BALQUHIDDER DEER MANAGEMENT GROUP

Part 2:
Deer Management Plan Information 2016 - 2021

Updated May 2019

Contents

1. Introduction

The Balquhidder Deer Management Group (BqDMG) lies in central Scotland to the north west of Loch Lomond and covers just over 45,950 ha. The elevation ranges from almost sea level to almost 4,000 feet.

The boundaries of the area are below and can be seen in the Appendix – Boundaries Map:

- Loch Katrine / Arklet / Vennacher in the South,
- Loch Lubnaig/A84 in the East,
- Glen Dochart/A85 in the North, and
- Glen Falloch/Loch Lomond/A82 in the West.

The Group lies wholly within the Loch Lomond & the Trossachs National Park and contains the popular Munros of Ben More and Stob Binnein.

It has 17 subscribing properties/organisations plus several other interested members, and was formed in 1988. It is not part of any other local association, and operates under its' own constitution. The Group subscribes to the Association of Deer Management Groups (ADMG).

BqDMG has a strong level of participation from among the members of the Group. The individual objectives of the Group members are detailed in Section 4. The main challenge facing the Group is satisfying the objectives of the several different land uses within the area.

The different land uses consist of commercial and native woodland, conservation, traditional high hill farming with cattle and sheep, deer management and hydro-electric generation with several of the properties running integrated units with a mix or all of these land uses.

Within the DMG area red deer are the dominant deer species, there are also roe deer and recently a few sika stags have been culled. There is also a population of feral goats.

Numbers of sheep are generally reducing with the Scottish Water removing all their sheep from The Loch Katrine catchment in 2002. Sheep have also been reduced on Glen Falloch, Inverlochlarig, Glen Finglas, Garrison, Milton and Suie.

Other neighbouring Deer Management Groups are:

- Breadalbane DMG to the north,
- Inveraray & Tyndrum DMG to the west,

- South Perthshire and Glen Artney DMGs to the east.
- East Lomond & Trossachs DMG to the south (formed Spring 2018).

There is cross involvement with these DMGs through local contacts, with a number of BqDMG members also having to be members of either Breadalbane DMG, Inveraray & Tyndrum DMG (ITDMG) and South Perthshire DMG (SPDMG).

1.1. Long Term Vision/ Policy statement

- Members agree that deer should be managed in a way that provides numerous benefits to the local area whilst minimising local issues.
- Members support the long term vision for deer populations and their management as laid out in Scotland's Wild Deer – A National Approach.
- In light of the Code of Deer Management (as set out in the Wildlife and Natural Environment (Scotland) Act 2011), deer populations will be managed sustainably so that their management is fully integrated with all local land uses and land use objectives.
- Such management will seek to follow Wild Deer Best Practice Guidance to safeguard high standards of public safety, food safety and deer welfare, and will play a constructive role in the long term stewardship of local habitats.
- Local deer management will continue to deliver and further develop its positive contributions to the rural economy and to the public in general. (See public interest section).
- Deer management and wildlife management more generally within the Group will be seen as an attractive and worthwhile occupation associated with high standards of skills and employment practice.

1.2. DMG Strategic Objectives

The main objectives for the DMG during the period of this Plan, are as follows, in all cases adhering to Wild Deer Best Practice Guidelines:-

- Deer will be managed in a way that will maintain or enhance the natural biodiversity and condition of the deer range to achieve sustainable land use.
- To continue to safeguard and improve the quality of the deer and deer welfare generally.

- To treat all deer as a resource in terms of their value for sustainable venison production, their value as an important source of income from guest stalking, their importance as the UK's largest wild land mammal and to cull them accordingly.
- To increase woodland cover within the Group area.
- With regards to the above fulfil the annual deer management and venison production objectives of individual members.
- To market such activity and produce to best advantage.
- To ensure such resources, training and monitoring capacity required are made available to achieve the objectives.
- To establish a thorough and robust set of working arrangements whereby access provision can be managed within the Group area, taking account of current guidelines and industry initiatives.
- To provide a mechanism for dealing with any disputes.
- Where appropriate, to provide site specific management advice or information.
- To ensure full participation from throughout the area in the Deer Management Group.
- To maintain tourism and improve local employment, be that specifically in deer management or wildlife management and agricultural activity more generally within the area.

In general to seek to improve the operation of the DMG in line with RACCE committee guidelines. **i.e. Collaboration – Communication – Compromise.**

1.3. The purpose of this Plan

The overall purpose of this Deer Management Plan (DMP) is to provide:-

- An agreed statement of the shared views of the Members of the Group regarding the management of wild deer in the area covered by the Group;
- An overview of the range of management objectives represented throughout the DMG range;
- An agreed set of actions to try and ensure that deer management in the area is in line with those shared views; and
- An agreed pattern of arrangements to try and ensure that the actions are implemented and their effectiveness monitored.

1.4. Deer Management Plan Structure

The DMP consists of three main parts:

- **Part 1: Deer Management Working Plan**: The Working Plan sets out the most up to date information on culls, counts and population targets as well as specific actions the Deer Management Group will undertake throughout the life of the plan. The Working Plan will be reviewed at least annually, with a systematic review of the whole plan taking place at the end of the five year period.
- **Part 2: Deer Management Plan Information.** This sets out background information and details the Public Interest relating to Deer Management in the local area. Information on individual management units is also contained here.
- **Part 3: Group Operation**. This section contains information relating to the Operation and Functioning of the DMG.

1.5. Deer Management Plan Implementation

The Plan will identify specific actions for the Group and targets to be delivered by 2021. These will be reviewed on an annual basis in the Working Plan (Part 1). The DMG will use information gathered from habitat monitoring, population census and cull reporting to agree and set culls on an annual basis. Each management unit is committed to implementing the necessary culls to achieve this although it is accepted that there may be specific geographical areas within the Group area where deer management requires to be focussed.

The Group are committed to working collaboratively to achieve deliver the objectives of the plan and will meet regularly to discuss deer management and issues that arise in the local and wider area. This Plan will therefore take account of all land management interests as well as those of other Statutory Organisations and the wider public interest.

2. Active Deer Management

2.1. Cull setting

Culls will be set at the June meeting. Setting cull targets has always been a challenge for this Group. The following section is designed to address this problem.

As a pre-requisite, members agree that each landholding must be represented at the cull setting meeting by a person fully authorised to discuss, negotiate and set cull targets. Members also agree to have all necessary information to complete this process available at least one week before the meeting.

Balquhidder DMG has many varied objectives all of which require differing levels of deer density across the area. A key annual task of the 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 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 & trends
- Guest stag stalking aspirations & required population to achieve this
- Most recent deer count data & previous trends
- Recruitment and mortality info
- Changes in management – i.e. compensatory culls for fencing, changes in livestock etc.

But will also take account of:

- Preventing risk to deer welfare
- Managing risk to public safety i.e. reducing risk of Deer Vehicle Collisions
- Unusual weather circumstance

Ultimately the cull should be achieved in a collaborative manner shared between members. Over the past 3 seasons (2012/13 - 2015/16), BqDMG have requested and circulated monthly cull updates around Group members and this will continue, with members asked to record and circulate more detailed information.

Generally Open Range DMGs are able to apply simple models to their population based on deer counts and subsequent culls. Given the level of open woodland within BqDMG, another layer of complexity is added as it is difficult to estimate the deer population resident within the woodlands. However, we do know that during the late summer/ rut, woodland deer, particularly stags, do wander onto the open range and no doubt contribute a proportion of the overall stag cull of the open range. The woodland stags that are culled on the open hill during the rut are likely benefitting all properties as a greater stag cull is being permitted from these marauding woodland deer than the open range population should technically allow.

As at September 2017, the collective guest stalking aspirations of the BqDMG is 155 stags and 168 hinds - either with paying clients or otherwise. Historically to ensure an annual supply of mature stags across an area, typically between a 6th to 7th (15%) 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 a 6th or 7th (15%) 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 not wanted.

The actual ratio needs to be dependent on the calving rate of hinds within the local area. Hinds which are hefted to woodland or have access to the woodland edge are known to be calving at a higher rate than those solely on the open range (local examples of this in both BqDMG and I&TDMG). Indeed anecdotal evidence suggests that red hinds on open range, where sheep numbers have been lowered or removed, show a consistently higher calving rate than previously achieved. As a rule of thumb there is an even split between male and female calves (excluding common acknowledgement that males, especially male calves, will be the first to die in unfavourable conditions) this means the cull of both male and female deer across the year should be similar and hence the sex ratio of 1:1.

Given the challenges facing BqDMG on balancing all management objectives it would be sensible in the first instance to aim for an optimal deer population across the Group that collectively delivers the objectives. Based on an annual required cull of 155 stags, a sustainable population should be based around 1,008 stags and 1,092 hinds. As can be seen from previous count and cull information it would appear the cull is higher than what is sustainable, however given there is a significant cull of woodland red deer and the unknown population within the woodlands then this will highlight why the overall population has not dropped as sharply as modelled.

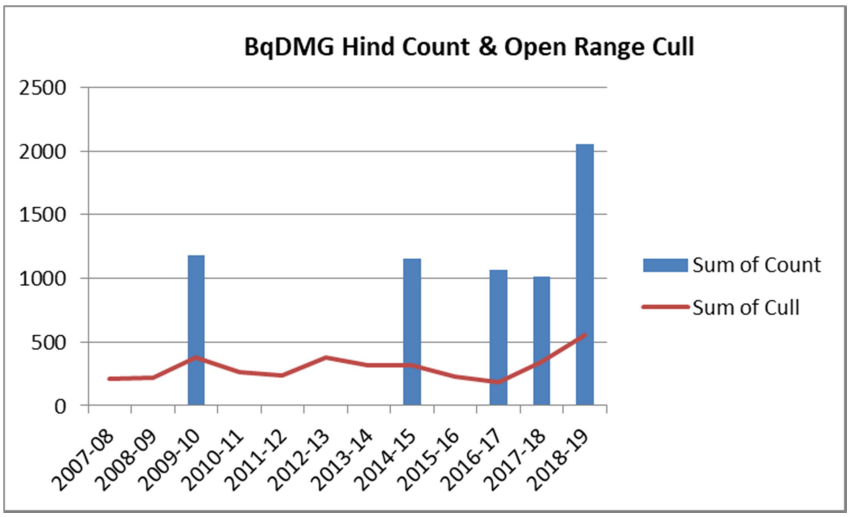
The setting of the annual cull will be even more challenging as there will be an element of 'horse trading' for how many deer each land holding is able/ willing to shoot. This is particularly the case for ensuring maximum annual potential for income from deer stalking in the stag season and in ensuring that a competent hind cull target is reached. With regards to the stag cull, FES have on previous occasions stated that they would be willing to reduce their cull of male deer if neighbouring properties take up the remainder of the required cull, thus ensuring a mutually beneficial cull regime of that year's annual stag cull. It is critical that in aiming to achieve the balance of all objectives that in the first instance, DMG members deliver the optimal open range hind population.

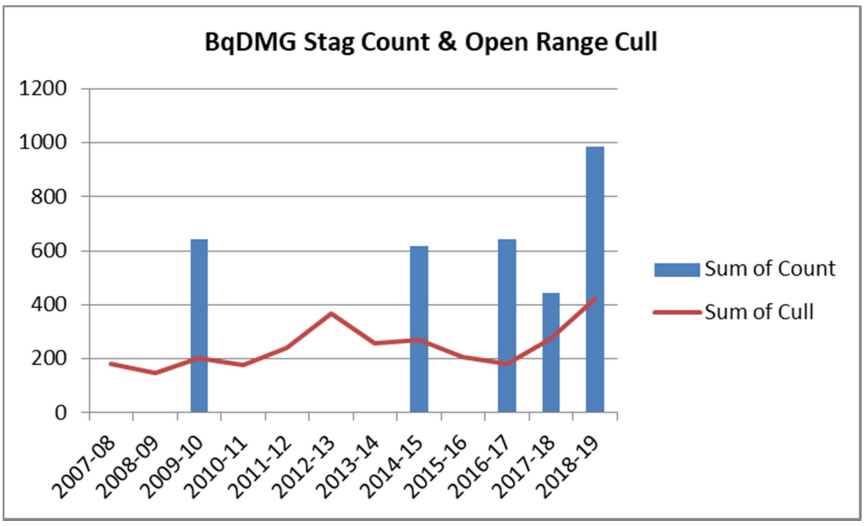
A key action for the BqDMG is to ensure this flexible 'trading' on cull targets is taken and ultimately the culls achieved. As mentioned in Section 2.2 of the DMP, BqDMG have improved coverage of foot counts of the open range. However, given the amount of forestry which is present in the Group there is an unknown number of deer, in particular red deer, which will cause an issue for woodland managers, but will also provide opportunities to those stalking for income in both the open range and woodland setting.

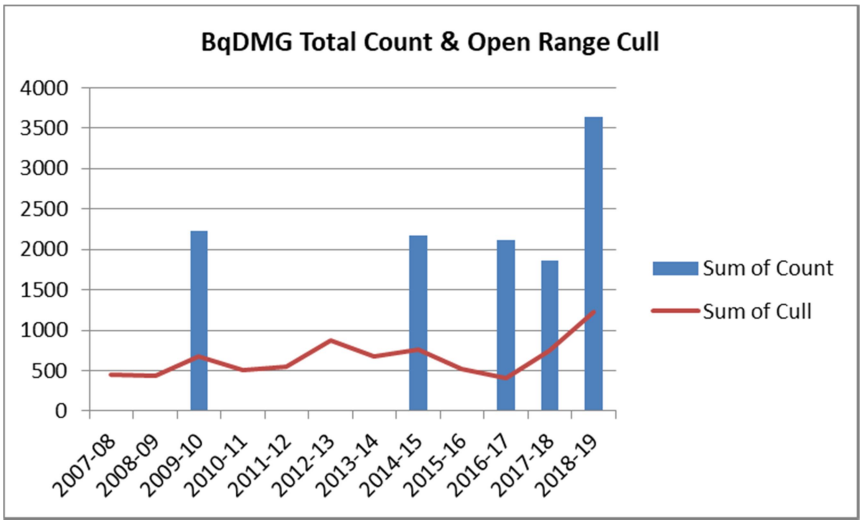
Individual land managers may carry out population assessment in woodland areas and whilst this is acceptable for helping provide some data, it is recognised that this may be costly/ inefficient or have large margins of error. Therefore, BqDMG are not collectively promoting this and would rather use damage assessments for basing whether the deer utilising woodland areas is acceptable.

There is also the simple density assessment for woodland areas – working through past culls.

The following graphs show trends of culls (from the open range) in relation to the counts.







2.2. Deer Counting

Carrying out a complete deer count of the open range area within BqDMG is one of the most important tasks to achieving members' objectives. Carrying out a well-organised and properly resourced count requires a collaborative effort from all members. Currently BqDMG organize a complete count each year with co-ordination across the Group aiming to ensure all properties are counted on the same day. Whilst of mixed success in earlier years there is broad agreement that the most recent counts of 2013, 2015 & 2017 have seen a high level of participation across the Group, with foot counts of the properties taking place the same day as a helicopter for the GTF properties, which has enabled more accurate & valuable up to date information.

BqDMG will continue to revise counting protocol going forwards to ensure complete counts of open range areas are achieved. This may require pulling of resources across the Group or even splitting the DMG area in half and counting over 2 days.

Within BqDMG there is significant woodland area where it is not possible to assess deer populations in the traditional manner as detailed above. Some properties may carry out vantage point or dung count assessments which will be of use for setting cull targets.

Deer Population Information

Red Deer Population: A DCS helicopter count took place in 2010, giving an overall total at that time of 2,761 animals – this included deer on Comer, Drumlean, FCS Achray West and FCS South Katrine, which are not within the BqDMG boundary. Therefore the updated total for the 2010 Helicopter count for BqDMG was 2,227 animals.

Neither of these totals includes deer resident in Forestry Commission plantations or other significant wooded areas, which, because of their size and nature were not walked out on count days. Another SNH funded helicopter count was carried out in 2019 – this showed a n increase in the overall population. (see Appendix for Count Data and Map in Part 1).

It is generally accepted that for this Group, standard population modelling is not feasible. This is due mainly to the heavy afforestation of the Group area and the inability over the years to correlate the cull figures with the number of deer thought to be on the ground.

However there is still a requirement for the setting of cull targets that deliver the overall population targets that provide objectives to be met. This is covered in further detail in the cull setting section.

Recruitment Count

Many members will already carry out recruitment counts in the spring during lambing, checking fox dens etc., during activities that are not coordinated by the DMG. Members should aim to survey several groups (preferably a minimum of 50 hinds) to see how many hinds have calves at foot. Information should then be recorded and passed to DMG for consideration when setting cull targets.

Mortality

Balquhidder DMG members agree that deer dying of natural mortality is not the best way to achieving sustainable objectives. Whilst some natural mortality will occur throughout the year, especially in late winter/ spring months, we aim to keep this to a minimum.

Current culling practice is to ensure that weak and older animals are killed first. Further to this all properties are encouraged to record and report mortality, and in particular any substantial increase in mortality, either locally or across the Group. This can be scrutinized and steps can be taken to ensure this is kept to a minimum for further years.

Red Deer Cull Data

The Cull Figures supplied by SNH since 2007/08 can be found in Part 1. Cull figures will tend to be on the low side as some returns not complete.

2.3. Habitat monitoring

Wild deer are supported by the condition of the habitat they live within. BqDMG members recognise the importance of having habitat that provides benefits to not only deer populations but also other wildlife and livestock.

The aim of habitat impact assessment is to provide land managers with information on grazing pressures across their management unit to help inform decision making for:

- Understanding overall grazing pressure and identifying trends
- To allow ‘adaptive management’ i.e. where informed decisions are made on the capturing of ongoing data gathering.

- To inform whether the carrying capacity is optimized

Monitoring should follow techniques promoted by Wild Deer Best Practice (http://www.bestpracticeguides.org.uk/guides/impacts-intro) as a minimum. It is recognised that several properties may be carrying out more advanced monitoring. BqDMG are aiming for complete coverage of HIA across all properties by year 3 (2019) of this DMP. Whilst individual land managers may look to monitor a variety of habitats for individual circumstances, it is promoted that as a minimum all open range properties should monitor both dwarf shrub heath (DSH) and blanket bog (BB) habitats if present. SNH has provided each landholding within the DMG with random monitoring points of both DSH & BB.

BqDMG is promoting that monitoring will be carried out initially every 2 years, with data recorded and shared with the DMG. Training has been offered to members over the last 5 years, with some uptake. Currently 7 properties are carrying out monitoring. Further training can be arranged as required. It is for individual properties to ensure that they are equipped to carrying out monitoring.

Further to the collection of data, BqDMG need to discuss suitable habitat impact targets for each habitat type. The level of impact should also be taken into account as well as the trend of a particular impact. For example, Ling Heather *Calluna* can cope with up to 40% of the yearly growth being removed by herbivores (this equates to Moderate or High impacts - greater than 33% shoots browsed) but if this is recorded year after year then they are likely to lead to a loss of heather. Members should be aiming for Low to moderate impacts whilst increasing cull effort in areas of high impacts.

2.4. Other Herbivores

Sheep

Since 2002 sheep numbers have been reduced considerably. See Appendix – Stock Numbers for details of stock numbers and reductions.

Goats

Goat populations have increased over the last few years, with populations on Loch Lomond, Glen Falloch, Loch Katrine and Ben Venue as examples. It is important to ensure these populations are managed effectively to keep grazing impacts at a low level. Different

properties have different management solutions, such as immune-contraceptive to reduce the fertility of the population and also the more conventional method of culling.

2.5. Authorisations

Members may need to take or kill deer under the various aspects of the Deer (Scotland) Act 1996. Authorisations to control deer out of season (OOS) or at night to prevent damage are tools which can allow certain land management objectives to be achieved. It is recognized that not all members agree with the use of authorisations; however in some instances they can enable the balance to achieving Group wide objectives.

The most common authorisations that may be utilized are:

- A General Authorisation for the culling of deer in certain circumstances
- 18(2) Night shooting authorization.
- 5(6) Out of season shooting for circumstances out with the general license

Full details for all authorisations can be found on the SNH website.

3. Public Interests

BqDMG has carried out the Benchmark and Public Interest Assessments which have been drawn up by SNH and ADMG.

The Code of Practice for Deer Management identifies 14 public interests issues which are in turn grouped into five main areas:

- Collaboration & Effective Deer Management Planning & Implementation
- Environment
- Social Wellbeing
- Economy
- Welfare

3.1. Collaboration & Effective Deer Management Planning & Implementation

Public Interest 1: Actions to develop mechanisms to manage deer

On the whole the BqDMG has a good meeting attendance record. Any non-attendees are being actively encouraged to take part and those that cannot attend should send any information required to allow informed discussions.

Our Communications Policy can be found in Part 3.

3.2. Environment

Public Interest 2: Actions for the delivery of designated features into Favourable Condition.

Habitat Information & Designations

Within the BqDMG area there are four different types of designation:

- Sites of Special Scientific Interest (SSSI)
- Special Areas of Conservation (SAC)
- National Park

- National Scenic Area (NSA)

(a) Sites of Special Scientific Interest (SSSI) are those areas of land and water that Scottish Natural Heritage (SNH) considers to best represent our natural heritage - its diversity of plants, animals and habitats, rocks and landforms, or a combinations of such natural features. They are the essential building blocks of Scotland's protected areas for nature conservation. Many are also designated as Natura sites (Special Protection Areas or Special Areas of Conservation). SNH designates SSSIs under the Nature Conservation (Scotland) Act 2004. SSSIs are protected by law. It is an offence for any person to intentionally or recklessly damage the protected natural features of an SSSI.

There are just over 1,450 SSSIs in Scotland covering 1,020,601 ha which represents 12.7% of the land area of Scotland.

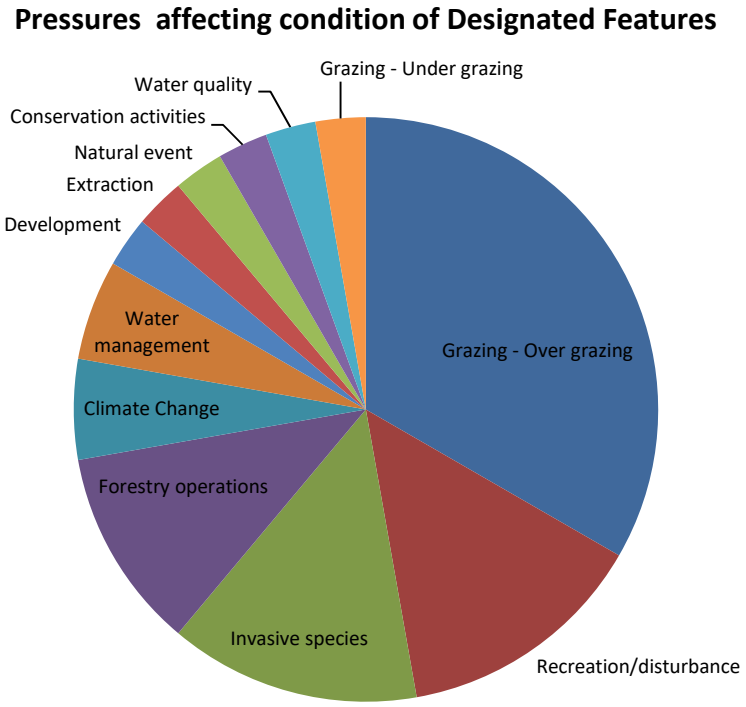
The Balquhidder area currently has 13 SSSIs including the large upland site of Ben More-Stob Binnein. In total, these sites extend to 4961 ha or 11.6% of the BqDMG area. A map showing the location of the Designated sites (SSSI & SAC) and information about their condition and pressures they face are in Appendix – Designated Sites.

Within the 13 SSSIs, there are 37 features for which the sites have been designated (and there condition assessed). The table below shows the condition of those features

Comparison Summary of SSSI Condition within the BqDMG area

Condition of Designated Feature	2008	2016	2019
Favourable	14	21	24
Unfavourable/Recovering	2	4	4
Unfavourable (no change or declining)	13	5	9
Not assessed	-	1	0
Total	29	31	37

The pie chart below shows the different pressures those designated features face:



This shows that grazing pressure by herbivores is the main pressure affecting the condition of the designated features but it is not the only pressure.

SNH will liaise with individual landowners on the management of designated sites. Please find the up to date information on the SNH Sitelink Website.

(b) Special Areas of Conservation (SACs*)* are areas designated under the European Directive commonly known as the 'Habitats' Directive. SACs form the Natura 2000 network of sites and most SACs on land or freshwater in Scotland are also underpinned by notification as Sites of Special Scientific Interest (SSSIs). The additional SAC designation is recognition that some or all of the wildlife and habitats are particularly valued in a European context. There are three SACs within the Balquidder area: Loch Lomond Woods, Trossachs Woods and the River Teith.

The western acidic oak woodlands in the Trossachs Woods are the only SAC designated feature affected by over-grazing.

(c) National Park*:* Balquidder DMG lies entirely within the Loch Lomond & Trossachs National Park (LLTNP) area.

(d) National Scenic Areas are Scotland's only national landscape designation. The Loch Lomond and Trossachs National Scenic Areas cover some 27,400 ha and 4,600 ha respectively at the edge of the BqDMG area.

Administration of Designated Sites

SNH are responsible for the administration of designated sites and these are managed from their Stirling Area office. In the context of this plan and the Balquidder upland designated sites that are subject to Joint Working, Jimmy Irvine of SNH is the primary point of contact.

Public Interest 3: Actions to manage deer to retain existing native woodland cover and improve woodland condition

There is significant woodland area within BqDMG. As of 2014 approx. 9212 ha (22%) was classed as woodland. All properties have some level of woodland with these being managed for a mixed of reasons – amenity, nature conservation, animal shelter, timber production amongst others.

With regards to deer management, there is strong evidence of the importance of woodland to deer – with regards to productivity, body size, improving individual welfare in poor weather conditions**.**

National Forest inventory Woodlands

Woodland type	Area (ha)
Conifer	4,361
Broadleaved	1,428
Assumed Woodland	1,251
Felled	1,075
Young Trees	713
Ground prep	303
Mixed mainly broadleaved	33
Low density	32
Mixed mainly conifer	16
Total	**9,212**

Three properties (Glen Finglas, FCS North Katrine & Inversnaid) are part of The Great Trossachs Forest project, which is in the south of the BqDMG area. There is a 200 year long term vision to restore native woodland habitats with actions identified in individual estate management plans for the next 5 years. Further information can be found at http://www.thegreattrossachsforest.co.uk . A further four properties are known to have Long Term Forest Plans in place to help detail forest operations over the coming 20 years.

Areas of woodland in the BqDMG can cause conflict between management objectives as a result of legitimate protection against deer impacts, but there are also numerous benefits of woodland within the DMG area. For example

- Increase body condition of deer
- Provide shelter in poor weather
- Increase in hind productivity (i.e. calving rates)
- Increase in calf size (i.e. producing bigger stags, better hinds)
- Provide different stalking opportunities

RACCE and SNH generally accept that deer impact is a more useful guide than actual deer numbers when considering cull levels. BqDMG also agree that this is an important aspect of deer management and that cull targets should be guided by woodland and habitat impacts. There has been significant native woodland creation within the BqDMG area already, with many of the new schemes including areas of existing native woodland.

The Native Woodland Survey of Scotland (Appendix – NWSS Map) that was published in 2014 has suggested that nationally 33% of native woods were in the high or very high impact categories (C and D), which would be likely to prevent successful tree and shrub

regeneration of most species in most cases if the impact were to be maintained at that level. Herbivore impact will be monitored (see habitat monitoring section) and fencing or culling will be carried out where appropriate. Areas of existing native woodland are not in all cases deer fenced and where site conditions are favourable to woodland expansion or development of an understorey, this should be achievable without deer fencing.

Herbivore impact in native woods

The table below shows the proportion of native woodlands in the BqDMG area and the National average for each NWSS Herbivore Impact category.

Herbivore Impact Class	Area (ha)	% of BqDMG Native Woodland	% of National Native Woodland	Description
Low	14	1%	14%	Very low or no herbivore impacts. Tree and shrub regeneration will not be restricted by browsing. Generally allows diverse wildlife as well as tree and shrub regeneration. However in some cases more grazing may be desirable for site objectives, e.g. wood pasture.
Medium	1605	67%	53%	Could meet a wide range of objectives but some tree and shrub species may be under-represented in regeneration.
High	206	9%	13%	Limited prospects for successful tree regeneration and in general future woodland biodiversity will be restricted.
Very High	549	23%	20%	Very little chance of new regeneration and restricted field and shrub layer. Woodland not sustainable in the long-term
Total	**2374**	**100%**	**100%**	

The BqDMG has a high percentage of native woodlands at low or medium deer impacts (68%), the National target being 60% by 2020, but there are very obvious clusters of high impacts along Loch Lomond, on the south side of Glen Dochart and in the area around Balquidder village itself. Discussions with BqDMG members as to the management of these woodlands will be required.

BqDMG recognises the benefits of using deer fencing as a tool to achieve woodland (or other) objectives. Generally if a site is very sensitive and fragile then appropriate fencing should generally be considered in terms of deer welfare, delivering management objectives, and the site specifics on the practicality and cost of such fencing. This is to be done using

FCS guidelines. There are examples within the Group area of Sitka restocking being established extremely well with no fencing whatsoever (Lix Toll area). This means a financial saving to foresters. This is not the case for young planted native woodlands or soft conifers plantations which are likely to suffer severe damage from even minor deer incursions especially during snow cover. However as woodland establish and fences age and become increasingly porous, deer impacts can be detrimental and cull setting needs to allow for containing these impacts to acceptable levels.

Incursions of deer (especially stags) into deer fenced areas may occur from time to time. In such circumstances early action can prevent significant impacts to crops and wider Group objectives from occurring. BqDMG will agree a local protocol for such instances to ensure neighbours are notified and a mitigation plan worked out within a sensible timeframe. Any incursions need to be dealt with quickly (FCS protocol).

Public Interest 4: Actions to demonstrate DMG contribution to the Scottish Government woodland expansion target of 25% woodland cover.

There has been significant Native woodland creation in the Group area during the last 25 years. Native woodland has been created at Glen Finglas, North Loch Katrine, Suie, Glen Falloch, Tulloch and Inverlochlarig.

Commercial replanting is taking place but it is not known how much, if any, new commercial planting has been created.

It is thought that considerably more recent native woodland creation has taken place than is shown on the map in the Appendix – Woodland Creation Map.

There is scope for more of this to be done utilising the Forestry Grant Scheme and as objectives for individual properties change. A collaborative approach to woodland schemes may benefit BqDMG objectives in the longer term. In particular open discussion will be required regarding deer management objectives and how best to deliver these.

Woodland Creation Scheme (Data correct as of 2014)

Scheme type	Area (ha)
WGS 1 (1991-92)	1095
WGS 2 (1993-94)	533

WGS 3 (1995-2004)	5072
SFGS (2005-06)	1171
SRDP Native woodland planting	200
SRDP Native woodland regeneration	173
Total	**8244**

Public Interest 5: Actions to monitor and manage deer impacts in the wider countryside.

BqDMG recognise the importance of carrying out habitat monitoring to not only help set deer cull targets, but also to be able to demonstrate management impacts are not detrimental to habitats and habitat condition is improving as a result of cull targets.

Training on habitat monitoring has been taking place in the Group supported by SNH.

The table below shows the broad habitat types found within the BqDMG area – a map showing this can be seen in Appendix – Land Cover Map.

Land Cover Scotland (1988) – Habitats

Habitat type Area	Area (Ha)
Blanket bog & peatland	1312
Bracken	1632
Broadleaved Woodland	1282
Coarse Grassland	5744
Coniferous plantation	3462
Heather moor	17256
Improved grassland	629
Mixed woodland	369
Montane vegetation	5784
Open canopy young plantation	1476
Smooth Grassland	3913
Plantation preparation	963
Total	**43,822**

There are other drivers now such as the new Basic Payment Scheme which should encourage landowners to carry out habitat monitoring. The working group has identified this as an important duty of group members and wishes to see more training rolled out and subsequent on the ground monitoring taking place at each property. Training on “kick sampling” of rivers should also be considered.

Public Interest 6: Actions to improve Scotland's ability to store carbon by maintaining or improving ecosystem health.

The Scottish & UK Government have committed to reducing carbon emissions and also promoting the management of land in a way that can help promote the storing of carbon. Carbon can be stored in two main ways – through peatlands and woodland.

Peatland, and in particular blanket bog, has been described as 'Scotland's Rainforest'. As shown in the Land Cover Scotland table (1988) approx. 3% of the Group's land cover is blanket bog or peatland and 40% is heather moorland (where some peat will be the soil composition).

As previously mentioned, there is a considerable range of new planting across the Group, with 22% of the DMG classed as woodland, and over 8000ha of woodland creation schemes since 1990. New planting forms an important part of carbon capture as the trees establish, and then as a carbon reservoir once the trees reach maturity.

In addition to woodland and peatland, the Group has several new Hydro-electric schemes built since 2012 which are already contributing to the reduction of a large tonnage of carbon emissions.

Group members recognise the role they have in storing carbon. BqDMG plays, and will continue to play, a vital role in delivering carbon storing targets. BqDMG will work with LLTNPA/ SNH to help promote and deliver carbon storage.

Further information on peatland restoration can be found at www.snh.gov.uk/climate-change/taking-action/carbonmanagenent/peatland-action/national-peatland-plan

River basin management planning.

River Basin Management Planning is about protecting and improving Scotland's water environment in a way that balances costs and benefits to the environment, society and economy. There is no local RBMP, just a Scotland wide plan, but through work of the Forth, Tay & Lomond Fisheries Trusts (and others) DMG members who are signed up to their local fisheries will be delivering many actions of the national RBMP. Some key local actions are improving water quality, managing for flood prevention, improving riparian woodlands.

Public Interest 7: Actions to reduce or mitigate the risk of establishment of non-native species.

Sika

The policy of the Group is to shoot Sika deer (as per Best Practice Guidance) as there is a risk of cross breeding with native Red deer. At present there are no other non-native species of deer in the Group area. Any evidence or believed sightings of other non-native species will be dealt with in a collaborative manner.

Muntjac

Currently, there are no wild muntjac deer in Scotland, with Scottish Government aiming to ensure populations do not become established. Evidence from England suggests that issues relating to Muntjac populations greatly outweigh any positives of having the deer present, with significant damage costs borne by all.

BqDMG members will ensure no populations of muntjac are established in the area – current protocol is as follows – if Muntjac are seen then ensure animals are shot ASAP. In Scotland, Muntjac can be culled 24hrs a day 365 days a year – they are not offered protection by the Deer (Scotland) Act. Clearly high animal welfare standards should still be followed. Any sightings (whether dead or alive) should be reported to SNH.

Discussion continues regarding the treatment of a number of “white faced” deer in the DMG area. BqDMG recognize the attraction of such deer to the public, but also realize that there management and decision of culling needs to follow the same welfare principles as per other deer species.

Feral Goats

There is a population of Feral Goats in the south east corner of the BqDMG area. Their presence is impacting upon the condition of the woodland to the east of Loch Lomond and in particular the condition of the designated woodlands.

Their population size is unknown but over 250 animals were counted in 2017. A number of members are involved in the management of these feral goats, by either lethal or non-lethal management methods. Discussions are being had with SNH and LLTNPA to ensure that the management of this population of feral goats is effective and the pressure on the designated sites is lessened.

Feral Pigs

There are reported populations of feral pigs beyond the south boundary of the DMG, around Aberfoyle. A number of members of BqDMG are currently involved in local projects on the management of feral pigs. All members are encouraged to report feral pig sightings to local FE/ SNH area staff and be aware and follow current Scottish Government policy. This is currently to ensure no feral pigs/ wild boar are released into the wild whilst aiming to minimise the range of current populations.

Other non-native issues, which when tackled in a collaborative manner, will improve opportunities and dealing with them in a more sustainable way include:

- Rhododendrons which are being cleared in certain areas.
- Japanese Knotweed which is also being treated in some areas.
- Mink

Public Interest 8: Actions to protect designated historic and cultural features from being damaged by deer e.g. by trampling.

There are many historic ruins and dykes etc. in the Group area, mainly old townships and shielings. Clearly there is considerable historic interest in the area to some of these sites. Moderate grazing by herbivores is likely to be beneficial rather than detrimental to these sites. Any new tree planting is subject to an archaeological survey. Minimal damage to these sites may occur due to non-adherence of guidance during planting or felling operations.

3.3. Social Wellbeing

Public Interest 9: Actions to contribute to delivering higher standards of competence in deer management.

The DMG recognises the importance of delivering higher standards of competence in deer management through:

- promoting and offering opportunities for Members to take up formal training opportunities;
- facilitating continuous professional development activities; and

- ensuring Wild Deer Best Practice guidance is adopted in deer management activities throughout the DMG.

Training

Throughout BqDMG all those involved in deer management should be adequately trained and deemed competent to cull deer. Training is a fundamental part of delivering higher standards.

A recent outbreak of E.coli 157 allegedly linked to venison has heightened awareness on the need for continually increasing standards in carcass handling and preparation.

The Group is committed to an ongoing programme of training in all aspects of land management whether it be DMQs, quad bike handling, habitat monitoring or anything else necessary to fulfil the Group's aspirations.

It is recognised that all training is a requirement of individuals, however where possible promotion of training will be carried out by BqDMG. When organising training members are encouraged to circulate around the Group to see if others are interested in participating. Training courses are often more cost effective with increase participation, so there are clear benefits to all.

There are several organisations/individuals, such as BDS, BASC and Tayforth machinery ring, which are capable of delivering this training and contact details are available from the Group office bearers.

The Table below shows the number of people in the Group which have DMQ 1/ 2 or Trained Hunter Status. Of the 23 properties where active deer management is taking place, 21 of them have personnel who hold DMQ1 or higher.

Qualification	**Number**
DMQ1	17
DMQ2	10
Trained Hunter	5

Public Interest 10: Actions to Identify and promote opportunities contributing to public health and wellbeing.

Deer are of great social and cultural value to Scotland. As one of Scotland's top iconic wildlife species they provide a range of benefits, for example through their contribution to tourism and people's enjoyment of the outdoors. Venison is also a healthy meat enjoyed by many. Deer can, however, also lead to health and safety risks e.g. road traffic accidents (see DVC section) and such as Lyme disease.

Recreation & Access

The Group contains several Munros and core paths which attract walkers to the area and a number of members take advantage of the landscape and beauty of the area to promote rural tourism.

Disturbance during stalking days can cause issues and members in the past have used the "Hill phone" which has now been replaced by the "Heading for the Scottish Hills" website (BqDMG info is in Area 7) which all walkers and properties are encouraged to use. The GTF is now attracting increasing numbers of visitors. In addition to this, a number of BqDMG members belong to the local Mountain Rescue Groups.

Further to the opportunities offered by one member through wildlife tours BqDMG recognises the importance of engaging / educating the public on deer management. BqDMG will consider future education opportunities through school visits/ local events/ local talks to groups/ etc. A number of these may be carried out at present and provide a model that can be used. This may also be carried out in collaboration with neighbouring DMGs.

Ticks & Lyme's Disease

Lyme disease is caused by a Borrelia bacteria and is spread to humans (and other mammals and birds) through the bite of infected ticks. Only a percentage of ticks carry Borrelia bacteria, however, this percentage can vary from area to area. Prompt removal is important, as the risk of infection increases the longer the tick remains attached. Checking for attached ticks regularly will help to reduce the risk, and will increase the chances of discovering them before they have had time to attach.

Correct tick-removal techniques are vitally important in avoiding transmission of infective organisms. Members are advised to make visitors and clients aware of ticks and Lyme's

disease and direct them to the Best Practice Guide's website on Lyme's Disease (http://www.bestpracticeguides.org.uk/people/lyme-disease).

Chronic Wasting Disease

Chronic wasting disease (CWD) is a highly contagious and fatal transmissible spongiform encephalopathy (TSE) disease that affects deer. It has had devastating effects on many populations of wild and farmed deer in the USA and Canada. It is not known to affect humans.

There is no evidence of TSEs in deer in the UK but if it were to become established in the wild deer population it would have major consequences for the UK deer industry. Chronic wasting disease is a notifiable disease. This means that if you suspect it you must tell your nearest Animal and Plant Health Office (APHA) office immediately. Failure to do is an offence. For information on how to spot CWD see https://www.gov.uk/chronic-wasting-disease.

3.4. Economy

Public Interest 11: Actions to maximise economic benefits associated with deer

Wild deer are considered a resource and can play an important role in promoting and sustaining economic activity, especially in rural areas where they can contribute to businesses, particularly stalking, tourism and food production.

A proportion of the cull is a management cull to deliver estate, conservation and/ or woodland establishment objectives, and a proportion of the cull is undertaken by direct guest shooting. Both guest shooting and nature tourism (as a result of conservation) both contribute to the rural economy.

Many properties provide letting of accommodation and other ancillary services. Callander and local villages provide a range of accommodation, pubs, restaurants as well as other tourism opportunities. Sporting and nature tourism visitors contribute to these, which subsequently are a provision for local employment.

Within the BqDMG area, there are some full time jobs which are either fully or partially involved with deer management. In the latter situation, income from deer management often

allows the position as a whole to remain viable. This income may derive from venison sales, stalking fees, or grants associated with government supported woodland or environmental schemes. In other instances deer management is a net cost to the land owner as whilst deer are an integral part of the habitat, maintaining a balanced environment with improved habitats for biodiversity is the main priority.

Almost all deer management staff within the BqDMG area have a range of other duties, ranging from other wildlife management duties such as visitor and access management, river management, livestock management, research, habitat monitoring and game-keepering.

Most deer carcasses are sold to game dealers out with the area but some are processed in the Group area and marketed from there, promoting the local resource, which is used in a number of local hotels/ restaurants etc. Larder provision within the Group is generally good, but local co-operation ensures appropriate capacity takes places at a number of locations within the area. Group members share a commitment to high standards beyond the larder door, right through to the sale of the carcass or else its use locally.

As of 2018, there are five properties plus FES managing the National Forest Estate (a further 5 deer management units), that are members of the venison quality assurance scheme (SQWV). All other members will be encouraged to attain the standards required. As a matter of general principle, Members also support the local consumption of locally shot, high quality venison.

Some local businesses operate wildlife safaris, nature cruises, and guided walks. Many businesses depend on, and promote the local scenery and its wildlife and there is at least one business adding value and marketing venison products.

Public Interest 12: Actions to minimise the economic costs of deer, and ensure deer management is cost-effective

There is an economic cost of damage caused by deer and undertaking deer management, even if this offset by some limited income from deer venison. Deer cause damage to various types of land management, such as agricultural land, damage to woodland resulting in replanting/ beat up of restocks, damage to open habitats, damage to gardens. One option to protect against this impact is to erect deer fences; this costs a considerable amount of money and should only be used as a last resort. If incursions of deer in fenced plantations

are found they need to be dealt with as soon as possible by either chasing out the deer or more practically culling.

BqDMG is committed to recognising that there is a balance between achieving management objectives and finding a compromise between the economic benefits and costs at a local level, which may not be the same outcome across the whole of the BqDMG area.

Deer are shot out of season to control deer within enclosed woodlands but is unlikely to have any impact on the open range population (see Authorisations section).

Deer Vehicle Collisions

Additional economic costs of deer occur through Deer Vehicle Collisions on local roads. The area around Lochearnhead on the A84 has been identified as a hot spot for Deer related traffic accidents. Resolution of this problem is seen as a top priority for the Group. This problem is complicated because that the A84 is one of the boundaries of the Group and three different DMGs meet at Lochearnhead. Therefore liaison between the Groups is imperative.

It is agreed by the Members that they will keep records of any collisions between deer and cars or other vehicles in their area together with relevant information (e.g. location, species of deer, fate of deer, damage to vehicle, human injuries), while also recording dead deer in their annual cull returns and where appropriate, larder sheets. Members may also wish to contribute to the national project collating RTA reports which can be accessed at

http://www.deercollisions.co.uk

Public Interest 13: Actions to ensure effective communication on deer management issues.

Effective collaborative deer management requires effective communication on deer management issues both within the DMG and throughout the wider community in order to promote better awareness and education of deer and deer management. The first step to encouraging more public involvement has been to involve LLTNPA in 2015/6; they are now attending all meetings and will hopefully find ways to assist in the future.

There are 7 Community Councils (CCs) within or partly within the BqDMG area (Appendix – Community Councils). At least 3 CC are represented at by Group members. Liaison with all CCs will take place in 2016, providing them with an opportunity to understand local deer

management, highlight any concerns/ issues and promote overall enjoyment of what deer/ rural land management can bring to the area.

It is envisaged that all BqDMG information will be available on the ADMG website to ensure a level of openness and transparency.

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3.5. Welfare

Public Interest 14: Actions to ensure deer welfare is taken fully into account at individual animal and population level.

The definition of welfare in relation to wild deer is “concern for their physical and psychological well-being”. This definition can be applied to both the individual animal and population level. Wild Deer Best Practice Guidance states that with increasing intervention (e.g. fencing, feeding, culling) comes increasing responsibility for their welfare. Any changes to current land management or new fencing could have a negative consequence on either individual or deer herd welfare.

There are not any identified deer welfare issues within the Group at the present time. As highlighted above from time to time there could be a higher calf mortality but this tends to be linked to excessively bad winters and often involves calves separated from hinds. But given the level of woodland cover and the approach to deer culling actions are in place to ensure this is kept to a very minimum.

Members keep a record of deer mortality and it is added to the SNH deer return.

See section on mortality.

Deer Fences

Attaining an up to date picture of the status of these fences should be a priority for the Group.

Almost all significant woodland areas within the Group area are fenced off from deer, although many areas are retained as deer shelter, and a number of pole-stage plantations have been opened up for deer access in recent years. Group members will take account of the Joint Agency Fencing guidelines.

Supplementary/ diversionary Feeding:

There is relatively little supplementary or diversionary feeding specifically for deer in the group area, although feed blocks and silage laid out for sheep and cattle can sometimes be utilized by deer.

4. Properties Information

This section gives brief information on the properties in the BqDMG area.

Auchleskine

Estate details:	1,020 ha	
Main contacts	Mike Luti	Davie Luti
Sporting Requirements	None	
Farming Interests	Tenanted Farm with sheep on the open hill.	
Forestry Interests	None	
Conservation Interests		
Deer Management	A few hinds taken on the open hill but the deer only utilise the area in the rut.	

Ballimore

Estate details:	Area: 1770 ha
Main contacts	David Thow
Sporting Requirements	30 stags and 30 hinds
Farming Interests	100-150 ewes 80 – 100 cows
Forestry Interests	Deer fenced: 66ha
Conservation Interests	
Deer Management	Dependent on what is seen on the ground due to high culling on neighbouring land.

Craigruie

Estate details:	250 ha
Main contacts	Quintin Lyle
Sporting Requirements	6 stags
Farming Interests	
Forestry Interests	
Conservation Interests	
Deer Management	

Dochart Woods

Estate details:	356 ha	
Main contacts	Eddy Dixon	John Searl
Sporting Requirements	None	
Farming Interests	None	
Forestry Interests	The main objective is to manage the forestry on a commercial basis. The area is predominantly planted with Sitka spruce with mixed conifer and native broadleaf and some areas of open ground.	
Conservation Interests	None	
Deer Management	Deer are culled to ensure that impacts on the woodland are kept to tolerable levels.	

Edinchip

Estate details:	1,320 ha	
Main contacts	Alex Bowers	David Sutherland
Sporting Requirements	15 stags & 30 hinds	
Farming Interests	900 ewes	
Forestry Interests	104 hectares of woodland	
Conservation Interests	14 hectares SSSI – Edinchip Woods	
Deer Management	Stalking is leased out but the main objective is to maintain a healthy and sustainable herd.	

FCS North Loch Katrine, Balquhidder, Crianlarich, Strathyre West & Achray North

Estate details:	Total Area: 10,995ha
Main contacts	Richard Eadington
Sporting Requirements	Deer control is currently carried out by directly employed FCS Wildlife Ranger staff. Some permit stalking will be offered where this does not detract from other objectives being achieved.
Farming Interests	None
Forestry Interests	The total land holding is a mix between open moorland, new native woodland which has been developed through planting and natural regeneration and conifer blocks. The new planted areas have all been enclosed by deer fencing due to the high numbers of deer on adjacent land ownership. Managed grazing using cattle will form part of the management of the Katrine area.
Conservation Interests	Vegetation within deer fences has developed since removal of sheep, although outside these there is little evidence of the heathland vegetation recovering. This is an important conservation area with black Grouse in particular; Golden

	eagles and other raptor species are not uncommon. In 2009, highland cattle were introduced to the area, the plan is to utilise these animals to enable the habitat to improve through controlled grazing. This is proving successful and the cattle herd has been added to in the last 6 months, they also provide an aesthetic value which is proving popular with visitors. Designations: Ben A'an and Brenachoile Woods SSSI, current status Unfavourable recovering due to management. This is on the basis that continued herbivore control is undertaken, this included deer and goats.
Deer Management	New planting is vulnerable to deer impacts. Native woodland remnants are extremely vulnerable and steps will be taken to reduce adverse impacts. Deer fencing will be used extensively to protect the newly established woodland areas. The deer population will need to be managed to counter the effects of grazing loss from fencing and the cattle grazing and to reduce unacceptable impacts on other habitats. Out of season shooting will conform to FCS policy. Night shooting may be utilized where serious damage occurs despite having used all other methods including out of season control. Population monitoring has been undertaken by direct counts using helicopters and using dung clearance plots, this will continue where resources allow.
Other comments	**Ongoing survey and monitoring** of the open habitats will eventually inform this management plan and therefore determine future cull setting. All year 1 re-stocking will be monitored by Nearest Neighbour assessment or subsequent newly developed methodology. Population monitoring has been undertaken by direct counts using helicopters. Deer usage will be monitored using dung clearance plots. SDA assessments are conducted at years 1 and 5 by the Operations team. All biological data will be collected via the SWMS. **Significant public access** mostly confined to the B28 tarmac road which is single track in many places and requires care in the winter months. Loch Katrine is accessible from tarmac roads throughout although there are barriers positioned to the east and west which control vehicle access.

Glenfalloch Estate

Estate details:	Open hill 4,651ha	
Main contacts	David Lowes	Falcon Frost
Sporting Requirements	20 Stags, 40 Hinds and 20 calves	
Farming Interests	Tenancy on north part of Estate where 95% of stock is grazed. 150 Ewes 100 cows	
Forestry Interests	No commercial timber. Fenced regen areas 298 ha	
Conservation Interests	4 SSSIs 1 National Scenic area 1 Special Area of Conservation	
Deer Management	Management includes: Deer count, group and recruitment. Managing the herd sustainably Habitat Impact Assessments.	
Other comments	Impact of hill walking is increasingly restricting deer range. Hind cull increased as more deer are present following additional fencing to south of estate land Goats culled to protect Pollochro woodland	

Glen Finglas – Woodland Trust Scotland

Estate details:	Area: 4,915 ha	
Main contacts	Hamish Thomson	Andrew Eadington
Sporting Requirements	None	
Farming Interests	Glen Finglas has a free-ranging breeding herd of Luing cattle that graze on the open hill and within native woodland. Cattle winter and calf outdoors. Cattle numbers total approximately 150, and comprise approximately 70 breeding	

	cows & followers and 35 to 40 conservation grazing steers. A small herd of approximately 300 hill sheep is retained and their role is to graze areas that are not undergoing tree regeneration.
Forestry Interests	The management objective at Glen Finglas is to achieve 50 - 70% tree cover on land below the altitudinal limit for woodland (approx. 400 metres ASL), and this currently stands at nearing 40%. Approximately 1500ha of this woodland will be established behind deer fences and the balance through scattered natural regeneration across the wider estate. This is to expand the key habitat at Glen Finglas which is wood pasture.
Conservation Interests	The estate has a range of important habitats such as dwarf heath shrub, wetland, species rich acid grassland, ancient woodland pasture and native woodland. Habitats are managed through appropriate grazing by primarily cattle and wild deer.
Deer Management	Deer management is carried out by our Wildlife Manager in order to achieve our conservation objectives, in particular the expansion of native woodland and the protection of existing areas of planted and ancient native woodland. This is undertaken within the legal seasons and also by license out of season and at night as appropriate to expand the area of wood pasture within a habitat mosaic.
Other comments	The Estate encourages public access and understanding of what we are trying to achieve at Glen Finglas. We have a Visitor Gateway to provide orientation and information, and a network of surfaced paths as well as hill tracks. The Estate hosts long-term grazing research work undertaken by the James Hutton Institute, and works with other research bodies and individuals on studies carried out on the Estate. The Woodland Trust undertakes monitoring of tree establishment, habitat condition and black grouse.

Glenogle & Leskine

Estate details:	2,328 ha
Main contacts	John Sinclair – Managed Estates
Sporting Requirements	5 stags & 2 hinds
Farming Interests	Agricultural Tenant. 1,500 ewes (whole estate) 1,000 ewes West area. Potential for future moorland management scheme via AECS 2018.
Forestry Interests	Mixed woodland blocks of semi established Broad and conifer species. All boundaries are fenced and should be stock proof.
Conservation Interests	
Deer Management	

Inverlochlarig

Estate details:	Area: 4187 ha
Main contacts	Malcolm McNaughton
Sporting Requirements	24 stags . Hind cull varies depending what deer are on the ground, winter mortality and neighbouring culls.
Farming Interests	Inverlochlarig is a hill farm/estate situated in the middle of the DMG area. It carries about 3000 ewes & 100 sucklers On the southern side it marches with North Loch Katrine which removed all its sheep stock in 2002. This substantially increased the grazing range of the red deer herd. Since 2002 Inverlochlarig has reduced sheep numbers in its western and south western areas. This has improved the deer habitat especially as area is now mainly grazed with cattle.
Forestry Interests	Approx 100 ha. All deer fenced. Boundary deer fenced only along estate march neighbouring Blaircreich
Conservation Interests	Part of the estate is in the Ben More/ Stobinnien SSSI. Native forest compartments are in the process of being planted totaling 100 ha. These will be deer fenced and have been sited to cause minimum disruption to

	deer movement and will be monitored. Any incursions will be dealt with by chasing deer out or culling. The area fenced off will not constitute a significant reduction in deer range. There are not enough deer to create problems of habitat damage. They supplement the grazing of other herbivores.
Deer Management	Inverlochlarig winters dispersed numbers of red deer hinds. Most of the stags in the BDMG area winter to the south and to the north but disperse over the whole DMG area during the rut. Inverlochlarig tries to manage the deer as a sustainable resource to provide some stag stalking with guests mainly during October and some hind stalking which supplies the Inverlochlarig venison business.
Other comments	**Access** to 7 Munroes to the north which leads to high numbers of walkers in the area. There is also a Corbett on the south side of the glen. Public access fits in well with deer management and creates very few problems.

Leskine Forest

Estate details:	170 ha	
Main contacts	Rolf Thornquist	Alan Cory-Wright
Sporting Requirements	None	
Farming Interests	None	
Forestry Interests	The forest is made up of commercial conifer, mixed conifer, mixed broadleaf and open ground.	
Conservation Interests	None	
Deer Management	Deer management is carried out to ensure that browsing impacts are kept within tolerable levels.	

Monachyle Beag

Estate details:	Area: 401ha
Main contacts	Mike Luti
Sporting Requirements	8 stags and 12 hinds
Farming Interests	Sheep taken off in November 2017.
Forestry Interests	Lower third of the glen is privately owned and deer have access.
Conservation Interests	Starting HIAs in Spring 2018. Grass and heather in good order. Eagle site in area.
Deer Management	Selective stag and hind culls. Deer numbers are relatively low until December when the estate holds 80 to 100 stags from neighbouring areas. The hill is south-facing and the estate accepts that deer need to be there for welfare reasons.

Monachyle Mhor

Estate details:	Area: 905 ha
Main contacts	Alan Sneddon
Sporting Requirements	12-14 stags and 12 hinds
Farming Interests	800 ewes and lambs 15 cattle
Forestry Interests	850 ha open hill- bounded on eastern side by privately owned plantation with poor boundary fence. Very little migration between open hill and forestry, more frequent in winter under harsh conditions.
Conservation Interests	Aim is to prevent over-grazing of hill to conserve habitat and protect wild flowers especially orchids on the lower ground. Resident Golden Eagles and small coveys of Ptarmigan. Noted increase in Kestrel population and frequent Peregrine recorded. Occasional red kite and ring ousel sightings
Deer Management	Objective: sustainable cull with a stable herd of hefted hinds and a reasonable number of stags appearing during the rut. Historic migration of stags from north

	west onto Glen Carnaig for summer grazing. Very Few over-wintering mature stags.
Comments	Hind numbers seem to be reducing. Low recruitment rate and higher overall herd mortality during the 2009/2010 winters seem to have had a lasting effect on hind population. 2017/18 Season seems to have been very difficult for calves with an observed recruitment rate of less than 20%.

Muirlaggan Forest Partnership

Estate details:	Area: 1051 ha	
Main contacts	Juan Arkotxa	Alcuin Arkotxa
Sporting Requirements	15 stags and 6 hinds	
Farming Interests	400 BF ewes	
Forestry Interests	600 ha forest 400 ha open hill	
Conservation Interests	AECS programme that includes Moorland Management and Habitat Impact Assessments	
Deer Management	Approved Forest Plan which includes Deer Management Plan	

RSPB Inversnaid

Estate details:	Area: 803 ha
Main contacts	Fraser Lamont
Sporting Requirements	None
Farming Interests	No grazing for 2018. However, future management on parts of the site will include low density grazing, most likely from cattle.
Forestry Interests	No commercial planting. 90ha of ancient woodland. 24ha establishing woodland. 100ha native woodland planted in 2013/14. 50ha set aside for natural regeneration of trees.

	Approx 700ha of open hill (this includes the farmed area). In the open hill area there is 25 ha deer exclosure that has stood since 1997 and is showing good tree growth and regeneration.
Conservation Interests	Herbivore management predominantly to encourage understory and improve woodland and hill habitat. Grazing to produce leks and habitat for black grouse. Stalking to reduce deer numbers and promote tree regeneration. Large scale tree planting and erection of deer fencing to try and provide woodland pasture habitat for woodland assemblage and black grouse wintering.
Deer Management	Cull target: 10 stags, 20 hinds and 5 calves. Also 5 roe deer. Contract stalker is used to reduce numbers across property. Deer numbers are managed to reduce browsing and promote tree regeneration.
Other comments	The property also has a population of feral goats. Work continues alongside DMG partners to reduce goat numbers and their damaging impacts at Inversnaid and the wider area. The goats appear to travel across property boundaries and group members are monitoring to research more about their movements.

Stroneslaney Woods

Estate details:	Area 60 ha
Main contacts	J.M.B. Baillie-Hamilton
Sporting Requirements	2 Stags
Farming Interests	None
Forestry Interests	4ha bare ground at top and bottom 12 ha newly replanted and deer fenced 44 ha closed canopy forest
Conservation Interests	None
Deer Management	Prefer to have lowish deer numbers for sake of trees but happy to have enough to justify recreational stalking. At present numbers are low.

Suie Estate

Estate details:	2,832 ha	
Main contacts	Emma Paterson	Ian Dingwall
Sporting Requirements	18 stags and 30 hinds	
Farming Interests	In-hand farm: Pedigree fold of 35 cows and calves plus heifers (3yr, 2yr and 1yr) and bulls. 400 hill ewes and 150 inbye. Tenanted farm: mixture of BF sheep and cattle on low ground.	
Forestry Interests	60ha of enclosed woodland: Conifer Plantation (3.15 ha) and the rest are plantations of native woodland planted recently. 1 SSSI – Ben More & Stob Binnien.	
Conservation Interests	On the low ground part of Glen Dochart Wader Project - Sluices and scrapes created to attract waders. Estate is keen to see return of Black Grouse to the area.	
Deer Management	The management on Suie is: to ensure that the deer population is in good health and to provide let days for clients, mainly from the UK. Clients are asked to shoot cull stags and good headed stags are spared until old; and to deliver conservation objectives.	

Appendix

Stock Numbers

	Present numbers		Stock removed since 2000	
Landholding	**Stock ewes**	**Cattle (1 Livestock unit)**	**Cattle**	**Stock Ewes**
Craigruie	250	10		
Balliemore	1,000	90		
Immerion	1,060	30		
Inverlochlarig	3,000	90		700
FCS Loch Katrine (N)	0	0		5,990
FCS Loch Katrine (S)	0	0		2,300
Monachyle Beag	200	0		
Monachyle Mhor	800	15		
Muirlaggan	400	0		
Inversnaid	0	0		600
Edinchip	800	0		
Suie	550	35		
Ledharrie	850	20		
Glenfalloch	1,400	80		900
Glen Finglas	300	110		2,800
Glen Ogle West	1,000	0		
Totals	**11,610**	**480**		**13,290**

Community Council Contacts

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Strathard Community Council	Chair		cc@strathard.org
Strathfillan Community Council	Chair	Alan Smailes	smaileshome@btinternet.com
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Trossachs Community Council	Chair	Gene Maxwell	achrayfarm@aol.com

Designated Sites Information – Updated 25th January 2019

Site Name	Desig.	Feature Name	Summary Condition	Pressure
Ben A'an and Brenachoile Woods	SSSI	Upland oak woodland	Recovering	Grazing - Over grazing Invasive species
Ben More - Stob Binnein	SSSI	Alpine heath	Favourable	Grazing - Over grazing
Ben More - Stob Binnein	SSSI	Lichen assemblage	Favourable	
Ben More - Stob Binnein	SSSI	Tall herb ledge	Favourable	
Ben More - Stob Binnein	SSSI	Alpine moss heath and associated vegetation	Favourable	Grazing - Over grazing
Ben More - Stob Binnein	SSSI	Vascular plant assemblage	Favourable	Natural event
Brig o' Turk Mires	SSSI	Valley fen	Favourable	
Edinchip Wood	SSSI	Upland oak woodland	Unfavourable	Grazing - Over grazing
Edinchip Wood	SSSI	Wet woodland	Favourable	Grazing - Over grazing
Geal and Dubh Lochs	SSSI	Hydromorphological mire range	Favourable	Recreation/disturbance
Geal and Dubh Lochs	SSSI	Oligotrophic loch	Favourable	Invasive species
Glen Falloch Pinewood	SSSI	Native pinewood	Favourable	Grazing - Over grazing
Glen Falloch Woods	SSSI	Upland oak woodland	Recovering	Grazing - Over grazing
Loch Lomond Woods	SAC	Otter (Lutra lutra)	Favourable	Climate Change Development Recreation/disturbance
Loch Lomond Woods	SAC	Western acidic oak woodland	Unfavourable	Forestry operations Grazing - Over grazing Invasive species
Loch Lubnaig Marshes	SSSI	Flies	Favourable	
Loch Lubnaig Marshes	SSSI	Fluvial Geomorphology of Scotland	Favourable	Climate Change Extraction

Loch Lubnaig Marshes	SSSI	Freshwater pearl mussel	Unfavourable	Water management
Loch Lubnaig Marshes	SSSI	Open water transition fen	Favourable	Invasive species
Lochan Lairig Cheile	SSSI	Oligotrophic loch	Favourable	Forestry operations Recreation/disturbance Water management Water quality
Lochan Lairig Cheile	SSSI	Open water transition fen	Favourable	Forestry operations Recreation/disturbance
Lochan Lairig Cheile	SSSI	Valley fen	Favourable	Forestry operations Recreation/disturbance
Pass of Leny Flushes	SSSI	Springs (including flushes)	Favourable	Grazing - Under grazing Invasive species
Pass of Leny Flushes	SSSI	Upland oak woodland	Recovering	Grazing - Over grazing
Pollochro Woods	SSSI	Bryophyte assemblage	Favourable	Grazing - Over grazing
Pollochro Woods	SSSI	Lichen assemblage	Favourable	Conservation activities Grazing - Over grazing
Pollochro Woods	SSSI	Wet woodland	Unfavourable	Grazing - Over grazing
Pollochro Woods	SSSI	Wood pasture and parkland	Not Assessed	Grazing - Over grazing
River Dochart Meadows	SSSI	Fen meadow	Favourable	Grazing - Under grazing Recreation/disturbance
River Teith	SAC	Atlantic salmon (Salmo salar)	Favourable	Forestry operations Invasive species Water quality
River Teith	SAC	Brook lamprey (Lampetra planeri)	Favourable	Forestry operations Water management Water quality
River Teith	SAC	River lamprey (Lampetra fluviatilis)	Favourable	Forestry operations Water management Water quality
River Teith	SAC	Sea lamprey (Petromyzon marinus)	Unfavourable	Forestry operation Water management

				Water quality s
Stronvar Marshes	SSSI	Loch trophic range	Favourable	Agricultural operations Forestry operations Invasive species Water quality
Stronvar Marshes	SSSI	Open water transition fen	Favourable	Recreation/disturbance
Stronvar Marshes	SSSI	Wet woodland	Favourable	Invasive species
Trossachs Woods	SAC	Western acidic oak woodland	Unfavourable	Grazing - Over grazing Invasive species

Maps

The following maps will be appended to the DMP and are held digitally on the BqDMG website.

http://balquhidderdmg.deer-management.co.uk/

Part 1 Maps

2013 Count Map

2017 Count Map

Part 2 Maps

Properties Boundaries Map

Designated Sites Map

Designated Sites with Features under pressure from Grazing Map

National Forest Inventory Map

Woodland Creation Map

Native Woodland Survey of Scotland Map

Land Cover Map

NWSS High and Very High Impacts

Properties with the potential for restoring Peatland

Deer Fences Map