

## EAST LOCH SHIEL HABITAT IMPACT ASSESSMENT

### Appendix 13.

Revision 3A: - June 2021.

#### PART 1: -

##### HABITATS AND IMPACTS

###### **Designated Sites: -**

With a decades long history of delivering large scale habitat and environmental benefits by way of domestic livestock reductions, livestock and deer exclosures, woodland planting, &etc. within our area, further woodland protection, creation and regeneration projects are progressing to secure yet more areas on designated features in the EWG area. These continue with the use of rotational fencing within the DMG area to provide a mosaic of landscape management, as opposed to a mono-culture and is exactly as later identified in the 'SNH report Peterken, G.F. and Worrell, R. (2005). Conservation management of the Sunart Oak Woodland Special Area of Conservation (SAC) and the potential for supporting rural development. Scottish Natural Heritage Commissioned Report No. 091 (ROAME No. F00LD21)' which recommends enclosures for "15 years in every 100 years to allow a pulse of regeneration," and considers the whole lifecycle of a woodland. Fully detailed applications have been consulted on and are now with the agencies for final approval and support.

The DMG herbivore impact target for Designated Sites is to be favourable, stable or, URDTM. Often there is more than one feature in a designated site which requires different conditions, so to improve one may degrade another. Designated Sites are assessed under the NatureScot (SNH) - SCM programme.

The Designated Sites are reported on in the DMP 9th Edition - Sept 2018 - Background Information Document at Section 10 at which time the majority of the designated features, SSSI's, SAC's, SPA's land and habitats within the ELSDMG area were reported as in favourable condition by SNH. The condition status of some Designated Features has however been downgraded from favourable to unfavourable during 2019/20<sup>1</sup>.

###### **Non-Designated Open Range: -**

SNH provided the training in BPG HIA to the DMG practitioners (deer managers) who were to carry out HIA's for their estates/landholdings<sup>2</sup>. BPG Blanket Bog or Dwarf Shrub Heath (BB or DSH) are the HIA methods promoted by SNH/Nature Scot for Non-Designated Open Range<sup>3</sup>. Other methods may be used by landholdings with the onus where this is the case is for these landholdings to confirm whether their deer impacts are within the DMG target or not.

The 'Land Cover Scotland 1988' (ELSDMG DMP – Appendix 3) plan shows just over 3% of the ELSDMG area is identified as Blanket Bog/Peatland (BB), much of which is on the SNH Clais

Moss SAC/SSSI/Ramsar Site. With the remaining non-designated BB being under 2% of the group area more emphasis group wide is based on monitoring using the BPG Dwarf Shrub Heath (DSH) HIA method<sup>4</sup>.

Habitat Impact Assessments over the Non-Designated Open Range are underway on a 3–5-year cycle with re-measures indicating the trend.

The group's herbivore impact target for the Non-Designated Open Range is to be at least 50% light or moderate. Analysis of BPG - BB & DSH HIA shows the overall herbivore impacts as over 50% light or moderate. Heavy herbivore impacts recorded are mostly concentrated in areas where the remaining domestic livestock is grazed. Group wide, overall, our Non-Designated Open Range deer impacts are within the DMG target.

#### **Native Woodlands: -**

The group Native Woodland target is to retain existing native woodland cover and improve the woodland condition in the medium to long term. This is measured as being greater than 50% low or medium deer impacts. Native Woodlands are assessed under the NWSS programme which shows herbivore impacts to be within the DMG target. More detail is provided in the ELSDMG DMP Background Information - Section 9 and Appendices 5 & 7. SNH advises (2017) that a Woodland Monitoring method and training for deer managers are under development and are still to be rolled out. It should be noted that, in enclosed woodlands vegetation has often become tall and rank and now poses a severe wildfire risk.

#### **FLS Woodland and Open Range: -**

FLS have extensive woodland HIA data and results. Their view is that as the woodland condition impacts are satisfactory then adjacent open range, by default, should also be satisfactory.

#### **Large Herbivores: -**

Domestic livestock numbers would have peaked in the area during the 19<sup>th</sup> century, reducing thereafter, and along with farming practices over time will have altered the habitat, probably irreversibly and have led to the dominance of molinia. More recent documented changes in management practices over the past 30 years or so has resulted in the overall large herbivore pressure/ impact being significantly further reduced with >13170 sheep + followers and >350 cows + followers having been removed from the ELS open range during this time. This alone is equivalent to a further >75% reduction by number of large herbivore presence leading to, without any other interventions, reduction in herbivore impacts being observed with corresponding increases of vegetation heights and ground cover. Overall grazing pressures are lower now than for many decades, even centuries, with any higher impacts mostly concentrated where domestic livestock continues to be grazed. In places however, with reduced herbivore presence, vegetation has become tall and rank, now posing a severe wildfire risk and reducing bio-diversity. Current deer densities have been stable for a long time with the deer density of  $\approx 10.5/\text{KM}^2$  at the lower end of the SNH medium rated category of 8 to 15 deer/km<sup>2</sup>.

### **Heather Beetle Impacts: -**

Heather beetle impacts have been observed year on year with members reporting much higher than normal heather beetle impacts during 2019 and 2020<sup>5</sup>. The *“Heather Trust believes that the heather beetle Lochmaea suturalis has been instrumental in driving the change from heather to grass dominated moorland. This is a particularly significant cause of moorland decline in the wetter areas, generally on the west side of the country where there is often greater competition from grasses. Purple moor-grass Molinia caerulea is often the chief competitor.”* <https://www.heathertrust.co.uk/#!/heather-beetle/c58r>

Heather beetle impacts are most noticeable in longer, rank heather. The lack of browsing/ grazing may lead to more heather becoming long and rank with consequently more heather beetle impacts, in turn resulting in further losses of heather presence.

### **Bracken: -**

Bracken is present in many areas and is prolific, out competing most other plants. Bracken, with its ability to inhibit herbage and seedling growth, dominates other vegetation. Being fire adapted it seems further invigorated in any areas burnt and leaves large volumes of dry dead matter adding fuel to any wildfire risk and impacts. With the reduction and removal of domestic livestock, along with the low deer numbers the bracken, which intolerant of trampling, is able to expand its coverage year on year and threatens bio-diversity in the areas where it is present.

### **DEER DENSITY**

#### **Deer Density Target: -**

The officers of the DMG conclude that with regard to deer impacts the East Loch Shiel DMG area target Spring deer density can remain at 10.5 per km<sup>2</sup> +/- 5%. Refer to the population model (Appendix 15 Population Models and Targets) which considers all population criteria, indicators, the collective objectives of the DMG members and the public interest to set the overall population and cull targets.

### **ONGOING ACTIONS**

HIA monitoring is just one activity that has been affected by the COVID pandemic with some monitoring postponed/delayed until circumstances allow for re-programming.

Woodland protection, creation and re-generation projects are progressing to address designated sites issues. Fully detailed applications are with the agencies for approval and support.

With the Non-Designated areas herbivore impacts within the DMG targets, the issue is one of maintenance and of addressing any localised areas of unacceptable high deer impacts on an Estate-by-Estate basis.

Emphasis is placed on deer managers to maintain the DMG planned cull through the 2021/22 season despite any ongoing difficulties that may be posed by the COVID pandemic.

Review this HIA document annually incorporating updated and new data.

Review updated HIA data and confirm or re-set the deer density target during summer 2022.

### **NOTES**

SNH, (formerly the Deer Commission for Scotland (DCS)) has been re-named as NatureScot and is the Government agency responsible for implementation of deer policy matters. Either or both names may be used in the HIA reports and other documentation.

<sup>1</sup> There is concern among the DMG membership regarding the downgrading of the condition status of designated features which is not based on any deteriorating condition on the ground but rather on changes to the assessment method, simply the goalposts have been moved. The downgrading of the condition status has been applied to whole designated sites, despite the fact in some areas extensive, expansion, protection and improvement works have been carried out over many decades and ignores the net environmental gains already attained.

<sup>2</sup> There is concern among the DMG membership regarding the inconsistencies of the HIA training received, the differences between the training, issued documents and BPG, &etc.

<sup>3</sup> There is concern among the DMG membership that; We were told in July 2017 the BPG HIA Guides are under review and will change. Will any change simply move the goalposts and lead to a downgrading of condition status? Will any change lead to a lack of statistical robustness to any ongoing results? Will the current data collected even be compatible with the new/changed BPG? No information has been given yet as to any detail nor even a date by which the changes may be published.

<sup>4</sup> There is concern among the DMG membership that in an area with e.g., a lot of grassland, such as East Loch Shiel, impacts measured on other habitats may not be representative of the overall habitat/ impacts and therefore may not be relevant.

<sup>5</sup> Heather Beetle impacts are not recorded on either the BPG Data Sheets or the SNH analysis spreadsheets. There is concern among the DMG membership that Heather Beetle impacts over time has and will continue to lead to an ongoing deterioration of heather, with these impacts, particularly reduction in average heights or loss of heather, occurring gradually, being misinterpreted as by other causes, perhaps as deer impacts.

## **PART 2: -**

### **Landholding HIA Log/Programme**

East Loch Shiel Deer Management Group. HIA Log

Sheet No.1	Landholding: - Ardgour	Date created	17/04/2019
Responsible	EM	Date updated	June 2021

Year	Area/Location	Number/Measure	Habitat	Method	O/A Impacts
2018	Glengour	Ecologist survey			See note below *
2019	Glengour	7 Baseline	BB	BPG-BB	Light/Moderate
2019	Glengour	5 Baseline	Moor	BPG-DSH	Light/Moderate
By 2024	Glengour	7, 1 <sup>st</sup> re-measure	BB	BPG-BB	
By 2024	Glengour	5, 1 <sup>st</sup> re-measure	Moor	BPG-DSH	

Information provided by: - EM

\*The funding for the ecologist survey noted above was withdrawn. It is now very unlikely that any results or analysis will be available.

East Loch Shiel Deer Management Group. HIA Log

Sheet No. 2	Landholding: - Carnoch/Druim Laith	Date created	17/04/2019
Responsible	SF	Date updated	June 2021

Year	Area/Location	Number/Measure	Habitat	Method	O/A Impacts
2014	Carnoch SW	10 Baseline	Moor	BPG-DSH	Light/moderate
2015	Druim Laith NE	10 Baseline	Moor	BPG-DSH	Light/moderate
2016	Druim Laith NW	10 Baseline	Moor	BPG-DSH	Light/moderate
2017	Carnoch SW	9 1st re-measure	Moor	BPG-DSH	Light Moderate
2017	Carnoch GC	5 Baseline	Moor	BPG-DSH	Light/moderate
2018	Druim Laith NE	10, 1st re-measure	Moor	BPG-DSH	Light/moderate
2021	Druim Laith NW	10, 1st re-measure	Moor	BPG-DSH	Light/moderate
2021	Carnoch GC	5 1 <sup>st</sup> re measure	Moor	BPG-DSH	Light/moderate
By 2022	Carnoch SW	10 2 re measure	Moor	BPG-DSH	
By 2023	Druim Laith NE	10 2nd re-measure	Moor	BPG-DSH	
By 2026	Druim Laith NW	10 2 <sup>nd</sup> re-measure	Moor	BPG-DSH	
By 2026	Carnoch GC	10 2 re measure	Moor	BPG-DSH	

Information provided by: - SF

Carnoch Estate straddles the East Loch Shiel DMG area boundary with the Morvern DMG area. With effect from 2020 HIA on Morvern DMG has been contracted out. The results of the MDMG Carnoch monitoring will also be used to inform the overall Carnoch/Druim Laith Estate HIA.

### East Loch Shiel Deer Management Group. HIA Log

Sheet No.3	Landholding: - SNH/ NatureScot Claish Moss.	Date created	17/04/2019
Responsible		Date updated	June 2021

Year	Area/Location	Number/Measure	Habitat	Method	O/A Impacts
				BPG	

Information provided by: - GT - LS

\* SNH Email 12/09/2018. ‘Just to let you know that we will be monitoring Claish in 2019 using Wild Deer Best Practice.’

Action Plan response LS 14/01/2020. ‘The SNH Nature Reserves team confirmed on 30/10/19 that HIA was not carried out in 2019 therefore no historical detail can be provided’. ‘HIA on Claish Moss is to be carried out in 2020 and results will be circulated.’

## East Loch Shiel Deer Management Group. HIA Log

Sheet No.4	Landholding: - Conaglen	Date created	17/04/2019
Responsible	DM	Date updated	June 2021

Year	Area/Location	Number/Measure	Habitat	Method	O/A Impacts
2018	Conaglen	10 Baseline	BB	BPG-BB	Light/moderate
2019	Conaglen	48 Baseline	Moor	BPG-DSH	Light/moderate
By 2023	Conaglen	10, 1 <sup>st</sup> re-measure	BB	BPG-BB	
By 2024	Conaglen	48 re-measure	Moor	BPG-DSH	

Information provided by: - DM



East Loch Shiel Deer Management Group. HIA Log

Sheet No.5	Landholding: - FLS	Date created	17/04/2019
Responsible	JJ	Date updated	June 2021

Year	Area/Location	Number/Measure	Habitat	Method	O/A Impacts

Information provided by: -
----------------------------

East Loch Shiel Deer Management Group. HIA Log

Sheet No.6	Landholding: - Inversanda North/South	Date created	17/04/2019
Responsible	HP	Date updated	June 2021

Year	Area/Location	Number/Measure	Habitat	Method	O/A Impacts
2021	Inversanda	10 Baseline	Moor	BPG-DSH	Light/moderate
By 2026	Inversanda	1 <sup>st</sup> re-measure	Moor	BPG-DSH	

Information provided by: - HP

Inversanda Estate straddles the East Loch Shiel DMG area boundary with the Morvern DMG area. With effect from 2020 HIA on Morvern DMG has been contracted out. The results of the MDMG monitoring will also be used to inform the overall Inversanda Estate HIA.

East Loch Shiel Deer Management Group. HIA Log

Sheet No.7	Landholding: - Resipole	Date created	17/04/2019
Responsible	PS	Date updated	June 2021

Year	Area/Location	Number/Measure	Habitat	Method	O/A Impacts
2019	Resipole Farm	10 Baseline	Moor	BPG-DSH	Light
By 2024	Resipole Farm	10 1 <sup>st</sup> re-measure	Moor	BPG-DSH	

Information provided by: - RS

Resipole also advise they carry out 'Woodland Grazing Toolbox' Impact Assessments on an annual basis which commenced 2014 following on from other woodland HIA.

East Loch Shiel Deer Management Group. HIA Log

Sheet No.8	Landholding: - SGRIPD	Date created	17/04/2019
Responsible	RD	Date updated	June 2021

Year	Area/Location	Number/Measure	Habitat	Method	O/A Impacts
2019	Sunart Estate	30 Baseline	BB	BPG	Light/Moderate
2019	Sunart Estate	30 Baseline	DSH	BPG	Light/Moderate
By 2024	Sunart Estate	30 1 <sup>st</sup> re-measure	BB	BPG	
By 2024	Sunart Estate	30 1 <sup>st</sup> re-measure	DSH	BPG	

Information provided by: - RD.

Sunart Estate arranged for Mountain Environment Services to carry out baseline HIA on BB and DSH to BPG during July and August 2019. A comprehensive report was issued and copied to the DMG.

## PART 3

### Browsing and Trampling Impacts

<u>East Loch Shiel DMG HIA Open Range Summary.</u>					<u>Baseline Data</u>				
					ELS HIA Summary - Excel				
<b><u>Browsing impacts</u></b>									
<b>Method used: BPG Blanket Bog</b>					<b>Method used: BPG Dwarf Shrub Heath</b>				
<b>Analysis used: SNH Spreadsheet</b>					<b>Analysis used: SNH Spreadsheet</b>				
Estate	# plots	Light	Moderate	Heavy	Estate	# plots	Light	Moderate	Heavy
Ardgour/Glens	7	2	3	2	Ardgour/Glens	5	1	4	2
Carnoch N&S	21	18	1	2	Carnoch N&S	35	28	5	2
SNH Claish					SNH Claish				
Conaglen	10	6	1	3	Conaglen	48	29	10	9
FLS					FLS				
Inversanda					Inversanda	10	5	5	
Resipole					Resipole	10	10		
Sunart	30	24	2	4	Sunart	30	17	6	7
<b># Results</b>	<b>68</b>	<b>50</b>	<b>7</b>	<b>11</b>	<b># Results</b>	<b>138</b>	<b>90</b>	<b>30</b>	<b>18</b>
		<b>Light</b>	<b>Moderate</b>	<b>Heavy</b>			<b>Light</b>	<b>Moderate</b>	<b>Heavy</b>
		74%	10%	16%			65%	22%	13%

  

**Blanket Bog Browsing Impacts**

Impact Level	Percentage
Light	74%
Moderate	10%
Heavy	16%

**Dwarf Shrub Heath Browsing Impacts**

Impact Level	Percentage
Light	65%
Moderate	22%
Heavy	13%

<b>East Loch Shiel DMG HIA Open Range Summary.</b>					<b>Baseline Data</b>				
					ELS HIA Summary - Excel				
<b>Trampling Impacts</b>									
<b>Method used: BPG Blanket Bog</b>					<b>Method used: BPG Dwarf Shrub Heath</b>				
<b>Analysis used: SNH Spreadsheet</b>					<b>Analysis used: SNH Spreadsheet</b>				
Estate	# plots	Light/ Moderate	Moderate	Heavy	Estate	# plots	Light/ Moderate	Moderate	Heavy
Ardgour/Glens	7	7			Ardgour/Glens	5	5		
Carnoch N&S	21	21			Carnoch N&S	35	35		
SNH Claish					SNH Claish				
Conaglen	10	10			Conaglen	48	48		
FLS					FLS				
Inversanda					Inversanda	10	10		
Resipole					Resipole	10	10		
Sunart	30	27	1	2	Sunart	30	30		
<b># Results</b>	<b>68</b>	<b>65</b>	<b>1</b>	<b>2</b>	<b># Results</b>	<b>138</b>	<b>138</b>	<b>0</b>	<b>0</b>
		Light/ Moderate	Moderate	Heavy			Light/ Moderate	Moderate	Heavy
		96%	1%	3%			100%	0%	0%
<p><b>Blanket Bog Trampling Impacts</b></p> <ul style="list-style-type: none"> <li>Light/ Moderate: 96%</li> <li>Moderate: 1%</li> <li>Heavy: 3%</li> </ul>					<p><b>Dwarf Shrub Heath Trampling Impacts</b></p> <ul style="list-style-type: none"> <li>Light/ Moderate: 100%</li> <li>Moderate: 0%</li> <li>Heavy: 0%</li> </ul>				

NOTE: BPG Data Sheets only have two classifications, 'Light/Moderate' or 'Heavy' for Heather Stem Breakage. The moderate column has been included as this was on the Sunart Estate report.