

GUIDANCE TO HELP INFORM WHEN AN UPLAND BREEDING WADER SURVEY IS NEEDED AND WHEN WOODLAND CREATION IS LIKELY TO BE APPROPRIATE

27 July 2023

Purpose

This guidance should help staff and applicants:

- Identify sites that are not likely to be of importance for waders
- Understand potential risk to wader conservation and appropriateness of woodland based on mapping (see Appendix 1)
- Know when further engagement with Forestry Commission/Natural England is needed to determine the extent to which a survey is needed (See Appendix 2)
- Decide on the suitability of sites for woodland creation where we have breeding wader survey information (see Appendix 3)

This guidance will help you with early screening of site sensitivities, but decisions about the need for survey and the appropriateness of woodland creation will be made by FC in consultation with NE. It does not replace full [assessment](#) of sites submitted for afforestation and deals primarily with three key species for conservation (see table 1) – curlew, lapwing and redshank, which are also considered in Agricultural Environmental Impact Assessments (EIA).

Table 1: Summary of key protections and conservation status for curlew, lapwing and redshank

Species	Section 41 Species	Agricultural EIA screening threshold	UK Birds of Conservation Concern	IUCN GB Red List	IUCN Global Red List
Curlew	Yes	1 pair	Red	Endangered	Near threatened
Lapwing	Yes	2 pairs	Red	Vulnerable	Near threatened
Redshank	-	1 pair	Amber	Vulnerable	Least concern

These species are found in upland farmland and moorland where they are generally associated with assemblages of other bird species which breed or forage on unenclosed habitats, including ground nesting raptors, oystercatcher, snipe, golden

plover, dunlin, ring ouzel, skylark and twite etc. Afforestation can have a negative impact on all these species, which all need to be considered.

Scope of guidance

This guidance applies to upland farmland and moorland¹ in the north² of England only. Schemes in scope include:

- New woodland creation grant schemes and/or Environmental Impact Assessment applications for afforestation received from 27 July 2023.
- Proposals in progress for new afforestation where a decision had not been taken as of the 27 July 2023. For proposals already in progress, more work or evidence gathering may be necessary. This is to ensure the requirements of this guidance are met.
- This guidance will not apply to approved or implemented woodland creation grant schemes and/or approved Environmental Impact Assessment projects.

Background

Expanding the area of trees and woodland in England is a central part of environmental policy helping society restore nature, adapt to climate change, produce timber and reduce carbon emissions. As part of the Nature for Climate Fund, Government set out plans to increase tree planting in England to 7,500ha by April 2025. Woodland creation in England is regulated by the Forestry Commission (FC) which is responsible for ensuring woodland creation proposals provide a balance of environmental, social and economic benefits to society, as well as direct benefits to those individuals and organisations creating woodlands and planting trees. The regulation of woodland creation takes place within a framework of environmental legislation including the Forestry Act, the Natural Environment and Communities Act (2006), the Wildlife and Countryside Act 1981 (as amended), the Conservation of Habitats and Species Regulations 2017 and the Environment Act (2021). In addition, the UK Forestry Standard and grant conditions ensure woodlands are created to high standards which provide an overall benefit to the environment.

Government recognises that the recovery of bird species including willow tit, tree pipit and woodcock is dependent on the creation of new, resilient wooded habitat. Other similarly threatened species, including curlew and lapwing, require open habitat in which to thrive. This guidance sets out how new, resilient, woodlands can be accommodated in the uplands to safeguard wading birds and ensure government's wider nature recovery ambitions and a wide range of other public benefits flow for many decades as trees become established and mature.

¹ Unenclosed moorland habitats and adjacent unimproved or semi-improved grassland pastures and meadows.

² Northumberland, Durham, Cumbria, Yorkshire, Lancashire, North York Moors and the Peak District

Conservation status of breeding waders

England's upland grassland and moorland breeding waders are in serious decline. Waders are becoming restricted to fewer sites with losses accelerating in the wider countryside. Curlew and lapwing are Section 41 [priority species](#), UK [Red-listed Birds of Conservation Concern and 'Near Threatened'](#) on the international [IUCN Red List](#). Redshank, although Amber listed, is on the IUCN GB Red List and has shown significant recent population declines.

The UK is globally important for Eurasian curlew (*Numenius arquata*), supporting one of the largest breeding populations, yet declines here are amongst the steepest recorded throughout its range. Most of the UK's breeding waders are in Scotland and England but these populations have declined by 60% and 29%, respectively, between 1995 and 2020 (Heywood et al. 2023)³. The main pressures affecting breeding curlew are habitat loss, unfavourable habitat management or lack of management and nest/chick predation.

Curlews use both unenclosed moorland habitats and adjacent semi-improved grassland, pastures and meadows. Adult birds and chicks often move from one habitat to another during the breeding season. The [Curlew Recovery Partnership](#), supported by Defra, is coordinating action to help curlew.

Important areas for Upland Breeding Waders

Upland waders nest and forage in a wide range of habitats including:

- Upland heath and bog
- Wet meadows and unimproved and semi-improved pastures
- Lowland heaths
- Arable farmland

Evidence shows that waders avoid nesting near wooded areas and that breeding productivity in such areas is low due to nest and chick predation by mammalian and avian predators.

Therefore, new afforestation, if not sited appropriately, has the potential to negatively impact on breeding populations.

³ Heywood, J.J.N., Massimino, D., Balmer, D.E., Kelly, L., Noble, D.G., Pearce-Higgins, J.W., Woodcock, P., Wotton, S., Gillings, S. & Harris, S.J. 2023. The Breeding Bird Survey 2022. BTO Research Report 756. British Trust for Ornithology, Thetford. ([BBS 2022](#))

Appendix 1: Wader survey policy for application in upland northern England

The chart below indicates the likely suitability of areas for woodland creation and the likely approach to breeding wader surveys. These zones are mapped at a low resolution of 1km² and are mostly based on modelled data⁴. Therefore, applicants should consult FC for a final determination on the need for surveys. FC will determine this based on a combination of assessing the local context including local features (topography, presence of existing woodland, BTO zonal mapping within functionally linked areas etc.) in consultation with Natural England (NE) and/or a scoping site visit. Based on this scoping exercise they may determine that a survey is necessary or not necessary contra to the indication below.

Zone	Risk level	Opportunities for woodland creation in the context of waders	Bird surveys needed	Funding/available for bird survey	Rationale
Special Protection Areas (SPAs) for wading birds and Sites of Special Scientific Interest (SSSIs) notified for wading birds plus buffer (2km for SPAs and 1km for SSSIs) ⁵	Highest	In exceptional cases (where approved by NE)	Yes	No (unless with prior support for the project from NE)	These areas are designated for the protection of waders and woodland creation is likely to hinder these objectives. However, there may be opportunities to create new woodland in order to achieve favourable condition of other SSSI features, to deliver habitats of high wildlife value or to help achieve favourable condition status of priority woodland habitat.
BTO Strata ⁶ 4 & 5 (note: these may overlap with protected areas)	High	Rarely appropriate	Yes	Yes	Modelling suggests these areas can provide important habitat for wading birds. However, modelling is low resolution so there may be some opportunities for woodland in appropriate locations with FC and NE advice.

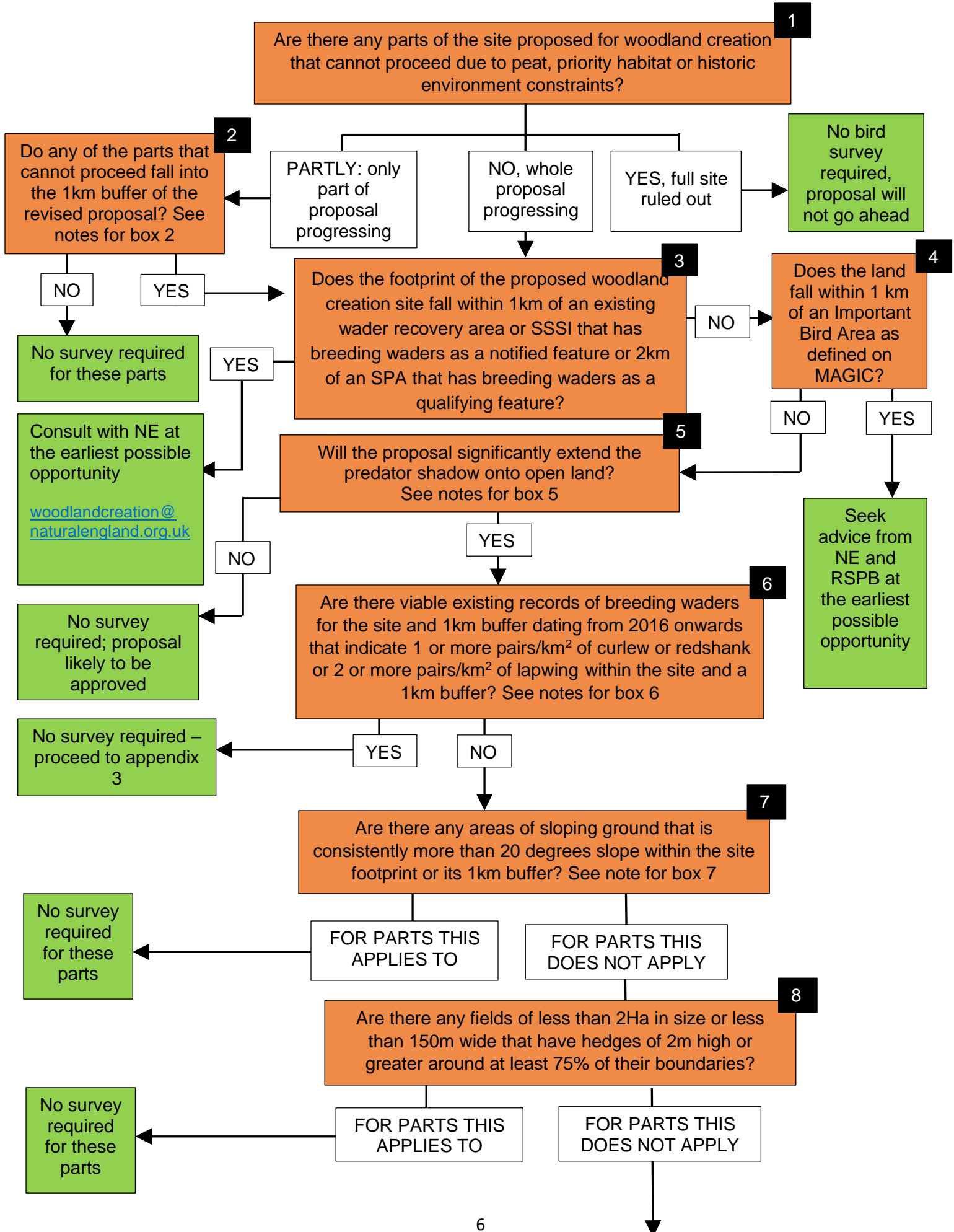
⁴ bto.org/our-science/publications/research-reports/sensitivity-mapping-breeding-waders-britain-towards

⁵ You can check if a designated site is notified for individual breeding wader species and/or where waders are included as scoring features in a breeding bird assemblage by consulting Natural England's Designated Sites View webpage [Site Search \(naturalengland.org.uk\)](https://naturalengland.org.uk)

⁶ Look at the [FC LIS](#) to see which BTO wader zonal strata your proposals fall within. It is recommended to that you check the curlew and golden plover layers, as these models are the most accurate.

BTO Strata ⁶ 3	Medium	Sometimes appropriate	Generally needed	Yes	Modelling suggests these areas may be important for waders. Survey information is likely to be needed before FC can advise on appropriateness of woodland creation.
BTO Strata ⁶ 2	Low	Usually appropriate	Generally not needed (unless specifically requested by FC and NE advisors)	Yes, if specifically requested by FC or NE advisors	Modelling suggests these areas may have lower importance for breeding waders; however, a wader survey may be needed before FC can advise on the suitability of woodland creation. For example, where this occurs close to areas of higher sensitivity or where scoping indicates habitat may be more favourable than modelling suggests.
BTO Strata ⁶ 1	Lowest	Normally appropriate	Rarely needed (unless requested in exceptional cases by FC and NE advisors)	Yes, if specifically requested by FC or NE advisors	Modelling suggests these areas are likely to have low value for waders, although FC/NE may request a wader survey, in instances where there are known wader sensitivities.

Appendix 2 - Key to identify when an upland breeding wader survey is required



height or having the potential to achieve this. The definition relates to land use, rather than land cover, so newly established woodland, integral open space and felled areas within existing woodland that are awaiting restocking are included as woodland.

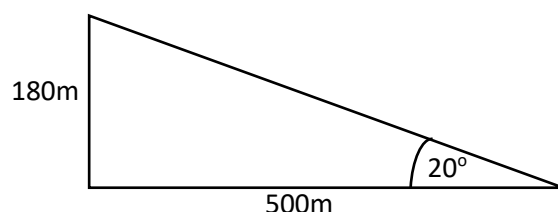
Any woodland which meets the NFI definition is expected to exert predation pressure on the surrounding landscape as a result of mammalian and avian predators utilising the woodland as cover and perching posts. This is referred to as predator shadow and evidence suggests these impacts extend at least 500m from that woodland. For the purposes of the guidance predator shadow is therefore defined as the area extending 500m from a woodland in every direction. When assessing woodland creation proposals, NE and FC will consider existing predator shadow and extension of predator shadow in conjunction with the suitability of the surrounding landscape for waders.

Open land is unenclosed land and/or inbye land where boundaries are primarily fences or walls with low cover of hedges and trees. FC and NE will determine whether the proposal significantly extends the predator shadow onto open land either known to be used by breeding waders or with high suitability for breeding waders by considering the following factors:

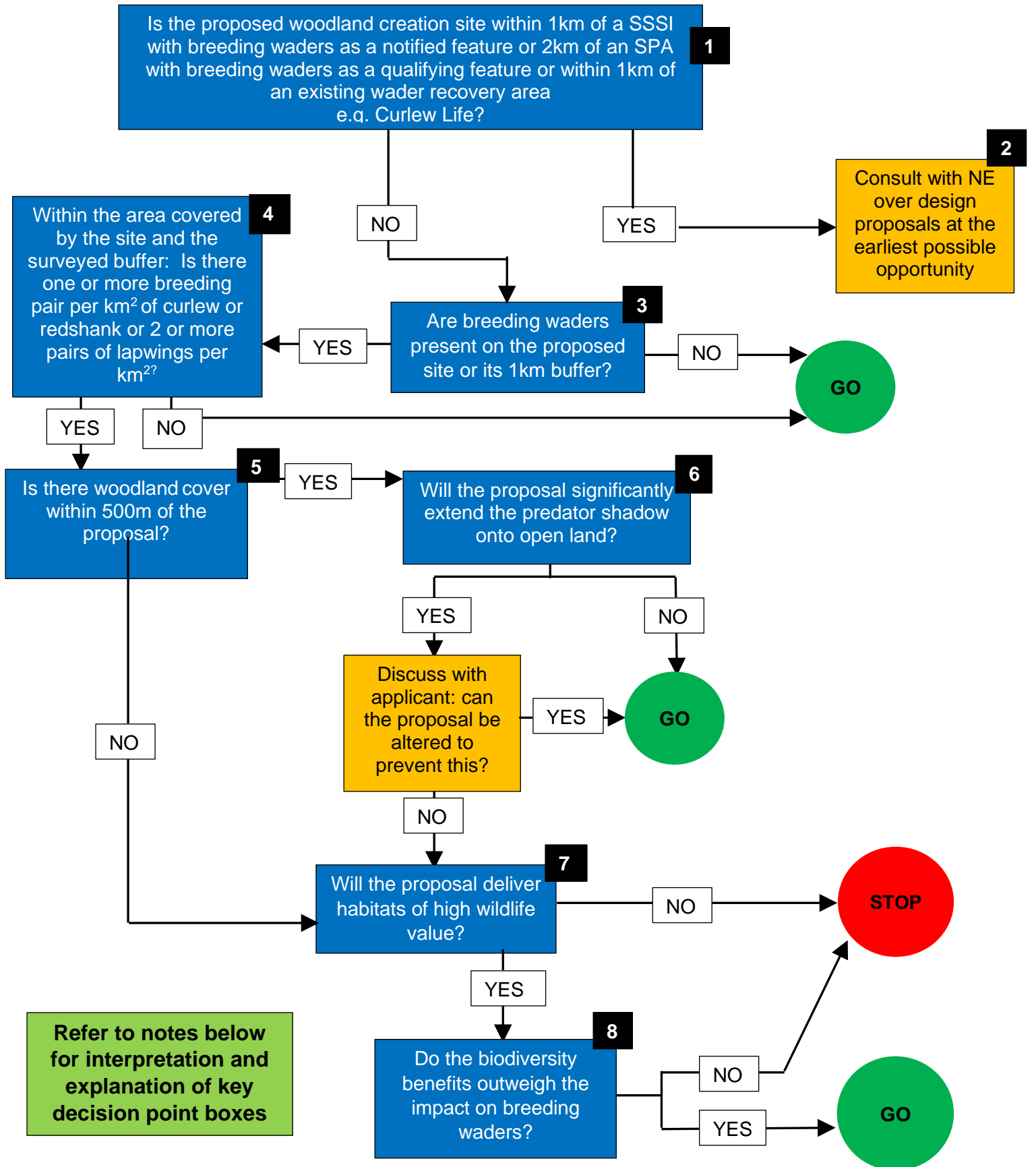
- a) the degree of sensitivity of the landscape into which this shadow is being extended – i.e. the likelihood that the characteristics of the landscape and habitat within it being suitable for breeding waders. *This may include gently sloping, enclosed, semi-improved grassland as well as areas of semi-natural habitat.*
- b) where breeding wader productivity has been sustained, even where there is significant cover of woodland cover, for example due to a long and sustained history of intensive predator control at landscape scale as a result of grouse moor management.

Box 6: Viable existing records will be those that come from credible sources such as local records centres, the RSPB, BTO or local bird clubs, which have used a suitable methodology and are at suitable resolution.

Box 7: Areas of land that have consistent slope more than 20 degrees and which do not have intervening areas of lower degree slope can be excluded from the need for survey as waders are unlikely to nest on ground with this degree of slope. A slope of 20 degrees equates to increase in altitude of 180m over a 500m distance, a 36% slope or an approximately 1 in 3 gradient.



Appendix 3 - Determining the suitability of sites for woodland creation where we have breeding wader information



Notes for flow diagram

Box 1: This allows for the fact that where breeding waders are features of protected sites, the birds that nest within the sites can be dependent (e.g. for foraging/chick-rearing) on functionally linked land that is outside of the protected site's boundaries and can therefore come within the scope of the CRoW Act and Habitats Regulations. The notified features of SSSIs and SPAs can be found on [Site Search \(naturalengland.org.uk\)](https://www.naturalengland.org.uk).

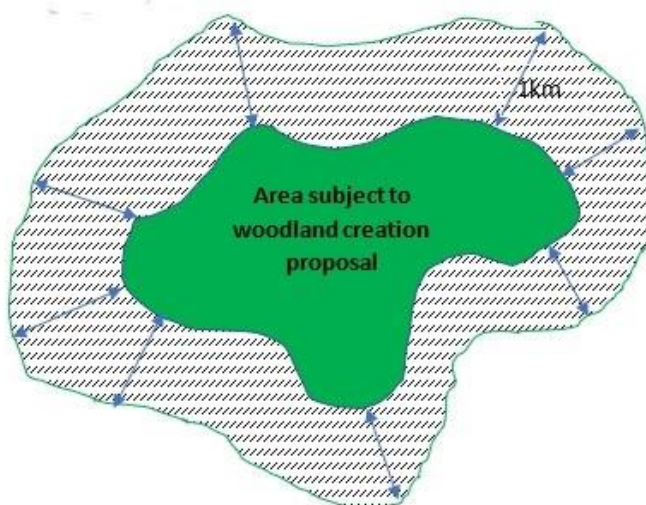
The importance of areas determined to be critical to meeting Wader Recovery ambitions are also recognised here. Currently there is only one recognised wader recovery area in the geographical areas covered by this guidance, the [Curlew Life](#) Geltsdale & Hadrian's Wall initiative. Additional Wader Recovery Areas will be identified over time, including as part of the development of nature recovery strategies, with the intention of making them available as a wader recovery mapped layer on MAGIC.

Box 2: Contact Natural England at woodlandcreation@naturalengland.org.uk for a consultation proforma if you do not already have one.

Box 3 & Box 4: This may be based on results of commissioned survey results or viable historical data dating from 2016 or later. Viable historical records will be those that come from credible sources such as local records centres, the RSPB, BTO or local bird clubs, which have used a suitable methodology and are at suitable resolution. Where there are no records or where historical records do not result in a yes answer to step 3 and to step 4 a new survey should be commissioned. This is on the basis that absence of records is not evidence of absence of waders.

When calculating the breeding wader density per km² all land that was excluded from the survey due to existing woodland cover, degree of slope, small field size or lack of predation shadow extension should be excluded from the calculation. The density for curlew, redshank or lapwing will be calculated separately, if any are above the density threshold then that triggers step 5.

Figure 1: How to create 1km buffers:



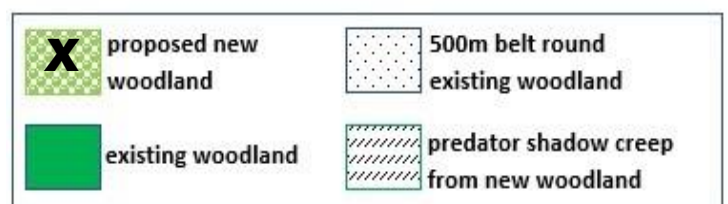
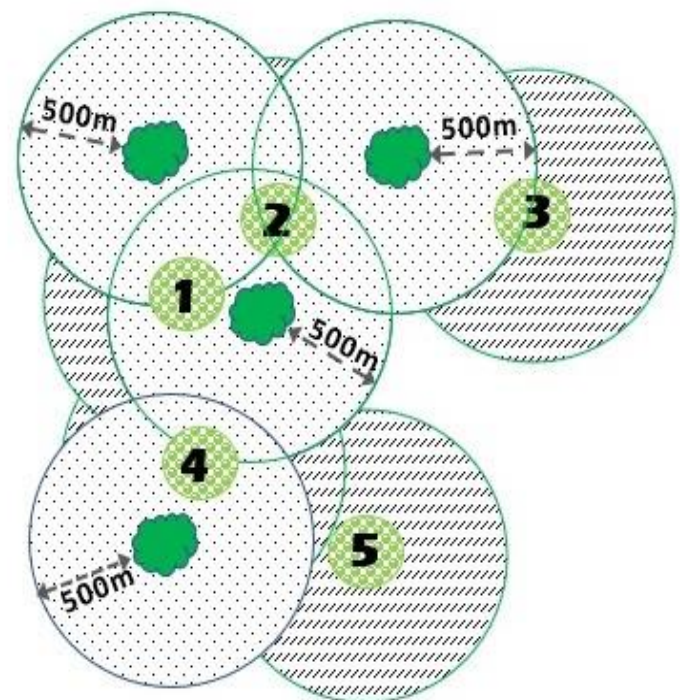
Box 5: Woodland will be considered to fall within the scope of this guidance if it is identified on the most up-to-date National Forest Inventory (NFI) or is woodland that has been created after the most recent NFI update and meets the NFI definition. The definition of woodland included in the NFI is as follows: A minimum area of 0.5 ha under stands of growing trees greater than 20m in width, with a canopy cover of at least 20% comprised of trees at least 5 metres in height or having the potential to achieve this. The definition relates to land use, rather than land cover, so newly established woodland, integral open space and felled areas within existing woodland that are awaiting restocking are included as woodland.

Box 6: The consideration of predator shadow is intended to limit the potential for predator shadow to creep across open land. This will be assessed through the increase of woodland cover encroaching into open land, cumulative impact of existing woodland and the degree of sensitivity of the landscape.

Open land is unenclosed land and/or inbye land where boundaries are primarily fences or walls with low cover of hedges and trees. Please refer to the notes under Box 5 in Appendix 2 for factors FC/NE will consider.

Figure 2 - Examples of encroachment onto open land:

- **Proposal 1** is well within 500 metres of existing woodland cover on two opposing sides and only marginally extends the predator shadow.
- **Proposal 2** can proceed as it is wholly within 500 metres of existing woodland cover on three sides and causes only very minor predator shadow creep into open land.
- **Proposal 3** is only partly within 500m of existing woodland and its predator shadow encroaches significantly onto open land
- **Proposal 4** is well within 500 metres of existing woodland cover on two opposing sides and only marginally extends the predator shadow
- **Proposal 5** does not have any existing woodland within 500m and causes significant shadow creep into open land



Box 7: Defining habitats of high wildlife value

The proposal should be based on exclusive use / colonisation of native tree species and be expected to be capable of meeting the definition of one of the following S41 woodland priority habitats over time: Wood-Pasture & Parkland, Upland Oakwood, Upland Mixed Ashwoods, Upland Birchwoods, Wet Woodland AND/OR native scrub habitats. It may include potential for enhancement of wildlife value of the following habitats within the woodland design, for example: Upland Calcareous Grassland; Upland Hay Meadows; Coastal and Floodplain Grazing Marsh; Upland Heathland; Upland Flushes; Fens and Swamps; Purple Moor Grass and Rush Pastures; Blanket Bog; Mountain Heaths and Willow Scrub; Inland Rock Outcrop and Scree Habitats; Calaminarian Grasslands; Limestone Pavement.

Box 8: To assess whether the biodiversity benefits outweigh the impact on breeding waders consider the following:

- proximity of the site and its 1km buffer to any wader recovery areas
- the density of breeding wader territories within the site and its 1km buffer
- the number of waders within the site and its 1km buffer
- the range of wader species within the site and its 1km buffer
- successful delivery of Agri-environment wader-specific options within the site and its 1km buffer

Against the following:

- occurrence of woodland as notified features of any SSSIs/ SACs involved
- contribution to expansion of priority woodland habitats in support of their Favourable Conservation Status
- tree establishment through natural colonisation or low-density planting below 600/Ha will have greater wildlife benefits
- good evidence of significant benefits to non-woodland priority habitats from removal or relaxation of grazing pressures
- good evidence of significant benefits to other priority species
- provision of connectivity between existing areas of native tree cover
- tree establishment in areas that will not be in sightlines to areas used by waders, e.g. in cloughs and valleys, will have less impact

As Local Nature Recovery Strategies and additional Wader Recovery Areas are identified, they can be expected to contribute to the assessment.

Wader Recovery Areas: Currently there is only one recognised wader recovery area in the geographical areas covered by this guidance, the [Curlew Life](#) Geltsdale & Hadrian's Wall initiative. See map below. There may however be additional wader recovery areas identified over time, for example as part of the development of nature recovery strategies.

