

# Li and Coire Dhorrcail Management Plan

2015 - 2025



## **1. Introduction**

This management plan follows previous plans (most recent 2010 – 2014). It contains minor updates and revisions to previous plans rather than significant changes in direction. It has been slimmed down to make it more accessible

## **2. Vision**

The John Muir Trust's vision is that wild land is protected and enhanced throughout the UK and wild places are valued by all sectors of society. This vision will be achieved when:

- Wild land is protected
- Wild land is enhanced
- People engage with wild places
- Communities thrive alongside wild land

Li & Coire Dhorrcail is a remote and spectacular estate, and as its first property, holds a special importance for the John Muir Trust. Our vision is that its wild landscape is safeguarded for future generations to enjoy, and for the benefit of the rich diversity of wildlife it supports. The property will act as a showcase for how sensitive wild land management can, over time, restore an ecologically impoverished landscape. Key to that will be effective deer management, resulting in a smaller population of red deer and expanding natural woodland. The Trust will seek to work in close co-operation with neighbouring landowners and the Knoydart Foundation to engage in collaborative projects that enhances the biodiversity and contribute to the wellbeing of the Knoydart community and wider society.

## **3. Aims and objectives**

The Trust owns wild land to protect it from inappropriate development, to improve habitats, and to encourage a more natural landscape and ecosystem. A prime aim of management is to retain, and where possible restore, natural processes and indigenous populations of plants and animals. The Trust will therefore promote sustainable management practices, and the repair, where necessary, of physical damage that has resulted in declines in biodiversity and deterioration of

soils and landscape. Objectives are defined within the Trust’s Wild Land Management Standards at: [www.wildlandmanagement.org.uk](http://www.wildlandmanagement.org.uk)

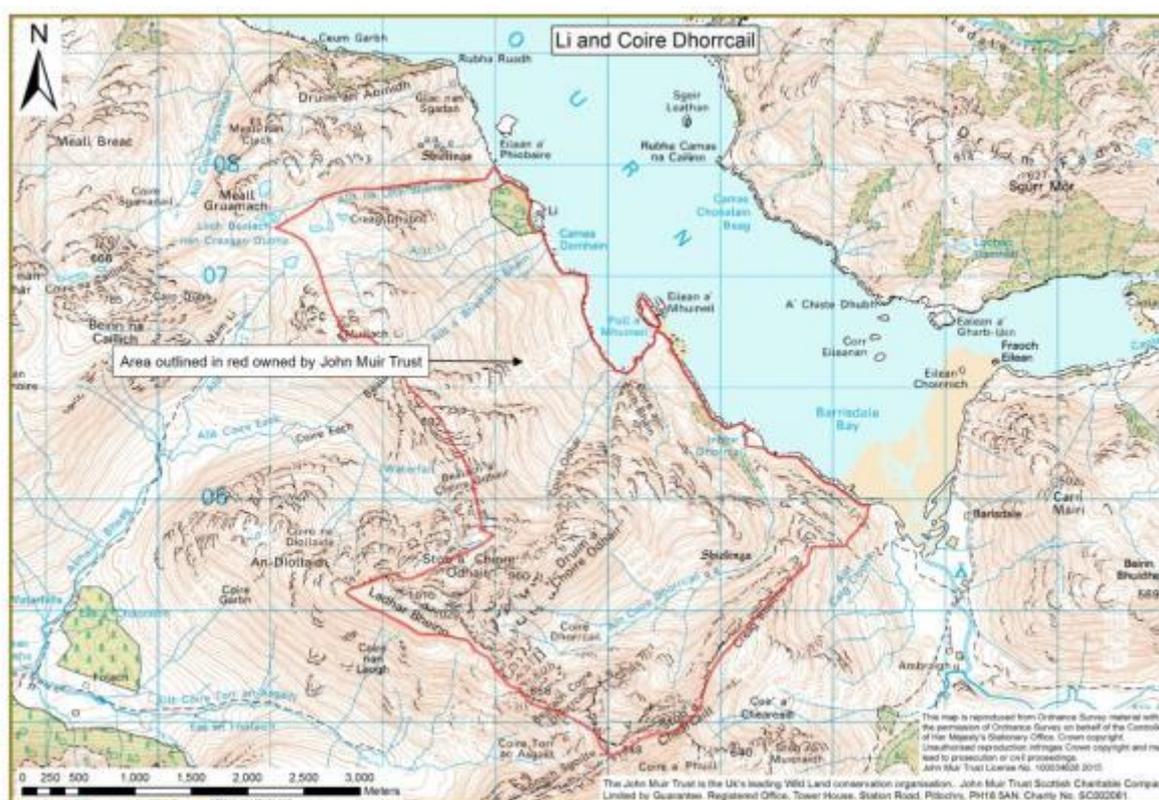
#### 4. Actions

Actions are based on Wild Land Management Standards – Appendix A.

#### 5. Ownership and tenure

Li & Coire Dhorrcail covers 1,255 hectares on the north-eastern slopes of Ladhar Bheinn. An area of 1.8 hectares at Inbhir Dhorrcail was retained by the vendor and is now owned by the Knoydart Foundation.

**Map 1. Ownership of Li & Coire Dhorrcail**



#### Tenure

2.56 ha of land at Li was sold to Mr Rohde and family in 2006. This area includes the house at Li, outbuildings and extended garden grounds. The Rohdes had been tenants of this area since 1975. The Rohdes also have tenancy of approximately 90ha of hill land which is managed under two Woodland Grant Schemes for native woodland creation (Map 2). The trust acquired the stalking rights over the whole property in 2007. The control of deer within the tenanted woodland enclosures is the responsibility of the John Muir Trust.

#### Statutory designations

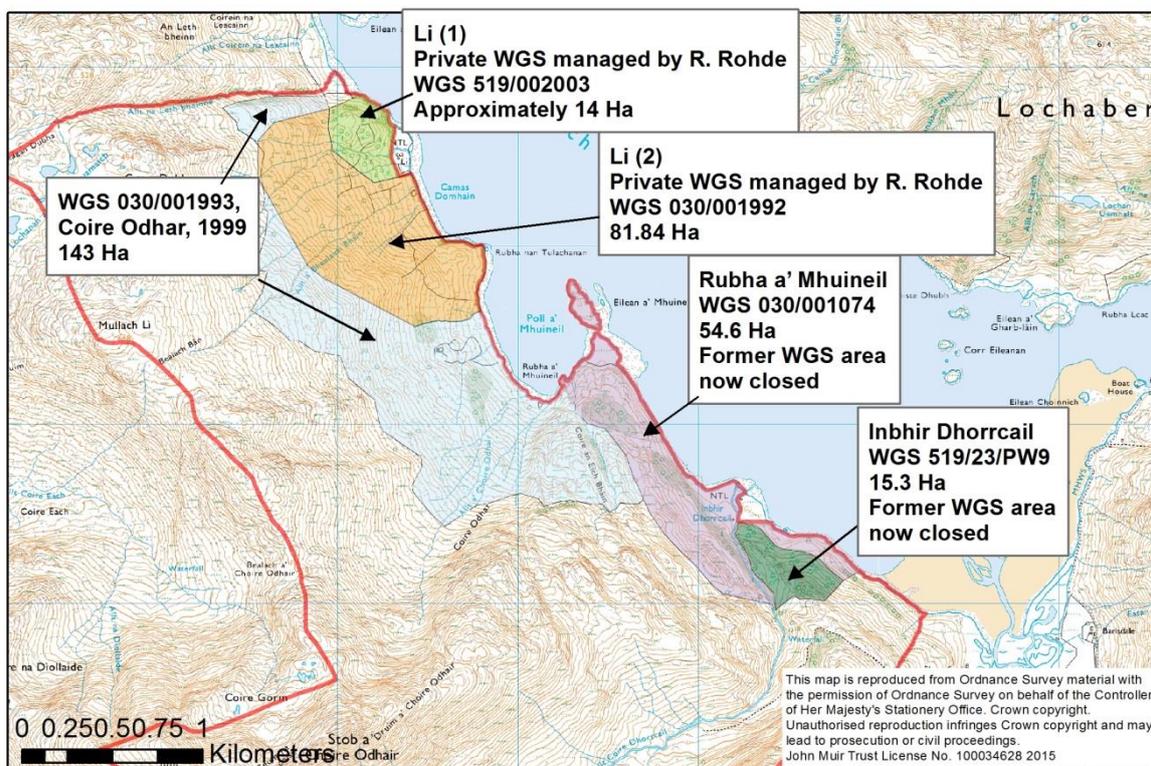
The property lies entirely within the Knoydart National Scenic Area.

#### 6. Woodland

In 1989 a total of 3.0 hectares of ancient and 9.0 hectares of semi ancient woodland were recorded on Li & Coire Dhorrcail. Since then there has been an ongoing programme of woodland regeneration and planting of native trees by staff, contractors and volunteers under Woodland Grant Schemes (Map 2).

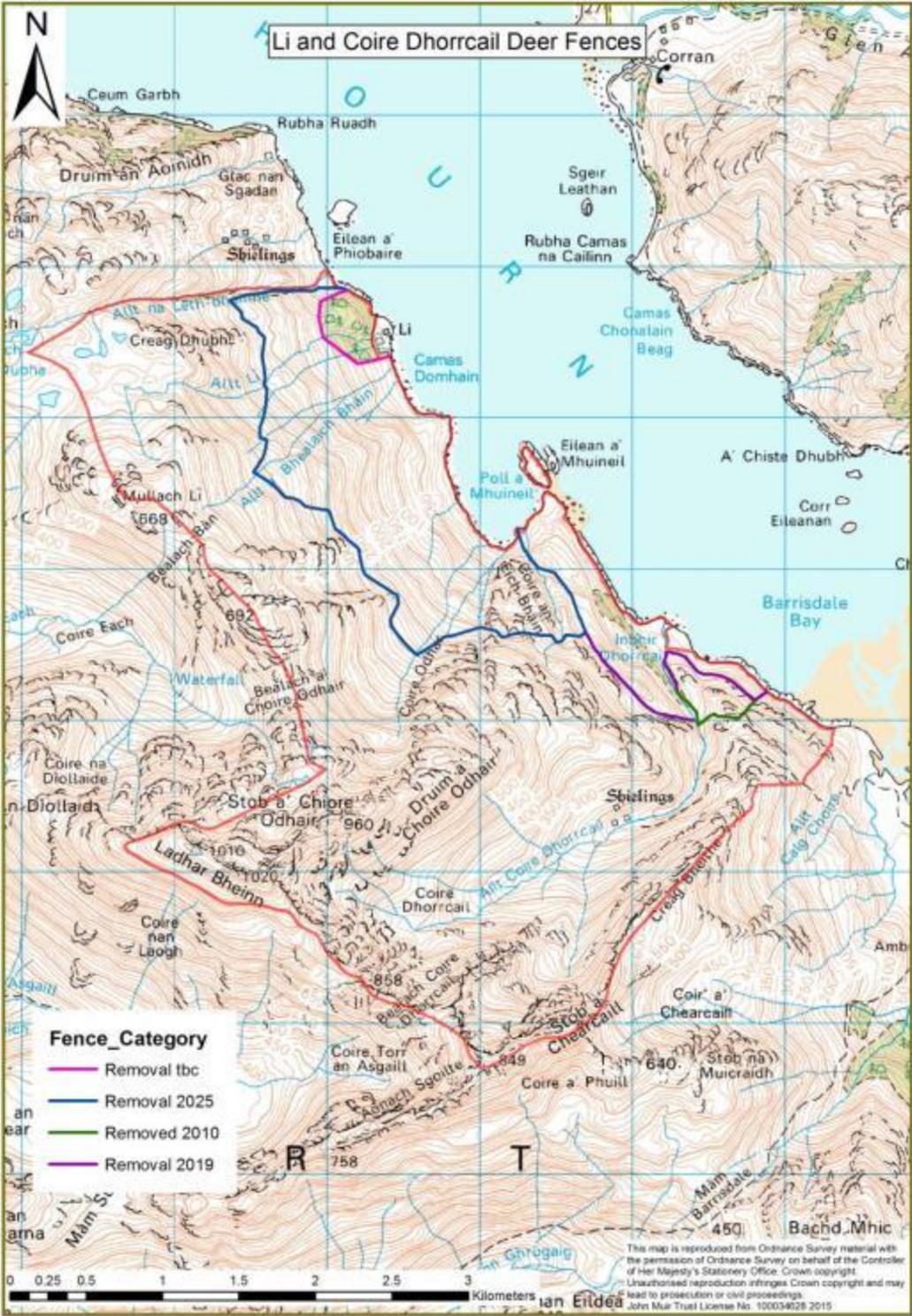
Woodland grant scheme	Reference	Area fenced (ha)	Start date	Details
Li (1)	WGS 519/002003	14 approx	1992	Deer fenced 1992. 10 ha regen. 2ha new planting.
Li (2)	WGS 030/001992	81.84	1999	Fenced 2000. 35 ha regen. 2 ha planting
Coire Odhar	WGS 030/001993	143	1999	Fenced 2000. 22.29 ha regen. 7.07ha new planting.
Rubha a' Mhuineil	WGS 030/001074	54.6	1995	Fenced 1997. 22 ha regen. 5.6 ha planting.
Inbhir Dhorrcail	WGS 519/23/PW9	15.3	1991	10 ha regen. 5.3 ha planting. Scheme closed and fencing removed.

**Map 2. Woodland grant scheme areas**

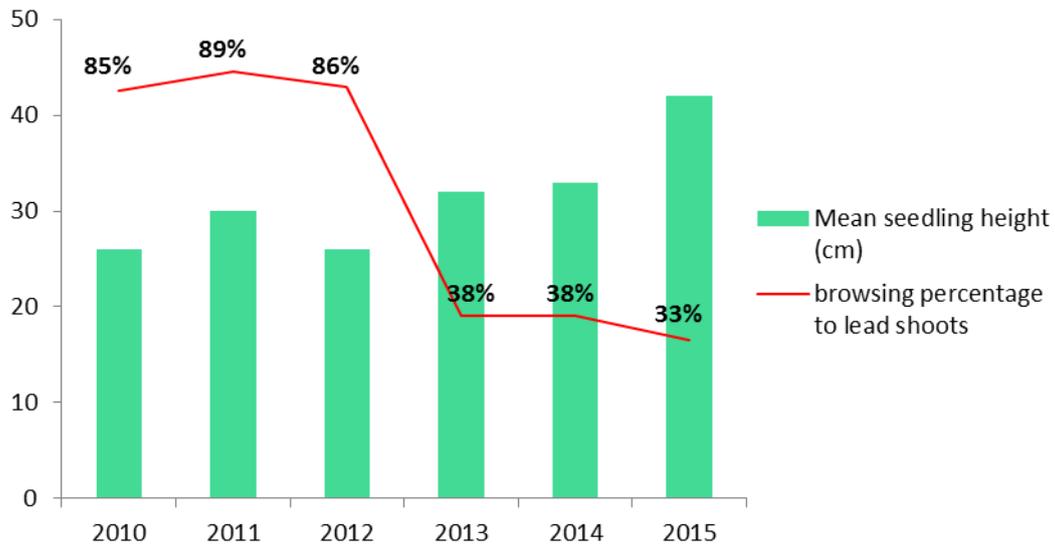


Once trees are established a programme of fence removal will be undertaken (Map 3).

**Map 3. Fences**



Since 2008 reductions in deer numbers have allowed the process of natural woodland regeneration to start outside fenced areas. The graph below shows the percentage of browsing to lead shoots and corresponding mean growth of monitored seedlings.



The following photograph shows unfenced regeneration as at June 2015



### 7. Deer

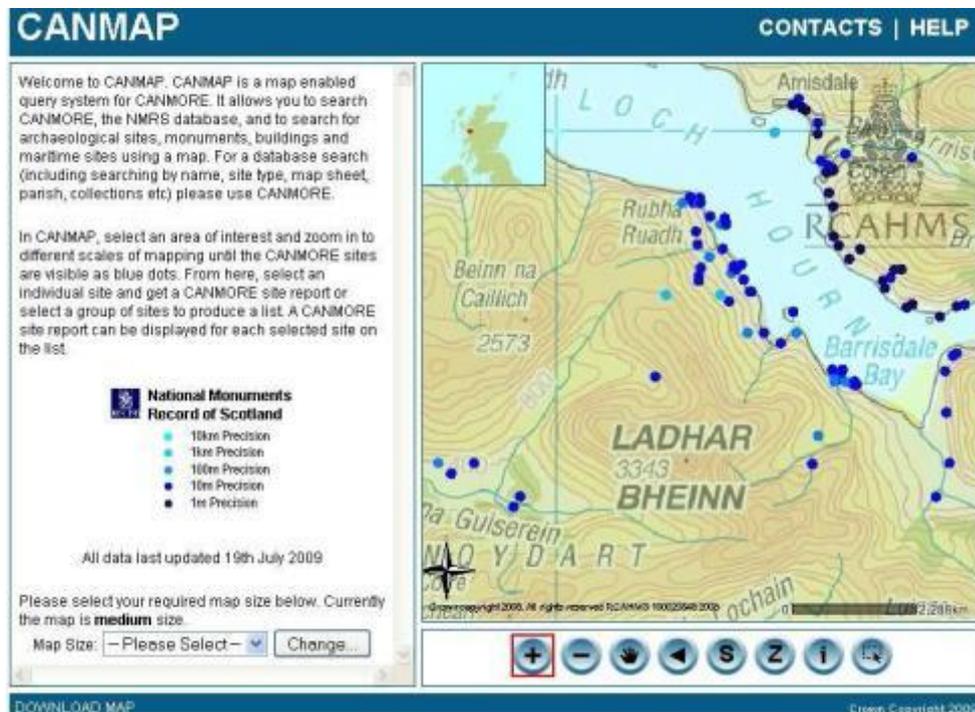
A deer management plan for the estate is in place and is reviewed annually (see Appendix B).

### 8. Archaeology

An archaeological survey was undertaken by the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) in June 1991 (Map 4). Archaeological remains are densely scattered across the lower slopes, showing that what is now a deserted peninsula was once home to a sizeable human population. During the Jacobite Rising between 1745 – 1746 individual estates were forfeited to the Crown and not returned to the MacDonell family until 1784. From

this period up until the Knoydart Clearance in 1853, four farms existed in Li and Coire Dhorrcail and, with the exception of Muineil, were re-tenanted with sheep production continuing until the mid to late 19th century.

**Map 4. Distribution of archaeological remains**



The remains recorded by the RCAHMS at Li and Coire Dhorrcail include: **Houses**, built of rubble, probably with cruck roofs and some with windows. **Kilns** and a **water mill**. **Cultivation ridges**; all were worked by spade. **Shielings**: the best-preserved site is by the Allt Li, and there are many remains in Coire Dhorrcail, among the left-bank tributaries of the burn. **Nausts**: unroofed boat-shelters, facing the sea; two good ones are at Inbhir Dhorrcail. There are also: a grave by the shoreline, a mysterious causeway, and Second World War slit-trenches on two of the islands. In the mid-18th century most people lived on the coastal fringe, working at fishing, cattle-rearing and a little arable farming: potatoes, oats and barley. There were farms at Li, Muineil and Inbhir Dhorrcail. Between the 1841 and 1851 censuses, Muineil and Inbhir Dhorrcail were cleared, and new tenants, including a shepherd, installed at Li. Sheep-farming was well established in the whole peninsula by the time of the big clearance in 1853. Li and Inbhir Dhorrcail were lived in by declining numbers of shepherds' families until, at the end of the century, the only roofed buildings left were at Li - the house and bothy – both in use today. By that time the sheep farms were giving way to deer forest. **Appendix A: Wild Land Management Standards and actions**

WLM - STANDARDS	Action No.	Action Name	Description
1. Audit existing state and condition	1	Map all man made structures	n/a
	2	Digitise woodland	n/a
	3	Conduct archaeological survey	n/a
	4	Collate all relevant data	Collect and Collate new data at Pitlochry
2. Establish survey and monitoring programme	5	Conduct habitat monitoring programme	Setup/Record dwarf shrub heath plots
			Setup/Record Marked Seedling plots
	6	Conduct species monitoring programme	n/a
	7	Monitor deer and livestock enclosure plots	n/a
	8	Maintain species records	Record species and submit data to Pitlochry
	9	Take fixed point photographs	n/a
			Woodland edge photographs
			Set up fixed point photos
	10	Monitor people counters / car park usage	n/a
	11	Conduct visitor survey	n/a
3. Develop SMART actions	12	Develop SMART actions	Draft Management Plan
			Annually review management plan actions
4. Consult stakeholders	13	Consult on plan with stakeholders	Consult local community re management issues
5. Maximise water tables on peatlands	14	Drain Blocking	n/a
6. Minimise exposure, burning and grazing	15	Minimise Burning	n/a
7. Minimise pollution	16	Remove litter	Remove Litter as seen on all visits
	17	Implement SNH advice	n/a
8. Maintain protected sites in favourable condition	18	Inform / work with other groups / users	n/a
	19	Advance Agri - Environment scheme applications to deliver management	n/a
9. Maximise native habitats	20	Maximise native habitats	Habitat enhancement project
10. Biodiversity species management	21	Map and remove non-native invasives (plants)	Map Invasive Non Natives Species (INNS)
			Implement control programme for INNS
	22	Develop and implement a control strategy (animals)	Report any mink sightings
11. Re-structure woodlands	23	Develop / implement a forest plan	Implement Forest/ woodland Plan
	24	Additional native woodland planting projects	Extensive planting
12. Re-introductions	25	Consider reintroductions	n/a
13. Minimise deer impacts	26	Collect / analyse relevant deer / habitat data	Collate relevant deer and habitat data
	27	Produce deer management plan	Review existing deer management plan
	28	Deliver cull targets	Deliver annual cull
	29	Engage with WKDMG	Attend relevant meetings
14. Leave deer carcasses for eagles	30	Leave carcasses	Leave small number of deer carcasses for eagles
	31	Camera trap monitor carcasses	Install camera traps on deer carcasses
15. Minimise livestock impacts	32	Control numbers	n/a
	33	Monitor incursions and liaise with owner	Incursions from Barrisdale. Consider need for stock fence.
16. Staff training	34	Staff training	Implement training plan (staff / volunteers)
17. Infrastructure & heritage maintenance	35	Monitor and maintain paths	Maintain existing paths on property
	36	Monitor and maintain buildings, fences etc.	Maintain boundary fences
	37	Run conservation work parties	Run conservation work parties
18. Reduce, re-use, recycle	38	Minimise resource use and waste	
19. Minimise carbon footprint	39	Maximise energy efficiency	
20. Explore local renewable energy	40	Explore local renewable options	n/a
21. Remove redundant structures	41	Remove redundant structures	Remove any new cairns that appear on the property
22. Sensitive new build techniques	42	Remove, reduce or narrow roads where this is possible	n/a
	43	Apply sensitive techniques to any new build	n/a
23. Sensitive footpath techniques	44	Apply sensitive techniques to any footpath work	Coire path
24. Provide responsible access	45	Provide guidance on large scale events	n/a
	46	Provide guidance on fishing policy	n/a
	47	Advise on responsible campfires and clean up	n/a
25. Meet responsibilities towards local people	48	Liaise with neighbours	Continue and develop relationships with neighbours, relevant local bodies and communities of interest
	49	Engage with local groups	Attend relevant local community and partnership meetings
	50	Hold Open meetings	n/a
	51	Use local contractors / volunteers / produce	Prioritise where possible in procuring goods and services
26. Joint project work	52	Liaise locally with SNH	
	53	Contribute to relevant wider projects	
27. Maximise interpretation	54	Review and update leaflets, ensure leaflet dispensers filled (including gaelic)	n/a
	55	Review and maintain website information (including gaelic/welsh)	Ensure info on website is kept up to date
	56	Review and maintain interpretation panels (including gaelic)	n/a
28. Maximise education opportunities	57	Carry out guided walks / talks / events / land days / wild land awareness / open days programme	Hold members wild day
	58	Produce articles for local media	
	59	Encourage local John Muir Award activity	

## Appendix B: DEER MANAGEMENT PLAN - Li and Coire Dhorrcail 2013-17

## 1. Rationale

JMT recognises that:

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

Deer populations will be manipulated through culling:

- To achieve JMT's charitable objective to "conserve and protect wild land encouraging natural processes",
- In line with industry Best Practice Guidance,
- Not impeding public access at any time.

## 2. Audit

Detailed information about the property is available in the management plan. The property is approximately 1,250 hectares.

### 2.1 Geology, soils, habitats and species

See section management plan

### 2.2 Designations, biodiversity priorities, habitat condition

See section management plan

### 2.3 Other herbivores and livestock

A small number of wild sheep (approximately half a dozen) graze the property and adjacent Knoydart Foundation land. No one claims ownership and none appear to have ever been tagged or marked in any way. It is believed that the present generation of sheep were born in the wild but originated from feral stock that had either escaped or been abandoned. An unknown number of feral goats (probably 40 – 60) are present on the adjacent Sgamadail estate, some of which come onto the property occasionally and are culled whenever possible.

### 2.4 Employment and income

Deer management is carried out by and under the direction of the property manager. A number of stalkers, ghillies and pony handlers are engaged from Knoydart Foundation and Arnisdale with a proportion of carcasses processed in Knoydart. There is some sport stalking by a number of Knoydart Foundation and other guests contributing to delivery of the deer management objectives. Income from carcasses is set against deer management costs.

### 2.5 Deer population estimates and cull figures

The following data is available for the property. All counts were carried out on foot by various combinations of John Muir Trust and Knoydart Foundation staff and contractors with the exception of the 2014 SNH count.

Year ends 31 March	Count estimate	Cull
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	Stags	Hinds	Calves	Total	Stags	Hinds	Calves	Total
2008-09	Not counted				32	45	15	94
2009-10	Not counted				46	41	4	91
2010-11	2	77	14	93	42	53	17	112
2011-12	37	48	29	114	10	8	4	22
2012-13	44	46	21	111	35	45	10	90
2013-14	23	48	27	98	75	31	9	115
2014-15 (SNH)	13	28	9	50	54	40	15	109
2014-15	31	53	19	103				

The latest (2015 West Knoydart) count gives a broad density figure of 9 deer per km<sup>2</sup> but the population on the estate varies regularly and considerably due to deer movement.

### 3. Objectives, targets and constraints

#### 3.1 Habitat

To manipulate the deer population through culling to enable:

- All habitats to be in or move toward favourable condition,
- Natural habitat processes (such as woodland regeneration) to continue or to start,
- Populations of priority species to be maintained or enhanced.

#### 3.2 Deer population and cull

A specific target deer density has **not** been set. Instead culls will be adjusted in line with monitoring information to achieve the above objectives. Culling will tend to be focussed on target areas to achieve local scale habitat objectives. Purely as a **guide** it is anticipated that a total annual cull of 115 (45 stags + 50 hinds and calves) will be required for 2013-17. This figure will be reviewed annually.

#### 3.3 Employment and income

Current annual levels of employment and income are expected to be maintained.

#### 3.4 Constraints and mitigation

It is recognised that the habitat, natural processes and priority species population objectives set out above may be constrained by external uncontrollable factors such as weather, access for stalkers, etc. Wider deer management by neighbours may also impact on both the habitat objectives and the cull required. Where possible JMT will seek to negotiate or influence neighbours sharing deer range to meet objectives.

### 4. Monitoring

#### 4.1 Habitats and species

A programme of habitat and species monitoring is in place on the properties. Annual habitat impact monitoring (carried out in May / June) will be used to inform cull targets for the year.

#### 4.2 Deer and other herbivore numbers

While the key measures are habitat impact and condition, information on deer numbers will be used to adjust cull targets. JMT will only participate in annual range wide counts where it is believed that they will be well organised and serve a useful purpose. In addition JMT will

regularly monitor and record deer and other herbivore numbers on the property. Deer cull data will also be recorded.

#### **5. Review**

Habitat, count and cull data will be reviewed annually with the plan adjusted accordingly. A review of the whole plan will take place in 2017.