

**North Logiealmond: Assessment of Impacts of a  
Woodland Creation Proposal on Breeding Bird  
Interest**

**Blairbeg Consulting**

**September 2022**

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## **Introduction**

Woodland creation proposals have been developed for a large area of ground in Strathbraan, Perthshire, known locally as North Logiealmond and which forms part of Dullator Farm, which in turn forms part of the wider landholding of Scone Estates. Following an initial search over a very extensive area of land south of the River Braan, covering around 1,300 ha, more focused surveys and assessments were undertaken on around 570 ha of land south-east of Dullator, and to the immediate west of Meikle Findowie - a property that was also the subject of woodland creation proposals.

It was recognised that the presence of breeding waders would potentially be a significant constraint on woodland creation in the locality.

Further to breeding bird surveys carried out in 2019, seventeen bird species of conservation concern were identified as breeding within the originally proposed new planting area at North Logiealmond. Of these, the most sensitive to change in land-use resulting from afforestation within the area are wading bird species, most notably curlew. This assessment is intended to describe the baseline information for curlews and highlight potential impacts on their population status resulting from woodland establishment. Furthermore, the significance of these potential impacts resulting from the specific nature of woodland establishment proposed at North Logiealmond will be discussed. It should be noted that this report is not intended to constitute an assessment of impacts as could be found in an Environmental Assessment and is a more discursive consideration to enable further refinement of monitoring and mitigations.

## **Survey Results**

An initial breeding bird's survey of the much larger initial search area, conducted in 2018, indicated the presence of 14 pairs of curlews. Locational data for curlew territories was not provided although the report notes that the highest densities of curlews occurred on the east of the search area, which coincides with the 570 ha site.

Subsequently, breeding curlew survey work in the locality has been undertaken on North Logiealmond (in 2019 and 2021) and on Meikle Findowie (in 2018, 2020 and 2021). The results are summarised below, and the territory locations are shown on Map 1. It should be noted that there was no significant alteration in land management practices between survey years on North Logiealmond, while at Meikle Findowie, positive land management practices designed to favour curlews were instigated in 2020.

**Table 1 – Survey Results 2018-2021**

<b>Area</b>	<b>Area</b>	<b>Date</b>	<b>Pairs</b>	<b>Density</b>	<b>Notes</b>
Meikle Findowie	430 ha	2018	13	3.0 per km <sup>2</sup>	CSM Ecology survey
N. Logiealmond	660 ha	2019	12	1.8 per km <sup>2</sup>	inc. buffer to west
Meikle Findowie	430 ha	2021	19	4.4 per km <sup>2</sup>	Upland Ecology survey
Meikle Findowie	430 ha	2021	19	4.4 per km <sup>2</sup>	RSPB survey
N. Logiealmond	660 ha	2021	4	n/a	late/partial survey

The 2021 survey at North Logiealmond was undertaken towards the end of the breeding season, following a late season request from Scottish Forestry and involved two brief visits rather than the three more intensive visits which would be expected from a standard breeding bird survey. The

2021 survey does provide some indication of the likely levels of breeding success, but it is recognised that the 2019 survey should be accepted as the baseline for assessment and mitigation purposes.

The Strathbraan area is identified as a 'hotspot' for breeding curlew. Historically this status indicated a density of at least 5 pairs per km<sup>2</sup> but given the decline in numbers lower densities should be recognised as being important, and the densities of curlews at Meikle Findowie, at 4.4 pairs per km<sup>2</sup> support the view that Strathbraan is an important stronghold for curlew. The density recorded at North Logiealmond, of 1.8 pairs per km<sup>2</sup>, in isolation, does not reach 'hot spot' status, (being around 40% of the densities recorded at Meikle Findowie). However, it should be recognised that the value of North Logiealmond for curlews is enhanced by its adjacency to Meikle Findowie.

The density of breeding curlews at Meikle Findowie increased by over 45% between 2018 and 2021. While some of this increase may be due to chicks born in 2018 reaching their first year of breeding, it is also possible that the enhanced habitats at Meikle Findowie attracted pairs that previously bred on North Logiealmond or elsewhere. This latter suggestion is supported by the fact that the 2020 survey at Meikle Findowie also recorded 19 pairs; birds hatched in 2018 would be too young to have contributed to the increase in nesting pairs. While curlew are known to prefer nesting in proximity to previous sites it should be noted that Meikle Findowie shares a 2km long boundary with North Logiealmond, and that the Corrody Burn valley, which forms the march is a focus for curlew territories on both properties.

In addition, guidance produced by the RSPB<sup>1</sup> notes that '*we consider that any woodland proposals likely to affect more than 5 pairs of nesting curlew is potentially threatening to curlew populations, especially so if areas are involved where densities reach more than 5 pairs per sq. km*'. Similarly, Scottish Forestry's 'Woodland Creation and Curlew' Guidance Note<sup>2</sup> suggests that it may not be appropriate to plant in locations where the proposals would displace 7 or more breeding pairs, and that in regions that have had recent significant declines, this may apply to proposals that could displace 5 or more pairs.

While it is suggested that breeding densities give a truer picture of the importance of an area to curlew than numbers present (as the latter is directly related to site size) it is recognised that the presence of 12 curlew territories in or close to North Logiealmond means that without implementation of appropriate mitigation measures the proposals have the potential to have a significant impact on the local curlew population.

### **Planting Design**

The Planting design for North Logiealmond has progressed through various iterations, with amendments undertaken largely to address issues relating to curlews. An area analysis of the current design is contained below (see Map 2- Woodland Design (September 2022))

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<sup>1</sup> Curlew conservation and new woodland in Scotland – essential steps for forest managers, RSPB Scotland, 2019. <https://reforestingscotland.org/wp-content/uploads/2020/06/Curlew-and-new-woodland-good-practice.pdf>

<sup>2</sup> Scottish Forestry (2021) Woodland Creation and Curlew <https://forestry.gov.scot/publications/713-woodland-creation-and-curlew/viewdocument/713>



**Table 2 – Analysis of Planting Design**

Aspect	Area (ha)	Percentage - planting	Percentage - site
<b>Site</b>	<b>570</b>		
<b>Planting</b>	<b>249</b>	<b>100%</b>	<b>44%</b>
Sitka spruce	66	26.51%	11.58%
Norway spruce	3	1.20%	0.53%
Mixed Firs	5	2.01%	0.88%
Scots pine (productive)	28	11.24%	4.91%
<b>Total Productive Woodland</b>	<b>102</b>	<b>40.96%</b>	<b>17.89%</b>
Scots pine (native)	88	35.34%	15.44%
Oak	5	2.01%	0.88%
Native broadleaves	21	8.43%	3.68%
Upland birch	33	13.25%	5.79%
<b>Total Native Woodland</b>	<b>147</b>	<b>59.04%</b>	<b>25.79%</b>
Open ground (ungrazed)	128		22.46%
Deep peat	14		2.5%
Existing/restocked woodland	9		1.58%
<b>Other Land</b>	<b>143</b>		<b>25.1%</b>
Remaining in Agriculture / Wader management	166		29.12%
Woodland Removal	4		0.7%
<b>Total Agriculture</b>	<b>170</b>		<b>29.82%</b>

In brief, just less than 45% of the site will be planted, and the woodland creation proposals are balanced just in favour of native woodland. The native woodland is predominantly Scots pine, with roughly 40% being broadleaved.

Around a quarter of the site will remain as open, unplanted ground, notably the higher land around Rose Craig. Agricultural grazing will continue on approximately 30% of the land, notably on the lower ground by the Corrody Burn and adjacent to Meikle Findowie. This remaining land will be retained in active agricultural management, and is currently identified as coinciding with Curlew territory centres.

### **Potential Impacts**

#### Waders

The survey in 2019 highlighted a large number of wader territories across low-mid elevations, with particularly high concentrations along the southern banks of the Corrody Burn (six Curlew, three Lapwing, one Oystercatcher and one Snipe territory). A further six Curlew territories were identified near Schochie Burn and Dullator Burn. In general, curlew territories were located in areas of marshy or semi-improved grassland, with three territories identified at fringes of moorland areas. Repeat surveys were undertaken in 2021, comprising two survey visits. These visits were carried out late in the breeding season however (July) and only four potential territories were identified.

Scotland holds approximately 15% of the global population of Curlew<sup>3</sup>. Curlew are recently placed on the Birds of Conservation Concern red-list as a result of a severe decline exceeding 50% between 1994 and 2010 in population numbers across Scotland. At North Logiealmond, Curlew are frequent across the site, with a total of twelve probable or confirmed territories across the survey area (an area of approximately 650ha, 6.50km<sup>2</sup>). Confirmed breeding attempts included nests with eggs, chicks or adults tending young birds. The approximate density within the site, with an assumed impermeable boundary, is therefore 1.85prs/km<sup>2</sup>. However, when considering the distribution of Curlew territories, and taking Meikle Findowie data into consideration, densities are higher in valley along the Corrody Burn, where the most suitable habitat is present.

It is considered in general guidance that any woodland proposal that affects more than five pairs of nesting Curlew, particularly in areas where densities are greater than 5prs/km<sup>2</sup>, is likely to have a detrimental effect on the Curlew population<sup>4</sup>. The density of the Curlew population across low-mid elevations at North Logiealmond and generally associated with suitable heath/mire mosaic habitat, would not be considered a 'hotspot' for breeding Curlew. However, the site is considered of general importance to Curlew as there are more than five pairs in the area.

Lapwing are also considered to be of conservation concern, with numbers across Scotland declining by approximately 30% since 1989<sup>4</sup>. At North Logiealmond, three possible, probable or confirmed territories were identified within the site in 2019, largely focussed on grassland vegetation on lower ground along the Corrody Burn. Lapwing, like Curlew, are sensitive to woodland establishment<sup>5</sup>, which directly impacts on availability of suitable habitat, provides refuge for generalist predators which may predate ground-nesting birds (e.g. Foxes) and reduces the ability of Lapwing to avoid predators as a result of more limited visibility around nest sites<sup>6</sup>. Woodland elements in the landscape can directly reduce Lapwing numbers but can also generate a feedback system whereby fewer remaining individuals do not benefit from the advantages of greater numbers within a semi-colonial breeding site. Greater densities of Lapwing at breeding sites enhance predator avoidance strategies and therefore smaller colonies are more susceptible to systematic predation themselves.

Oystercatcher are associated with similar habitat to Lapwing and also like more open areas of habitat with access to damper soils for breeding. Snipe however are generally associated with open mire or marsh vegetation.

All wader species thrive in areas with a mosaic of short and tall vegetation and areas of wet/damp pasture or mires. Access to shallow areas of standing water is also preferred by some. Breeding abundance of waders increases with distance from woodland edges, and many species show broad avoidance of suitable nesting and foraging habitat within 500m of wooded areas<sup>7</sup>. Local variation in this pattern however is possible, and evident at North Logiealmond and Meikle Findowie. The effect

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<sup>3</sup> Woodward, I.D., Massimino, D., Hammond, M.J., Harris, S.J., Leech, D.I., Noble, D.G., Walker, R.H., Barimore, C., Dadam, D., Eglington, S.M., Marchant, J.H., Sullivan, M.J.P., Baillie, S.R. & Robinson, R.A. (2018) BirdTrends 2018: trends in numbers, breeding success and survival for UK breeding birds. Research Report 708. BTO, Thetford. [www.bto.org/birdtrends](http://www.bto.org/birdtrends)

<sup>4</sup> Curlew conservation and new woodland in Scotland – essential steps for forest managers, RSPB Scotland, 2019. <https://reforestingscotland.org/wp-content/uploads/2020/06/Curlew-and-new-woodland-good-practice.pdf>

<sup>5</sup> Wilson JD, Anderson R, Bailey S, Chetcuti J, Cowie NR, Hancock MH, Quine CP, Russell N, Stephen L, Thompson DBA (2014) Modelling edge effects of mature forest plantations on peatland waders informs landscape-scale conservation. *J Appl Ecol* 51:204–213.

<sup>6</sup> Berg, Å., Lindberg, T. & Källebrink, K.G. 1992. Hatching success of Lapwings on farmland: 226 Differences between habitats and colonies of different sizes. *Journal of Animal Ecology* 61: 227 469–476.

Nikolas P. Bertholdt, Jennifer A. Gill, Rebecca A. Laidlaw & Jennifer Smart (2017) Landscape effects on nest site selection and nest success of Northern Lapwing *Vanellus vanellus* in lowland wet grasslands, *Bird Study*, 64:1, 30-36

<sup>7</sup> Wilson JD, Anderson R, Bailey S, Chetcuti J, Cowie NR, Hancock MH, Quine CP, Russell N, Stephen L, Thompson DBA (2014) Modelling edge effects of mature forest plantations on peatland waders informs landscape-scale conservation. *J Appl Ecol* 51:204–213.

of woodland expansion in the area would be that as trees begin to mature, habitat availability for waders will reduce and there will be a permanent loss of habitat for waders over the site. This may in turn negatively impact breeding wader populations across the site.

### **Assessment of Impacts**

#### **Waders**

Assessment of impacts will be largely limited to those applicable to Curlew, which provide a useful ‘umbrella’ species, with large territories that require a mosaic of habitats that will also suit other wader species. Curlew are also the most numerous wader species within or adjacent to the proposed planting area. Snipe and Lapwing hold territories within the proposed planting area, in areas also utilised by Curlew. Oystercatcher are also present in areas utilised by other wader species. Some consideration is given to impacts on Lapwing and Oystercatcher.

Table 3 below sets out the analysis of the wader territories in relation to the current design.

**Table 3 - Location of Wader Territories**

<b>Species</b>	<b>2019 Survey</b>	<b>Woodland Footprint</b>	<b>Open Ground</b>	<b>Agricultural Land</b>	<b>Outwith Site (Buffer)</b>
<b>Curlew</b>	12	3	1	5	3
<b>Lapwing</b>	3	0	0	3	0
<b>Oystercatcher</b>	2	0	1	1	0

Eight Curlew territories will be maintained in wider areas of designed open ground. One Curlew territory will be completely encircled by proposed planting. Of the eight Curlew territories in open ground, most will contain a modest amount of planting (~10-25% of the territory area as delineated by a 500m buffer of territory centres (78 ha area). However, all eight will retain access to wider areas of open ground beyond the assumed territory boundary and the planting scheme boundary. Therefore, it is considered that four Curlew territories will be directly negatively impacted by proposed planting.

Around the Corrody Burn, proposed planting of coniferous woodland is located 50-320m (average ~240m) from assumed Curlew territory location centres. Scattered broadleaved woodland is located 140-230m (average ~190m) from assumed Curlew location centres. Open ground is maintained in areas of all assumed Curlew territories. These areas of open ground comprise a mosaic of open heath, mire and grassland habitat, and as such maintain large potential territories. Connectivity, by way of open ground, between all areas of mire, flush, grassland and marsh, is also retained between most Curlew territory centres in these areas. Areas of flush, mire and grassland are to be kept as unplanted on lower northern slopes of Rose Craig and within the wetter areas. This will ensure waders can access suitable habitat for nesting, foraging, chick-rearing and roosting.

Potential impacts suggest it is likely that four Curlew territories will be lost or displaced further to establishment of woodland. This represents 33% of the local population (as of 2019) and could be considered a significant impact at the local scale in the absence of appropriate mitigation.

However, data made available from Curlew surveys undertaken in 2021 on adjacent land to the east of the planting scheme (Meikle Findowie estate) highlights the presence of nineteen Curlew territories, with an increase of 6 pairs from the 2018 survey. Suitable habitat for Curlew is extensive across land to the east, and is maintained/enhanced for the benefit of wading bird species as part of a habitat management plan, and survey data from 2018 and 2020 evidences an increase in

population that may have resulted from displacement. Habitats comprise large expanses of marshy grassland, semi-improved rough grassland and moorland, which provides extensive habitat for Curlew. When considering the wider population status of Curlew therefore, the potential loss of four Curlew territories at North Logiealmond represents a less significant proportion of their population as of 2019 (13% of currently known territories).

Enhancement of habitat on adjacent land and within the proposed wader management area at North Logiealmond should serve to improve breeding conditions for Curlew, and may translate to maintenance of or increases in current population levels. These areas have high suitability for Curlew and are likely to offer breeding opportunities for displaced birds. Along with other mitigation measures including grazing management and predator control, as set out in the mitigation plan detailed below, losses of 33% of the local population (13% of the wider population) could therefore be considered a worst-case scenario which may not materialise. As such it is considered that the proposed establishment of woodland will not result in a significant impact on the local population of Curlew.

No significant impacts are predicted in terms of Lapwing and Oystercatcher populations. Their territories near the Corrody Burn will be centrally located within ground which is being retained in agricultural use.

## **Proposed Mitigation**

### **Introduction**

There are significant opportunities for habitat enhancement for waders at North Logiealmond.

A large area of agricultural pasture, originally included within the woodland creation search area boundary will be enhanced through habitat management measures for wading bird species. Management of grassland habitats will contribute to maintaining successful wader populations.

Management of grassland will incorporate grazing regimes and, if required, cutting, to preserve a mosaic of sward heights across the area. Legal predator control is proposed across the area for the benefit of native ground-nesting bird species, undertaken in conjunction with a programme of wader population survey and monitoring.

Mitigation measures for the potential losses of curlews are proposed below. The measures proposed primarily focus on the retention of agricultural land, and on maintaining the vegetation in forms suitable for curlew breeding and foraging, but include positive habitat enhancement works, and predator control.

### **Location**

The main area for wader mitigation lies on agricultural pasture on the north-east facing slopes above the Corrody Burn, and around the former farmstead at Rosecraig. This area adjoins land on Meikle Findowie which is being managed for curlews. In addition, a smaller area to the east of the Dullator Burn will be included. The Corrody Burn/Rosecraig area showed the highest density of breeding curlew on North Logiealmond in 2019, while the adjoining land on Meikle Findowie supports a high density of breeding curlew.

## **Habitats**

The Corrody Burn/Rosecraig area mainly comprises of neutral semi-improved and unimproved grassland and marshy grassland, often in mosaic. There are smaller areas of dry heath and calcareous grasslands, and a Scots pine plantation. The Dullator Burn area comprises of neutral semi-improved grassland and marshy grassland, with a small area of felled, but not restocked, woodland. These habitats, with the exception of the existing woodland, are suitable for curlew nesting and foraging, with there being very limited woodland or scrub cover and few field divisions.

## **Extent**

The Corrody Burn/Rosecraig area extends to 115 ha, while the Dullator Burn area covers 17 ha. In addition to these proposed wader mitigation areas, a connecting corridor of dry heath, extending to 34 ha, will be similarly maintained in pastoral agriculture. In summary, the active mitigation area will total 132 ha, and the open area retained in agricultural use will cover 166 ha. The woodland creation proposals (including associated open ground) amount to roughly 280 ha.

## **Connectivity**

As mentioned above, the two areas of wader mitigation will be connected by a wide corridor of retained open ground. This area is not included within the Mitigation area for woodland creation, as it is of less suitability to curlews in terms of habitats. Nevertheless, it has the potential to provide some foraging and nesting habitat, and importantly, will provide open ground linkage between the Corrody Burn/Rosecraig mitigation area and the Dullator mitigation area.

## **Felling**

The existing pine plantation within the Corrody Burn/Rosecraig mitigation area will be felled, and the site cleared of brash. The felling will occur within 5 years of any FGS approval (and most likely within 2 years) and the land will not be restocked either in situ or in an alternative area. The felled woodland within the Dullator Burn mitigation area will be restocked in an already identified location within the proposed woodland creation site

## **Grazing Methods**

Where suitable grassland habitat exists, the aim will be to maintain a medium/long sward (15-30cm) interspersed by shorter areas of sward (5-15cm long) between early March and the end of July. This may be achieved by intensive grazing prior to March, and there after by less intensive grazing between March and July, in order to avoid damage to nests. The intention is to limit grazing within the mitigation areas during the bird breeding season to sheep, rather than cattle, and stocking densities will be low (less than 1 livestock unit per ha in any event, and around 0.6 livestock units per ha if viable).

A dairy cow in full milk production equates to a single livestock unit. It is generally held that there are between 0.67 and 10 ewes per single livestock unit.

Grazing will be managed as part of the ongoing contract farming agreement at Dullator Farm, which manages a flock of 1,500 ewes and gimmers. These sheep numbers will allow the Wader Management area (of 166 ha) to be intensively grazed when required, while there is sufficient grazing elsewhere on the farm to allow for low level (or no) grazing when required. Dullator Farm also has a small herd of cattle, which could be used for targeted grazing if required.

## **Grazing Management**

The use of fertilizers and lime will be avoided. No new drainage works will be undertaken. Mechanical sward management may be undertaken if grazing management does not produce the desired conditions. This will include the selective and partial cutting of rushy ground in the marshy grassland areas. The use of agricultural vehicles within the mitigation area will be avoided during the bird breeding season

## **Habitat Enhancement**

At this stage no drain blockage is proposed, and no drain maintenance or construction will be undertaken. Scrapes will be created at intervals along the flat ground by the Corrody Burn, and in other locations where the topography and hydrology permit. Most scrapes will be a maximum of 30cm maximum depth, and will extend to roughly 25m x 10m, but at least 2 scrapes will have a depth of 50cm, with the likelihood that they will continue to hold water if the other scrapes dry up.. The intention would be to create at least 10 no. scrapes. The RSPB provided guidance on the scrape specifications, and they have said that they will provide on-site guidance regarding the location of the scrapes

## **Predator Control**

Rigorous predator control will be undertaken. Ideally, this will be undertaken in conjunction with Meikle Findowie, and will cover the remaining parts of North Logiealmond Estate. A copy of the proposed Predator Control Plan is attached

## **Monitoring**

A monitoring programme will be established, ideally to be operated in conjunction with Meikle Findowie Estate's programme.

The purposes of monitoring include:-

- To verify that the proposed works and measures have been implemented as agreed
- To gauge the effectiveness of the measures
- To identify measures that do not appear to be effective at an early stage
- The identification of measures that may need to be taken to improve effectiveness
- To provide data to stakeholders

Breeding bird activity, targeted at waders, will be monitored in years 1, 2, 5, 10 and 15. The RSPB's monitoring methodology will be utilized for the monitoring, involving the walking of predetermined transects across the site.

Consideration will also be given to monitoring, or collation of casual observations of, wader populations on immediately adjacent land (<1km from planting boundary) to the west, along with collaboration with monitoring efforts on adjacent land to the east, to establish wider population status and both the impacts of planting within the site and across wider adjacent land.

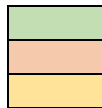
In addition vegetation growth and management will be monitored for the same purposes as the breeding wader monitoring. Prior approval will be sought for any suggested changes to the vegetation management arising from the monitoring exercises.

## Work Programme

The table below sets out the proposed programme of works. Year 1 would be immediately prior to/during the first year of the woodland creation establishment works in the vicinity of Meikle Findowie (potentially 2023/4)

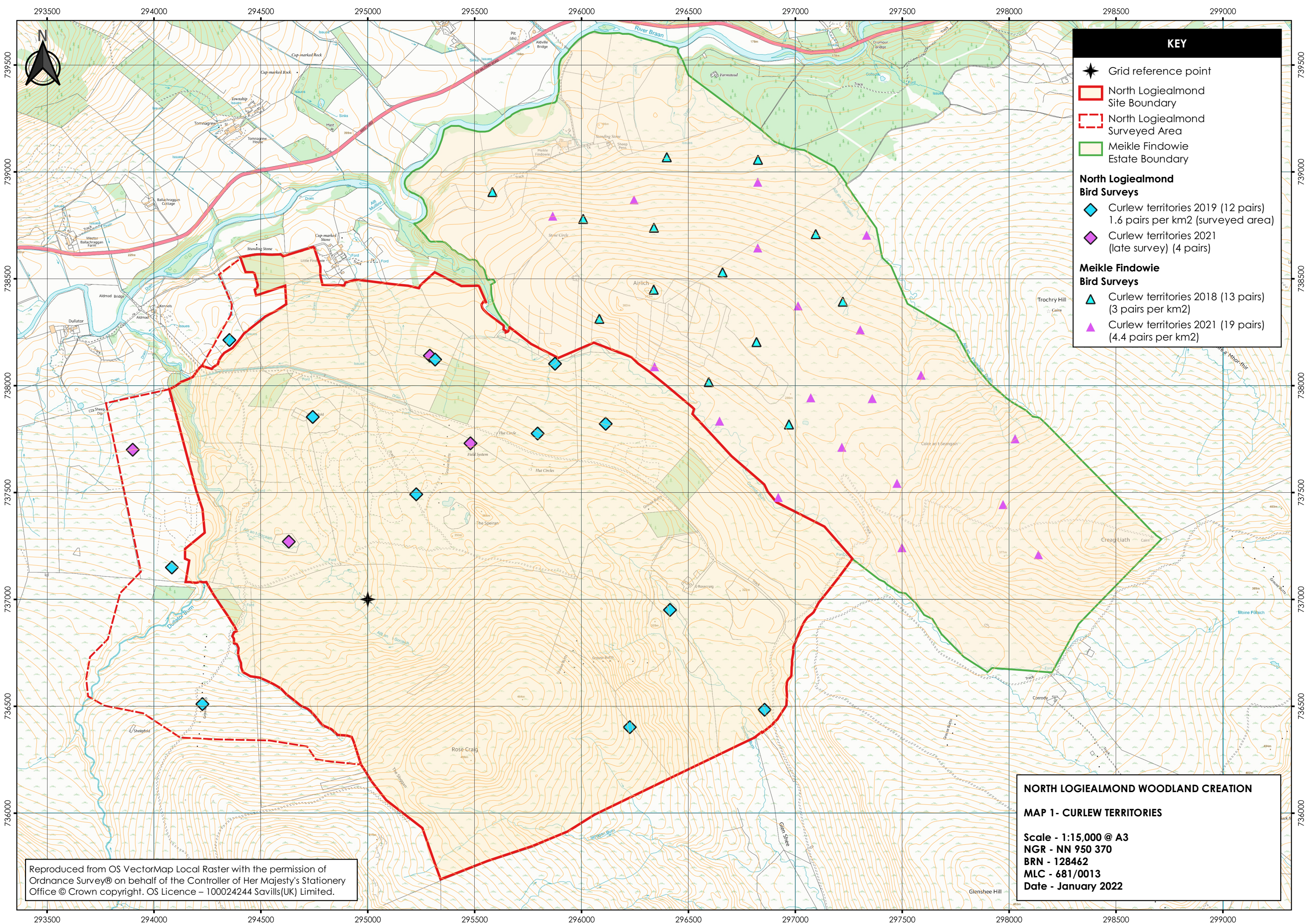
Works	notes	Y 1 2023	Y 2 2024	Y 3 2025	Y 5 2027	Y 7 2029	Y 10 2032	Y 15 2037
Capital Works	scrape creation							
- Maintenance	as required							
Woodland Felling/Clearance								
Predator Control	continual, with annual report							
Rush cutting	as required							
Vegetation monitoring	annual/ as required							
Breeding waders survey/report	following RSPB's methodology							
Liaison with Meikle Findowie								

only in year shown  
continual  
annual



A Report covering habitat management, wader survey data, monitoring, and predator control will be produced in years 1, 2, 5, 10, and 15, and sent to Scottish Forestry.





**KEY**

- ★ Grid reference point
- ▭ North Logiealmond Site Boundary
- - - North Logiealmond Surveyed Area
- ▭ Meikle Findowie Estate Boundary

**North Logiealmond Bird Surveys**

- ◆ Curlew territories 2019 (12 pairs)  
1.6 pairs per km<sup>2</sup> (surveyed area)
- ◆ Curlew territories 2021 (late survey) (4 pairs)

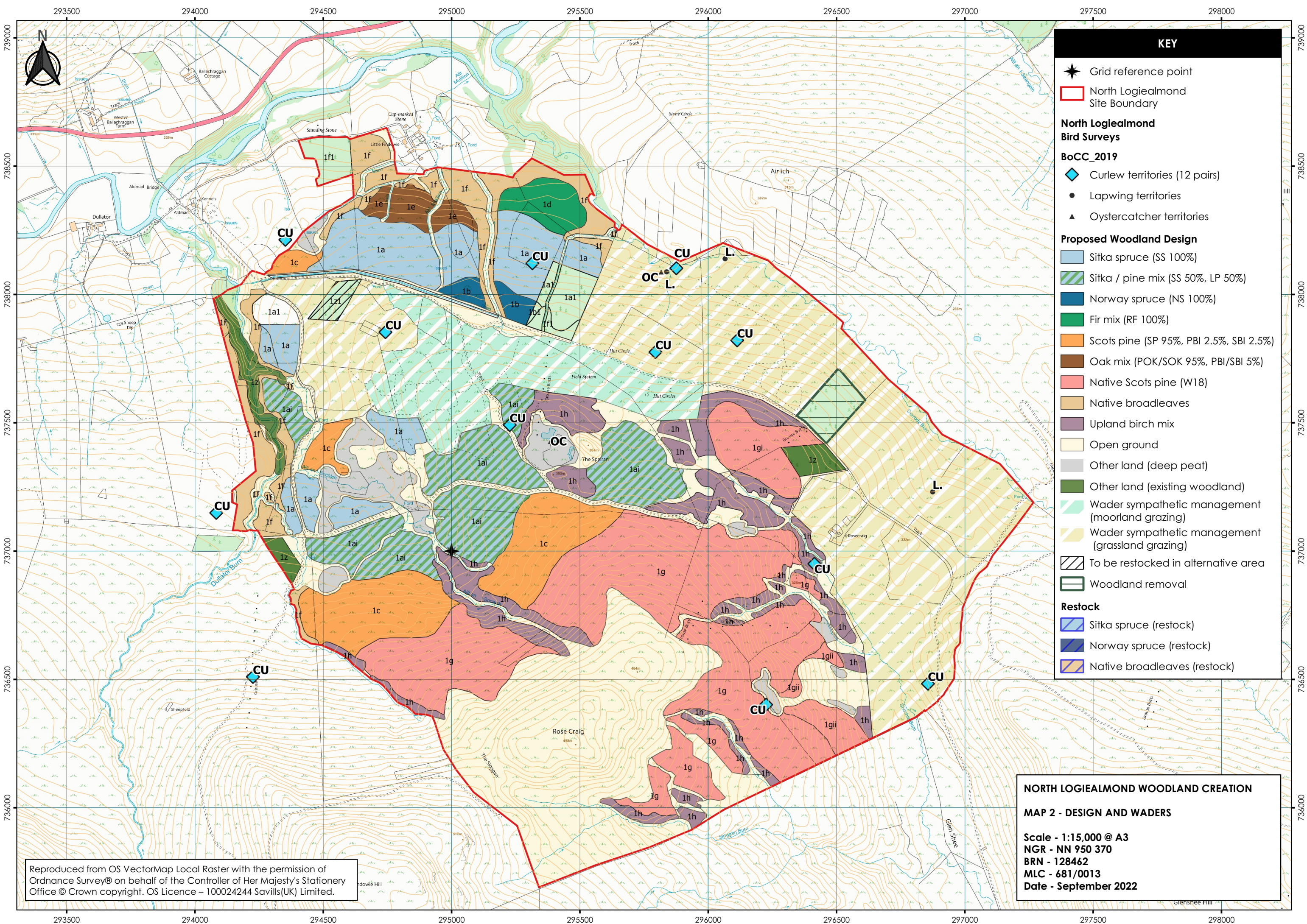
**Meikle Findowie Bird Surveys**

- ▲ Curlew territories 2018 (13 pairs)  
(3 pairs per km<sup>2</sup>)
- ▲ Curlew territories 2021 (19 pairs)  
(4.4 pairs per km<sup>2</sup>)

**NORTH LOGIEALMOND WOODLAND CREATION**  
**MAP 1 - CURLEW TERRITORIES**  
 Scale - 1:15,000 @ A3  
 NGR - NN 950 370  
 BRN - 128462  
 MLC - 681/0013  
 Date - January 2022

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**KEY**

- ★ Grid reference point
- North Logiealmond Site Boundary

**North Logiealmond Bird Surveys**

**BoCC\_2019**

- ◆ Curlew territories (12 pairs)
- Lapwing territories
- ▲ Oystercatcher territories

**Proposed Woodland Design**

- Sitka spruce (SS 100%)
- Sitka / pine mix (SS 50%, LP 50%)
- Norway spruce (NS 100%)
- Fir mix (RF 100%)
- Scots pine (SP 95%, PBI 2.5%, SBI 2.5%)
- Oak mix (POK/SOK 95%, PBI/SBI 5%)
- Native Scots pine (W18)
- Native broadleaves
- Upland birch mix
- Open ground
- Other land (deep peat)
- Other land (existing woodland)
- Wader sympathetic management (moorland grazing)
- Wader sympathetic management (grassland grazing)
- ▨ To be restocked in alternative area
- Woodland removal

**Restock**

- Sitka spruce (restock)
- Norway spruce (restock)
- Native broadleaves (restock)

**NORTH LOGIEALMOND WOODLAND CREATION**

**MAP 2 - DESIGN AND WADERS**

Scale - 1:15,000 @ A3  
 NGR - NN 950 370  
 BRN - 128462  
 MLC - 681/0013  
 Date - September 2022

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## **NORTH LOGIEALMOND WOODLAND CREATION - PREDATOR CONTROL PLAN**

### **Control Requirements**

While the proposed woodland site is not covered by any conservation designations, it is recognised that the adjacent moorland habitats in the surrounding area, particularly to the south, provide suitable habitat for ground nesting birds, including black grouse, waders, and raptors.

The likelihood is that the new woodland will harbour predators (e.g. foxes, crows) which could increase predation pressure on birds in the locality.

Predator control is currently carried out over the wider North Logiealmond area under an Agri-Environment Climate Scheme (AECS) Moorland Option which includes the supporting option for Predator Control.

This option is eligible for:

- Protected sites (include SSSIs, SPAs and Ramsar sites) designated for breeding bird assemblage (excluding woodland sites), and/or short-eared owl and/or hen harrier
- 10km squares of black grouse range

The land proposed for woodland planting lies within the existing AECS scheme and the predator control will continue for the foreseeable future, even when the woodland creation area is subsequently removed from the AECS scheme. Predators are currently controlled on the wider Estate through shooting and trapping. These activities are spread across the whole of the holding, with only low level predator control being undertaken over the areas immediately surrounding the known Black Grouse Leks.

This Control Plan provides information relating to the current control measures employed by the Estate, and the likely impact of the woodland creation proposals in terms of an increase in predation on ground nesting birds.

### **Objective**

The primary objective is to remove any potential increase in predation on ground-nesting birds arising from the establishment of woodland, as well as improving the breeding success of black grouse. This will be achieved by continued implementation of the current Predator Control Plan for the estate as a whole, coupled with additional control efforts if required.

### **Statement of Predator Control**

Predator control measure currently in place on the estate targets foxes, crows, mustelids and rodents as the principal predators of concern. The plan seeks to minimise numbers of these species.

#### Fox Control

Foxes are controlled through lamping within the control area. Snaring is not carried out on the scheme area however, through collaboration, snares are deployed in certain areas within the 1.5km radius of the blackcock lek sights.

#### Crow Control

Crow control is carried out using Larsen traps. These traps are moved periodically in order to ensure their optimum success rate.

### Mustelids and rodents

Mustelids and rodents are controlled with the use of Fenn traps.

The above predator control methods are in operation between 1<sup>st</sup> March and 30<sup>th</sup> June. Lamping is in operation from 1<sup>st</sup> January to 31<sup>st</sup> December.

### General requirements

Under the AECS Moorland Option - Predator Control, the following requirements are being met:

- The same locations and extents are managed each year.
- Traps and snares are set and operated in the locations as agreed under the AECS. These locations are shown on the predator control management map for the scheme.
- Traps and snares are tagged with relevant authorisation identification numbers clearly visible.
- Records of all predator control are being kept and are available for inspection. These include location of traps and snares, dates these were set and unset, or removed, and dates of any lamping work.
- A report of predator control activity is submitted to RPID annually
- All predator control work is carried out in accordance with BASC Trapping Pest Birds Code of Practice and the Trapping Pest mammal Code of Practice.

Liaison with NatureScot will be undertaken on an annual basis and additional contact will be made should any licences be required. Cull records will be kept and will be submitted to NatureScot as soon as feasible after August 31<sup>st</sup> each year.

### **Woodland Creation Impacts**

Although the creation of new woodland areas is likely to provide shelter and breeding sites for foxes and crows, it is anticipated that the control measures currently being implemented over the estate will be sufficient to maintain predator numbers at levels that will avoid impacting on black grouse and other ground-nesting birds, with target levels of control being subject to annual review.