

Cairngorms National Park Partnership Plan 2017-2022

Strategic Environmental Assessment

Environmental Report

Appendix 2: Environmental

Baseline

Topic 6: Biodiversity, Fauna & Flora

June 2016

Topic 6: Biodiversity, Fauna and Flora

"Biodiversity – the variety of Life on Earth – makes our planet habitable and beautiful. We depend on it for food, energy, raw materials, air and water that make life possible and drive our economy. We look to the natural environment for equally important things like aesthetic pleasure, artistic inspiration and recreation."

European Commission Natura 2000.

The Cairngorms National Park is a haven for nature and wildlife and is of great significance for Scotland and the UK. The National Park covers less than two per cent of the UK landmass but is home to 25% of its rare animal, insect, lichen, fungi and insect species. Habitats are rich and varied and include the montane alpine plants high on the Cairngorms plateaux, the sources of renowned salmon rivers the Spey, Dee, Tay and South Esk and stands of trembling Aspen in Strathspey which support rare insects and fungi.

Protected Areas

Protected areas represent the very best of Scotland's landscapes, plants and animals, rocks, fossils and landforms. Their protection and management will help to ensure that they remain in good health for all to enjoy, both now and for future generations.

The Cairngorms National Park is home to a number of areas designated to meet the needs of international directives and treaties, national legislation and policies as well as more local needs and interests.

National Designations

National designations cover a range of different types of protected area, including Natural Nature Reserves (NNR) and Sites of Special Scientific Interest (SSSI), both of which are located within the Cairngorms National Park. The National Park is also home to a number of non-statutory protected sites, such as the RSPB reserve at Loch Garten.

National Nature Reserves

NNRs are statutory nature reserves designed under Part III of the National Parks and Access to the Countryside Act 1949. Most reserves have habitats and species that are nationally or internationally important so the wildlife is managed very carefully. However, people are also encouraged to enjoy NNRs too and so most have some form of visitor facilities that are designed to ensure recreational activities are not pursued without heed for the wildlife and habitat that exists there.

The Cairngorms National Park is home to 11 NNRs¹¹ (**Table 16** and **Figure 81**), which cover a combined area of around 513 km².

¹¹ While the Cairngorms NNR, Dinnet Oakwood NNR and Morrone Birkwood NNR are technically declared NNRs (see **Table 16**), they are under review and not managed or promoted as NNRs.

The NNRs are run by a range of organisations. For example, most of the Abernethy and Inch Marshes NNRs are also managed as part of RSPB reserves.

Table 16 National Nature Reserves in the Cairngorms National Park.

Site Code	Name	Year Est.	Area (ha)
5013	Cairngorms	1954	25,963.63
5020	Craigellachie	1960	257.46
5023	Dinnet Oakwood	1966	30.8
5032	Glen Tanar	1979	4,186.76
5051	Morrone Birkwood	1972	226.48
5054	Muir of Dinnet	1977	1,166.17
8628	Insh Marshes	2003	695.18
8670	Corrie Fee	2005	165.38
10097	Invereshie and Inshriach	2007	3,730.86
10098	Glenmore	2007	2,119.49
10099	Abernethy	2007	12,753.81

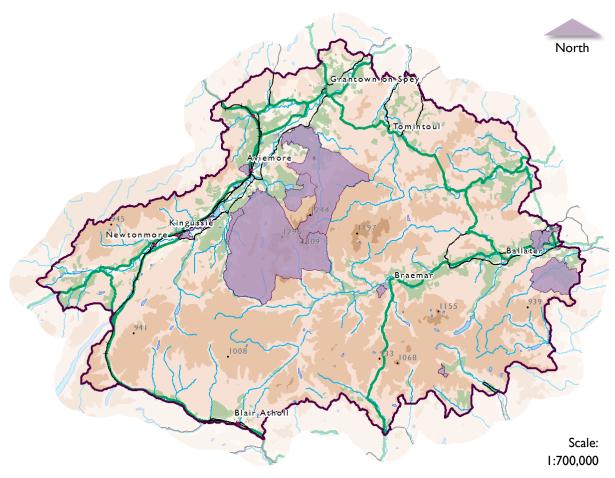


Figure 81 National Nature Reserves in the Cairngorms National Park.

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Sites of Special Scientific Interest

Designated under the Nature Conservation (Scotland) Act 2004, SSSIs are those areas of land and water that SNH considers to best represent Scotland's natural heritage - its diversity of plants, animals and habitats, rocks and landforms, or a combinations of such natural features (see **Table 17** and **Figure 82** to **Figure 87**).

They are the essential building blocks of Scotland's protected areas for nature

conservation and therefore many are also designated as Natura 2000 sites.

SSSIs designated solely for geological or physiographical features are also covered in **Topic 4: Soil** (p. 113) and **Topic 5: Material Assets** (p. 124).

A simple colour scheme has been used to highlight the condition of interests, the key to which is provided:

Features in 'Favourable Maintained' or 'Favourable Recovered' condition.

Features that are either in 'Favourable Declining' or 'Unfavourable Recovering' condition.

Features that are in 'Unfavourable Maintained' or 'Unfavourable Declining' condition.

Features that have not been monitored to date.

Table 17 Condition of Biological and Mixed SSSIs located within the Cairngorms National Park.

Site Code	Name	Туре	Total Area (ha)	Are in CNP (ha)	Interest	Latest Assessed Condition	Pressures	Visit Date
					Basin fen	Favourable Maintained	No negative pressures identified	18/10/2014
	Forest				Beetle assemblage	Favourable Maintained	Over-grazing	17/11/2002
0	_	Mixed	5793.46		Breeding bird assemblage	Favourable Maintained	No negative pressures identified	23/04/2013
,	Abernethy		3773.40		Capercaillie (Tetrao urogallus), breeding	Favourable Declining	Under-grazing	19/04/2014
					Crested tit (Lophophanes cristatus), breeding	Favourable Maintained	No negative pressures identified	03/05/1998
					Dragonfly assemblage	Favourable Maintained	Forestry operations, other	01/08/2013

Site Code	Name	Туре	Total Area (ha)	Are in CNP (ha)	Interest	Latest Assessed Condition	Pressures	Visit Date
					Fluvial Geomorphology of Scotland	Favourable Recovered	Invasive species	06/04/2007
					Fungi assemblage	Favourable Maintained	Over-grazing, under- grazing	01/10/2014
					Invertebrate assemblage	Favourable Maintained	Trampling	01/08/2013
					Lichen assemblage	Favourable Maintained	No negative pressures identified	25/06/2010
					Native pinewood	Favourable Maintained	Game/ fisheries management	30/09/2008
					Osprey (Pandion haliaetus), breeding	Unfavourable Declining	No negative pressures identified	14/06/2013
					Quaternary of Scotland	Favourable Maintained	No negative pressures identified	03/05/2007
					Raised bog	Favourable Maintained	No negative pressures identified	12/08/2014
					Scottish crossbill (Loxia scotica), breeding	Not monitored to date	No negative pressures identified	N/A
					Subalpine dry heath	Unfavourable No change	Burning, under-grazing	27/09/2004
					Vascular plant assemblage	Favourable Maintained	Maintenance activities	28/03/2007
30	Aldclune and Invervack Meadows	Biological	16.61	16.61	Lowland calcareous grassland	Unfavourable No change	Under-grazing	22/08/2012

Site Code	Name	Туре	Total Area (ha)	Are in CNP (ha)	Interest	Latest Assessed Condition	Pressures	Visit Date														
44	Allt Mor	Geological	40.68	40.68	Fluvial Geomorphology of Scotland	Favourable Maintained	No negative pressures identified	27/04/2007														
					Goldeneye (Bucephala clangula), breeding	Favourable Maintained	No negative pressures identified	15/05/2013														
53	Alvie	Biological	339.01	339.01	Hydromorphological mire range	Favourable Maintained	No negative pressures identified	13/07/2011														
33	Aivie	biological	337.01	337.01	Invertebrate assemblage	Favourable Maintained	Forestry operations, over-grazing	16/07/2013														
					Upland oak woodland	Unfavourable No change	Over-grazing	20/07/2005														
					Breeding bird assemblage	Favourable Maintained	Game/ fisheries management	20/06/2013														
					Bryophyte assemblage	Favourable No negative pressures Maintained identified		17/08/2013														
					Caledonian Igneous	Favourable No negative pressures Maintained identified	24/11/2010															
161	Beinn a' Ghlo	Mixed	8084.76	7763.08	Dalradian	Favourable Maintained	No negative pressures identified	25/04/2002														
					-							-	-	-	-			-	Upland assemblage	Unfavourable Recovering	No negative pressures identified	22/07/2010
																			l	ι	ι	l
					Vascular plant assemblage	Favourable Maintained	Agricultural operations	29/08/2002														
223	Blair Atholl Meadow	Biological	0.55	0.55	Lowland calcareous grassland	Unfavourable No change	Agricultural operations	17/07/2007														

Site Code	Name	Туре	Total Area (ha)	Are in CNP (ha)	Interest	Latest Assessed Condition	Pressures	Visit Date
235	Bochel Wood	Biological	197.87	197.55	Upland birch woodland	Favourable Maintained	No negative pressures identified	19/06/2000
					Breeding bird assemblage	Favourable Maintained	Over-grazing, recreation / disturbance	01/07/2003
					Bryophyte assemblage	Favourable Maintained	Trampling	31/12/2005
	ر	Piological			Dystrophic loch	Favourable Maintained	Over-grazing	02/07/2004
282	ochar		4974 75	4.75 4974.75	Invertebrate assemblage	Favourable Maintained	No negative pressures identified	15/08/2011
202	Caenlochan	ыоюдісаі	7// 1./3	T//T./3	Lichen assemblage	Favourable Maintained	No negative pressures identified	03/10/2010
	0				Montane assemblage	Unfavourable No change	No change Over-grazing	
					Quaternary of Scotland	Favourable Maintained	No negative pressures identified	26/07/2011
					Vascular plant assemblage	Unfavourable No change	Over-grazing, to be identified	31/08/2009
					Breeding bird assemblage	Favourable Maintained	Over-grazing, recreation / disturbance	15/07/2006
	S Cairngorms 8 Wixe				Bryophyte assemblage	Favourable Maintained	Natural event	18/08/2005
288		Mixed	29226.7	29226.7	Dotterel (Charadrius morinellus), breeding	ius morinellus), breeding Favourable Over-grazing, recreat / disturbance, trample		01/07/2011
		Ö			Dystrophic and oligotrophic lochs	Not monitored to date	No negative pressures identified	N/A

Site Code	Name	Туре	Total Area (ha)	Are in CNP (ha)	Interest	Latest Assessed Condition	Pressures	Visit Date
					Fluvial Geomorphology of Scotland	Favourable Maintained	Forestry operations	30/04/2003
					Fungi assemblage	Favourable Maintained	Over-grazing, recreation / disturbance	20/10/2010
					Golden eagle (Aquila chrysaetos), breeding	Favourable Maintained	Recreation/disturbance	21/10/2007
					Invertebrate assemblage	Favourable Maintained	Agricultural operations, other	30/08/2013
					Lichen assemblage	Favourable Declining	Over-grazing	19/08/2010
					Mineralogy of Scotland	Favourable Maintained	No negative pressures identified	30/08/2006
					Native pinewood	Unfavourable Declining	Over-grazing, under- grazing	27/01/2009
					Ptarmigan (Lagopus muta), breeding	Favourable Maintained	Recreation/disturbance	17/07/2004
					Quaternary of Scotland	Favourable Maintained	Climate Change, recreation / disturbance	07/08/2003
					Snow bunting (Plectrophenax nivalis), breeding	Favourable Maintained	Recreation / disturbance, other	24/07/2004
					Upland assemblage	Not monitored to date	No negative pressures identified	N/A
					Vascular plant assemblage	Favourable Maintained	Natural event	05/10/2006

Site Code	Name	Туре	Total Area (ha)	Are in CNP (ha)	Interest	Latest Assessed Condition	Pressures	Visit Date											
291	Cairnwell	Biological	22.96	22.96	Alpine calcareous grassland	Favourable Maintained	Over-grazing	20/08/2008											
271	Carriwen	ыоюдісаі	22.70	22.70	Vascular plant assemblage	Favourable Maintained	Over-grazing	20/07/2011											
					Calaminarian grassland and serpentine heath	Favourable Maintained	No negative pressures identified	25/07/2012											
415	Coyles of Muick	Biological	122.52	122.52	Subalpine flushes	Favourable No negative pressures Maintained identified		08/07/2008											
					Vascular plant assemblage	Favourable Maintained	No negative pressures identified	25/07/2012											
					Bryophyte assemblage	Unfavourable Declining	Under-grazing	24/07/2009											
					Native pinewood	Favourable Over-grazing		10/09/2009											
419	Craig	Biological	185.13	185.13	Subalpine calcareous grassland	Favourable Maintained	Invasive species	01/08/2006											
717	Leek	ыоюдісаі	105.15	105.15	Upland assemblage	Unfavourable Declining	Forestry operations, under-grazing	16/07/2012											
																Upland birch woodland	Unfavourable No change	Over-grazing	14/07/2011
					Vascular plant assemblage	Favourable Maintained	No negative pressures identified	21/11/2013											
428	Craigellac	Biological	379.85	379.85	Moth assemblage	Favourable Maintained	Other	13/08/2014											
720	Craigellac hie	biological	377.03		Upland birch woodland	Favourable Maintained	Burning	23/07/2009											

Site Code	Name	Туре	Total Area (ha)	Are in CNP (ha)	Interest	Latest Assessed Condition	Pressures	Visit Date			
429	Craigenda rroch	Biological	67.07	67.07	Upland oak woodland	Favourable Maintained	No negative pressures identified	10/07/2013			
					Invertebrate assemblage	Favourable Maintained	Agricultural operations, over-grazing	05/08/2013			
					Juniper scrub	Favourable Maintained	Burning, plant pests and diseases, under-grazing	18/09/2012			
452	Crathie Wood	Biological	193.34	29.06	Native pinewood	Favourable Maintained Plant pests and diseases		13/08/2009			
						Rocky slopes (includes inland cliff, rocky outcrops, chasmophytic vegetation)	Favourable Maintained	No negative pressures identified	18/09/2012		
					Upland birch woodland	Favourable Maintained	No negative pressures identified	18/09/2012			
					Bryophyte assemblage	Not monitored to date	No negative pressures identified	N/A			
					Capercaillie (Tetrao urogallus), breeding	Unfavourable Over-grazing, under- Declining grazing	31/03/2011				
	Creag Clunie and				Elm Gyalecta lichen (Gyalecta ulmi)	Favourable Maintained	Invasive species	11/02/2003			
1697	the Lion's Face	Biological	251.94	.94 251.94				Lichen assemblage	Not monitored to date	No negative pressures identified	N/A
					Native pinewood	Unfavourable Declining	Invasive species, over- grazing	08/08/2011			
					Scottish crossbill (Loxia scotica), breeding	Not monitored to date	No negative pressures identified	N/A			

Site Code	Name	Туре	Total Area (ha)	Are in CNP (ha)	Interest	Latest Assessed Condition	Pressures	Visit Date	
455	Creag Dhubh	Biological	1052.31	1052.31	Upland birch woodland	Unfavourable No change	Over-grazing	03/07/2009	
					Breeding bird assemblage	Favourable Maintained	Over-grazing, recreation / disturbance, trampling	26/06/2013	
					Rocky slopes (includes inland cliff, rocky outcrops, chasmophytic vegetation)	Favourable Maintained	Natural event	30/09/2005	
457	Creag Meagaidh	Biological	7033.13	507.19	Upland assemblage	Favourable Maintained	Trampling	30/09/2005	
						Upland birch woodland	Favourable Maintained	No negative pressures identified	10/09/2015
					Vascular plant assemblage	Favourable Recovered	Natural event	04/09/2011	
	_				Broad-leaved helleborine (Epipactis helleborine)	Favourable Maintained	Maintenance activities	28/08/2012	
	hainr				Lowland calcareous grassland	Favourable Maintained	Invasive species	28/08/2012	
460	Gam	Biological	15.75	6.2	Lowland neutral grassland	Favourable Maintained	No negative pressures identified	14/07/2008	
400	nan	ыоюдсаг	13.73	0.2	Northern brown argus (Aricia artaxerxes)	Favourable Maintained	Maintenance activities	14/07/2008	
	Creag nan Gamhainn				Springs (including flushes)	Favourable Maintained	No negative pressures identified	21/07/2011	
					Upland birch woodland	Favourable Maintained	No negative pressures identified	16/07/2002	
490	Dalnabo Quarry	Geological	0.28	0.28	Mineralogy of Scotland	Favourable Maintained	Natural event	18/10/2007	

Site Code	Name	Туре	Total Area (ha)	Are in CNP (ha)	Interest	Latest Assessed Condition	Pressures	Visit Date
514	Dinnet Oakwood	Biological	19.73	19.73	Upland oak woodland	Favourable Maintained	Invasive species, no proactive management, over-grazing	12/07/2002
	HIIS				Breeding bird assemblage	Favourable Maintained	Over-grazing, recreation / disturbance	25/04/2003
541	nter F	Piological	9688.13	7625 11	Fluvial Geomorphology of Scotland	Favourable Maintained	No negative pressures identified	11/10/2011
341	Drumochter Hills	ыоюдсаг	7000.13	7023.11	Montane assemblage	Favourable Maintained	No negative pressures identified	31/07/2006
	Dru				Vascular plant assemblage	Unfavourable Declining	Burning, over-grazing, water management	15/08/2003
					Arctic charr (Salvelinus alpinus)	Favourable Maintained	No negative pressures identified	18/07/2008
					Breeding bird assemblage	Favourable Maintained	Burning, game/ fisheries management	14/06/2013
	rms				Bryophyte assemblage	Unfavourable Declining	Air pollution	31/07/2010
	irngo			16503.4	Dystrophic and oligotrophic lochs	Favourable Maintained	Game/ fisheries management	21/06/2010
593	Eastern Cairngorms	Mixed	16503.4		Fluvial Geomorphology of Scotland	Favourable Maintained	Water management	15/01/2003
	Easter				Fungi assemblage	Not monitored to date	No negative pressures identified	N/A
					Invertebrate assemblage	Favourable Declining	Forestry operations	04/07/2013
					Lichen assemblage	Not monitored to	No negative pressures identified	N/A

Site Code	Name	Туре	Total Area (ha)	Are in CNP (ha)	Interest	Latest Assessed Condition	Pressures	Visit Date
						date		
					Native pinewood	Unfavourable Declining	Natural event, over- grazing	01/04/2008
					Quaternary of Scotland	Favourable Maintained	Recreation/disturbance	07/08/2003
					Upland assemblage	Not monitored to date	No negative pressures identified	N/A
					Vascular plant assemblage	Favourable Maintained	Burning, over-grazing, recreation / disturbance	31/08/2010
1696	Fafernie	Biological	252.44	252 44	Breeding bird assemblage	Favourable Maintained	Over-grazing, recreation / disturbance	30/04/2003
1070	Talerille	ыоюдісаі	232.77	232.77	Dotterel (Charadrius morinellus), breeding	Favourable Maintained	Burning, recreation / disturbance	31/05/1999
646	Fodderlett	Biological	3.08	1.19	Lowland acid grassland	Favourable Maintained	No negative pressures identified	14/07/2008
040	er	ыоюдісаі	3.00	1.17	Springs (including flushes)	Favourable Declining	No negative pressures identified	25/06/2013
					Black grouse (Tetrao tetrix), breeding	Favourable Maintained	Burning, natural event, over-grazing	14/05/2009
	Favort of				Breeding bird assemblage	Favourable Maintained	Water management	29/05/2009
1709	Forest of Clunie	Biological	19476.6	233.8	Hen harrier (Circus cyaneus), breeding	Unfavourable Declining	Burning, natural event, over-grazing	29/05/2009
					Osprey (Pandion haliaetus), breeding	Favourable Declining	No negative pressures identified	01/08/2010
					Short-eared owl (Asio flammeus), breeding	Unfavourable	Burning	29/05/2009

Site Code	Name	Туре	Total Area (ha)	Are in CNP (ha)	Interest	Latest Assessed Condition	Pressures	Visit Date
						Declining		
					Alpine flush	Favourable Recovered	Over-grazing	22/06/2011
					Bryophyte assemblage	Unfavourable Declining	Over-grazing	27/10/2004
670	Garbh Choire	Biological	229.32	229.32	Snowbed	Not monitored to date	Over-grazing	N/A
	Choire	_			Spring-head, rill and flush	Unfavourable No change	Over-grazing	10/07/2006
					Upland assemblage	Unfavourable No change	Natural event, Over- grazing, Trampling	03/08/2012
					Vascular plant assemblage	Unfavourable No change	Over-grazing	16/07/2005
693	Glas Tulaichea n	Biological	456.43	456.43	Vascular plant assemblage	Favourable Recovered	Natural event	13/07/2010
				3.01 1513.01	Alpine blue-sow-thistle (Cicerbita alpina)	Not monitored to date	No negative pressures identified	N/A
702	Glen Callater	Biological	1513.01		Alpine heath	Not monitored to date	No negative pressures identified	N/A
					Blanket bog	Unfavourable Declining	, 1 0	05/07/2011
					Breeding bird assemblage	Favourable Maintained	Game/ fisheries management	21/06/2013

Site Code	Name	Туре	Total Area (ha)	Are in CNP (ha)	Interest	Latest Assessed Condition	Pressures	Visit Date	
					Bryophyte assemblage	Favourable Maintained	No negative pressures identified	30/10/2010	
					Mineralogy of Scotland	Favourable Maintained	No negative pressures identified	10/07/2013	
					Oligotrophic loch	Favourable Maintained	No negative pressures identified	09/07/2009	
					Spring-head, rill and flush	Favourable Maintained	Over-grazing, trampling	05/09/2001	
					Tall herb ledge	Favourable Maintained	Under-grazing	30/07/2002	
					Upland assemblage	Not monitored to date	No negative pressures identified	N/A	
					Vascular plant assemblage	Unfavourable No change	Natural event, over- grazing	04/08/2006	
			41.24		Dalradian	Favourable Maintained	No negative pressures identified	31/07/2012	
705	Glen Ey Gorge	Mixed			Subalpine dry heath	Favourable Declining	Over-grazing	24/05/2013	
					Tall herb ledge	Favourable Maintained	No negative pressures identified	31/07/2012	
	Glen Fender Meadows				Lowland calcareous grassland	Favourable Maintained	No negative pressures identified	02/08/2002	
708		der Biological	96.15		96.15	Lowland dry heath	Unfavourable Declining	Agricultural operations, over-grazing	02/06/2014
					Springs (including flushes)	Unfavourable Declining	Under-grazing	02/09/2004	

Site Code	Name	Туре	Total Area (ha)	Are in CNP (ha)	Interest	Latest Assessed Condition	Pressures	Visit Date
					Vascular plant assemblage	Favourable Declining	Over-grazing	09/08/2014
710	Glen Garry	Geological	28.59	0	Dalradian	Favourable Maintained	No negative pressures identified	29/01/2001
					Capercaillie (Tetrao urogallus), breeding	Unfavourable Declining	No negative pressures identified	30/04/2014
					Fungi assemblage	Favourable Maintained	No negative pressures identified	26/10/2009
	Glen				Invertebrate assemblage	Favourable Maintained	Forestry operations, under-grazing	26/06/2013
724	Tanar	Mixed	4180.09	4142.25	Native pinewood	Favourable Maintained	Invasive species	08/04/2010
					Scottish crossbill (Loxia scotica), breeding	Not monitored to date	No negative pressures identified	N/A
					Subalpine dry heath	Favourable Maintained	No negative pressures identified	17/11/2009
726	Glen Tilt Woods	Biological	15.02	9.4	Upland mixed ash woodland	Favourable Maintained	No negative pressures identified	15/08/2000
	Forest				Capercaillie (Tetrao urogallus), breeding	Favourable Maintained	Proactive on-site management	30/04/2009
1665	Glenmore For	Biological	1440.38	1440.38	Narrow-headed ant (Formica exsecta)	Favourable Maintained	Conservation activities, Inter-specific competition, No proactive management	30/08/2013
	Gle				Native pinewood	Unfavourable Recovering	Game/ fisheries management	16/06/2008

Site Code	Name	Туре	Total Area (ha)	Are in CNP (ha)	Interest	Latest Assessed Condition	Pressures	Visit Date
					Quaternary of Scotland	Not monitored to date	No negative pressures identified	N/A
					Scottish crossbill (Loxia scotica), breeding	Not monitored to date	No negative pressures identified	N/A
					Vascular plant assemblage	Favourable Maintained	No negative pressures identified	23/07/2007
	of				Calaminarian grassland and serpentine heath	Favourable Maintained	Over-grazing	02/08/2002
742	Green Hill of Strathdon	Biological	640.77	640.77	Moorland juniper	Favourable Maintained	Burning	29/07/2011
742	reen	ыоюдісаі	040.77	040.77	Subalpine dry heath	Favourable Maintained	Burning, over-grazing	15/08/2008
	6				Subalpine flushes	Favourable Maintained	No negative pressures identified	29/07/2011
					Mountain whorl snail (Vertigo alpestris)	Favourable Maintained	No negative pressures identified	17/07/2013
					Northern brown argus (Aricia artaxerxes)	Not monitored to date	No negative pressures identified	N/A
807	Inchrory	Mixed	1089.93	1089.93	Quaternary of Scotland	Favourable Maintained	No negative pressures identified	31/10/1999
					Upland assemblage	Not monitored to date	Burning, over-grazing, trampling, under-grazing	N/A
					Vascular plant assemblage	Favourable Recovered	Burning, over-grazing, trampling	09/06/2008

Site Code	Name	Туре	Total Area (ha)	Are in CNP (ha)	Interest	Latest Assessed Condition	Pressures	Visit Date
858	Kinlochlag gan Boulder Beds	Geological	6.13	6.13	Dalradian	Favourable Maintained	No negative pressures identified	08/01/2014
864	Kinveachy	Biological	5325.7	3728.87	Breeding bird assemblage	Favourable Maintained	No negative pressures identified	08/06/2007
004	Forest	Diological	3323.7		Native pinewood	Unfavourable Recovering	No negative pressures identified	24/06/2008
					Alpine heath	Favourable Maintained	Game/ fisheries management	04/07/2013
					Blanket bog	Favourable Maintained	Agricultural operations, burning	03/09/1999
887	Ladder Hills	Biological	4357.94	4357.94	Mineralogy of Scotland	Favourable Maintained	No negative pressures identified	31/03/2006
					Subalpine dry heath	Unfavourable Declining	Burning, over-grazing, recreation / disturbance	09/04/2007
					Upland assemblage	Unfavourable No change	Agricultural operations, burning	04/07/2013
968	Loch	Riological	90 90		Bryophyte assemblage	Favourable Maintained	Recreation / disturbance	31/10/2010
700	Brandy	Biological	98.98	98.98	Oligotrophic loch	Favourable Maintained	Recreation / disturbance	01/07/2004
981	Loch Etteridge	Geological	114.94	114.94	Quaternary of Scotland	Favourable Maintained	Agricultural operations, extraction, recreation / disturbance	28/03/2000

Site Code	Name	Туре	Total Area (ha)	Are in CNP (ha)	Interest	Latest Assessed Condition	Pressures	Visit Date
					Mesotrophic loch	Favourable Maintained	No negative pressures identified	01/07/2010
1014	Loch Moraig	Biological	33.46	33.46	Springs (including flushes)	Favourable Maintained	No negative pressures identified	23/07/2008
					Vascular plant assemblage	Favourable Maintained	No negative pressures identified	29/07/2010
					Beetles	Favourable Maintained	No negative pressures identified	12/07/2010
1065	Loch Vaa	Biological	44.6	44.6	Goldeneye (Bucephala clangula), breeding	Unfavourable No change	Recreation/disturbance	30/06/2007
1003	Locii vaa		77.0		Slavonian grebe (Podiceps auritus), breeding	Unfavourable No change	Game/ fisheries management, natural event, recreation / disturbance	30/06/2007
	Lower				Upland birch woodland	Unfavourable Recovering	Over-grazing, under- grazing	20/08/2010
1108	Strathabo n Woods	Biological	293.47	0	Upland oak woodland	Favourable Maintained	Over-grazing	29/08/2002
	11 ************************************				Wet woodland	Favourable Maintained	No negative pressures identified	29/08/2002
					Black mountain moth (Glacies coracina)	Favourable Maintained	No negative pressures identified	26/06/2014
1180	Ihliat	Biological	106711	7120.93	Blanket bog	Unfavourable No change	Trampling	03/11/2004
1100	Monadhliath	Diological	10071.1	, 120.73	Breeding bird assemblage	Favourable Maintained	Over-grazing	19/06/2008
	Σ	Σ			Dotterel (Charadrius morinellus), breeding	Unfavourable No change	Over-grazing, recreation / disturbance	01/07/2011

Site Code	Name	Туре	Total Area (ha)	Are in CNP (ha)	Interest	Latest Assessed Condition	Pressures	Visit Date
					Upland assemblage	Favourable Maintained	Over-grazing	03/11/2004
					Vascular plant assemblage	Unfavourable No change	Over-grazing	26/07/2008
					Alpine heath	Favourable Maintained	Over-grazing	03/06/2014
					Basin fen	Favourable Maintained	No negative pressures identified	02/08/2013
					Bryophyte assemblage	Favourable Maintained	No negative pressures identified	06/09/2013
	P				Fungi assemblage	Not monitored to date	No negative pressures identified	N/A
	kwoo				Invertebrate assemblage	Favourable Declining	Under-grazing	25/06/2013
1190	le Bir	Biological	328.34	34 328.34	Juniper scrub	Unfavourable No change	Over-grazing	11/10/2009
	Morrone Birkwood				Quaternary of Scotland	Favourable Maintained	No negative pressures identified	04/06/2014
	Σ				Rocky slopes (includes inland cliff, rocky outcrops, chasmophytic vegetation)	Not monitored to date	No negative pressures identified	N/A
					Spring-head, rill and flush	Favourable Maintained	No negative pressures identified	03/06/2014
					Subalpine calcareous grassland	Favourable Maintained	No negative pressures identified	03/06/2014
					Subalpine flushes	Favourable Declining	No negative pressures identified	03/06/2014

Site Code	Name	Туре	Total Area (ha)	Are in CNP (ha)	Interest	Latest Assessed Condition	Pressures	Visit Date
					Upland birch woodland	Unfavourable No change	Over-grazing	12/11/2009
					Vascular plant assemblage	Unfavourable No change	Over-grazing, recreation / disturbance	03/08/2005
					Alpine heath	Favourable Maintained	No negative pressures identified	16/08/2000
	qqn				Blanket bog	Not monitored to date	No negative pressures identified	N/A
	Morven and Mullachdubh				Breeding bird assemblage	Not monitored to date	Burning, game / fisheries management, wildlife crime	N/A
1194	n and M	Biological	2508.35	2345.72	Moorland juniper	Favourable Maintained	Over-grazing, plant pests and diseases, undergrazing	04/09/2008
	Morve				Upland assemblage	Not monitored to date	No negative pressures identified	N/A
					Vascular plant assemblage	Not monitored to date	No negative pressures identified	N/A
					Breeding bird assemblage	Unfavourable No change	No proactive management	31/08/2004
1212	Muir of Dinnet	Miyed	2308.59	59 15.54	Dragonfly assemblage	Favourable Maintained	No negative pressures identified	31/10/2012
						Greylag goose (Anser anser), non-breeding	Unfavourable No change	No negative pressures identified

Site Code	Name	Туре	Total Area (ha)	Are in CNP (ha)	Interest	Latest Assessed Condition	Pressures	Visit Date
					Hydromorphological mire range	Not monitored to date	Invasive species	N/A
					Invertebrate assemblage	Favourable Maintained	No negative pressures identified	31/10/2012
					Lowland dry heath	Unfavourable Recovering	No proactive management	30/07/2013
					Lowland wet heath	Unfavourable Declining	Over-grazing	24/07/2015
					Oligo-mesotrophic loch	Favourable Maintained	Invasive species, water quality	25/06/2004
					Quaternary of Scotland	Favourable Maintained	Forestry operations	30/06/2000
	ood				Breeding bird assemblage	Favourable Maintained	No negative pressures identified	17/06/2014
	inew				Capercaillie (Tetrao urogallus), breeding	Favourable Maintained	Proactive on-site management	30/04/2010
	hus P			509.75	Crested tit (Lophophanes cristatus), breeding	Favourable Maintained	No negative pressures identified	17/03/2005
1241	North Rothiemurchus Pinewood	Mixed	1509.75		Fungi assemblage	Favourable Maintained	Forestry operations, over-grazing, recreation / disturbance, under-grazing	02/10/2014
	th Ro				Invertebrate assemblage	Favourable Maintained	No negative pressures identified	20/08/2013
	Nor				Lichen assemblage	Favourable Declining	Over-grazing	21/08/2010

Site Code	Name	Туре	Total Area (ha)	Are in CNP (ha)	Interest	Latest Assessed Condition	Pressures	Visit Date
					Native pinewood	Unfavourable Recovering	Invasive species	22/05/2008
					Osprey (Pandion haliaetus), breeding	Unfavourable No change	Other	20/06/2010
					Quaternary of Scotland	Favourable Maintained	No negative pressures identified	11/06/2003
					Scottish crossbill (Loxia scotica), breeding	Not monitored to date	No negative pressures identified	N/A
					Vascular plant assemblage	Favourable Maintained	Under-grazing	23/07/2010
	ς,				Breeding bird assemblage	Favourable Maintained	Recreation / disturbance, other	11/07/2013
	orrie				Quaternary of Scotland	Favourable Maintained	No negative pressures identified	26/06/2003
1243	Northern Corries, Cairngorms	Mixed	1966.37	1966.37	Scrub	Favourable Maintained	No negative pressures identified	28/07/2008
	orthe				Upland assemblage	Favourable Maintained	No negative pressures identified	03/04/2007
	Z				Vascular plant assemblage	Favourable Maintained	No negative pressures identified	05/10/2006
1274	Pass of Killiecrank ie	illiecrank Biological	62.24	5.55	Fly assemblage	Favourable Maintained	No negative pressures identified	03/08/2010
12/4			cal 62.24		Upland oak woodland	Unfavourable No change	Invasive species	28/09/2006
1335	Red Craig	Geological	105.43	105.43	Caledonian Igneous	Favourable Maintained	No negative pressures identified	20/07/2001

Site Code	Name	Туре	Total Area (ha)	Are in CNP (ha)	Interest	Latest Assessed Condition	Pressures	Visit Date
1361	River	Geological	598 82		Fluvial Geomorphology of Scotland	Favourable Recovered	Flood defence works	27/04/2007
1301	Feshie	Geological	370.02	370.02	Quaternary of Scotland	Favourable Maintained	Flood defence works	28/07/2011
					Atlantic salmon (Salmo salar)	Unfavourable Recovering	Invasive species	20/10/2004
1699	River Spey	Mixed	1958.79	346.3	Freshwater pearl mussel (Margaritifera margaritifera)	Unfavourable Declining	Invasive species, extraction, invasive species, water quality, wildlife crime	30/09/2014
					Otter (Lutra lutra)	Favourable Maintained	Over-grazing	08/09/2004
					Sea lamprey (Petromyzon marinus)	Favourable Maintained	No negative pressures identified	07/11/2011
					Arctic charr (Salvelinus alpinus)	Favourable Maintained	Game/ fisheries management	17/07/2008
					Breeding bird assemblage	Favourable Maintained	No negative pressures identified	31/07/2001
	Biron Spar				Flood-plain fen	Favourable Maintained	Trampling, water management	20/07/2011
1364	- Insh		1158.77	1158.77	Invertebrate assemblage	Favourable Maintained	Over-grazing	20/08/2013
	i iai siles				Mesotrophic loch	Favourable Maintained	Invasive species, recreation / disturbance	30/07/2010
					Osprey (Pandion haliaetus), breeding	Favourable Maintained	Recreation / disturbance	07/09/2009
	River Spey				Otter (Lutra lutra)	Favourable Maintained	Over-grazing	08/09/2004

Site Code	Name	Туре	Total Area (ha)	Are in CNP (ha)	Interest	Latest Assessed Condition	Pressures	Visit Date
					Vascular plant assemblage	Favourable Maintained	Invasive species, over- grazing	09/07/2007
					Whooper swan (Cygnus cygnus), non-breeding	Favourable Maintained	Recreation / disturbance	28/03/2010
					Beetles	Favourable Maintained	No negative pressures identified	28/06/2013
1504	Struan Wood	Biological	82.82	0	Rannoch roller moth (Ancylis tineana)	Favourable Maintained	No negative pressures identified	03/08/2012
	VV OOD				Upland birch woodland	Unfavourable No change	Over-grazing	20/06/2013

There are 59 SSSIs within or overlapping the National Park. Of these, 50 have biological notifiable features, covering an area of around 1,120 km² (or 25% of the National Park's area). Of these, 28 have at least one notifiable interest that is in unfavourable condition. 5 SSSIs, namely Aldclune and Invervack Meadows, Blair Atholl Meadow, Craigendarroch, Creag Dhubh and Garbh Choire, have no interests in favourable condition.

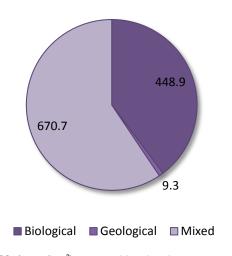


Figure 82 Area (km²) covered by the three types of SSSI within the Cairngorms National Park.

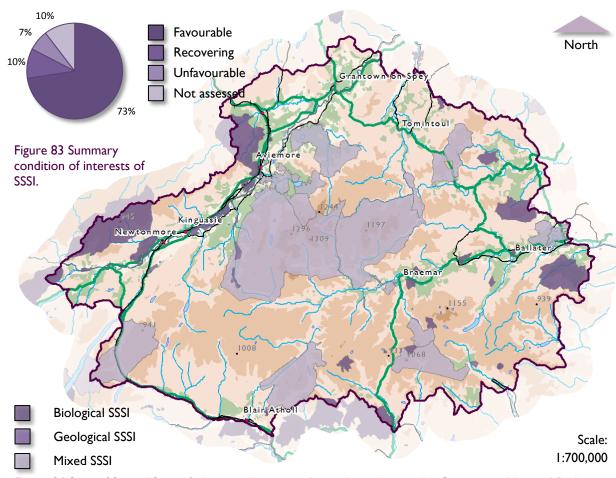


Figure 84 Sites of Special Scientific Interest by type within and overlapping the Cairngorms National Park Authority.

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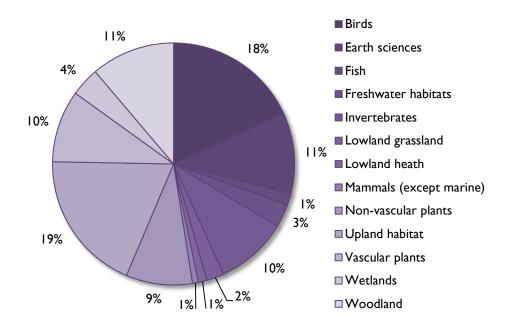


Figure 85 Category of interests of SSSIs within the Cairngorms National Park.

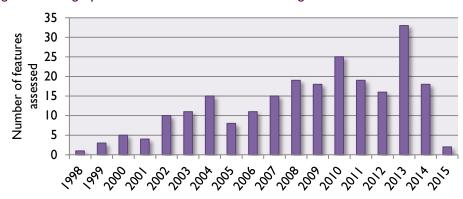


Figure 86 Year of latest assessed visit of interests of SSSIs within the Cairngorms National Park.

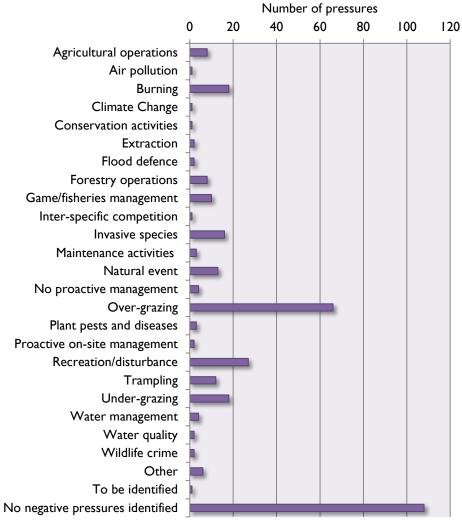


Figure 87 Pressures on interests of SSSIs within the Cairngorms National Park.

International Designations

Natura 2000 Network

Nearly half of the Cairngorms National Park is designated within the Natura 2000 network, sites which are considered the best for wildlife in Europe.

There are two types of Natura 2000 site within the National Park, namely Special Areas of Conservation (SAC) and Special Protection Areas (SPA).

SACs (Table 18 and Figure 88 to Figure 92) are strictly protected sites designated under the EC Habitats Directive. Article 3 of the Directive requires the establishment of a European network of important high-quality conservation sites that will make a significant contribution to conserving the 189 habitat types and 788 species identified in Annexes I and II of the Directive (as amended). The listed habitat types and

species are those considered to be most in need of conservation at a European level (excluding birds). Of the UK's 78 Annex I habitat types (of which 26 are marine and coastal and therefore not relevant to the National Park), 33 occur in the National Park. Of the UK's 33 Annex II species (of which 4 are marine and coastal and therefore not relevant to the National Park), 10 are native to, and normally resident in, the National Park.

SPAs (Table 19 and Figure 93 to Figure 94) are strictly protected sites classified in accordance with Article 4 of the EC Birds Directive. They are classified for rare and vulnerable birds (as listed on Annex I of the Directive), and for regularly occurring migratory species. 35 of these Annex I species can be found within the Cairngorms National Park, with SPAs designated to protect populations of 15 of them.

Table 18 and Table 19 provide information on SACs and SPAs both within and overlapping the Cairngorms National Park. Sites are listed with their qualifying features, the latest assessment of their respective conditions and when the assessments took place and the key pressures affecting the features.

A simple colour scheme has been used to highlight the condition of qualifying features, the key to which is provided below:

Features in 'Favourable Maintained' or 'Favourable Recovered' condition.

Features that are either in 'Favourable Declining' or 'Unfavourable Recovering' condition.

Features that are in 'Unfavourable Maintained' or 'Unfavourable Declining' condition.

Features that have not been monitored to date.

Table 18 Special Areas of Conservation within the Cairngorms National Park.

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Latest Assessed Condition	Pressures	Visit Date	
				Base-rich fens	Unfavourable No change	Trampling, over-grazing	22/07/2010	
				Dry grasslands and scrublands on chalk or limestone	Unfavourable Recovering	No negative pressures identified	22/07/2010	
				High-altitude plant communities associated with areas of water seepage	Favourable Recovered	No negative pressures identified	22/07/2010	
				Species-rich grassland with mat-grass in upland areas	Favourable Recovered	No negative pressures identified	22/07/2010	
	U			Plants in crevices on acid rocks	Favourable Recovered	No negative pressures identified	22/07/2010	
957	Ghlo SAC			Alpine and subalpine heaths	Favourable Recovered	No negative pressures identified	22/07/2010	
UK0012957		8084.76	7762.25	Blanket bog	Favourable Recovered	Burning	22/07/2010	
Ž	Beinn a'			Montane acid grasslands	Unfavourable No change	Over-grazing	19/08/2004	
	ď			Plants in crevices on base-rich rocks	Favourable Maintained	No negative pressures identified	19/08/2004	
				Dry heaths	Unfavourable No change	Burning, over-grazing	19/08/2004	
				Acidic scree	Favourable Maintained	No negative pressures identified	19/08/2004	
					Hard-water springs depositing lime	Unfavourable No change	Burning, over-grazing	19/08/2004
				Geyer's whorl snail (Vertigo geyeri)	Favourable Maintained	No negative pressures identified	22/07/2010	

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Latest Assessed Condition	Pressures	Visit Date
				Round-mouthed whorl snail (Vertigo genesii)	Favourable Maintained	No negative pressures identified	22/07/2010
				Bog woodland	Unfavourable No change	Over-grazing	02/08/2011
				Caledonian forest	Unfavourable No change	Over-grazing	08/08/2011
<u>=</u>	AC			Blanket bog	Unfavourable No change	Burning	05/05/2006
UK003002781	Ballochbuie SAC	1881.73	1881.73	Plants in crevices on acid rocks	Favourable Maintained	No negative pressures identified	01/11/2006
K003	lochb	1001.73	1001.73	Dry heaths	Unfavourable No change	Burning	01/11/2006
ō	Ball			Wet heathland with cross-leaved heath	Unfavourable No change	Burning	01/11/2006
				Plants in crevices on base-rich rocks	Favourable Maintained	No negative pressures identified	23/11/2004
				Otter (Lutra lutra)	Favourable Maintained	No negative pressures identified	12/11/2011
UK0012821	SAC			Mountain willow scrub	Unfavourable No change	Climate change, over- grazing, plant pests and diseases	23/08/2012
	chan	5975.28	5975.28	Acidic scree	Unfavourable Declining	Over-grazing	30/08/2012
	Caenlochan SAC			Montane acid grasslands	Unfavourable No change	Climate change, over- grazing	18/09/2012
	Ű			High-altitude plant communities associated with areas of water seepage	Favourable Recovered	No negative pressures identified	18/09/2012

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Latest Assessed Condition	Pressures	Visit Date
				Tall herb communities	Favourable Maintained	No negative pressures identified	18/09/2012
				Plants in crevices on base-rich rocks	Favourable Maintained	No negative pressures identified	18/09/2012
				Dry heaths	Unfavourable No change	Burning, over-grazing	16/07/2006
				Plants in crevices on acid rocks	Favourable Maintained	No negative pressures identified	16/07/2006
				Blanket bog	Unfavourable No change	Burning, over-grazing	16/07/2006
				Alpine and subalpine heaths	Unfavourable No change	Climate change, over- grazing	16/07/2006
				Base-rich fens	Unfavourable No change	No negative pressures identified	16/07/2006
				Base-rich scree	Favourable Maintained	No negative pressures identified	16/07/2006
				Grasslands on soils rich in heavy metals	Favourable Maintained	No negative pressures identified	16/07/2006
				Species-rich grassland with mat-grass in upland areas	Unfavourable No Change	No negative pressures identified	16/07/2006
5412	swo.			Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels	Favourable Maintained	No negative pressures identified	23/06/2010
UK0016412	Cairngroms SAC	50903.74	50903.74	Acid peat-stained lakes and ponds	Favourable Maintained	No negative pressures identified	24/06/2010
ō				Caledonian forest	Unfavourable Declining	Invasive species; under- grazing	27/01/2009

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Latest Assessed Condition	Pressures	Visit Date
				Dry grasslands and scrublands on chalk or limestone	Unfavourable No change	Over-grazing; under- grazing; over grazing	03/04/2007
				Blanket bog	Unfavourable No change	Over-grazing	03/04/2007
				Tall herb communities	Favourable Maintained	No negative pressures identified	03/04/2007
				Hard-water springs depositing lime	Favourable Maintained	Over-grazing	03/04/2007
				Alpine and subalpine heaths	Unfavourable No change	Burning; over grazing; Recreation / disturbance	03/04/2007
				Dry heaths	Unfavourable No change	Burning	03/04/2007
				Plants in crevices on acid rocks	Favourable Maintained	Recreation / disturbance	03/04/2007
				Acidic scree	Favourable Maintained	Recreation / disturbance	03/04/2007
				Mountain willow scrub	Unfavourable No change	Over-grazing	03/04/2007
				Wet heathland with cross-leaved heath	Unfavourable No change	Over-grazing	03/04/2007
				Species-rich grassland with mat-grass in upland areas	Unfavourable No change	Trampling; under- grazing	03/04/2007
				Plants in crevices on base-rich rocks	Unfavourable No change	Invasive species	03/04/2007
				Juniper on heaths or calcareous grasslands	Favourable Maintained	No negative pressures identified	03/04/2007

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Latest Assessed Condition	Pressures	Visit Date
				Very wet mires often identified by an unstable 'quaking' surface	Favourable Maintained	No negative pressures identified	08/04/2007
				Montane acid grasslands	Unfavourable Recovering	Recreation / disturbance	14/07/2006
				High-altitude plant communities associated with areas of water seepage	Unfavourable No change	Over-grazing	15/10/2006
				Bog woodland	Favourable Maintained	Over-grazing	05/09/2002
				Green shield-moss (Buxbaumia viridis)	Favourable Maintained	Forestry operations	02/05/2006
				Otter (Lutra lutra)	Favourable Maintained	Recreation / disturbance	08/09/2004
UK 0030122	Coyles of Muick SAC	135.16	135.16	Grasslands on soils rich in heavy metals	Favourable Maintained	No negative pressures identified	03/08/2006
	C			Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels	Favourable Maintained	No negative pressures identified	10/06/2010
25	lh SA			Plants in crevices on base-rich rocks	Favourable Maintained	No negative pressures identified	15/08/2010
UK0012955	Creag Meagaidh SAC	6144.58	507.19	Plants in crevices on acid rocks	Favourable Maintained	No negative pressures identified	08/08/2005
UKO	ß Me			Alpine and subalpine heaths	Unfavourable No change	Over-grazing	01/09/2005
	Crea			Mountain willow scrub	Unfavourable No change	Over-grazing	01/09/2005
				Tall herb communities	Unfavourable No change	Over-grazing	30/09/2005

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Latest Assessed Condition	Pressures	Visit Date
				Wet heathland with cross-leaved heath	Unfavourable No change	Burning, game / fisheries management, over-grazing	30/09/2005
				Montane acid grasslands	Unfavourable No change	Over-grazing	30/09/2005
				Dry heaths	Unfavourable No change	Burning, over-grazing	30/09/2005
				Blanket bog	Unfavourable No change	Burning, over-grazing	30/09/2005
				Acidic scree	Unfavourable No change	Over-grazing	30/09/2005
UK0013584	Creag nan Gamhainn SAC	15.75	15.75	Hard-water springs depositing lime	Favourable Maintained	No negative pressures identified	21/07/2011
UK0030134	Dinnet Oakwood SAC	19.73	19.73	Western acidic oak woodland	Favourable Maintained	Invasive species, no proactive management, over-grazing	12/07/2002
				Alpine and subalpine heaths	Unfavourable No change	Invasive species, no proactive management,	05/07/2006
				Montane acid grasslands	Unfavourable No change	Over-grazing, trampling	06/07/2006
UK0012942	Drumochter Hills SAC	9445.56	7382.22	Plants in crevices on acid rocks	Unfavourable No change	Over-grazing	06/07/2006
	Tillis SAC			Dry heaths	Unfavourable No change	Burning	06/07/2006
				Mountain willow scrub	Unfavourable No change	Over-grazing	06/07/2006
				Wet heathland with cross-leaved heath	Unfavourable	Burning, over-grazing,	06/07/2006

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Latest Assessed Condition	Pressures	Visit Date	
					No change	trampling		
				Blanket bog	Unfavourable No change	Burning, over-grazing, trampling	06/07/2006	
				Species-rich grassland with mat-grass in upland areas	Unfavourable No change	Under-grazing	06/07/2006	
				Acidic scree	Favourable Maintained	No negative pressures identified	06/07/2006	
				Tall herb communities	Unfavourable Recovering	No negative pressures identified	31/07/2006	
				Caledonian forest	Favourable Maintained	Invasive species	08/04/2010	
756	SAC			Wet heathland with cross-leaved heath	Favourable Maintained	No negative pressures identified	21/11/2009	
UK0012756	Tanar	[anar	4180.09	1180.09 4142.25	Dry heaths	Favourable Maintained	Under-grazing	23/10/2003
Š	Glen Tanar			Blanket bog	Favourable Maintained	Burning	31/10/2003	
	0			Otter (Lutra lutra)	Favourable Maintained	No negative pressures identified	30/09/2004	
59	ll of on			Dry heaths	Favourable Maintained	Burning, over-grazing	15/08/2008	
UK0030159	Green Hill of Strathdon SAC	640.77	640.77	Grasslands on soils rich in heavy metals	Favourable Maintained	Burning	15/08/2008	
Ž,	Gre			Juniper on heaths or calcareous grasslands	Favourable Maintained	Over-grazing	02/08/2002	

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Latest Assessed Condition	Pressures	Visit Date	
	C			Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels	Favourable Maintained	Invasive species, recreation / disturbance	30/07/2010	
UK0019812	Insh Marshes SA	1158.78	1158.78	Alder woodland on floodplains	Unfavourable Recovering	Flood defence works, invasive species, no proactive management, over-grazing, water management	19/05/2009	
٠	Insh			Very wet mires often identified by an unstable 'quaking' surface	Favourable Maintained	No negative pressures identified	04/10/2002	
				Otter (Lutra lutra)	Favourable Maintained	Over-grazing, other	08/09/2004	
UK0012759	Kinveachy	2849.36	849.36 2232.59	Bog woodland	Unfavourable Recovering	No negative pressures identified	24/06/2008	
OK0012737	Forest SAC			Caledonian forest	Unfavourable Recovering	No negative pressures identified	24/06/2008	
9110	S E H	≝ I ()			Dry heaths	Unfavourable Recovering	Burning, over-grazing, recreation / disturbance	09/04/2007
UK0030179	Ladder Hills SAC	4357.94	4357.94	Blanket bog	Favourable Maintained	Agricultural operations, burning	03/09/1999	
5	La			Alpine and subalpine heaths	Favourable Maintained	No negative pressures identified	03/09/1999	
UK0030210	Monadhliath SAC	1061.11	7121.03	Blanket bog	Unfavourable No change	Trampling	23/09/2004	

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Latest Assessed Condition	Pressures	Visit Date			
				Base-rich fens	Favourable Declining	Trampling	03/06/2014			
	SAC			Hard-water springs depositing lime	Favourable Maintained	Invasive species, over- grazing	03/06/2014			
4	S poo			High-altitude plant communities associated with areas of water seepage	Favourable Declining	Invasive species, trampling	03/06/2014			
UK0012894	Morrone Birkwood	318.4	318.4	Dry grasslands and scrublands on chalk or limestone	Favourable Maintained	No negative pressures identified	03/06/2014			
UK0	one B						Juniper on heaths or calcareous grasslands	Unfavourable No change	Over-grazing	11/10/2009
	Morra						Alpine and subalpine heaths	Favourable Maintained	Over-grazing, recreation / disturbance	01/07/2008
				Geyer's whorl snail (Vertigo geyeri)	Unfavourable Declining	No negative pressures identified	30/06/2013			
UK0019958	Morven & Mullachdubh SAC	916.76	916.76	Juniper on heaths or calcareous grasslands	Favourable Maintained	Burning, no proactive management, overgrazing, plant pests and diseases	25/01/2005			
	AC			Very wet mires often identified by an unstable 'quaking' surface	Unfavourable Declining	Invasive species	30/08/2008			
UK0019959	Sinnet S	Muir of Dinnet SAC 412.7	415.76 415.76	Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels	Favourable Maintained	Invasive species, water quality	25/06/2004			
UK0	ir of L			Dry heaths	Unfavourable Declining	No proactive management	16/02/2001			
	Σ			Degraded raised bog	Favourable Maintained	Agricultural operations, invasive species	30/06/2000			

Cairngorms National Park Authority | Appendix 2: Topic 6 Biodiversity, Fauna and Flora

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Latest Assessed Condition	Pressures	Visit Date				
				Otter (Lutra lutra)	Favourable Maintained	Natural event, water quality	04/10/2012				
				Otter (Lutra lutra)	Favourable Declining	No negative pressures identified	06/10/2012				
UK0030251	2446.82	2446.82	1368.59	Atlantic salmon (Salmo salar)	Favourable Maintained	Agricultural operations, invasive species, water management, water quality	21/07/2011				
ÜŘ	River			Freshwater pearl mussel (Margaritifera margaritifera)	Unfavourable No change	Development, invasive species, water management. To be identified, other	07/08/2003				
UK0030262	River South Esk SAC	SAC 478.62 I	South Esk 478.62 103.48	103.48	Atlantic salmon (Salmo salar)	Unfavourable Recovering	Agricultural operations, climate change, forestry operations, invasive species, over-grazing, water management, water quality	22/09/2004			
5	River			Freshwater pearl mussel (Margaritifera margaritifera)	Unfavourable Declining	Invasive species, water management, wildlife crime	19/09/2002				
=	River Spey SAC			>	*	λ:		Sea lamprey (Petromyzon marinus)	Favourable Maintained	No negative pressures identified	07/09/2011
UK0019811		5729.48 4181.76	Otter (Lutra lutra)	Favourable Maintained	Over-grazing; other	08/09/2004					
UK0		N V		Atlantic salmon (Salmo salar)	Unfavourable Recovering	Agricultural operations; invasive species; water management	20/10/2004				

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Latest Assessed Condition	Pressures	Visit Date				
				Freshwater pearl mussel (Margaritifera margaritifera)	Unfavourable Recovering	Extraction; invasive species; water quality; wildlife crime	01/10/2000				
				Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels	Favourable Maintained	Water management	09/09/2004				
	ıy SAC	9497.72 233.94	Atlantic salmon (Salmo salar)	Favourable Maintained	Game/ fisheries management, invasive species, water management, water quality	19/09/2011					
UK0030312			0407.72	0407.72	72 222.04	222.04	107 72 222 04	233 94	Sea lamprey (Petromyzon marinus)	Favourable Maintained	Development, water management, water quality
UK00	River Tay SAC		7477.72 233.74	River lamprey (Lampetra fluviatilis)	Favourable Maintained	Development, water management, water quality	30/11/2007				
			Brook lamprey (Lampetra planeri)	Favourable Maintained	Development, water management, water quality	30/11/2007					
			Otter (Lutra lutra)	Favourable Maintained	Agricultural operations, invasive species, recreation / disturbance, water management	03/04/2004					
UK0030348	The Maim SAC	484.58	484.58	Dry heaths	Unfavourable No change	Burning	12/06/2006				

There are 23 SACs within or overlapping the National Park (**Figure 89**), covering an area of around 1,063 km² (or 24% of the National Park's area). Of these, 16 have at least one qualifying feature that is in unfavourable condition. 4 SACs, namely Monadhliath, River South Esk, Kinveachy Forest and The Maim, have no qualifying features in favourable condition. It should be noted that the majority of the River South Esk SAC is located outwith the National Park boundary and therefore the CNPA has only limited influence over its status.

Significant pressures on qualifying features are burning and over-grazing (**Figure 92**).

Around 53% of the land area protected as an SAC falls within the Cairngorms SAC, which is the third largest in Scotland.

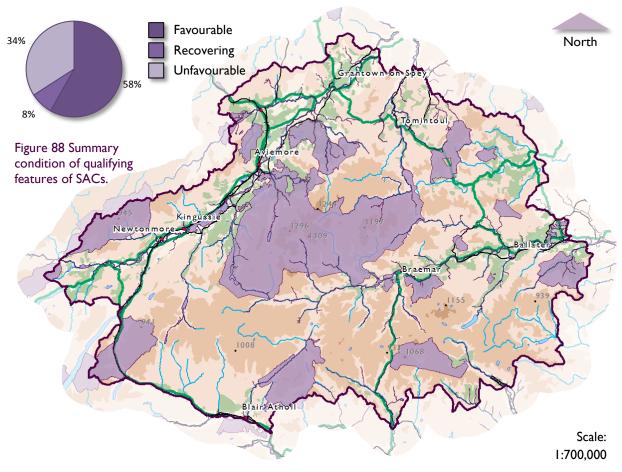


Figure 89 Special Areas of Conservation within the Cairngorms National Park.

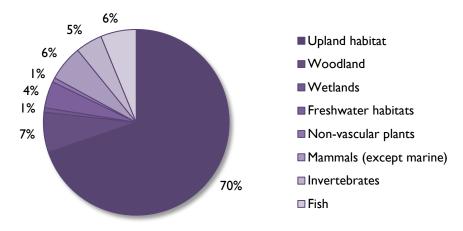


Figure 90 Category of qualifying features of SACs within the Cairngorms National Park.

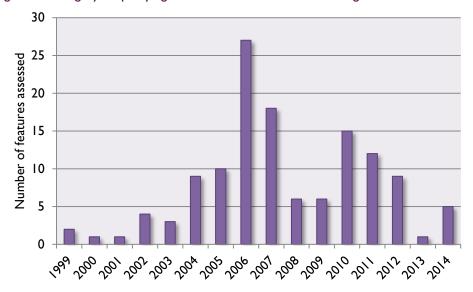


Figure 91 Year of latest assessed visit of qualifying features of SACs within the Cairngorms National Park.

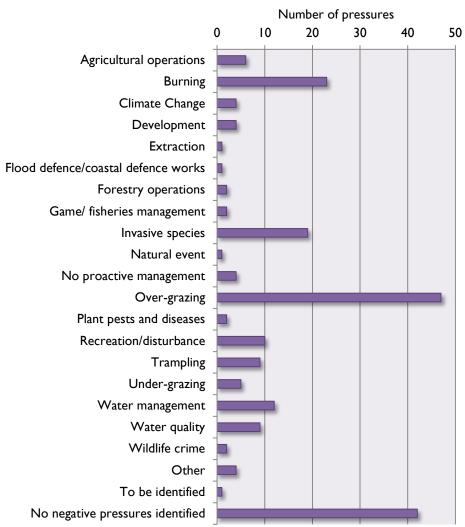


Figure 92 Pressures on qualifying features of SACs within the Cairngorms National Park.

Table 19 Special Protection Areas within the Cairngorms National Park.

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Latest Assessed Condition	Pressures	Visit Date			
15	у А			Capercaillie (Tetrao urogallus), breeding	Favourable Maintained	Under-grazing	28/04/2009			
UK900256	Abernethy Forest SPA	5793.46	5793.46	Osprey (Pandion haliaetus), breeding	Favourable Maintained	No negative pressures identified	31/05/2007			
UK9	Abe			Scottish crossbill (Loxia scotica), breeding	Not monitored to date	No negative pressures identified	N/A			
UK9020297	Anagach Woods SPA	392.78	392.78	Capercaillie (Tetrao urogallus), breeding	Favourable Maintained	Recreation / disturbance	25/04/2010			
UK9002781	Ballochbuie	1881.73 1881.73	1001 72	1001 72	1001 73	1991 73	Capercaillie (Tetrao urogallus), breeding	Unfavourable Declining	Forestry operations, natural event, overgrazing, under-grazing.	14/04/2014
OK7002701	SPA		Scottish crossbill (Loxia scotica), breeding	Not monitored to date	No negative pressures identified	N/A				
UK9004011	Caenlochan	5975.28	5975.28	Dotterel (Charadrius morinellus), breeding	Favourable Maintained	Over-grazing, recreation / disturbance	01/01/1999			
OK7004011	SPA	37/3.26 37/3.	37/3.28	59/5.28 59/5.28	Golden eagle (Aquila chrysaetos), breeding	Favourable Maintained	Over-grazing, recreation / disturbance	04/12/2009		
1224	gor	50903.74 50		Capercaillie (Tetrao urogallus), breeding	Favourable Maintained	No negative pressures identified	25/04/2011			
UK900224 1	Cairngor ms SPA		50903.74 509	50903.74 5	50903.74	50903.74	Merlin (Falco columbarius), breeding	Not monitored to date	No negative pressures identified	N/A

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Latest Assessed Condition	Pressures	Visit Date
				Osprey (Pandion haliaetus), breeding	Favourable Maintained	No negative pressures identified	01/06/2006
				Golden eagle (Aquila chrysaetos), breeding	Favourable Maintained	Game / fisheries management	31/07/2009
				Dotterel (Charadrius morinellus), breeding	Unfavourable Declining	Recreation / disturbance; over- grazing	01/07/2011
				Scottish crossbill (Loxia scotica), breeding	Not monitored to date	No negative pressures identified	N/A
				Peregrine (Falco peregrinus), breeding	Favourable Maintained	Recreation / disturbance	30/06/2002
UK9020308	Cairngorms Massif SPA	187504.1	173254.6	Golden eagle (Aquila chrysaetos), breeding	Not monitored to date	Plant pests & diseases; proactive onsite management	N/A
UK9001801	Craigmore Wood SPA	654.09	654.09	Capercaillie (Tetrao urogallus), breeding	Unfavourable No change	No onsite activities identified	28/04/2009
UK9002161	Creag Maegaidh SPA	6144.58	507.19	Dotterel (Charadrius morinellus), breeding	Unfavourable Declining	No negative pressures identified	01/07/2011
UK9002301	Drumochter	9445.56	7382.22	Dotterel (Charadrius morinellus), breeding	Favourable Maintained	Other	11/02/2004
CR7002301	Hills SPA	7773.30	7302.22	Merlin (Falco columbarius), breeding	Unfavourable No change	Burning, over-grazing	31/08/2004

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Latest Assessed Condition	Pressures	Visit Date											
_	nie			Osprey (Pandion haliaetus), breeding	Favourable Declining	No negative pressures identified	01/08/2010											
0438	t of Clu SPA	19349.38	905.22	Merlin (Falco columbarius), breeding	Favourable Declining	Burning, natural event, over-grazing	29/05/2009											
UK9004381	Forest of Clunie SPA	17547.50	703.22	Hen harrier (Circus cyaneus), breeding	Favourable Declining	Burning, natural event, over-grazing	29/05/2009											
3	Foi			Short-eared owl (Asio flammeus), breeding	Favourable Declining	Burning	29/05/2009											
	PA	4180.09		Capercaillie (Tetrao urogallus), breeding	Unfavourable Declining	Forestry operations, recreation / disturbance, under- grazing	18/04/2011											
1772	nar S		4180.09	4120.09	4120.09	4180.09	4142.25	Hen harrier (Circus cyaneus), breeding	Favourable Maintained	No negative pressures identified	19/07/2010							
UK902771	3len Ta		00.07	Osprey (Pandion haliaetus), breeding	Favourable Maintained	Forestry operations, recreation / disturbance	13/10/2010											
	0															Scottish crossbill (Loxia scotica), breeding	Not monitored to date	No negative pressures identified
	Kinveachy	2849.36 22							Capercaillie (Tetrao urogallus), breeding	Favourable Maintained	No negative pressures identified	15/05/2008						
UK9002581	Forest SPA		2232.59	Scottish crossbill (Loxia scotica), breeding	date	No negative pressures identified	N/A											
UK9002951	Ladder Hills pSPA	4240.4	4240.4	Hen Harrier (Circus cyaneus), breeding	Not monitored to date	No negative pressures identified	N/A											

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Latest Assessed Condition	Pressures	Visit Date
UK9002751	Loch Vaa SPA	44.6	44.6	Slavonian grebe (Podiceps auritus), breeding	Unfavourable No change	Natural event, recreation / disturbance	30/06/2007
UK9002281	Lochnagar SPA	1431.28	1431.28	Dotterel (Charadrius morinellus), breeding	Favourable Maintained	Over-grazing, recreation / disturbance	31/05/1999
UK9002791	Muir of Dinnet SPA	157.6	157.6	Waterfowl assemblage, non-breeding	Unfavourable Declining	No negative pressures identified	01/12/2012
, a	Οin			Greylag goose (Anser anser), non-breeding	Unfavourable Declining	No negative pressures identified	05/11/2010
	SS			Hen harrier (Circus cyaneus), non- breeding	Favourable Maintained	No negative pressures identified	22/02/2010
Ξ.	Insh Marshes			Wigeon (Anas penelope), breeding	Unfavourable No change	Natural event, recreation / disturbance	30/05/2009
UK900223	– Insh SPA	1158.87	1158.87	Osprey (Pandion haliaetus), breeding	Favourable Maintained	Recreation / disturbance	07/09/2009
UK9				Whooper swan (Cygnus cygnus), non-breeding	Favourable Maintained	No negative pressures identified	31/12/2000
	River Spey			Spotted crake (Porzana porzana), breeding	Favourable Maintained	No negative pressures identified	31/12/2000
	<u>R</u>			Wood sandpiper (<i>Tringa glareola</i>), breeding	Unfavourable Declining	Forestry operations	31/12/2000

There are 15 SPAs within or overlapping the National Park (**Figure 92**), covering an area of around 2,013 km² (or 45% of the National Park's area). Of these, 9 have at least one qualifying feature that is in unfavourable condition. 3 SPAs, namely Craigmore Wood, Creag Meagaidh and Muir of Dinnet have no qualifying features in favourable condition.

With around 1,733 km² of its 1,875 km² within the National Park, The Cairngorms Massif SPA contributes 68% of the land protected as an SPA within the National Park. It is the largest in Scotland. There are currently no public records on the condition of the breeding population of Golden eagle (*Aquila chrysaetos*) in the SPA, which is its only qualifying feature.

There is also one area currently under consideration for designation as a SPA. If Ladder Hills is designated then it will create an additional 42 km² of land within the National Park protected under the Birds Directive.

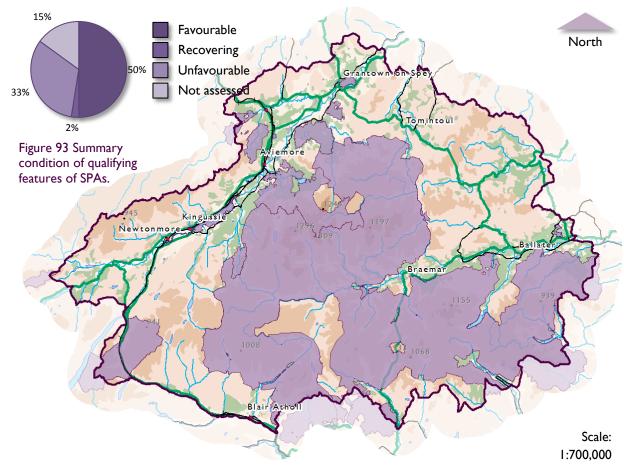


Figure 94 Special Protection Areas within the Cairngorms National Park.

20

15

Number of pressurs

10

5

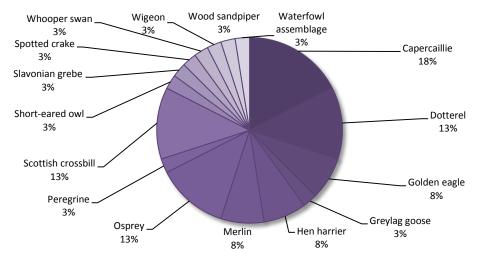


Figure 95 Qualifying features of SPAs within the Cairngorms National Park.

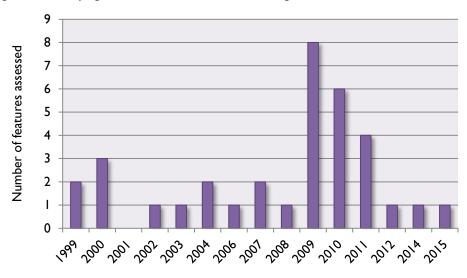


Figure 96 Year of latest assessed visit of qualifying features of SPAs within the Cairngorms National Park.

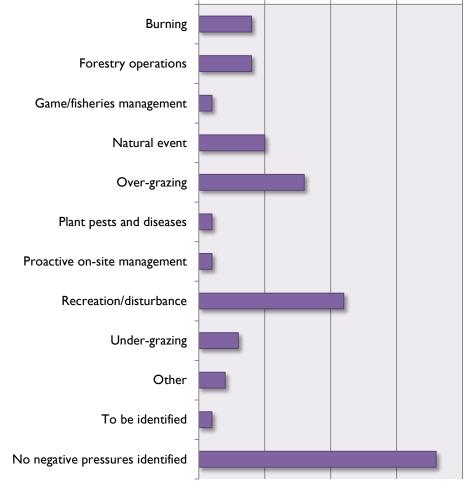


Figure 97 Pressures on qualifying features of SPAs within the Cairngorms National Park.

Ramsar Convention

The National Park is also home to three wetlands of international importance that have been designated under the Ramsar Convention (**Table 20** and **Figure 98**). All are wholly located within the Cairngorms National Park. The designation recognises the fundamental ecological functions of these areas as well as their economic, cultural, scientific, and recreational value.

Table 20 Ramsar Convention Sites within the Cairngorms National Park.

Site Code	Name	Area (ha)
UK13002	Cairngorm Lochs	172.99
UK 13049	Muir of Dinnet	157.60
	River Spey - Insh	
UK 13053	Marshes	1158.77

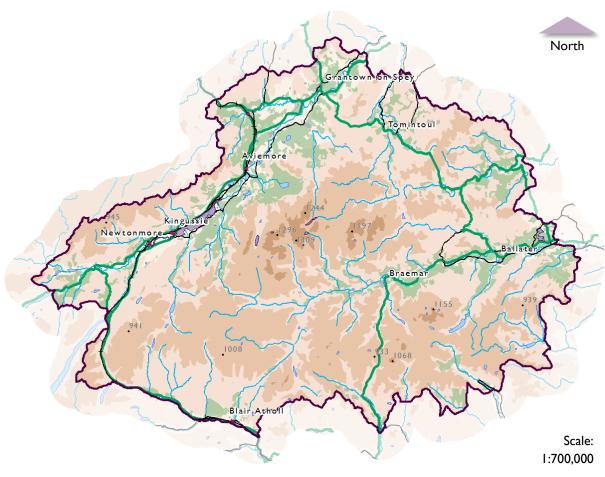


Figure 98 Ramsar Sites within the Cairngorms National Park.

Non-Statutory Designations

The National Park contains a number of non-statutory designations (**Figure 99**). The RSPB runs 2 Nature Reserves within the National Park namely, Loch Garten and Insh Marshes. Both encompass areas of statutory designation, with the former covering most of Abernethy NNR and SPA and the latter, Inch Marshes NNR and SPA.

Loch Garten is best known for its osprey, but is also an important site for capercaillie, crested tit, goldeneye and Scottish crossbill. Insh Marshes is home to an important assemblage of wetland birds, including curlew, lapwing, redshank, snipe and whooper swan.

The National Park contains one Biogenetic Reserve at Muir of Dinnet. This is part of a European network of 'living laboratories' representative of various types of natural environment found in Europe. The purpose of Biogenetic Reserves has now been overtaken by that of Scotland's national nature reserve network and so the designation is rarely referred to.

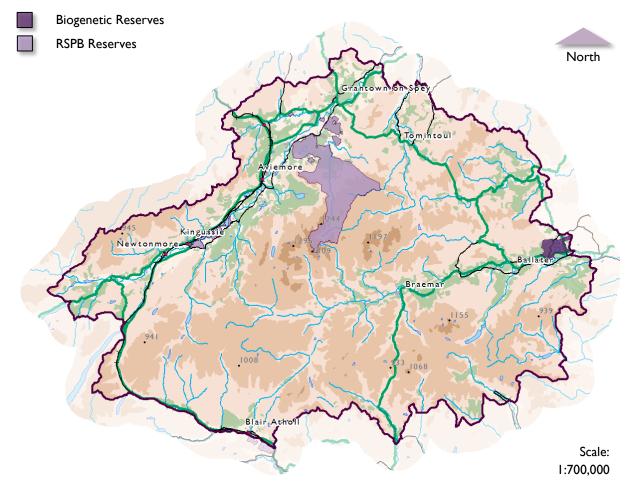


Figure 99 RSBP and Biogenetic Reserves in the Cairngorms National Park.

Important Species and Habitats

There are around 1,200 species considered to be important for nature conservation within the National Park. Of these, 26 have been identified for priority action within the Cairngorms Nature Action Plan (CNAP) 2013-2018.

The CNAP also identifies the National Park's threatened habitats, which are broader than those afforded special protection as designated sites. For the purpose of discussing them and the priority species that depend on them, they are described here under four headings, namely:

- Woodlands (p. 191),
- Freshwater, Wetlands & Wet Grassland (p. 202),
- Uplands (p. 208), and
- Lowlands (p. 211).

Woodlands

The Cairngorms National Park contains the most extensive tracts of Caledonian forest in Britain, comprising pine, juniper and broadleaved species (**Figure 100**). It also

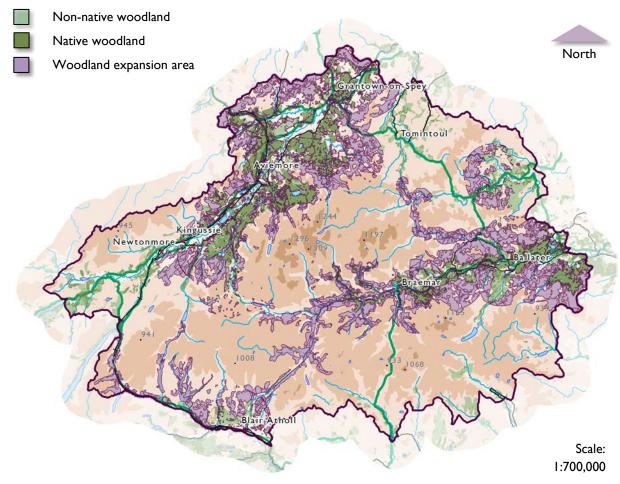


Figure 100 Areas of woodland and woodland expansion in the Cairngorms National Park.

contains the best examples in Scotland of bog woodland, montane willow scrub and stands of aspen. Native tree species comprise around 79% of these woodlands, representing a quarter of the entire Scottish native woodland resource.

Strathspey, Strath Avon, Glenlivet, Donside, Deeside and the Angus Glens combined contain an extensive, varied and predominantly native network of forest habitats. This is one of the most valuable ecological networks in Britain and one of the most widely recognised special qualities of the Cairngorms National Park.

Key woodland types found within the National Park are:

- Caledonian Pinewoods,
- Conifer Plantations,
- Birch & Aspen Woodland,
- Wet & Riparian woodland, and
- Upland Oak.

The native pine woodlands of predominantly self-sown Scots pine are the western-most link to the extensive boreal forest which formerly covered a much

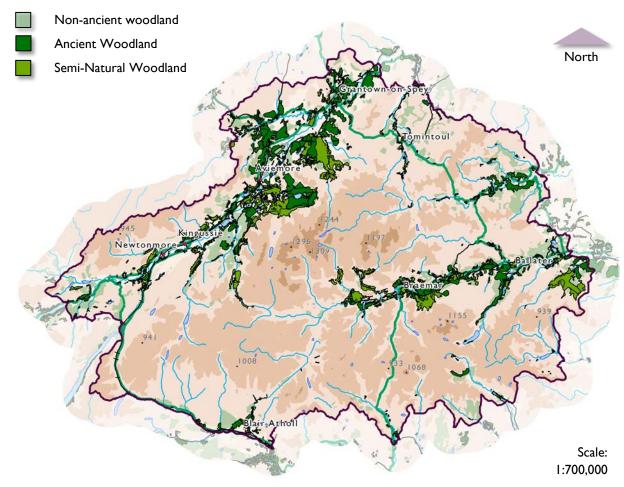


Figure 101 Areas of ancient woodland in the Cairngorms National Park.

larger area of northern Europe. Aspen can tolerate a wide range of soil types and climatic conditions and it is likely that its present distribution is due to the effects of deforestation.

Around 340 km² of the National Park's woodlands are also identified as being ancient according to SNH's Ancient Woodland Inventory (**Figure 101**). Around 160 km² of this has also been identified as being semi-natural. Ancient woodland is defined as land that is currently wooded and has been continually wooded, at least since 1750. This type of woodland has important biodiversity and cultural values by virtue of its antiquity.

Over the last 25 years there has been an increased awareness of the multiple benefits that native woodland can deliver and an upsurge in action to restore and expand native woods. Between 2013 and 2015 890ha of new native woodland has been created in the National Park, while work is underway to identify areas of with future potential (Figure 100 and Figure 102). Of

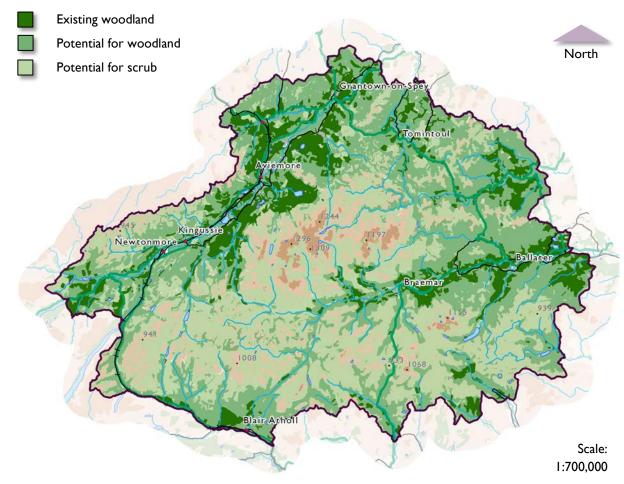


Figure 102 Existing woodland and land with potential for woodland and scrub in the Cairngorms National Park (Based on Soil Survey of Scotland Staff, 1981).

the newly created woodland, around 704ha is adjacent to the existing resource.

However, Lack of regeneration, poor structural diversity and grazing pressure has resulted in some woodlands suffering from reduced biodiversity value.

Improved connectivity through woodland expansion combined with good management is crucial to enhance habitat that supports species of high conservation value. The CNPA Woodlands Expansion programme (Cairngorms National Park Authority, 2008) actively promotes this and in combination with the Cairngorms Deer Management Framework (Cairngorms National Park Authority, 2011) aims to ensure greater connectivity and management.

Table 21 provides the main issues affecting woodlands within the National Park together with actions required to address them.

Table 21 Issues affecting woodlands in the Cairngorms National Park.

Habitat	Issue	Action Required
Caledonian Pinewood	At threat from habitat loss, lack of regeneration, limited deadwood and poor structural diversity. Past management has reduced species diversity in many of the remaining woods.	Improving the existing resource and encouraging expansion into areas for habitat connectivity and resilience which will mitigate against further loss and also enhance the habitat to halt the decline and encourage growth.
Conifer Plantations	Mixture of Scots Pine, Sitka and Norwegian Spruce, Lodgepole pine and Douglas fir and Larch. Many are of single species and single age and are of limited value for biodiversity. Conifer plantations make up 50% of the woodland resource and a third of these are on Ancient Woodland Sites.	 Promote the restoration of Plantations on Ancient Woodland Sites. Encourage and provide advice and guidance on continuous forest cover via workshops, demonstration projects and events. Promote stand restructuring and thinning to create a mosaic of different densities and structures.
Birch & Aspen Woodland	Aspen dominated woodland is unique to the Cairngorms National Park, the stands are small and total less than 350ha concentrated in Strathspey and Deeside.	 Encourage and advise land managers to manage birch woodlands for aspen enhancement. Review grazing management in high nature value areas to encourage vigorous birch and aspen regeneration and a diverse field layer.
Wet & riparian woodland	Fragments of ancient floodplain woodlands are rare in the UK, the Cairngorms National Park has some of the best, especially in Strathspey and Deeside.	 Identify sites for creating and expanding bog and wet woodland. Block drains, re-wet areas and remove non-native conifers.
Upland oak	Lack of regeneration, poor structural diversity and grazing pressure has reduced their biodiversity value. Most of the oak woodlands are found in Deeside	Encourage better land management and reduce grazing pressures.

Key Woodland Species

The CNAP species which have been selected for targeted action and are dependent on woodland habitat are listed in **Table 22**.

Working in partnership, the CNPA is involved in projects aimed directly at improving the status of woodland habitats and associated species, some of which were listed in **Table 22**, within the Cairngorms National Park, these include:

Capercaillie Framework

Capercaillie (*Tetrao urogallus*) populations in Scotland have declined significantly from an estimated 20,000 birds in 1970 to around 1,285 at the most recent national winter survey in 2009/10 (Ewing et al. 2012).

The Cairngorms National Park holds a significant proportion of the national population – at least 75% of the national number of lekking males, with the majority in Strathspey (Eaton *et al.* 2007; Poole, 2010) (**Figure 103**, p. 198).

Table 22 Woodland species selected for targeted action in CNAP (Cairngorms National Park Authority, 2013).

Species	Status in the CNP
Capercaillie Tetrao urogallus	Capercaillie are found almost exclusively in Caledonian Pine Forest. Including Anagach, Rothiemurchas and Abernethy woods. Capercaillie chicks feed on moth caterpillars feeding on blueberry plants, adults and older chicks feed on leaves and berries, during winter they feed on pine needles.
Scottish Wildcat Felix sylvestris	The Scottish wildcat is a rare, elusive and largely nocturnal species confined to the most thinly populated parts of the UK. Main threats to the survival of the species in Scotland were: hybridisation with feral or domestic cats, being inadvertently killed during feral cat control operation and disease.
One-flowered Wintergreen Moneses uniflora	This plant used to be called St Olaf's Candlestick. It has a single nodding white flower at the top of a stem, and a rosette of leaves at the base. Key threats are the loss of the old Caledonian Forest and the harvesting of commercial forests.
Twinflower Linnea borealis	Twinflower is an Artic-alpine flower which is a relic of the ice age it has a stronghold in Strathspey. It is dependent on the open canopy of Caledonian Pinewoods.
Green Shield-moss Buxbaumia viridis	The Green Shield-moss is a rare and endangered species which grows on decaying wood. The loss of woodland cover over the centuries and, more recently, the intense management of woodland areas has led to a significant loss of habitat for this bryophyte species.
Pine Hoverfly Blera fallax	The Pine Hoverfly is found in only two locations in the UK in Strathspey. It needs rotten tree stumps that are more than 40 cm in diameter to breed. The lack of these large stumps in pinewoods – especially stumps with the necessary rot conditions – has been the cause of the decline.

Although capercaillie numbers have held up in Strathspey in recent years, the population is now extremely vulnerable elsewhere. Capercaillie persist in other areas (Deeside, Donside, Easter Ross, Moray and Perthshire) but these populations are smaller and more fragmented.

The Strathspey capercaillie population is crucial to the long-term survival of the species in the UK. The Capercaillie Framework (Cairngorms National Park Authority, 2015) aims to improve conservation for Capercaillie by the introduction of landscape scale measures to target the main threats of disturbance, predation, collision with deer fences, unsympathetic woodland management, habitat loss and fragmentation.

Increased disturbance resulting from development and recreation can have a significant effect on Capercaillie usage of habitat for example Capercaillie have been shown to avoid habitat close to tracks.

Species	Status in the CNP
Pearl-bordered fritillary Boloria euphrosyne	Changes in woodland management over recent years have led to the decline of the species. Woodland practices such as coppicing and thinning are in decline, and many areas have been planted with conifers. Woodland rides and clearings have become increasingly shady and overgrown. Bracken habitats are no longer managed through grazing.
Dark bordered beauty Epione vespertaria	A small yellow- orange moth with brown bordered wings. The caterpillar feeds on young suckering aspen, which requires particular levels of grazing. Only found in a handful of locations in the CNP.
Scarlet splash fungus Cytidia salicina	This fungus appears as a bright red splash on the underside of dead willow branches, especially those lying close to the ground. It has only been recorded 14 times in Scotland most of these records are in the CNP.
Kentish Glory Endronis versicolora	Kentish Glory, a large day flying moth is found in open birch woodlands. Both sexes are brown with white markings on the forewings.
Wood Ants	There are four species considered for action: Formica aquilonia, F. lugubis, F. exsecta and Formicoxensus nitidulus. They perform a number of important roles in the forest ecosystem, earning them the status of "keystone" species; these are species which play critical roles in the structure of their ecological community. Changes in woodland management, deforestation, inappropriate afforestation, urban expansion, human disturbance and agriculture are all linked to the loss of suitable habitat for woodland ant species.

which may reduce overall carrying capacity in forests with a high density of tracks (Rosner et al. 2013). A study at Abernethy forest estimated that 21-41% of suitable woodland habitat could be lost due to avoidance of tracks (Summers et al. 2007). To ensure these factors are considered the framework integrates habitat management, recreation and development plans as outlined in the Cairngorms Nature Strategy (2012-2018), Active Cairngorms (2015) and the Local Development Plan (2015) and suggests mitigation packages be developed to ensure no impact on Capercaillie.

Red Squirrel of the Highlands

The Cairngorms National Park is one of the last strongholds for Red Squirrel (*Sciurus vulgaris*) in the UK. Grey Squirrels (*Sciurus carolinensis*) are larger than the native reds and were introduced to the UK from America and Canada in the early 1900's. They pose a serious threat to the survival of the red squirrel population through transmission of the deadly squirrel pox

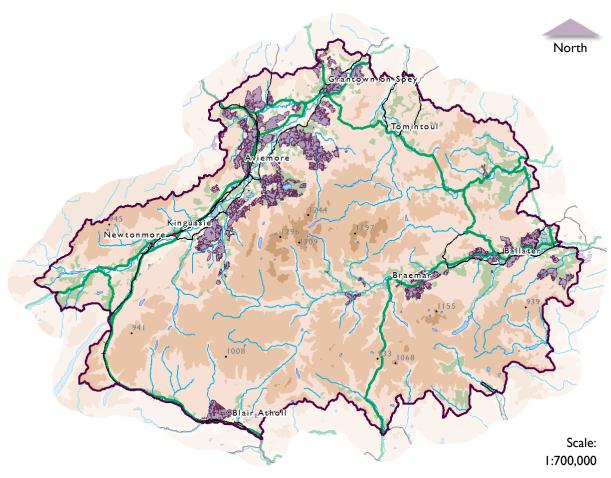


Figure 103 Areas where Capercaillie have been sighted in the Cairngorms National Park since 2007.

virus that the grey squirrel carries. Grey squirrels are occasionally seen moving up the River Dee from Aboyne or moving up the River Garry from Pitlochry. The Red Squirrels of the Highlands Project is working to monitor and conserve Red Squirrels in the National Park.

Wildcat - Tiger of the Highlands

The project raised awareness of the wildcat's (Felis silvestris) plight using a campaign branded 'Highland Tiger'. It worked with a range of partners and interest groups to safeguard surviving Scottish wildcat populations and create favourable conditions for the species to thrive in the future. Part of the project was aimed at assisting gamekeepers to confidently identify wildcats to ensure they are not inadvertently culled through otherwise legal predator control activities. The project also worked with vets and cat welfare charities to encourage responsible cat ownership and the expansion of feral cat trapping and neutering. SNH have produced the Scottish Wildcat Conservation Action Plan 2013-2018, which

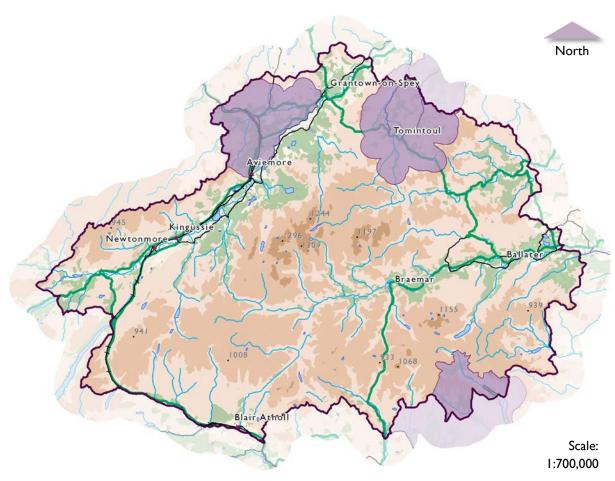


Figure 104 Wildcat Protection Areas within the Cairngorms National Park.

details three Wildcat protection Areas within the National Park (Figure 104).

Deer

There are four species of deer found within the Cairngorms National Park, all contributing to different extents to the biodiversity and economy of the area. The UK's largest wild land mammal, Red Deer (Cervus elaphus) are common in most areas of the National Park and have long been central to the cultural and natural heritage of the Highlands (Figure 105). Their economic importance and significant positive and negative impacts on the land means that their careful management is critical, and at times causes controversy.

Roe Deer (*Capreolus capreolus*) are also numerous in the National Park and are a common sight on lower ground in and around woodlands. Although less high profile, they are popular with wildlife spotters and are valued for venison, but can cause damage to young trees and crops.

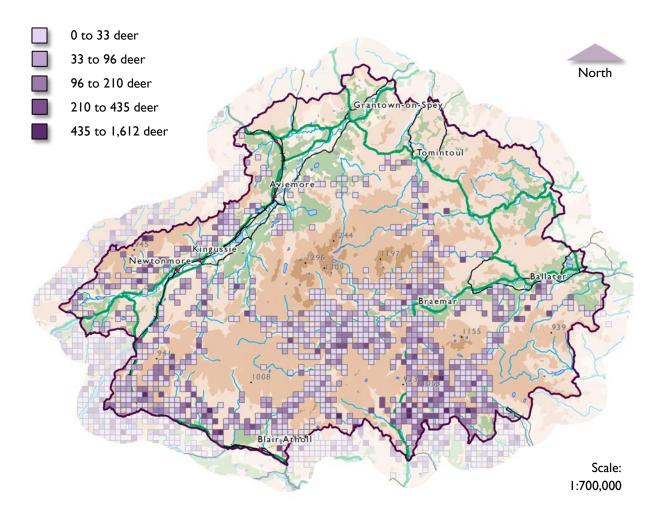


Figure 105 Deer density polygons of 1km² based on results from deer counts, 2000 - 2015.

Non-native Sika Deer (*Cervus nippon*) are present in much smaller numbers and are of concern because of their potential to interbreed with Red Deer.

The unique herd of semi-domestic Reindeer (Rangifer tarandus) in the National Park are important mainly as a tourist attraction.

The Cairngorms Deer Advisory Group is a forum to promote and advise on best practice deer management within the Cairngorms and is formed from local deer group members. In partnership with the CNPA they have produced The Cairngorms Deer Management Framework (Cairngorms National Park Authority, 2011). One of the Framework's aims is to create patchwork of deer densities allowing different deer management objectives to be achieved in different parts of the Park (**Figure 106**).

Key Woodland Sites in the Cairngorms National Park

Key woodlands within the Cairngorms National Park are Abernethy, Glenmore, Rothiemurchas and Inshriach, all of which are located in Strathspey. Together these

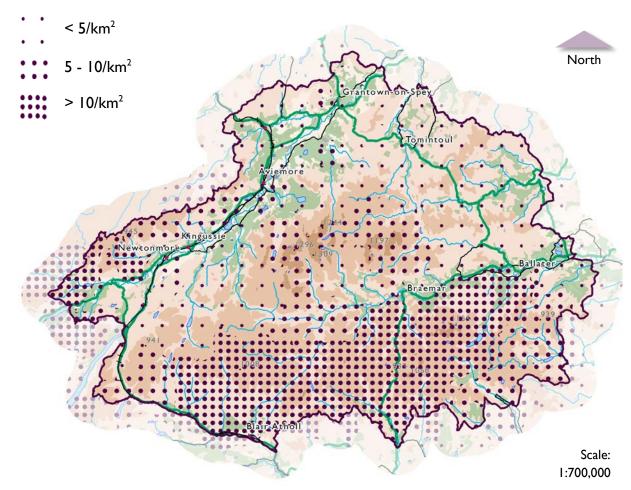


Figure 106 Aspirational Red Deer Densities in the Cairngorms National Park, November 2015.

reserves form the largest continuous tract of native woodland in the UK. In Deeside the two NNRs Glen Tanar and Dinnet Oakwood are examples of Caledonian woodland and old Sessile Oak (Quercus petraea) woodland, a habitat which is very fragmented in north-east Scotland. They are managed by various organisations, which include the Forestry Commission, SNH, RSPB and the Estates. They are home to Osprey (Pandion haliaetus), Capercaillie, Red Squirrel and Crossbill (Loxia curvirostra). The forests have a rich understorey and plant species include Twinflower and One flowered wintergreen (Moneses uniflora).

Freshwater, Wetlands & Wet Grassland

A mosaic of wetland habitats with fens, bogs, woods, wet grassland and open water provides a home to a rich array of wildlife (Figure 107). The National Park is one of the most important sites for breeding waders due to the combination of wetlands, wet grassland and low-intensity mixed farming. Even so, birds such as Lapwing and Redshank have seen dramatic declines in

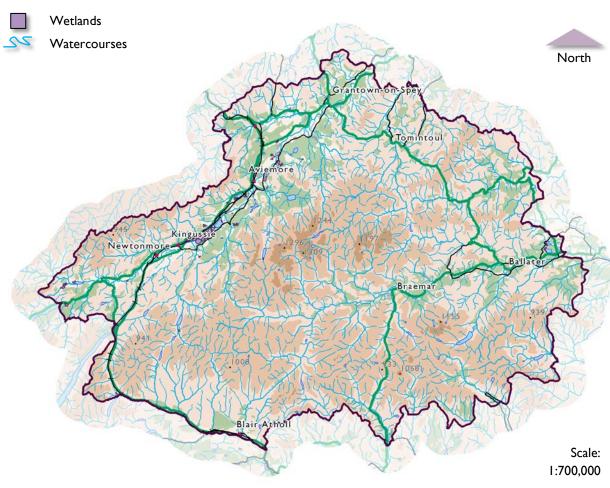


Figure 107 Wetlands within the Cairngorms National Park (Soil Survey of Scotland Staff, 1981).

numbers in recent years. Wet grasslands are the products of agricultural management, they are not extensive within the National Park and are often in low-lying areas of fields where crop yield and productivity is low. Wetlands would have once been an extensive habitat within the Cairngorms National Park but have suffered dramatic declines here as in the rest of the UK.

The Cairngorms are the source of the internationally designated rivers Spey, Dee, Tay and South Esk, which support Atlantic Salmon (Salmo salar), Freshwater Pearl Mussel (Margaritifera margaritifera), Otter (Lutra lutra) and Lamprey (Petromyzontiformes). The lochs support fish including Arctic Charr (Salvelinus alpinus).

The WFD Classification places a requirement on SEPA to monitor the ecological status of waterbodies and its ability to continue to function as such. Within the National Park around 50% of waterbodies are classified as being at good or better ecological status (**Figure 108**), however, recently the ecological status of

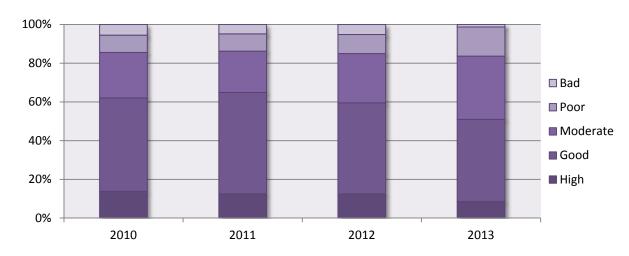


Figure 108 Ecological status of waterbodies within and overlapping the Cairngorms National Park.

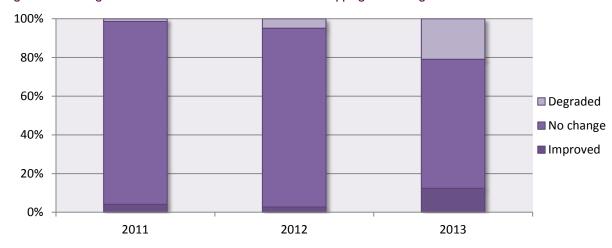


Figure 109 Change from previous year in the ecological status of waterbodies within or overlapping the Cairngorms National Park

Source: http://www.sepa.org.uk/data-visualisation/rbmp-interim-planning-tool/

many waterbodies within the National Park has been on the wane (Figure 109). See Topic 3: Water (p. 96) for further information on the quality of waterbodies in the National Park. Table 23 provides the main issues affecting wetlands within the National Park together with actions required to address them.

Table 23 Issues affecting Freshwater, Wetlands and Wet Grassland in the Cairngorms National Park.

Habitat	Issue	Action Required
Wet Grassland	Over-grazing and poaching by livestock, cutting for hay at critical wader breeding times and drainage to produce productive agricultural land.	Support land managers and farmers to conserve populations of breeding waders. Improve and restore wet grassland.
Wetlands	Wetlands have historically been drained for agriculture, suffered water shortages as a result of over abstraction and impoundment and been subject to pollution pressure from diffuse and point sources. The remaining wetlands are now often small and fragmented.	Create new wetland habitats.
Freshwater	Rivers and lochs and the species they support have been affected by large scale impoundments which have a hydrological impact but also affect sediment dynamics, barriers to fish passage, diffuse and point source pollution and invasive species such as <i>Ranunculus</i> .	Continue to support river management to improve and maintain good ecological status of waterbodies, create new freshwater targets.

Key species for focused action

The CNAP species which have been selected for targeted action and are dependent on Freshwater, Wetlands & Wet Grassland habitat are listed in **Table 24**.

Working in partnership, the CNPA is involved in projects aimed directly at improving the status of wetland habitats and their associated species within the Cairngorms National Park, these include:

River Catchment Initiatives

Several of the rivers within the National Park have associated initiatives who coordinate partnerships to deliver integrated catchment management they are (**Figure 110**):

- > Spey Catchment Initiative,
- Dee Catchment Partnership,
- River South Esk Catchment Partnership, and
- > River Don Catchment Partnership.

The main objectives to meet WFD good status within these catchments are to

Table 24 Freshwater, Wetlands & Wet Grassland species selected for targeted action in CNAP (Cairngorms National Park Authority, 2013).

Species	Status in the CNP
Lapwing Vanellus vanellus	Breeding lapwings are in decline in Strathspey, the Waders and Wetlands Project aims to research reasons for the decline and work with landowners to encourage sympathetic land management.
Northern damselfly Coenagrion hastulatum	This is a very rare and localised species with almost all known lochan locations within the CNP. It is very similar to Common blue damselfly but has a distinctive 'ace of spades' marking.
Northern silver- stiletto fly Spiriverpa lunulata	Stiletto larvae are long, thin, white and worm-like. They are ferocious predators with a glossy hard skin that lets them slither through dry sand as they chase their insect prey. Habitat needs – exposed sand and shingle on river banks
Freshwater pearl mussel Margaritifera margaritifera	The freshwater pearl mussel Margaritifera margaritifera grows to 140 mm in length, and burrows into sandy substrates, often between boulders and pebbles, in fast-flowing rivers and streams. It is sensitive to heavy siltation and requires high water quality.
Northern February red stonefly Brachyptera putata	The Northern February red is a freshwater species endemic to Britain, found mainly in Scottish upland streams. Due to its rarity and decline in numbers this insect has been made a Priority Species on the UK Biodiversity Action Plan (BAP).

address barriers to fish, tackle diffuse pollution and improve river morphology.

Strathspey Wetland and Waders Initiative

The Strathspey Wetlands and Waders Initiative (SWWI) was set up to work with farmers and other landowners to safeguard wetland habitats and the future of the nationally important wader population in Badenoch and Strathspey - the largest of its kind in mainland Britain.

Pearls in Peril

'Pearls in Peril' (PIP) is a UK wide LIFE funded nature project with 22 partners working together to restore river habitats benefiting freshwater pearl mussel and salmonids. A total of 48 actions will be delivered across 21 rivers designated as SACs for freshwater pearl mussel. The freshwater pearl mussel (Margaritifera margaritifera) is declining dramatically throughout its range. Mussel populations have been affected by multiple issues, including wildlife crime – pearl fishing was

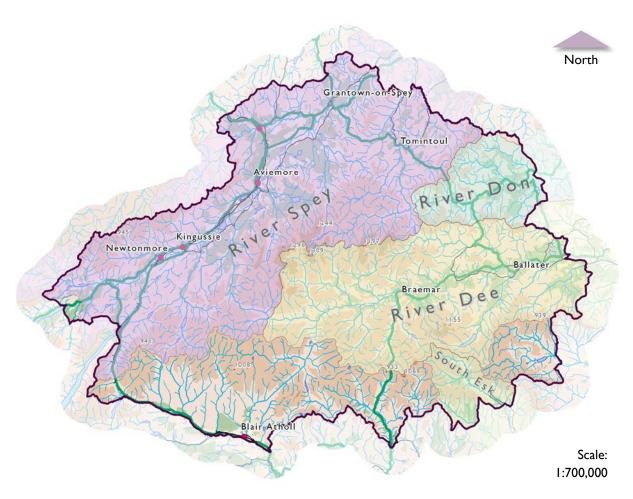


Figure 110 Areas covered by River Catchment Initiatives.

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legal until 1992, habitat degradation and declining water quality. This project will help to safeguard the future of the most important pearl mussel populations in the UK by tackling these threats and implementing best practice conservation methods.

A recent survey of FWPM sites in the River Spey highlighted a 50% decline in the population (Sime, 2014), meaning the status of FWPM in the River Spey SAC is currently classified as unfavourable and declining. The reasons for this are still under investigation but are attributed to water quality, especially nutrient levels; an increase in the abundance of water crowfoot (Ranunculus spp.) in the middle and lower Spey; low river levels in the middle and lower reaches which have killed established mussel beds; illegal fishing and no recruitment of juveniles in the middle to upper reaches which means the distribution will gradually contract as older mussels die.

Key Wetland Sites

Muir of Dinnet NNR

At the heart of the Reserve are Lochs Davan and Kinord, with their near pure water and associated bogs and fens providing ideal habitat for a wide mix of species; from rare water beetles to mammals like otter, feeding and breeding on the Reserve. During winter, the lochs are an important roost site, attracting migrating geese and other wildfowl. Their international importance is recognised by their designation as a SAC, SPA and Ramsar site.

Muir of Dinnet has two areas of raised bog, one at Parkin's Moss to the south-west of Loch Kinord and the other at Black Moss to the north-east of the Reserve. Together they cover approximately 32ha. Sphagnum mosses, the most important plants of a raised bog, are found at both locations, growing in the wet, acid and nutrient poor conditions. Both bogs support other specialist bog plants including bog cotton, cranberry and the carnivorous plants,

butterwort and sundew. The bogs are also home to a wide variety of insects, including at least eight species of dragonfly or damselfly.

Insh Marshes NNR

One of the most designated wetlands sites in Scotland, the Insh Marshes is owned and managed by the RSPB and is renowned for its birdlife throughout the year. The marshes are also home to rare invertebrates such as the newly discovered in Scotland caddisfly (Molanna angustata) and hoverfly (Cheilosia psilophthalma) and a population of Dark Bordered Beauty moth (Epione vespertaria). Mammals include water vole and otter. Wetland vegetation includes String Sedge (Carex chordorrhiza), which is only found at one other location in Scotland. Its international importance is recognised by its designation as a SAC, SPA and Ramsar site.

Uplands

The Cairngorms are considered to be one of the most spectacular mountain areas in Britain and support a rich arctic montane flora (Figure 111). Upland heath is the most extensive habitat due mainly to human activities such as felling, burning and grazing which prevents natural tree regeneration and drainage to allow grouse and red deer hunting. Blanket bog (Figure 51 to 52) is the second most extensive habitat and is mainly *Calluna-Eriophorum* dominated blanket mire.

Montante scrub is where dwarf trees and shrubs grow above the natural tree line. Dwarf willows, birches and juniper grow in a low twisted, wind-pruned form together with a variety of flowering plants, fungi, lichen and insects. The best example of a continuous treeline in Britain is at Creag Fhialach above Inshriach where a complex of Juniper and birch scrub grows at 550-650m.

Table 25 provides the main issues affecting uplands within the National Park together

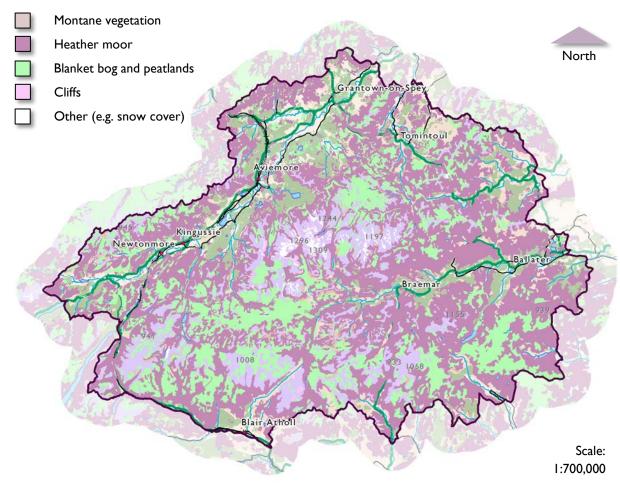


Figure 111 Upland land cover types within the Cairngorms National Park (Soil Survey of Scotland Staff, 1981).

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with actions required to address them.

Table 25 Issues affecting uplands in the Cairngorms National Park.

Habitat	Issue	Action Required
Montane & moorland	Climate change, trampling, erosion and disturbance.	Reduced grazing pressure and sympathetic disturbance.
Upland heathland	Drainage.	Restoration and blockage of drainage channels.
Blanket bog	Erosion, which is likely to be a significant cause of carbon emissions.	Sustainable deer management and following the Muirburn Code.
Montane scrub	Overgrazing and burning.	Deer Management to prevent overgrazing.

Key species for focused action

Those Cairngorms Nature Action Plan species dependent upon upland habitat are listed in **Table 26**.

Working in partnership, the CNPA is involved in projects aimed directly at improving the status of upland habitats and their associated species within the Cairngorms National Park, these include:

Golden Eagle

North East Scotland Raptor Watch began in 2006. It's a partnership project that aims to address the problem of declining populations of rare or endangered species of birds of prey that breed in the uplands of North East Scotland. The Raptortrack project is into its fifth year of satellite tracking specific raptors in the Cairngorms National Park. Three golden eagles (Aquila chrysaetos) are presently being followed.

Montane Scrub Expansion

High altitude birches, willows and junipers would have been much more prevalent in

Table 26 Upland species selected for targeted action in CNAP (Cairngorms National Park Authority, 2013).

-			
Species	Status in the CNP		
Golden eagle	Breeds in high altitude areas of the CNP. At threat from persecution		
Aquila chrysaetos	and disturbance.		
Alpine blue sow	Alpine blue-sow-thistle is a very rare plant in the UK; it grows on		
thistle	only four rocky ledges sites on the Cairngorm Massif. It was once		
Cicerbita alpina	part of a more widely distributed mountain flora that is today		
•	restricted by changing land management practices and increased		
	levels of grazing.		
Tufted saxifrage	A cushion-forming, perennial herb of well-drained base-rich rocks. It		
Saxifraga cespitosa	is found on mossy ledges, in crevices and on boulder-scree slopes, it		
,	is in decline in the Cairngorms.		
Powdered sunshine	Records exist for the Eastern and Southern Cairngorms.		
lichen	-		
Vulpicida pinastri			

the Cairngorms in the past. Centuries of burning and heavy grazing by livestock and deer have taken their toll on trees and shrubs which grow only slowly amid the poor soils and exposed conditions found high in the Cairngorms. Cairngorms Nature is bringing landowners in the core of the national park together to help identify where all the remnants are and the condition they're in, and explore ways of enhancing and expanding them.

The Cairngorms SAC/SPA is a key site in the effort to expand mountain scrub. Some of the best cliff and scree flora in the Cairngorms is found high up in the cliff buttresses, ridges and deeply indented gullies of the Northern Corries. A number of rare species grow here including alpine saxifrage (Micranthes nivalis), Highland saxifrage (Saxifraga rivularis), hare's-foot sedge (Carex lachenalii), curved wood-rush (Luzula arcuata) and green shield-moss (Buxbaumia viridis) above the treeline in

Creag Fhiaclach is one of the best areas for montane scrub in Britain.

Lowlands

The lowland farmland and grassland within the National Park (Figure 112) has been traditionally managed less intensively than the rest of the UK. There are small fragmented areas of lowland and upland hay meadows which are locally important for biodiversity and include many species of orchid and waxcap fungi.

Those Cairngorms Nature Action Plan species dependent on lowland habitat are listed in **Table 27**.

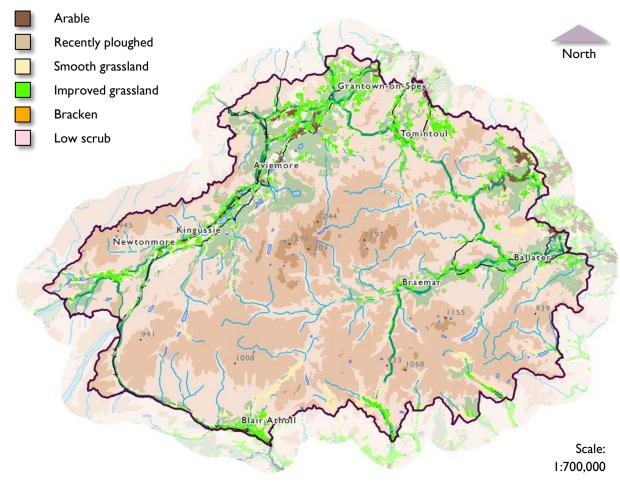


Figure 112 Lowland land cover types (excluding woodlands and moorland) within the Cairngorms National Park (Soil Survey of Scotland Staff, 1981).

Working in partnership, the CNPA is involved in projects aimed directly at improving the status of lowland habitats and their associated species within the Cairngorms National Park, these include:

Farm Advisory

Most of the farms in the Cairngorms National Park are livestock farms. Farmers and crofters keep beef cows, sheep and grow small areas of crops. Most of the crops are for feeding to livestock - grass for hay and silage, turnips for sheep in winter however some crops such as barley are grown for whisky distilleries. Many of the farmers and crofters in the park are in 'agrienvironment' schemes, which means that they take extra care of the environment by careful grazing, growing special crops for birds, and growing wildflower meadows. The CNPA provides advice, support, various projects and special learning events such as the Land Management Training Series which recently included a deer stalking course for women working within the Cairngorms National Park.

Table 27 Lowland species selected for targeted action in CNAP (Cairngorms National Park Authority, 2013).

Species	Status in the CNP
Small dark yellow underwing Anarta cordigera	Depends on bearberry-rich moorland, mainly at altitudes of between 200-650m. Flies rapidly in sunshine, but in dull weather can be found at rest on rocks and posts.
Mining bee Andrena marginata	Requires bare ground for nesting and grassland rich in devils-but scabious as a nectar source. Only a handful of known sites in the National Park.
Violet oil beetle Meloe violaceus	Occurs in woodland, heathland and grassland habitats where solitary bees are abundant which it requires for part of its lifecycle.
Crimson waxcap Hygrobyce punicea	One of the largest of the waxcaps, Hygrocybe punicea is an infrequent find on cropped grassland. It occurs in late summer and autumn and is only found in grassland along Strathspey and Deeside.

Bio-security

Non-native species, pathogens and disease can have an impact on the nature of the Cairngorms National Park and a range of environment-based economic activities including fishing, farming and forestry.

Non-native species can kill, harbour disease, or compete with native species. A number have been recorded in the National Park, including the plants, Japanese knotweed (Fallopia japonica), giant hogweed (Heracleum mantegiazzanum), Himalayan balsam (Impatiens glandulifera), American

Skunk Cabbage (Lysichiton americanus); the mammals American Mink (Mustela vison) and Grey Squirrel (Sciurus carolinensis); and the fish, rudd (Scardinius erythrophthalmus), roach (Rutilus rutilus), tench (Tinca tinca), golden orfe (Leuciscus idus) and bream (Abramis brama).

The CNPA is a partner in the Scottish Mink Initiative which aims to have river catchments within the Cairngorms (and throughout Scotland) free from mink to enhance water vole and ground nesting bird populations. The CNPA also supports the

Cairngorms non-native fish project to stop the deliberate or accidental release of nonnative fish into the Dee or Spey catchments.

Pathogens can cause death or reduce viability of populations which has great implications for habitat connectivity.

Red band needle blight (also known as Dothistroma Needle Blight) is a fungus which causes the premature loss of pine needles. In the Cairngorms National Park planting of Scots Pine next to existing stands is currently discouraged, which could have long term impacts on woodland structure and species composition.

Ash dieback or Chalara (Hymenoecyphus fraxineus) is a fungus causing dieback and mortality in Ash trees. In 2015, records show it on the southern edges of the Cairngorms National Park.

Ramorum Phytophthora ramorum is a fungal disease of Larch, the highest incidence is in the south west of Scotland but it was recorded on the southern and eastern

fringes of the Cairngorms National Park in 2015.

Phytophthora austrocedraeon is a fungus which causes dieback and mortality in Juniper when it attacks the roots and stems, it has been found within the Cairngorms National Park and is thought to be transmitted to new areas through movement of sheep.

Key Messages

The Cairngorms National Park is considered to be one of the richest and biodiverse places in the UK, being home to 25% of the UK's rare animal, insect, lichen, fungi and insect species.

Consequently, large areas have are protected by various types of national and international nature designation, including NNRs, SSSIs, SACs and SPAs. A number of these designations are however in unfavourable condition.

Increasingly the National Park's valued species and habitats are under threat from habitat loss, fragmentation, disturbance and unsustainable land management practices. Some important species, such as Capercaillie and Freshwater Pearl Mussel have been under particular pressure and have seen significant drops in their population.

The Cairngorms National Park Authority already has a number of PPS in place to help prevent, mitigate and compensate the loss of biodiversity, including the Cairngorms Nature Action Plan (2013), Active Cairngorms Strategy (2015), The Cairngorms National Park Forest and Woodland Framework (2008) and Deer Framework for the Cairngorms National Park (2011). The implementation NPPP may therefore result a number of cumulative, synergistic and in-combination with these. Together they should work towards a cohesive approach addressing issues, linking the needs of people with the natural environment.

Inter-relationships with other topics Topic I: Climatic Factors 83 Topic 2: Air 92 Topic 3: Water 96 Topic 4: Soil 113 Topic 5: Material Assets 124 Topic 7: Landscape and Cultural Heritage 215 Topic 8: Population and Human Health 244