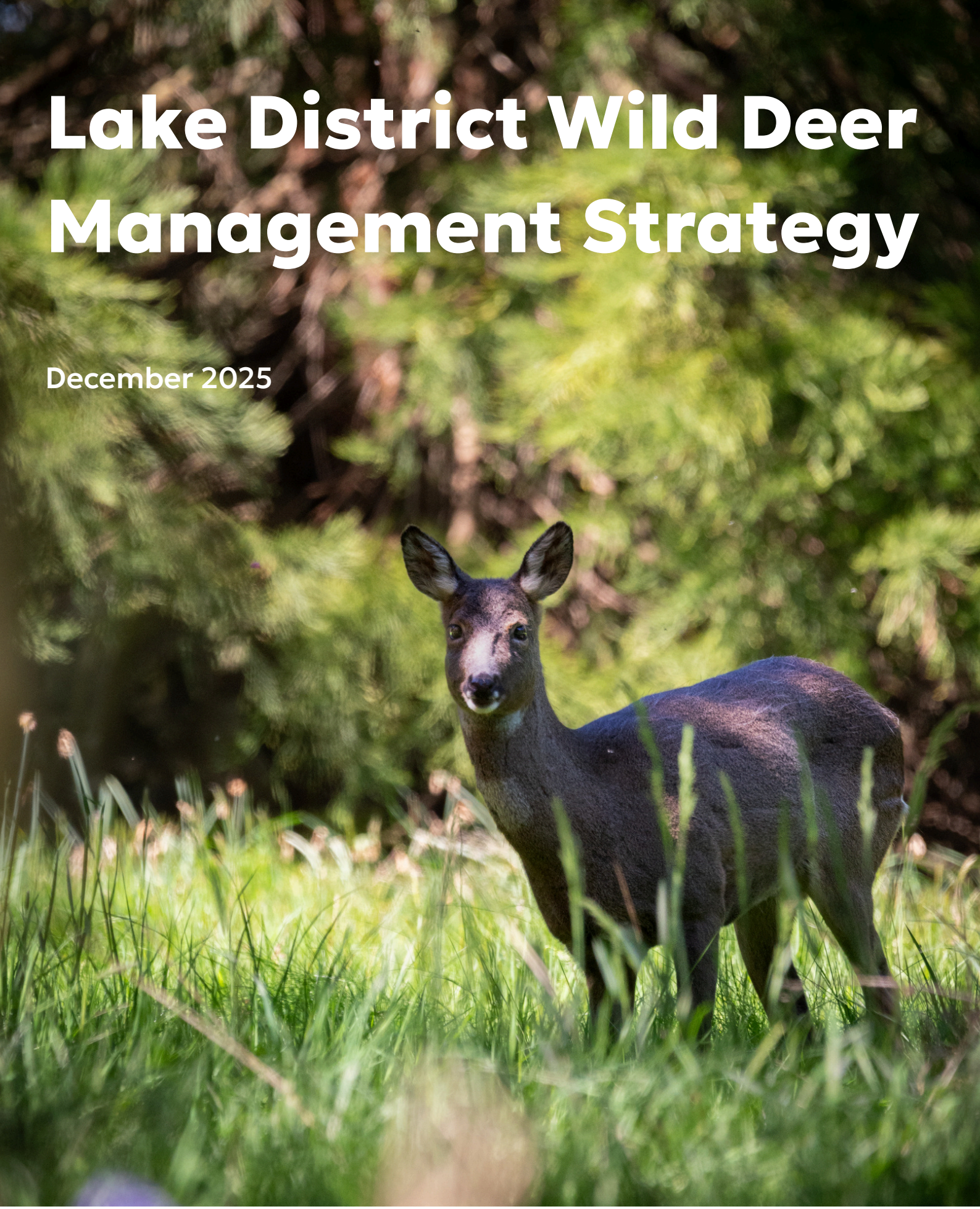
Lake District Wild Deer Management Strategy

December 2025



NATURAL ENGLAND

Forestry Commission

Forestry England

Cumbria Connect
Restoring Nature

North Lakes
Red Deer Group

United Utilities
Water for the North West

National Trust

Lake District
National Park

Foreword

Over the last century the UK has seen a dramatic increase in deer density and distribution due to factors including land use change in combination with the lack of natural predators. This presents significant management challenges.
In the Lake District, native red and roe deer have an important cultural, historical and natural place. However, if left unmanaged, there can be negative impacts upon the landscape and environment. The presence of non-native deer also poses significant problems for native ecosystems and woodland biodiversity.

To manage this, we must regulate wild deer populations to sustainable levels, understand and mitigate their impacts, prevent further encroachment and control of non-native species of wild deer and promote collaborative management among landowners, land managers, stalkers, deer experts, scientists and others on a landscape scale. To achieve the desired outcomes, we have developed a strategy specifically for the Lake District that encourages an approach that is evidence led, adaptive, collaborative and sustainable.

This Strategy has been developed by the Lake District Wild Deer Management Strategy Steering Group. The steering group is made up of representatives from the following organisations with either the expertise and / or statutory responsibility for managing wild deer: Natural England, Forestry Commission, Forestry England, North Lakes Red Deer Group, Cumbria Connect, National Trust, United Utilities and facilitated by the Lake District National Park Authority. The steering group will also provide some of the personnel and financial resources necessary to help drive the delivery of the strategy.

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Executive Summary

The ambition of the Lake District Wild Deer Management trategy is to develop an approach towards the sustainable management of wild deer across the Lake District landscape. The aim is to achieve a better understanding of species' extent, geographic distribution and the impacts on Lake District habitats, whilst considering cultural importance, implications for nature recovery, commercial aspects and public concern.

Nationally there is increasing evidence demonstrating the negative impacts wild deer have on the natural diversity of habitats, economy and health and safety, including:

- Damage to woodland plants and stock and the additional costs of protecting trees and shrubs from deer.
- The reduction of woodland bird abundance[1] and changes to small mammal and invertebrate assemblages.
- Increase in deer related vehicle collisions, some of which result in human injuries or fatalities.[2]
- Transmission of diseases to other deer and cattle,[3] including carrying the species of tick that can transmit Lyme disease and encephalitis in humans.
- Damage to agricultural, horticulture and timber crops, parklands and gardens.[4]

This strategy has been developed by the Lake District Wild Deer Management Strategy Steering Group made up of representatives from the Lake District National Park Authority, Natural England and deer managers from Forestry Commission, Forestry England, North Lakes Red Deer Group, Cumbria Connect, National Trust, and United Utilities.

The strategy is intended to support the delivery of a future government endorsed National Deer Management Strategy by establishing a local framework with which to address recognised issues. The strategy is built around the delivery of five themed goals: communication, collaboration, data and evidence, adaptability, Lake District venison brand. The rationale for each of the five themed goals is outlined below with greater collaboration underpinning all five.

[1] The British Trust for Ornithology has reported that common species including robin, wren and blackbird are less likely to be in woodland areas browsed by deer.

[2] RSPCA reported in 2024 that up to 74,000 deer may be involved in vehicle collisions each year in Britain.

[3] Increase risk of Zoonotic tuberculosis in cattle where deer populations are located close to where cattle are kept.

[4] It is estimated that in the UK individual arable farmers & forester owners are losing more than £1m a year to deer damage and the value of commercial timber production reduced by up to 50% per year.

Theme: **Communication**

Goal: *Increase awareness and develop a common understanding on the importance of landscapes, biodiversity and deer management.*

Rationale: Raising awareness about management practice is fundamental to gaining the support and cooperation of the public.

Theme: **Collaboration**

Goal: *To encourage a landscape scale approach through knowledge-sharing and partnerships.*

Rationale: Wild deer move across landscapes and landownership boundaries therefore, effective management requires collaboration between many stakeholders, including public and private sector landowners, deer managers, deer stalkers, Defra organisations and others involved in deer management across the Lake District.

Theme: **Data and evidence**

Goal: *Develop a strong evidence base of science, data and expertise, including local knowledge to guide management.*

Rationale: The Lake District needs a strong evidence and knowledge base to inform and guide management decisions including setting population targets for wild deer species. Currently there is no consistent approach to monitoring and there are gaps in knowledge relating to spatial distribution and density.

Theme: **Adaptive**

Goal: *Act upon local and scientific knowledge to promote a dynamic, impact focused approach to deer management.*

Rationale: The strategy advocates the use of local knowledge, population modelling, herbivore impact assessments and habitat monitoring to inform ongoing management to achieve the long-term direction of maintaining sustainable deer numbers. Regular reviews of deer management plans will ensure that control measures remain effective and responsive to changes in deer behaviour, population trends, and ecological conditions.

Theme: **Lake District venison brand**

Goal: *Support market growth by developing initiatives that promote the sale of venison, built around the highest possible standards of welfare and quality.*

Rationale: Venison sales support deer management activities and form a small but important component of the rural economy and traditions. The strategy

will encourage the development of marketing initiatives in the Lake District.

Communication	Increase awareness and develop a common understanding on the importance of landscapes, biodiversity and deer management.
Collaboration	Encourage a landscape scale approach through knowledge sharing and partnerships.
Data and evidence	Develop a strong evidence base of science, data and expertise, including local knowledge to guide management.
Adaptability	Integrate local and scientific knowledge to promote a dynamic, impact focused approach to deer management.
Lake District venison brand	Support market growth by developing initiatives that promote the sale of venison, built around the highest possible standards of welfare and quality.

1. Background

1.1. National overview

There are six species of wild deer in the UK. Red and roe deer are native; fallow, sika, muntjac and Chinese water deer are introduced species. Populations of wild deer have been increasing rapidly over the last 60 years most probably as a result of successful breeding and, in the absence of management, the availability of natural habitat for them to expand into (*see Figure 1: Distribution of Wild Deer in the UK*).

Red and roe deer are part of our natural environment, popular tourist attractions, and economic contributors. Wild deer are transitory, grazing and browsing vegetation as part of meeting their dietary requirements; dependent on density this can have both positive and negative impacts on the environment, economy, and health and safety. The positive impacts of wild deer are often outweighed by their negative impacts, but our native deer remain an important part of the natural ecosystem. Their impacts are summarised below:

Positives

- Deer can play a significant role in maintaining natural habitats and contributing to biodiversity.
- They help to maintain the health of the environment by grazing on plants, which can improve soil quality and support a variety of wildlife.
- Contribute to the economy through the management, processing, and marketing of venison supporting rural jobs and businesses.

Negatives

Damage to wildlife habitats**:**

- Browsing and grazing leaves, new shoots and flowers, reducing the ability of plants to grow, spread or even survive and preventing forests and woodlands from regenerating. This can even affect the soil structure leading to the release carbon into the atmosphere.
- Fraying (bark stripping) can cause physical damage to trees that can lead to diseases, die back or degraded quality.
- Trampling can affect plant growth by changing the surface soil structure, exposing and damaging surface roots, vulnerable bryophytes and leading to soil erosion, which can impact on water quality.
- Dung - although a natural nutrient source and means of seed dispersal, too much can have negative impacts on the rarer, nutrient poor dependent plant species such as lichens and bryophytes.

- Reducing woodland bird abundance and modifying small mammal and invertebrate assemblages.[5]
- Deer vehicle collisions (DVC) are estimated to be involved in up to 60,000 road traffic accidents per year in England, some of which result in human injuries or fatalities. Research has suggested that DVCs increase in parallel to deer density.[6]
- Increased risk for the transmission of infection which can affect farm livestock[7] and host for the hard bodied tick (*Ixodes ricinus*), commonly referred to as deer or sheep tick and known to be a vector for both tick-borne encephalitis as well as Lyme disease (deer are not a carrier of Lyme disease).

- Damage to agricultural, horticultural and timber crops, also parklands and gardens.[8]

- Additional financial and environmental cost created through the requirement to protect trees and habitats from the impacts of deer and the use of plastic and chemicals involved in this.

To be successful, wild deer management must contemplate a full range of management options, considering effectiveness for purpose and possible impacts. This will help achieve a balance that serves both the welfare of the deer and the needs of the public, economy and landscape.

This strategy has been influenced and guided by other legislative documentation, guidance and statutory environmental goals set to protect our valuable wildlife habitats.[9]

1.2 National Deer Management Strategy

Government is committed to producing a national strategy with the aim of reducing impacts to woodlands and other habitats from wild deer. A consultation took place in 2022 but owing to changes in government a final document has not yet been published. A Deer Action Plan remains an action within the Environment Improvement Plan (EIP).

An overarching government action plan will support land and deer managers to be effective on the ground whilst accelerating progress towards environmental and net zero targets by 2050,[10] through an increase in tree and woodland cover.

Government has a target to increase tree cover from 14.5% in 2023 to 16.5% by 2050. Forestry Commission and Natural England's joint vision is to create a more resilient,

[5] The British Trust for Ornithology has reported that common species including robin, wren and blackbird are less likely to be in woodland areas browsed by deer.

[6] Putman, RJ and Langbein, J. Deer Vehicle Collisions - A review of mitigation measures and their effectiveness. 2024.

[7] Increase risk of Zoonotic tuberculosis in cattle where deer populations are located close to where cattle are kept.

[8] It is estimated that in the UK individual arable farmers are losing more than £1m a year to deer damage and the value of commercial timber production reduced by up to 50% per year.

[9] Environment Act 2020.

[10] https://commonslibrary.parliament.uk/research-briefings/cbp-8590/

nature-rich and productive landscape framed by a diverse range of forests, woodlands, copses, hedges and trees outside woods including treescapes in our towns and cities.[11]

The Lake District Wild Deer Management Strategy will provide a landscape scale approach to help improve our understanding of wild deer populations in the Lake District, their extent and overall impact on the natural environment. This will assist with our understanding of what a sustainable population looks like and how we can achieve this long-term across this Protected Landscape. When produced, the national strategy will influence future reviews of this local strategy.

1.3. Environmental Improvement Plan (EIP)

The government's EIP was launched in 2023 and builds on both the 25 Year Environment Plan (2018) and the Environment Act (2021). It sets out ambitious targets to halt nature loss by 2030 and help achieve carbon net zero by 2050. The Lake District National Park, as a Protected Landscape, has been apportioned individual nature recovery targets which include:

- Approximately 1,8000 hectares of wildlife rich habitats (outside of protected areas - 932ha per year between 2022 and 2042)
- Approximately 13,000 hectares of peat (468 ha per year between 2022 and 2050)
- Approximately 7,000 hectares of tree canopy and woodland cover (252ha per year and 3% of total woodland cover in the Lake District between 2022 and 2050)

The above targets will be challenging to achieve if high deer density is not addressed and managed effectively.

1.4. Local Nature Recovery Strategy

The Government's 25 Year Environment Plan includes a commitment to developing a 'Nature Recovery Network'. The Cumbria Local Nature Recovery Strategy (CLNRS) will establish priorities and map proposals for specific actions to drive the creation and recovery of a network of connected, wildlife-rich places, which can help support natural resilience to the impacts of climate change and provide wider environmental benefits.

The CLNRS mentions pressure from browsing deer as a threat to the establishment of trees and woodlands and places a priority measure around monitoring and management if the ambition is to be realised.[12] The CLNRS sites the incorporation of wild deer management into plans to create and restore areas of interconnected habitats.

1.5. English Lake District World Heritage Site and National Park Special Qualities

The agro-pastoral system and unique farming heritage is a distinctive feature of the English Lake District World Heritage Site and Special Quality of the Lake District

[11] Policy Paper. Natural England and Forestry Commission: Our position on woodland creation. December 2023.
[12] Measure 34: Monitor and control deer as part of a Cumbria wide deer strategy.

National Park. In 2023 the English Lake District World Heritage Site Steering Group recognised the need for a coordinated approach to deer management in relation to better understanding herbivore grazing impacts on Lake District habitats. This included the recommendation to form a park-wide deer management group to improve sustainable management, control non-native species, assist in the development of a venison market and further research into wild deer population and dynamics[13].

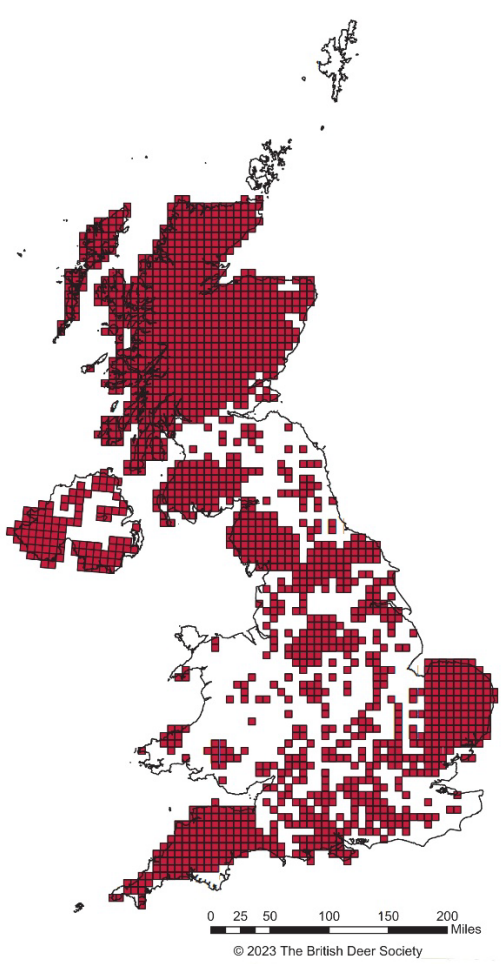
This led to the establishment of a Lake District Wild Deer Management Steering Group to oversee the development and delivery of a strategy to ensure a more coordinated and targeted approach to deer management in the Lake District and to respond to the government's evolving national strategy. Representation is made up from key partners and organisations who either have a statutory remit to oversee deer management, expertise or have effective landscape scale management plans in place and includes representatives from the Lake District National Park Authority, Natural England and deer managers from Forestry Commission, Forestry England, North Lakes Red Deer Group, Cumbria Connect, National Trust, and United Utilities. The members will also play an active role in delivering the strategy through expanding management activity or promoting the document to wider audiences.

In addition to the Steering Group, a Stakeholder Group was invited to form. Representation includes landowners from larger estates, National Farmers Union, Cumbria Wildlife Trust, deer stalkers, farmer and land managers. The stakeholders contribute to and help "ground truth" in the document to support its delivery.

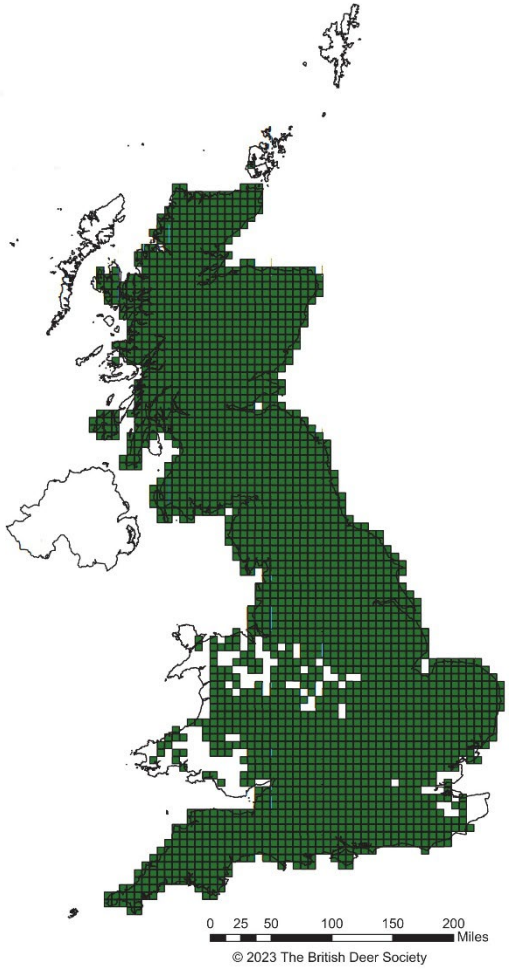
[13] Guidance document Nature recovery, deer management, and management of fell-going sheep flocks. 2023.

Figure 1: Distribution of Wild Deer Species in the UK

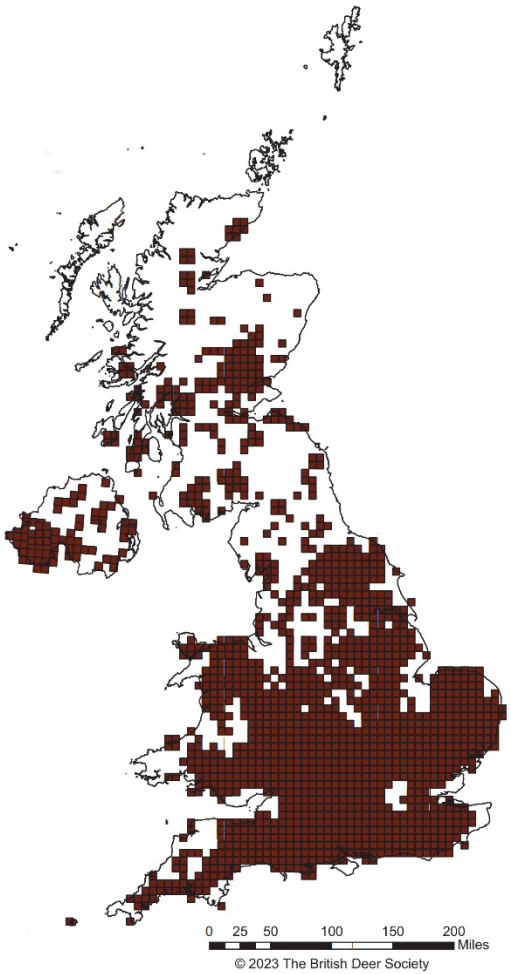
Red deer *(Cervus elaphus)*



Roe deer *(Capreolus capreolus)*

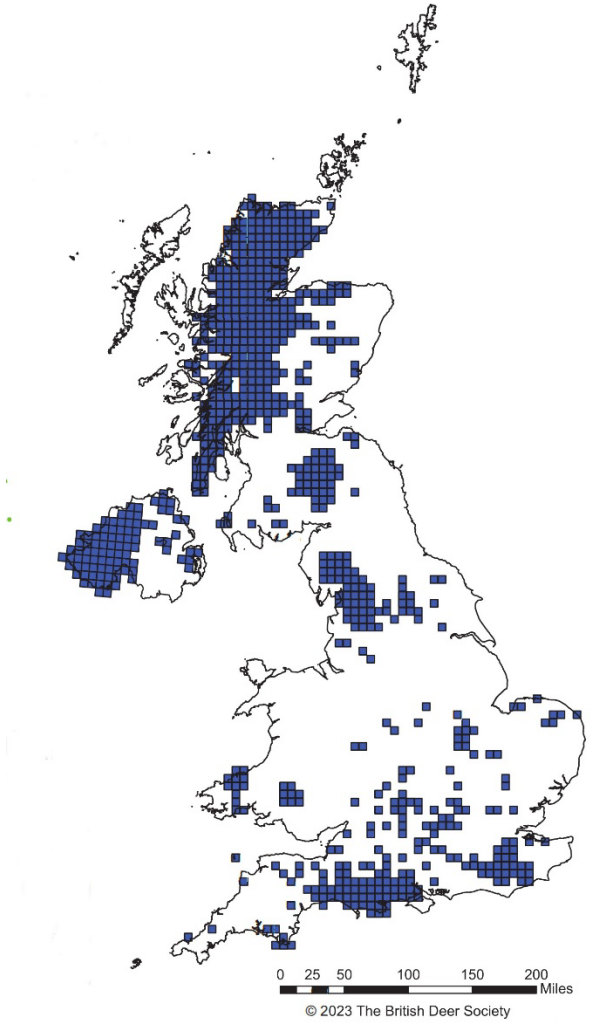


Fallow deer *(Dama dama)*

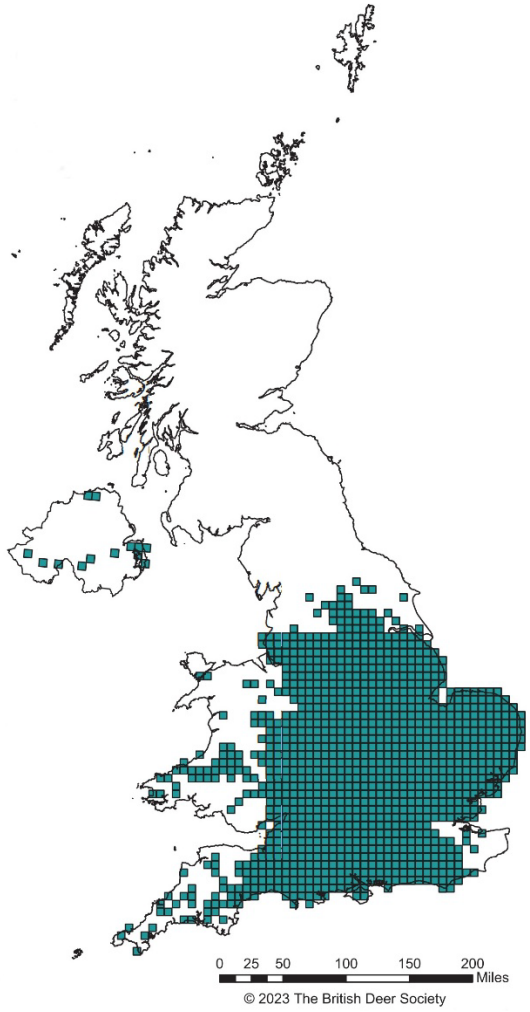


The British Deer Society 2023

Sika deer *(Cervus nippon)*



Muntjac deer *(Muntiacus reevesi)*



Chinese water deer *(Hydropotes inermis)*

The British Deer Society 2023

1.6. Wild Deer in the Lake District landscape

Wild deer are not officially “owned”, and their transitory nature means they are free to roam across the landscape, unless impeded by deer fencing, railways or roads. Red deer often travel long distances, favouring certain areas according to the season, weather, or disturbance. In recent years deer herds’ traditional patterns of behaviour have altered, which could be due to increased disturbance from public access, decreasing numbers of sheep numbers in the uplands, changes to boundary or fencing through agri-environment schemes, and changes to vegetation cover and weather patterns due to the effects of climate change.

There are five species of wild deer that exist within the Lake District National Park. Red and Roe deer are regarded as native species; whilst Sika and Fallow deer (Fallow deer are often referred to as naturalised) are classed as introduced species and their distribution is considerably less and restricted to the central and southern areas of the Lake District (see Figure 1). Muntjac deer, introduced into the UK from China in the 20th century and although not shown in Figure 1 are increasingly observed in the Lake District and Cumbria.

Native Red and Roe deer have an important cultural, historical and natural place in the Lake District landscape; visitors come specifically to see red deer in places, such as Martindale, near Pooley Bridge.

1.7. Lake District habitats

The Lake District supports a unique assemblage of wildlife and habitats. Many of the habitats and species found in the Lake District are recognised for their biodiversity importance at an international level with almost 20% of the National Park area designated for its biodiversity value. Habitats include moss and lichen heath on high montane plateaus, dwarf shrub heath, juniper scrub, tall herb, blanket bog and wet heath, upland oak wood, semi-natural broadleaved woodland, upland hay meadows and pastures reflect pastoral management.

The Cumbria Local Nature Recovery Strategy habitat basemap demonstrates the rich diversity of habitats across the Lake District National Park (Map 1: Habitat Base Map).

Totalling an area of 236,240 hectares (or 2,362 km^2) the Lake District National Park has a total of 136 Sites of Special Scientific Interest (SSSI) covering an area of 42,983 hectares (24% of the National Park). 20.7% of SSSI’s are in favourable condition and 38.3% are unfavourable but recovering. Since 2021, 16 SSSIs have been identified as having features negatively impacted by deer (this is likely to be much higher). To date just over half of sites have targeted actions agreed or on track to address the issues.[14]

Semi-natural woodlands are distinct in the landscape; some are internationally important habitats, such as Atlantic oak woodland. 13% of the National Park has tree canopy or woodland coverage (30,772 hectares) supporting distinctive woodland types such as wood pasture, pollards and old coppice woodland. The National Park contains

[14] Natural England Lake District SSSI Pressure and Targets. 2024.

one of the greatest concentrations of ancient trees in Europe and one of the largest oak woodland complexes in England.[15] 74% of woodlands are managed through Forestry Commission and Countryside Stewardship schemes.

Whilst deer play an important role in woodland ecology, high numbers of browsing deer can have a negative effect on the structure, biodiversity and future resilience of woodlands. This often results in woodlands becoming less diverse in their tree and shrub species composition, inhibiting natural regeneration of trees, making them vulnerable to disease and climate change. In commercial woodlands deer damage can reduce the final timber crop value by up to 30-50%.[16]

The Lake District High Fells include England's three highest massifs (Scafell, Helvellyn and Skiddaw) and are home to a range of diverse habitats including heathlands, acid grasslands, blanket bog and important populations of arctic-alpine species such as alpine saxifrage, alpine mouse-ear and alpine catchfly. There are remnants of various types of woodland and scrub including Atlantic oak woods, juniper scrub and montane willows. Most of the best areas for wildlife are included within the 27,000ha Lake District High Fells Special Area of Conservation (SAC).

By contrast to woodlands, some level of grazing and browsing may be required for maintenance of open range habitats such as heathlands, peatlands and grasslands to prevent scrub encroachment and succession to woodland. Damage to these habitats is often caused by large numbers of individuals or groups of deer moving through the landscape to favoured feeding grounds. Trampling can cause direct damage to plants, with ground growing bryophytes and vascular species especially vulnerable. Trampling impacts may be of more concern than the effects of grazing in some areas and can occur at lesser densities. Large herds can also cause damage to physical infrastructure such as earth bunding constructed for peatland restoration.

In many instances open range habitats are subject to grazing by other herbivores such as sheep or other domestic livestock, or even smaller herbivores such as rabbits or hares. Overgrazing by herbivores has an adverse impact on habitats, particularly grazing outside of the growing season, leading to a decline in habitat condition. In the Lake District ground observations and deer census survey data suggests that where sheep numbers have been reduced, predominantly through agri-environment schemes to support the natural regeneration of upland habitats, there has been a marked increase in the extent of red and roe deer. In time, left unmanaged, this will negatively impact on the regeneration and recovery of upland habitats.

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[15]Borrowdale Woodland Complex SAC consists of a series of upland oak woodlands in the Borrowdale and Buttermere valleys of the Northwest Lake District. The woodlands are particularly rich in Atlantic and Oceanic bryophytes with many species present rare in England and restricted to this site.

[16] Forestry Commission hold no local data. 30-50% can be attributed to the timber crop devaluation in the Lake District.
Forest Research. Understanding deer damage is crucial when planting new forests. April 2020.

The potential positive and negative impacts of wild deer are further complicated by the fact that acceptable impact levels vary for different habitats. By adjusting deer density to maintain sites or create favourable conditions for direct habitat features, it is inevitable that some habitat condition compromise may be unavoidable.

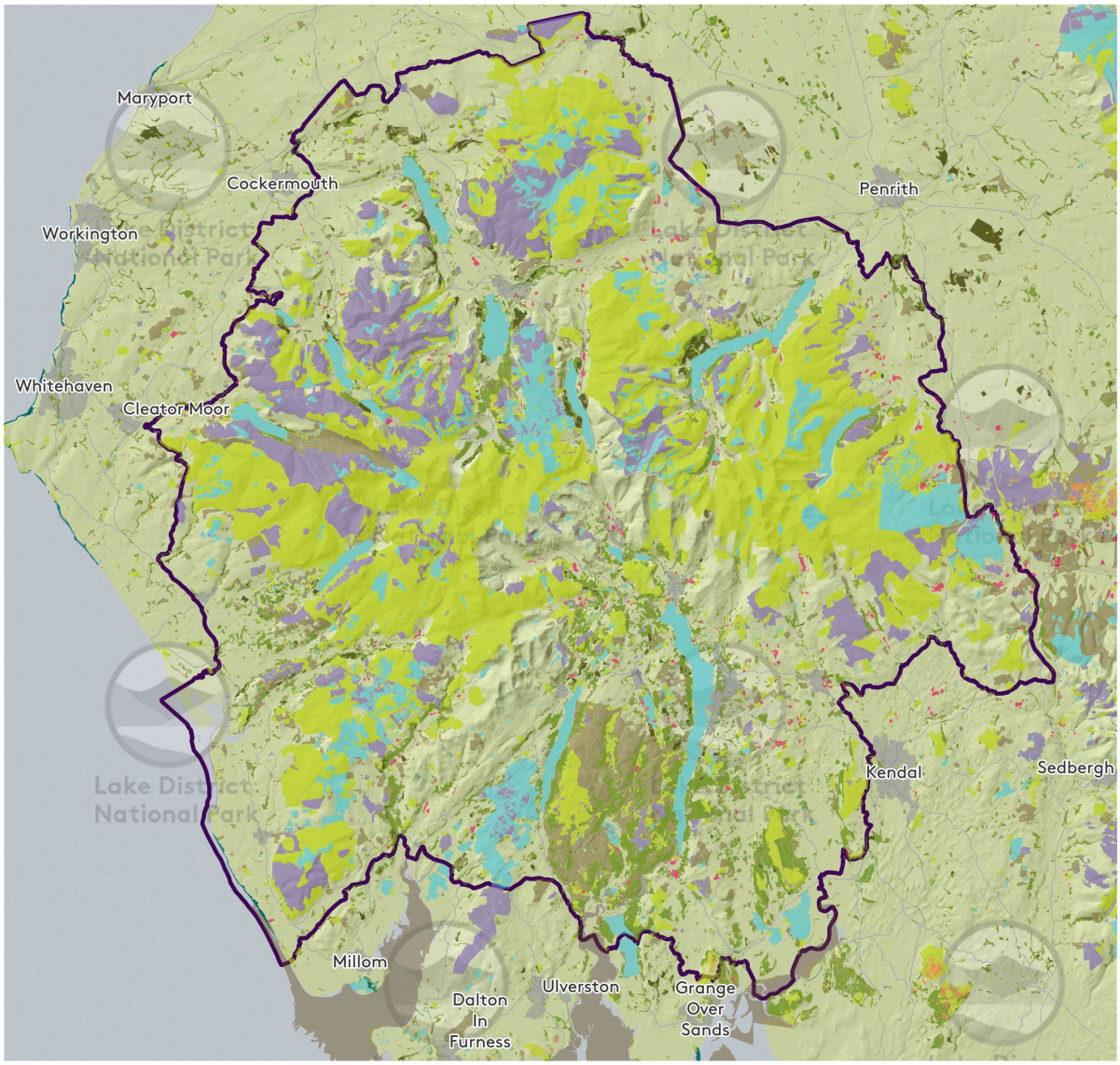
Photo 1: Survey data indicates that where sheep numbers have been reduced on the fells an increase in red and roe deer are having a negative impact on the regeneration and recovery of open range, upland habitats.

Photo: BH Wildlife Consultancy

Natural England are responsible for monitoring the condition status of all SSSIs and now must ensure that 60% of SSSIs, within all Protected Landscapes, have 'actions on track' to achieve favourable condition by 31 January 2028[17]. An outcome of the strategy will be to support and encourage the production of updated, targeted site plans to help meet this target.

[17] Protected Landscapes Targets and Outcomes Framework - GOV.UK

Map 1: Lake District habitats (taken from Cumbria Local Nature Recovery Network Habitats)



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Cumbria Local Nature Recovery Network Habitats

- Ancient Woodland
- Woodland and Parkland
- Grassland and meadows
- Upland hay meadows
- Heathland
- Limestone pavement
- Pond, River, Swamp, Fen, Bog
- Maritime cliff and slope
- Rock and other habitats
- Lake District National Park boundary

Centre of map: NY 3023 0781

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0 5 10 km

2. Key issues and opportunities

2.1. Deer management initiatives

There are numerous payments available through agri-environment schemes subject to application windows being available.

Farmers and land managers can obtain supplement payments for deer control and management through Countryside Stewardship Higher Tier.

- Deer Control and Management (WS1) for land parcels where deer have been identified in a Woodland Management Plan as a threat to semi-natural woodlands, regeneration and/or where browsing negatively impacts on woodland features, ground flora or structure.[18]
- Species Management Plan (PA7) can fund the production of a deer management plan. [19]

Defra's Environmental Land Management schemes aim to pay for environmental and climate goods and services to deliver significant elements of statutory environment and climate targets outlined in the government's Environmental Improvement Plan. These include the new Countryside Stewardship Higher Tier and Landscape Recovery schemes.

- Countryside Stewardship Higher Tier (CSHT) offers Deer Control and Management (CWS1) where deer are causing damage to priority habitats. This includes deer impacted habitats outside of woodlands, such as moorland and wetlands and will support action on land undergoing habitat creation or management action.[20] As part of this option a Deer Management Plan is required and must be approved by the Forestry Commission or Natural England. The benefits of CWS1 include the inclusion of both native and non-native species and an approach that targets the delivery of wider environmental outcomes, such as habitat creation and management, rather than generic, population reduction focused deer control. In addition, it offers payment over 10 years, providing a more stable funding source for landowners.

- The Landscape Recovery schemes empower farmers and land managers to undertake large-scale, long-term projects for environmental and climate goods, and enable the co-design of bespoke agreements of over 20 years. There are currently four Landscape Recovery schemes in the Lake District: Glenderamackin, Eastern Fells, Penrith to Kendal and Upper Duddon (the latter is verified, and the others are in development). Cumbria Connect is part of the Endangered Landscapes & Seascapes Programme.[21]

[18] WS1: Deer Control and Management
[19] PA7: Deer Species Management Plan
[20] CWS1: Deer Control and Management
[21] Endangered Landscapes and Seascapes Programme

The schemes enable the creation and restoration of landscape-scale mosaics of semi-natural habitats and offer realistic opportunities for further research and collaborative wild deer management at scale.

It is important to note that whilst culling is widely accepted as being the most effective method for managing deer numbers, other approaches need to be considered and deployed to influence deer behaviour and mitigate their impact on habitats. Examples include deer fencing, tree guards, dead hedging, deer lawns, fertility control[22] and even the future re-introduction of apex predators.

Photo 2: Red deer stag in bracken

BH Wildlife Consultancy

2.2. Status of professional deer management

Deer management in the Lake District is subject to many challenges including difficult terrains, unpredictable weather, extent of territory, changing land ownership boundaries, recreational disturbance, lack of convenient larders to deposit carcasses and public perceptions regarding management activity. Currently there is a short supply of well trained, experienced deerstalkers working in the landscape. According to The British Association for Shooting and Conservation (BASC) the average age of BASC deer

[22] Options to control fertility of wild deer is quite controversial and concerns have been raised by the British Deer Society around ethics, health and welfare issues.

stalker member is 58 years old, which is perhaps reflective of an industry struggling to attract a new generation of stalkers. Career opportunities and incentives in the Lake District need to be identified and established to increase the number of well trained, employed professional deer stalkers and deer managers, including expanding openings for apprenticeships and mentoring.

2.3. Training and equipment requirements for Deer Stalkers

In the UK, deer stalkers are required to complete the Deer Stalking Certificate (DSC1), covering deer stalking techniques and wild meat hygiene. Following on from this, stalkers can undertake DSC2 to gain full Large Game Trained Hunter status to meet the Food Hygiene Regulations 2004.

The DSC1 qualification is widely recognised and often a requirement for those wanting to join a syndicate, lease land, stalk unaccompanied, or conduct deer management on land owned or managed by organisations such as the National Trust, United Utilities, and Forestry England.

The British Deer Society have pioneered deer stalker training to ensure that all involved in deer management have the necessary skills and knowledge on the importance of humane control and the need for responsible deer management practices. However, the legal requirements and closed season system for deer culling in the UK are not uniform across the country, which can create confusion and barriers for stalkers.

The UK deer stalking community faces several challenges related to training and regulation. Although it is recognised that more high-quality training is required the introduction of mandatory training for all deer stalkers in Scotland has been a contentious proposal, with concerns about its potential negative impact on the deer management community.

More opportunities for affordable or subsidised training are required to develop the deer management and processing skills of local deerstalkers and deer managers.

Equipment required for effective deer management such as capstan winches, quad bikes and trailers require training, in-field experience and can also be costly for the respective landowner and / or deer manager / stalker. Even the fundamentals such as roe sacks, trail cameras and thermal binoculars can amount to several hundred pounds.

2.4 Landowners and Deer Management Groups (DMGs)

The control of wild deer is the responsibility of landowners on whose land the deer are on, but only for as long as the deer are located there. Landowners manage deer on a variety of levels from pro-active (for example, in collaboration with other landowners) to inactive (where management is absent). Landowners are sometimes unaware of their responsibility regarding deer management.

Forestry England, National Trust, United Utilities, private estates and individual landowners employ deer managers to work across their land holdings and manage deer based on survey and monitoring data.

Recreational deer stalking is popular in the Lake District and often used as a way to generate income in exchange for hunting meat, leisure/trophy, or as a means to control deer populations. This is normally undertaken either through a syndicate or private guiding. It can also be an effective method of deer control. There is conflicting opinion around whether recreational stalking is an effective method of deer management. Whilst some advocate for increased deer culling to control population numbers and regenerate habitats, others emphasise the importance of sustainable management practices that benefit both the environment and the local economy. The debate centres on the balance between maintaining healthy deer populations for recreational use and the ecological benefits of managing deer numbers.

Deer managers and stalkers play a crucial role in collaborative deer management, particularly when operating as a deer group. DMGs can provide a platform for collaboration among landowners and managers to work together to deliver deer management objectives. These groups have the potential to ensure that management strategies are comprehensive and coordinated, covering large areas and addressing the movement of deer across property boundaries.

There are four active, voluntary wild deer management groups across the Lake District[23]:

- North Lakes Red Deer Group
- West Cumbria DMG
- Eden Valley DMG
- South Lakes DMG

DMGs cover most of Lake District's upland wild deer range and each group comprises of representatives from landholdings within an area, mainly deer stalkers and managers.

Arnside and Burton and Lune Valley Deer Management Groups are outside of the National Park but play a crucial role in managing the movement of deer across boundaries.

Based on the areas shown in Map 2 (page 18) the DMGs could offer a potential means for ensuring complete coverage of the Lake District. The groups remain important for the following reasons:

- Important source of local knowledge and expertise to inform and improve deer management plans and adaptive management.
- Provide a focus point for knowledge exchange.
- Create a forum for discussion and promoting training opportunities and events.

North Lakes Red Deer Group operate differently to other groups and demonstrate the advantages of having landowners and deer managers proactively engaged in group

[23] Bowland Deer Management Group sits outside of the Lake District National Park boundary but acts as a 'buffer zone' for the resident sika population. All DMG's are working towards preventing sika/red deer hybridisation within the pure Lakeland red deer herds.

governance, consistent landscape scale monitoring and delivering shared objectives through a collaborative approach. (See section 2.9, Case study 1).

The strategy aims to encourage greater collaboration between landowners and DMG members to enable a more coordinated approach towards the management of wild deer, but also appreciates the differences in attitudes, objectives and circumstances such as recreational deer stalking, smaller land holdings, absentee landowners and greater public scrutiny in tourist hotspots.

Map 2: Voluntary Deer Management Group Areas across Cumbria and the Lake District

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Centre of map: NY 4228 0513

N

0 5 10 km

2.5. Public awareness

A recent survey undertaken by the British Deer Society (BDS)[24] revealed that the British public has a “deep affection” for the UK’s deer species but many lack awareness of the role and necessity of deer management. Wild red deer in National Parks are a popular attraction often generating controversy over physical control. Increased public access and longer visitor seasons have led to increased disturbance which can impede deer stalking activities. Research suggests improved education and collaboration with key stakeholders can reduce public concern.[25] The strategy presents an opportunity to work collaboratively with key stakeholders, including statutory and non-statutory environmental and community-based organisations to develop better communication through public information campaigns and other media channels.

2.6. Research and Monitoring

To be accountable to the public, deer management needs to be based on robust, verifiable evidence.[26] Consistent monitoring of deer populations is crucial for effective control and management. There is no complete data set available to provide an accurate baseline on wild deer numbers in the Lake District.

Monitoring wild deer in the Lake District presents many challenges, such as the complex and difficult terrain, extent of territory, and the paradox of weather (bad weather stops work due to poor visibility and good weather encourages more people, leading to more disturbance). Drone data is proving to be a useful tool in estimating deer density and understanding distribution at landscape scale. Drone surveys can sometimes collect more precise data on deer numbers and spatial concentrations than the traditional foot counts. They can cover large areas in a shorter timeframe and access hard-to-reach locations with minimal disturbance, therefore expanding the geospatial scope of surveys.

There are already some good examples of landscape scale drone surveys including North Lakes Red Deer Group area, Forestry England / Commission survey in the Central Lakes and a survey over land owned by LDNPA, Cumbria Wildlife Trust, Dalemain, Greystoke and Lonsdale Estates around the Skiddaw Group SSSI. This does not preclude the use of traditional census foot counts, deer impact assessments, or trail camera networks, which can provide more detailed ground information. Despite prescribed management activity through agri-environment schemes and other deer management work in the Lake District, high density populations of wild deer still persist and, in some areas, continue to expand their range. There is no single density threshold available to inform at what density damage to habitats starts to occur. Table 1 illustrates a range of densities, taken from existing research, at which impact, or damage, has been reported. Calculating optimum density is further complicated by the complex (potential) interaction and in-combination effects of different species and groups across network mosaics of different habitats across the landscape.

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[24] A*rticle by: Deer Management, UK Conservation, British Deer Society - 4 December, 2024*

[25] A*rticle by: Deer Management, UK Conservation, British Deer Society - 4 December, 2024*

[26] Waber et al. Considering Sources and Sinks in Deer Management. The Journal of Wildlife Management. 2012.

It is likely that optimum density of wild deer will need to be understood on an area basis. This will require further research on population extent, range expansion and the relationship between deer management and habitat response. Nature recovery projects at landscape scale such as Recovery create an opportunity to explore this in more detail. An example of how this is being applied in the Lake District is covered in Case Study 2: Modelling the Impact of Deer on Habitat Recovery at Haweswater (page 30).

Photo: Mark Williamson

Photo: 3 & 4: Thermal drone data is proving to be a useful tool in helping to estimate deer density and understanding distribution at landscape scale.

Photo: BH Wildlife Consultancy

Table 1. Densities of deer (deer per km^2 at which damage has been reported in literature reviewed by Watson et al (2009).[27]

Deer group	Agriculture	Forest damage	Natural regeneration	Coppice	Ground flora	Insects, birds	Moorland	Livestock diseases	Vehicle Collisions
Red, Sika, Fallow	ND	4-5	4-5, 14	ND	ND	1 (butterflies) 8 (bird diversity)	7-8	25 Fallow >90 Red	7
Roe, Muntjac	ND	ND	25	25	50	ND	ND	26	ND

[27] Watson, P, Putman, R, Langbein, J and Green, P. 2009. A review of the threshold densities for wild deer in England above which negative impacts may occur

Encouragingly, Citizen Science research is also playing a more fundamental role in understanding the condition of woodlands. The Woodland Condition Assessment has been developed by the Forestry Commission, Natural England, Woodland Trust, Forest Research, and England Woodland Biodiversity Group to help assess the ecological condition of woodland. The data generated will provide additional information on the current condition of woodlands and enable further monitoring of change both positive and negative.

2.7. Impact driven adaptive management

Adaptive management is a proactive way of integrating local and scientific knowledge, helping to build trust and facilitate negotiation between the key stakeholders (landowner/managers, farmers, deer managers, scientists etc.) and to promote a dynamic, impact focused approach to deer management.

In order to manage deer effectively, land managers need to understand how different deer species impact on a habitat over time, and how this affects condition. Density alone is unlikely to be a particularly good predictor of expected impact. Impact driven management considers evidence of visible impact alongside estimates of actual density. The combination of these approaches can help inform management, including the use of non-lethal forms of control, support achieving sustainable deer numbers, and improve awareness, especially in landscapes where landowner collaboration is limited due to differing opinions.

Photo 5: Martindale Deer Rut

Photo by Mike Childs

2.8. Retention of deer carcasses in the landscape

Research by the University of Edinburgh and Yale University[28] recommends that wild deer managers consider the integration of approaches that retain a proportion of deer carcasses in the landscape to assist habitat recovery through recycling of minerals. Other benefits include provision of a food resource for small predators including pine martens, supplementary food for birds of prey, and alternative food sources for predators protecting ground-nesting birds.

The Countryside and Rights of Way Act 2000 (CRoW Act) provides a public right of access to land mapped as 'open country' or registered common land. The CRoW Act does require that any disposal of wild deer carcasses must be done in a way that minimises environmental impact and does not interfere with other landowners' rights or the public's access to the land. In addition, it needs to be appreciated that the retention of carcasses in the landscape may increase public anxiety around deer management, therefore the retention of carcasses needs careful consideration.

2.9 Non-native deer species

The presence of non-native deer in the Lake District poses significant problems for native ecosystems, forestry and woodland biodiversity. Species, such as muntjac and sika are spreading through the county. Managing non-native species requires a balanced approach that considers various perspectives and aims to preserve genetically native populations.

The hybridisation between red and sika deer poses a risk to native populations and can occur wherever the two species come into contact. Red and Sika deer fill slightly different ecological niches, and we have no idea what impact losing native Red might have on our woodland ecology. Developing a long-term national strategy for this issue is crucial.

In 2017, a study found that within the Lake District, only three of 137 (2.2%) red deer-like animals were found to be hybrids, and there was no evidence of sika genetics in the samples.[29] While there is a documented history of hybrid individuals in this region (Lowe & Gardiner, 1975; Whitehead, 1964), none were sampled in this study and it is possible that increased culling pressure on conspicuous hybrids by the Lake District Deer Control Society in the 1970s may have reduced hybridisation in the area.[30] Consideration must be given to protecting the genetic integrity of native red deer, including preventing the establishment of native red deer in areas where they are not currently present.

- Monitoring and deterring red deer from the border with the Western Dales so there exists little opportunity for them to hybridise with sika deer.

[28] Missing carcasses, lost nutrients: Quantifying nutrient losses from deer culling practices in Scotland. Kristy M. Ferraro, K.M, Hirst, C. 2024.
[29] Introgression of exotic Sika (*Cervus nippon*) and North American wapiti (*Cervus canadensis*) into red deer (*Cervus elaphus*) populations in Scotland and the English Lake District. Smith, S.L., Senn, H.V., Perez-Espona, S., Wyman, M.T., Heap, E., Pemberton, J.M. (2017).
[30] Sustainable Deer Management Project North Lakes Red Deer Group. Chetwynd, T. 2022.

- Manage Muntjac moving outside of their current range and further migration from the southeast.

The production of a wild deer species distribution map, specific to the Lake District, based on current local knowledge and supportive data is crucial in protecting native populations and preventing the spread of non-native species.

2.10. Marketable Lake District venison brand

Venison is a highly nutritious meat, low in cholesterol, saturated fats and a source of lean, high-quality protein. Venison is produced as a product of physical deer management.[31]

If the true costs of producing wild venison were calculated - factoring in labour, equipment, and processing - even at minimum wage it's unlikely that current pricing would prove sustainable and profitable and this is a significant factor that might deter people from entering the industry. For wild venison to become a profitable and sustainable industry, increasing the selling price and improving the current market will be essential. There is a rising demand for venison which creates key opportunities for suppliers. Two thirds of the venison consumed in the UK is sourced domestically, or from culling wild red deer in Scotland. Sourcing venison from the wild population does not offer a particularly secure supply chain.

Following the drop in venison prices at the start of COVID in 2020, there has been a drive throughout the UK to promote local processing of venison. The key objective is to shorten the supply chain to local markets in order to maximise returns.

The Wild Game Guide (WGG), produced by the Food Standards Agency, provides guidance on the food hygiene regulatory requirements applicable to hunters, suppliers, and processors of wild game. This permits a trained hunter to hunt, process and supply small quantities of game meat direct to the final consumer and/or local retailers that directly supply game meat to the final consumer, and/or process game meat for sale from their own retail outlet.

Currently there are at two main game dealers supplying Lake District Venison and several other game suppliers and retailers in the Lake District who sell venison, although this is not always locally sourced. There is an opportunity to expand the existing, local venison supply chain and market to gradually make venison become a more mainstream choice for consumers, contributing to sustainable food systems and wildlife management by growing the demand for sustainable, ethical, locally sourced and carbon positive meat. This in turn will help establish new markets, for example local hotels, restaurants, schools, prisons and quick returns sold through premium outlets, such as farm shops or through 'boxed meat' type schemes.

Nationally, the British Wild Venison partnership, including the Forestry Commission, has created a The British Quality Wild Venison Standard as part of its aim to support market growth. The initiative aims to ensure traceability of wild venison, provide a quality

[31] Focusing on wild venison this British Game Week – Forestry Commission

product with high deer management standards, increase market demand for traceable, accredited British wild venison, support market development for deer-protected habitats, and increase consumer confidence in responsible, traceable, food safety, animal welfare, and environmental protection. Encouraging accreditation to the above could help to form the basis of establishing a recognised English Lake District Brand of wild venison.

A Lake District brand could generate financial support for deer management while making a modest but valuable contribution to the rural economy and local traditions. The brand would provide the story from fell to plate, connecting stalkers, game dealers, processors, retailers, restaurants and butchers across the supply chain, while promoting traceability to increase buyer and consumer confidence. To realise this opportunity, investment will be needed in better upland access, more central larders and processing facilities, and training to support skilled stalkers and the next generation.
Land access issues and a lack of infrastructure have been highlighted by deer stalkers and managers as barriers to fast and regular supply of venison to markets. The complex terrain, extent of landholdings, and the weather paradox, in which bad weather impedes work and good weather draws more people, leads to more disruptions, and environmental designations of some sites makes deer management in the Lake District challenging. Improved carcass extraction may be possible by enhancing existing upland routes and establishing better access over designated land. The establishment and/or upgrade of convenient mobile chillers, deer larders, mini–Approved Game Handling Establishment (AGHE), to supply whole carcasses to the hospitality sector, and processing units (equipped mini butchery units) have all been identified as ways to shorten the supply chain to local suppliers and expand the local processing capacity.

To enable a processing facility to operate effectively, an identified operator is required to take responsibility for the unit and to organise the deliveries, storage, processing and record keeping, and to maintain the premises in a satisfactory condition, but have the advantage of being operated either as an estate diversification or co-operative operation, providing employment within the Lake District.

2.11. Achieving best practice

The ambition of this strategy is to develop an approach for managing wild deer sustainably at a "whole" landscape scale while striking a balance between the needs of the general public, the restoration of the environment, and the cultural integrity of the native wild deer in the Lake District. The strategy's five main goals: communication, collaboration, data and evidence, adaptability, markets, and market branding, will offer the framework for tackling the issues and challenges identified in the sections above.

Below are three best practice case studies provided by the steering group illustrating how this can be delivered on the ground.

Case Study 1: North Lakes Red Deer Group (NLRDG)

The NLRDG manages the red deer population within the National Park covering an area of approximately 35,872 hectares (358.7 km²), or 15% of the overall Lake District area. The red deer, known as the Lake District herd, is thought to be one of the purest red deer herds in mainland Britain. The herd has been well documented for over 200 years in terms of its importance and uniqueness and has been cited within the valley descriptions for the Cultural Landscape World Heritage Status inscribed by UNESCO in 2017. The group comprises of the National Trust, United Utilities and several private estates, including Lowther and Dalemain who all employ a combination of estate stalkers, contract stalkers, stalking tenants, and stalker assistants in undertaking the cull within the project.

NLRDG was formed in the 1970s to promote collective management of the red deer herd with a focus on protecting and maintaining the integrity of the herd. The group also worked collectively on preventing indiscriminate shooting and/or poaching to ensure that best practice was adhered and the herd remains as healthy as possible.

The group works collaboratively with guidance from Natural England and in recent years has investigated how deer management can support the delivery of SSSI condition objectives delivered through agri-environment schemes.

The red deer are an open range herd sometimes travelling long distances across the whole NLRDG area; some areas are favoured more according to the season, weather, or disturbance. In recent years the herds traditional pattern of behaviour has changed, possibly due to an increase in public access, decrease in sheep numbers on the open fell, changing vegetation cover, changes to boundary or woodland fences, and/or changing weather patterns. A small number of roe deer are also present, mainly occupying the woodland areas on the lower ground and around the fringes of the main open fell area.

There have been sporadic sightings of non-native species in the project area, and a concern is the threat of sika deer moving into the area. The project area has recorded three animals since 1999, all of which have been shot and confirmed to have some sika origins.

Deer management within the project area is undertaken by members who all work collaboratively to a deer management plan with guidance from Natural England. Members undertake a co-ordinated annual foot count in August to determine the number of deer on their respective properties, which is split between stags, hind and calves. Following collation of the count data, a group meeting is held to discuss and determine the cull targets for the season ahead.

The annual cull is set to target and addresses the overall balance, structure and size of the herd, always ensuring that it remains a viable and sustainable herd as well as promoting good health. The cull is carried out during the permitted deer season for each species and sex, although each area has its own restrictions around start and finish times of the cull. Factors such as high levels of public access, seasonal deer activity / behaviour and stalkers / deer managers other work commitments affect this and are managed between the landowner and stalker.

The members of NLRDG employ a combination of estate stalkers, contract stalkers, stalking tenants, and stalker assistants in undertaking the cull within the project area, with up to 13 people involved in deer management on a regular basis further supported by additional assistance. All stalkers within the project area have the use of either an Argocat, Polaris 6x6 ATV or quad bike, with a winch for the extraction of deer. There are six larders in use within the project area, some of which are shared by other members of the group. These larders have capacity for between 12 to 20 animals, and all are accessible for regular collections by game dealers.

Case Study 2: Modelling the impact of deer on habitat recovery at Haweswater (Cumbria Connect – Endangered Landscapes & Seascapes Programme).

Wild Haweswater, a partnership between the RSPB and landowner United Utilities, is a flagship conservation and land management initiative in the eastern Lake District. A key part of this work involves understanding and managing the impact of red and roe deer on sensitive upland habitats. The over browsing of deer has been shown to impede natural regeneration of native woodlands, reduce plant diversity and damage fragile montane ecosystems. To better inform deer management efforts, Cumbria Connect's science team is currently undertaking research using drones to monitor deer populations across the site.

The primary goal of this research project is to gather robust data on deer population density, species composition and spatial distribution throughout the Haweswater catchment. Drone-mounted thermal imaging technology has been used to conduct aerial surveys, with the resulting data combined with ground-based habitat impact assessments to create a comprehensive understanding of how deer activity is affecting ecological restoration efforts.

Challenges

The terrain around Wild Haweswater is steep, rugged and often inaccessible by foot, making ground-based monitoring logistically difficult and time-consuming. While drones offer a non-intrusive alternative for monitoring, conducting aerial surveys in this remote upland landscape presents a unique set of challenges.

One key challenge is the tendency of red deer to roam across large distances, frequently moving in and out of the defined survey area. This mobility can make it difficult to obtain consistent population counts over time and requires surveys to be carefully timed and repeated to capture seasonal variations in deer movement. Furthermore, red deer have an acute sense of smell and can easily catch human's scent on the breeze. If perceived as a threat, the deer may suddenly flee. As such surveys are planned carefully to ensure data is collected from a down-wind vantage point.

As roe deer are also present at Haweswater, surveys are only undertaken during winter months when trees are out of leaf and woodland vegetation is reduced. Again, repetition when surveying woodland for roe deer is vital. The topographic diversity of woodlands at Wild Haweswater means animals are easily obscured. Repetition reduces the risk of an inaccurate count due to topographic obscuration.

The Lake District's unpredictable weather can also pose challenges for drone-based surveys, with high winds, rain and poor visibility often making flying conditions unsuitable. However, these constraints are effectively addressed through strategic

planning and careful timing. Thermal imaging, which is crucial for detecting deer, performs best under cool, overcast conditions when temperature contrasts between animals and the environment are most distinct. Whilst winter months provide better thermal contrast, bright, sunny days can still reduce sensor effectiveness by warming the ground and masking heat signatures. As such, surveyors maximise data quality by flying in overcast conditions. Together, these strategies ensure that high-quality, reliable data can be collected despite the challenges posed by the region's weather.

Expected Outcomes

Despite these challenges, the project is yielding valuable insights. The key expected outcomes of the drone surveys and associated habitat assessments include:

- **Improved understanding of deer populations:** Regular drone flights provide a clearer picture of deer numbers and distribution across different seasons and habitat types.
- **Density estimates and species identification:** With refined techniques, the team aims to produce population density estimates for both red and roe deer within the catchment.
- **Ecological impact assessment:** By coupling deer data with assessments of vegetation condition, tree regeneration and evidence of deer pressure, the project helps identify areas most impacted by deer.
- **Informing management decisions:** The findings from Cumbria Connect's research will directly inform deer management plans, allowing for more targeted and effective interventions aimed at reducing browsing pressure on sensitive habitats.

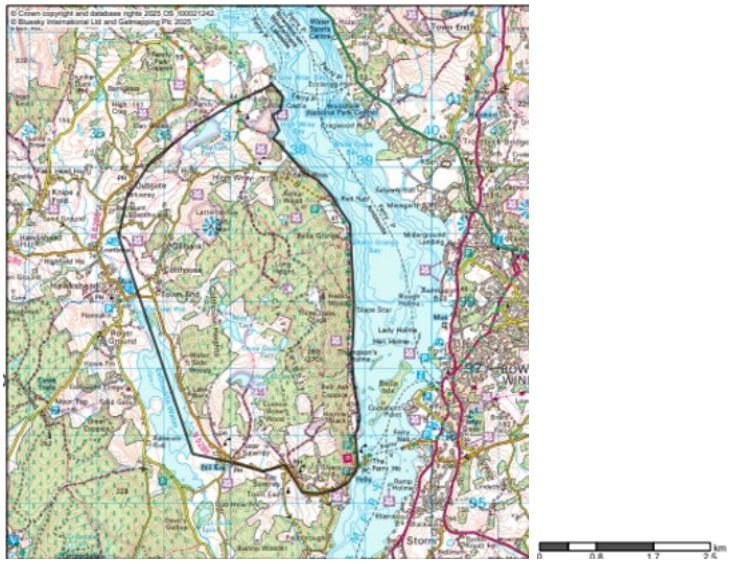
The project showcases the value of innovative technology in conservation research, and how science-led approaches can support practical wildlife management in complex, real-world landscapes.

Case Study 3: Claife Heights landowner and deer managers collaborative cull days (Forestry England/Forestry Commission).

Claife Heights is an upland area in the south of the Lake District National Park. The area is characterised by its undulating terrain situated between Windermere and Esthwaite Water. It attracts many visitors. The area amounts to around 1,300 hectares of heavily wooded land divided between both public and private landownership. The majority of land area is boarded by open water and open ground which creates a self-contained area for both red deer (*Cervus elaphus*) and roe deer (*Capreolus capreolus*). This makes forestry and woodland habitat vulnerable to grazing pressure hence the requirement for a Claife Heights landowner and deer management focused collaboration. The group consists of Forestry England, Forestry Commission, National Trust and local landowners. Twice a year the group carries out foot census counts and organises collaborative deer culls. Several of these days are organised through the doe and hind culling season, funding thermal drone census' and regular catch-up meetings.

There are several challenges and opportunities for wild deer management in this area:

- The National Park is very busy with high levels of visitor pressure which leads to regular disturbance of deer mainly through recreation and access. This can cause them to become unsettled, stressed and often leads towards them becoming more nocturnal in their habitats.
- Red deer can be particularly transient, often travelling over numerous land holdings in a very short space of time moving between habitats and extending their range.
- Changing woodland management, Statutory Plant Health Notice (SPHN) felling and storms resulting in wind-blown timber can create challenges for deer management.
- The above also can open new areas to allow culling and may make opportunities to create deer management infrastructure**,** such as diverting deer away from sensitive woodland areas.
- Claife Heights presents a good opportunity to achieve goals and work collaboratively creating a small-scale model for potential successful landscape management projects.



The outcomes of this approach include:

- Improvement in communication and collaboration between landowners and deer managers over a landscape scale.
- Input from landowners and stalkers to help drive momentum to achieve management goals, including the reduction of impacts on woodland habitats.
- Working across a landscape makes deer management and planning more effective.
- The group meets twice a year to discuss future forestry work and deer targets. There is good communication and trust amongst the members which is fundamental in achieving success long-term.

3. Achieving the ambition

The ambition of this strategy is to establish an approach to the sustainable management of wild deer, at a “whole” landscape scale, balancing public interest, nature recovery, and the cultural integrity of native wild deer in the Lake District landscape.

The steering group has established five goals to address the challenges outlined in the preceding sections and to encourage the direction of deer management towards adopting practice that reflected under the themes of communication, collaboration, data and evidence, communication, adaptability, and the Lake District venison brand.

The strategy aims to provide the framework for delivery and enable clarity, motivation, and a clear path toward delivering outcomes to achieve the goals below. Greater collaboration will underpin all aspects of the strategy.

Communication	Increase awareness and develop a common understanding on the importance of landscapes, biodiversity and deer management.
Collaboration	To encourage a landscape scale approach through knowledge sharing and partnerships.
Data and Evidence	Develop a strong evidence base of science, data and expertise, including local knowledge to guide management.
Adaptive	Integrate local and scientific knowledge to promote a dynamic, impact focused approach to deer management.
Lake District Venison Brand	Support market growth by developing initiatives that promote the sale of venison, built around the highest possible standards of welfare and quality.

The rationale for each of the five themed goals is outlined below:

3.1. Communication

Increase awareness and develop a common understanding on the importance of landscapes, biodiversity and deer management.

Successful deer management requires the support and cooperation of the public, and raising awareness about the impacts of overpopulation and explaining the need for management practices is fundamental.

3.2. Collaboration

Encourage a landscape scale approach through knowledge-sharing and partnerships.

Wild deer move across landscapes and landownership boundaries therefore, effective management requires collaboration between many stakeholders, including public and

private sector landowners, deer managers, deer stalkers, Defra organisations and others involved in deer management across the Lake District.

3.3. Data and evidence

Develop a strong evidence base of science, data and expertise, including local knowledge to guide management *to guide management.*

The Lake District needs a strong evidence and knowledge base to inform and guide management decisions including setting population targets for wild deer species. Currently there is no consistent approach to monitoring and gaps in knowledge relating to spatial distribution and density.

3.4. Impact driven adaptive management

Act upon local and scientific knowledge to promote a dynamic, impact focused approach to deer management.

Regular evaluation of deer management plans ensures that control measures remain effective and responsive to changes in deer behaviour, population trends, and ecological conditions. The strategy advocates the use of local knowledge, population modelling, herbivore impact assessments and habitat monitoring to inform ongoing management to achieve the long-term direction of maintaining sustainable deer numbers.

3.5. Marketable Lake District venison brand

Support market growth by developing initiatives that promote the sale of venison, built around the highest possible standards of welfare and quality.

Venison sales support deer management activities and form a small but important component of the rural economy and traditions. The strategy will encourage the development of marketing initiatives in the Lake District.

3.6. Delivering the strategy

The steering group will be instrumental in the delivery of the strategy through statutory regulation and remit and non-statutory commitment:

- Promotion of the strategy to other landowners, land managers and relevant stakeholders and audiences.
- Facilitate a joint communications approach: social messaging, education and addressing public concern.
- Ensure that effective deer management is carried out on their respective property and land holdings.
- Share information on research and management interventions and methodologies to increase understanding of deer populations across the Lake District.

- Support and facilitate the development of markets for venison.

Achieving the goals will be challenging and require a coordinated, collaborative approach involving a wide range of stakeholders, including private, public and voluntary sector landowners and land managers, deer managers, deer stalkers and the public. There will be regular collaboration and engagement with the steering group, stakeholder group and Deer Management Groups for knowledge sharing and dissemination of best practices and research to maximise the impact of the actions.

3.7. Funding

Funding and investment are vital to deliver the ambition for this strategy and therefore it is important to explore all appropriate funding sources, both short-term and long-term, to ensure that management of wild deer populations remains a priority.

The Farming in Protected Landscapes programme[32] and other partner grant funding mechanisms will support projects that support the delivery of strategic goals, whilst agri-environment schemes such as Countryside Stewardship Higher Tier and Landscape Recovery will incorporate wild deer management into agreements where relevant and appropriate.

4. Actions

The ambition is to establish an approach to the sustainable management of wild deer whilst preserving the balance between public interest, nature recovery, and the cultural integrity of native wild deer in the Lake District landscape. The steering group, facilitated by the Lake District National Park Authority, will oversee the delivery of the actions outlined below. The actions, leads and timelines will be reviewed on an annual basis and where necessary developed and modified by the steering group and stakeholder group to take advantage of future resource opportunities and relevant changes to legislation and policy.

[32] Year 5 will run until 31 March 2025 – future funding is unknown at the time of publication.

Action plan 2025 - 2030

Theme: **Communication**

Goal: Increase awareness and develop a common understanding on the importance of landscapes, biodiversity and deer management.

Outcomes: Better public and stakeholder awareness about wild deer management.

Actions:

1. Work with the Stakeholder Group, Lake District National Park Partnership and others to raise the profile of the strategy and deer management in the Lake District.
2. Organise an annual Stakeholder Group workshop to share knowledge, raise awareness and encourage best practice.
3. Work with key partners to develop joined up messaging to help increase public awareness about wild deer, potential impact on biodiversity and management, including:

- Delivery of key messages using appropriate media channels
- Promoting the benefits of responsible management.
- On-site information provision on management activity.
- Develop an E-newsletter to be hosted on the LDNPA website.
- Organise events to promote the strategy, showcase career opportunities and demonstrate different aspects of responsible management.
- Represent Lake District issues and contribute to the development of a National Deer Management Strategy.

Key issues to consider:

- Public perceptions regarding deer management are varied and extreme views for and against will require mitigation.
- Views and values held by the public and other stakeholders are acknowledged and respected.

Measurements of success:

- Joint approach communications plan regarding deer management established with Steering and Stakeholder group members.
- A minimum of one Wild Deer Management/ Celebration event to be organised annually.

Action plan 2025 - 2030

Theme: **Collaboration**

Goal: Encourage a landscape scale approach through knowledge sharing and partnerships

Outcomes: Native wild deer populations are managed at a sustainable level and are a valuable part of the natural and cultural landscape.

Populations of non-native wild deer are managed towards suppression and prevented from further colonisation.

Actions

1. Advise and support landowners, land managers and farmers on
   - Deer impacts and sustainable populations
   - Signpost landowners, land managers and farmers to existing agri-environment schemes and funding streams i.e. CWS1 payment (as part of Countryside Stewardship Higher Tier), Woodland Supplement WS1, PA7 (payment for managing invasive non-native species) and as part of the England Woodland Creation offer (EWCO).
2. Work with local deer management groups and Landscape Recovery projects to encourage and secure landscape scale management.
3. Develop a case study on the benefits of retaining deer carcasses for nature recovery in the uplands and share learning with the stakeholder group (see section 2.8).
4. Work with landowners, local deer management groups, deer managers and deer stalkers and other stakeholders to develop an action plan for the Rusland Valley.
5. Develop a best practice tool kit on how to set up a landscape scale landowner collaborative.
6. Encourage and organise collaborative deer control days based on the Claife model (target =2 new events: preferably 1 North Lakes and 1 South Lakes).
7. Identify and support opportunities to improve training to help increase the number of well trained, professional deer stalkers and deer managers.
8. Develop opportunities for deer management apprenticeships and traineeships; placements.

Key issues to consider:

- Effective management requires the regulation and review of deer management plans.
- Landowners may have different drivers and incentives with regard to deer management.

Action plan 2025 - 2030

Measures of success:

- Lake District agri-environment scheme targets (options for deer management) are met.
- Physical impact on habitats reduced and the condition of protected sites is improved.
- No evidence of encroachment of non-native species into new areas.
- No increases in current extent of species and populations for any given area.
- Evidence of 2 deer manager apprentices in the Lake District.

Action plan 2025 - 2030

Theme: **Data and Evidence**

Goal: Develop a strong evidence base of science, data and expertise, including local knowledge to guide management.

Outcomes: Robust data sets supporting effective control and appropriate management

Actions

1. Develop an impact focused model for understanding and managing the impact of red and roe deer within specific landscape areas and sharing learning from landscape recovery projects.
2. Organise drone survey demonstration events for the stakeholder group and other deer managers.
3. Create a knowledge network to facilitate information sharing, data collection best practices, and analysis and interpretation of results to aid in decision-making in control and management.
4. Monitor red deer on the border with the Western Dales and work with landowners to deter them to reduce the opportunity for them to hybridise with Sika deer to protect their genetic integrity.
5. Ensure that methods to monitor change through regular impact assessments are built into Landscape Recovery scheme monitoring plans and exchange knowledge with the stakeholder group.
6. Pilot the development of a wild deer data dashboard and distribution map for the Penrith to Kendal Landscape Recovery Project and share with other Landscape Recovery Projects, DMGs and the stakeholder group.
7. Promote Citizen Science as a means of contributing to data monitoring, collection using the Woodland Condition Assessment toolkit and app.

Key issues to consider

- There is a lack of reliable data on exact numbers and their impact on habitats.
- Calculating optimum density is complicated by the complex interaction and in combination effects of different species and groups across a mosaic and network of different habitats across a landscape.
- The management of all wild deer needs to be accountable and based on robust, verifiable evidence.
- Consistent monitoring of deer populations is crucial for effective control and accurate management.
- Understanding wild deer populations and appropriate, sustainable management methods is essential.

Measurements of success

- Sustainable populations of native wild deer are established in the core nature recovery areas across the Lake District.
- No increase in the range and extent in wild deer populations across the Lake District (from current knowledge) – noting non-native species.
- Muntjac numbers, extent and range decreased.
- There is no evidence of the hybridisation of red and sika deer.

Action plan 2025 - 2030

Theme: **Adaptive Management**

Goal: Integrate local and scientific knowledge to promote a dynamic, impact focused approach to deer management.

Outcomes: Control measures remain effective and responsive to changes in deer behaviour, population trends, and ecological conditions.

Action:

1. Develop two case studies using impact focused approach to drive management and share with stakeholder group i.e. using outputs from deer management work undertaken by the Landscape Recovery projects.

Key issues to consider:

- Adaptive management needs to involve relevant stakeholders in developing effective management regimes and ensure learning is shared amongst scientists, landowners, land managers, farmers and other stakeholders.
- An inclusive approach should aim to test different management approaches to provide evidence of what works and of the nature and size of the trade-offs that are inherent.
- Time, resources and the spatial area needed to conduct experimental management often makes adaptive management unfeasible for providing timely evidence to inform new management directions.
- Statutory organisational barriers can be a constraint where the context requires multiple stakeholders to agree on an experimental procedure across an area characterised by multiple ownership.

Measurements of success:

- Prescribed indicators show a visible reduction in over-grazing pressures on key habitats targeted for recovery in agri-environment agreements.
- Protected areas demonstrate an improved conditions status.

Action plan 2025 - 2030

Theme: **Lake District Venison Market**

Goal: Support market growth by developing initiatives that promote the sale of venison, built around the highest possible standards of welfare and quality.

Outcomes: Venison sales support deer management activities and form a small but important component of the rural economy and traditions.

Actions:

1. Increase consumer demand for venison by promoting its health benefits and environmental sustainability, through advertising campaigns, encouraging substitution at hospitality venues, butchery demonstrations, taster venison boxes and chefs showcasing venison in easy recipes.
2. Organise an event to encourage British Quality Wild Venison Standard accreditation and best practice towards supporting market growth and increasing consumer confidence in responsible, traceable, accredited Lake District wild venison.
3. Develop a FiPL applications to support the expansion of market demand for locally sourced venison, to include:
    a. Promotion of venison – as a mainstream choice for consumers and sustainable food source.
    b. Development towards a Lake District Venison brand
    c. Training to develop deer management and processing skills of local deerstalkers, deer managers and farmers.
    d. Upgrade of chillers and processing units
    e. R&D towards:
    - Developing a local supply chain
    - The use of different cuts, from roe and red deer, throughout the year

    f. Create a free registration service that maps venison sellers and connects them directly with buyers, benefiting smaller producers and solving distribution challenges.
    4. Enhance traditional upland access routes and consider provision of new access routes for wild deer management, avoiding adverse impacts on the landscape.
    5. Investigate methods for extracting deer on designated sites.

Key issues to consider:

Supply can sometimes be inconsistent due many physical challenges, such as the complex and difficult terrain, extent of territory, and the paradox of weather (bad weather stops work due to poor visibility and good weather encourages more people leading to more disturbance).

The requirement for better access routes for extraction. The need for more centrally based deer larders and processing units to facilitate direct sales to the supplier.

- Cost related to processing venison can out way the profit.

Measurements of success:

- Establishment of a Lake District World Heritage brand of wild venison.
- The establishment of a minimum of three additional local markets with assured sustainable supply.
- The creation of at least two additional processing plant to process and package venison.
- The location of three additional shared larders to improve supply.
- The upgrade of access routes to improve the efficiency of extraction: priority is Thirlmere and Borrowdale.

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