

**DEER MANAGEMENT PLAN**  
**West Knoydart Deer Management Group**  
**Version 20<sup>th</sup> November 2017**

**1. Statement of Purpose**

This plan will enable the West Knoydart Deer Management Group to deliver positive outcomes for the deer population, natural heritage, local community and visitors, as well as deliver the wider public interest.

**2. Rationale**

This plan will put into practice the aims and objectives outlined in the WKDMG Framework Document (Appendix 1.1), and will be implemented in line with the WKDMG Code of Conduct (Appendix 1.2).

The group recognises that:

- native deer species are an integral part of the natural heritage,
- deer management can bring environmental, social and economic benefits,
- at inappropriate population levels, deer impacts can damage habitat condition and suppress natural processes.

Deer populations will be manipulated through culling and fencing:

- to achieve group priority objectives,
- in collaboration with the neighbouring KDMG
- with regard to the Code of Practice on Deer Management,
- in line with industry Best Practice Guidance,
- with regard to the 'Joint Agency Guidance on Fencing'
- not impeding public access at any time,
- to deliver the wider public interest.(Appendix 2.1 & 2.2)
- with due regard to the ADMG Benchmark and Principles of Collaboration (Appendix 2.3)

**3. Members**

Membership is open to any landowner or organisation with an interest in deer management, within the geographical area of the Knoydart Peninsula.

Current WKDMG members are:

Airor Common Grazings Committee, Airor School House, Bhraomisaig, Cnoc Gorm, Croulin, Doune, Glaschoille, Inverguserein Farm, Li and Coire Dhorcail, Knoydart Forest Trust, Knoydart Foundation, Li, Rheigh Dharraich, Sandaig, Torr na Insche.

Current active participants are:

Kilchoan Estate and Scottish Natural Heritage.

Kilchoan Estate is an integral partner in WKDMG deer management planning and as such is included within relevant parts of this plan, including deer population data and group objectives. They are members of the KDMG.

#### **4. Communications Policy**

The group will inform members, neighbours, the local community and the wider general public of its' activities and intentions by:

- Informal communications regarding day to day activities between members as necessary,
- Direct communication to members and neighbours of all meeting agendas & minutes, and deer management data,
- Visit Knoydart and members own websites to be used to publish the Deer Management Plan and all meeting agendas & minutes,
- Local community newsletter and display area to be used to keep local community informed of activities.

#### **5. Training Policy**

The group will encourage members to ensure that all individuals directly involved in deer management have appropriate competence levels by:

- Assessing competence levels within the group, including keeping records of members competence levels (Appendix 2.9)
- Encouraging and providing opportunities for all active members to gain training to a minimum DSC level 1 standard.
- Encouraging and providing opportunities for all active deer managers to gain training to a minimum DSC level 2 standard, with SNH 'Fit and Competent' registration.
- Consideration of a group member becoming a DSC level 2 assessor.
- Encouraging professional deer managers to study the UHI "Sustainable Deer Management" module.

#### **6. Audit**

##### 6.1 The land

The group covers an area of 10,417 ha. (Appendix 3.1)

Nearly all of the group area is part of the Knoydart National Scenic Area (Appendix 3.2), but there are no other significant designations. It is largely within the SNH Core Areas of Wildland map (Appendix 3.3). The area comprises mainly open hill ground of heath and bogland habitats (Appendix 3.4), with some remnant native woodland. There are some small areas of commercial forestry now within the deer range (c. 270 ha). There is a similar area of mixed woodland at Inverie (c. 255 ha) which is managed for multiple objectives, and excluded from the open range by deer fencing. At Aior there is an area of Common Grazings also excluded by deer fences (c. 400 ha) which encompasses 125 ha of native woodland establishment. There are also increasing areas of new native woodland establishment and regeneration which are currently excluded from the open range by deer fencing, but which will be opened up once the woodland is established (c. 1200 ha). Woodland cover totals approximately 1900 ha, which equates to approximately 18% of the total Group area. Currently around 14% of the Group land area is excluded from the open range by deer fencing, giving a reduced open range area of 8506 ha. (Appendix 2.10 & 3.5)

Over the last few centuries the area has been intensively managed for livestock and arable but in the last 170 years this has narrowed to a generally high impact herbivore (sheep and deer) regime. In the last 50 years red deer have been the primary grazing

animal on most of the peninsula. Use of muirburn has been widespread and can still occur, though mostly as accidental wildfire. Ownership and objectives are now more diverse, including wildland conservation, tourism, agriculture and community interests (Appendix. 2.4)

The group area contains significant areas of peatland, which is important both for its habitat and carbon storage value. The group will endeavour to map and assess the condition of its peatlands, with a view to their future conservation.

A list of references to relevant documents describing the area and some of its' members can be found in the appendix.

### 6.2 Deer population estimates and cull figures

*This section includes data for Kilchoan Estate, because it is an integral component of the annual deer count area, and so we can view trends from the combined data.*

The group is primarily concerned with the management of open range red deer, but does also recognise wider issues and concerns. Consistent annual count and cull data is available for the group area since 1992 (Appendix 2.6), and other available deer population data has also been compiled (Appendix 2.7). The most recent group population count (spring 2017) of 2719 deer would suggest an overall population density for the whole group area of approximately 17 deer per 100ha. This is inclusive of land currently excluded from the deer range by deer fencing, which when taken into account increases the actual open range density to 19 deer per 100ha. However, the density varies significantly across the area (Appendix 3.6). The actual population density is generally significantly higher than the stated target densities of most members (Appendix 3.7). Cull returns totalled 387 deer culled over the whole group area in 2016 -17, approximately 14.2% of the spring 2016 count of 2719 deer.

There are relatively small numbers of roe deer to be found, generally on low and wooded ground, with the highest density being in Inverie Woods. The population has been largely limited by the available woodland habitat, but may increase as woodland cover expands. There is no population census data available for roe deer.

Occasionally young sika stags have been found in the vicinity of Inverie, which have been culled at the earliest opportunity. These are believed to have either swam over from Nevis Estate or come over land from the east. However, there has been a sighting of sika hinds at the Guserein Plantation, and a sika stag has been culled from the Guserein Bridge Plantation, so it is possible that a small breeding population now exists there. A sika stags have also now been sighted at Cnoc Gorm and Li, both Loch Hourn.

### 6.3 Other herbivores and livestock

There are two small distinct herds of feral goats. One herd of 40 (April 2015 count) ranges the west coast from Glaschoille to Doune and the hills to the west of the track from Inverie to Inverguserein. The second group ranges along the Loch Hourn coast between Croulin and Li, and up onto Bheinn na Callaich, and the population size is currently unknown but thought to number less than 40..

Inverguserein is a sheep farm which currently carries approximately 620 Blackface ewes, including on 1613 hectares of land leased from Knoydart Foundation. There is croft land at Airor which currently carries small numbers of cattle (6) and sheep (40). There are small numbers of ponies at Inverie and seasonally at Follach.

There are small numbers of wild Mountain hare. Rabbits are not currently present.

#### 6.4 Employment and Economic Considerations

Currently, deer management is actively carried out by 5 members, and makes a significant contribution to the local economy as shown in the table below.

Member	Employment Full-time equivalents	Average stag lets	Average hind days lets	Annual value of wider community benefits from deer management (£)	Proportion of annual turnover derived from deer management
ACGC	0.05	0	0	100	0.1%
Inverguseran	0.1	2	2	1,000	0.2%
JMT	0.8	8	7	10,000	80%
KFT	0.1	0	0	500	0.1%
KF	2.2	55	40	20,000	30% (Not including subsidiaries)
<b>Total</b>	<b>3.25</b>	<b>65</b>	<b>49</b>	<b>32,100</b>	

Note: wider community benefits include revenue from venison processing and transport from Knoydart, and stalking lets spend on accommodation, boats and food/drink.

The annual stag cull also contributes towards the capital value of the land, not quantified here and not relevant to all landholdings.

The group recognises that maintaining the deer population at the target density will have associated costs, such as damage to forestry, woodland and agriculture. This is often only tangible through costs such as deer fencing, culling and re-planting seedling losses, etc, and these costs are very difficult to quantify.

## **7. Objectives, targets and constraints**

### 7.1 Group Priority Objectives

Group members have listed and scored their land management objectives (Appendix 2.4). From this list, the top 20 ranking objectives have been selected as the groups' 'Priority Objectives'. These are:

#### Red Deer Management Specific

- Deer population not to exceed carrying capacity
- Maintain a healthy red deer herd
- Protect deer welfare
- Operate best practice
- Operate sustainable deer management
- Operate within a deer management plan
- Maximise venison production

#### Environmental

- Native woodland regeneration
- Enhance biodiversity
- Guard against uncontrolled muirburn
- Maintain and enhance the landscape
- Habitat conservation and improvement

#### Land Use

- Deer stalking
- Venison sales
- Tourism

#### Socio-economic

- Good relationships with neighbours
- Protect cultural heritage
- Coherent peninsula-wide management
- Generate breakeven or profit
- Local employment

### 7.2 Deer population and cull targets

From individual members' stated target deer densities, a specific target density for the group as whole (including Kilchoan) has been calculated at 12 deer per 100ha, as shown in the table below. This equates to a target population of 1900 deer. However, if ground excluded from the open range by deer fences is taken into consideration, the target population would be reduced to 1654 deer. The density will in any case vary across the group in line with individual members' aspirations and with consideration to their neighbours' objectives (appendix 3.7).

Member	Area (ha)	Stated Target Density (Deer/100ha)	Target Population	Current Population Spring 2017	Current Density
Kilchoan	5350	16	856	1460	27.2
KF	6800	11	748	962	14.2
Inverguserein	1000	10	100	181	18.1
JMT	1156	3	35	62	5.4
Total for landholdings with a stated target density	14306	12	1739	2665	18.6
Total Group Area	15862	12	1900	2719	17.1
Group Open Range	13782	12	1654	2719	19.7

Culls will be adjusted in line with monitoring information to consistently work towards aspirational densities. A minimum annual maintenance cull of 10% of the counted population will be applied by members; this figure being increased as necessary to achieve aspirational densities and other objectives.

Historic population data has been reviewed in order to build up a population model for the group, which will be used by members to assist future cull planning. This model recognises that the deer range extends beyond the boundaries of existing members, and so also incorporates Barisdale and Camusrory estates. Because there is no reliable recent foot count data for these properties, the 2014 SNH helicopter count data has been used as a start point. In the future, spring counts for these properties will be coordinated with WKDMG and the data then fed into the population model.

### 7.3 Constraints and mitigation

It is recognised that achieving the deer population, habitat and other priority objectives set out above may be constrained by external uncontrollable factors such as weather, access for stalkers, etc. Wider deer management by neighbours may also impact on both the objectives and the cull required, and it is accepted that some level of compromise between members may at times become necessary.

### 7.4 Communication

Members will maintain effective communication with each other, particularly where operations might have the potential to impact upon a neighbour, such as building or removing deer fencing, or changes to planned cull targets.

Progress with annual culls should also be communicated, and where a shortfall is expected any mitigating measures explored, for example a neighbour increasing their cull to compensate.

## **8. Group Contribution to SNH Public Interest Outcomes**

### 8.1 Develop effective mechanisms to manage deer.

- Members will engage with the group at appropriate levels and implement this DMP.

### 8.2 Contribute to the delivery of designated features into favourable condition.

- No action required.
- Where appropriate, encourage and assist neighbours to deliver.

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

- The group members have already made significant contributions, with approximately 218ha or 73% of woodland (NWSS) protected by either culling or fencing.
- Members will actively seek ways to continue to expand this management.
- Where woodland is currently protected by fencing, when deer are again allowed open access the woodland will be monitored to ensure impacts are kept to acceptable levels.

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

- The group members have already made significant contributions, through the establishment of about 1500ha of new native woodland over the last 30 years. This in addition to NWSS areas and non-native plantations give a total Group woodland cover area of 1900ha, or 18% of the land area.
- Members will actively seek opportunities to establish new and expand existing woodlands.
- The Knoydart Forest Trust's Long Term Forest Plan is currently being updated, and has a vision for linking existing woodland areas. This includes consideration of new establishment schemes which could total up to 400ha of new woodland over the next 10 to 15 years. This would potentially give a group area woodland cover of 2300ha, or 22% of the land area.

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

- Members will contribute to Group habitat impact monitoring assessments at appropriate levels, and respond as outlined in 9.2 below.
- Consideration will be given to expanding the monitoring program to cover more plots and/or habitat types.

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

- Members will consider mapping and monitoring the condition of peatlands.
- Members will consider managing deer to conserve and improve the condition of peatlands.

### 8.7 Reduce or mitigate the risk of establishment of invasive non-native species

- Members will continue management of feral goat populations to prevent expansion of territory and minimise impacts.
- The group area is relatively free from Sika deer at present and should be maintained as such, in order to protect the genetic integrity of the red deer.
- Members will report, and prioritise resources to cull, any sika deer sighted.

### 8.8 Protect landscapes and historic features from deer and deer management activity.

- Members will take note of historic feature survey results.
- Deer impacts on historic features should generally be positive, but special consideration needs to be made where establishing woodland, or where trampling is eroding features..
- Members will minimise the impacts of fencing on the landscape.

8.9 Contribute to delivering higher standards of competence in deer management

- Members will implement the training policy as outlined in section 5 above.

8.10 Identify and promote opportunities contributing to public health and well-being benefits

- Members will continue to promote open access for local communities and visitors.

8.11 Optimise economic benefits of Deer Management in Scotland

- Members are already delivering this by maximising income from stalking lets and venison, and the wider community benefits this brings.
- Members will continue to look for opportunities to increase the value of their deer management activities.

8.12 Minimise the economic costs of deer, and ensure deer management is cost effective

- Members should identify and quantify all costs of deer management, including capital investments such as deer fencing and stalking equipment.
- Members should identify all negative impacts of deer on other land uses, and where possible assign a financial value to each cost, such as replanting lost trees.
- The Group will collate these records and consider where improvements can be made.

8.13 Ensure effective communication on deer management issues

- Members will implement the communication policy as outlined in section 4 above.

8.14 Ensure deer welfare is taken fully into account at individual animal and population level

- Members will report any natural mortality of deer to the Group, and the Group will keep records of this.
- The Group will assess this information and indicative data gathered from cull records, to determine herd health and identify any welfare issues.
- If welfare is determined to be an issue, then actions such as increased culling levels or expanding woodland shelter will be considered.



## **9. Monitoring**

### 9.1 Priority Objectives

Progress towards achieving the groups' priority 'top 20' objectives will be reviewed annually by a members' scoring exercise (appendix 2.11), to be carried out at one of the annual meetings.

### 9.2 Habitats

A programme of habitat monitoring is in place on Li & CD, Knoydart Foundation and Kilchoan Estate. Annual habitat impact monitoring (carried out in April / May / June) will be used to help inform cull targets. If heavy impacts over more than 10% of plots, or medium impacts over more than 30% of plots are consistently measured over 3 years, there is an assumption that targeted culling will be increased to reduce these impacts to acceptable levels.

### 9.3 Deer and other herbivore numbers

Any significant changes in livestock numbers on the ground should be reported to the group.

Members will record cull data and report back to the group annually.

The group will carry out an annual deer population census by means of a coordinated foot count. If desired and when viable, a helicopter count will be carried out. The group deer density map will be updated annually, in order to assess progress towards desired densities. Where deer densities are moving away from target densities, proposed culls for the following year will be adjusted accordingly.

## **10. Review**

### 10.1 Annual Review

An evidence based annual review of the above monitoring information will be carried out, with the targets for the following year adjusted in order to achieve optimum progress towards group priority objectives, target deer densities and target habitat impact levels. The review will also consider the Group contribution to the SNH Public Interest Outcomes, as detailed in section 8 above.

### 10.2 Full Review

A review of the whole plan will take place every 5 years. This will include reviewing aspirational deer densities and re-scoring of all members objectives in order to update the groups' priority objectives.

## **11. Summary of Actions**

- 11.1 Maintain invitation of membership to all within the geographical area of the Knoydart Peninsula, including Kilchoan, Barisdale and Camusrory Estates.
- 11.2 Maintain open communications as described in section 4.
- 11.3 Continue to record levels of competence and promote training opportunities, as described in section 5.
- 11.4 Continue with the consistent spring deer counting regime.
- 11.5 Continue with, and consider expanding, the habitat impact monitoring program.
- 11.6 Implement use of the population model to assist in cull planning.
- 11.7 Carry out an annual cull planning exercise, adjusting targets in line with monitoring information to consistently work towards aspirational densities, habitat impact targets and priority objectives.
- 11.8 Maintain records of livestock within the group.
- 11.9 Carry out an annual review, as described in 10.1 above.
- 11.10 Carry out a full review as described in 10.2 above, every 5 years.

## **12. Additional Public Interest Actions (from section 8):**

- 12.1 Actively seek ways to continue to protect woodland through deer management.
- 12.2 Actively seek opportunities to establish new and expand existing woodlands.
- 12.3 Consider mapping peatlands and assessing their condition.
- 12.4 Consider managing deer to conserve and improve the condition of peatlands.
- 12.5 Continue management of feral goat populations to prevent expansion of territory and minimise impacts.
- 12.6 Prioritise resources to cull any sika deer sighted, in order to protect the genetic integrity of the red deer.
- 12.7 Protect historic features and minimise the impacts of fencing on the landscape.
- 12.8 Promote open access for local communities and visitors.
- 12.9 Look for opportunities to increase the value of deer management activities.
- 12.10 Identify and quantify all costs of deer management, including all negative impacts of deer on other land uses. Collate these records and consider where improvements can be made.
- 12.11 Monitor natural mortality levels and assess cull data, to identify any welfare issues, and respond as appropriate.

## 13. Appendix

### 1. Documents

- 1.1 WKDMG Framework Document
- 1.2 WKDMG Code of Conduct

### 2. Spread-sheets

- 2.1 SNH DMG Assessment
- 2.2 SNH Public Interest Criteria Assessment
- 2.3 ADMG Benchmark Assessment
- 2.4 Objectives scoring spreadsheet
- 2.5 Habitat impact monitoring records (Not yet collated)
- 2.6 Group Count, Cull and Natural Mortality Data
- 2.7 Population Model 2016 to 2022
- 2.8 Cull Proposals 2016 to 2022
- 2.9 Group Training Records
- 2.10 Woodland and deer fences
- 2.11 Open Range Population Density Calculations
- 2.12 Priority Objective Scoring

### 3. Charts

- 3.1 Deer Population Trend Chart
- 3.2 Deer Cull Returns Chart
- 3.3 Total Deer Count and Cull Chart
- 3.4 Stag Count and Cull Chart
- 3.5 Hind Count and Cull Chart

### 4. Maps

- 4.1 Ownership
- 4.2 Knoydart NSA
- 4.3 SNH Wildland
- 4.4 Land Cover Classification
- 4.5 Woodland, Forestry and Deer Fencing
- 4.6 KFT Woodland Linkage Vision Map
- 4.7 Current Deer Population Density
- 4.8 Target Deer Population Density

### 5. Other relevant documents

- 5.1 Knoydart NSA Special Qualities
- 5.2 Knoydart Foundation Feral Goat Management Plan
- 5.3 Knoydart Foundation Land Management Plan
- 5.4 JMT Land and Deer Management Plan
- 5.5 KFT Woodland Management Plan
- 5.6 KFT Long Term Forest Plan -currently under review; only available as hard copy in Inverie
- 5.7 WKDMG response to KDMG DMP Consultation

### 6. Relevant Web Links

- 6.1 Best Practice Guidance: [www.bestpracticeguides.org.uk/](http://www.bestpracticeguides.org.uk/)
- 6.2 Code of Practice on Deer Management: [www.snh.gov.uk/docs/B949709.pdf](http://www.snh.gov.uk/docs/B949709.pdf)
- 6.3 Joint Agency Guidance on Deer Fencing: [www.snh.gov.uk/land-and-sea/managing-wildlife/managing-deer/sites/fencing/](http://www.snh.gov.uk/land-and-sea/managing-wildlife/managing-deer/sites/fencing/)
- 6.4 Knoydart Deer Management Group, Deer Management Plan Draft: [www.knoydartdmg.deer-management.co.uk/deer-management-plan/](http://www.knoydartdmg.deer-management.co.uk/deer-management-plan/)  
\*Please read with reference to 5.7 above\*
- 6.5 Knoydart Foundation: [www.knoydart-foundation.com/](http://www.knoydart-foundation.com/)
- 6.6 John Muir Trust: [www.johnmuirtrust.org/trust-land/knoydart](http://www.johnmuirtrust.org/trust-land/knoydart)
- 6.7 Kilchoan Estate: [www.kilchoan-knoydart.com/](http://www.kilchoan-knoydart.com/)
- 6.8 Knoydart Forest Trust facebook page: [www.facebook.com/Knoydart-Forest-Trust-557257407630445/](https://www.facebook.com/Knoydart-Forest-Trust-557257407630445/)