CORROUR ESTATE
DEER MANAGEMENT PLAN
2017 - 2022

Rationale

The objectives of management on Corrour Estate as laid out in the Framework for Biodiversity [1] are to:

1. Ensure all 'priority' habitats and species residing on Corrour are in 'favourable condition',
2. Promote natural processes and the release of biodiversity potential,
3. Minimise human impact,
4. Maximise the land's positive carbon balance,
5. Value and invest in those who work to promote the objectives of Corrour,
6. Ensure financial security through long term planning and a "fair deal" between the costs of delivering public and private benefits,
7. Contribute to knowledge through monitoring,
8. Provide welcoming and informative gateways to visitors,
9. Stimulate dialogue with local and national stakeholders.

Corrour Estate's Deer Management Principles

Native wild deer, particularly red deer, are an integral part of the ecosystems on Corrour Estate. They bring economic and employment benefits from tourism, venison and stalking. They also have significant impacts on habitats and species through their trampling and grazing and their numbers have to be managed. Corrour Estate's aim is to manage the number of deer by culling in order to encourage and facilitate natural processes.

- ✓ Corrour Estate welcomes visitors at all times and deer control will not impede public access,
- ✓ The grazing impacts of deer will be determined through vegetation monitoring and the numbers culled will be in response to their grazing impact,
- ✓ There is a presumption against the use of fences for deer control, as Corrour Estate believes that its ecosystems need to develop in the presence of deer,
- ✓ Culling will be carried out to industry Best Practice with regards to public safety, deer welfare, carcasse hygiene and record keeping[2],

[1] Balharry, D. 2007. **CORROUR,** A Framework for Biodiversity Action through the wise management of wild land and resources 2007 (Revised September 2008)

[2] http://www.bestpracticeguides.org.uk/

- ✓ There is a presumption for using non-lead ammunition for culling deer, especially in situations where carcasses are to be left for other wildlife,
- ✓ For environmental reasons, some culled deer carcasses will be left on the hill – to minimse extraction damage and for the benefit of other wildlife,
- ✓ Corrour Estate will work collaboratively with neighbours to deliver sustainable deer management.

Background information

Geology, soils, habitats and species

Detailed information on the geology and ecology of the estate is available in the Framework for Biodiversity[1].

Designations, biodiversity priorities, habitat conditions

On Corrour Estate, Loch Ossian and Loch na Sgeallaig form the northern part of the Rannoch Lochs SPA, there is also a portion of the Parallel Roads of Lochaber SSSI and GCR. Outwith the estate but adjacent to the north-eastern boundary lies the Ben Alder SSSI, SPA, SAC and GCR. The estate has entered into a Memorandum of Understanding with Ben Alder and Ardverikie Estates and Scottish Natural Heritage to assist in delivering favourable condition status for the Ben Alder SAC.

The Framework for Biodiversity[1] identifies habitat and species priorities and an annual habitat monitoring programme following Best Practice[2] has been in place since 2008. A summary of results is presented in Annex 2. In 2009 the contractors carrying out Site Condition Monitoring of the adjacent and nearby Ben Alder SAC and Ben Nevis SAC were invited to conduct a survey using the same methodology on Corrour (although it is not designated).

Livestock and other herbivores

All sheep grazing ceased on the estate in 2008. Approximately 35 cattle plus followers graze in the north west of the estate. There are a small number of mountain hares on the estate.

Employment and income

Deer management is carried out by four full time stalkers / wildlife managers and three seasonal ghillies. Letting of sport stalking currently generates around £54,000 gross income with wholesale and processed venison generating a further £50,000.

Deer population estimates, densities and cull figures

There is a large population of red deer on the open hill. Red, Roe and Sika occur in the woodland with the latter two occasionally found on the hill.

[1] Balharry, D. 2007. **CORROUR,** A Framework for Biodiversity Action through the wise management of wild land and resources 2007 (Revised September 2008)

[1] http://www.bestpracticeguides.org.uk/

Year	'Open hill' red deer estimates from DCS / SNH helicopter counts					Open hill red deer cull figures			
	Stags	Hinds	Calves	Total	Density km2	Stags	Hinds	Calves	Total
2006/7	1310	1852		3162	16	230	159	53	442
2007/8						343	285	89	717
2008/9						338	262	91	691
2009/10						343	280	110	734
2010/11	742	987	294	2023	10	254	246	87	587
2011/12						224	237	105	566
2012/13						172	334	116	622
2013/14						123	120	40	283
2014/15						110	131	76	317
2015/16						145	243	71	459
2016/17						120	130	61	311
2017/18	1020	971	400	2391	12	*270*	*380*	*135*	*785*

Year	Woodland red deer cull figures				Woodland roe deer cull figures			
	Stags	Hinds	Calves	**Total**	Bucks	Does	Kids	**Total**
2006/7	36	29	9	74	5	4	1	10
2007/8	40	19	6	65	5	6	2	13
2008/9	25	11	4	40	9	2	0	11
2009/10	19	22	7	48	3	2	1	6
2010/11	56	33	11	100	1	0	0	1
2011/12	44	30	10	84	2	2	0	0
2012/13	48	37	15	100	7	1	0	8
2013/14	65	48	14	127	3	2	0	5
2014/15	94	76	26	196	4	3	0	7
2015/16	39	26	15	80	13	9	3	25
2016/17	53	29	19	101	11	12	2	25

Objectives, targets and constraints

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.

Deer population and cull

For deer management purposes Corrour is divided into three management areas (see Annex 3) consisting of:

1. The Fersit beat. Contains the largest area of native woodland remnants and the focus for habitat restoration.
2. The Beinn Eibhinn, Old Corrour and Beinn a Bhric beats. Containing mostly heathland and blanket bog – can sustain a higher deer density.
3. Woodland areas subject to forest plan actions.

Outline target densities for each of these are provided below along with suggested culls to achieve these densities. However, culls will always be subject to adjustment in line with monitoring information to achieve the above objectives.

Beat	**Area (km2)**	**Current population estimate**	**Current density (deer / km2)**	**Target density (deer / km2)**
Fersit	66.67	810	12	< 3
Beinn Eibhinn, Old Corrour, Beinn a Bhric	130.66	1352	12	< 6

Indicative red deer cull targets population:

	FERSIT				**BEINN EIBHINN, OLD CORROUR, BEINN A BHRIC**			
	Stags	***Hinds***	***Calves***	***Overall Density (km2)***	***Stags***	***Hinds***	***Calves***	***Overall Density (km2)***
2017/18 Cull	***310***	***100***	***55***		***100***	***280***	***120***	
2018/19 Cull	***250***	***70***	***25***		***100***	***250***	***115***	
2019/20 Cull	***200***	***50***	***20***		***100***	***250***	***115***	
2020/21 Cull	***120***	***30***	***12***	***<2***	***100***	***250***	***115***	***<6***

Indicative cull targets have not been produced for woodland deer. Animals will be culled in accordance to woodland objectives and monitoring of tree growth.

Operational policy

- ✓ In line with Corrour's deer management principles, some carcasses will be left on the hill where difficult or damaging to extract, and for the benefit of wildlife.
- ✓ On occasion helicopters may be deployed for the extraction of carcasses to reduce damage on the ground.
- ✓ Where necessary authorisation will be sought (under the Deer (Scotland) Act 1996) to cull deer out of season and at night to prevent damage to woodland and the natural heritage.

Employment and income

- ✓ Current levels of employment are expected to be maintained,
- ✓ Revenue from sport stalking is expected to be maintained
- ✓ Income from venison is expected to be maintained (subject to fluctuations in the market price).

Constraints and mitigation

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

Monitoring and review

Habitats and species

A programme of habitat and species monitoring is in place. Annual habitat impact monitoring and approximately six yearly site condition monitoring (both carried out in May / June) will continue to be used to inform cull targets for the following year.

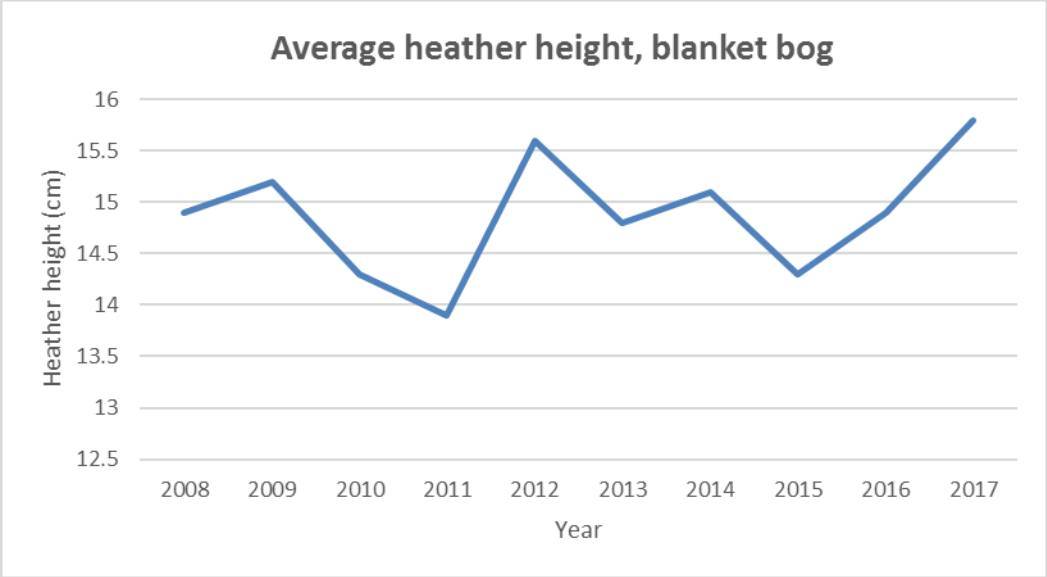
Deer numbers

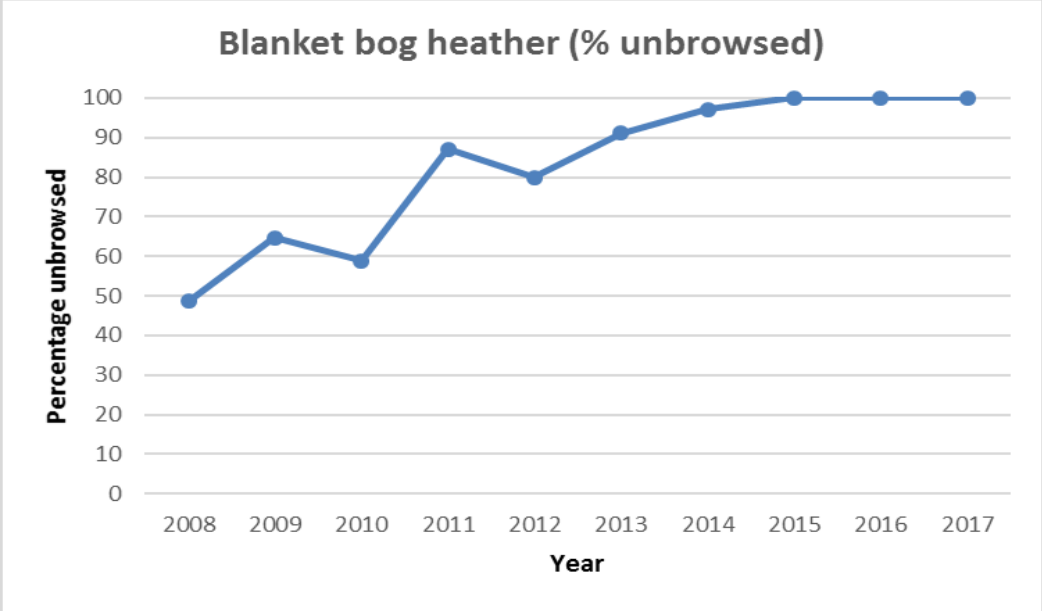
While the key measures are habitat impact and condition, information on deer numbers will be used to adjust cull targets. Where possible, Corrour Estate will participate in SNH or DMG counts of the wider area. Cull data will also be recorded.

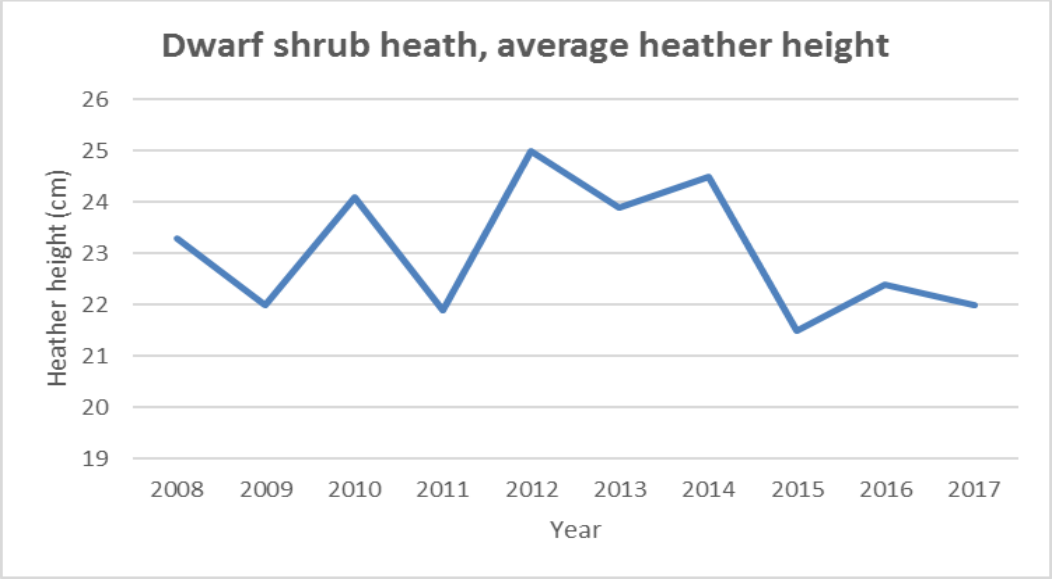
Review

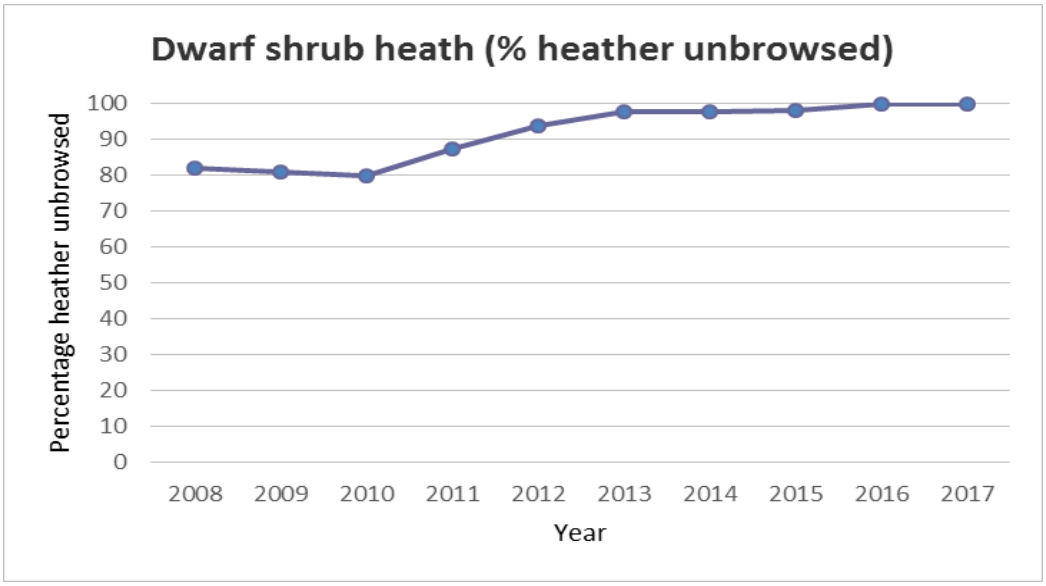
Habitat, count and cull data will be reviewed annually with the plan adjusted accordingly. A review of the whole plan will take place in 2022.

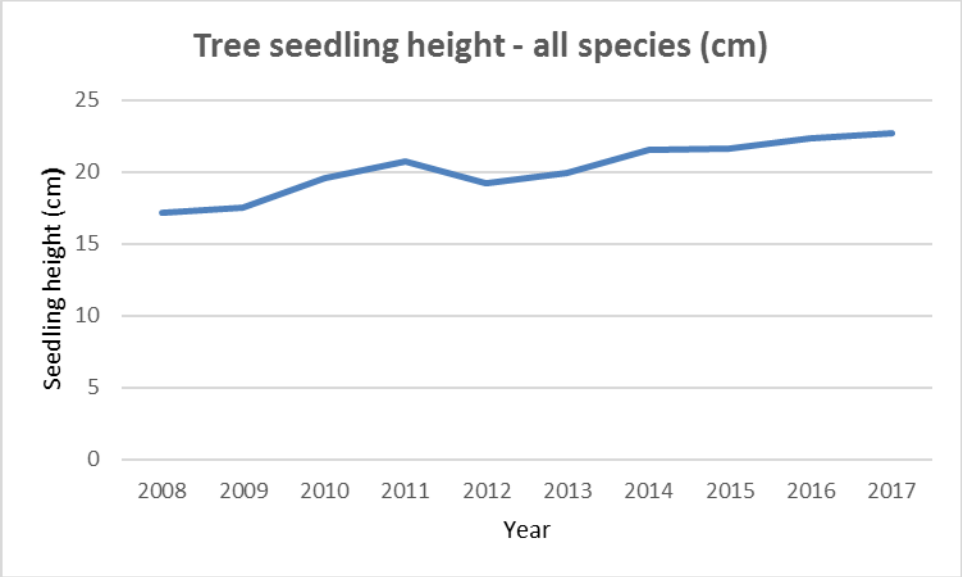
Annex 2. Summary of annual habitat monitoring in relation to herbivore impacts

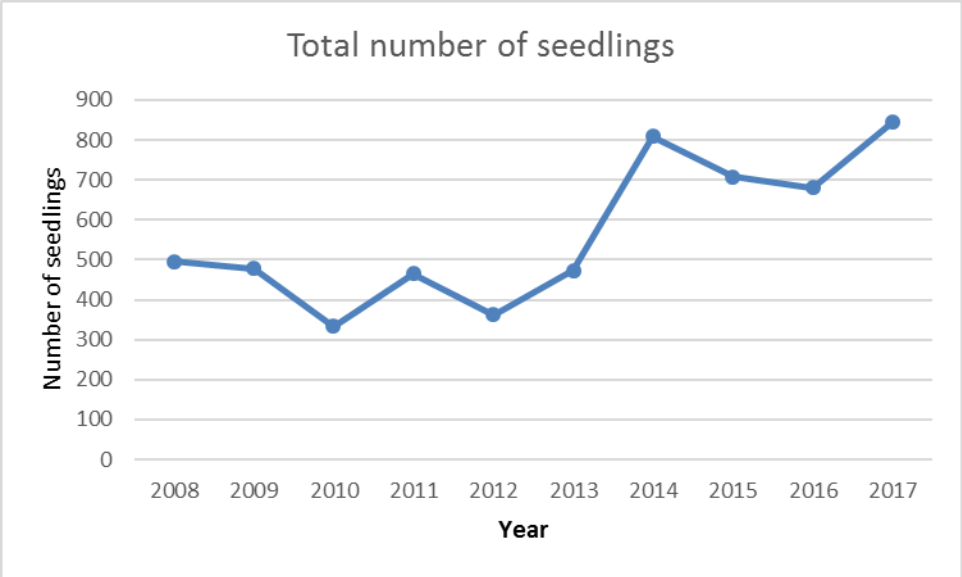




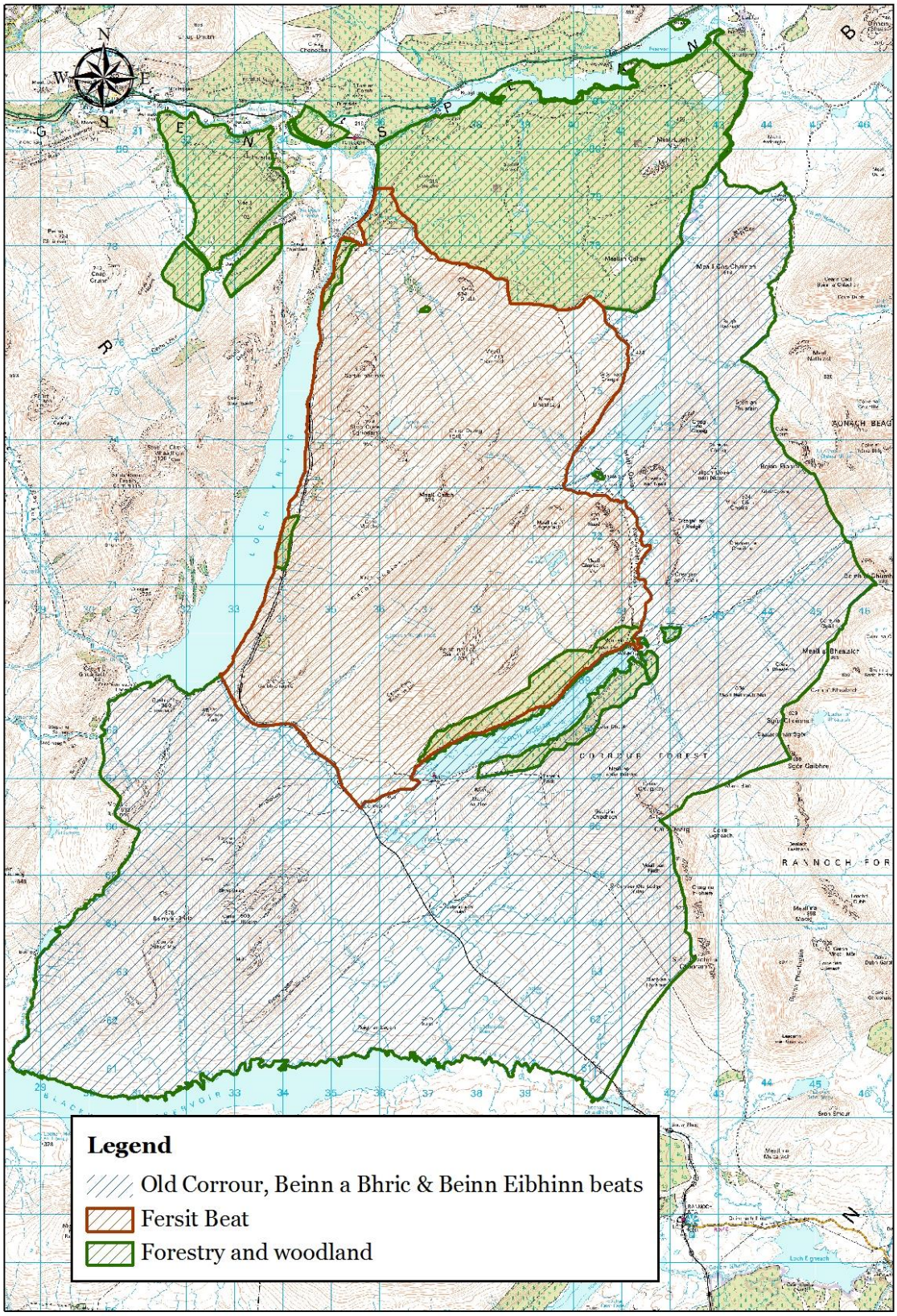

Dwarf shrub heath, average heather height
Heather height (cm)
26
25
24
23
22
21
20
19
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
Year


Dwarf shrub heath (% heather unbrowsed)
Percentage heather unbrowsed
100
90
80
70
60
50
40
30
20
10
0
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
Year





Annex 3. Corrour Deer Management Areas


Legend
Old Corrour, Beinn a Bhric & Beinn Eibhinn beats
Fersit Beat
Forestry and woodland