

**Invitation to Tender (ITT):** **St Cuddy’s Protected Birds Desktop Study 2022**

**SPECIFICATION OF REQUIREMENTS**

This section sets out the project requirements.

**1. Introduction**

## Natural England wishes to improve and update our understanding of the abundance and distribution of a number of protected non-breeding birds species along the Northumberland coastline, **outwith the Lindisfarne National Nature Reserve,** and the significance of the anthropogenic pressures and threats to which they are exposed.

## Natural England is seeking to procure a Contractor to deliver this improved understanding through a desk-based study/review to collate and analyse existing data on a number of protected bird species’ abundance, distribution, behaviour, pressures and threats across Northumberland.

## The Contractor will be required to collate and analyse all available data regarding the abundance and distribution of a number of protected bird species along the Northumberland coastline and their behaviour and the anthropogenic pressures and threats to which they are exposed (including a review of evidence of any changes to these over time).

## The Contractor will be required to provide an analysis of the results of a desktop survey relevant to a Condition Assessment (Special Protection Area (SPA) and Site of Special Scientific Interest (SSSI)). Where possible (with appropriate caveats), preliminary conclusions should be drawn regarding which (if any) anthropogenic activities may require improved management within the SPA/SSSI area as a result of species’ sensitivity to the pressures those activities cause and, exposure to those pressures arising from overlaps of activities with species distribution. All of this information is to be summarised in a report.

## The Contractor is expected to begin work as soon as possible after the contract start date.

## Potential Contractors are requested to provide separate costings for: a) all Northumberland shore non-breeding birds (all SSSI species including the two SPA species), or b) a selection of up to three identified bird species (Ringed Plover and two other identified species), an assessment of which would be good proxy indicators of condition (SSSI and SPA) along the coast, with a write up of a final report (see section 5).

## The contractor will be expected to undertake quality assurance on work delivered and ensure it is compliant with the requirements of the Joint Code of Practice for Research (see: <https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/413154/pb13725-research-code-practice.pdf>)

**2. Background**

**2.1 Site details (Northumberland Shore SSSI, Northumbria Coast Ramsar, Northumbria Coast SPA)**

The target sites are the Northumberland Coast SPA and Northumberland Shore SSSI, which includes most of the coastline between the Scottish border and the Tyne Estuary. These complement the Lindisfarne SSSI, which they abut, in providing important wintering grounds for shorebirds. The Northumberland Shore SSSI is of international and/or national significance for six species: purple sandpiper; turnstone; sanderling; golden plover; ringed plover, and redshank. The Northumberland coast consists largely of sandy bays separated by rocky headlands with wave-cut platforms, backed by dunes or soft and hard cliffs. Discrete areas of estuarine intertidal mudflats and saltmarsh are also included in the designations. Notably, the Northumberland Shore SSSI largely directly underpins the Northumbria Coast Ramsar, Northumbria Coast SPA, and underpins significant parts of the Berwickshire and North Northumberland Coast Special Area of Conservation (SAC), Lindisfarne SPA, Lindisfarne Ramsar, Northumberland Marine SPA (inshore areas) and the Berwick to St. Mary’s Marine Conservation Zone (MCZ). Thus, data and evidence collected and assessed on the chosen target species should provide insight across these sites, where possible.

**2.2 The issue**

An improved evidence base is required by Natural England in order to produce detailed and informative conservation advice packages and site condition assessment for the Northumberland Coast SPA and Northumberland Shore SSSI on the Northumberland Coast. Analysis of extant data is required by Natural England in order to provide evidence-based advice on the abundance, distribution and behaviour of selected species across the Northumberland Coast, and changes over time against baseline.

The Northumberland coastline and shallow coastal waters, are used for a wide range of anthropogenic activities, including numerous commercial and recreational activities such as, sailing, shipping, commercial fishing, recreational fishing and other marine industries. It is also in close proximity to various conurbations. One pertinent question is, for example, are protected bird species fully utilising the available habitat extent? e.g., species distribution data show avoidance of areas in close proximity to conurbations and/or popular areas of recreation.

Thus, we need to understand the threats and pressures faced by protected bird species across the coast in order to identify potential management measures (if required) and kick-start discussions with partners, regulators, NGOs, coastal users, industry and other stakeholders.

**2.3, Condition Assessments**

The aim for the SPA and the individual species and/or assemblage of species for which the site has been classified (the ‘Qualifying Features’ listed below), and subject to natural change is to; Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:

* The extent and distribution of the habitats of the qualifying features
* The structure and function of the habitats of the qualifying features
* The supporting processes on which the habitats of the qualifying features rely
* **The population of each of the qualifying features, and,**
* **The distribution of the qualifying features within the site.**

Supplementary advice is available on the [Designated Sites View (naturalengland.org.uk)](https://designatedsites.naturalengland.org.uk/SiteGeneralDetail.aspx?SiteCode=UK9006131&SiteName=Northumberland%20shore%20SSSI&countyCode=&responsiblePerson=&unitId=&SeaArea=&IFCAArea=)

For non-breeding aggregations of non-breeding birds reporting categories are available in the [Common Standards Monitoring Guidance for Birds (jncc.gov.uk)](https://data.jncc.gov.uk/data/dc33b514-d571-44b3-8936-08d2d7a1e1b1/CSM-Birds-2004.pdf)

**3. Objectives**

**3.1 Project objectives**

The objectivesfor this contract are:

* Undertake a desktop review of existing information against baseline to understand selected species abundance, distribution and ecology along the Northumberland Coast, and changes over time against baseline.
* Correlate bird data with human activities potentially impacting species along the Northumberland coast.
	+ An assessment of anthropogenic impacts to improve understanding of the pressures and threats faced by protected bird species across the whole site.
	+ An assessment of disturbance from anthropogenic activities and the resulting impact upon the behaviour and distribution of protected birds.
* Produce a report presenting and analysing the results of the data analyses

**4. Methods**

**4.1 Data review**

Potential contractors are invited to consider and report on the available data (species data and anthropogenic data) they will use, how they will analyse and assess the confidence of the data and the resultant outputs.

Ideally, a survey of the entire coast would be required to fully understand bird usage and abundance/distribution across the site. However, the scale of that task would be too large to effectively resource at this time. As such this desktop analysis is required to inform the objectives of such a project, and to inform the development of a whole site field survey project in the future.

*Data analyses*

Natural England does not wish to prescribe a particular form of data analyses. However, Natural England requires that robust and appropriate analyses are employed. Potential contractors are required to describe as part of their tender, the nature of the analytical approach which they will apply to these data to address the objectives of this contract.

# **5. Requirements and Timescales.**

**5.1 Products and deliverables**

To enable successful delivery, ideally the Contractor is expected to:

* Collate and analyse species data (the contractor is required to lead on acquiring data but will be supported by Natural England);
* Collate and analyse available anthropogenic activity data and correlate with species data to better understand distribution, abundance, usage of site(s);
* Conduct statistical analyses of the data;
* Submit a draft final report of the findings, including condition assessment(s) and recommendations, and
* Submit a revised final report (following review by Natural England).
* In addition to reporting on the project’s objectives (3.1) this report should also include
	+ Recommendations for future work
	+ Include the raw data, processed databases and associated analytical code and any associated GI products to Natural England.

Potential Contractors are requested to provide two separate costings for:

1. all Northumberland shore SSSI non-breeding birds, or
2. a selection of three identified bird species (one being Ringed Plover), an assessment of which would be good proxy indicators of condition (SSSI and SPA) along the coast.

Costings should be provided to carry out:

1. planning,
2. collation and analyses of data, and
3. write up of final report.

Costing should include VAT.

Timelines for delivery of draft final and revised final reports, and associated products, are detailed in section 5.2.

All data should be supplied to MEDIN standard (see guidance at [www.oceannet.org](http://www.oceannet.org)). Any GIS datasets need to be provided in ESRI ArcGIS format compatible with ArcGIS 10.7.1, have attached metadata and be clean of any topology errors. If relevant, any point and polygon data should be supplied to us with the final analysis.

**5.2 Timeline for project delivery:**

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| **Timeline** | **Date** |
| Project inception meeting between contractor and Natural England staff via video conferencing | asap |
| Contractor to collate all necessary data (other than new field data) and finalise analytical approach(es) and advise Natural England of these. | asap |
| Teleconference between contractor and Natural England to discuss datasets and planned analyses. | asap |
| Lessons learned interim report – short report on data collation, results and scope of future work.  | Mid Jan 2023 |
| Draft final report to be provided by contractor to Natural England. | End January 2023 |
| Comments on draft final report to be provided to contractor by Natural England. | Beginning Feb 2023 |
| Final report and associated products to be delivered by contractor to Natural England incorporating additions/ amendments in light of comments received from Natural England. | end March 2023 |

Any delays to this timetable should be immediately discussed with NE project leads. Catherine, Andrew and Beth [catherine.scott@naturalengland.org.uk] [andrew.craggs@natural.england.org.uk and Beth Rogers bethan.rogers@naturalengland.org.uk]

# **6. Other considerations**

In support of this contract, Natural England will provide the contractor with:

* Project support from dedicated project leads.
* Relevant available data held by Natural England.
* Opportunity to feedback and discuss progress with the project leads.