

**NORTHERN DEER  
MANAGEMENT GROUP**

**DEER MANAGEMENT PLAN:  
WORKING PLAN 2021-2026**

**SEPTEMBER 2022**

## PREFACE

This deer management plan has been developed for the Northern Deer Management Group (NDMG). The Group's plan was rewritten and updated in 2016 by Professor Rory Putman to include all estates and bring it in line with the ADMG benchmark for deer plans. This update was part-funded by Scottish Natural Heritage and part by group members. The plan is currently being updated and restructured by the Group to include a Working Plan with actions.

This Working Plan is used as the Group's action plan and is regularly updated to reflect current group issues and plans.

A separate document 'Deer Management Plan: Background Information' provides information about the structure and running of the Group, count and cull information, designated sites, and all other deer management issues that affect the Group. It is updated when necessary.

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# 1. STRATEGIC OBJECTIVES

Based on the information provided in the Deer Management Plan: Background Information, these are the main objectives for the Northern Deer Management Group, in all cases adhering to Best Practice Guidelines:

- 1 To safeguard and promote deer welfare within the NDMG area.
- 2 To achieve an appropriate balance between deer and their habitat, and between deer and other land uses, to minimize unacceptable damage to agricultural, forestry, sporting or natural heritage interests, such as the important peatland habitats of the Flow Country.
- 3 Within the constraint of (2) and the necessary management culls associated with this, to fulfil **the annual sporting and venison production** objectives of individual Members. This **currently amounts to some 700 stags and approx. 2300 animals overall.**
- 4 To market sporting and venison production to the best advantage of the Group.
- 5 To ensure such resources, training and monitoring capacity that are required are made available to achieve the above objectives.
- 6 Through Habitat Impact Assessments (HIA), NDMG aims to actively maintain the habitats, forage and shelter required to sustain healthy and productive deer herds within the Group area, resilient enough to cope with future uncertainties. Records should be kept of all those land managers undertaking HIA and those not undertaking HIA should be encouraged to do so.
- 7 To facilitate the implementation of any other deer-related management agreements within the Group area, and to provide a mechanism for dealing with any disputes. NDMG will always refer to the ADMG principles for collaboration if disputes arise.
- 8 To ensure full participation from landholders throughout the area in the deer management group, for both counting and cull reporting purposes.
- 9 To maintain and improve local employment, be that specifically in deer management or wildlife management and agricultural activity more generally within the area.
- 10 To ensure that the Group is following the Code of Practice on Deer Management.
- 11 NDMG should strive to always undertake deer management in the public interest whilst meeting individual management objectives. NDMG should introduce a communications and consultation policy to include individuals, local bodies such as community councils and local authorities, and should welcome communication and consultation from neighbouring DMGs.
- 12 To maintain an up-to-date Deer Management Plan (available online) that acts as a suitable source of information and direction for all group members.

## **2. ACTIONS SUMMARY**

The following actions will be delivered by the Group, in conjunction with NatureScot, ADMG and others. The actions will be reviewed and updated on an annual basis, and others added, as appropriate.

## **OPERATION OF THE GROUP**

### **1. Area and boundaries**

1.1 Define sub-group areas and add a map of sub-group boundaries to the Plan.

### **2. Membership**

2.1 Continue to seek to persuade non-members to engage with the Group and share their count and cull information.

### **3. Meetings**

3.1 Encourage all members to send a representative to Group meetings.

3.2 Hold Steering Group meetings in between Group meetings and update all members on progress and decisions made.

3.3 Invite community stakeholders to meetings, such as Community Councils, Wildlife Crime Officers, tourism groups.

### **4. Constitution and finances**

4.1 Produce annual budgets and accounts.

4.2 Review subscription rates annually.

### **5. Deer management plans**

5.1 Update the DMP to include summaries of counts and culls at sub-group level, along with population models for each sub-group.

5.2 Review and update the Working Plan as and when necessary and agree changes at group meetings.

5.3 Update community stakeholders on any changes to the Plan and take note of any feedback with a view to incorporating agreed changes into the Plan.

### **6. Code of Practice on Deer Management**

6.1 Ensure adherence to the Code at all times, both by the Group and by individual members.

### **7. ADMG Principles of Collaboration**

7.1 Incorporate the Principles into all deer management planning.

**8. Best Practice**

8.1 All deer management should be carried out in accordance with Best Practice.

**9. Data and evidence gathering – deer counts**

9.1 Annual foot counts to be carried out by all members, co-ordinated so as to occur simultaneously at least at sub-group level and not to interfere with in-season stalking operations.

9.2 All members to record and share recruitment counts and mortality figures.

9.3 Group to promote consideration of drone operated counts if and when such become practicable; Group to continue to co-operate with NatureScot when it is willing and able to fund helicopter counts.

**10. Data and evidence gathering – culls**

10.1 All members to submit cull figures twice a year.

10.2 Discuss introducing sub-group cull setting using member cull targets and population models.

**11. Data and evidence gathering – habitat monitoring**

11.1 Gather information on current habitat monitoring carried out by group members.

11.2 Support more members to undertake habitat monitoring.

11.3 Collect the results of habitat monitoring data and use to update the DMP and inform cull setting.

**12. Competence**

12.1 Carry out an annual audit and keep a record of competence levels across members e.g. DMQ1, Trained Hunter.

**13. Training**

13.1 Identify opportunities for training of Group members, such as Habitat Impact Assessment methods.

13.2 Encourage all stalkers to achieve DMQ2.

**14. Venison marketing**

14.1 Encourage membership of Scottish Quality Wild Venison scheme and monitor uptake within the group.

**15. Communications**

15.1 Use the Group website to make information publicly available, including DMP, Working Plan, minutes, agendas, annual report/newsletter.

15.2 Update the DMP to include information on engagement with the local community and other stakeholders.

15.3 Contact Community Councils prior to group meetings to ask for any deer-related concerns.

## **PUBLIC INTEREST ACTIONS**

### **1. Develop effective mechanisms to manage deer**

1.1 Progress under the Working Plan to be reviewed at six-monthly group meetings and the Plan updated.

1.2 The full Plan is due to be updated in 2020.

1.3 Collect and collate information from Group members to provide up-to-date information for deer management planning and make aggregated figures publicly available.

### **2. Contribute to the delivery of designated features into Favourable Condition**

2.1 Group/individual estates to initiate programmes of Habitat Impact Assessment to monitor conditions of designated sites.

2.2 Results of ongoing Site Condition Monitoring of designated sites to be reported to Group meetings as soon as completed and necessary actions by individual estates/Group to be discussed.

2.3 Priority areas to be identified through discussions with NatureScot.

### **3. Manage deer to retain existing native woodland cover and improve woodland condition in the medium to long term**

3.1 Discuss priority native woodland areas with high impacts and decide on a strategy for improvements.

3.2 Group to encourage individual estates where proposals are brought forward to restore or extend native woodland resources, particularly within designated sites.

### **4. Contribute to the Scottish Government woodland expansion target of 25% woodland cover**

4.1 Future proposals for new woodland creation to be discussed within the group in order to appreciate possible impact of new fencing on deer distribution and movements and also to assess what collaborative management may be required to undertake compensatory culls or address developing impacts.

4.2 Determine whether, and if so in what quantity, woodland expansion is appropriate for NDMG, given the question whether it is more appropriate to consider plans for reductions/removals of non-native forest plantations and the restoration of affected land to peatland.

## **5. Monitor and manage deer impacts in the wider countryside (not improved agricultural land)**

5.1 Member estates to be encouraged to initiate regular programme of monitoring of herbivore impacts on open hill habitats using Best Practice Guides methods.

5.2 NDMG secretary to collate HIA results and produce maps of significant impacts for each sub-group.

5.3 Results of assessments to be discussed at six-monthly Group meetings and implications considered for any changes to management (including cull setting at Estate, Sub Group or even Group level).

## **6. Maintain Scotland's Carbon storage capability and contribute to securing future carbon storage potential**

6.1 Members commit to maintaining peatland and heathland in good condition through ongoing deer management to ensure impacts do not exceed moderate levels.

6.2 The Group will consider further opportunities to enhance and restore peatland areas and will explore suitable funding sources/opportunities.

## **7. Reduce or mitigate the risk of establishment of invasive non-native species**

The Group will continue its policy for culling Sika Deer (*Cervus Nippon*) when encountered within the Group area; Reeves' Muntjac (*Muntiacus reevesi*) is a well-known invasive and non-native species in the U.K. However, it is not yet recorded as having spread as far as the area of the NDMG. Any sightings in the future will be reported to NatureScot.

7.1 Members to continue the NDMG policy for culling sika deer found within the Group area.

7.2 Members to report to Group secretariat any sightings of Reeves' Muntjac and Group to collate any such reports at six-monthly meetings.

## **8. Protect landscapes and historic features from deer and deer management activity**

8.1 The Group notes and adopts the extensive record of historic monuments, buildings and features within the Group area as designated on the Highland Historic Environment Record found at <https://her.highland.gov.uk/map>.

8.2 Special attention will be paid by stakeholders within the Group to protection of such features from effects of deer and deer management activity.

8.3 All fencing proposals will be brought to the Group for discussion of potential impacts on deer distribution and movement patterns, and consequent threat to the integrity of

recorded historic features. Any necessary compensatory action will be considered and discussed.

## **9. Contribute to delivering higher standards of competence in deer management**

9.1 Group to encourage all owners and staff to seek suitable qualifications and to update records of DMQ qualified staff annually.

9.2 Annual meetings also to discuss new training needs which may be identified and seek opportunities for delivery of training required.

## **10. Identify and promote opportunities contributing to public health and well-being benefits**

10.1 The Group will collate data on Deer Vehicle Collisions (DVCs) reported within the Management Area.

10.2 Group to seek annual updates from NatureScot on the distribution and extents of DVCs within the Management Area, other than those noted by members.

10.3 Group to advise NatureScot of any DVC issues identified and discuss appropriate action.

10.4 Group to encourage all those handling venison for consumption to secure Trained Hunter status.

10.5 Remind and update all members and stakeholders of the potential threats from CWD, *E.coli* and other relevant pathogens and advise on preventative measures.

10.6 Work with NatureScot and walking groups to promote the need to access the land responsibly whilst deer management is being undertaken, including using the HFTSH website.

## **11. Optimise economic benefits of Deer Management in Scotland**

11.1 Encourage members to gain SQWV certification.

11.2 Establish a method for collating and interpreting data on the economic value of deer stalking and venison production within the Group.

11.3 Investigate possibilities for increasing the sporting value of deer stalking.

## **12. Minimise the economic cost of deer**

12.1 Group to establish a mechanism for collating and interpreting data available on economic costs of deer and their management.

12.2 Assess the economic impacts on neighbouring members of changes in deer management by individual estates and provide a forum for conflict resolution to minimise negative economic impacts in an equitable way.

12.3 Investigate the implications of the introduction of sporting rates on Group members.

### **13. Ensure effective communication on deer management issues**

13.1 Invite representatives from community councils, other local stakeholders and community groups to NDMG meetings where appropriate.

13.2 Respond to community issues with deer when they arise.

13.3 Investigate opportunities for education of the wider community about local deer management, such as schools, DMG events.

### **14. Ensure deer welfare is taken fully into account at individual animal and population level**

14.1 Member Estates to report recruitment rates to annual meetings and also report estimated levels of winter mortality so these can be used in population modelling.

14.2 The Group should assess formally the implications of any new woodland felling/restocking proposals (and any fencing associated with restocking or woodland creation) in terms of future availability of cover/shelter to local deer populations.

14.3 Include a deer welfare policy in the Plan.

14.4 Respond with a Group strategy to significant mortality events.

### 3. POPULATION MODELS AND CULL TARGET SETTING

Northern DMG has many varied objectives all of which may require differing levels of deer density across the area. A key annual task of any DMG is to set cull targets that are sustainable – i.e. achieve habitat targets, maximising economic benefits (client stalking) whilst minimising unacceptable damage (e.g. damage to woodland plantings and peatland) – and should be based on the most up-to-date information as possible.

Annual cull setting will be based on the following key aspects:

- Habitat monitoring data and trends
- Sporting stalking aspirations and required population to achieve this
- Most recent deer count data and previous trends
- Recruitment and mortality info
- Changes in management – e.g. compensatory culls for fencing, changes in livestock etc.

But will also take account of:

- Deer welfare
- Managing risk to public safety i.e. reducing risk of Deer Vehicle Collisions
- Unusual weather circumstance
- Temporary changes within the deer range e.g. construction activity

The cull should be achieved in a collaborative manner shared between members, whilst still enabling individual management practices where possible. Habitat monitoring within the group should identify where culls need to be revised to prevent damage to habitat. As more group members undertake monitoring, the information gained can be used to better inform where culls should be adjusted.

Generally, Open Range DMGs are able to apply simple models to their population based on deer counts and subsequent culls. Woodland cover within NDMG is fairly low, but the areas of woodland within the group will add some complexity to modelling due to difficulty assessing the level of deer population resident within the woodlands. Deer movements across the external group boundaries may also affect the accuracy of modelling.

Historically, to ensure an annual supply of mature stags across an area typically between a 6<sup>th</sup> to 7<sup>th</sup> of the stag population should be culled. Research (Clutton Brook, 1994) carried out on Scottish red deer management shows that aiming for a sex ratio as close to 1 stag to 1 hind was mutually beneficial to both deer and land manager. Hence, in the instance of the research, taking a cull of female deer at between 14 - 17% (a 6<sup>th</sup> or 7<sup>th</sup>) of the hind population was optimal for ensuring:

- Higher survival rates in male calves
- Improved calving weights, therefore larger/ more productive deer
- Density of deer is at an optimal level for both habitat condition and economic requirement i.e. not over producing calves which results in larger culls of hinds (and particularly stags out of season – linked to displacement below)

- There is evidence across Scotland that wild deer populations that suffer from high hind densities tend to displace males to lower ground i.e. generally where deer damage is most noticeable.

### **Whole Group Modelling**

As at August 2022, the collective cull targets of NDMG are to take 713 stags and 1312 hinds from both open range and woodland areas. Some members are currently undertaking reduction culls so the total cull targets cannot be considered as the group's cull aspirations. Given the challenge of balancing all management objectives, one approach would be to calculate the deer population size across the group that would collectively provide enough deer to meet total cull aspirations. However, the potential impacts of the desired deer population on differing land use objectives within the group should also be considered, such as having suitable densities to prevent damage to peatlands or marauding deer on neighbouring crofts. A survey of group members in 2020 revealed that most members base their deer management on maintaining current deer numbers/densities, and a few members wish to reduce their deer densities.

The population model on the following page shows the open range counts and culls from 2017 onwards and the predicted future population changes following certain assumptions. The last two years have seen higher open range hind culls than previous years due to a reduction cull being carried out on some properties in the southern part of the group. The model shows that, if these levels of culls continued, it is likely that group deer numbers would continue to fall.

### **Sub-Group Modelling**

With the group covering such a large area, and with hinds hefted to the hill and therefore having limited movement across internal boundaries, the group can be split into several sub-groups to consider deer population dynamics. Stags move further within the group, but with hind numbers having a much greater effect on population changes through calving we can concentrate the modelling on hind numbers.

A survey in 2020 of the deer management objectives of all NDMG members determined the following objectives, split by sub-group:

- North: maintain current deer numbers;
- West 1: maintain current deer numbers;
- West 2: maintain or reduce deer densities to 10/km<sup>2</sup> or lower;
- South 1: some members aim to reduce densities to between 3 and 6/km<sup>2</sup>, others aim to maintain current deer numbers;
- South 2: maintain current deer numbers.

With the overall management objectives based on maintaining or achieving a certain deer density rather than achieving specific cull targets, the collection of accurate information on deer numbers, culls and recruitment data should allow the sub-groups to model their open range populations and adjust their cull targets as required.

**Whole Group Population Model - Open Range Only**

	Stags	Hinds	Calves	Totals	Density
<b>2017 Counted Spring Population</b>	3812	4709	1899	10420	8.4
2017 Summer Population	4667	5753	1726		
2017/18 Reported Hill Cull	655	1305	536		
2018 Mortality	93	115	104		
2018 Predicted Spring Population	3918	4333	1086		
<b>2018 Counted Spring Population</b>	3003	4711	1171	8885	6.9
Change from model	-915	378	85		
2018 Summer Population	3530	5355	1607		
2018/19 Reported Hill Cull	494	907	265		
2019 Mortality	71	107	96		
2019 Predicted Spring Population	2965	4341	1245		
<b>2019 Counted Spring Population</b>	3036	4284	1361	8681	6.7
Change from model	71	-57	116		
2019 Summer Population	3648	5033	1510		
2019/20 Reported Hill Cull	541	894	246		
2020 Mortality	73	101	91		
2020 Predicted Spring Population	3034	4038	1173		
<b>2020 Counted Spring Population</b>	3126	4430	1449	9005	7.1
Change from model	92	392	276		
2020 Summer Population (50% calv.)	3778	5227	2613		
2020/21 Reported Hill Cull	582	1158	383		
2021 Mortality	76	105	157		
2021 Predicted Spring Population	3120	3964	2074	9159	7.1
2021 Summer Population	4054	5105	1531		
2021/22 Reported Hill Cull	589	1109	342		
2022 Mortality	81	102	92		
2022 Predicted Spring Population	3384	3894	1098	8375	6.5
<b>2022 Counted Spring Population</b>	2892	4637	1616	9145	6.9
Change from model	-492	743	518		
2022 Summer Population	3619	5526	1658		
2022/23 Proposed Cull	648	1262	421		
2023 Mortality	72	111	99		
2023 Spring Population	2899	4153	1138	8190	6.4
2023 Summer Population	3411	4779	1434		
2023/24 Estimated Cull	580	1100	367		
2024 Mortality	68	96	86		
2024 Spring Population	2763	3583	981	7327	5.7
2024 Summer Population	3204	4123	1237		
<b>TARGET POPULATION</b>		?			

**Assumptions/ notes**

mortality = 2% for adult deer, 6% for calves

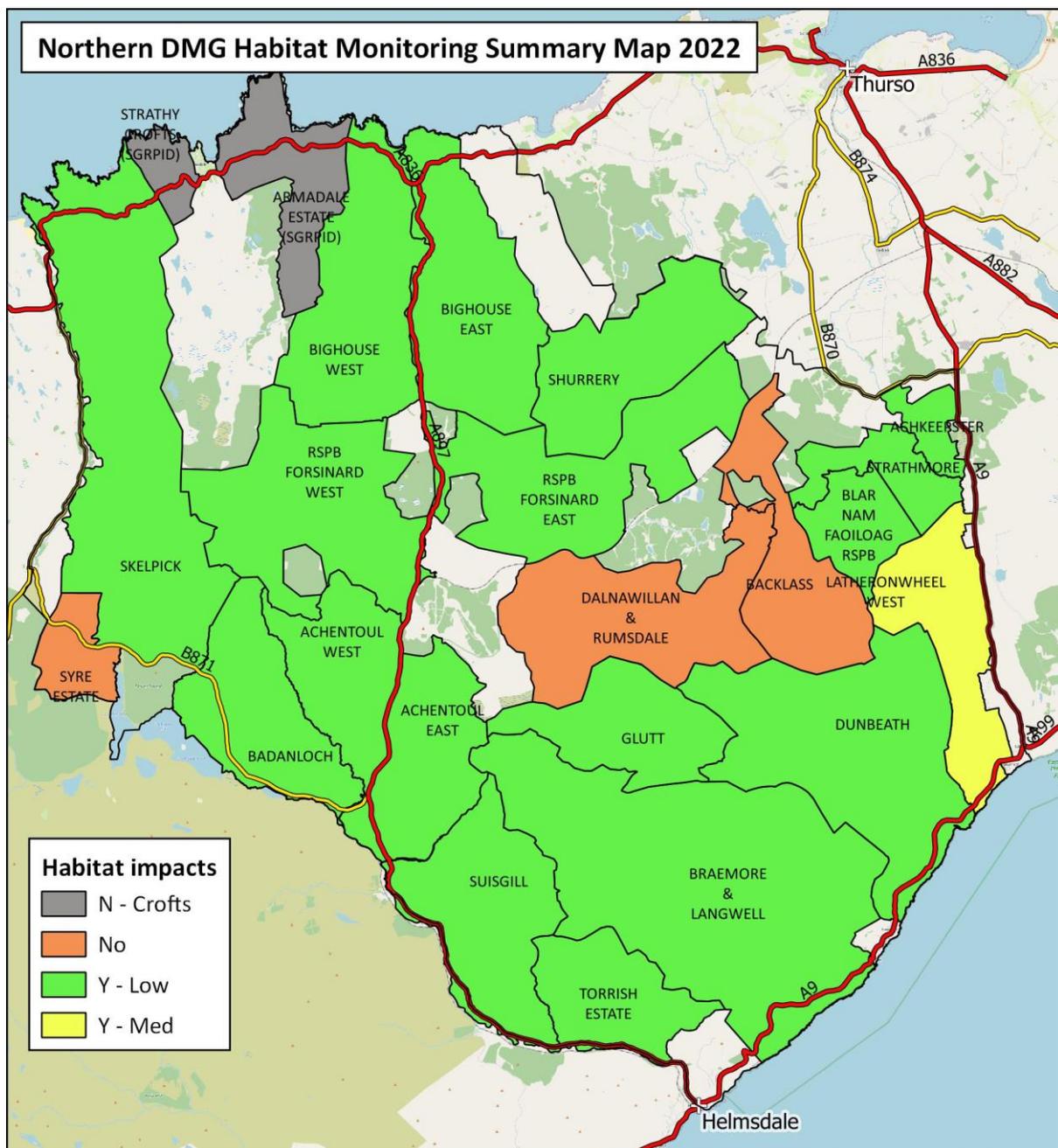
sex ratio split of calves stags:hinds = 45:55

summer calving = 30% (50% for 2020)

Area counted: 2017 - 124,090 ha; 2018&amp;19 - 128,876 ha; 2020 - 126,477 ha; 2022 - 132,522 ha

## 4. HABITAT MONITORING

Over the past few years, many group members have started monitoring their habitat condition, and now most of the group area is under monitoring schemes. Some members employ external contractors to undertake surveys whilst others have trained their staff to do the monitoring. NatureScot recently provided HIA training for several group members. The map below shows a summary of which members are doing habitat monitoring and what condition their habitats are in, as of Summer 2022.



**Designated Sites and The Flow Country**

50% of the DMG area lies within designated sites, almost all of which are in Favourable or Unfavourable Recovering status – see map below. The levels of browsing in the group’s native woodlands are high, especially on designated sites. This is likely due in part to them being extremely small within the landscape, with few other areas for deer to use as an alternative. It is understood that there are signs of regeneration in these woods.

The group covers a large part of the Flow Country, an area of Sutherland and Caithness that is known for its extensive peat bogs. Group members recognise the importance of protecting and maintaining these peatlands as a vital resource for carbon storage and for the conservation of their nationally important habitats and species.

