



SOUTH EAST DEVON  
HABITAT REGULATIONS  
PARTNERSHIP

# Exe Estuary Wildlife Refuge Study – Consultant brief

## Objectives of the Exe Wildlife Refuge Monitoring Programme:

- To determine (as far as is practicable) whether the Wildlife Refuges at Dawlish Warren and Exmouth a) work to reduce disturbance to water birds from recreational activities within these areas and b) positively contribute to the ability of the Exe Estuary to support designated bird populations in the SPA.
- To undertake a 3 year programme of monitoring (by direct observation) of the Exmouth (15 Sept – 31 Dec) & Dawlish Warren (all year) Wildlife Refuge areas, to ascertain their efficacy. Gather sufficient new data to establish the base line for new refuge areas.
- To ascertain the type, frequency and impact of disturbance events at the Exmouth Wildlife Refuge area outside of the date range of the refuge, when SPA designated species are present.
- To determine the level of adherence to the refuge areas (whether leading to a disturbance event or not).

There are essential components of the study that are critical to meeting its core objectives. Tenders should identify any components which could not be delivered within the available budget and what (if any) budget would be required to achieve all the study components.

## Essential components:

- To survey, record and quantify any disturbance events (type, response, distance, impact, species, number, time, tide) caused to water birds from different types of human activity within the refuges – on the water, inter-tidal and foreshore. This should also include activities in the refuges which do not result in disturbance.
- To survey and assess the effects on waterbirds of any consequences of displacement of water based recreational activity to other ecologically important areas in the Exe Estuary.
- Use existing studies to inform survey methodology, to ensure a growing and consistent evidence base. To use any available data (such as WeBS) to help gauge any discernable changes in the patterns of waterbird population and distribution as a result of the Wildlife Refuges.
- To compile an annual report including summary of results, interpretation of the data, full results and any issues arising.
- To compile an overarching report after a period of 3 years monitoring. This report to include comprehensive summary of results, interpretation of the data and (if appropriate) recommendations for future management.

**The safety of all users on the estuary is of paramount importance. Any vessel or craft is able to enter either of the Wildlife Refuges for reasons of immediate safety. It is considered reasonable to expect users, once safe, to make their way out of the refuge or recover their craft at the shore.**

## Background:

The Exe Estuary is designated as a Special Protection Area (SPA) for regularly supporting a community of at least 20,000 waterfowl. In simple terms, this affords the estuary legal protection against the deterioration of its habitats and disturbance (and deterioration) of the species for which it has been designated. Evidence reported in the Exe Disturbance Study (*Footprint Ecology, 2011*) demonstrated that:

“Disturbance is currently therefore influencing the distribution and behaviour of birds on the Exe. These impacts may be sufficiently widespread and frequent to result in the estuary being less able to support the designated bird populations”

East Devon, Exeter and Teignbridge Councils have all established Local Plans which set out housing growth across the region. The South-east Devon European Site Mitigation Strategy (*Footprint Ecology, 2014*) describes housing growth in the context of the Exe:

“Housing within 1km of the Exe Estuary is set to increase by 20% (3,138 houses) as a proportion of existing housing within 1km (15,395 houses). Looking at all housing within 10 km, there will be a 29% increase surrounding the Exe...”

In June 2016, a partnership of the three Councils formed as the South East Devon Habitat Regulations Executive Committee (HREC). At their inaugural meeting, the Committee approved a review of zonation in the Exe Estuary as part of the 2016-17 Annual Business Plan. Due to their neutral standing, history of involvement, established network of user groups and success in implementing a Voluntary Exclusion Zone in 2009, the Exe Estuary Management Partnership (EEMP) were commissioned to undertake the zoning review.

Results of species monitoring via the Wetland Bird Survey (WeBS) shows that the majority of the internationally important populations of Dark-bellied Brent Goose, Wigeon and Oystercatcher in the estuary are found at Dawlish Warren National Nature Reserve (NNR) and Exmouth Local Nature Reserve (LNR). Coupled with the presence of the *Zostera* (eelgrass) beds, EEMP's initial discussions with key stakeholders quickly identified these two key areas as critical to the ecological function of the SPA.

Comments, compromises and suggestions put forward by respondents to the EEMP's consultation were discussed by members of the EEMP and South East Devon Habitat Regulations Partnership (SEDHRP) Officer Working Groups on 6<sup>th</sup> June 2017. This resulted in significant amendments to the original proposals, primarily in response to concerns of safety and accommodating (as far as possible) existing uses of the areas.

The Wildlife Refuges are essentially a request to the thousands of people using the Exe Estuary to act responsibly and refrain from using two critically important ecological areas. As shown in figures 1-3 below, these represent just 3.5% (840,548 m<sup>2</sup>) of the SPA (23,457,100 m<sup>2</sup>) throughout the year (at Dawlish Warren) and a total of 7% (1,669,295 m<sup>2</sup>) for 14 weeks of the year (when including the Exmouth refuge area).

A rigorous programme of monitoring is necessary in order to understand whether or not these refuges are successful in reducing disturbance from recreational activities and positively affecting the ability of the estuary to support the designated bird populations. Without robust and effective mitigation which enables the partner authorities to be certain of no net impact to protected sites, continued development as outlined in respective local plans and within 10km of the estuary is at risk of legal challenge.

Figure 1: Wildlife Refuge areas relative to the wider estuary



## Exe Estuary

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Figure 2: Dawlish Warren Wildlife Refuge area

Proposed Dawlish Warren Wildlife Refuge (all year, all tidal states)



Start datum (NGR SX 97802 80423) at Cockwood Steps / railway crossing which establishes the start of the boundary line, runs easterly to the south-eastern tip of the wreck (NGR SX 98048 80414), then south-easterly along the mean low water mark to the defined landing area (NGR SX 98989 80204), follows the defined landing area south to the mean high water mark (NGR SX 99026 80139) then follows the mean high water mark along the sand spit back to the shoreline (NGR SX 97924 78932), then follows the shoreline (mean high water mark) back to the start datum (NGR SX 97802 80423).

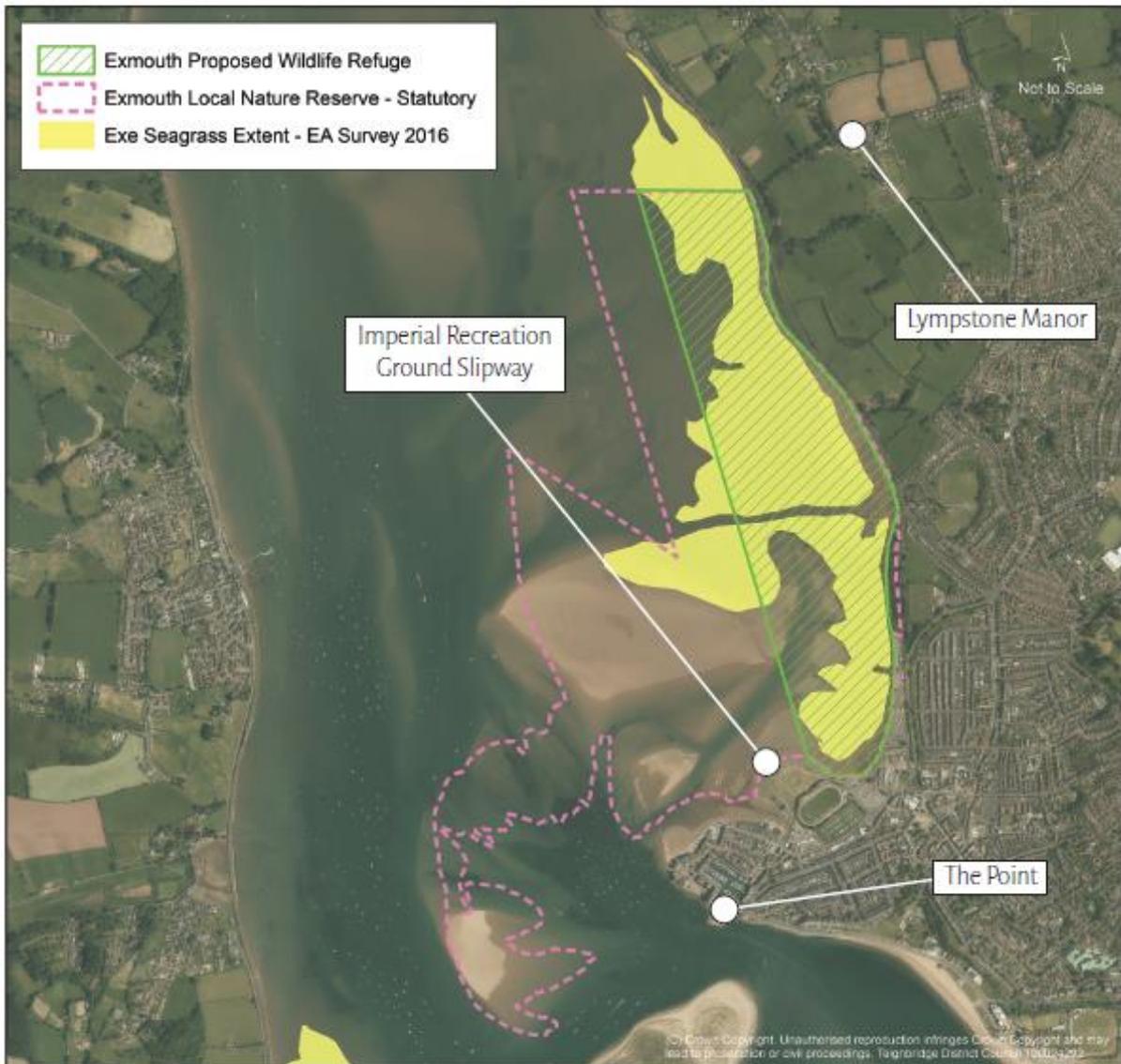
- For dog walking: statutory exclusion already in place through byelaw.
- For low tide activities (e.g. angling, bait digging, walking):
- On the foreshore, stay left of line between Cockwood Steps and the southern tip of the wreck.
- For high tide activities (e.g. canoeing, dinghy sailing, SUP):
- Buffer zone for water-based activities, which comes in from the boundary outlined above (and therefore the navigation channel) by 100m, until the mouth of Shutterton Creek, where the boundary re-joins at the mean low water mark (NGR SX 98697 80008).

## **Dawlish Warren Wildlife Refuge: Other considerations**

- Current Angling Voluntary Exclusion Zone superseded by new Dawlish Warren Wildlife Refuge.
- Continued access for Eales Dock via Shutterton Creek, with a voluntary agreement to promote responsible use of the VEZ to users of the dock.
- Nine existing crab tilers will continue to work under permit in the northern part of this area, in adherence to the Inshore Fisheries and Conservation Authority (IFCA) byelaw and following robust and updated codes of conduct.
- Official survey work by statutory authorities (or those with permission from these bodies) is unaffected by the refuge.

Figure 3: Exmouth Wildlife Refuge area

Proposed Exmouth Wildlife Refuge (mid-Sept to end-Dec, all tidal states)



Start datum (NGR SX 99660 81171) at the Imperial Recreation Ground establishes the start of the boundary line, which runs northerly to the northern limit of the Local Nature Reserve (NGR SX 99084 83101), then easterly to the shoreline (NGR SX 99463 83101), then follows the shoreline (mean high water mark) back to the start datum (NGR SX 99660 81171).

Dog walkers are to turn left when accessing foreshore from the Imperial Recreation Ground slipway. This allows for a buffer zone for feeding and roosting birds, as dog walkers with their dogs off lead on the intertidal caused the highest percentage of major flights from all the observed potential disturbance events. The slipway is also an easy reference point to communicate to the high number of dog walkers that visit the area. This buffer zone also includes other low tide activities, such as walking and bait digging.

## Exmouth Wildlife Refuge: Other considerations

- Current Kitesurfing Exclusion Zone superseded by new Exmouth Wildlife Refuge
- Water skis have continued use within their designated area, where the 10 knot speed limit can be exceeded, as set out in byelaw 5a.
- Wildfowling to have continued use of areas on Exe, including within the Exmouth Wildlife Refuge, as agreed through consent with relevant authorities who grant lease agreements. Activity is tightly controlled through regulations, agreements, tests and permits.
- Continued angling from area on shore adjacent to Exmouth Wildlife Refuge, i.e. 'The Gate / Field'. However, anglers to avoid entering Exmouth Wildlife Refuge by boat.
- Official survey work by statutory authorities (or those with permission from these bodies) is unaffected by the refuge.

The outputs of this study will be used to inform management advice in respect of delivering adequate and effective mitigation to ensure no net impacts to internationally important wildlife sites as a result of increasing recreational pressures.

This study will contribute to the delivery of the South-east Devon European Site Mitigation Strategy by providing a measure of the success or failure of a voluntary approach to addressing the impacts of recreation to designated bird species on the Exe Estuary SPA.

### Location & timeframes:

The study boundaries are as shown in figures 1-3 above and as described, where the Dawlish Warren Wildlife Refuge applies all year. The Exmouth Wildlife Refuge applies from 15 Sept – 31 Dec but the study should also include surveys either side of this period, when SPA designated bird species are present.

### Methodology:

Tenders should allocate effort and costs against each of the components set out below. The successful tender will need to include supervision from the start by a suitably experienced researcher so that the data collected is of sufficient quality that it can withstand rigorous scrutiny – and to employ suitably experienced staff to collect the data.

Tenders should also address how they propose to take into account the original Footprint report (28 counts of people and activities on the estuary between 28/12/2009 and 02/04/2011). Additionally, (if appropriate) the tender should also look to incorporate the results of other monitoring by the Exe Estuary Management Partnership (2016) and Teignbridge District Council Rangers (2009-2017).

- 1) **Existing data.** This study should seek to draw upon existing data concerning waterbird distribution, movements and disturbance within the areas of study and across the wider Estuary. The Exe Disturbance Study (2011) by Footprint Ecology will be a key source of information, as well as data from WeBS. Baseline information for both refuges is available from the Disturbance Study.

The study should adopt a methodology that allows direct comparison with that used for the Exe Disturbance Study. This will effectively extend the data set, facilitating statistical analysis.

## 2) Survey

The survey should enable the following questions to be answered:

- 1) How well are the Wildlife Refuges adhered to in general?
- 2) Are the Wildlife Refuges working to reduce disturbance to the designated bird species on the Exe?
- 3) Have the Wildlife Refuges positively affected the ability of the Exe Estuary to support designated bird populations? I.e. if a reduction in disturbance is observed, is this enough to conclude no adverse effect on site integrity for the SPA features?
- 4) If there is an insufficient reduction in disturbance to conclude no adverse effect on site integrity for the SPA features, what further actions in these areas can be taken to avoid and minimise the disturbance to waterbirds from recreational activities?
- 5) Do any particular activities continue to cause disturbance within the refuges?

The Habitat Regulations Delivery Manager can help to coordinate the work of the Habitat Mitigation Officers to assist in additional surveys to ensure as comprehensive a dataset as possible, and gain permission from relevant reserve managers.

### Management

The Study will be overseen by the Habitat Regulations Officer Working Group, who advise the Habitat Regulations Executive Committee. The successful tendering organisation will meet with the Office Working Group at the start of the contract to agree on the work to be undertaken and subsequently at appropriate intervals on no fewer than 4 occasions per calendar year. They will also be expected to attend one meeting of the Habitat Regulations Executive Committee per calendar year (July) in order to present the results of the annual monitoring & overarching review reports.

The main point of contact will be the Habitat Regulations Delivery Manager on 07890 626 291 or [nharris@eastdevon.gov.uk](mailto:nharris@eastdevon.gov.uk)

### Budget

Provision of up to £10,000 per year (£30,000 total) has been made at this time for the study.

### Output

The study will produce two annual reports, one in March 2019 and one in March 2020. It will also produce an overarching review report in March 2021 (which also comprises year 3 survey results). All reports will be made available electronically and by hard copy, which will provide the information required by this brief (or amendments made to it as agreed between the Consultants and the Officer Working Group) and will provide 8 copies of these to the Officer Working Group in an annual meeting with them no later than 31<sup>st</sup> March in each respective year.

### Key deadlines:

Tender applications: Mon 13<sup>th</sup> November 2017

First meeting with Officer Working Group: Fri 24<sup>th</sup> November

**Start of contract: January 2018**

**Key survey periods: Jan 2018 to Jan 2021**

## Key reporting periods:

1<sup>st</sup> Draft Annual Report to Officer Working Group: March 2019

1<sup>st</sup> Final Annual Report to Officer Working Group: April 2019

Then yearly according to the same timeframe, until

Draft 3 Year Review Report: March 2021

Final 3 Year Review Report: April 2021

The consultant is responsible for preparing Risk Assessments for all survey work. Copies should be made available to the Officer Working Group.

The consultant must have public liability insurance and evidence of this must be provided on acceptance of the contract.

You are invited to submit a written quote by 9am on Monday 20<sup>th</sup> November 2017. Please submit this quote to Neil Harris, Habitat Regulations Delivery Manager, c/o East Devon District Council, Knowle, Sidmouth, EX10 8HL or nharris@eastdevon.gov.uk

Please provide a quote for those elements of the study which are achievable within the limit of £10,000 per year, giving clear reference to those elements. If necessary, please provide a quote for any additional elements and what additional cost would be required.

Parameter	Description	Objective
Duration	DW: Year round, emphasis from August-March. EX: 15 Sept - 31 Dec (periods outside this range to be agreed). Start: Jan 2018 End: Jan 2021	To collect data specific to the operation of the refuges. To understand whether the refuge at Exmouth operates when important bird populations are present.
Activity monitoring	The survey should record all forms of recreational disturbance, identifying those activities which continue to cause the most disturbance.	To determine the level of recreational disturbance in the refuges before & after they are established.
Categorisation of observations of effects on waterbirds.	To adopt a methodology that allows direct comparison with that used in the Exe Disturbance Study.	To be consistent with and contribute to the existing dataset.
Survey cover	Surveys should be planned to reflect waterbird distribution and behaviour/activities in the Wildlife Refuge areas: Through the tidal cycle Through the diurnal cycle Through the season At varying use levels (e.g. weekends, bank holidays; optimal conditions for recreational activities).	To ensure that the survey reflects the range of normal variations in conditions on the estuary which may impact on disturbance.
Observations of bird response	To adopt a methodology that allows direct comparison with that used in the Exe Disturbance Study	To be consistent with and contribute to the existing dataset.

## **Assessment of quotations:**

Quotations received will be judged using the following criteria:

Methodology proposed

Ability to meet the essential study components within budget

Experience and suitability of project team

Ability to compete within the stated timetable

Quality of the submission and interpretation of the brief

In the event that two or more tenders achieve similar scoring, a shortlist of applicants will be invited for interview with the Officer Working Group in order to discuss their tender.

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