

North Harris Trust  
Deer Management Plan  
2022-2032



## Summary

The North Harris Trust aims to maintain a healthy resident population of around 1000 red deer on the North Harris Estate, striking a balance between the various environmental, socio-cultural and economic considerations in relation to deer management in North Harris.

## Purpose

The purpose of this document is to communicate the North Harris Trust's model for the management of the red deer population on the North Harris Estate to key stakeholders and the wider community. It comes in the context of the expiry of a 5-year plan for Deer Management on the North Harris Estate which ran from 2017-2021. Given the timescales over which land management actions take effect, a longer 10-year plan was decided upon.

## Policy Statement

The red deer of North Harris are an important part of the local natural heritage. They have a significant impact on native habitats and species through their grazing and trampling effects and bring a range of opportunities through tourism, stalking and venison.

Although deer calves provide a food source for resident eagle populations, adult deer have no natural predators, and therefore active deer management is vital to prevent damaging economic and environmental impacts.

The North Harris Trust employs Wild Deer Best Practice methods and where possible works collaboratively with stakeholders, to manage deer populations in a way that ensures a benefit for all.

## Context

Located in the Western Isles, North Harris Estate covers just under 26,000 ha to the north of the village of Tarbert, Isle of Harris, extending from the Caolas an Scarp in the west to Loch Seaforth and the Isle of Scalpay in the east. To the north it is bounded by Loch Reasort and extends along the border between Harris and Lewis. The area is mountainous; the ground rises from sea level to a maximum height of 799m at the summit of An Cliseam. Red deer are the only deer species in North Harris and the wider Western Isles. The islands are a recognised refuge for red deer and the introduction of other deer species is prohibited.

While the inbye land of the sixteen crofting townships in North Harris offer improved or semi-improved grazing lands, most of the land is unimproved and presents a mosaic of wet heath, mires and upland habitats. On the lower ground the area is broken with numerous acid and nutrient-poor lochans while the steeper, more freely draining slopes support alpine and subalpine grasslands and heath. On the western fringe, there are swathes of machair along the coast. Notably, native woodland habitat is almost entirely absent from the habitat assemblage, being restricted to small fragments on crags, gullies and islands where it is protected from grazing impacts.

The western half of the estate has various overlapping environmental designations (see Annex D for more information) which recognise the unique value of the habitat mix found in North Harris and some of the scheduled species which rely upon it. An important consideration of this plan is that deer densities should be managed in a manner which permits the healthy flourishing of all native habitats and dependent species in the area.

Various direct deer counts have been taken over the last 30 years in North Harris (data summarised in Annex B), these counts have returned figures ranging from approximately 700 up to around 2500 individuals.

A low helicopter count of 695 animals was returned in 2019, which was used as a baseline to inform cull figures through to 2022. As Covid struck during this period, it was not possible to undertake follow up direct counts. Unbeknownst to the North Harris Trust, this led to three seasons of culling far below the recruitment level of the population, and a resulting growth in deer numbers.

The latest count was undertaken by helicopter in September 2022, the favourable weather conditions, good visibility, and clustering of deer led to a more accurate count of 2,530 individuals. This figure was far above what was expected and is an important reference point for this plan.

Distribution of deer over the estate is uneven, with a pattern of higher densities in the north and west (over 15 per 100 ha in some places), and much lower densities in the south and east (as low as 2 per 100 ha). All major rutting areas are found in the north and west and tend to be hind dominated in the summer months. Primarily stags are found in the south and east, usually in small groups or as individuals. This pattern is seen in observation, direct population count data and is supported by the results of Habitat Impact Assessments. It is understood that the population distribution has arisen in response to a combination of resource availability, historical sheep stocking densities and past culling patterns, including poaching.

There is a seasonal movement of stags within the estate from north-west in the summer/autumn to south-east in the winter/spring. Additionally, there is some crossover of both stags and hinds to the neighbouring estates to the north i.e. Morsgail and Aline, however natural barriers in Caolas Scarp, East Loch and West Loch Tarbert, and Loch Seaforth prevent significant migration elsewhere.

# Management Objectives

The North Harris Trust has a wide range of objectives which it seeks to achieve when undertaking deer management over the estate, they can be placed into the following categories:

## Environmental Objectives

- Maintain a healthy red deer population through selective culling that prioritises welfare cases, such as old, infirm or injured animals, over other objectives.
- Maintain and improve the designated habitats throughout the western half of North Harris, to achieve a desired classification of favourable condition under NatureScot's Site Condition Monitoring programme.
- Facilitate the establishment of native woodland habitat in the south-east of the North Harris Estate by excluding deer from this area through full in-season culls.

**Environmental Constraints:** The harsh climate and poor soil nutrient levels can only support slow growing plant communities that take many years to recover and/or re-establish, even when the correct grazing levels are achieved. Access to the north-western part of the estate is very limited complicating deer management in this area, especially for hind culls over winter with short day lengths and generally poorer weather conditions.

## Socio-cultural Objectives

- Reduce the impact of the deer population on the local community, with a view to increasing public safety and reducing impacts on in-by croft land and gardens.
- Facilitate opportunities for local people to safely and legally undertake stalking, and access venison.
- Improve public knowledge, understanding and appreciation for the North Harris red deer population, deer management and associated land management objectives.

**Socio-cultural Constraints:** Many crofting townships are adjacent to the deer forest, including unfenced common grazings, making it difficult to reduce deer impacts in these areas.

## Economic Objectives

- Ensure that continued effective deer management is economically viable for the Trust.
- Facilitate safe and affordable community access to venison.
- Support local employment through deer management.

**Economic Constraints:** These various economic objectives need to be carefully considered as they come into tension and not all can be easily delivered concurrently. Where the balance lies among these priorities will depend on local economic conditions and the wider Trust financial position.

# Management Zones

When implementing the various deer management objectives for the estate, it is useful for the North Harris Trust to divide the ground into management zones, within which several different deer management regimes apply. These are described and mapped below; boundaries between zones follow clear physical boundaries such as roads, tracks, fence lines, ridge lines, etc. wherever possible.

## Deer Forest Zone

Encompassing the entire North Harris Deer Forest and parts of five common grazings, this zone represents the core area for deer management in North Harris. With a total extent of 15,000 ha, the zone is defined as most of the estate ground to the north of the B887 and west of the A859.

This area has supported the majority of the North Harris deer population since records began. The target population for the zone as part of this plan is 900, i.e. a target density of 6 / 100 ha. These levels allow for the maintenance of a healthy red deer population, while facilitating the continued recovery of the designated native habitats in this part of the estate.

Additionally, given that there are no physical barriers and that there is a semi-contiguous deer population with the neighbouring estates to the north, i.e. Morsgail and Aline, the Trust would not wish to undertake reductions below these levels which might impact upon sporting interests. Deer management activity is instead coordinated and shared where possible, through bilateral arrangements with the Trust, and through the Lewis and Harris Deer Management Group, of which all are members.

An important consideration of this plan is that the deer population should be evenly dispersed over the ground to achieve the required density, with a targeted reduction of aggregations where high impacts are found. Monitoring of habitats and direct population and group counts are therefore key to successful management in the zone.

## Buffer Zone

Representing a transition away from the core deer forest zone above, the buffer zone extends over 3000 ha from West Loch Tarbert through to Loch Seaforth along a band of ground to the east of the A859 some 3 to 4 km wide, encompassing the area dominated by the Giolabhal, Sgaoth and Todun ridges and surrounding hills. This area shows a strong seasonal influx of mainly stags from the deer forest after the rut, with them gradually returning to the hinds in the west during late summer. The buffer zone attempts to limit this influx and encourage migration back west for the rut, while limiting pressure on other parts of the estate further to the south and east.

The intended population for the area is 100 stags in season, or just over 3 stags / 100 ha. Stag stalking pressure is more heavily targeted to the south and east of the zone to encourage movement back towards the west where possible. A resident hind population in this area runs contrary to the deer management objectives for the estate and therefore a full in season hind cull is implemented in this zone on an annual basis.

## Exclusion Zone

This 2000 ha south-eastern part of the estate has historically had a combination of higher sheep numbers and significant levels of poaching which means that a resident red deer population was unable to ever become established. Since 2014 the Trust has continued to exert a higher stag stalking pressure in this area, with the aim of creating the low densities that could facilitate native woodland habitat restoration from existing woodland fragments. This pressure was successful in reducing and maintaining densities at below 2 / 100 ha until 2021.

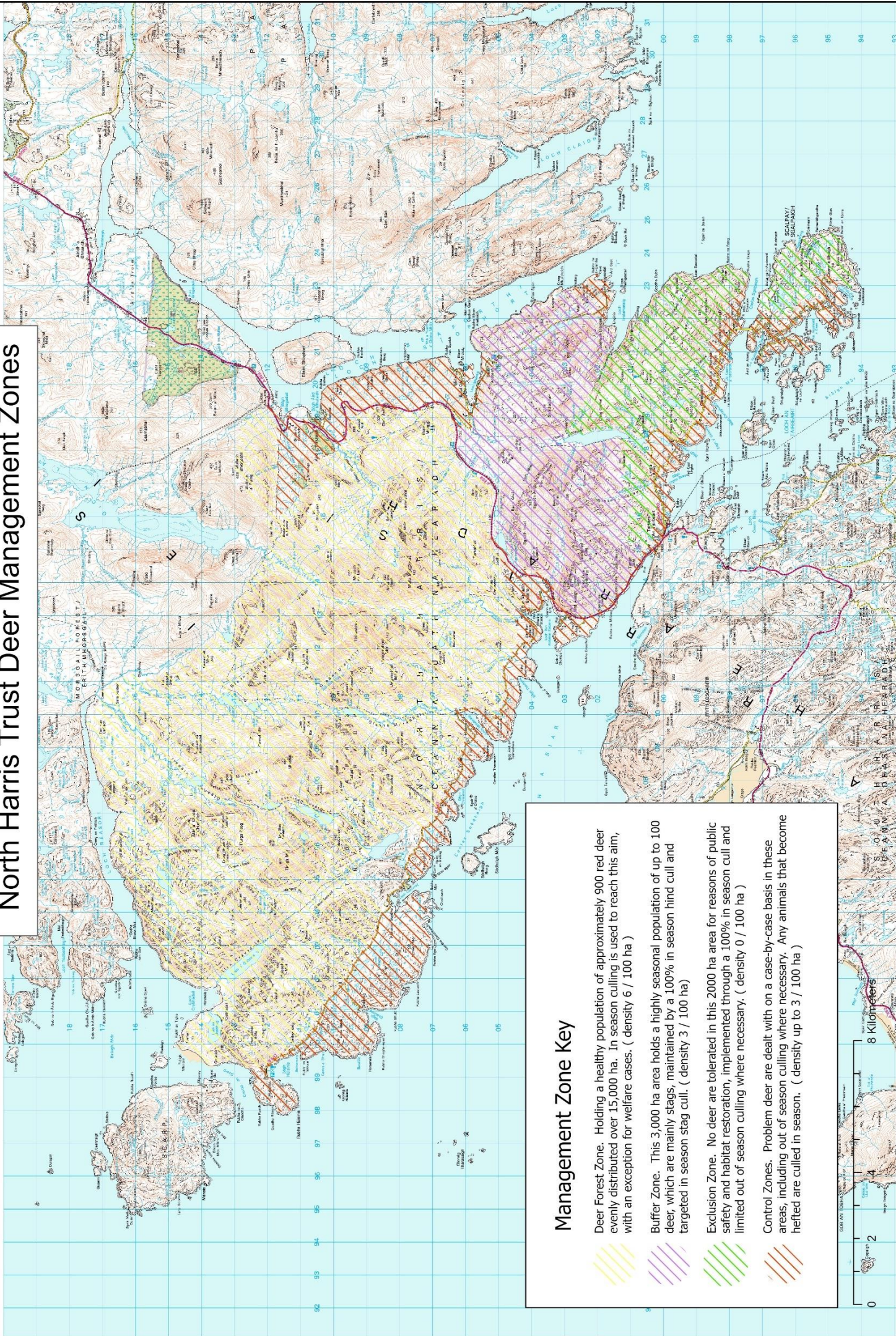
As almost 200,000 native saplings are to be planted in the area as part of a habitat restoration project running from 2022-2032, stalking effort in this zone is at zero tolerance for the duration of this plan, with the set target of the complete removal of all deer from the zone through a full in season stag and hind cull. Out of season culling will also be used to reduce impacts and ensure sapling establishment where necessary. In addition, this zone has the aim of reducing public safety issues in and around the village of Tarbert and surrounding townships.

## Control Zones





All townships, in-bye croft land and certain other areas adjacent to public highways are designated as control zones. An adaptive approach to deer management is undertaken in these areas, whereby problems are dealt with as they arise including culling animals when other solutions are not available or successful.

This encompasses a total of 5000 ha, made up of relatively small patches throughout the estate. It is envisaged that any cull required in these areas would be in the single figures in any given year and likely to consist mostly of stags causing significant damage or public safety issues. If hinds become hefted in these areas they will be prioritised for in season culling as part of the wider cull targets.

# North Harris Trust Deer Management Zones



## Management Zone Key

-  Deer Forest Zone. Holding a healthy population of approximately 900 red deer evenly distributed over 15,000 ha. In season culling is used to reach this aim, with an exception for welfare cases. ( density 6 / 100 ha )
-  Buffer Zone. This 3,000 ha area holds a highly seasonal population of up to 100 deer, which are mainly stags, maintained by a 100% in season hind cull and targeted in season stag cull. ( density 3 / 100 ha )
-  Exclusion Zone. No deer are tolerated in this 2000 ha area for reasons of public safety and habitat restoration, implemented through a 100% in season cull and limited out of season culling where necessary. ( density 0 / 100 ha )
-  Control Zones. Problem deer are dealt with on a case-by-case basis in these areas, including out of season culling where necessary. Any animals that become hefted are culled in season. ( density up to 3 / 100 ha )

# Management Activities

## Deer Management Participation

Although the North Harris Trust has the responsibility for deer management in North Harris, it does not undertake all stalking directly. Trust staff who stalk must be DSC1 qualified, have previous stalking experience and be registered as Fit & Competent with NatureScot. The arrangement for stalking often involves other parties in addition to the Trust, and much of the cull in North Harris is delivered through assigned deer leases.

## Population Assessment

Regular deer counts are undertaken by Trust staff. These provide useful estimates of the overall deer population, and the data allows for population trends, distributions and patterns to be determined. Spring recruitment counts are an important annual undertaking which are used to inform the next seasonal cull. Full population counts, helicopter counts, and other emerging technologies are used when available to provide more complete population estimates. A helicopter count was undertaken in September 2022 and provides an important baseline reference point for the duration of this plan.

## Population Modelling

Count data is collated and analysed through deer population modelling, which has been developed through working with deer consultants and represents the knowledge gained to date through monitoring, count data and habitat monitoring. Natural mortality rates are assumed to be 0.03 of summer populations, which reflects the severity of conditions and possible out-migration to Lewis (most Scottish models use a mortality rate closer to 0.02 as standard). Historical recruitment rates are highly variable, due to fluctuating annual conditions and other factors, but average around 0.3, i.e. approximately 30 surviving summer calves per 100 hinds per annum.

## Habitat Monitoring

Habitat monitoring is carried out over the estate on a regular basis and impacts recorded are used to inform density estimates and where culls should be targeted. It is a fundamental tenet of this plan, that management is adaptive and responsive to the results of ongoing monitoring. This is particularly the case given historical problems in the interpretation of different count methods and other uncertainties over the full deer population resident in North Harris. Therefore, it is considered vital that all deer management is accompanied by a continuing programme of habitat impact assessments as well as counts and distribution estimates across the North Harris Estate.

## Cull Allocation

Cull records, census figures and data from habitat impact assessments is carefully reviewed each year by Trust staff. This information is openly shared with neighbouring estates, the Lewis & Harris Deer Management Group and NatureScot. A deer consultant is contracted through the Deer Management Group, and their input on North Harris counts, models and proposed cull allocations is available when required. Using this resource, the Trust determines whether proposed cull figures require refinement



or revision to ensure a closer fit to management objectives. This occurs on an annual basis in late spring before issuing cull allocations to the relevant parties.

Average culls over the historical record (Annex A) come to around 40 stags and 50 hinds per annum, however they have fluctuated significantly over the years. It is understood at the outset of this plan that a reduction cull of both stags and hinds is required to bring the population towards to the target densities and overall numbers. Cull numbers for stags can be expected to be regularly above 150 and for hinds regularly over 200 throughout the course of this plan.

As an aid to allocating the cull as required and deconflicting outings between the various parties, the estate is currently divided into eleven beats. These are used to ensure safe and reliable stalking in conjunction with a shared digital calendar which all parties have simultaneous access to. This arrangement will continue to be used over the duration of this plan, however beat boundaries will be adjusted as required in response to management objectives. The differential allocation of the cull amongst the various beats ensures that management can be targeted at local areas with relatively higher population densities.

Note: In the Exclusion Deer Management Zone, pre-season cull allocations are not required, however numbers will be recorded as usual and fed into the decision on overall cull numbers in the subsequent season. Although outwith the timescale of this plan, it is hoped that once native woodland has become established in the area, the red deer population can be reintroduced to the improved habitat.

## Cull In-Season

The stag cull takes place throughout the statutory season from 1<sup>st</sup> July to 20<sup>th</sup> October. The hind cull takes place throughout the statutory season from October 21<sup>st</sup> to February 15<sup>th</sup>. However, to ensure cull targets are met, improve venison quality and limit disturbance, stalkers are strongly encouraged to cull hinds before Christmas. After Christmas an emphasis is placed on welfare culling.

## Deer Control & Out-of-Season Cull

Out of Season culls are considered on a case-by-case basis, in line with NatureScot statutory consents and requirements i.e. out of season licenses, registration as fit and competent and upholding best practice guidance. Out-of-season culling is considered as a last resort to deal with consistent problem animals to which there is no another solution. The Exclusion Zone in the south-east and Control Zones which extend throughout the estate are managed by Trust staff where possible, however delegation to third parties is often practicable.

## Reporting

As mentioned above, deer culls on the North Harris Estate may be executed by several different parties. Nonetheless, all stalkers are required to complete and submit a cull return form (Annex C) to the Trust within 48 hours of stalking. Cull return forms are submitted for every animal shot in North Harris. These are then collated and reported to the local deer management group. The North Harris Trust will continue its membership of the Lewis and Harris Deer Management Group and actively support the organisation financially and through staff time whenever necessary to ensure it continues to meet its aims. Other data recorded on cull return forms allow the Trust to observe long term trends in the average condition of animals shot and monitor the prevalence of parasites or illness.

## Delivery

This document was adopted by the North Harris Trust Board of Directors in June 2022 and updated in February 2023. Responsibility for the delivery of the North Harris Trust Deer Management Plan 2022 – 2032 is delegated to the NHT Manager. Queries on deer management in North Harris can be addressed in the first instance to the contact details below.

The North Harris Trust, Tigh an Urrais, Tarbert, Isle of Harris HS3 3DB

01859 502 222 • [www.north-harris.org](http://www.north-harris.org) • [info@north-harris.org](mailto:info@north-harris.org)

Scottish Charity No SC0 33413 • A Charitable Company Limited by Guarantee, No 235889

## Annex A: North Harris Cull Figures

Year	Stags	Hinds	Calves	Total
2003-4	31	23	2	56
2004-5	39	22	2	63
2005-6	33	37	4	74
2006-7	26	40	4	70
2007-8	41	36	4	81
2008-9	50	87	23	160
2009-10	46	88	19	153
2010-11	37	85	0	122
2011-12	38	66	5	109
2012-13	41	65	15	121
2013-14	42	77	17	136
2014-15	33	8	6	47
2015-16	37	29	1	67
2016-17	42	65	5	112
2017-18	49	85	13	147
2018-19	42	68	12	122
2019-20	38	25	5	68
2020-21	41	24	5	70
2021-22	50	35	5	90
<b>Average</b>	<b>39.3</b>	<b>50.3</b>	<b>7.7</b>	<b>97.3</b>

Due to concerns expressed within the local Deer Management Group about apparent declines in hind numbers on North Harris Trust land and neighbouring estates (supported by the findings of the 2013 helicopter count), a moratorium on hind culling was declared in the winter of 2014-15 although a small number were culled for welfare reasons and to fulfil the requirements of Rural Priorities Contract for feeding eagles. This contract ended in December 2015.

## Annex B: North Harris Estate Deer Counts

Year	Method	Stags	Hinds	Calves	No ID	Total
1993	Ground	231	-	-	466	697
2000	Helicopter	396	-	-	678	1074
2006	Helicopter	246	-	-	583	829
2008	Ground	359	-	-	1018	1377
2010	Ground	298	685	203	19	1205
2012	Helicopter	325	573	174	7	1079
2013	Helicopter	207	432	177	-	816
2016	Ground	358	539	107	293	1297
2018	Ground	345	803	114	-	1262
2019	Helicopter	243	344	108	-	695
2022	Helicopter	868	1292	370	-	2530

**Average Population 1169**

The counts in 2000 and 2013 were undertaken in November; the count in 2022 was undertaken in September; and all other counts are late winter counts in February/March.

## Annex C: Example Cull Return

All deer culled under lease on the North Harris Estate require the submission of the following form, the information from which is collated and returned to the Association of Deer Management Groups via Lewis and Harris Deer Management Group.

### NHT Cull Return Form

Please submit returns with 48 hours of stalk to [info@north-harris.org](mailto:info@north-harris.org)

Fill out a copy of this form for every animal culled. This includes all calves taken, any beast left on the hill and any beast wounded but not recovered. It is essential that forms are completed and returned as they are a specific condition of lease and a legal responsibility.

<b>Name of Stalker</b>	
<b>Date of Stalk</b>	
<b>Grid Reference (6 figure) &amp; Beat Name</b>	
<b>Sex of animal</b> (Please tick appropriate box)	Stag <input type="checkbox"/> Hind <input type="checkbox"/> Calf <input type="checkbox"/>
<b>Estimated Age &amp; Condition</b>	
<b>Larder Weight</b> (Kgs)	
<b>Breeding condition of hind</b> (Please tick appropriate box)	Yeld <input type="checkbox"/> Pregnant <input type="checkbox"/> Milk (with calf) <input type="checkbox"/>
<b>Foetus size &amp; sex</b>	
<b>Other deer seen</b>	
<b>Weather &amp; Wind Direction</b>	
<b>If carcass left – reasons why</b>	
<b>Additional comments</b>	

## Annex D: Site Designations

Approximately 13,165 ha of the western part of the estate has a number of overlapping designations as a Site of Special Scientific Interest (SSSI), a European Special Area of Conservation (SAC) and the North Harris Mountains Special Protection Area (SPA). Full statements describing the reasons for these designations are publicly available.

Designated features of the SAC include the following 10 vegetation types/habitats:

- Wet heathland with cross-leaved heath *Erica tetralix*
- European dry heaths
- Alpine and subalpine heaths
- Blanket bog
- Depressions on peat substrates
- Montane acid grasslands [Siliceous alpine and boreal grasslands]
- Plants in crevices on acid rocks
- Acidic scree
- Natural dystrophic lakes and ponds [acid, peaty lakes and ponds]
- Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels

And three species:

- Otter
- Freshwater pearl mussel
- Atlantic salmon

SPA designation recognises the nationally important breeding population of Golden eagle *Aquila chrysaetos*, an Annex I species. The site supports over 13 pairs, representing around 1% of the UK population. This population has a high breeding productivity for the west coast of Scotland and is one of the highest density populations in Britain.

The site also supports a notable assemblage of breeding birds including Annex I species, such as red-throated diver *Gavia stellata*, black-throated diver *G. arctica*, merlin *F. columbarius*, golden plover *Pluvialis apricaria*, common tern *Sterna hirundo* and Arctic tern *S. paradisaea*, which are recognised as requiring special protection. It is also frequented by growing numbers of white-tailed sea eagles *Haliaeetus albicilla*, of which a significant proportion are becoming resident.