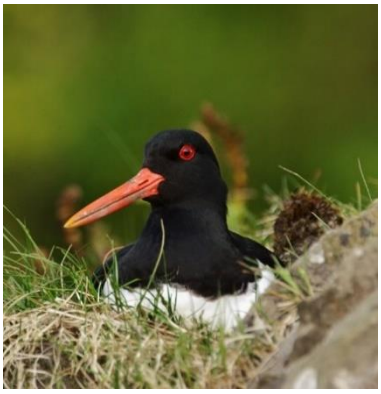
# ParkLife Project

## Monitoring guidelines





April 2020

# Introduction

Thank you for taking part in the ParkLife project. The project builds on discussions on future agri-environment schemes, and how to support both farmers and nature on farmland.

Farmers and crofters play a significant role in maintaining good habitats for curlew, lapwing, oystercatcher, redshank and snipe breeding on inbye land. This spring, you will carry out surveys on your land to gather data on waders and their habitats. The information you collect will help identify management practices that create good quality habitats. It will be used to write and share local best-practice habitat management guidance. We will also work with you to create a simple scorecard that measures quality of wader habitat on Shetland farms/crofts in a fair and consistent way.

Whether you already have a good knowledge of the birds on your land, or this is new to you, we hope you find the surveys interesting and enjoyable.

## Content

- Monitoring overview and checklist
- Wader survey guidelines
- Habitat survey guidelines
- Vegetation examples
- A sample recording

We will give you further guidance on surveying plants in early June and contact you to give you an update on soil sampling and worm surveys.

## Contact

For questions or comments on monitoring, contact Nathalie Pion, RSPB Conservation Adviser.
Email: nathalie.pion@rspb.org.uk, mobile: 07721759823.

# ParkLife Monitoring Overview

ParkLife is a pilot project. We are testing how monitoring and management of wildlife and wider farm environment could be integrated into farm management in the future. We are keen to hear your ideas on how this could be done better and any suggestions are welcome.

Select a minimum of 5 fields/areas on your land (inbye and/or improved apportionment) with a range of conditions and management (e.g. silage park, improved or semi-improved grazing with sheep and/or cattle, rough grassland, wetland). This is so there is a variety of habitats surveyed. If you manage a large unit, you can select one area to focus on. It will be more useful to collect information from repeat surveys in a smaller area than one or two visits during the season covering an extensive area. Get in touch if it applies and we can help you select survey areas.

The wader and habitat surveys should be relatively straightforward. Keep the recording sheets and measuring stick close to hand and fill out the information as you go. You will need to set aside some time for the plant survey.

For good practice, let someone know where you are and when you are expected back, and carry a mobile phone. You are welcome to enlist family members to help. A team comprising an observer and a note-taker can speed up the surveys.

Recording sheets and blank maps are available for all the monitoring tasks. You can either keep your recording sheets and maps in a safe place and return them all at once at the end of the season or send them back after each survey.

We encourage you to take and send us photos of the areas you survey.

## Mapping

Log into your account in the Rural Payments and Services (RPS) website. Go to Locations > Map and click on the printer icon. Choose 'Print selected parcels', then click 'Save to File'. Send the file to nathalie.pion@rspb.org.uk. We will return blank survey maps at a suitable scale. If you don't use the RPS website, please get in touch.

## Monitoring checklist

**Wader surveys**

☐ 18 April - 8 May

☐ 9 May - 29 May

☐ 30 May - 19 June

☐ 20 June - 10 July

**Habitat surveys**

☐ 18 April - 8 May

☐ 9 May - 29 May

☐ 30 May - 19 June

☐ 20 June - 10 July

☐ **Plant survey** (15 June - 31 July)

☐ **Farm management diary**

☐ **Records of predators**

## Farm management diary

Note in the calendar sheets any movement of livestock (number and field), silage cut etc in survey areas. The information should give an indication of the type of management practices happening during the bird breeding season.

## Predator records

We are interested in any evidence of the presence of wader predators on your land (e.g. polecat ferret, hedgehog, otter, rat, stoat, gulls, crows, ravens…). Record on the sheet where and when you see them. You can either mark the location on a blank map or use an app to find the grid reference (e.g. OS Locate).

# Wader survey

## Objective

To estimate the number of curlew, lapwing, oystercatcher, redshank and snipe breeding in each inbye field.

## Method

**You need**

- A Wader Recording Sheet
- A blank map of your land
- A clipboard and pencil
- Binoculars, if available

**Survey method**

Recording frequently the presence and absence of waders between April and July will give us an indication of the species and numbers of birds using your land for breeding. Try and survey your fields at least once every 3 weeks and more often if you can. The data you collect will be used to create a summary map of assumed bird territories on your land for the season.

For each visit, walk around the field following the fence line and use vantage points to get a good view over the area. Mark and number on the map the location of birds you see or hear and fill out a line on the recording sheet. If your map is getting crowded, use another copy. Remember to label them (map 1, 2 etc) and note the number on the accompanying recording sheet.

**Guidelines**

- If you see a bird on the ground or on a fence post, mark the location. If it is flying, only record it if it is displaying, or calling/alarming and flying around the area, and note the location as the approximate centre of the flight. If it is flying over the field, you don't need to record it.

- Try and avoid double-counting. If you see a bird moving between fields, only record it once – in the first location you see it. Late in the season, it can get confusing when birds start to gather in flocks. Estimate numbers as best you can. Information from earlier visits will help understand what may be occurring.

- Waders tend to be most active at dawn and dusk. You are more likely to see and hear them then. Avoid surveying in cold, wet and windy conditions.

- The absence of bird is valuable information. If you have checked an area and didn't see any bird, note the date and field number, and tick the box 'No bird recorded'.

**Disturbance**

When out surveying, keep disturbance to a minimum in areas where you have noticed bird activity. There is no need to search for nests or get close to birds.

Waders nest in scrapes on the ground and lay up to 4 eggs. From April until the end of June, disturbance will cause parents sitting on a nest to leave the eggs unattended and exposed to predators. Once hatched, chicks start leaving the nest and feeding themselves on small insects within a day of hatching. At that time, they are highly vulnerable to predation. The parents remain with them and will attempt to drive predators away.

If you happen to find a nest or notice chicks, move away quickly so the parents can come back to them. Optionally, you can record the location of nest or chicks later.

# Habitat survey

## Objective

To describe field characteristics that are important for waders: vegetation structure and ground wetness.

## Method

You need

- A Wader Habitat Survey Sheet for each field/survey area
- A measuring stick marked with 5 cm intervals or ruler
- A clipboard and pencil

Each species has different preferences. For example, lapwings favour short grassland with occasional tussocks and redshanks nest in tall tussocks and feed in short vegetation in wet areas.
The characteristics are likely to vary during the season so please repeat the measurements once a month between April and July.
If you are unsure, take a photo and do not hesitate to send it and ask for guidance.

**Field overview**

If the fenced area contains clearly distinct areas of vegetation, mark on the map the approximate boundary and survey each area separately.

Find a place where you have a good view of the whole survey area. Look around you, and answer the following questions:

1. Is the sward uniform in structure, or is there a variety in height and vegetation density?
2. Are there tussocks? If the answer is yes, are there a few, dispersed in the field (scattered), or are there many, throughout the field (frequent)? A tussock is a small patch or clump of vegetation which is longer and thicker than the vegetation around it.
3. Which wet features are present in the field: burn, open drains, scrapes and loch or pond? A scrape is a shallow pool with muddy edges. You can write in the Notes box if they are holding water, or if they are dry.

**Sample points**

In each field, you will measure the sward height and assess sward density and ground wetness at 10 different locations. Before starting the survey, plan your route. Aim to roughly follow a W-shape, so that your records will provide a good description of the various characteristics of the field (for example, make sure you have records from the top to the bottom of a slope).
If the sward and ground condition are uniform across the field (for example, in a silage park), you don't need to measure 10 points. Take measurements on 2-3 points.

a. <u>Sward height</u>

Place your hand horizontally on the sward at the level below which most of the vegetation is growing, ignoring tall stalks. Using a ruler or a measuring stick marked with 5 cm intervals, measure the distance between the ground surface and your hand. Tick the appropriate height interval on the recording sheet.

b. <u>Sward density</u>

Select the best description for the location point and tick on the recording sheet:

- **Bare/sparse:** the soil is visible, the vegetation is thin and doesn't cover the whole surface, and you can tell individual plants apart.
- **Open:** the soil surface is not visible but you can easily reach it with your stick, the vegetation covers the whole surface.
- **Dense:** the soil surface is not visible, and you can't reach it with your stick without pushing through the sward. Dead plant matter may have built up.

c. Ground wetness

Select the best description for the location point and tick on the recording sheet:

- **Dry:** The ground is dry and hard, it would be difficult to probe with a spade.
- **Soft:** The ground would be easy to probe and it gives slightly under foot.
- **Damp:** The water level is at or just below the ground surface and squelches when walking on it.
- **Surface water:** The water level is above the ground surface.

d. Examples

*Short, open sward*

*Tall, open sward*

*Medium length sward with scattered tussocks*

*Tall, dense sward*

*Muddy patch, sparse vegetation*

*Frequent tussocks*

## *Example Wader Habitat Survey Sheet (Field 1)*

(There is no need to record the location of survey path/points on a map)

### Wader Habitat Survey Sheet

Farm/croft name: Example croft | Surveyor: Example | Date: 5/5/20

Field: 1

Field overview

- ☐ Uniform sward
- ☑ Mixed sward
- ☐ No tussocks
- ☑ Scattered tussocks
- ☐ Frequent tussocks

Wet features

- ☐ burn
- ☐ open drain
- ☐ scrape or shallow pool
- ☐ loch or pond

| | Sward height (cm) | | | | Sward density | | | Ground wetness | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-5 | 5-10 | 10-15 | >15 | Bare/ sparse | Open | Dense | Dry | Soft | Damp | Surface water |
| Point 1 | | X | | | | X | | | X | | |
| Point 2 | | X | | | | X | | | X | | |
| Point 3 | X | | | | X | | | X | | | |
| Point 4 | | | X | | | X | | | | | |
| Point 5 | | | | X | | | X | | | X | |
| Point 6 | | X | | | | X | | | | X | |
| Point 7 | | X | | | | X | | | | X | |
| Point 8 | X | | | | | X | | | X | | |
| Point 9 | X | | | | X | | | | X | | |
| Point 10 | | | X | | | | X | | | | X |

Notes

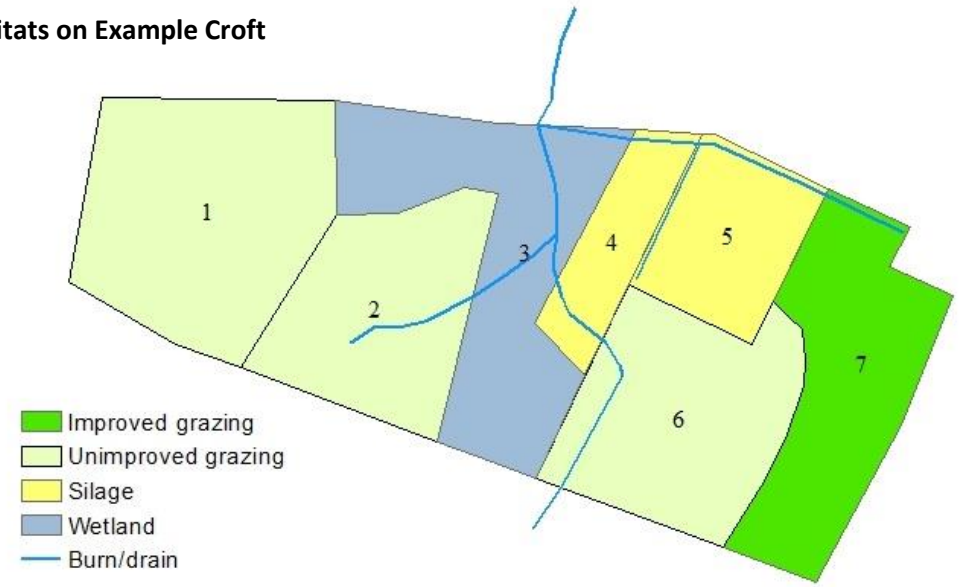
## *Example Wader Recording Sheet*

### Wader Recording Sheet

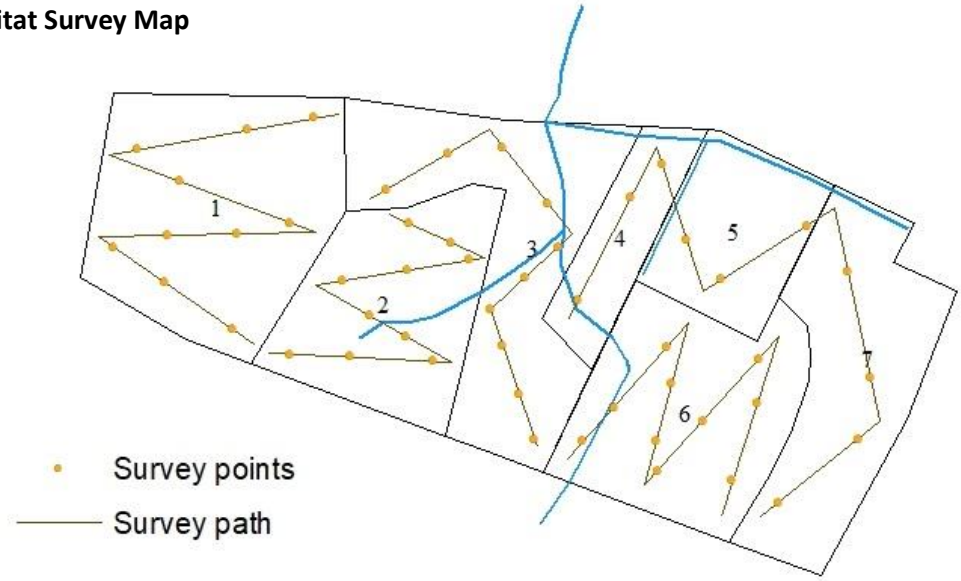
Farm/croft name: Example croft | Map number: 1

| Date | Field | No bird recorded | Curlew (CU) | | | | Lapwing (L) | | | | Oystercatcher (OC) | | | | Redshank (RK) | | | | Snipe (SN) | | | | Nest Eggs (Map location, species or ?, number) | Chicks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Map | Displaying Calling Alarming | Feeding | Other/ unknown | Map | Displaying Calling Alarming | Feeding | Other/ unknown | Map | Displaying Calling Alarming | Feeding | Other/ unknown | Map | Displaying Calling Alarming | Feeding | Other/ unknown | Map | Displaying Calling Alarming | Feeding | Other/ unknown | | |
| 2/5/20 | 1 | | 1 | 1 | | | | | | | | | | | | | | | | | | | | |
| 2/5/20 | 2 | | | | | | 2 | 2 | | | | | | | | | | | | | | | | |
| 2/5/20 | 3 | | | | | | | | | | 5 | 1 | | | 3 | 2 | | | 4 | 1 | | | | |
| 2/5/20 | 4 | X | | | | | | | | | | | | | | | | | | | | | | |
| 4/5/20 | 5 | X | | | | | | | | | | | | | | | | | | | | | | |
| 4/5/20 | 6 | | | | | | | | | | 6 | | 4 | | | | | | | | | | | |
| 4/5/20 | 7 | X | | | | | | | | | | | | | | | | | | | | | | |
| 18/5/20 | 1 | | 7 | 2 | | | | | | | | | | | | | | | | | | | | |
| 18/5/20 | 2 | | | | | | 8 | 2 | | | | | | | | | | | | | | | | |
| 20/6/20 | 1 | | | | | | | | | | | | | | | | | | | | | | | (9) ? 1 |

**Habitats on Example Croft**




**Habitat Survey Map**




**Wader Recording Map**

Map number 1