# WS1- Exclosure Plot Guidance

Contents

[WS1- Exclosure Plot Guidance 1](#_Toc126064078)

[Revision History 1](#_Toc126064079)

[Introduction 1](#_Toc126064080)

[What are Deer Exclosure Plots? 1](#_Toc126064081)

[Countryside Stewardship WD2 and WS1 design 2](#_Toc126064082)

[Siting Exclosure and Control Plots 2](#_Toc126064083)

[Monitoring and Recording 3](#_Toc126064084)

[What to record on the Exclosure Record form 3](#_Toc126064085)

[Interpretation, Summary, and Reporting 3](#_Toc126064086)

## Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| Date  | Version  | Comments  | Sections updated  |
| 20.01.2022  | Draft  |   |   |
| 26.01.2022  | V1  | Reformatted into FC standard template |  Aesthetic changes only |
| 11.01.2023 | V2 | Content review | All - minor text changes |

Author/Who to Contact?

Jamie Cordery

## Introduction

Monitoring the effect that deer have on a habitat is an important way of informing deer management and impact mitigation strategies.

Exclosure plots can be used alone or with other methods to help understand current levels of impact across a site and to monitor how impacts change with time. They are a required component of Countryside Stewardship WD2 and WS1 where deer are identified as an issue.

## What are Deer Exclosure Plots?

An exclosure prevents deer grazing/browsing in a representative area of a habitat and is used to demonstrate, for a period of a few years, the difference in impacts between areas with no grazing/browsing (inside exclosure) and adjacent grazed/browsed areas (i.e. the “control” area outside the exclosure). This gives an indication of the effect that deer are having on the potential growth of a habitat.

## Countryside Stewardship WD2 and WS1 design

WD2 grant aided exclosures must be 4x4 metres square, a minimum of 1.5m high and erected using deer fencing. These are suitable for all deer species.

The WS1 supplement can use the same design or any of three alternatives as agreed with your Woodland/Deer Officer:

• a 1.2m high, 2.4m by 2.4m weldmesh square of the “Gengard” type

• a minimum 1.4m high, approx 8.3m circumference circle using 50mm square weldmesh, minimum 12 gauge (2.5mm), with two stakes, one at the closure.

• Three or four security fence panels of the “Heras” type, min 3.45m long by 2 m high with a maximum of 50mm between the mesh verticals.

All designs are available as [FG11](https://www.gov.uk/countryside-stewardship-grants/deer-exclosure-plot-fg11) capital items.

## Siting Exclosure and Control Plots

To ensure adequate coverage of the woodland/holding, the design, number and general location of exclosures will be agreed with your Woodland/Deer Officer. Within a woodland it is best to place them where they will demonstrate the most obvious difference between browsed/non-browsed situations rather than use randomly generated plots. The sites chosen will often be in good potential growing conditions where the contrast between grazed and ungrazed is likely to be highest. For the purposes of WS1 supplement exclosures must be erected within the first year and before the start of the growing season usually by the end of March.

Easily accessed, reasonably level sites are more likely to be well monitored and are the easiest on which to erect exclosures but the temptation to put all exclosures immediately next to convenient vehicular/pedestrian access should be resisted because these sites may not be representative of the wood as a whole or may be commonly used by people, and if so, may be avoided by the deer.

Under WS1, deer activity/impact monitoring surveys will be carried out in the same woodland, place exclosure plots somewhere along or close to the survey route so that the exclosure plots can be checked during the impact survey.

Each exclosure must have an adjacent or nearby “control” area of equivalent size and habitat.

Control plots should be marked using a wooden post or using a natural landmark. Either will help to orientate fixed point photographs when monitoring. Situating control plots a short distance (up to a few metres) away from the exclosure plot avoids the possibility of trampling by human/animal activity immediately around the exclosure.

Each exclosure must have a code/name, date of establishment, and map/GIS reference, all of which should be noted on the Exclosure monitoring form.

## Monitoring and Recording

Monitoring usually requires a single visit and ideally should take place in Spring, say, late March/early April. If late emerging/flowering plants are important to the site it may be necessary to return for a second visit when they are most evident, adding the results to the previous survey.

Precise repeat timing is not critical but visiting at a consistent stage in the annual stage of growth of the habitat (rather than a calendar date) makes interpretation easier.

Minimum requirements for WS1 are:

Year 0-1: Erect exclosure and establish control plot. By the end of April record habitat condition in both and take fixed point photo(s) to compare exclosure and control (there is unlikely to be much difference). Summarise exclosure findings by end year 1 in a [Deer Survey Report](https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fassets.publishing.service.gov.uk%2Fgovernment%2Fuploads%2Fsystem%2Fuploads%2Fattachment_data%2Ffile%2F1052905%2FWS1_Deer_Survey_Report_Guide_.docx&wdOrigin=BROWSELINK), together with findings from the relevant habitat impact and activity assessment for the woodland.

Years 3 and 5: Repeat the recording (in Spring) and report.

You may wish to monitor on an annual basis for interest.

## What to record on the [Exclosure Record form](https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fassets.publishing.service.gov.uk%2Fgovernment%2Fuploads%2Fsystem%2Fuploads%2Fattachment_data%2Ffile%2F1052900%2FWS1_Deer_Exclosure_Record_Form.docx&wdOrigin=BROWSELINK)

* Average height of the total plant assemblage in/out
* Height of indicative plant species in/out (species chosen will vary with site)
* Number (count) and type (list) of plant species found in/out
* Estimate of flowering/seeding success by species (e.g. % flowering, height of flowering stem, comparative size of flowers)
* Summary of Difference is a qualitative measure of the extent of the difference between growth inside the exclosure and outside.
* Comments will relate to any other significant issues.

A Fixed point photograph of the labelled exclosure showing both in/out (either in a single photo or small series) is required for each date surveyed and will be included in the Deer Survey report.

## Interpretation, Summary, and Reporting

The Summary of Difference measure is a qualitative assessment of the difference between the exclosure and control plot using surveyor experience and the features noted on the record form.

Exclosure Record sheets must be retained for the grant period.

For WS1 purposes the Summary of Difference measure, plus significant comments based on the record sheet are reported in the [Deer Survey Report](https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fassets.publishing.service.gov.uk%2Fgovernment%2Fuploads%2Fsystem%2Fuploads%2Fattachment_data%2Ffile%2F1052906%2FWS1_Deer_Survey_Report_Template_.docx&wdOrigin=BROWSELINK). This must be submitted electronically to the FC Deer Officer as soon as possible after completion and certainly by the end of years 1, 3 and 5 of the agreement.