

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

Amended April 2024

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 breeding wader species – curlew, lapwing and redshank (see table 1), 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 April 2024.
- Proposals in progress for new afforestation where a decision had not been taken as of April 2024. 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 some 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 whilst safeguarding wading birds and ensure government's wider nature recovery ambitions and a broad range of other public benefits flow for many decades as trees become established and mature.

¹ 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. Woodland creation can therefore result in reduced habitat extent (through direct habitat loss and displacement) and reduced breeding success, ultimately contributing to local breeding population declines.

¹ 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](#))

Predator Shadows

For the purposes of this guidance “woodland” is defined as any area meeting the National Forestry Inventory (NFI) definition, which 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.

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 pressure is referred to as predator shadow and evidence suggests these impacts extend at least 500m from that woodland. For the purposes of the guidance, a predator shadow is therefore defined as the area extending 500m from a woodland in every direction. New woodland creation has the potential to extend predator shadow on to open land where none currently exists and/or to increase the predator pressure on land already within the predator shadow of an existing woodland through increases in predator numbers.

For the purpose of this guidance ‘Extension of predator shadow’ refers to new predator shadow where none currently exists. An ‘Increase of predator pressure’ refers to additional predator pressure where a predator shadow already exists.

Open land is unenclosed land and/or inbye land where boundaries are primarily fences or walls with low cover of hedges and trees.

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.

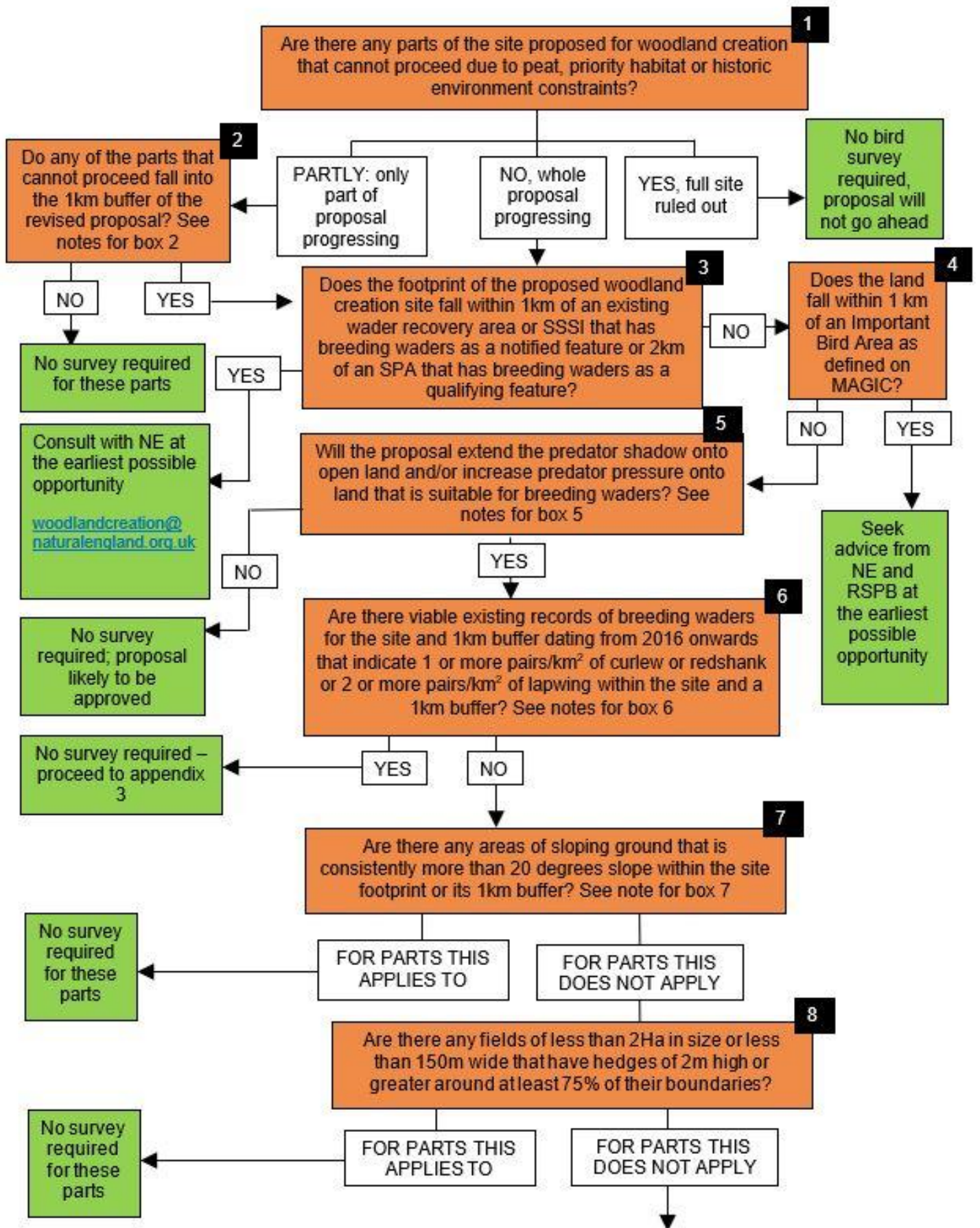
⁴ bto.org/our-science/publications/research-reports/sensitivity-mapping-breeding-waders-britain-towards

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 \(naturalengland.org.uk\)](http://Site Search (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

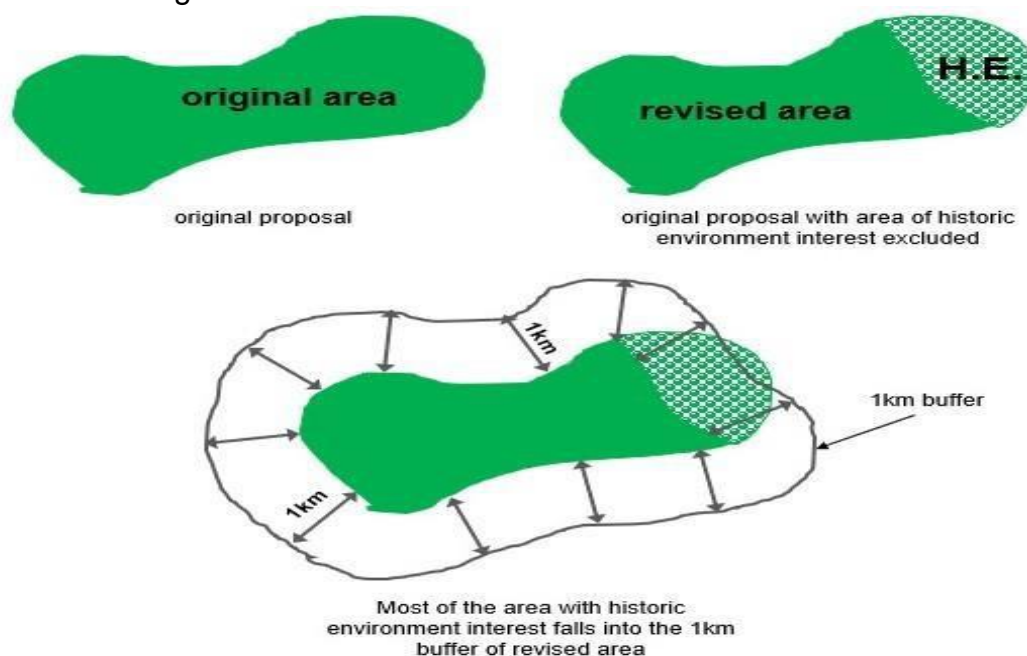


This brings us to a point where the answers to the preceding questions are either not clear in terms of the value of the land for breeding waders or suggest high suitability of the land for waders but where there may be potential for wider species recovery benefits from appropriate woodland creation dependent on number of waders potentially impacted. A survey may be required to get clarity on numbers of waders. Additional factors that NE & FC staff will consider when determining the need for survey are:

- Existing records that point to wader interest on the site and its 1km buffer
- Overall openness of the site, its 1km buffer and the wider landscape
- Presence of areas of wet ground or indications that ground is likely to be wet in spring on the site and its 1km buffer
- Proximity of the site to blocks of scrub, tall hedges and trees.
- Site topography, for example cloughs and ghylls.

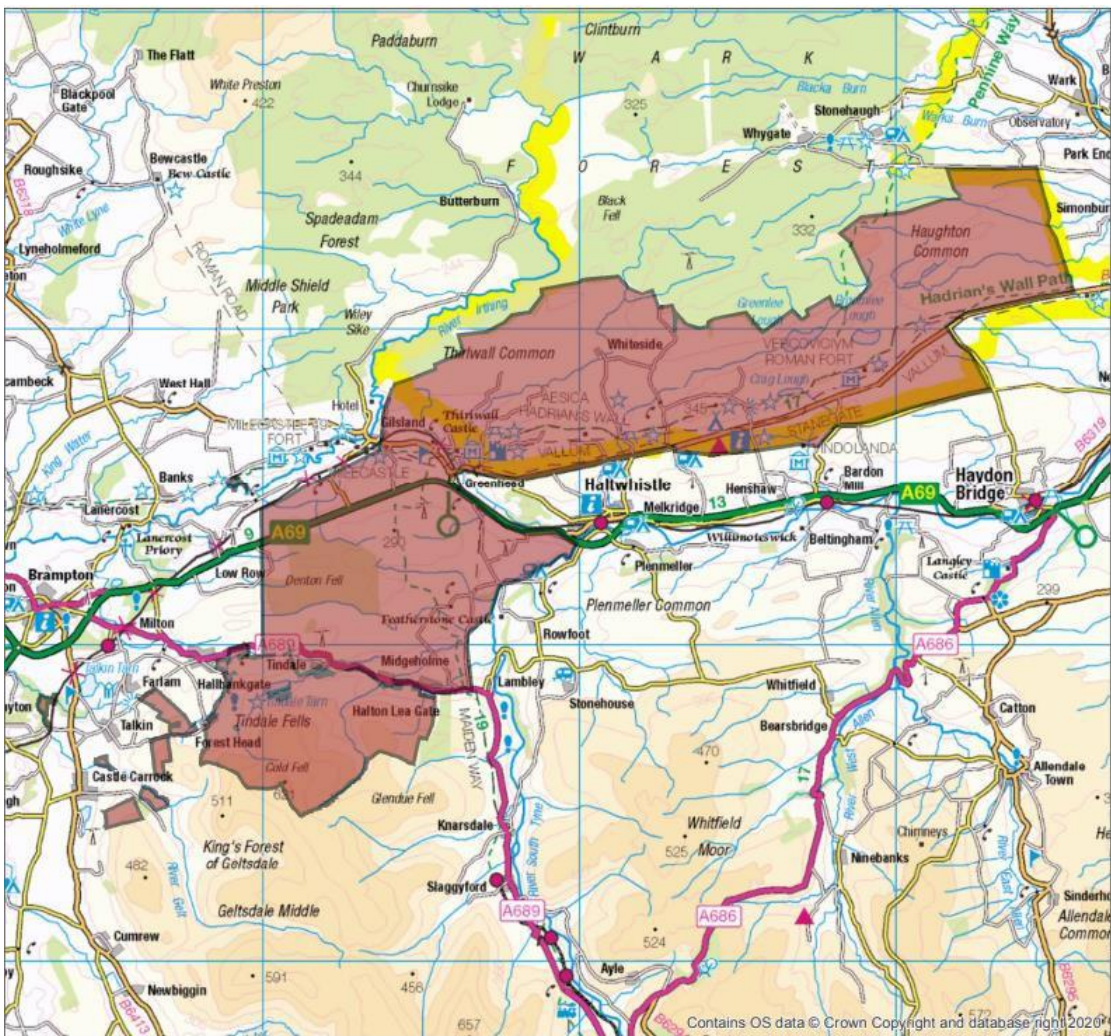
NOTES TO ACCOMPANY APPENDIX 2: KEY TO IDENTIFY WHEN AN UPLAND BREEDING WADER SURVEY IS REQUIRED

Box 2: Defining a 1km buffer:



Areas of existing woodland, uniformly steeply sloping ground more than 20 degrees and small fields with high boundary hedge cover within the buffer can be excluded from the need for survey. (See notes for Box 7)

Box 3: 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. 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 4: Applicants are encouraged to approach RSPB (although they are not statutory consultees) for advice in relation to Important Bird Areas (IBAs), these can be found on MAGIC magic.defra.gov.uk/

Box 5: Predator Shadows

When assessing woodland creation proposals, NE and FC will consider the potential extension of predator shadow onto open land and/or the increase in predator pressure, in conjunction with the suitability of the surrounding landscape for waders. This will include consideration of the following factors:

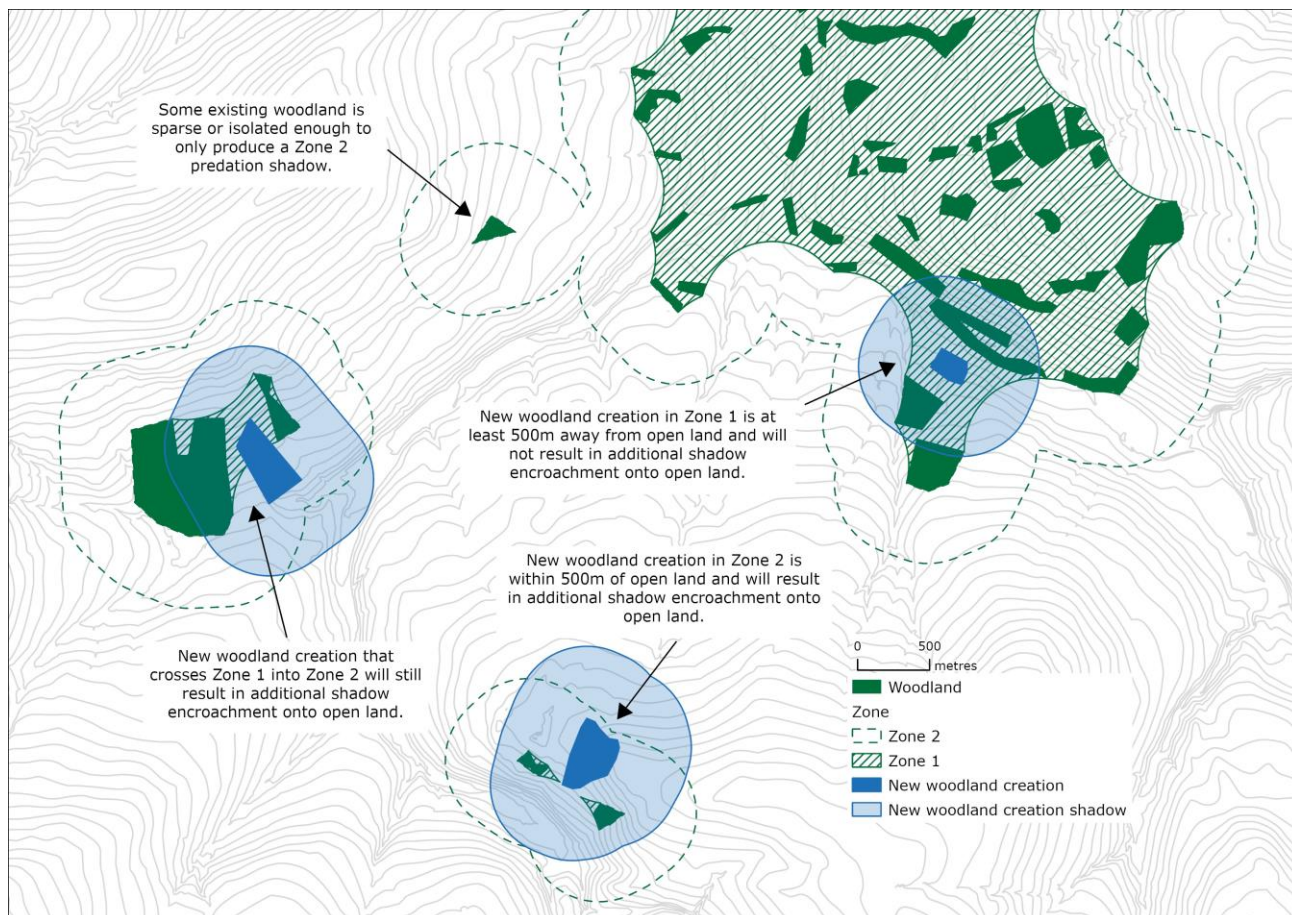
- a) the degree of sensitivity/suitability of the landscape onto which this shadow falls – i.e. the likelihood that the characteristics of the landscape and habitat within it are suitable for breeding waders. *This may include gently sloping, enclosed, semi-improved grassland as well as areas of semi-natural habitat.*
- b) where breeding waders are known to be present in the landscape, even where there is significant 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 or other land management practices that depress predator activity.

FC and NE have created a new woodland predation shadow for waders mapping layer which can be accessed on <https://www.forestergis.com/Apps/MapBrowser/>. This mapping layer provides a representation of how new woodland creation could encroach into open land. This layer uses the latest version of the NFI and assigns a 500m buffer from existing NFI woodland.

- Zone 1. Land that is already covered by existing predator shadow (from one or more NFI woodlands) and is 500 m or more away from open land not covered by existing predator shadow. New woodland creation in Zone 1 is unlikely to significantly encroach onto open land.
- Zone 2. Land within existing predator shadow that lies within 500 m of open land and existing NFI woodland. New woodland creation in Zone 2 will result in encroachment of predator shadow onto open land.

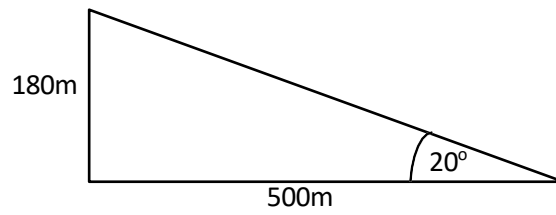
Please note that whilst woodland creation in Zone 1 may not result in a significant extension of predator shadow, it will result in an increase in predator pressure. Where breeding waders are present an increase in predator pressure is likely to have a significant adverse impact, therefore woodland creation is unlikely to be appropriate. Conversely, woodland creation in Zone 2 that results in minimal encroachment on to open land may be appropriate in certain situations (e.g., in cloughs).

Assessing woodland predation shadow for waders mapping layer

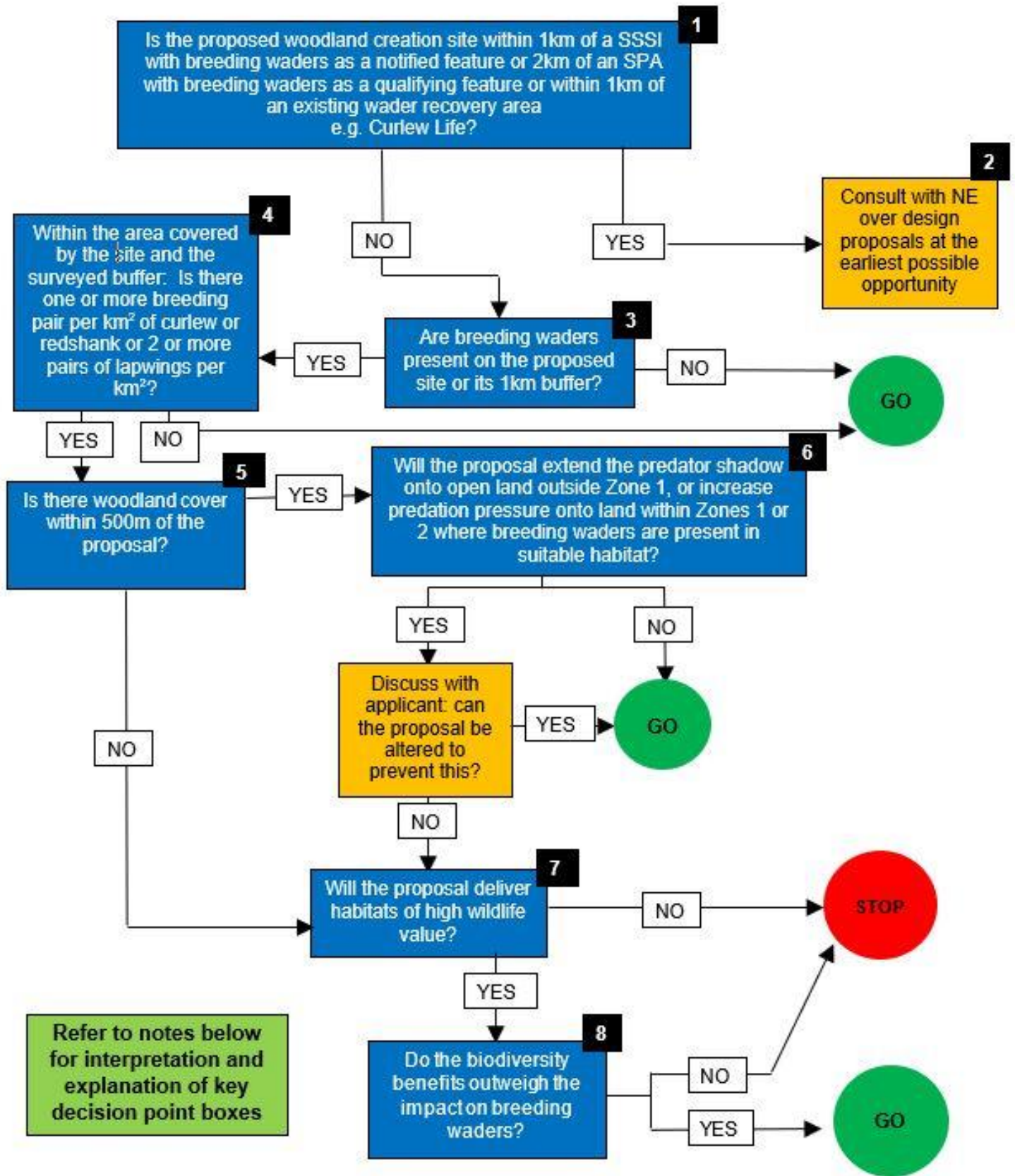


Box 6: Viable existing records will be those that come from credible sources such as local records centres, the RSPB, BTO or local bird clubs, which have used a suitable methodology and are at suitable resolution.

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 TO ACCOMPANY APPENDIX 3: DETERMINING THE SUITABILITY OF SITES FOR WOODLAND CREATION WHERE WE HAVE BREEDING WADER INFORMATION

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).

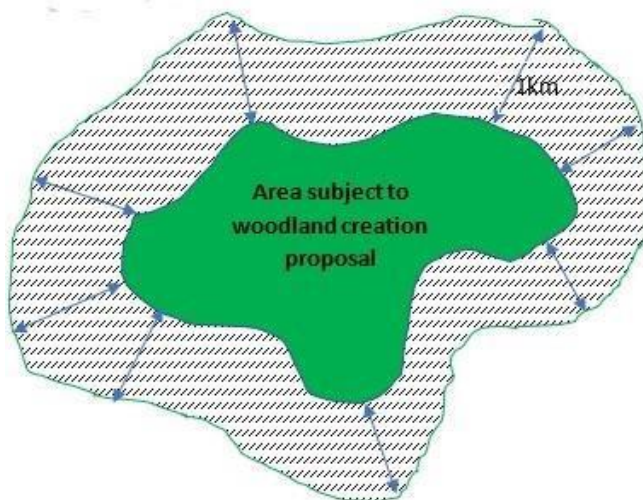
The importance of areas determined to be critical to meeting Wader Recovery ambitions are also recognised here. Currently there is only one recognised wader recovery area in the geographical areas covered by this guidance, the [Curlew Life](#) Geltsdale & Hadrian's Wall initiative. Additional Wader Recovery 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 (see Annex 9 of the [ecological assessment and survey guidance](#)). The density for curlew, redshank or lapwing will be calculated separately; if any are above the density threshold then move to Box 5.

How to create 1km buffers:



Box 6: See notes for appendix 2, Box 5.

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

There is an expectation that as Local Nature Recovery Strategies are developed, they can be expected to contribute to the assessment.