

Lochalsh Deer Management Group Deer Management Plan Update- April 2019



Prepared by Susan Jones
(MA;PG Dip;Cert Env Mgmt (NZ))
On behalf of the Lochalsh DMG

Table of Contents

1. Introduction	3
1.1 Introduction	3
1.2 Members of Group.....	3
2. Lochalsh Deer Management Group Deer Population.....	4
2.1 Deer Count Figures	4
2.1.1 SNH Group Counts	4
2.1.2 Individual Estate Deer Counts.....	4
2.2 Deer Cull Figures	6
2.3 Other grazing species.....	6
2.4 Supplementary Feeding	7
3. Deer related Infrastructure/Accreditation and Workforce skills	7
3.1 Deer related Infrastructure/Accreditation	7
3.2 Workforce Skills	7
4. Natural History of Group area	8
4.1 Site designations	8
5. Public Access and Public Welfare	8
5.1 Provision on Estates for Recreational Activities	8
5.2 Public Welfare.....	8
6. Future Management of the group area.....	9
6.1 Actions to achieve the ADMG/SNH Benchmark	9
6.1.1 Action 1	9
6.1.2 Action 2	11
6.1.3 Action 3	11
6.1.4 Action 4	12
6.1.5 Action 5	12
6.1.6 Action 6	12
6.2.7 Action 10	13
6.2.8 Action 13	13
7.0 Actions to take forward	14

Appendices, Figures and Tables

Appendix 1.....Attadale Native Woodland-Herbivore Impact Map

Appendix 2.....Achnashellach- proposed woodland regeneration site

Appendix 3.....Inverinate Native Woodland Herbivore Impact Maps

Appendix 4.....Progress update on Attadale Estate Long Term Forest Plan

Appendix 5.....Habitat Impact Assessment-Baseline data gathering report 2016-2018

FIGURE	INFORMATION	PAGE
1	Spring counts for Achnashellach Estate	4
2	Spring Counts for Attadale Estate	5
3	Spring Counts for Inverinate Estate	5

TABLE	INFORMATION	PAGE
1	Achnashellach deer cull figures	6
2	Arineckaig deer cull Figures	6
3	Attadale deer cull figures	6
4	Inverinate deer cull figures	6
5	FC- Achnashellach (south of road) deer cull figures	6

1. Introduction

1.1 Introduction

Lochalsh Deer Management Group published their new Deer Management Plan in August 2016. The Plan had a timeframe of five years with a full review due in 2020. However as it was a live, evolving plan, it was decided that a short annual update should be prepared each autumn to ensure that the information and updates on actions being worked on are kept current.

Due to the SNH DMG Assessment at the end of April 2019, it was decided that the 2018 annual update would be delayed until early April 2019 to ensure all the up to date information was available prior to the assessment.

A copy of all the annual updates will be made available on the Lochalsh DMG website (www.lochalshdmg.deer-management.co.uk).

1.2 Members of Group

The Lochalsh Deer Management Group still consists of four private Estates and an area of land held by the Forestry Commission. The private Estates are Achnashellach (South Beat only as the land on the north side of the A890 is part of the South West Ross DMG); Arineckaig, Attadale and Inverinate (Inverinate itself has three distinct beats known as Killilan, Inverinate and West Benula). The Forestry Commission has an area of land situated centrally within Glen Carron and is bounded in part by the south beat of Achnashellach Estate.

All five members continue to return cull data annually to SNH.

2. Lochalsh Deer Management Group Deer Population

2.1 Deer Count Figures

2.1.1 SNH Group Counts

No further whole group counts (organised by SNH) have occurred.

2.1.2 Individual Estate Deer Counts

Achnashellach Estate

Achnashellach undertook a spring count in 2018. The count was undertaken on foot by the stalker, Chris Mackenzie. The chart below shows the count for the south beat only, as it is the only beat included in this DMG.

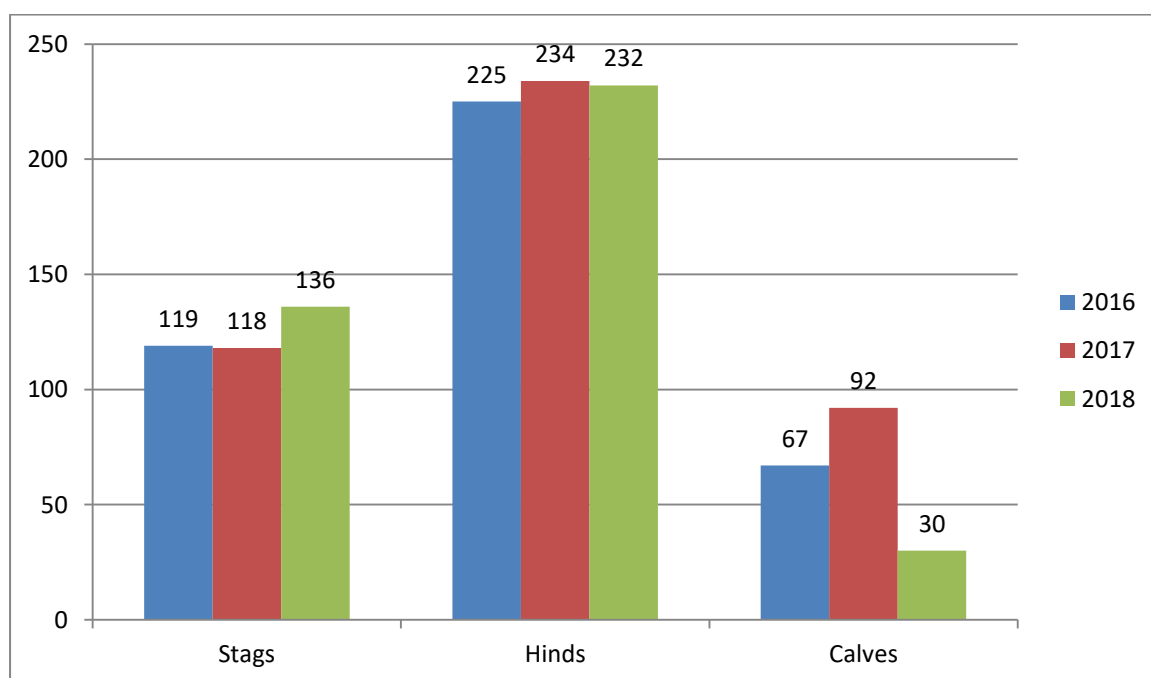


Figure 1- Achnashellach spring counts-south beat only

Arineckaig Estate

Due to the small size of Arineckaig relative to its neighbours, deer numbers tend to reflect weather or other disturbances. Therefore general observations are noted throughout the year as opposed to an organised count and numbers appear to be stable.

Attadale Estate

Attadale undertook a late spring count of the three key deer holding areas in 2018. These counts were done on foot by the Stalker and concentrate on the Far Corries, the slopes of Lurg Mhor above Loch Calavie and on Beinn Dronaig.

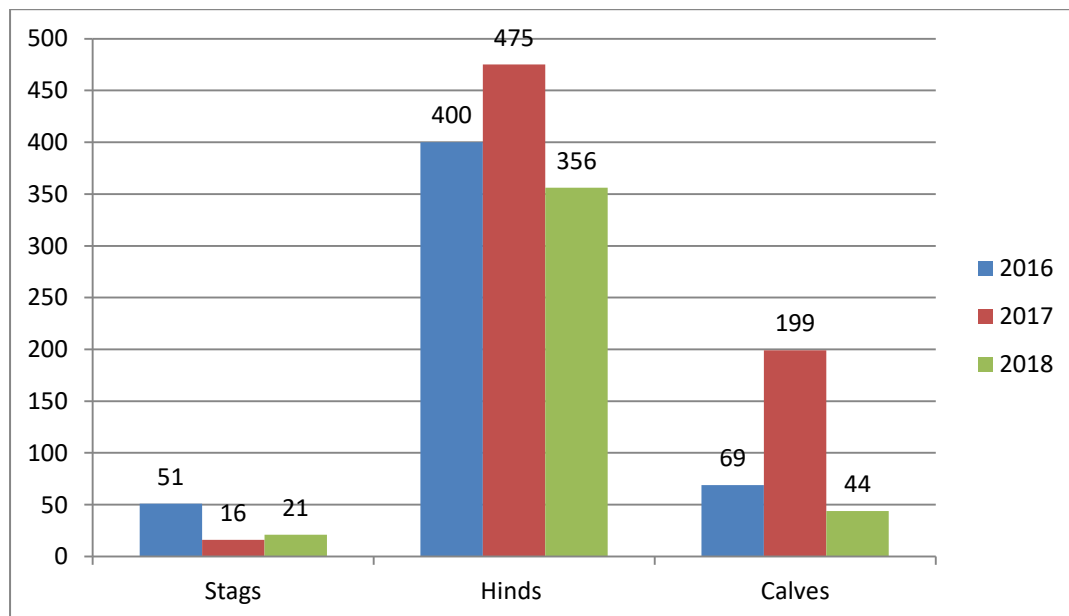


Figure 2- Attadale spring counts

Inverinate Estate

Inverinate Estate normally undertakes counts in the spring, however in 2018; a count was undertaken on 15 December prior to the commencement of the hind/calf cull. Therefore please note that 2018 results for the count were from a different time of year from 2015 and 2016. No count was undertaken in 2017.

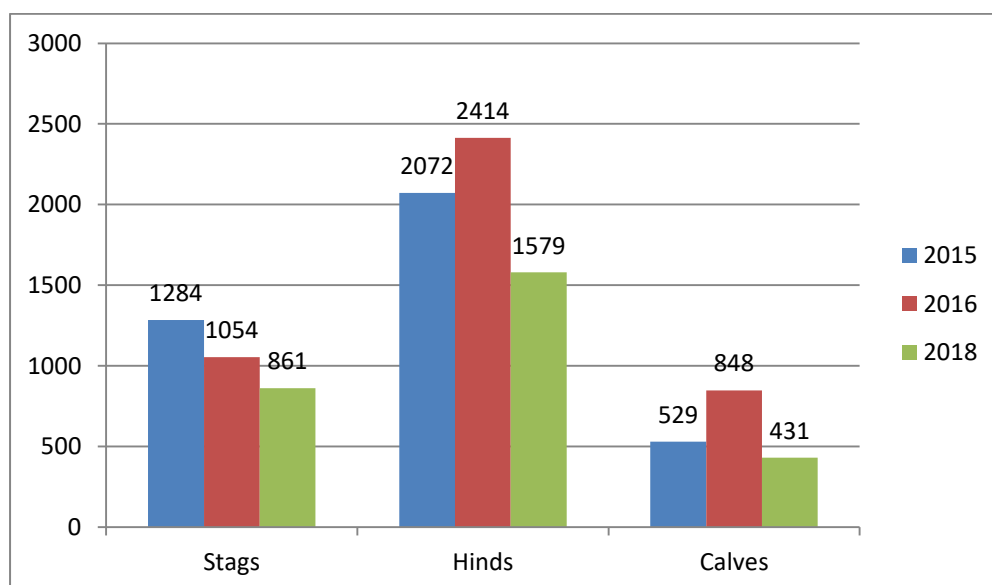


Figure 3- Inverinate spring counts

Forestry Commission- Achnashellach

The Forestry Commission undertakes dung counting to ascertain its deer levels within the woodland area. The last count was done in 2009 and was estimated at 16 deer per 100ha.

2.2 Deer Cull Figures

Annual Deer culls to date have been organised at Estate level and cull numbers are decided based on annual count data, annual recruitment levels and annual spring mortality levels.

Cull figures for red deer during the 2018/19 season are shown in the tables below. Numbers in brackets for Attadale were animals shot out of season.

Table 1- Achnashellach deer cull figures

Year	STAGS	HINDS	CALVES	TOTAL
2018/19	18	17	3	38

Table 2- Arineckaig deer cull figures

Year	STAGS	HINDS	CALVES	TOTAL
2018/19	6	3	2	11

Table 3- Attadale deer cull figures

Year	STAGS	HINDS	CALVES	TOTAL
2018/19	45(8)	46	8	107

Table 4- Inverinate deer cull figures

Year	STAGS	HINDS	CALVES	TOTAL
2018/19	105	116	41	262

Table 5- Forestry Commission- Achnashellach Forest South

Year	STAGS	HINDS	CALVES	TOTAL
2018/19	31 (19 red, 2 roe, 10 sika)	24 (18 red, 5 roe, 1 sika)	14 (10 red, 4 roe)	69

2.3 Other grazing species

Grazing numbers by other species is unchanged from the original plan in all areas except Inverinate where there are 50 more sheep on the hill.

2.4 Supplementary Feeding

Supplementary feeding remains pretty much unchanged from the 2016 plan, perhaps a slight reduction at Inverinate due to increase in feed costs.

3. Deer related Infrastructure/Accreditation and Workforce skills

3.1 Deer related Infrastructure/Accreditation

The Deer larders at Achnashellach, Attadale and Inverinate (Arineckaig uses Attadale larder) are unchanged and are still annually inspected and 'approved' under the Scottish Quality Venison Assurance (SQVA) Scheme.

Forestry Commission

The Forestry Commission now only use the Forestry Commission larder at Achmore for all its deer processing.

The larder and the procedures undertaken by the deer stalkers in that larder continue to be inspected annually and are 'approved' under the Scottish Quality Venison Assurance (SQVA) Scheme.

3.2 Workforce Skills

The majority of staff members remain the same and there are no changes to their qualifications. However, from Sept 2018 to August 2019, deer culling on the Forestry Commission land will be undertaken by contractor rather than Forestry Commission staff. Any Contractor must have DSC-Levels 1 and 2, Trained Hunter Status, SNH Fit and Competent status, Quad bike Certification and a First Aid certificate prior to the contract being awarded to them.

Deer Stalking Certificate- Level 2

The following staff members are still working towards their DSC-Level 2 certification.

-Thomas Watson, Attadale Estate

-Ewan Bennett, Inverinate

-Dean Baillie, Inverinate

Arran Matheson of Inverinate has completed his Level 2 and the paperwork is currently away being assessed.

4. Natural History of Group area

4.1 Site designations

The DMG contains four sites with designations. One *National Scenic Area* (NSA) and three *Sites of Special Scientific Interest* (SSSI). Management of the sites remain unchanged as SNH feedback is that the sites are doing well.

5. Public Access and Public Welfare

5.1 Provision on Estates for Recreational Activities

Existing facilities and/or information continues to be used by the Estates, however a few changes have been noted below:

All open hill members provided updated details to the SNH 'Heading for the Scottish Hills' website in July 2018.

Attadale Estate

In order to reach the stag cull target for 2018, the Estate decided it would temporarily close the bothy at Beinn Dronaig for a month between 20th September and 20th October.

5.2 Public Welfare

The group is also currently involved with a tick sampling research project being undertaken by a PhD university student from Zurich, Switzerland. The aim of their four year research project is to gain an understanding on the effect of woodland expansion on Lyme disease risk.

Any results/outcomes of the research project will be provided once the study is complete.

6. Future Management of the group area

6.1 Actions to achieve the ADMG/SNH Benchmark

The DMG outlined a variety of actions in their published Deer Management Plan which they hoped would help the group achieve the 14 Benchmark Criteria prepared by ADMG/SNH.

Actions that have begun to be addressed over the past year have been outlined below to show that ongoing progress continues within the group to achieve all the criteria. Please note some of those actions will ongoing throughout the period of the plan (ie Habitat Assessments), while other actions will just be at the planning stage and may not begin until either time or finances become available.

6.1.1 Action 1

Actions to develop mechanisms to manage deer

Deer Population Model

A model was provided to the group to help it plan future deer population figures. The model uses the data in the table below to generate the figures. Density is based on deer numbers per square km and the group has an area of 437.1 square km (43710ha). Cull figures in black are correct and cull figures in blue are 'best guess forecasts' as final culls are still to be determined.

Data table used:

Year	Stag Cull	Hind Cull	Calf Cull	Recruitment	Adult Mortality	Calf Mortality
(2016) 1	239	438	210	0.33	0.02	0.06
(2017) 2	258	636	310	0.33	0.02	0.06
(2018) 3	174	182	54	0.33	0.02	0.06
(2019) 4	180	250	70	0.33	0.02	0.06
(2020) 5	180	250	70	0.33	0.02	0.06

Resulting model predictions:

		Stags	Hinds	Calves	Density
2016	SNH Spring Population	1920	3845	1221	16.0
	Summer Population	2531	4456	1470	19.3
	Cull	239	438	210	
	Mortality	51	89	88	
2017	Spring Population	2241	3928	1172	16.8
	Summer Population	2827	4514	1490	20.2
	Cull	258	636	310	
	Mortality	57	90	89	
2018	Spring Population	2512	3788	1090	16.9
	Summer Population	3058	4333	1430	20.2
	Actual Cull	174	182	54	
	Mortality	61	87	86	
2019	Spring Population	2822	4065	1290	18.7
	Summer Population	3468	4710	1554	22.3
	Proposed Cull	180	250	70	
	Mortality	69	94	93	
2020	Spring Population	3218	4366	1391	20.5
	Summer Population	3914	5061	1670	24.4
	Proposed Cull	180	250	70	
	Mortality	78	101	100	
2021	Spring Population	3655	4710	1500	22.6
	Summer Population	4405	5460	1802	26.7

Although the cull data for 2016-2018 in the data table and the initial SNH count data in the model are accurate, it is felt that the recruitment, adult mortality and calf mortality figures do vary year by year and this has resulted in actual deer numbers not reflecting what is presented on the model. Therefore, although useful, it is felt that the model will need more refinement and can only be used as a guide in conjunction with actual on the ground counting.

The group will continue to work on refining the model to try and achieve more accurate forecasts.

6.1.2 Action 2

Actions for the delivery of designated features into favourable conditions

The DMG contains four sites with designations, one *National Scenic Area* (NSA) and three *Sites of Special Scientific Interest* (SSSI). Two of the SSSI's are considered in 'favourable' condition by SNH. However in the 2009 assessment, the Affric-Strathglass SSSI was considered in 'mixed condition' and as a result, affected landowners did offer up and work on proposals alongside SNH to help return it to a favourable condition.

A reassessment of the SSSI was undertaken in early summer 2016 and the results have shown that there has been considerable change with most of the impact results now in the Low and Low-to-Moderate range with a significant reduction in browsing and trampling. Landowners will continue to work with SNH to ensure the improvements continue.

6.1.3 Action 3

Actions to manage deer to retain existing native woodland cover and improve woodland condition in the medium to long term

In the 2016 Deer Plan, a map (provided by SNH) showed areas of native woodland (mostly unfenced) within the DMG area and the map indicated the herbivore pressure that area was under. Of the 1248ha of native woodland identified, 526ha was considered as having low herbivore pressure, 191ha had medium herbivore pressure, 167ha had high herbivore pressure and 364ha had very high herbivore pressure.

The DMG still aims to have the woodland areas reassessed during the next 10 years and consider what herbivores are the likely causes of those pressures and if possible undertake actions to help reduce pressure in the medium to long term to ensure the majority of those native woodland areas are achieving low to medium pressure levels to secure this important resource. Any actions taken will be discussed at DMG meetings and recorded in the minutes.

As part of its ongoing Estate Forestry Plan, Attadale Estate has produced a map showing the original native woodland herbivore impact assessment (as seen in Appendix 7 of original DMP) which has been overlaid with where areas of that native woodland have actually been fenced or are proposed to be fenced. Please refer to Appendix 1 for map. As a result it is highly likely that the herbivore impact on those areas will be significantly lower than originally shown as all herbivores were removed from the fenced areas.

It is estimated that on Attadale approximately 10.1ha of 'very high' and 4.6ha of 'high' herbivore impact woodland is actually within existing fenced areas and 2.4ha of 'High' herbivore impact woodland will be fenced in the near future under proposed schemes.

Arineckaig Estate currently has no plans to fence any further native woodland areas.

Achnashellach is hoping to undertake a regeneration scheme at Creag an Eilein. The Estate is currently securing funding for the project. Please refer to Appendix 2 for map showing area to be fenced. This will ensure that another area of previously 'very high' herbivore impact woodland will be protected and encouraged to expand.

Inverinate has clear felled/harvested the Dorusduain car park forestry block and currently the brash is being cleared. The Estate plans to re-stock with native woodland within the next two years. Felling has also begun to the NE section of Dorusduain forestry on the face of Ghlas-Bheinn. It is expected that this will be cleared by the end of 2019. In addition, the Estate has undertaken a review of the the original native woodland herbivore impact assessment (as seen in Appendix 7 of original DMP) and maps outlining the results of this review have been included in Appendix 3. From the information provided it would appear that herbivore impact on those areas is significantly lower than originally shown.

6.1.4 Action 4

Actions to demonstrate DMG contribution to the Scottish Government expansion target of 25% woodland cover

As noted in last year's update, Attadale Estate has produced a new Long Term Forest Plan (LTFP) and this was finalised in the summer of 2017. The long term vision for Attadale Estate's woodlands is to increase the quality and extent of native woodland habitat through new woodland creation and the encouragement of natural regeneration within the existing woodlands. An update on the progress of this forest plan, written by Louise Alexander of Galbraiths (who prepared the LTFP), can be found under Appendix 4.

As noted under Action 3 above, Achnashellach and Inverinate are also in the process of expanding native woodland cover.

6.1.5 Action 5

Actions to monitor and manage deer impacts in the wider countryside

In order to monitor the impact of deer on the wider countryside, the DMG began habitat assessments in the summer of 2016. It was intended that those assessments would be done in early summer for the first three years (to provide good baseline data) and then every few years to monitor any changes. These assessments would follow the recommended process outlined by SNH. Please note the Forestry Commission land is not involved in this project.

The Habitat Impact Assessments have now been completed for the first three year cycle and a report summarising the results has just been finalised and has been included in Appendix 5. The group will now assess these results at the next group meeting (summer 2019) and discuss what actions, if any are required.

6.1.6 Action 6

Actions to improve Scotland's ability to store carbon by maintaining or improving ecosystem health.

As noted in the original plan, approximately 550ha of land has been set aside in the past 25 years for natural regeneration/native woodland planting schemes. This is on top of the approximate 3988ha of woodland (which is a mixture of native and commercial coniferous forestry) already found within the Lochalsh DMG. Attadale Estate has begun to action a Long Term Forest Plan which will create 286ha of new native woodland over the next 20 years as well as improve the existing commercial and native forest areas.

Inverinate and Achnashellach Estates are also actioning some Woodland Management/Creation schemes.

These proposed expansions to the woodland area will help improve Scotland's ecosystem health as the habitat within the fenced areas is highly likely to be in good health due to very low grazing pressure and the increase in tree numbers will help store more carbon.

The Habitat Assessment process will assist the DMG in determining the health of the habitat and if necessary the DMG can implement changes to herbivore numbers if it is considered that large areas of habitat is suffering from grazing/trampling pressures which are considered to be 'above' the acceptable impact ranges.

The DMG will continue to work closely with SNH to ensure that ecosystem health is maintained (or if required improved) to ensure Scotland's ability to store carbon increases.

The group also has 2229ha of Blanket Bog and as noted in last year's update, the DMG members are aware of the National Peatland Plan and also of the possible funding available via the Peatland Action Project. Some group members have visited other Estates where Peatland Restoration is currently being undertaken and one option currently being considered is some of the individual group members selecting some trial areas of peat hag to try and reprofile and revegetate. If the reprofiling proves successful, the group may consider going for funding to undertake work on further areas in the future.

There is no River Basin management currently going on within the group area, however the group members would be happy to contribute in the future if asked.

6.2.7 Action 10

Actions to identify and promote opportunities contributing to public health and well-being.

The DMG members' larders and the procedures undertaken within those larders are still inspected annually and are currently all 'approved' under the Scottish Quality Venison Assurance (SQVA) Scheme. This ensures that food safety is maintained and carcass handling and venison processing is compliant with the Best Practice Guide.

As previously noted, the group has been involved with a tick sampling project being undertaken by a university student. Any results/outcomes of the project will be provided once the study is complete.

6.2.8 Action 13

Actions to ensure effective communications on deer management issues

Lochalsh DMG has prepared a Communications Policy which states that *'the group is committed to ensuring that effective communication on deer management issues both within the DMG and throughout the wider community is undertaken'*. This effective communication will be undertaken by the following actions:

- All meeting agendas and minutes will be published on the DMG website
- All Deer Management Plans and Plan updates will be published on the DMG website
- During the main DMP preparations, the group will seek feedback from the public and other relevant bodies

- Contact details of the group Chair and Secretary will be provided on the DMG website
- DMG will actively seek opportunities to promote deer management such as school visits, work with students and other interest groups

Attadale Estate has already organised a school visit to the Estate during the summer term for the local primary school and also annual undertakes presentations to an overseas student group.

7.0 Actions to take forward

The Lochalsh Deer Management Group published their new Deer Management Plan in August 2016. The Plan had a timeframe of five years with a full review due in 2020. However as it was a live, evolving plan, it was decided that a short annual update should be prepared each autumn to ensure that the plan and its actions are being regularly reviewed. This update has provided further information which demonstrates that the group continues to work on the actions required to achieve the desired Benchmark Criteria. A further update will be provided in the early spring of 2020.

The summary table below outlines actions that the group intends to work on in the coming year and beyond:

	Benchmark Criteria Action	Actions Lochalsh DMG plans to undertake in coming year and beyond
1	Actions to develop mechanisms to manage deer.	<p>DMP was published in 2016 and annual updates were provided in 2017 and now in 2019.</p> <p>Group has also commenced population modelling which will be used in conjunction with the annual spring count to help determine future cull requirements.</p> <p>Model will require more refining to ensure group is confident in its output.</p>
2	Actions for the delivery of designated features into favourable conditions.	<p>Strathglass Complex SSSI was the only designated site that required improvement. A SNH review in 2016 has indicated good overall improvement to the site with regards to browsing and trampling.</p> <p>Inverinate (group member affected by SSSI) will continue to work with SNH to ensure this improvement continues and will provide group with any updates on site.</p>

3	Actions to manage deer to retain existing woodland cover and improve woodland condition in the medium to long term.	<p>Most group members are currently involved in woodland projects with Attadale felling coniferous woodland and planting new areas of native woodland, Achnashellach in the process of fencing an area of native woodland to allow regeneration and Inverinate clear felling some coniferous woodland to then plant with native woodland.</p> <p>Projects are ongoing and the members will provide feedback to group as projects evolve.</p> <p>Mapping has shown that many of the areas originally identified as suffering from high herbivore pressure are actually now contained in..or will be contained within fences.</p> <p>Maps included in update and will be updated as projects evolve.</p>
4	Actions to demonstrate DMG contribution to the Scottish Government expansion target of 25% woodland cover.	<p>New areas of native woodland are planned for the next few years and some areas of native woodland are to be expanded. Members will keep group updated as projects progress.</p> <p>Some maps provided and members will provide maps of new areas as they are confirmed.</p>
5	Actions to monitor and manage deer impacts in the wider countryside.	<p>Three years of Habitat Impact Assessment was completed in 2018 and a summary report has been prepared.</p> <p>Group members will consider HIA report at summer 2019 meeting and discuss what actions, if any, are required at this time.</p>
6	Actions to improve Scotland's ability to store carbon by maintaining or improving ecosystem health.	<p>The planned Woodland Expansion across the group will increase Scotland's ability to store carbon.</p> <p>Some group members are looking to undertake some trial sites of peatland restoration in 2019/2020 prior to committing to any funding.</p> <p>River Basin Management Planning currently not occurring in group area, group happy to contribute in ever needed.</p> <p>Group members will provide feedback at meetings as to how trial sites are going.</p>
7	Actions to reduce or mitigate the risk of establishment of non-native species.	<p>Group will continue to share news on non-native species and what actions they are taking.</p>

8	Actions to protect designated historic and cultural features from being damaged by deer eg trampling.	Not considered to be an issue.
9	Actions to contribute to delivering higher standards of competence in deer management.	Group members will continue to work towards all the relevant qualifications and where possible try to organise training events together. Group members will provide updates as qualifications are achieved.
10	Actions to identify and promote opportunities contributing to public health and well-being.	Group members will continue to promote awareness of issues such as Lyme's Disease and are always open to assist in research. Any new opportunities to be discussed at meetings with other group members.
11	Actions to maximise economic benefits associated with deer	Recorded in plan. Any changes will be discussed at group meetings.
12	Actions to minimise the economic costs of deer and ensure deer management is cost-effective.	DMG is aware of and responsive to potential negative impacts by deer and undertake a range of work to help minimise these costs. Any new impacts will be discussed with group members at meetings.
13	Actions to ensure effective communication on deer management issues.	Group will ensure that all DMPs, DMP Updates, Meeting agendas and minutes are published on group website. Group will continue to ensure that meeting invites are sent to relevant interested individuals. Group members will look at other ways to communicate on deer management issues and discuss at meetings.
14	Actions to ensure deer welfare is taken fully into account at individual animal and population level.	Welfare is currently safeguarded in DMG through members following the Best Practice Guidance on the Management of Wild Deer in Scotland manual and the existing high skill level in the group. Group may look into analysing larder data to see if there are any trends. To discuss at summer meeting with SNH staff.