

PRINCIPLES



Aim

The Habitat Impact Assessment (HIA) guides show how to collect and interpret habitat data to inform and demonstrate responsible deer management, both for individual properties and landscapes. HIA guides cover habitats that are directly related to deer management. This guide:

- ◆ Explains why deer managers should undertake habitat impact assessment;
- ◆ outlines the steps involved in HIA.

Introduction

A **habitat** is an environment characterised by a specific set of conditions and communities of organisms. Herbivores such as deer have **impacts** on habitats which can be observed and measured. Impacts can influence habitat **condition**, both in terms of its biodiversity, and its ability to support deer.

Impacts are not always negative, occasional browsing stimulates some plant growth, browsing of dominant species may allow others to thrive.

Impact is classed as high, medium or low depending on how frequent it is, how much of the plant is removed, how sensitive it is, and how many plants are affected. If impact is LOW, species may remain stable or increase in abundance. If impact is HIGH,

plants may decline in size, stop flowering, or die, the habitat may be regarded as being in poorer condition and/or may change to a different type of habitat.

Condition is the result of the sum of impacts and influences on the habitat over years, while **impact** is an observable current effect. **Impact assessment** allows prediction of habitat change, based on impacts.

The benefits of measuring impacts

The main reasons for assessing or understanding how to assess habitat impacts are:

- ◆ **Understanding current impacts and monitoring trends.** Measuring and recording deer and other herbivore impacts enables deer managers to determine effects on habitat condition, deer, and other species, and whether land management objectives are being achieved.
- ◆ **Understanding the food resource for deer.** Grazing levels affect the food resource available to support a healthy population of deer and this resource changes over time.
- ◆ **Collaborative management.** By using a standardised Habitat Impact Assessment methodology, Deer Managers can share



information as part of effective collaborative deer management across deer management units.

- ◆ **Delivering the public interest.** The Code of Practice for Deer Management¹ identifies areas of public interest including Protected Areas, woodlands and where wider biodiversity responsibilities apply (see BPG Statutory Guides^{*}). Government agencies

monitor deer impacts and HIA assessment enables deer managers to have evidence based discussions with them.

- ◆ **Adding Value.** Informing stalking guests about deer impacts, HIA, condition and monitoring, increases understanding and involvement, adding value to the stalking day; see BPG Working with Clients ^{**}.

Steps to Implementing Habitat Impact Assessment

Step	What needs to be done	Relevant BPG Guide
Principles and Planning	Understanding impacts and why they are measured Identifying habitat types and planning surveys Identifying equipment and skills needed. When, how often, who monitors and how results are recorded	Principles Principles in Practice
Fieldwork	Locating plots, checking habitat type, and laying-out the plot. What and how to measure.	HIA guides for specific habitats
Data analysis	What to do with the data and how to present it.	Analysis Guides for the specific habitats
Interpreting, and informing management.	The significance of results. How they are used to inform management decisions	Interpretation and Management Actions

Understanding the methodology

The HIA Guides are based on standard methodologies² used by government agencies.

The planning and establishment of the first (baseline) assessment will take time, repeat monitoring is quicker and fits more easily into existing work.

Land and deer managers will find methods straightforward but some training is recommended. Where there are complex issues, or on protected areas* (SACs, SPAs and SSSIs)³, or where assessments support grant funding, it is recommended that professional advice is sought.

Habitat Impact Assessment and Deer Management Planning

Habitat HIAs, with other deer management information, can provide evidence to:

- ◆ Set culls and inform the deer management planning process
- ◆ Identify priority areas for management action
- ◆ Provide supporting evidence for funding applications
- ◆ Monitor deer management outcomes to support current management, or change practice.

3 Other information includes:

- ◆ Up to date and historic cull and count data
- ◆ Knowledge of deer and other herbivore distribution e.g. seasonal deer movement and routes.
- ◆ Population modelling (see BPG Setting Cull Targets ***)

* BPG Statutory Guides

** BPG People and Resources: Working With Clients

*** BPG Planning: Setting Cull Targets

1 Code of Practice on Deer Management. 2012. Scottish Natural Heritage. <https://www.nature.scot/professional-advice/land-and-sea-management/managing-wildlife/managing-deer/code-practice-deer-management>

2 Guide to Upland Habitats, Surveying Land Management Impacts. (1998) Angus Macdonald, Penny Stevens, Helen Armstrong, Philip Immirzi and P Reynolds. Scottish Natural Heritage. <https://www.nature.scot/guide-upland-habitats-surveying-land-management-impacts-volumes-1-and-2>

3 Protected areas <https://www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/protected-areas>