



## Assessments complete. Stage one in a year of review.

*Photo: Dick Playfair*



Richard Cooke, Chairman  
Association of Deer Management Groups

**The SNH Assessments of all Deer Management Groups (DMGs) were completed on schedule in May. We have yet to see the overall analysis from SNH but the general feedback from senior staff has been that the process has gone fairly smoothly and that the results will show significant progress since 2016 in almost all cases. Certainly, those Assessments I have seen are encouraging and there will be a number of Groups that have scored green in every category. I am not currently aware of any formal appeals.**

It seems that the process this time has been more in the nature of a negotiation than an examination and that SNH has taken some trouble to ensure a consistent and fair approach, which I welcome, as the 2016 experience was rather more challenging. We have pressed for this and for clarity as to what was expected during our discussions with SNH over the last two years. The support of consultants, part funded by ADMG, at most Assessment meetings has undoubtedly been helpful and SNH has been very ready to adjust their initial gradings if presented with new evidence and a well-argued case.

DMGs have been sending in their completed Assessments to ADMG and Linzi Seivwright will be analysing these over the next few months as a basis for any general

recommendations for member Groups; also, to inform ADMG's future work programme to build on the good progress which has been made.

Looking to the future, the beauty of the voluntary principle is that it allows individual DMGs to find their own way of achieving their private and public objectives and I do note that progressive Groups are developing a more ambitious and creative approach, in some cases extending beyond deer management. For all Groups making use of our growing databases of habitat information as a means of ensuring that deer and other herbivore impacts remain sustainable will be a priority. It is essential that we maintain the level of commitment and progress which has been so much in evidence over the past three years and my thanks to those who have personally dedicated a lot of time to this within their DMGs. Leadership has emerged as a key theme in effective deer management.

The next stage in the review process will be the submission of the SNH Report to the Scottish Government in September, to be followed shortly afterwards by the report of the Deer Working Group which has been tasked by the Cabinet Secretary with reviewing the **system** of deer management in Scotland (as opposed to the **practice** which is covered in the SNH review) and making recommendations for change. Hopefully that will be of a fine tuning rather than a radical nature, but we shall just have to wait and see. ADMG is also likely to be invited to appear in front of the ECCLR Committee of the Scottish Parliament at some point later in the year after the SNH and DWG reports have been presented to Ministers.



# PROFILE OF BREADALBANE DMG AND PROGRESS THROUGH THE ASSESSMENT PROCESS

Upper Glen Lochay.  
Photo: Victor Clements



Victor Clements

**The Breadalbane Deer Management Group (BDMG) covers Glens Lyon and Lochay, the South side of Loch Rannoch, the north side of Glen Dochart, and the north side**

**of Loch Tay up to Ben Lawers, extending to just over 90,000ha from Tyndrum in the west to Aberfeldy in the east. You can find information on the Group at [www.breadalbanedmg.deer-management.co.uk](http://www.breadalbanedmg.deer-management.co.uk)**

BDMG is a strong Group, with a very active membership, and good levels of participation from both owners and stalkers. From 2010 to 2015, the DMG management was dominated by five large upland designated sites, and the overall deer population was reduced from 13,000 to 9,000. While the Group appeared to be able to adjust to this at the time, in retrospect, we probably over-cooked it a bit, and the age profiles and distribution of deer have been affected in ways we didn't fully appreciate at the time, so we are having to fine-tune and re-adjust now. The Section 7 process which covered this period expired in May 2015, and there is no obvious requirement to re-instate this. Indeed, it is the view of the DMG that there is now no need for something like this, and SNH have no obvious grounds for intervention anymore.

The Group is structured into sub-areas, with vice-chairs being appointed in the sub areas outwith that in which the chair resides. This gives us a recognised lead in each area, helps with succession planning, and gives us a number of personnel to make up a small steering group or working committee.

The sub-areas have worked well in the past, but changes in deer movements and extensive woodland creation schemes mean that the sub-area boundaries may now be breaking down, and this is a significant issue for us to address going forward to ensure that our structure remains relevant.

BDMG makes extensive use of population modelling, but the possible changing sub-area boundaries make this difficult at present, and we have a significant number of deer which appear to be hidden by forestry, but which appear during the season. It is not easy to quantify these. The DMG vice-chairs are increasingly taking a role in population modelling and advising on suggested hind culls in particular. We carry out recruitment counting every May across 1,200 to 1,500 hinds. In the past, we probably under-estimated the variation in recruitment rates across the area, with a range of 25 per cent in the west to over 40 per cent in the more fertile and sheltered east. Much depends on the actual season. We have decided to check calf cull data this year to see if the male/female ratio is actually 50:50 or not.

A key part of the Group functioning is to collate and distribute cull information to members well in advance of spring meetings, and we aim to have this done by 7 April each year at the latest. We would have it done sooner but some members shoot occasional animals through to 31 March on agricultural ground or in woodlands. Giving people time to view the figures makes discussion at meetings more relevant, and the collated data allows the DMG to invoice for subscription money quickly after the end of the season. We aim to gather in all our subscriptions over two months maximum.



There are a number of smaller properties within the area that pay a minimum £20 subscription only, and a number of farmers and small woodland properties that are not actually members, but who do supply us with cull information, and who we do keep on our email circulation list. The information is more useful than the money.

At the 2016 review of deer management, the Group scored poorly for counting and habitat monitoring, primarily because these functions had been undertaken by SNH during the Section 7 process. Since then, it has been a priority for us to try and rectify this.

Successful foot counts were delivered in both 2017 and again in 2019, undertaken over two to three days, with personnel moving between properties or covering gaps where required. Morven Frost of Boreland Estate and Steven Macdonald of Meggernie/Lochs co-ordinated this process, and it has worked well after a gap of 10 years without foot counting. We aim to count every second year, using population modelling and recruitment/mortality counts in between.



It took us longer to decide what we could do in the way of habitat monitoring, principally because of the designated sites and the complexity of those. Several owners also did not want to be doing SNH's work for them. We also had the issue that much of the area is dominated by upland grassland, for which there is no agreed survey protocol, and which is more technically difficult as well.

In 2018, a year later than planned, we eventually held a Group training day, which was well attended, and we managed to monitor both heather and blanket bog plots across the DMG area. We lacked some plots in some areas, but in general, the results we achieved were in line with the HIA carried out by SNH, and our blanket bog plots showed mostly low impacts. We previously did not have any data on these. Data is best presented by simply putting it on a map, with red for high impacts, and green for medium or low. No other analysis is required. Going forward, we plan to monitor habitat every second year, in the years when we are not foot counting. This gives us one significant project every year to deliver using our own personnel, hopefully with minimal external costs going forwards.

In each of the assessments to date (2014, 2016, 2018, 2019), we have been quite tough on ourselves, and that has helped generate a gradual improvement. For example, although we did quite a good job with HIA monitoring in 2018, we still have a cluster of ambers around this, implying that we can build on what we have, and we are comfortable with that.

In terms of communications, we believe that anyone with an interest in deer within the area is involved with the Group, and the ADMG website has been useful in allowing a range of community groups to make contact with us, including community councils asking for help and the local school which wanted placements on estates for some of their students.

We have a dedicated agenda item for health and safety at all meetings, and just recently, we have started a member profile agenda item, where members give a presentation on their wider operations. The aim is to make meetings useful and enjoyable, and hopefully, we have been able to achieve this.

Group members aim to manage deer for their own varied interests, not for SNH or for the Scottish Government. A Group that can work for itself will inevitably work for the public interest too.

**Victor Clements is Secretary of the Breadalbane Deer Management Group, is on the Executive Committee of ADMG, and works as a woodland advisor, based in Aberfeldy.**

## Packed house at ADMG AGM.

**The Association of Deer Management Groups annual general meeting was held with a packed house at the Macdonald Aviemore Resort in February 2019.**

In a break from tradition there were no guest speakers, instead the conference focusing on the deer management review and the Deer Management Group assessment process which ran from April through to June. The conference was kindly sponsored by RK Harrison.

*The panel for the Q & A session consisted (left to right) Linzi Seivwright, Caorann Consulting; Willie Fraser, NTS; Finlay Clark, ADMG Secretary; Robbie Kernahan, SNH, and John Risby, Forestry Commission Scotland.*





Roe Deer.  
Photo: L. Campbell

# The Lowland Deer Panel Report



Dick Playfair,  
Secretary, LDNS

**The report of the Lowland Deer Panel was published in the spring and will form a part of the overall SNH review of the**

**deer sector this autumn. It has been broadly welcomed, although containing few surprises.**

## The Panel set out to answer 5 key questions:

- Do lowland deer managers need to collaborate to achieve sustainable deer management?
- If so, at what scale does this need to take place, and what is the most efficient and effective approach?
- What knowledge and information are needed to support this process and to determine whether the public interest is being met?
- What are the practical implications of public perceptions of deer and deer management in the lowlands?
- What further action could SNH take in the context of the existing legislative and policy framework?

In answering these questions, the Panel took evidence in a variety of ways, inviting stakeholders to contribute, circulating the questions widely, undertaking an online survey, and holding targeted discussions and evidence sessions.

## The Panel drew the following conclusions from what has been described as a very diverse range of views:

- Collaboration is needed – but there are differing views about the nature of cooperation.
- There are differing views on the scale at which cooperation should take place and how it should be achieved.
- There is general agreement that the herding species should be managed in the same way in both the Uplands and the Lowlands.

- There is agreement that there was a disconnect in the venison supply chain that acts as a disincentive for some recreational deer stalkers.
- There is concern about lack of engagement from Local Authorities.
- There is concern among recreational stalkers about local access to the National Forest Estate.
- There is concern about the perceived poor conversion rate from DSC1 to DSC2.

## The Panel also made a number of recommendations:

- The panel supported the findings of the report on Lowland Deer Management: Assessing the Delivery of Public Interests (McMorran et al, 2018), encouraging SNH to work closely with other agencies to harmonise existing spatial data, and filling gaps on culls, as well as collecting stalker effort, through collaboration with hunting bodies. All data including local expert knowledge on both deer numbers and habitat impacts could be incorporated into an updated Impact Indicator Matrix (Putman et al, 2011) of public interests and could form a basis in future for multi-criteria decision support models.
- The Panel recommended that SNH should work more extensively with Local Authorities and others to provide guidance on the need for deer management and to make them aware of their obligations under the Deer Code, through education and direct help in deer management planning and implementation.
- The panel recommended that SNH encourages the wide use of the Impact Indicator Matrix of public interests and establishes a systematic approach to reviewing the evidence across the lowlands, in order to identify areas where a regulatory approach may be necessary (prioritising the herding species, but where appropriate also roe deer).
- SNH should support the provision of venison storage and processing facilities where lack of such facilities is a barrier to sustainable deer management and consider using such support as a lever for better reporting of cull returns by Groups or individuals.



# ADMG Survey of Stalking Rents 2018.

## Sponsored by Knight Frank – Final Report.



### Executive Summary

This is a repeat of the 2011 survey exercise, with the aim of establishing current charges and trends and how these vary by stalking experience.

59 estates took part in this survey, covering a total area of 498,000 hectares (1,231,000 acres), compared to 76 estates with 550,000 hectares (1,360,000 acres) in 2011.

The reported prices of both stag and hind stalking have increased from 2011 to 2018. The average charge for a day's stag stalking with stalker and ghillie has increased by 38%. The average charge for a day's hind stalking with stalker only has increased by 81%, and for stalker and ghillie has increased by 32%.

For stags, the provenance of guests has changed since 2011. The 2018 survey found that Europe is the most important source of guests, followed by 'Rest of UK' and then Scotland. The 2011 results showed 'Rest of UK' as most important, then Scotland, then Europe.

For hinds, Europe has also become the most important source of guests in 2018, with Scotland and 'Rest of Europe' equal second. In 2011, 'Rest of UK' was most important, closely followed by Scotland, with Europe a distant third.

For both stags and hinds, the number of estates using repeat business and word of mouth for marketing has fallen between 2011 and 2018. Use of advertising, agents, and the Scottish Country Sports Tourism Group has risen.

### Full Results

#### 1. How many stags do you let per year?

Numbers ranged from 3 to 400, with an average of 42 let per estate per year. 37 estates (54%) let between 20 and 50 stags, 3 let 100 stags or more and 12 let less than 20.

#### 2. Do you let by the stag, day, week or other?

34 let by the stag only (59%)

None let by the day only

11 let by the week only (19%)

One lets for the whole season (2%)

The rest let by combination of stags/day/week.

#### 3. How many hinds do you let per year?

Numbers ranged from 8 to 130 per estate, with an average of 45 let per estate per year. 7 estates let less than 20 hinds per year, 31 (62%) let between 20 and 50 hinds, 10 (20%) let 60 to 100 hinds, and 2 let over 100.

#### 4. Do you let by the hind, day, week or other?

2 let by the hind only (4%)

35 let by the day only (70%)

5 let by the week only (10%)

Other: One lets for the whole season (2%), one donates hind stalking to charity auctions (2%)

The rest let by combination of hinds/day/week.

#### 5. How many days do you let stags in total?

46% let stags for fewer than 30 days per year, with a minimum of 3 days and an average of 32 days per estate.

Only 2 estates let stags for more than 100 days (one of these lets for the whole season, and the other covers several stalking beats on a large estate).

#### 6. How many days do you let hinds in total?

50% let hinds for fewer than 30 days per year, with a minimum of 4 days and an average of 32 days per estate.

Only 1 estate lets hinds for more than 100 days (letting for the whole season).

#### 7. Do you charge extra for a trophy?

19 estates charge for trophies (32%), with prices from £25 to £3850, often based on the number of antler points.

#### 8. How many let stags do you expect to shoot per day?

97% expect to shoot 2 or fewer stags per day, with 45% shooting only one stag per day and 22% shooting 1-2 stags per day.

Only 2 estates expect to shoot more than 3 stags per day (over more than 1 beat).

#### 9. How many let hinds do you expect to shoot per day?

Many responded that hind numbers shot per day varied depending on conditions, with 52% shooting 2 per day and 13% shooting 3 or more per day.

#### 10. How do you offer your stag stalking and what do you charge (inc. VAT) on average per guest per day?

Estates charge from £300 to £1000 per guest per day (compared with £240 to £600 in 2011).

27% offer stalker only, charging £300 to £790, an average of £472 (compared with £444 in 2011, a 6% increase).

66% offer stalker plus ghillie, charging £325 to £1000, an average of £671 (compared with £487 average in 2011, a 38% increase).

7% offer stalker plus two ghillies, charging £540 to £864, an average of £670.

### 11. How do you recover your stag carcasses?

52 estates use ATVs (90%), with 34 of these using only ATVs (59%).

7 estates use ponies (15%), with 2 estates using only ponies (3%).

12 estates use quad-bikes (21%) along with other methods.

18 estates drag to vehicle (31%) along with other methods.

1 estate uses a boat along with other methods (2%).

22 estates use a combination of methods (38%).

### 12. How do you offer your hind stalking and what do you charge (inc. VAT) on average per guest per day?

48 estates responded, charging from £150 to £450 per guest per day (compared to £50 to £360 in 2011).

67% offer stalker only, charging £150 to £450, an average of £326 (compared with £180 in 2011, an 81% increase).

33% offer stalker plus ghillie, charging £200 to £385, an average of £269 (compared with £204 in 2011, a 32% increase).

### 13. How do you recover your hind carcasses?

47 estates use ATVs (94%), with 33 using only ATVs (66%).

4 estates use ponies (8%),  
1 using only ponies (2%).

8 estates use quad-bikes (16%) along with other methods.

12 estates drag to vehicle (24%) along with other methods.

1 estate uses a boat along with other methods (2%).

16 estates use a combination of methods (32%).

### 14. Do you let your stalking inclusive of accommodation?

30 estates do not include accommodation (53%)

27 estates include accommodation (47%)

### 15. Do you reimburse clients for an unsuccessful stalk?

42 do not reimburse (71%)

17 do reimburse (29%). Of 14 responses, the reimbursement ranged from 25% to 100%, with 50-75% most common.

### 16. When does your let stag stalking start and end?

The earliest start is 1st July, opening day.

All estates end in October, with 84% ending on 20th.

5 estates start in July (9%)

27 start in August (47%)

21 in September (37%)

4 in October (7%)

### 17. When does your let hind stalking start and end?

56% of estates start on opening day, 21st October

20% start after this in October

22% in November

2% in January

2 estates end stalking in November (4%)

6 end in December (12%)

16 in January (32%)

25 in February (50%), with the 15th being the last date for 19 estates.

### 18a. How do you market your stag stalking?

Estates chose as many of the 6 options that applied.

Of 59 estates:

32 said 'word of mouth' (54%)

40 said 'repeat business' (68%)

27 said 'advertising' (46%)

26 said 'agents' (44%)

22 said 'Scottish Country Sports Tourism Group' (37%)

11 said 'Other: International hunting fairs' (19%)

### 18b. How do you market your hind stalking?

Of 52 estates:

29 said 'word of mouth' (56%)

34 said 'repeat business' (65%)

14 said 'advertising' (27%)

9 said 'agents' (17%)

12 said 'Scottish Country Sports Tourism Group' (23%)

No other marketing options were specified.

## 19. Where do your guests come from?

**Stags** – 50 estates answered this question (some ranked two options joint first where they were equally important)

25 estates ranked 'Europe' first (50%)

20 estates ranked 'Rest of UK' first (40%)

6 estates ranked 'Scotland' first (12%)

1 estate ranked 'Rest of World' first (2%)

**Hinds** – 42 estates answered this question

16 estates ranked 'Europe' first (38%)

13 estates ranked 'Scotland' first (31%)

13 estates ranked 'Rest of UK' first (31%)

No estates ranked 'Rest of World' first

## 20. Additional comments

7 estates (12%) commented on high mortality during winter 2017/18.

6 estates (10%) have experienced reduced deer numbers due to neighbouring deer management policies.

5 estates (8%) mentioned walker disturbance of stalking.

## 21. Approximate area of ground for stalking

Stalking areas ranged from 1,180 acres (478 hectares) to 96,000 acres (38,866 hectares).

The average area was 20,867 acres (8,448 hectares).



Ran Morgan, Knight Frank  
Sponsor of the report says:

*It is acknowledged that what Scotland can offer in this area is up there with the best in the world, if not the best. But we know that providers have often let for less than the market is prepared to pay. It is therefore interesting to see that the general movement recorded through this survey is an upward one, in terms of price, for stags and hinds.*

*We have unmatched expertise among our stalkers and ghillies; let stalking is a long-acknowledged and essential aspect of deer management, steeped in tradition and fieldcraft; and we have spectacular scenery for its pursuit.*

*I think all of us in the sector now recognise that there should be a premium for this.*

*Undoubtedly the hard work of an under-resourced Scottish Country Sports Tourism Group, and a number of estates, deer forests and agents that have taken the initiative in terms of marketing, have helped to move this forward, and encourage greater interest from Europe and other non-UK markets. At last, I think, we have recognised the quality of our resource, and are not afraid to market it at a price it merits.*

**The 2018 survey of stalking rents was undertaken by Helen McIntyre on behalf of ADMG.**

## Looking back at the 2018 Fred Taylor Trophy winner.

**The Fred Taylor Trophy for Working Hill ponies in 2018 was won by Archie Hay and Highland pony Spey from Invercauld Estate in the sixth running of the competition sponsored by London gunmaker John Rigby & Co.**

As well as the winning trophy, the estate received a Highland Stalker rifle from Rigby worth £12,000 and a medal from the Highland Pony Society.

The competition, organised by the Game and Wildlife Conservation Trust and the Association of Deer Management Groups is held in memory of Fred Taylor, head stalker on the Invermark Estate in Angus for more than 30 years.

This year's competition takes place at the GWCT Scottish Game Fair at Scone Palace on Sunday 7 July.



Archie Hay  
with pony Spey.  
Photo: Dick Playfair



# Update on the Scottish Deer Health Survey 2017 – 18

Tom McNeilly and Beth Wells

The Scottish Deer Health Survey, funded by Food Standards Scotland and the Scottish Government and started in July 2017, is now coming to the end of its two-year funding period. The project aims were to determine the prevalence of *E. coli* O157 bacteria that can cause severe disease in humans but not deer, in wild Scottish deer, and to determine which practices in processing deer carcasses are most likely to cause faecal (and therefore *E. coli*) cross-contamination of the carcass. The project also looked at the prevalence of a specific parasite, *Cryptosporidium*, in deer faeces which can cause disease in both deer and humans.

Thanks to the efforts of deer stalkers, deer managers and Forest Enterprise, over 1000 faecal samples from wild Scottish deer were collected and analysed for presence of *E. coli* O157 between July 2017 and June 2018. Of the samples tested, only three were positive for *E. coli* O157 meaning the prevalence of this bacteria in wild deer is low (~0.3%); however, the three positive samples contained high levels of *E. coli* O157, and DNA sequencing indicates that the types of *E. coli* O157 strains found are very similar to those that cause human disease. Analysis of the cross-contamination survey is ongoing.

*Cryptosporidium* is a parasite of livestock and public health significance, the main reservoirs of which are cattle. However, recent localised studies have shown that wildlife, including red and roe deer, can act as *Cryptosporidium* reservoirs. All available samples have now been tested for *Cryptosporidium* and 13% were positive for the parasite. Analysis is currently underway to determine which species of *Cryptosporidium* was present in the positive samples, as some species of the parasite are more able to cause disease. A further analysis will then be performed to determine whether proximity of the deer to livestock increases the risk of being *Cryptosporidium* positive.

The final project report is currently being compiled and will hopefully be published in autumn 2019. We once again would like to thank the deer industry, from deer management groups, Forest Enterprise through to the stalkers on the ground, for their enthusiasm and efforts in making this project happen.

**For more information please contact:**

**Tom McNeilly** - Email: [Tom.McNeilly@moredun.ac.uk](mailto:Tom.McNeilly@moredun.ac.uk)  
or **Beth Wells** - Email: [Beth.wells@moredun.ac.uk](mailto:Beth.wells@moredun.ac.uk)  
Tel: 0131 445 6157



## Here to protect all things rural

With over 40 years' of supporting the rural sector, R K Harrison is one of the leading insurance providers to farms and estates, as well as rural homes and businesses. We solve their risk requirements with a suite of specially developed solutions.

Please call on 01738 234 019 or email [laura.mitchell@rkharrison.com](mailto:laura.mitchell@rkharrison.com)

// R K HARRISON





### For the Attention of Estate Owners, Woodland Managers and Conservation Bodies

#### ABOUT US

Roddy Macaskill has 35 years of deer management with both the private sector and government bodies. We offer a range of professional contracting services. With the emphasis on delivering targeted deer culls in a very cost-effective and sensitive manner in woodland settings, private sporting estates and agricultural land.

We are a very experienced team certified and equipped to the highest standard, and operate to Best Practice guidelines.

#### SERVICES

We offer a wide range of services including:

- Short-term help with deer culls on the open range or in woodlands
- Long-term contract support for deer culling
- Advice on population control and sporting management for estates and private owners

#### CONTACT US

If you would like to discuss a new project in confidence please call Roddy Macaskill on **07808168404** or e-mail him [info@highlanddeersolutions.co.uk](mailto:info@highlanddeersolutions.co.uk)  
**[www.highlanddeersolutions.co.uk](http://www.highlanddeersolutions.co.uk)**





# MUSINGS OF A HABITAT SURVEYOR

*Quadrat laid out on a blanket bog.  
Photo: Colin McClean*

**A continued national focus on deer,  
in isolation from other grazing animals,  
simply makes no ecological sense.**



Colin McClean

**Over the last two springs I have strode, plodded and limped over many estates within DMGs covering the Cairngorms**

**National Park, the objective being to monitor habitats, mostly heather, to fulfil Habitat Impact Assessment (HIA) actions within Deer Management Plans.**

The oft repeated adage that “it’s not about deer numbers, it’s about impacts” is brought to life during habitat monitoring and I find it fascinating. I was sceptical about how estates would view the HIA process but, while some do see it as a box ticking exercise, most have been genuinely interested in results and their implications for management.

Dwarf shrub heath (or heather moorland to you and I) is a widespread habitat in the Cairngorms and most of the work I have done has been focussed on heather. The monitoring system developed through Best Practice works well. I find it practical, consistent and I think it will prove repeatable over time. When demonstrating the system, most managers are surprised at its simplicity. The SNH deer team in Inverness provide excellent, patient support to surveyors and have recently brought regular surveyors together to discuss lessons learned from experience and to make improvements. This is how the deer sector should work.

I started monitoring habitats with some preconceptions. The first was that results would only be useful in the long term when trends became apparent. Not so. Sometimes HIA produces unequivocal results with clear management implications. I have just finished HIAs across much of the Cairngorm Speyside DMG and in several hundred handfuls

of heather where I estimated browsing levels, I rarely found a browsed shoot. Clearly current grazing levels are not threatening the extent or health of heather over this range as a whole. In other places you can find virtually every shoot browsed and it is clear that if management does not change then heather will be lost. Trends are not always required to make decisions.

To me it is also now starkly clear that impacts on heather are much greater when sheep and deer graze together, as opposed to deer grazing alone. Without seeking to downplay the ecological impacts that deer can have on open range, sheep grazing has a greater ability to bring about heather loss and habitat change. Sheep have become the elephants in the room in the deer debate. A continued national focus on deer, in isolation from other grazing animals, simply makes no ecological sense. There are parts of Scotland where deer could be removed completely without bringing about much habitat improvement, but with the loss of a job-sustaining resource. Deer are a much softer political target than sheep, but politicians must be braver on sheep issues if change to upland habitats is their genuine goal.

Finally, I think we might be in danger of under-estimating the importance of heather to open range deer. Young heather provides winter forage which is likely to be of higher quality than dead *Molinia* and long heather can be good shelter for deer. I wonder if it is entirely down to rainfall that west coast deer seem to be more prone to sporadic years of high mortality, or is there also a link to historic heather loss? Discuss. Habitat monitoring provides the data which allows estates to manage their heather sustainably and this data is, I think, vital.

**Colin McClean manages wildlife on an Aberdeenshire estate, is on the Executive Committee of ADMG and is a director of Deer Consultancy Services.**



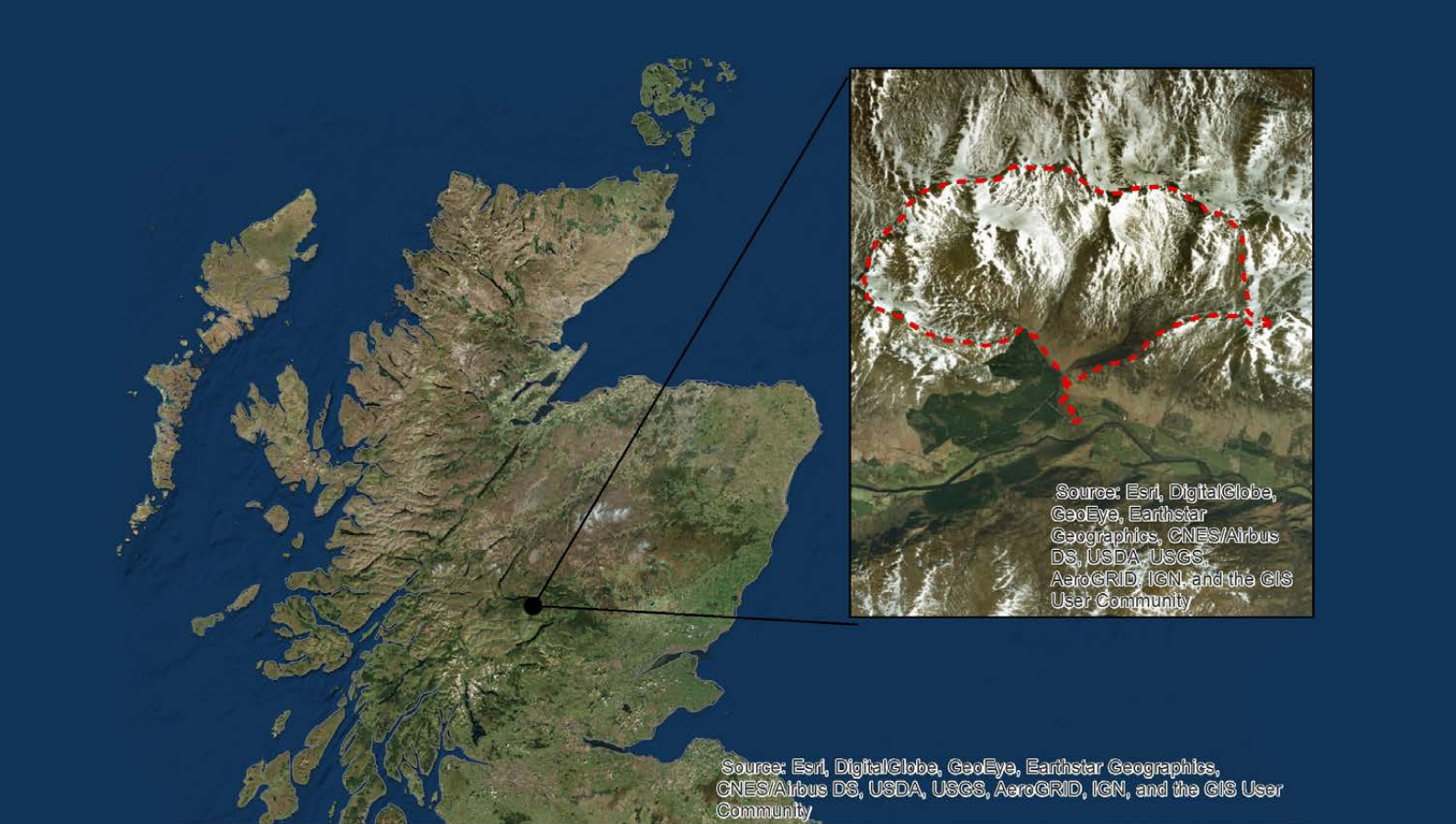


Figure 1: Location of the study area in Glen Lyon, Perthshire, Scotland, which includes a popular 17.5 km hill walking track that takes walkers over the summits of four prominent Munros (Carn Gorm, Meall Garbh, Carn Maig, Creag Mhor).

# The Glen Lyon deer project

Dr Jed Long,  
University of St Andrews

**While remote and natural areas are increasingly popular for human recreation, the presence of people in key wildlife habitats can influence the behaviour of, and habitat selection by, wildlife. In Scotland, the red deer (*Cervus elaphus*) range covers most of the Scottish uplands and populations of these animals need to be managed to control grazing impacts on priority habitats.**

These areas are also increasingly visited by hill-walkers who are attracted to the open landscapes and high mountains, such as the Munros and Corbetts. Both deer management and hill walking are legitimate activities and important to rural economies, generating income and rural jobs. However, in some places, visitors have the potential to disturb deer which are believed to move away from or avoid areas of human activity such as footpaths and tracks. Such disturbance can cause conflicts with deer management objectives, affecting the ability to carry out activities such as recreational hunting and managed deer culling. Thus, there is a need to understand the interaction between recreational users (such as hill walkers) and red deer movement and behaviour. Further, quantifying the importance of this interaction cannot be done without also considering other factors that are likely to influence deer distribution and behaviour, such as sheep stocking rates, habitat quality, and other environmental effects.

In the Glen Lyon deer project (figure 1), we take an innovative approach to the collection of human-wildlife interaction data. Specifically, we aim to gather data to:

1. quantify the impact of hill walkers on red deer;
2. disentangle this from other effects, such as livestock presence;
3. test the effect of information provision on hill walker behaviour and hence on deer behaviour.

The results will support a more evidence-based approach to managing the relationship between outdoor recreation activities and this iconic species.

During sampling days in the summers of 2017 and 2018, we positioned a team member just beyond the car park at the trail head of the hill-walking circuit on the estate. From that location, all hill walkers entering the loop were counted. An infrared sensor positioned slightly further along the trail also counted passing walkers, allowing us to estimate hillwalker numbers at times when we were not present. We asked all hill-walkers entering the trail to carry a GPS device while out on the hill.

The GPS devices were pre-programmed to record their location continuously (one position every 5 seconds). At the same time we asked hillwalkers to fill-out a wildlife viewing survey, which was a piece of card which we provided (along with a pencil). Based on the time information provided by participants in the wildlife



survey, the location of the walker at that point in time was cross-referenced based on their GPS tracking data. The locations where walkers viewed wildlife can then serve as a coarse estimate of where encounters between humans and wildlife occur.

We also used wildlife camera traps (trail cameras) to collect systematic information on the spatial and temporal distribution of red deer in the study area. In 2017, we situated 33 cameras along 11 transects at various points along the hiking trail. We situated 3 camera traps along each transect (at 25m, 75m, and 150m from the trail) altering the side of the trail that the cameras were located at various times throughout the study period. In 2018, we employed a similar transect design with 15 cameras and then set out a further 20 cameras randomly throughout the study area, varying the vegetation and topographic conditions within this random sample. A similar camera trap set up to 2018 is being replicated in summer 2019.

In 2017 and 2018, we approached a total of 197 hill walkers to participate in our survey and 185 agreed (93.9% success rate) spread across 35 sampling days (roughly equal weekday and weekend days). This result indicates a very high level of engagement and represents one of our most surprising findings thus far: that hill-walkers were overwhelmingly willing to participate in our project. From the GPS tracking data, we can clearly identify areas where hill walkers are sticking to the known route, and areas where hill walkers are more likely going off this main route (figure 2). In 2019, we will test whether strategically placed information signs, which outline the impacts of off-track walking on the ecosystem and its management, affect the amount of off-track activity and whether this has noticeable effects on deer distribution and behaviour.

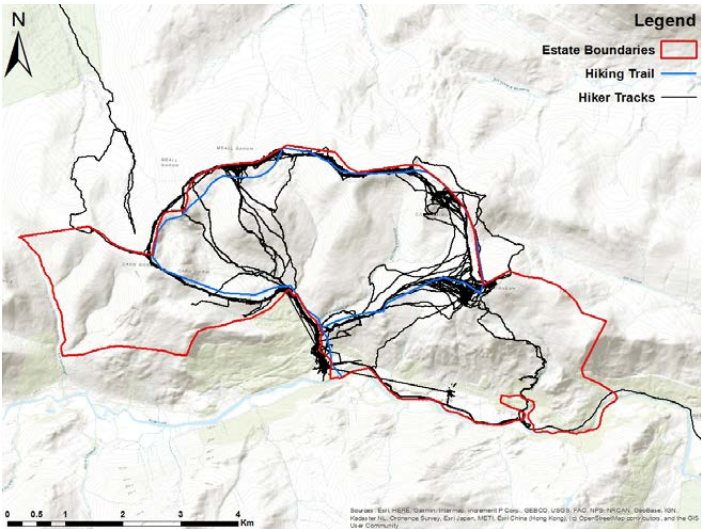


Figure 2: All 185 GPS tracks collected in 2017 and 2018 at the Glen Lyon, North Chesthill estate study site.

So far, we have collected over 150,000 camera trap images of wildlife and livestock (sheep) in the study area. We are currently processing the camera trap data from both 2017 and 2018 for the presence and timing of red deer, and of sheep and/or other animals. We are also categorizing behaviour of red deer (in terms of movement and vigilance) from the images (figure 3).



Figure 3: Example of two camera trap images used to characterize red deer behaviour (top vigilant, bottom relaxed) at different distances from the hill-walking track at the Glen Lyon, North Chesthill estate study site.

Our analyses of the camera trap data are ongoing, but the set-up we have employed appears to be highly suitable for answering these research questions. We are also experimenting with innovative camera trap techniques to estimate deer movement speeds directly from sequences of rapidly triggered camera images.

Our long-term goal is to acquire the resources to fit sufficient numbers of red deer with GPS collars. Costs for these devices are now more reasonable, but sample sizes need to be robust. However, these devices would allow us to simultaneously match fine scale distribution and movement of red deer with GPS carrying recreational users. We will then be able to better understand how deer respond in the short-term to disturbance compared to longer-term changes in land use, such as changes in sheep stocking and hill-walker numbers that are a feature of many upland areas.

This project would not have been possible without the support from funders and project partners, including: The Carnegie Trust; a James Hutton Institute – University of St Andrews collaborative PhD Studentship; the British Deer Society; the Association of Deer Management Groups; Gillespie Macandrew; and the North Chesthill Estate.

If you would like to stay in touch with the project please follow us on twitter: @GlenLyonDeer

Project Team Members Include:

University of St Andrews: Dr J Long, Dr U Demsar, Dr. A Davies, PhD Student S Marion

Durham University: Dr P Stephens, PhD Student E Smith

James Hutton Institute: Dr J Irvine



## Leo Barclay retires from SQWV.

Leo Barclay, seen here receiving the Balfour Brown Trophy for services to deer management from Jo O'Hara, Head of Forestry Commission Scotland at the GWCT Scottish Game Fair last year, has stepped down as Chairman of Scottish Quality Wild Venison (SQWV).

His successor is Jamie Stewart who many will know through DMQ and the Scottish Countryside Alliance.

## Scottish Venison



**Dick Playfair,**  
Secretary, Scottish Venison Partnership

**In line with the new strategy for Scottish Venison, Beyond the Glen, the Scottish Venison Partnership was wound up at**

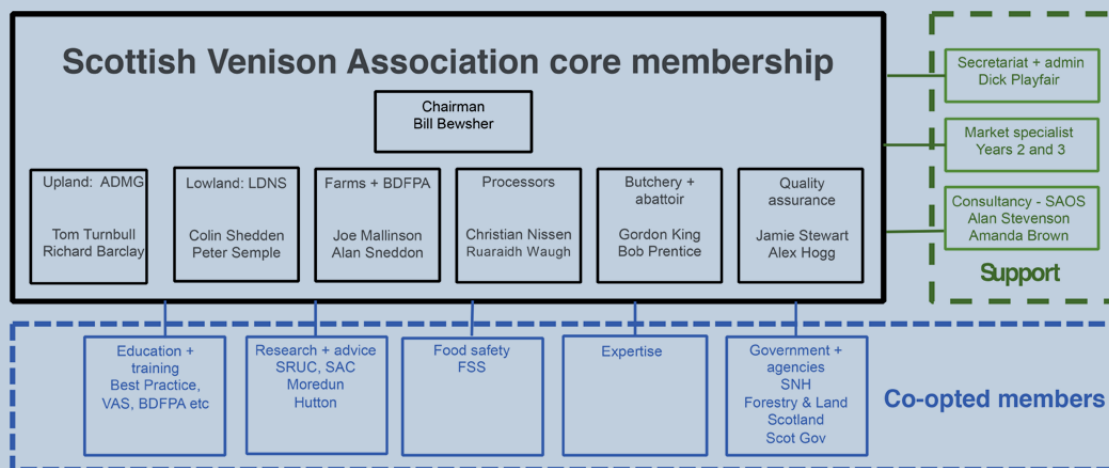
**its annual general meeting in May 2019, and a new organisation, the Scottish Venison Association to be known as 'Scottish Venison' was formed.**

This organisation will take on the role of the 'venison hub' as outlined in the strategy. In addition, a Venison Industry Leadership Group has been set up to oversee activity. Both are chaired by former SVP Chairman Bill Bewsher.

Scottish Venison's restructuring sees it move towards an organisation that is firmly producer and processor led, its membership drawn principally from upland and lowland wild deer interests, deer farming, processing, the butchery and abattoir sector, and quality assurance.

Discussion remains ongoing with the Scottish Government about funding for the 'big ticket' items within the strategy. Brexit has had an impact with all major funding currently on hold until it is clear where Scotland's food and farming sectors will stand in relation to Europe in the future, but the Group remains optimistic that funding support will materialise in due course. The production of the strategy followed the holding of a venison summit chaired by Cabinet Secretary Fergus Ewing last year.

## Scottish Venison Association



*Industry Leadership Group comprises Chairman and one from each of SVA core membership.*

Newsletter produced by

The Association of Deer Management Groups, c/o Bidwells, Carn Dearg House, North Road, Fort William PH33 6PP  
Tel: 01397 702433 | Email: [finlay.clark@bidwells.co.uk](mailto:finlay.clark@bidwells.co.uk) | [www.deer-management.co.uk](http://www.deer-management.co.uk)