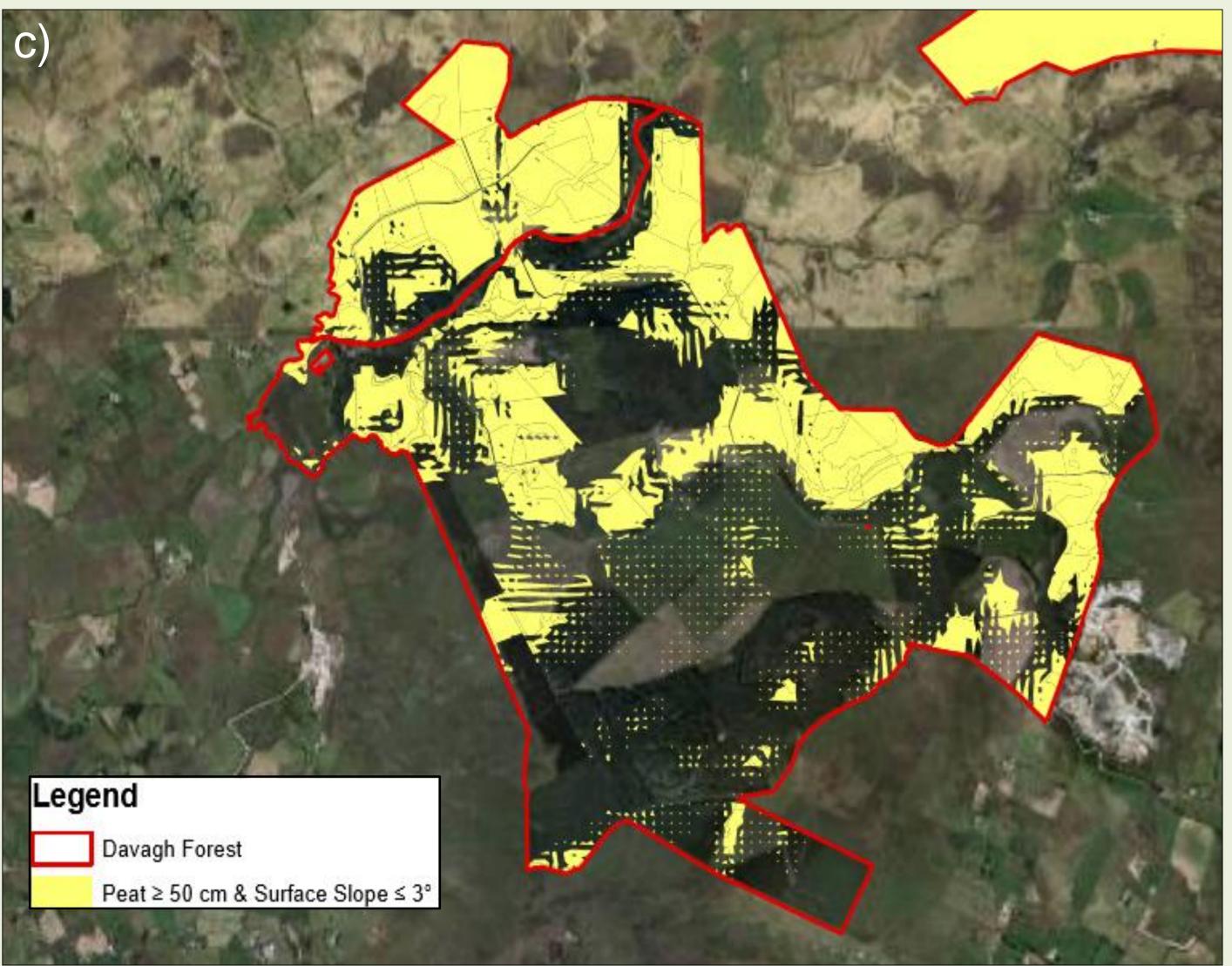
The Forest Service has recently produced a revised strategy for restoring peatland habitats to reflect Northern Ireland's forestry and biodiversity strategies. Previously, Forest Service initiated plans to restore areas of afforested peatlands in Creggan Forest, Mullaghfad Forest and Glenshane Forest, with varying degrees of success due to site factors. The revised strategy will be implemented in conjunction with a GIS-based planning tool, which identifies areas that meet soil type and slope criteria, and allows these areas to be prioritised based on forest stand conditions and their proximity to priority habitats.

2. Forest Service GIS model for identifying restorable peatland areas

The planning tool uses the deep peat classification from the AFBI Northern Ireland soil map (Fig. a, below) combined with a digital terrain model (b) to produce a flat deep peat model (c) which is overlaid on the Forest Service estate map to identify potential restoration areas and enables information on forests such as tree growth and age, and the proportion of open ground to be included. Once areas are spatially displayed they can be prioritised for restoration and additional criteria (d), e.g. proximity to designated areas, can be added to determine where restoration efforts should be focused to maximise benefits. The example below shows the extent of areas meeting the soil and slope criteria in Davagh Forest. The presence of designated areas in close proximity to these identified areas further increases the benefits of restoration. The main method used to restore afforested peatland will be tree removal and drain blocking. This will allow the water table to rise and create suitable hydrological conditions which will facilitate recolonisation by Sphagnum spp. and other species typical of active peat. Focusing on areas with topographically suitable conditions could potentially increase restoration success and reduce restoration cost. To gauge the success of this approach long-term monitoring of restoration projects is included.







3. Criteria for determining suitability of candidate sites for restoration

The following additional criteria may be used to identify the most suitable sites for restoration:

- (1) Specified as future open ground in Forest Design Plans
- (2) Adjacent and integral to designated areas, or non-designated priority habitat
- (3) Peat depth \geq 0.5 m and slope \leq 3° over most of the area
- (4) Previously open ground that has become colonised with > 400 conifer seedlings/ha, or,

5. Peatland restoration and stakeholder consultation

Peatland restoration is an important topic in our stakeholder engagement process and Forest Service Northern Ireland is producing scoping documents for each of Northern Ireland's Forestry Planning Areas.

This process provides an opportunity for stakeholders to become involved in developing plans for the promotion of afforestation and sustainable forestry throughout Northern Ireland. Further information can be obtained by scanning the QR code below or at <u>https://www.daera-ni.gov.uk/consultations/scoping-</u> new-forestry-plan-forests-and-woodland-west-tyrone

able as an archival record of climatic and vegetational history and archaeological remains. Globa

dered to be suitable for afforestation, using Sitka spruce and lodgepole pine (Pinus conto

serving Peatland In Northern Ireland: A Statement of Policy (1993

uneconomic plantation (e.g. high rate of mortality, or poor growth due to wetness, nutrient deficient, or disease)

Sites meeting some or all of these criteria will then be prioritised into different categories.

4. Prioritising restoration

The ability of a site to meet the above criteria will result in it being classed as either: <u>Priority 1</u>: Meeting all criteria – uneconomic stands or colonised areas shown as open ground priority habitat, adjacent and integral to designated or non-designated priority habitat, and where peat depth \geq 0.5m and slope \leq 3° over most of the site.

<u>Priority 2</u>: Planned open ground, predominantly meeting remaining criteria; may include up to 30% productive stands (Sitka spruce (≥ General Yield Class 8) or Lodgepole pine (General Yield Class 6)). <u>Priority 3</u>: As for Priority 2, but does not fully meet peat depth and slope criteria.



Strategy for Restoring Peatland Habita

Rationale

Appendix II

Northern Ireland Forestry Strategy

The Northern Ireland Forestry Strategy, 'Northern Ireland Forestry – A Strategy for Sustainability and Growth' (2006) restates policy as:

The sustainable management of existing woods and forests, and

A steady expansion of tree cover to increase the many diverse benefits that fores

The strategy indicated that an amended Forestry Act would place a duty on the Department promote afforestation and sustainable forestry, which duly came into effect in 2010.

he Northern Ireland and UK Governments, approach to sustainable forestry is set out in the IK Forestry Standard (UKFS), which is currently in its 4th edition (2017). The UKFS reiterate he legal requirement that "Appropriate protection and conservation must be afforded where sites, habitats and species are subject to the legal provisions of EU Directives and UK and country legislation". In addition in Northern Ireland, the WANE Act (2011) places a General Duty on every public body to 'further the conservation of biodiversity so far as is consistent with the proper exercise of those functions [it exercises].'

The UKES includes a number of general forestry practice requirements and guidelines that are applicable to afforested peat.

The standard requires forest plans to take full account of a range of requirements and guidelines relating to forest design, biodiversity, water, soil, and timate change, and provides scope for undertaking peatland restoration projects to improve the delivery of ecosystem services. The requirements that are most relevant to the topic of restoring peatland habitats are Forests and Biodiversity general forestry practice requirements 1 and 4

Forests and woodlands should be managed in such a way that conserves or enhances biodiversity; opportunities for enhancing biodiversity should be considered in forest management plans.

Particular consideration should be given to conserving, enhancing or restoring priorit habitats and species identified in the statutory lists of priority species and habitats England, Scotland, Wales and Northern Ireland, through the delivery of country biodiversity strategies and local level plans.

orests and Biodiversity Guidelines 24 and 26 refer specifically to restoration of habitats and



QR Code