
PLANNING

Cairngorms National Park Local
Development Plan 2020

**Strategic Environmental Assessment
Environmental Report January 2019**

**Appendix 2: Environmental Baseline
Topic 6: Biodiversity, Fauna and Flora**

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 NNRs¹⁰ (**Table 18** and **Figure 81**), which cover a combined area of around 513 km².

¹⁰ While the Cairngorms NNR, Dinnet Oakwood NNR and Morrone Birkwood NNR are technically declared NNRs (see Table 12), 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 18 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

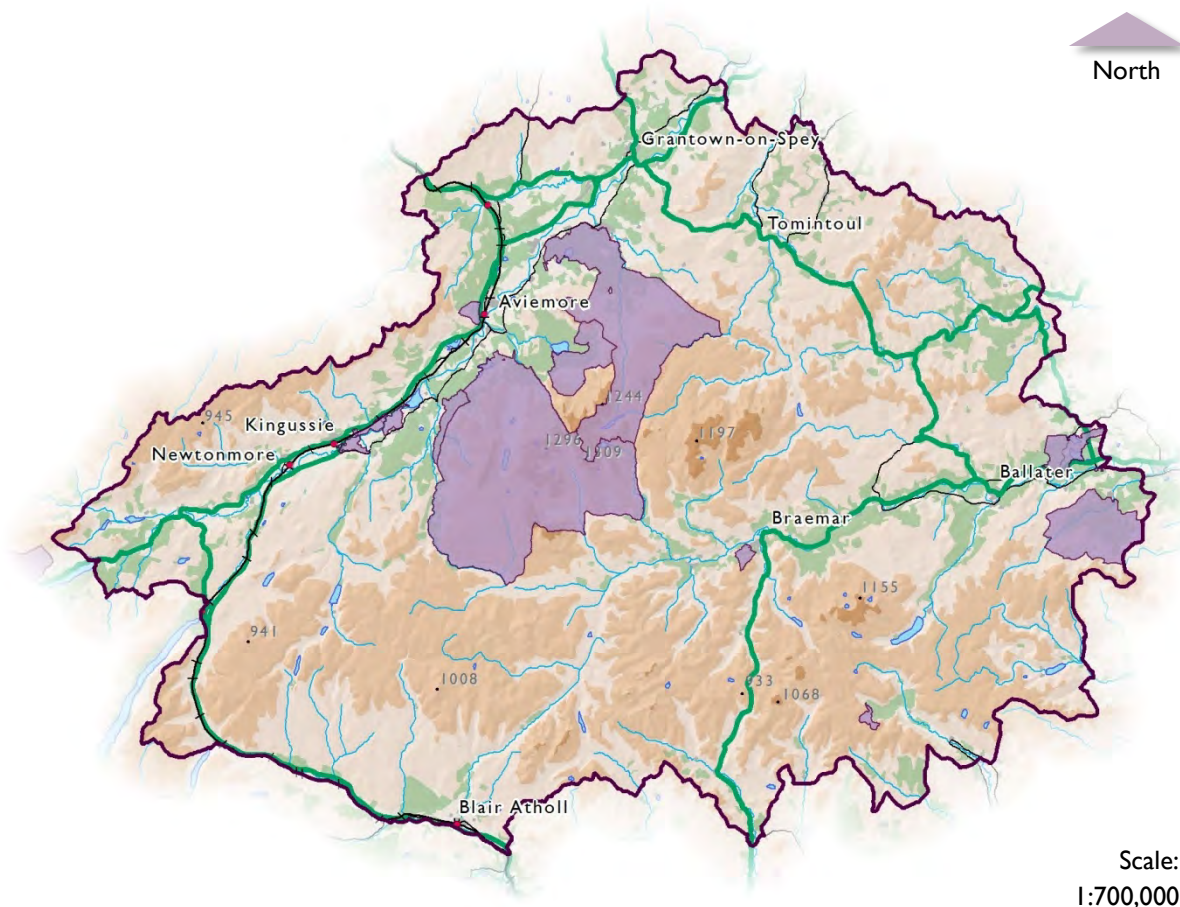


Figure 81 National Nature Reserves in the Cairngorms National Park.

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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 19** **Figure 82** and **Figure 84**).

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. 155) and **Topic 5: Material Assets** (p. 166).

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

Features in ‘Favourable’ condition.
Features that are in ‘Unfavourable’ condition.
Features that have not been monitored to date.

Table 19 Condition of Biological and Mixed SSSIs located within the Cairngorms National Park.

Site Code	Name	Type	Total Area (ha)	Are in CNP (ha)	Interest	Summary Condition	Pressures	Visit Date
9	Abernethy Forest	Mixed	5793.46	5793.46	Basin fen	Favourable	No negative pressures identified	18/10/2014
					Beetle assemblage	Favourable	Over-grazing	17/11/2002
					Breeding bird assemblage	Favourable	No negative pressures identified	23/04/2013
					Capercaillie (<i>Tetrao urogallus</i>), breeding	Favourable	Under-grazing	19/04/2014
					Crested tit (<i>Lophophanes cristatus</i>), breeding	Favourable	No negative pressures identified	03/05/1998
					Dragonfly assemblage	Favourable	Forestry operations, other	01/08/2013
					Fluvial Geomorphology of Scotland	Favourable	Invasive species	06/04/2007
					Fungi assemblage	Favourable	Over-grazing, under-grazing	01/10/2014
					Invertebrate assemblage	Favourable	Trampling	01/08/2013

Site Code	Name	Type	Total Area (ha)	Are in CNP (ha)	Interest	Summary Condition	Pressures	Visit Date
					Lichen assemblage	Favourable	No negative pressures identified	25/06/2010
					Native pinewood	Favourable	Game/ fisheries management	30/09/2008
					Osprey (<i>Pandion haliaetus</i>), breeding	Unfavourable	No negative pressures identified	14/06/2013
					Quaternary of Scotland	Favourable	No negative pressures identified	03/05/2007
					Raised bog	Favourable	No negative pressures identified	12/08/2014
					Scottish crossbill (<i>Loxia scotica</i>), breeding	Favourable	No negative pressures identified	28/03/2012
					Subalpine dry heath	Unfavourable Recovering Due to Management	Burning, under-grazing	27/09/2004
					Vascular plant assemblage	Favourable	Maintenance activities	28/03/2007
30	Aldclune and Invervack Meadows	Biological	16.61	16.61	Lowland calcareous grassland	Unfavourable	Under-grazing	22/08/2012
44	Allt Mor	Geological	40.68	40.68	Fluvial Geomorphology of Scotland	Favourable	No negative pressures identified	27/04/2007
53	Alvie	Biological	339.01	339.01	Goldeneye (<i>Bucephala clangula</i>), breeding	Favourable	No negative pressures identified	15/05/2013
					Hydromorphological mire range	Favourable	No negative pressures identified	13/07/2011

Site Code	Name	Type	Total Area (ha)	Are in CNP (ha)	Interest	Summary Condition	Pressures	Visit Date
					Invertebrate assemblage	Favourable	Forestry operations, over-grazing	16/07/2013
					Upland oak woodland	Unfavourable Recovering Due to Management	Over-grazing	20/07/2005
161	Beinn a' Ghlo	Mixed	8084.76	7763.08	Breeding bird assemblage	Favourable	Game/ fisheries management	20/06/2013
					Bryophyte assemblage	Favourable	No negative pressures identified	17/08/2013
					Caledonian Igneous	Favourable	No negative pressures identified	24/11/2010
					Dalradian	Favourable	No negative pressures identified	25/04/2002
					Upland assemblage	Favourable	No negative pressures identified	22/07/2010
					Upland birch woodland	Favourable	No negative pressures identified	30/07/2004
					Vascular plant assemblage	Favourable	Agricultural operations	29/08/2002
223	Blair Atholl Meadow	Biological	0.55	0.55	Lowland calcareous grassland	Unfavourable Recovering Due to Management	Agricultural operations	17/07/2007
235	Bochel Wood	Biological	197.87	197.55	Upland birch woodland	Favourable	No negative pressures identified	19/06/2000
282	Uenloch	Biological	4974.75	4974.75	Breeding bird assemblage	Favourable	Over-grazing, recreation / disturbance	01/07/2003

Site Code	Name	Type	Total Area (ha)	Are in CNP (ha)	Interest	Summary Condition	Pressures	Visit Date
					Bryophyte assemblage	Favourable	Trampling	31/12/2005
					Dystrophic loch	Favourable	Over-grazing	02/07/2004
					Invertebrate assemblage	Favourable	No negative pressures identified	15/08/2011
					Lichen assemblage	Favourable	No negative pressures identified	03/10/2010
					Montane assemblage	Unfavourable	Over-grazing	16/07/2006
					Quaternary of Scotland	Favourable	No negative pressures identified	26/07/2011
					Vascular plant assemblage	Unfavourable	Over-grazing, to be identified	31/08/2009
288	Cairngorms	Mixed	29226.7	29226.7	Breeding bird assemblage	Favourable	Over-grazing, recreation / disturbance	15/07/2006
					Bryophyte assemblage	Favourable	Natural event	18/08/2005
					Dotterel (<i>Charadrius morinellus</i>), breeding	Favourable	Over-grazing, recreation / disturbance, trampling	01/07/2011
					Dystrophic and oligotrophic lochs	Not monitored to date	No negative pressures identified	N/A
					Fluvial Geomorphology of Scotland	Favourable	Forestry operations	30/04/2003
					Fungi assemblage	Favourable	Over-grazing, recreation / disturbance	20/10/2010
					Golden eagle (<i>Aquila chrysaetos</i>), breeding	Favourable	Recreation/disturbance	21/10/2007
					Invertebrate assemblage	Favourable	Agricultural operations, other	30/08/2013
					Lichen assemblage	Favourable	Over-grazing	19/08/2010

Site Code	Name	Type	Total Area (ha)	Are in CNP (ha)	Interest	Summary Condition	Pressures	Visit Date
					Mineralogy of Scotland	Favourable	No negative pressures identified	30/08/2006
					Native pinewood	Unfavourable Recovering Due to Management	Over-grazing, under-grazing	27/01/2009
					Ptarmigan (<i>Lagopus muta</i>), breeding	Favourable	Recreation/disturbance	17/07/2004
					Quaternary of Scotland	Favourable	Climate Change, recreation / disturbance	07/08/2003
					Snow bunting (<i>Plectrophenax nivalis</i>), breeding	Favourable	Recreation / disturbance, other	24/07/2004
					Upland assemblage	Not monitored to date	No negative pressures identified	N/A
					Vascular plant assemblage	Favourable	Natural event	05/10/2006
291	Cairnwell	Biological	22.96	22.96	Alpine calcareous grassland	Favourable	Over-grazing	20/08/2008
					Vascular plant assemblage	Favourable	Over-grazing	20/07/2011
415	Coyles of Muick	Biological	122.52	122.52	Calaminarian grassland and serpentine heath	Favourable	No negative pressures identified	25/07/2012
					Subalpine flushes	Favourable	No negative pressures identified	08/07/2008
					Vascular plant assemblage	Favourable	No negative pressures identified	25/07/2012

Site Code	Name	Type	Total Area (ha)	Are in CNP (ha)	Interest	Summary Condition	Pressures	Visit Date
419	Craig Leek	Biological	185.13	185.13	Bryophyte assemblage	Unfavourable Recovering Due to Management	Under-grazing	24/07/2009
					Native pinewood	Favourable	Over-grazing	10/09/2009
					Subalpine calcareous grassland	Favourable	Invasive species	01/08/2006
					Upland assemblage	Unfavourable	Forestry operations, under-grazing	16/07/2012
					Upland birch woodland	Unfavourable Recovering Due to Management	Over-grazing	14/07/2011
					Vascular plant assemblage	Favourable	No negative pressures identified	21/11/2013
428	Craigellachie	Biological	379.85	379.85	Moth assemblage	Favourable	Other	13/08/2014
					Upland birch woodland	Favourable	Burning	23/07/2009
429	Craigendarroch	Biological	67.07	67.07	Upland oak woodland	Favourable	No negative pressures identified	10/07/2013

Site Code	Name	Type	Total Area (ha)	Are in CNP (ha)	Interest	Summary Condition	Pressures	Visit Date
452	Crathie Wood	Biological	193.34	29.06	Invertebrate assemblage	Favourable	Agricultural operations, over-grazing	05/08/2013
					Juniper scrub	Favourable	Burning, plant pests and diseases, under-grazing	18/09/2012
					Native pinewood	Favourable	Plant pests and diseases	13/08/2009
					Rocky slopes (includes inland cliff, rocky outcrops, chasmophytic vegetation)	Favourable	No negative pressures identified	18/09/2012
					Upland birch woodland	Favourable	No negative pressures identified	18/09/2012
1697	Creag Clunie and the Lion's Face	Biological	251.94	251.94	Bryophyte assemblage	Not monitored to date	No negative pressures identified	N/A
					Capercaillie (<i>Tetrao urogallus</i>), breeding	Unfavourable	Over-grazing, under-grazing	31/03/2011
					Elm Gyalecta lichen (<i>Gyalecta ulmi</i>)	Favourable	Invasive species	11/02/2003
					Lichen assemblage	Not monitored to date	No negative pressures identified	N/A
					Native pinewood	Unfavourable Recovering Due to Management	Invasive species, over-grazing	08/08/2011
					Scottish crossbill (<i>Loxia scotica</i>), breeding	Favourable	No negative pressures identified	01/03/2015
455	Creag Dhubh	Biological	1052.31	1052.31	Upland birch woodland	Unfavourable	Over-grazing	03/07/2009
457	Creag Meagaidh	Biological	7033.13	507.19	Breeding bird assemblage	Favourable	Over-grazing, recreation / disturbance, trampling	26/06/2013

Site Code	Name	Type	Total Area (ha)	Are in CNP (ha)	Interest	Summary Condition	Pressures	Visit Date
					Rocky slopes (includes inland cliff, rocky outcrops, chasmophytic vegetation)	Favourable	Natural event	30/09/2005
					Upland assemblage	Favourable	Trampling	30/09/2005
					Upland birch woodland	Favourable	No negative pressures identified	10/09/2015
					Vascular plant assemblage	Favourable	Natural event	04/09/2011
460	Creag nan Gamhainn	Biological	15.75	6.2	Broad-leaved helleborine (<i>Epipactis helleborine</i>)	Favourable	Maintenance activities	28/08/2012
					Lowland calcareous grassland	Favourable	Invasive species	28/08/2012
					Lowland neutral grassland	Favourable	No negative pressures identified	14/07/2008
					Northern brown argus (<i>Aricia artaxerxes</i>)	Favourable	Maintenance activities	14/07/2008
					Springs (including flushes)	Favourable	No negative pressures identified	21/07/2011
					Upland birch woodland	Favourable	No negative pressures identified	16/07/2002
490	Dalnabo Quarry	Geological	0.28	0.28	Mineralogy of Scotland	Favourable	Natural event	18/10/2007
514	Dinnet Oakwood	Biological	19.73	19.73	Upland oak woodland	Favourable	Invasive species, no proactive management, over-grazing	12/07/2002

Site Code	Name	Type	Total Area (ha)	Are in CNP (ha)	Interest	Summary Condition	Pressures	Visit Date
541	Drumochter Hills	Biological	9688.13	7625.11	Breeding bird assemblage	Favourable	Over-grazing, recreation / disturbance	25/04/2003
					Fluvial Geomorphology of Scotland	Favourable	No negative pressures identified	11/10/2011
					Montane assemblage	Favourable	No negative pressures identified	31/07/2006
					Vascular plant assemblage	Unfavourable	Burning, over-grazing, water management	15/08/2003
593	Eastern Cairngorms	Mixed	16503.4	16503.4	Arctic charr (<i>Salvelinus alpinus</i>)	Favourable	No negative pressures identified	18/07/2008
					Breeding bird assemblage	Favourable	Burning, game/ fisheries management	14/06/2013
					Bryophyte assemblage	Unfavourable	Air pollution	31/07/2010
					Dystrophic and oligotrophic lochs	Favourable	Game/ fisheries management	21/06/2010
					Fluvial Geomorphology of Scotland	Favourable	Water management	15/01/2003
					Fungi assemblage	Not monitored to date	No negative pressures identified	N/A
					Invertebrate assemblage	Favourable	Forestry operations	04/07/2013
					Lichen assemblage	Not monitored to date	No negative pressures identified	N/A
					Native pinewood	Unfavourable Recovering Due to Management	Natural event, over-grazing	01/04/2008
					Quaternary of Scotland	Favourable	Recreation/disturbance	07/08/2003

Site Code	Name	Type	Total Area (ha)	Are in CNP (ha)	Interest	Summary Condition	Pressures	Visit Date
					Upland assemblage	Not monitored to date	No negative pressures identified	N/A
					Vascular plant assemblage	Favourable	Burning, over-grazing, recreation / disturbance	31/08/2010
1696	Fafernie	Biological	252.44	252.44	Breeding bird assemblage	Favourable	Over-grazing, recreation / disturbance	30/04/2003
					Dotterel (<i>Charadrius morinellus</i>), breeding	Favourable	Burning, recreation / disturbance	31/05/1999
646	Fodderletter	Biological	3.08	1.19	Lowland acid grassland	Favourable	No negative pressures identified	14/07/2008
					Springs (including flushes)	Favourable	No negative pressures identified	25/06/2013
1709	Forest of Clunie	Biological	19476.6	233.8	Black grouse (<i>Tetrao tetrix</i>), breeding	Favourable	Burning, natural event, over-grazing	14/05/2009
					Breeding bird assemblage	Favourable	Water management	29/05/2009
					Hen harrier (<i>Circus cyaneus</i>), breeding	Unfavourable	Burning, natural event, over-grazing	29/05/2009
					Osprey (<i>Pandion haliaetus</i>), breeding	Favourable	No negative pressures identified	01/08/2010
					Short-eared owl (<i>Asio flammeus</i>), breeding	Unfavourable	Burning	29/05/2009
670	Garbh Choire	Biological	229.32	229.32	Alpine flush	Favourable	Over-grazing	22/06/2011
					Bryophyte assemblage	Unfavourable Recovering Due to Management	Over-grazing	27/10/2004
					Snowbed	Not monitored to date	Over-grazing	N/A

Site Code	Name	Type	Total Area (ha)	Are in CNP (ha)	Interest	Summary Condition	Pressures	Visit Date
					Spring-head, rill and flush	Unfavourable Recovering Due to Management	Over-grazing	10/07/2006
					Upland assemblage	Unfavourable	Natural event, Over-grazing, Trampling	03/08/2012
					Vascular plant assemblage	Unfavourable Recovering Due to Management	Over-grazing	16/07/2005
693	Glas Tulaichean	Biological	456.43	456.43	Vascular plant assemblage	Favourable	Natural event	13/07/2010
702	Glen Callater	Biological	1513.01	1513.01	Alpine blue-sow-thistle (<i>Cicerbita alpina</i>)	Not monitored to date	No negative pressures identified	N/A
					Alpine heath	Favourable	No negative pressures identified	30/07/2015
					Blanket bog	Unfavourable	Natural event, trampling	30/07/2015
					Breeding bird assemblage	Favourable	Game/ fisheries management	21/06/2013
					Bryophyte assemblage	Favourable	No negative pressures identified	30/10/2010
					Mineralogy of Scotland	Favourable	No negative pressures identified	10/07/2013
					Oligotrophic loch	Favourable	No negative pressures identified	09/07/2009

Site Code	Name	Type	Total Area (ha)	Are in CNP (ha)	Interest	Summary Condition	Pressures	Visit Date
					Spring-head, rill and flush	Favourable	Over-grazing, trampling	05/09/2001
					Tall herb ledge	Favourable	Under-grazing	30/07/2015
					Upland assemblage	Not monitored to date	No negative pressures identified	N/A
					Vascular plant assemblage	Unfavourable	Natural event, over-grazing	04/08/2006
705	Glen Ey Gorge	Mixed	41.24	41.24	Dalradian	Favourable	No negative pressures identified	31/07/2012
					Subalpine dry heath	Favourable	Over-grazing	24/05/2013
					Tall herb ledge	Favourable	No negative pressures identified	31/07/2012
708	Glen Fender Meadows	Biological	96.15	96.15	Lowland calcareous grassland	Favourable	No negative pressures identified	02/08/2002
					Lowland dry heath	Unfavourable Recovering Due to Management	Agricultural operations, over-grazing	02/06/2014
					Springs (including flushes)	Unfavourable Recovering Due to Management	Under-grazing	02/09/2004
					Vascular plant assemblage	Favourable	Over-grazing	09/08/2014
710	Glen Garry	Geological	28.59	0	Dalradian	Favourable	No negative pressures identified	29/01/2001
724	Glen Tanar	Mixed	4180.09	4142.25	Capercaillie (<i>Tetrao urogallus</i>), breeding	Unfavourable	No negative pressures identified	30/04/2014

Site Code	Name	Type	Total Area (ha)	Are in CNP (ha)	Interest	Summary Condition	Pressures	Visit Date
					Fungi assemblage	Favourable	No negative pressures identified	26/10/2009
					Invertebrate assemblage	Favourable	Forestry operations, under-grazing	26/06/2013
					Native pinewood	Favourable	Invasive species	08/04/2010
					Scottish crossbill (<i>Loxia scotica</i>), breeding	Favourable	No negative pressures identified	23/03/2012
					Subalpine dry heath	Favourable	No negative pressures identified	17/11/2009
726	Glen Tilt Woods	Biological	15.02	9.4	Upland mixed ash woodland	Favourable	No negative pressures identified	15/08/2000
1665	Glenmore Forest	Biological	1440.38	1440.38	Capercaillie (<i>Tetrao urogallus</i>), breeding	Favourable	Proactive on-site management	30/04/2009
					Narrow-headed ant (<i>Formica exsecta</i>)	Favourable	Conservation activities, Inter-specific competition, No proactive management	30/08/2013
					Native pinewood	Favourable	Game/ fisheries management	16/06/2008
					Quaternary of Scotland	Not monitored to date	No negative pressures identified	N/A
					Scottish crossbill (<i>Loxia scotica</i>), breeding	Not monitored to date	No negative pressures identified	7/03/2012
					Vascular plant assemblage	Favourable	No negative pressures identified	23/07/2007
742	Ben Hill of Strath	Biological	640.77	640.77	Calaminarian grassland and serpentine heath	Favourable	Over-grazing	02/08/2002
					Moorland juniper	Favourable	Burning	29/07/2011

Site Code	Name	Type	Total Area (ha)	Are in CNP (ha)	Interest	Summary Condition	Pressures	Visit Date
					Subalpine dry heath	Favourable	Burning, over-grazing	15/08/2008
					Subalpine flushes	Favourable	No negative pressures identified	29/07/2011
807	Inchrory	Mixed	1089.93	1089.93	Mountain whorl snail (<i>Vertigo alpestris</i>)	Favourable	No negative pressures identified	17/07/2013
					Northern brown argus (<i>Aricia artaxerxes</i>)	Not monitored to date	No negative pressures identified	N/A
					Quaternary of Scotland	Favourable	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	Burning, over-grazing, trampling	09/06/2008
858	Kinlochlagan Boulder Beds	Geological	6.13	6.13	Dalradian	Favourable	No negative pressures identified	08/01/2014
864	Kinveachy Forest	Biological	5325.7	3728.87	Breeding bird assemblage	Favourable	No negative pressures identified	08/06/2007
					Native pinewood	Favourable	No negative pressures identified	24/06/2008
887	Ladder Hills	Biological	4357.94	4357.94	Alpine heath	Favourable	Game/ fisheries management	04/07/2013
					Blanket bog	Favourable	Agricultural operations, burning	03/09/1999
					Mineralogy of Scotland	Favourable	No negative pressures identified	31/03/2006

Site Code	Name	Type	Total Area (ha)	Are in CNP (ha)	Interest	Summary Condition	Pressures	Visit Date
					Subalpine dry heath	Unfavourable	Burning, over-grazing, recreation / disturbance	09/04/2007
					Upland assemblage	Unfavourable	Agricultural operations, burning	04/07/2013
968	Loch Brandy	Biological	98.98	98.98	Bryophyte assemblage	Favourable	Recreation / disturbance	31/10/2010
					Oligotrophic loch	Favourable	Recreation / disturbance	01/07/2004
981	Loch Etteridge	Geological	114.94	114.94	Quaternary of Scotland	Favourable	Agricultural operations, extraction, recreation / disturbance	28/03/2000
1014	Loch Moraig	Biological	33.46	33.46	Mesotrophic loch	Favourable	No negative pressures identified	01/07/2010
					Springs (including flushes)	Favourable	No negative pressures identified	23/07/2008
					Vascular plant assemblage	Favourable	No negative pressures identified	29/07/2010
1065	Loch Vaa	Biological	44.6	44.6	Beetles	Favourable	No negative pressures identified	12/07/2010
					Goldeneye (<i>Bucephala clangula</i>), breeding	Unfavourable	Recreation/disturbance	30/06/2007
					Slavonian grebe (<i>Podiceps auritus</i>), breeding	Unfavourable	Game/ fisheries management, natural event, recreation / disturbance	30/06/2007

Site Code	Name	Type	Total Area (ha)	Are in CNP (ha)	Interest	Summary Condition	Pressures	Visit Date
1108	Lower Strathabon Woods	Biological	293.47	0	Upland birch woodland	Favourable	Over-grazing, under-grazing	20/08/2010
					Upland oak woodland	Favourable	Over-grazing	29/08/2002
					Wet woodland	Favourable	No negative pressures identified	29/08/2002
1180	Monadhliath	Biological	10671.1	7120.93	Black mountain moth (<i>Glacies coracina</i>)	Favourable	No negative pressures identified	26/06/2014
					Blanket bog	Unfavourable	Trampling	03/11/2004
					Breeding bird assemblage	Favourable	Over-grazing	19/06/2008
					Dotterel (<i>Charadrius morinellus</i>), breeding	Unfavourable	Over-grazing, recreation / disturbance	01/07/2011
					Upland assemblage	Favourable	Over-grazing	03/11/2004
					Vascular plant assemblage	Favourable	Over-grazing	06/08/2015
1190	Morrone Birkwood	Biological	328.34	328.34	Alpine heath	Favourable	Over-grazing	03/06/2014
					Basin fen	Favourable	No negative pressures identified	02/08/2013
					Bryophyte assemblage	Favourable	No negative pressures identified	06/09/2013
					Fungi assemblage	Favourable	No negative pressures identified	18/10/2012
					Invertebrate assemblage	Favourable	Under-grazing	25/06/2013
					Juniper scrub	Unfavourable Recovering Due to Management	Over-grazing	11/10/2009
					Quaternary of Scotland	Favourable	No negative pressures	04/06/2014

Site Code	Name	Type	Total Area (ha)	Are in CNP (ha)	Interest	Summary Condition	Pressures	Visit Date
							identified	
					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	No negative pressures identified	03/06/2014
					Subalpine calcareous grassland	Favourable	No negative pressures identified	03/06/2014
					Subalpine flushes	Favourable	No negative pressures identified	03/06/2014
					Upland birch woodland	Unfavourable Recovering Due to Management	Over-grazing	12/11/2009
					Vascular plant assemblage	Favourable	Over-grazing, recreation / disturbance	03/08/2005
1194	Morven and Mullachdubh	Biological	2508.35	2345.72	Alpine heath	Favourable	No negative pressures identified	16/08/2000
					Blanket bog	Favourable	No negative pressures identified	11/11/2012
					Breeding bird assemblage	Favourable	Burning, game / fisheries management, wildlife crime	13/07/2013
					Moorland juniper	Favourable	Over-grazing, plant pests and diseases, under-grazing	04/09/2008
					Upland assemblage	Not monitored to date	No negative pressures identified	N/A

Site Code	Name	Type	Total Area (ha)	Are in CNP (ha)	Interest	Summary Condition	Pressures	Visit Date
					Vascular plant assemblage	Favourable	No negative pressures identified	04/08/2015
1212	Muir of Dinnet	Mixed	2308.59	15.54	Breeding bird assemblage	Unfavourable Recovering Due to Management	No proactive management	31/08/2004
					Dragonfly assemblage	Favourable	No negative pressures identified	31/10/2012
					Greylag goose (<i>Anser anser</i>), non-breeding	Unfavourable	No negative pressures identified	10/12/2012
					Hydromorphological mire range	Favourable	Invasive species	N/A
					Invertebrate assemblage	Favourable	No negative pressures identified	31/10/2012
					Lowland dry heath	Favourable	No proactive management	30/07/2013
					Lowland wet heath	Unfavourable	Over-grazing	24/07/2015
					Oligo-mesotrophic loch	Favourable	Invasive species, water quality	25/06/2004
					Quaternary of Scotland	Favourable	Forestry operations	30/06/2000
1241	North Rothiemurchus Pinewood	Mixed	1509.75	1509.75	Breeding bird assemblage	Favourable	No negative pressures identified	17/06/2014
					Capercaillie (<i>Tetrao urogallus</i>), breeding	Favourable	Proactive on-site management	30/04/2010
					Crested tit (<i>Lophophanes cristatus</i>), breeding	Favourable	No negative pressures identified	17/03/2005
					Fungi assemblage	Favourable	Forestry operations, over-grazing, recreation	02/10/2014

Site Code	Name	Type	Total Area (ha)	Are in CNP (ha)	Interest	Summary Condition	Pressures	Visit Date
							/ disturbance, under-grazing	
					Invertebrate assemblage	Favourable	No negative pressures identified	20/08/2013
					Lichen assemblage	Favourable	Over-grazing	21/08/2010
					Native pinewood	Favourable	Invasive species	22/05/2008
					Osprey (<i>Pandion haliaetus</i>), breeding	Unfavourable Recovering Due to Management	Other	20/06/2010
					Quaternary of Scotland	Favourable	No negative pressures identified	11/06/2003
					Scottish crossbill (<i>Loxia scotica</i>), breeding	Favourable	No negative pressures identified	12/02/2012
					Vascular plant assemblage	Favourable	Under-grazing	23/07/2010
1243	Northern Corries, Cairngorms	Mixed	1966.37	1966.37	Breeding bird assemblage	Favourable	Recreation / disturbance, other	11/07/2013
					Quaternary of Scotland	Favourable	No negative pressures identified	26/06/2003
					Scrub	Favourable	No negative pressures identified	28/07/2008
					Upland assemblage	Favourable	No negative pressures identified	03/04/2007
					Vascular plant assemblage	Favourable	No negative pressures identified	05/10/2006
1274	Pass of Killiecrank	Biological	62.24	5.55	Fly assemblage	Favourable	No negative pressures identified	03/08/2010

Site Code	Name	Type	Total Area (ha)	Are in CNP (ha)	Interest	Summary Condition	Pressures	Visit Date
	ie				Upland oak woodland	Unfavourable	Invasive species	28/09/2006
1335	Red Craig	Geological	105.43	105.43	Caledonian Igneous	Favourable	No negative pressures identified	20/07/2001
1361	River Feshie	Geological	598.82	598.82	Fluvial Geomorphology of Scotland	Favourable	Flood defence works	27/04/2007
					Quaternary of Scotland	Favourable	Flood defence works	28/07/2011
1699	River Spey	Mixed	1958.79	346.3	Atlantic salmon (<i>Salmo salar</i>)	Favourable	Invasive species	20/10/2004
					Freshwater pearl mussel (<i>Margaritifera margaritifera</i>)	Unfavourable	Invasive species, extraction, invasive species, water quality, wildlife crime	30/09/2014
					Otter (<i>Lutra lutra</i>)	Favourable	Over-grazing	08/09/2004
					Sea lamprey (<i>Petromyzon marinus</i>)	Favourable	No negative pressures identified	07/11/2011
1364	River Spey - Insh Marshes	Biological	1158.77	1158.77	Arctic charr (<i>Salvelinus alpinus</i>)	Favourable	Game/ fisheries management	17/07/2008
					Breeding bird assemblage	Favourable	No negative pressures identified	31/07/2001
					Flood-plain fen	Favourable	Trampling, water management	20/07/2011
					Invertebrate assemblage	Favourable	Over-grazing	20/08/2013
					Mesotrophic loch	Favourable	Invasive species, recreation / disturbance	30/07/2010
					Osprey (<i>Pandion haliaetus</i>), breeding	Favourable	Recreation / disturbance	07/09/2009
					Otter (<i>Lutra lutra</i>)	Favourable	Over-grazing	08/09/2004
					Vascular plant assemblage	Favourable	Invasive species, over-	09/07/2007

Site Code	Name	Type	Total Area (ha)	Are in CNP (ha)	Interest	Summary Condition	Pressures	Visit Date
							grazing	
					Whooper swan (<i>Cygnus cygnus</i>), non-breeding	Favourable	Recreation / disturbance	28/03/2010
1504	Struan Wood	Biological	82.82	0	Beetles	Favourable	No negative pressures identified	28/06/2013
					Rannoch roller moth (<i>Ancylis tineana</i>)	Favourable	No negative pressures identified	03/08/2012
					Upland birch woodland	Unfavourable	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 Dhuhb and Garbh Choire, have no interests in favourable condition.

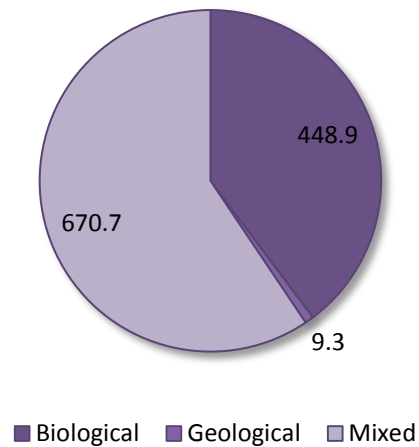


Figure 82 Area (km²) covered by the three types of SSSI within the Cairngorms National Park.

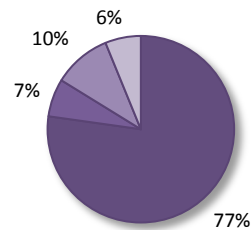


Figure 83 Summary condition of interests of SSSI.

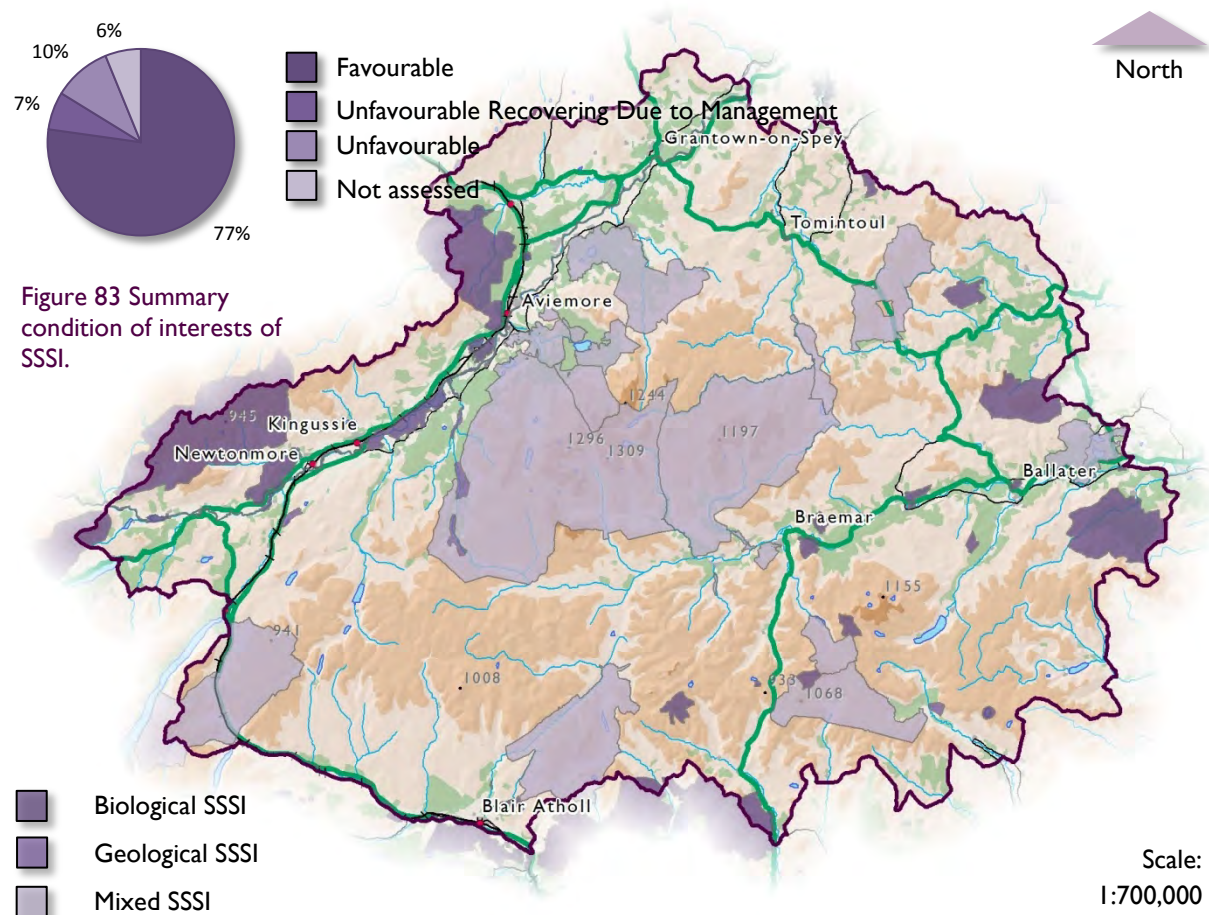


Figure 84 Sites of Special Scientific Interest by type within and overlapping the Cairngorms National Park Authority.

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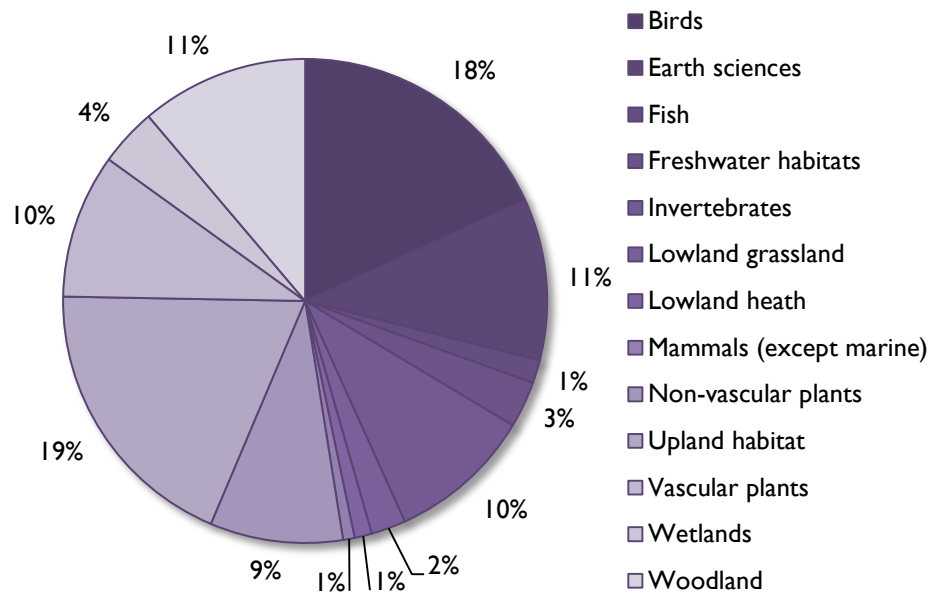


Figure 85 Category of interests of SSSIs within the Cairngorms National Park.

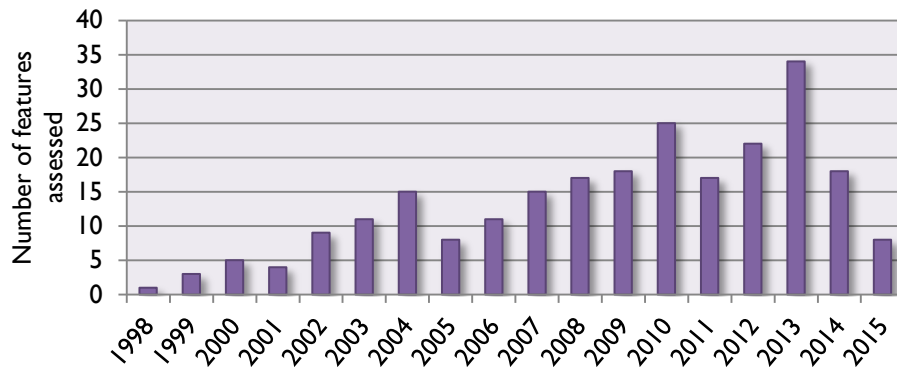


Figure 86 Year of latest assessed visit of interests of SSSIs within the Cairngorms National Park.

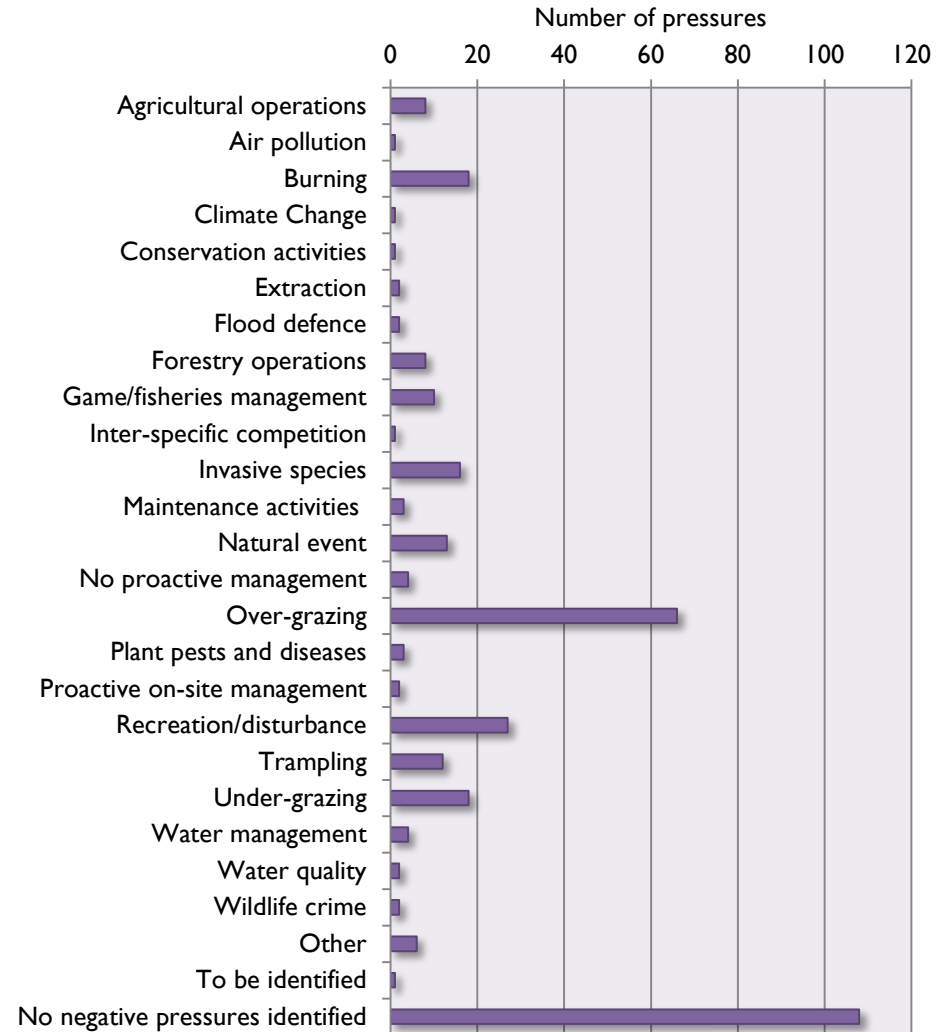


Figure 87 Pressures on interests of SSSIs within the Cairngorms National Park.

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 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 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 20 and **Table 21** 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' condition.
Features that are in 'Unfavourable' condition.
Features that have not been monitored to date.

Table 20 Special Areas of Conservation within the Cairngorms National Park.

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

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Summary Condition	Pressures	Visit Date
				Geyer's whorl snail (<i>Vertigo geyeri</i>)	Favourable	No negative pressures identified	22/07/2010
				Round-mouthed whorl snail (<i>Vertigo genesii</i>)	Favourable	No negative pressures identified	22/07/2010
UK003002781	Ballochbuie SAC	1881.73	1881.73	Bog woodland	Unfavourable Recovering Due to Management	Over-grazing	02/08/2011
				Caledonian forest	Unfavourable Recovering Due to Management	Over-grazing	08/08/2011
				Blanket bog	Unfavourable Recovering Due to Management	Burning	05/05/2006
				Plants in crevices on acid rocks	Favourable	No negative pressures identified	01/11/2006
				Dry heaths	Unfavourable Recovering Due to Management	Burning	01/11/2006
				Wet heathland with cross-leaved heath	Unfavourable Recovering Due to Management	Burning	01/11/2006
				Plants in crevices on base-rich rocks	Favourable	No negative pressures identified	23/11/2004

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Summary Condition	Pressures	Visit Date
				Otter (<i>Lutra lutra</i>)	Favourable	No negative pressures identified	12/11/2011
UK0012821	Caenlochan SAC	5975.28	5975.28	Mountain willow scrub	Unfavourable	Climate change, over-grazing, plant pests and diseases	23/08/2012
				Acidic scree	Unfavourable	Over-grazing	30/08/2012
				Montane acid grasslands	Unfavourable	Climate change, over-grazing	18/09/2012
				High-altitude plant communities associated with areas of water seepage	Favourable	No negative pressures identified	18/09/2012
				Tall herb communities	Favourable	No negative pressures identified	18/09/2012
				Plants in crevices on base-rich rocks	Favourable	No negative pressures identified	18/09/2012
				Dry heaths	Unfavourable	Burning, over-grazing	16/07/2006
				Plants in crevices on acid rocks	Favourable	No negative pressures identified	16/07/2006
				Blanket bog	Unfavourable	Burning, over-grazing	16/07/2006
				Alpine and subalpine heaths	Unfavourable	Climate change, over-grazing	16/07/2006
				Base-rich fens	Unfavourable	No negative pressures identified	16/07/2006
				Base-rich scree	Favourable	No negative pressures identified	16/07/2006
				Grasslands on soils rich in heavy metals	Favourable	No negative pressures identified	16/07/2006
				Species-rich grassland with mat-grass in	Unfavourable	No negative pressures	16/07/2006

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Summary Condition	Pressures	Visit Date
				upland areas		identified	
UK0016412	Cairngorms SAC	50903.74	50903.74	Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels	Favourable	No negative pressures identified	23/06/2010
				Acid peat-stained lakes and ponds	Favourable	No negative pressures identified	24/06/2010
				Caledonian forest	Unfavourable Recovering Due to Management	Invasive species; under-grazing	27/01/2009
				Dry grasslands and scrublands on chalk or limestone	Unfavourable	Over-grazing; under-grazing; over grazing	03/04/2007
				Blanket bog	Unfavourable	Over-grazing	03/04/2007
				Tall herb communities	Favourable	No negative pressures identified	03/04/2007
				Hard-water springs depositing lime	Favourable	Over-grazing	03/04/2007
				Alpine and subalpine heaths	Unfavourable	Burning; over grazing; Recreation / disturbance	03/04/2007
				Dry heaths	Unfavourable	Burning	03/04/2007
				Plants in crevices on acid rocks	Favourable	Recreation / disturbance	03/04/2007
				Acidic scree	Favourable	Recreation / disturbance	03/04/2007
				Mountain willow scrub	Unfavourable	Over-grazing	03/04/2007
				Wet heathland with cross-leaved heath	Unfavourable	Over-grazing	03/04/2007
				Species-rich grassland with mat-grass in	Unfavourable	Trampling; under-	03/04/2007

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Summary Condition	Pressures	Visit Date
				upland areas		grazing	
				Plants in crevices on base-rich rocks	Unfavourable	Invasive species	03/04/2007
				Juniper on heaths or calcareous grasslands	Favourable	No negative pressures identified	03/04/2007
				Very wet mires often identified by an unstable 'quaking' surface	Favourable	No negative pressures identified	08/04/2007
				Montane acid grasslands	Favourable	Recreation / disturbance	14/07/2006
				High-altitude plant communities associated with areas of water seepage	Unfavourable	Over-grazing	15/10/2006
				Bog woodland	Favourable	Over-grazing	05/09/2002
				Green shield-moss (<i>Buxbaumia viridis</i>)	Favourable	Forestry operations	02/05/2006
				Otter (<i>Lutra lutra</i>)	Unfavourable	Recreation / disturbance	22/09/2011
UK 0030122	Coyles of Muick SAC	135.16	135.16	Grasslands on soils rich in heavy metals	Favourable	No negative pressures identified	03/08/2006
UK0012955	Creag Meagaidh SAC	6144.58	507.19	Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels	Favourable	No negative pressures identified	10/06/2010
				Plants in crevices on base-rich rocks	Favourable	No negative pressures identified	15/08/2010
				Plants in crevices on acid rocks	Favourable	No negative pressures identified	08/08/2005
				Alpine and subalpine heaths	Unfavourable	Over-grazing	01/09/2005
				Mountain willow scrub	Unfavourable Recovering Due to	Over-grazing	01/09/2005

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

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Summary Condition	Pressures	Visit Date
						identified	
				Tall herb communities	Favourable	No negative pressures identified	08/08/2013
UK0012756	Glen Tanar SAC	4180.09	4142.25	Caledonian forest	Favourable	Invasive species	08/04/2010
				Wet heathland with cross-leaved heath	Favourable	No negative pressures identified	21/11/2009
				Dry heaths	Favourable	Under-grazing	23/10/2003
				Blanket bog	Favourable	Burning	31/10/2003
				Otter (<i>Lutra lutra</i>)	Favourable	No negative pressures identified	23/09/2012
UK0030159	Green Hill of Strathd on SAC	640.77	640.77	Dry heaths	Favourable	Burning, over-grazing	15/08/2008
				Grasslands on soils rich in heavy metals	Favourable	Burning	15/08/2008
				Juniper on heaths or calcareous grasslands	Favourable	Over-grazing	02/08/2002
UK0019812	Insh Marshes SAC	1158.78	1158.78	Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels	Favourable	Invasive species, recreation / disturbance	30/07/2010
				Alder woodland on floodplains	Favourable	Flood defence works, invasive species, no proactive management, over-grazing, water management	19/05/2009
				Very wet mires often identified by an unstable 'quaking' surface	Favourable	No negative pressures identified	04/10/2002
				Otter (<i>Lutra lutra</i>)	Favourable	Over-grazing, other	08/09/2004

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

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Summary Condition	Pressures	Visit Date
UK0012894	Morrone Birkwood SAC	318.4	318.4	Base-rich fens	Favourable	Trampling	03/06/2014
				Hard-water springs depositing lime	Favourable	Invasive species, over-grazing	03/06/2014
				High-altitude plant communities associated with areas of water seepage	Favourable	Invasive species, trampling	03/06/2014
				Dry grasslands and scrublands on chalk or limestone	Favourable	No negative pressures identified	03/06/2014
				Juniper on heaths or calcareous grasslands	Unfavourable Recovering Due to Management	Over-grazing	11/10/2009
				Alpine and subalpine heaths	Favourable	Over-grazing, recreation / disturbance	01/07/2008
				Geyer's whorl snail (<i>Vertigo geyeri</i>)	Unfavourable	No negative pressures identified	30/06/2013
UK0019958	Morven & Mullachdubh SAC	916.76	916.76	Juniper on heaths or calcareous grasslands	Favourable	Burning, no proactive management, over-grazing, plant pests and diseases	25/01/2005
UK0019959	Muir of Dinnet SAC	415.76	415.76	Very wet mires often identified by an unstable 'quaking' surface	Unfavourable Recovering Due to Management	Invasive species	30/08/2008
				Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels	Favourable	Invasive species, water quality	25/06/2004
				Dry heaths	Unfavourable	No proactive	16/02/2001

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Summary Condition	Pressures	Visit Date
					Recovering Due to Management	management	
				Degraded raised bog	Favourable	Agricultural operations, invasive species	30/06/2000
				Otter (<i>Lutra lutra</i>)	Favourable	Natural event, water quality	04/10/2012
UK0030251	River Dee SAC	2446.82	1368.59	Otter (<i>Lutra lutra</i>)	Favourable	No negative pressures identified	06/10/2012
				Atlantic salmon (<i>Salmo salar</i>)	Favourable	Agricultural operations, invasive species, water management, water quality	21/07/2011
				Freshwater pearl mussel (<i>Margaritifera margaritifera</i>)	Unfavourable	Development, invasive species, water management. To be identified, other	07/08/2003
UK0030262	River South Esk SAC	478.62	103.48	Atlantic salmon (<i>Salmo salar</i>)	Unfavourable	Agricultural operations, climate change, forestry operations, invasive species, over-grazing, water management, water quality	29/07/2011
				Freshwater pearl mussel (<i>Margaritifera margaritifera</i>)	Unfavourable	Invasive species, water management, wildlife crime	13/09/2009

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Summary Condition	Pressures	Visit Date
UK0019811	River Spey SAC	5729.48	4181.76	Sea lamprey (<i>Petromyzon marinus</i>)	Favourable	No negative pressures identified	07/09/2011
				Otter (<i>Lutra lutra</i>)	Favourable	Over-grazing; other	18/09/2012
				Atlantic salmon (<i>Salmo salar</i>)	Unfavourable	Agricultural operations; invasive species; water management	04/09/2011
				Freshwater pearl mussel (<i>Margaritifera margaritifera</i>)	Unfavourable	Extraction; invasive species; water quality; wildlife crime	30/09/2014
UK0030312	River Tay SAC	9497.72	233.94	Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels	Favourable	Water management	12/08/2009
				Atlantic salmon (<i>Salmo salar</i>)	Favourable	Game/ fisheries management, invasive species, water management, water quality	19/09/2011
				Sea lamprey (<i>Petromyzon marinus</i>)	Favourable	Development, water management, water quality	30/11/2007
				River lamprey (<i>Lampetra fluviatilis</i>)	Favourable	Development, water management, water quality	30/11/2007
				Brook lamprey (<i>Lampetra planeri</i>)	Favourable	Development, water management, water quality	30/11/2007
				Otter (<i>Lutra lutra</i>)	Favourable	Agricultural operations, invasive species,	03/04/2004

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Summary Condition	Pressures	Visit Date
						recreation / disturbance, water management	
UK0030348	The Maim SAC	484.58	484.58	Dry heaths	Unfavourable	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.

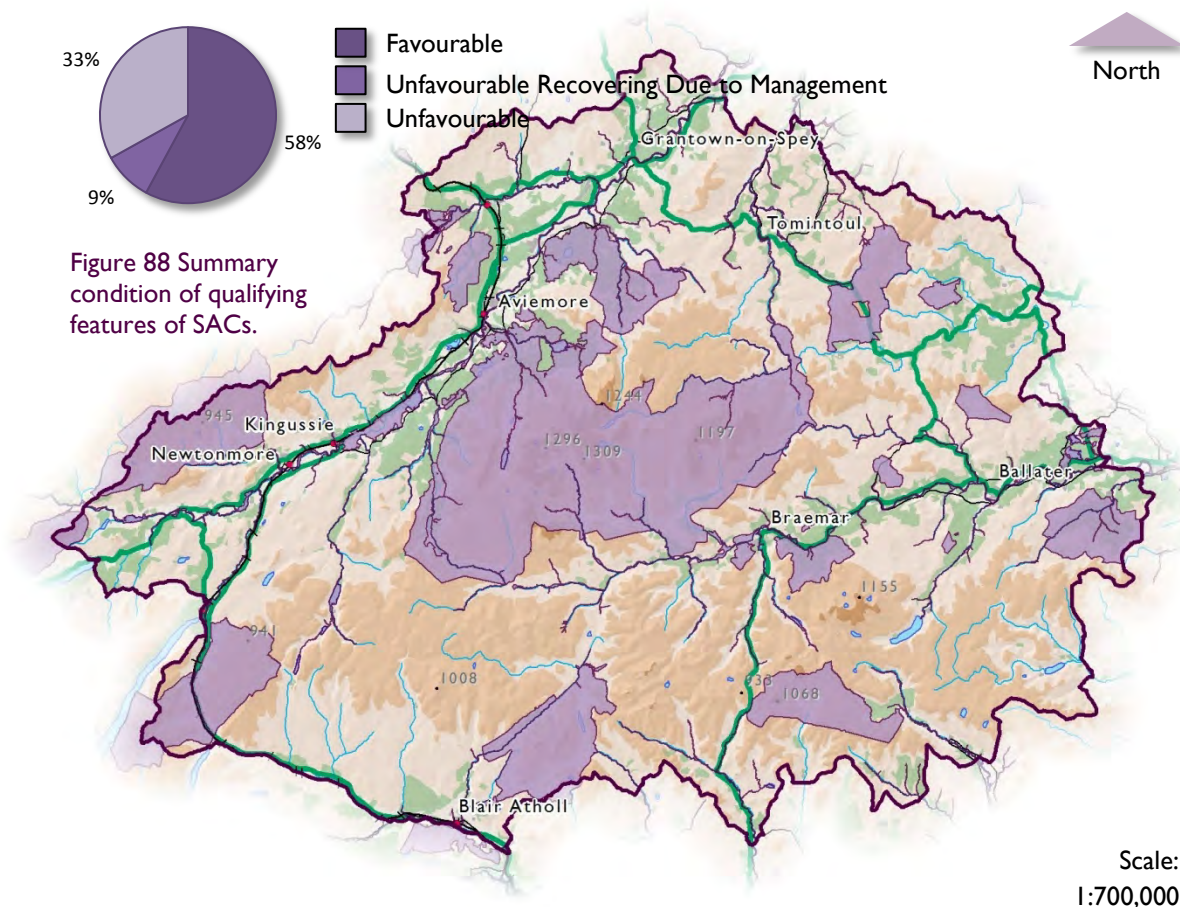


Figure 89 Special Areas of Conservation within the Cairngorms National Park.

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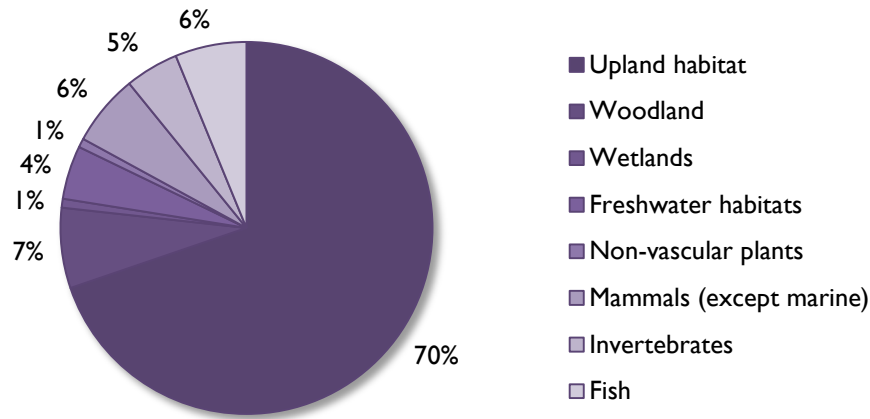


Figure 90 Category of qualifying features of SACs within the Cairngorms National Park.

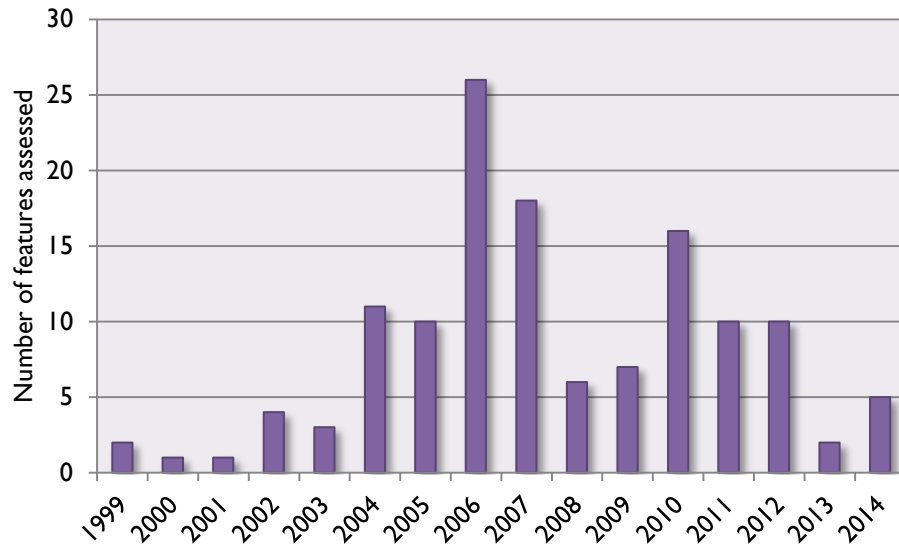


Figure 91 Year of latest assessed visit of qualifying features of SACs within the Cairngorms National Park.

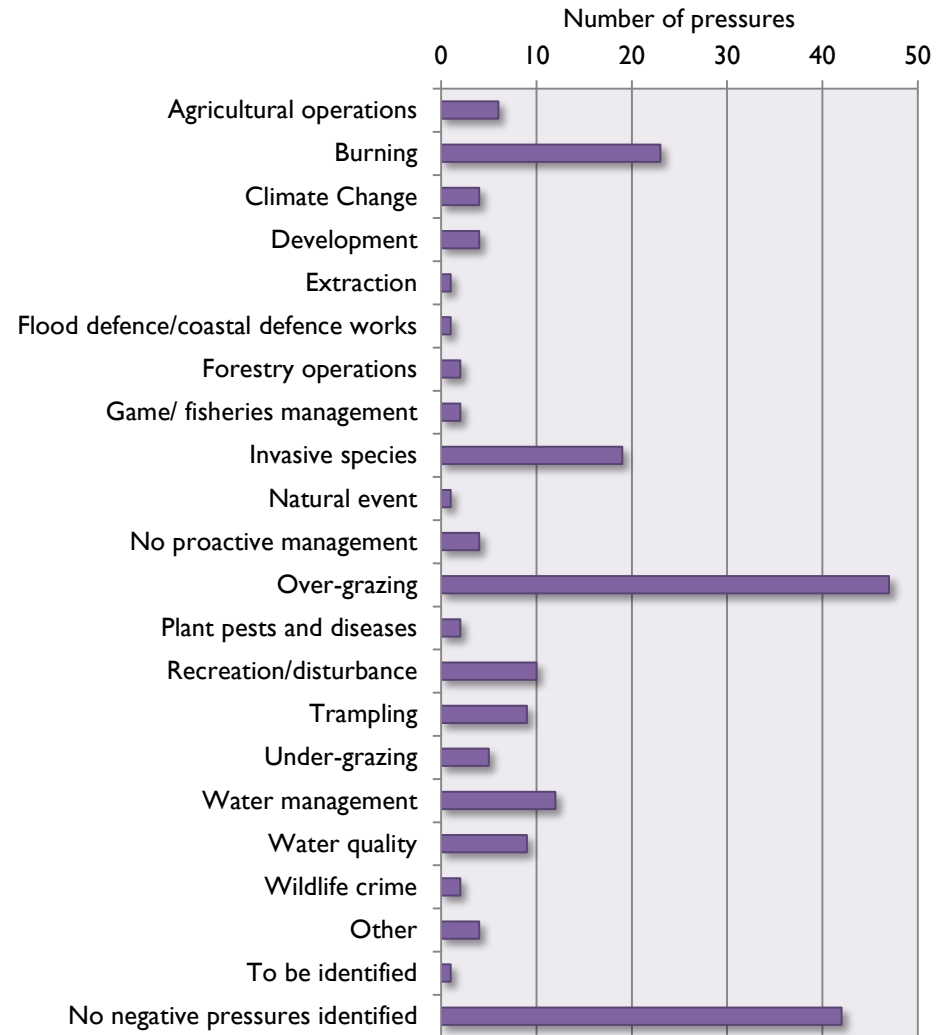


Figure 92 Pressures on qualifying features of SACs within the Cairngorms National Park.

Table 21 Special Protection Areas within the Cairngorms National Park.

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Summary Condition	Pressures	Visit Date
UK900256 I	Abernethy Forest SPA	5793.46	5793.46	Capercaillie (<i>Tetrao urogallus</i>), breeding	Favourable	Under-grazing	28/04/2009
				Osprey (<i>Pandion haliaetus</i>), breeding	Favourable	No negative pressures identified	31/05/2007
				Scottish crossbill (<i>Loxia scotica</i>), breeding	Favourable	No negative pressures identified	28/03/2012
UK9020297	Anagach Woods SPA	392.78	392.78	Capercaillie (<i>Tetrao urogallus</i>), breeding	Unfavourable	Recreation / disturbance	29/04/2015
UK9002781	Ballochbuie SPA	1881.73	1881.73	Capercaillie (<i>Tetrao urogallus</i>), breeding	Unfavourable	Forestry operations, natural event, over-grazing, under-grazing.	14/04/2014
				Scottish crossbill (<i>Loxia scotica</i>), breeding	Favourable	No negative pressures identified	01/03/2015
UK9004011	Caenlochan SPA	5975.28	5975.28	Dotterel (<i>Charadrius morinellus</i>), breeding	Favourable	Over-grazing, recreation / disturbance	01/01/1999
				Golden eagle (<i>Aquila chrysaetos</i>), breeding	Favourable	Over-grazing, recreation / disturbance	04/12/2009
UK9002241	Cairngorms SPA	50903.74	50903.74	Capercaillie (<i>Tetrao urogallus</i>), breeding	Favourable	No negative pressures identified	25/04/2011
				Merlin (<i>Falco columbarius</i>), breeding	Not monitored to date	No negative pressures identified	N/A
				Osprey (<i>Pandion haliaetus</i>), breeding	Favourable	No negative pressures identified	01/06/2006
				Golden eagle (<i>Aquila chrysaetos</i>),	Favourable	Game / fisheries	31/07/2009

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Summary Condition	Pressures	Visit Date
				breeding		management	
				Dotterel (<i>Charadrius morinellus</i>), breeding	Unfavourable	Recreation / disturbance; over-grazing	01/07/2011
				Scottish crossbill (<i>Loxia scotica</i>), breeding	Favourable	No negative pressures identified	14/03/2012
				Peregrine (<i>Falco peregrinus</i>), breeding	Favourable	Recreation / disturbance	30/06/2002
UK9020308	Cairngorms Massif SPA	187504.1	173254.6	Golden eagle (<i>Aquila chrysaetos</i>), breeding	Favourable	Plant pests & diseases; proactive onsite management	31/08/2003
UK9001801	Craigmore Wood SPA	654.09	654.09	Capercaillie (<i>Tetrao urogallus</i>), breeding	Unfavourable	No onsite activities identified	20/04/2014
UK9002161	Creag Maegaidh SPA	6144.58	507.19	Dotterel (<i>Charadrius morinellus</i>), breeding	Unfavourable	No negative pressures identified	01/07/2011
UK9002301	Drumochter Hills SPA	9445.56	7382.22	Dotterel (<i>Charadrius morinellus</i>), breeding	Favourable	Other	11/02/2004
				Merlin (<i>Falco columbarius</i>), breeding	Unfavourable	Burning, over-grazing	31/08/2004
UK9004381	Forest of Clunie SPA	19349.38	905.22	Osprey (<i>Pandion haliaetus</i>), breeding	Favourable	No negative pressures identified	01/08/2010
				Merlin (<i>Falco columbarius</i>), breeding	Unfavourable	Burning, natural event, over-grazing	29/05/2009
				Hen harrier (<i>Circus cyaneus</i>), breeding	Unfavourable	Burning, natural event, over-grazing	29/05/2009
				Short-eared owl (<i>Asio flammeus</i>), breeding	Unfavourable	Burning	29/05/2009

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Summary Condition	Pressures	Visit Date
UK902771	Glen Tanar SPA	4180.09	4142.25	Capercaillie (<i>Tetrao urogallus</i>), breeding	Unfavourable	Forestry operations, recreation / disturbance, under-grazing	18/04/2011
				Hen harrier (<i>Circus cyaneus</i>), breeding	Favourable	No negative pressures identified	19/07/2010
				Osprey (<i>Pandion haliaetus</i>), breeding	Favourable	Forestry operations, recreation / disturbance	13/10/2010
				Scottish crossbill (<i>Loxia scotica</i>), breeding	Favourable	No negative pressures identified	23/03/2012
UK9002581	Kinveachy Forest SPA	2849.36	2232.59	Capercaillie (<i>Tetrao urogallus</i>), breeding	Favourable	No negative pressures identified	15/05/2008
				Scottish crossbill (<i>Loxia scotica</i>), breeding	Favourable	No negative pressures identified	27/03/2012
UK9002951	Ladder Hills pSPA	4240.4	4240.4	Hen Harrier (<i>Circus cyaneus</i>), breeding	Not monitored to date	No negative pressures identified	N/A
UK9002751	Loch Vaa SPA	44.6	44.6	Slavonian grebe (<i>Podiceps auritus</i>), breeding	Unfavourable	Natural event, recreation / disturbance	30/06/2007

Site Code	Name	Total Area (ha)	Are in CNP (ha)	Qualifying Feature	Summary Condition	Pressures	Visit Date
UK9002791	Muir of Dinnet SPA	157.6	157.6	Waterfowl assemblage, non-breeding	Unfavourable	No negative pressures identified	01/12/2012
				Greylag goose (<i>Anser anser</i>), non-breeding	Unfavourable	No negative pressures identified	05/11/2010
UK9002231	River Spey – Insh Marshes SPA	1158.87	1158.87	Hen harrier (<i>Circus cyaneus</i>), non-breeding	Favourable	No negative pressures identified	22/02/2010
				Wigeon (<i>Anas penelope</i>), breeding	Unfavourable	Natural event, recreation / disturbance	30/05/2009
				Osprey (<i>Pandion haliaetus</i>), breeding	Favourable	Recreation / disturbance	07/09/2009
				Whooper swan (<i>Cygnus cygnus</i>), non-breeding	Favourable	No negative pressures identified	31/12/2000
				Spotted crake (<i>Porzana porzana</i>), breeding	Favourable	No negative pressures identified	31/12/2000
				Wood sandpiper (<i>Tringa glareola</i>), breeding	Unfavourable Recovering Due to Management	Forestry operations	31/12/2000

There are 15 SPAs within or overlapping the National Park (**Figure 94**), 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.

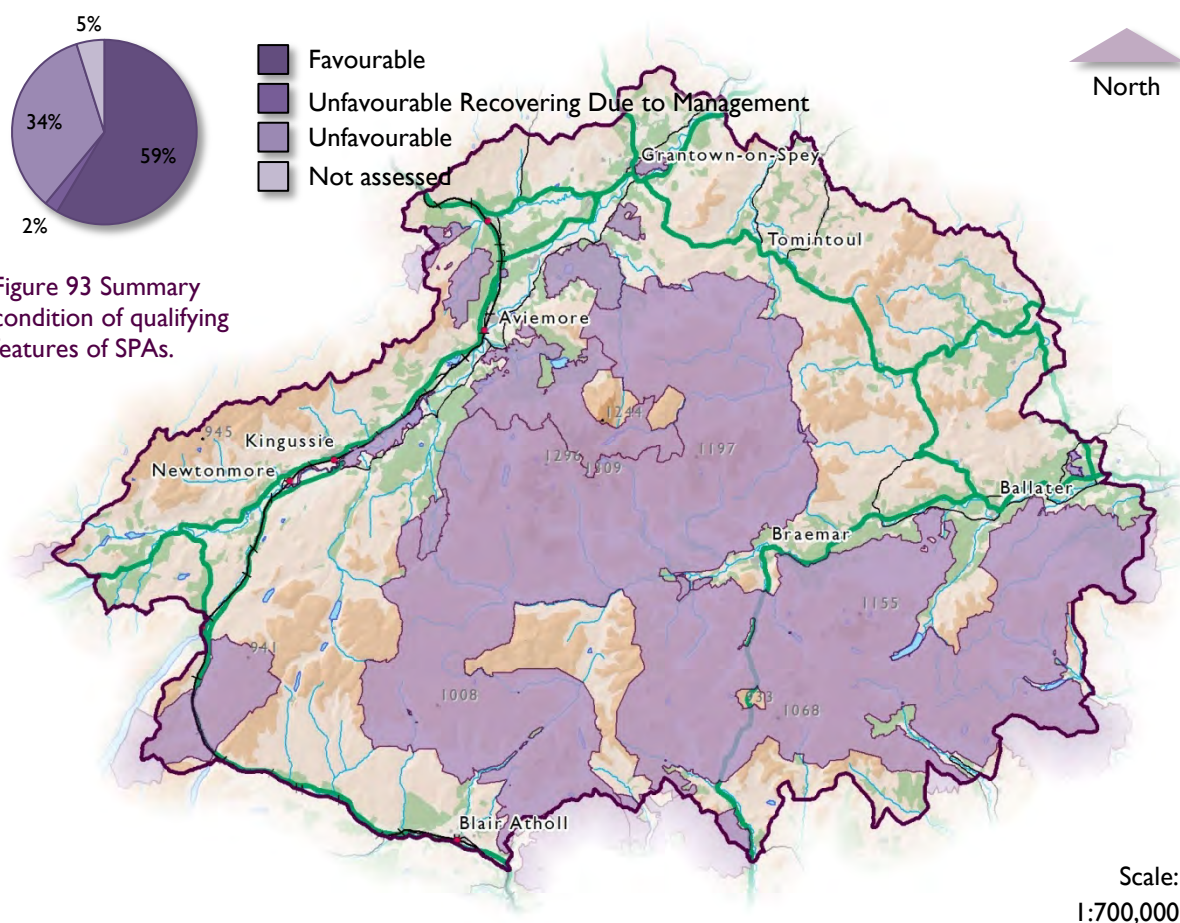


Figure 94 Special Protection Areas within the Cairngorms National Park.

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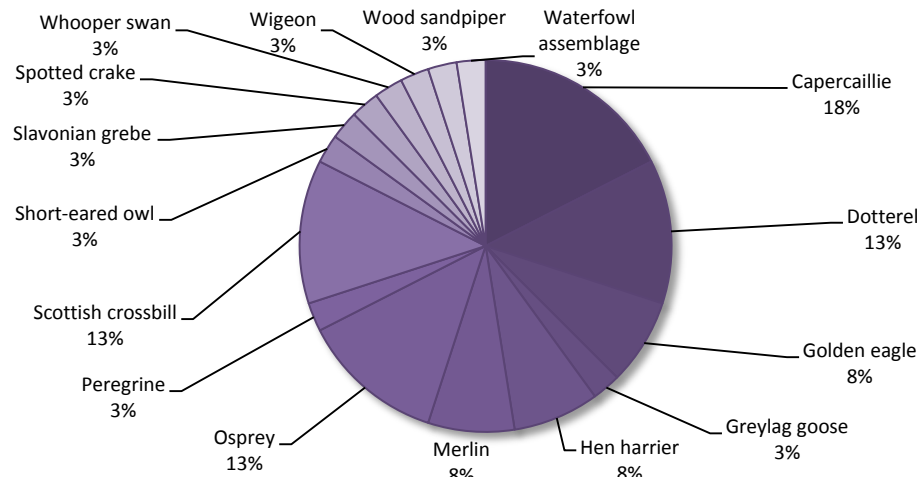


Figure 95 Qualifying features of SPAs within the Cairngorms National Park.

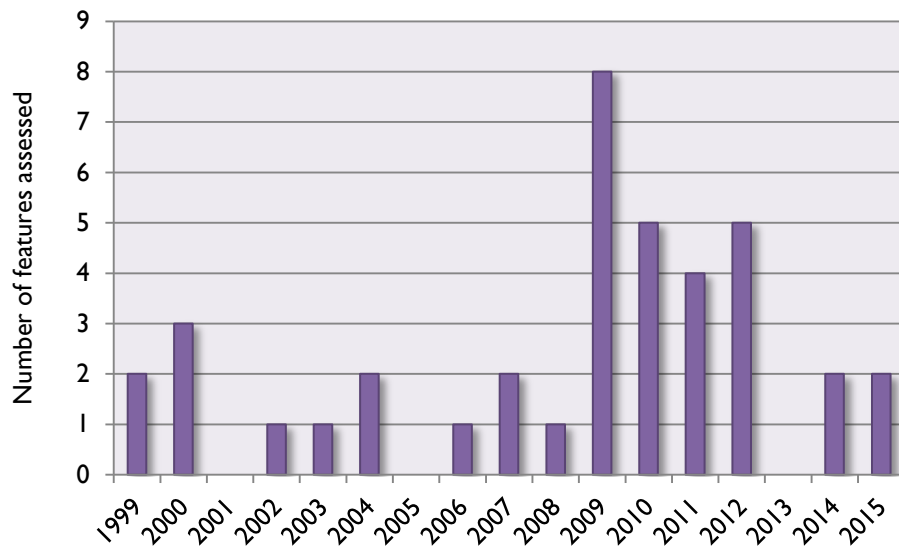


Figure 96 Year of latest assessed visit of qualifying features of SPAs within the Cairngorms National Park.

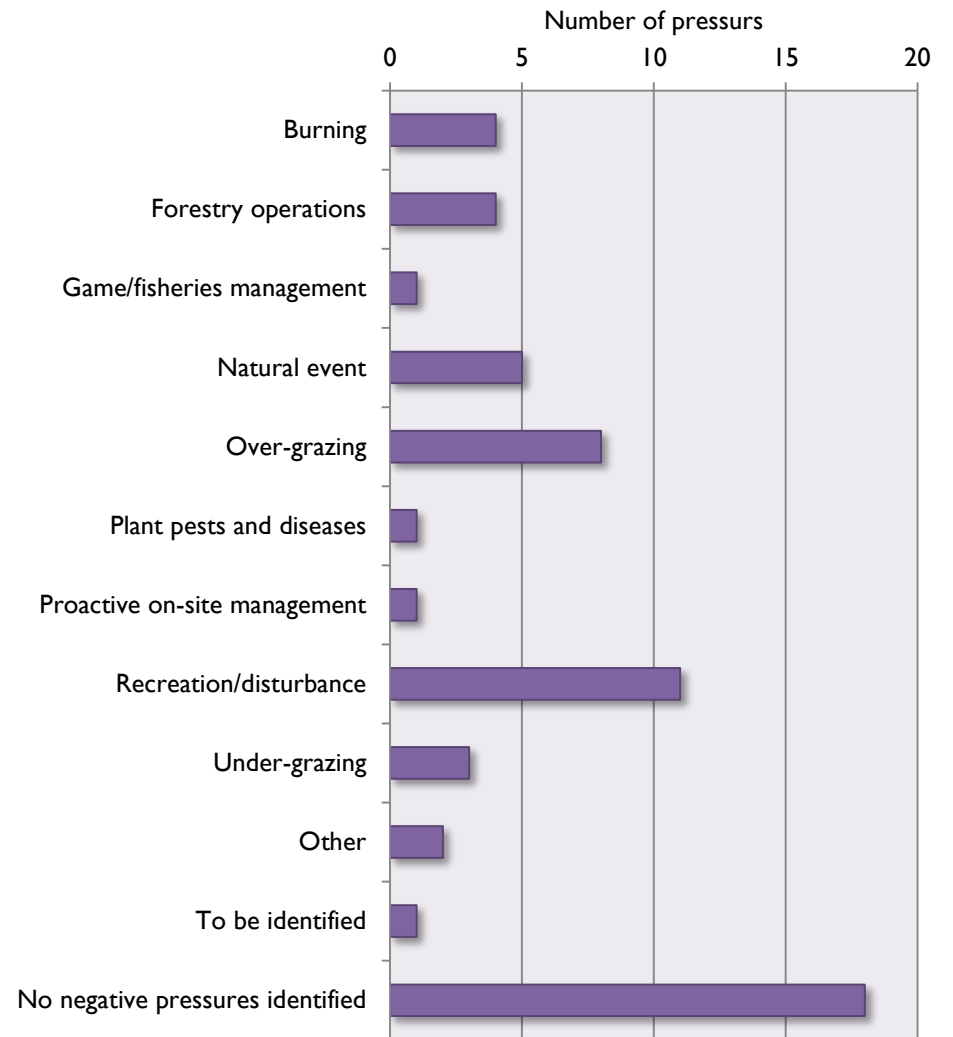


Figure 97 Pressures on qualifying features of SPAs within the Cairngorms National Park.

Ramsar Convention

The National Park is also home to three wetlands of international importance that have been designated under the Ramsar Convention (**Table 22** 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 22 Ramsar Convention Sites within the Cairngorms National Park.

Site Code	Name	Area (ha)
UK13002	Cairngorm Lochs	172.99
UK13049	Muir of Dinnet	157.60
UK13053	River Spey - Insh Marshes	1158.77

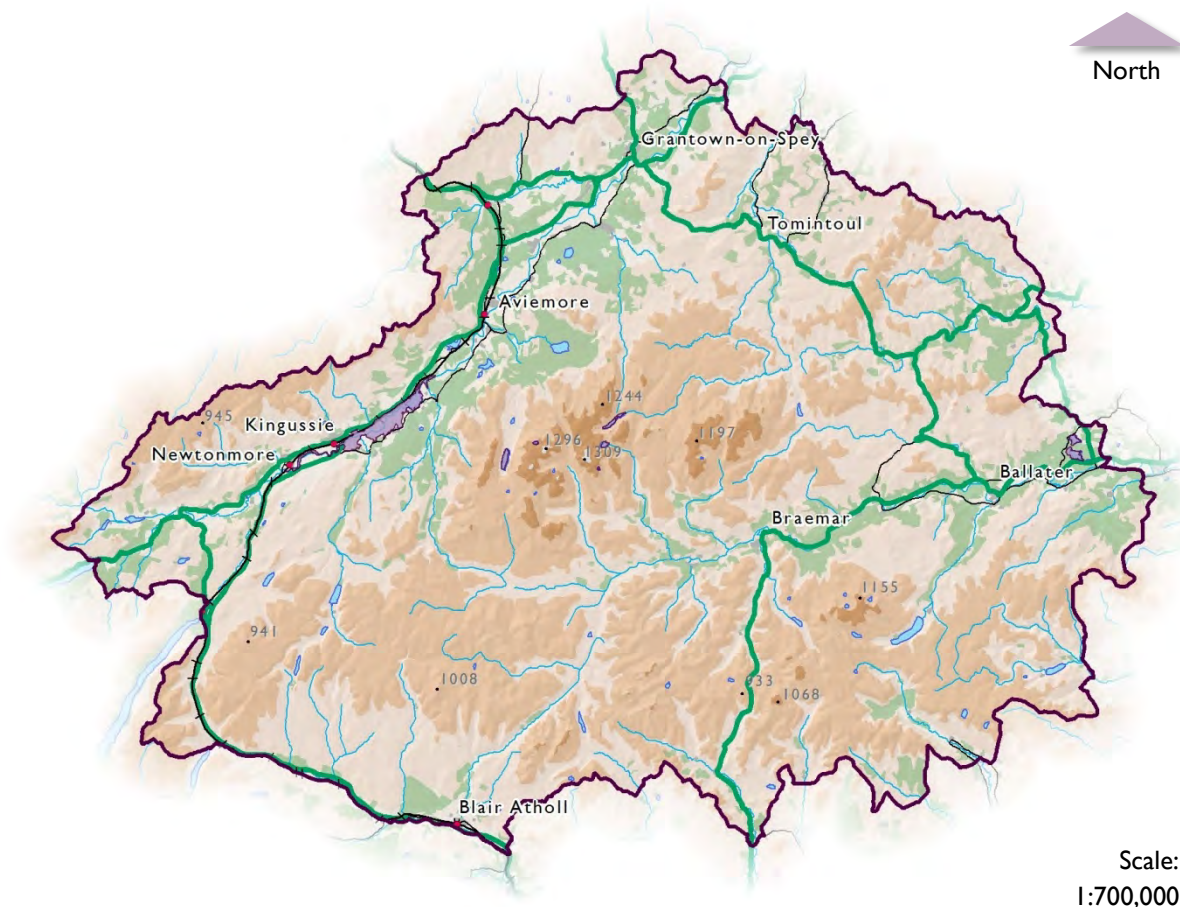


Figure 98 Ramsar Sites within the Cairngorms National Park.

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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.

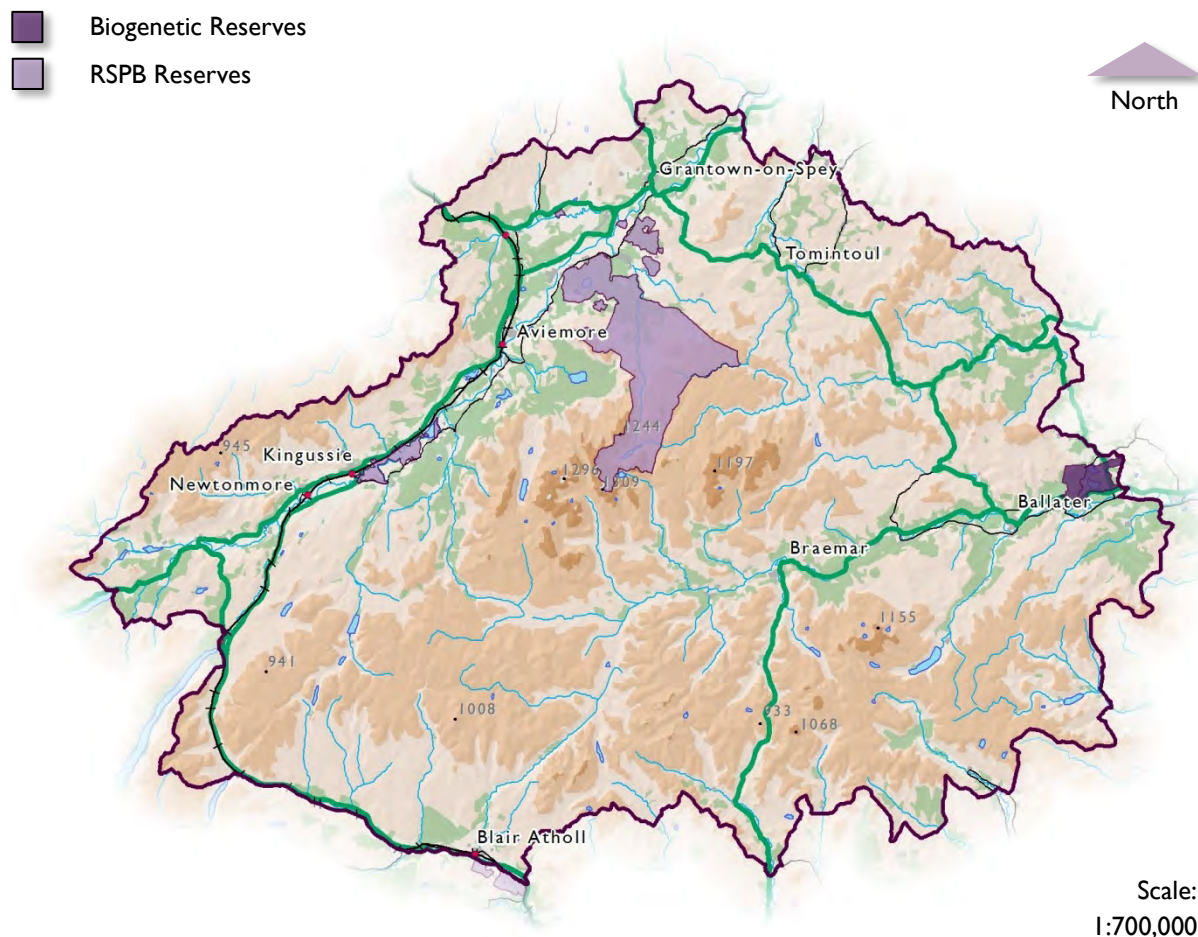


Figure 99 RSBP and Biogenetic Reserves in the Cairngorms National Park.

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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. 233),
- Freshwater, Wetlands & Wet Grassland (p.244),
- Uplands (p. 250), and
- Lowlands (p. 253).

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

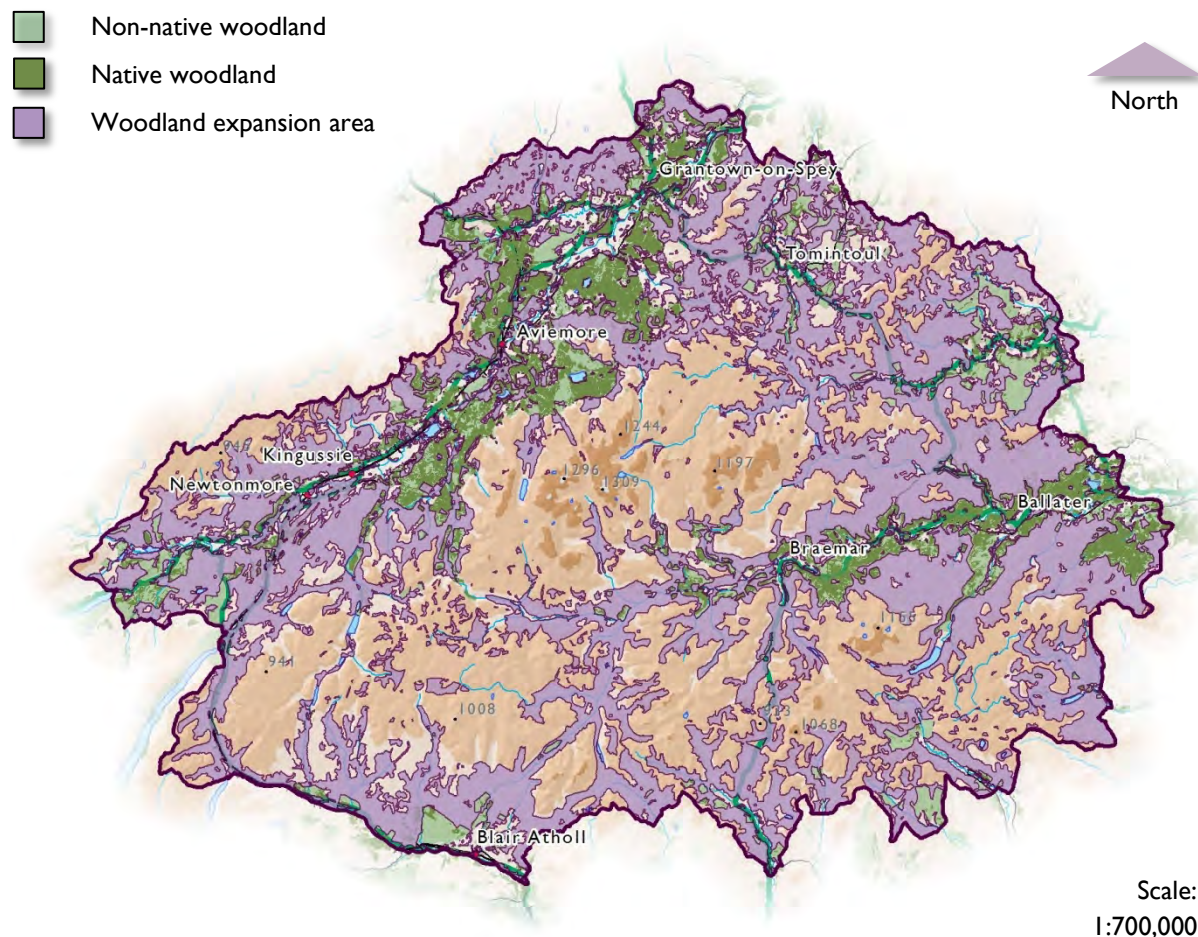


Figure 100 Areas of woodland and woodland expansion in the Cairngorms National Park.

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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

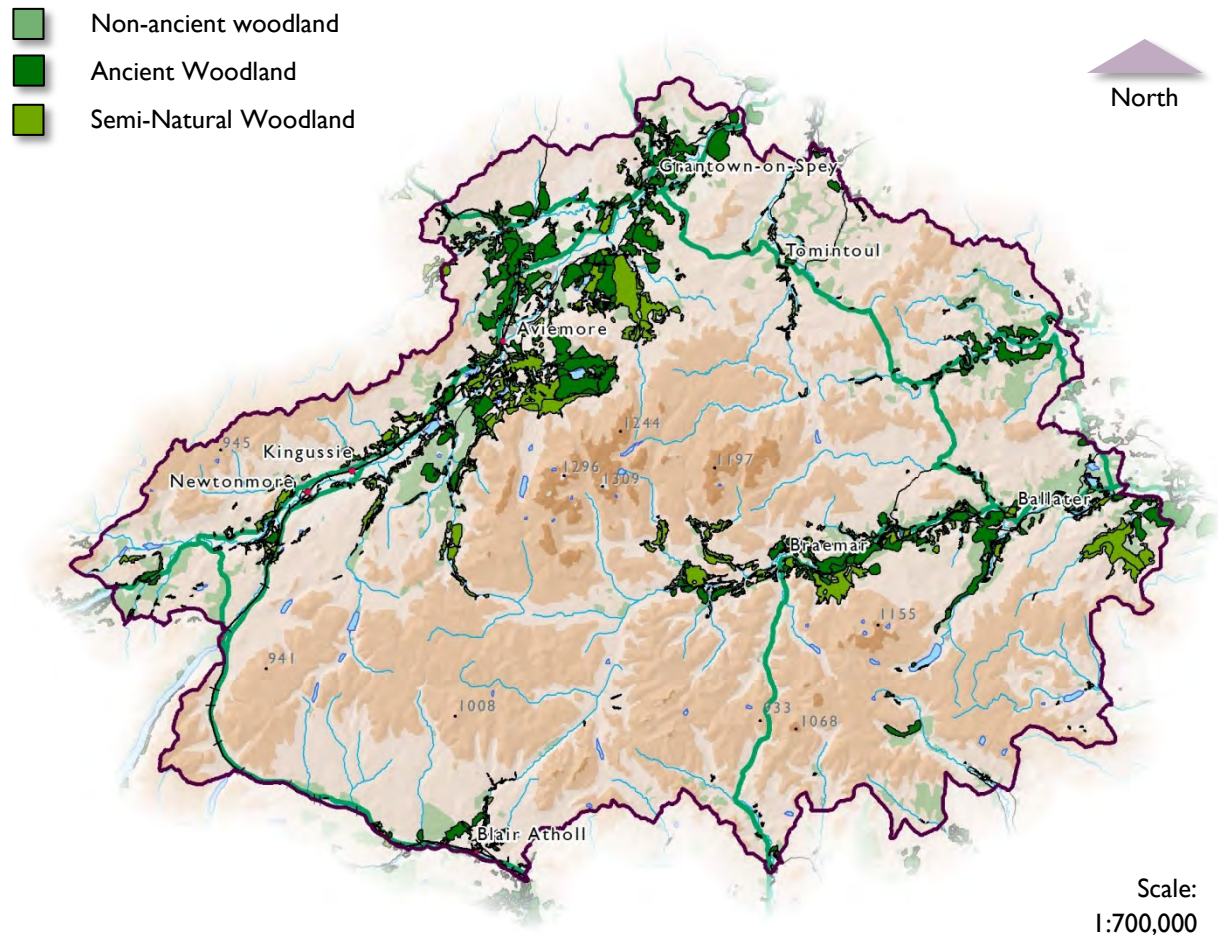


Figure 101 Areas of ancient woodland in the Cairngorms National Park.

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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

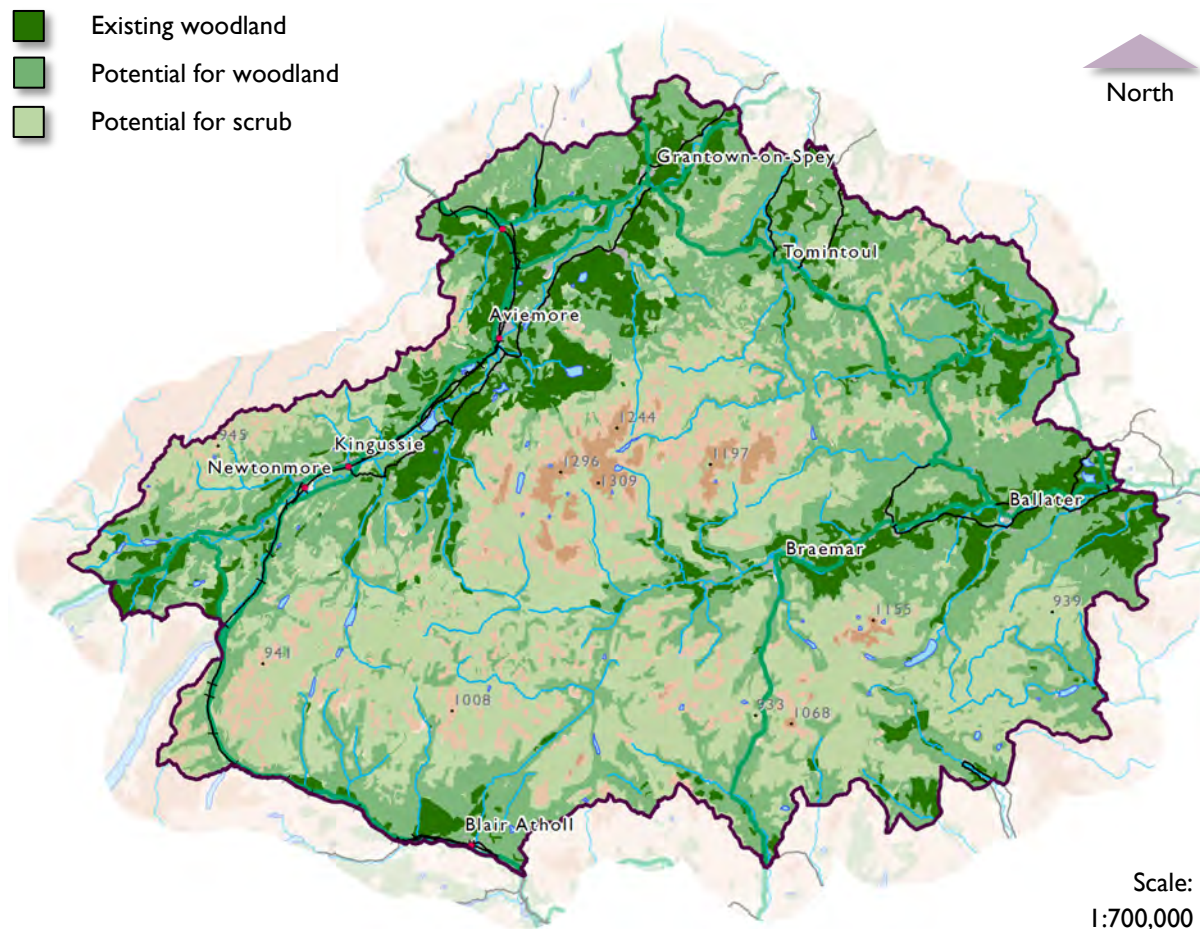


Figure 102 Existing woodland and land with potential for woodland and scrub in the Cairngorms National Park.

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

Table 23 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.	<ul style="list-style-type: none"> ➤ 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.	<ul style="list-style-type: none"> ➤ 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.	<ul style="list-style-type: none"> ➤ 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.	<ul style="list-style-type: none"> ➤ 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	<ul style="list-style-type: none"> ➤ 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 24**.

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 24**, 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. 240).

Table 24 Woodland species selected for targeted action in CNAP (Cairngorms National Park Authority, 2013).

Species	Status in the CNP
Capercaillie <i>Tetrao urogallus</i>	Capercaillie are found almost exclusively in Caledonian Pine Forest. Including Anagach, Rothiemurchus 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 <i>Felix sylvestris</i>	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 <i>Moneses uniflora</i>	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 <i>Linnea borealis</i>	Twinflower is an Arctic-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 <i>Buxbaumia viridis</i>	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 <i>Blera fallax</i>	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 <i>Boloria euphrosyne</i>	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 <i>Epione vespertaria</i>	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 <i>Cytidia salicina</i>	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 <i>Endronis versicolora</i>	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: <i>Formica aquilonia</i> , <i>F. lugubis</i> , <i>F. exsecta</i> and <i>Formicoxenus nitidulus</i> . 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

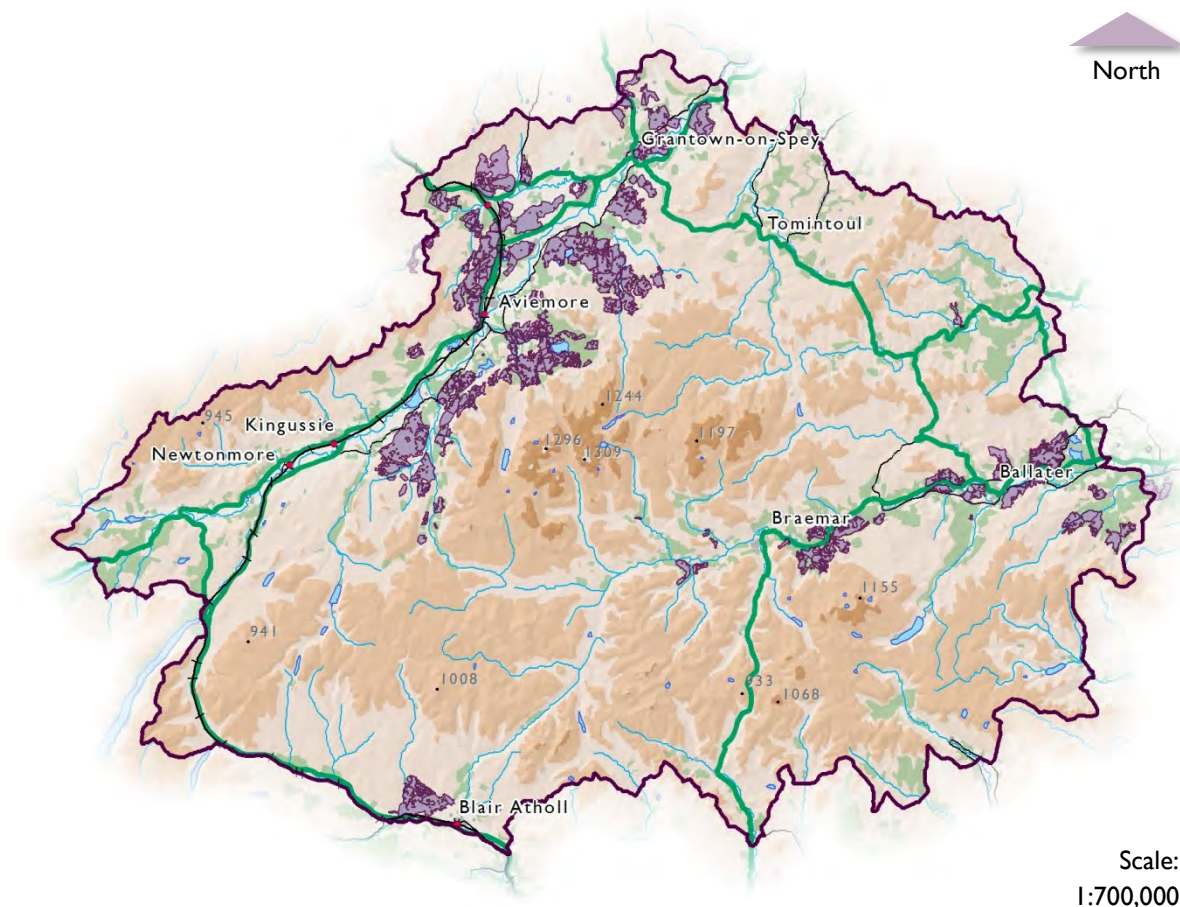


Figure 103 Areas where Capercaillie have been sighted in the Cairngorms National Park since 2007.

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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

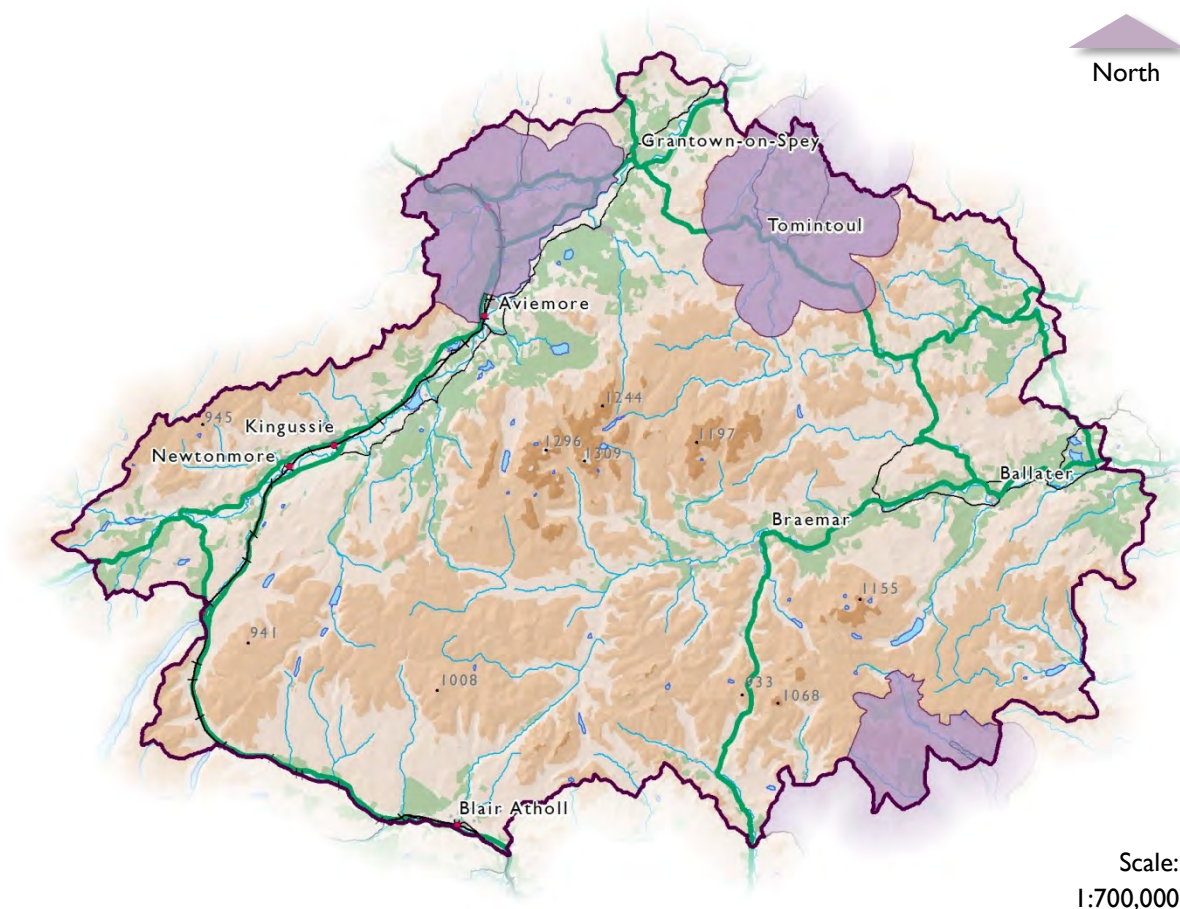


Figure 104 Wildcat Priority Areas within the Cairngorms National Park.

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details three wildcat conservation 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 are common in most areas of the National Park and have long been central to the cultural and natural heritage of the Highlands. 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.

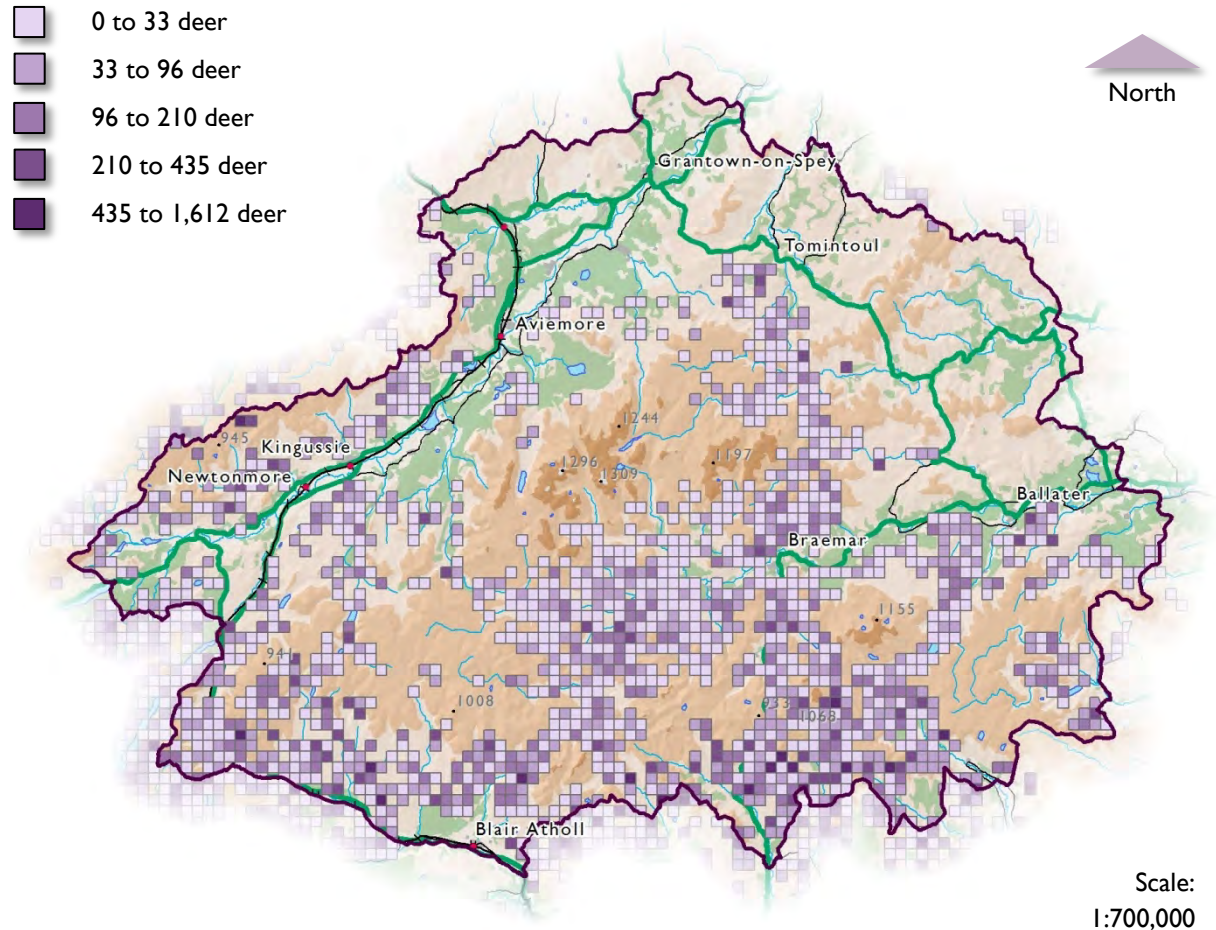


Figure 105 Deer density polygons of 1km² based on results from deer counts, 2000 - 2018.

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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

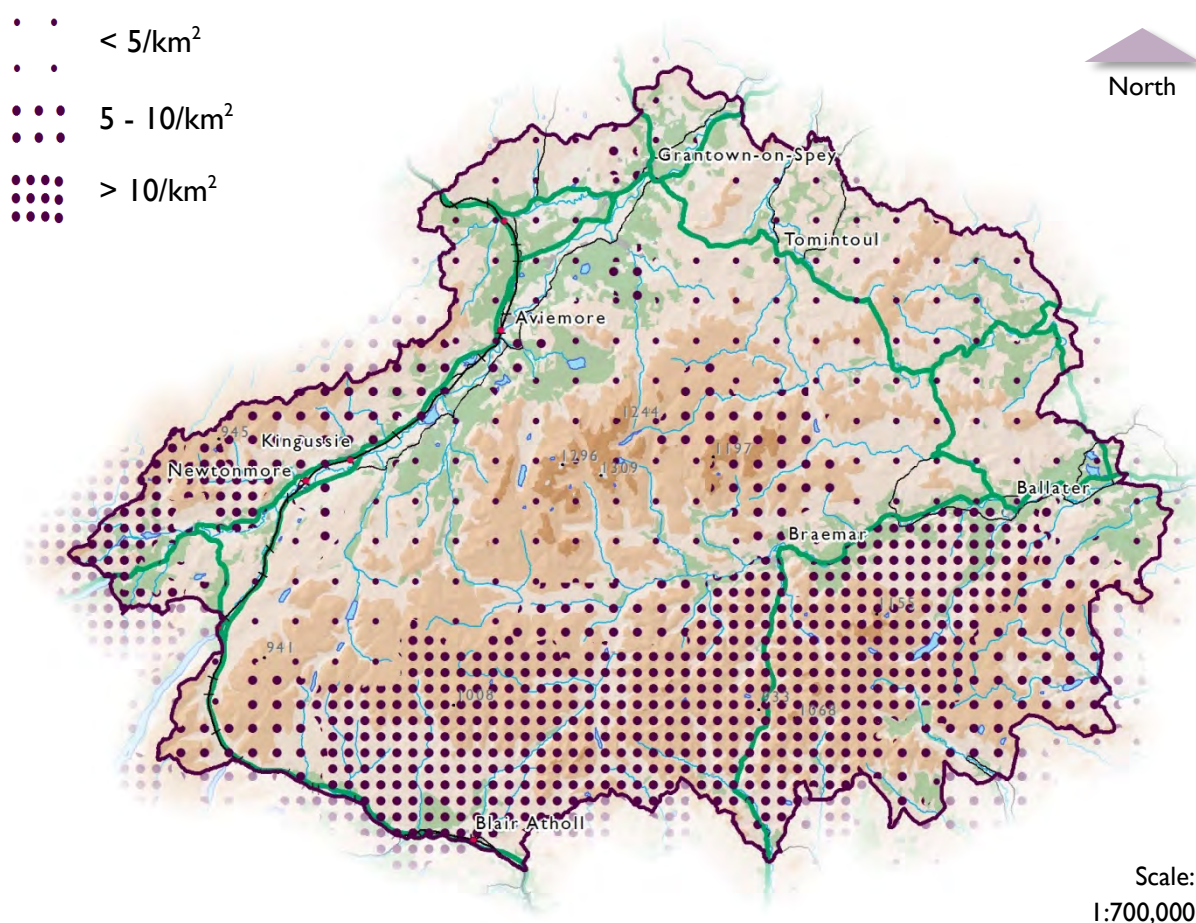


Figure 106 Aspirational Red Deer Densities in the Cairngorms National Park, November 2015.

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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, Capercaillie, Red Squirrel and Crossbill. 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

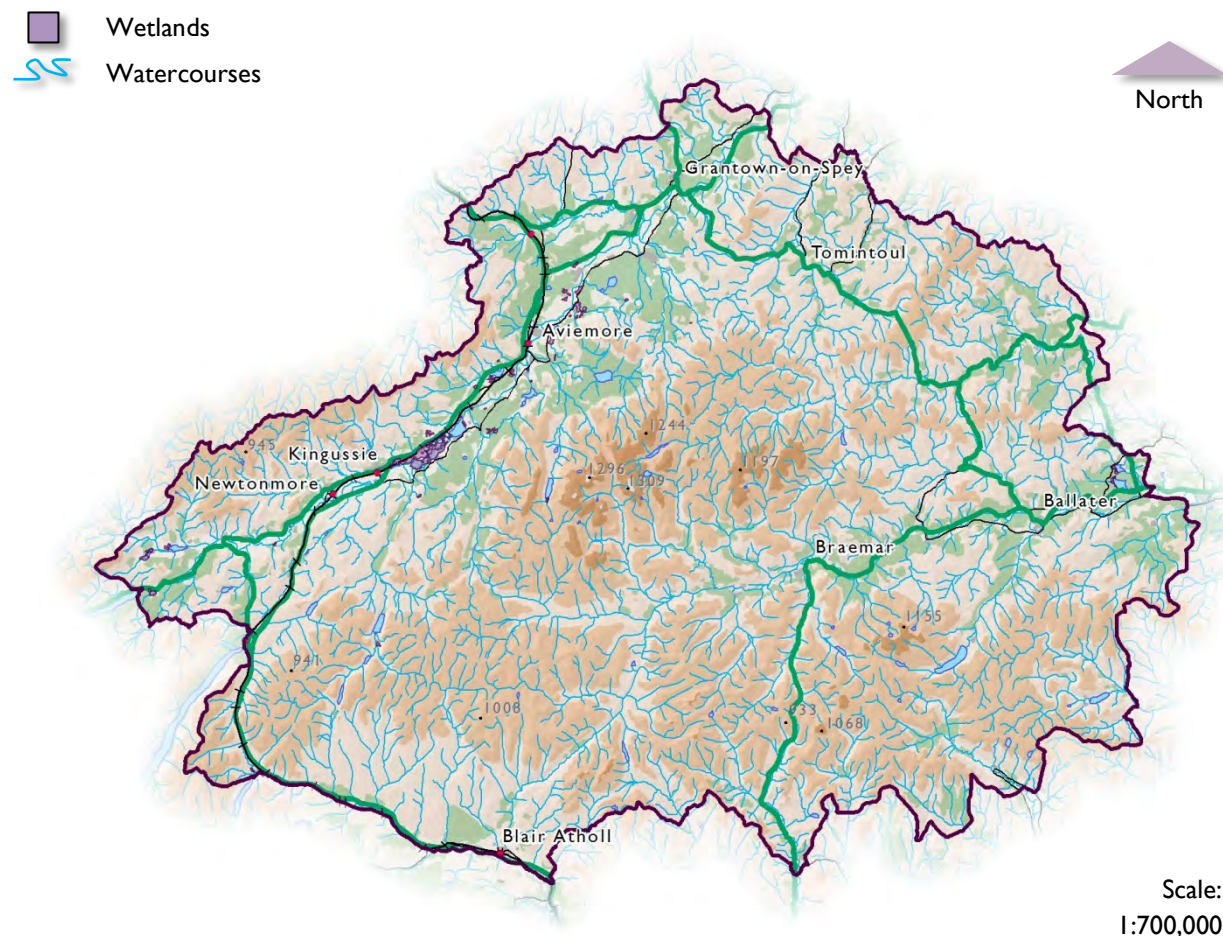


Figure 107 Wetlands within the Cairngorms National Park (Soil Survey of Scotland Staff, 1981).

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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 65% of waterbodies are classified as being at good or better ecological status (**Figure 108**), recovering from a low of around 50% in

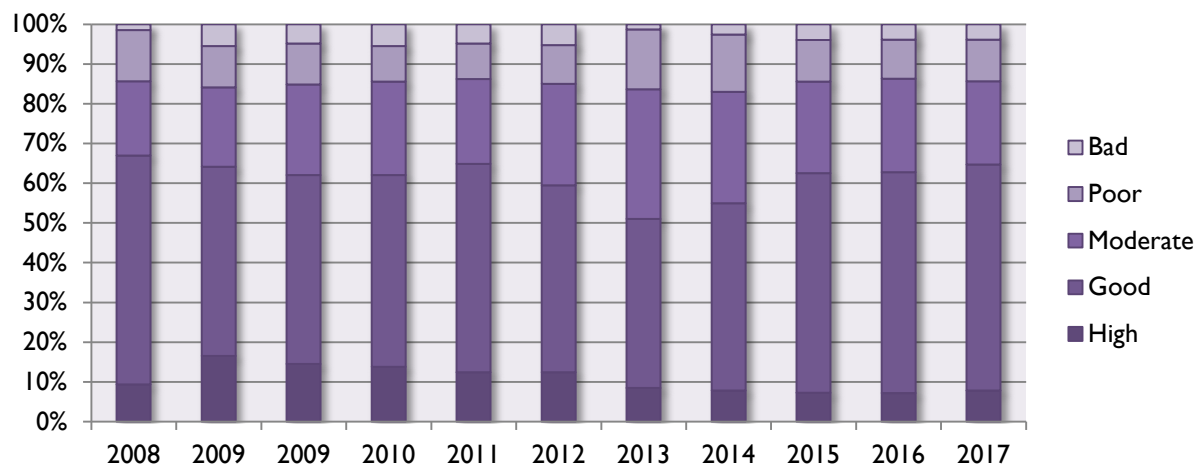


Figure 108 Ecological status of waterbodies within and overlapping the Cairngorms National Park.

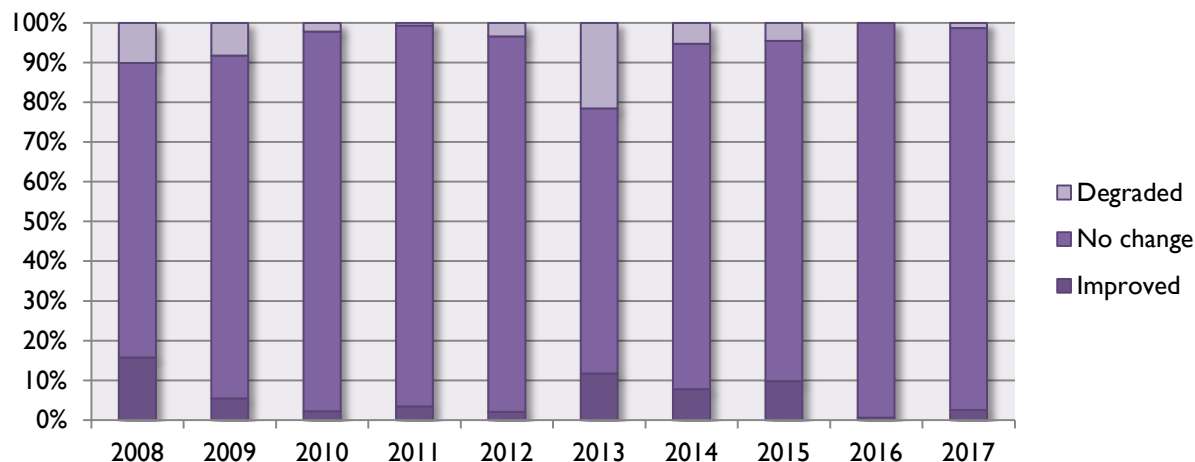


Figure 109 Change from previous year in the ecological status of waterbodies within or overlapping the Cairngorms National Park

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

2013 (**Figure 109**). See **Topic 3: Water** (p. 138) for further information on the quality of waterbodies in the National Park. **Table 25** provides the main issues affecting wetlands within the National Park together with actions required to address them.

Table 25 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 26**.

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 co-ordinate 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 26 Freshwater, Wetlands & Wet Grassland species selected for targeted action in CNAP (Cairngorms National Park Authority, 2013).

Species	Status in the CNP
Lapwing <i>Vanellus vanellus</i>	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 <i>Coenagrion hastulatum</i>	This 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 <i>Spiriverpa lunulata</i>	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 <i>Margaritifera margaritifera</i>	The freshwater pearl mussel <i>Margaritifera margaritifera</i> 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 <i>Brachyptera putata</i>	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

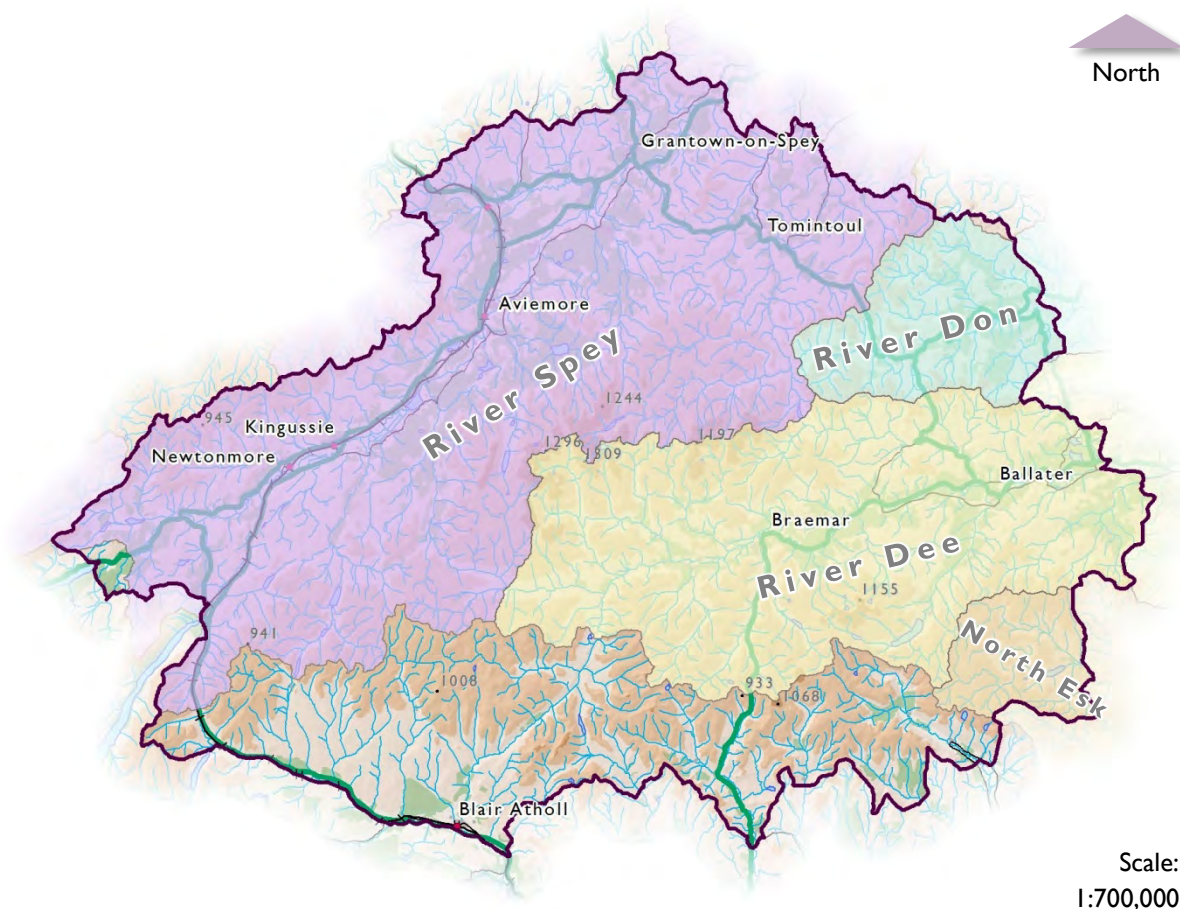


Figure 110 Areas covered by River Catchment Initiatives.

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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 32 ha. 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 52 and Figure 53) is the second most extensive habitat and is mainly *Calluna-Eriophorum* dominated blanket mire.

Montane 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.

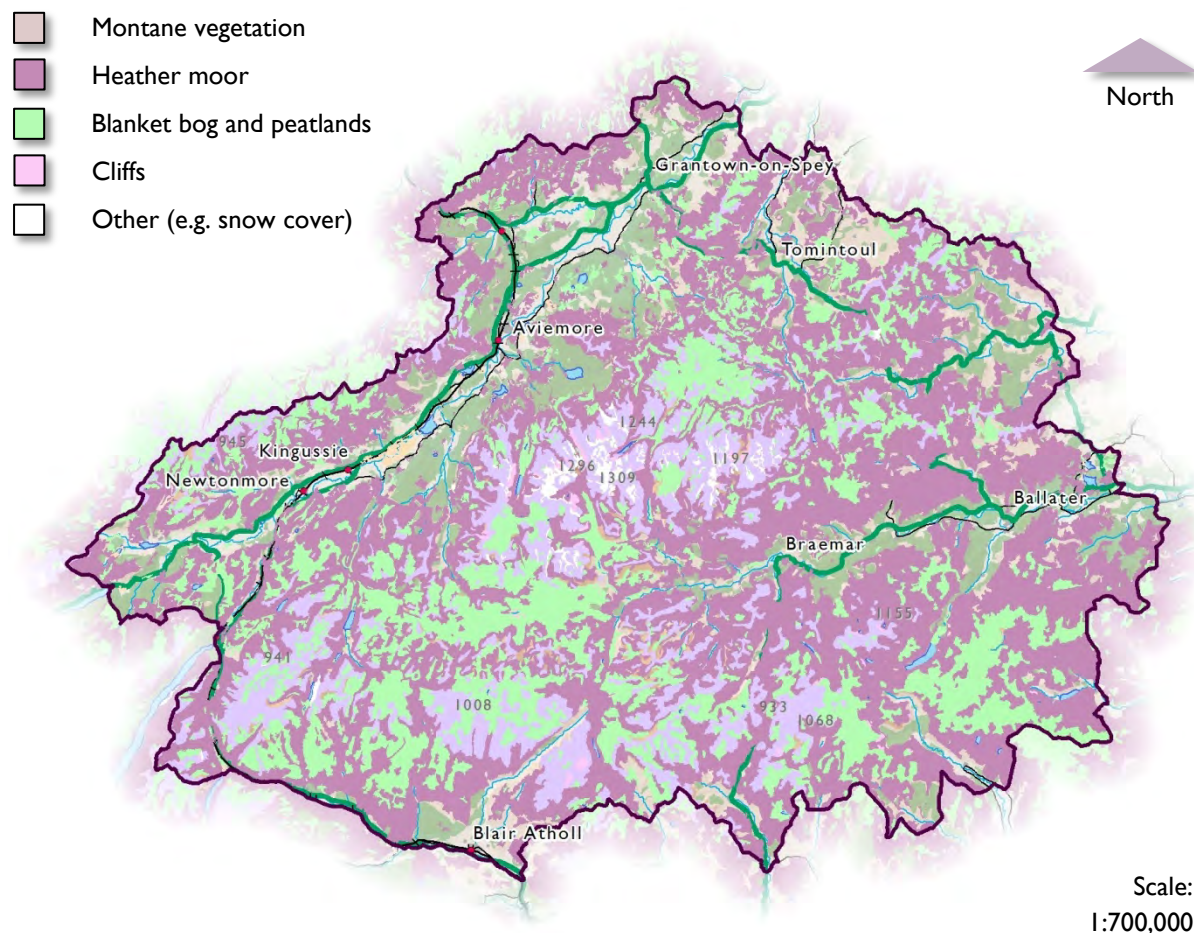


Figure 111 Upland land cover types within the Cairngorms National Park (Soil Survey of Scotland Staff, 1981).
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Table 27 provides the main issues affecting uplands within the National Park together with actions required to address them.

Table 27 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 28**.

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

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

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 (**Figure 102**).

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 29**.

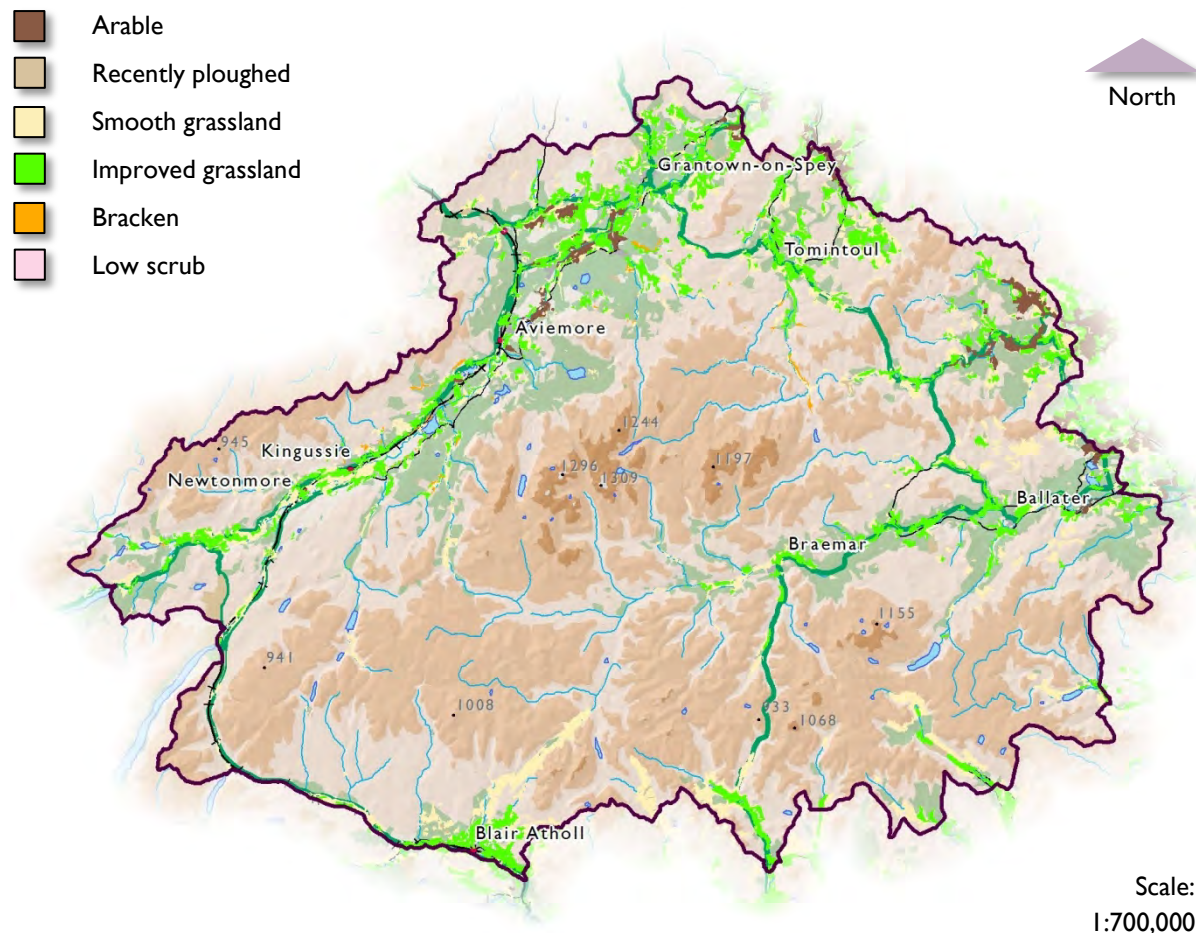


Figure 112 Lowland land cover types within the Cairngorms National Park (Soil Survey of Scotland Staff, 1981).
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Working in partnership, the CNPA is involved in projects aimed directly at improving the status of lowland habitats and their associated species within the Cairngorms National Park, these include:

Farm Advisory

Most of the farms in the 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 'agri-environment' 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 29 Lowland species selected for targeted action in CNAP (Cairngorms National Park Authority, 2013).

Species	Status in the CNP
Small dark yellow underwing <i>Anarta cordigera</i>	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 <i>Andrena marginata</i>	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 <i>Meloe violaceus</i>	Occurs in woodland, heathland and grassland habitats where solitary bees are abundant which it requires for part of its lifecycle.
Crimson waxcap <i>Hygrocybe punicea</i>	One of the largest of the waxcaps, <i>Hygrocybe punicea</i> 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 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 mantegazzanum*), 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 non-native 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. Currently in the National Park planting of Scots Pine next to existing stands is discouraged which could have long term impacts on woodland structure and species composition.

Ash die back 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 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 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 CNP and is thought to be transmitted to new areas through movement of sheep.

Domestic Pets

The number and distribution of domestic pets can have a variety of impacts on ecosystems, either directly, for example through predation or indirectly, for example as a result of the recreation patterns of their owners. Estimates of dog and cat numbers and their spatial distribution are available from Animal and Plant Health Agency and discussed in (Aegerter, Fourcare, & Smith, 2017).

In the National Park context, dogs are of interest as those recreating with them may have a negative effect on capercaillie though recreational disturbance, while cats may predate on bird life and inter-breed with wildcat populations.

There are approximately 8,400 dogs and 7,700 in the National Park, with **Figure 113** and **Figure 114** showing their distribution. The absence of a data point does not necessarily indicate that there are no dogs or cats at addresses in these areas, just that the density of the population is below one per km².

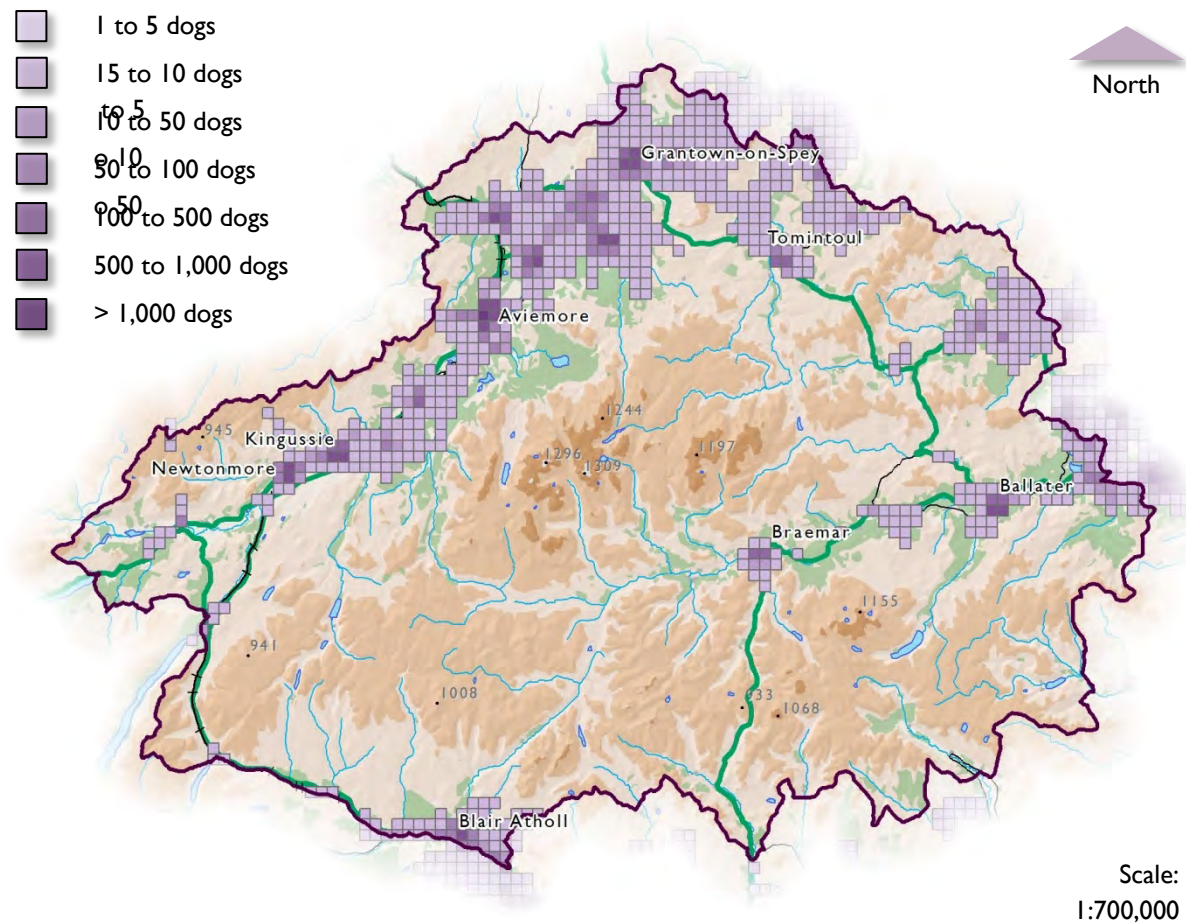


Figure 113 Dog density by 1km².

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The predicted density of pets varies substantially, with the lowest densities in the more rural areas, and the highest in the more urban towns. Conversely, the number of pets per household generally shows the opposite relationship.

AB37, which covers the Tomintoul and Glenlivet area had the most dogs per household (1.2), while PH20, which covers Newtonmore, PH22, which covers Aviemore and AB35, which covers Braemar, all have fewer dogs per household than the National Park average of about 0.8 dogs per household.

The difference in the number of cats per household, which is also around 0.8 for the whole National Park, shows less variation between towns and more rural areas, with the highest number 1.1 in AB37 and 0.4 in AB35.

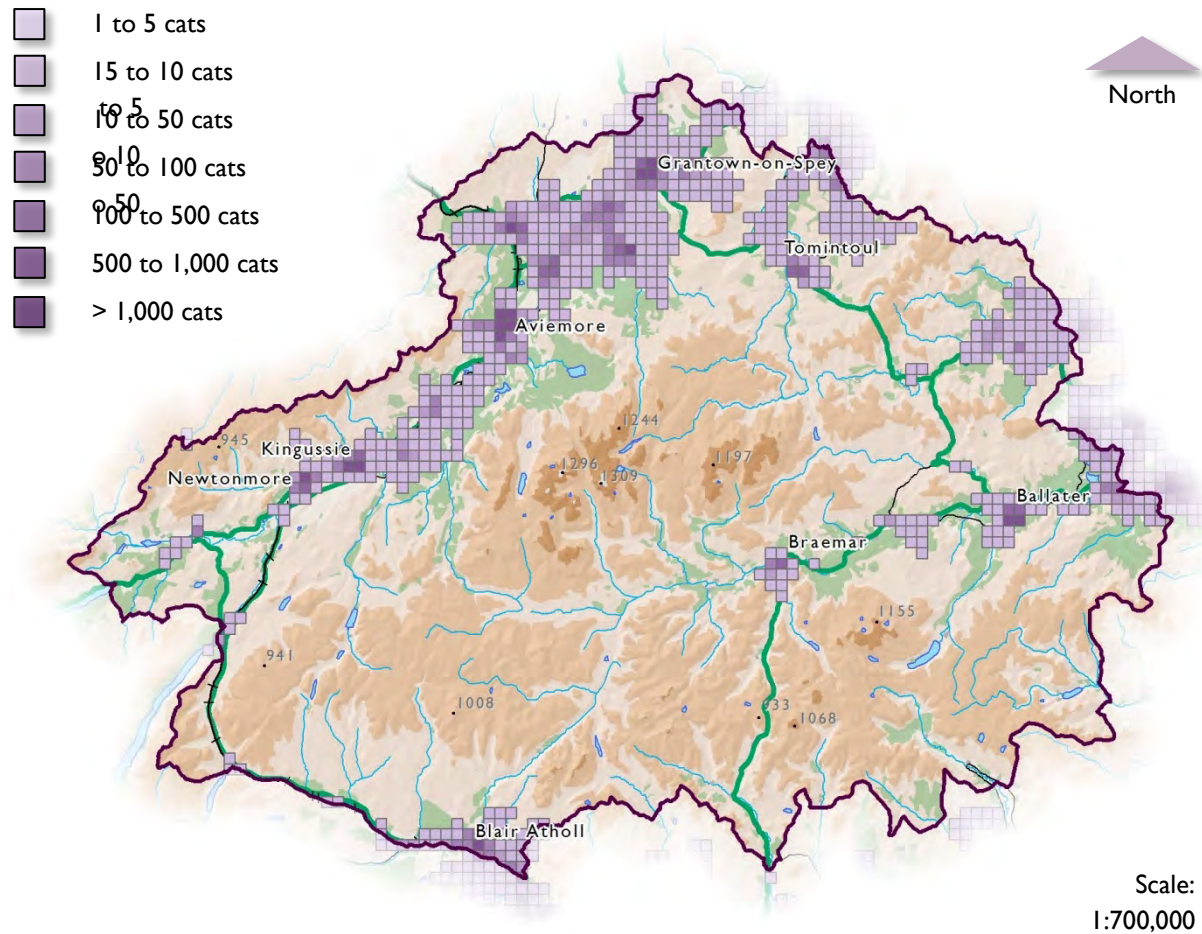


Figure 114 Cat density by 1km².

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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 LDP 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

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