

Cairngorms National Park Authority

Habitats Regulations Assessment Report

Boat of Garten Housing

Planning Application No: 2013/0115/DET

Erection of 30 houses, 2 house plots, associated roads and footways on land 200m west of the football field, Craigie Avenue, Boat of Garten

June 2013

Section I: Introduction

This is a record of the assessment under regulation 48 of the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) for the planning application 2013/0115/DET made by Davall Developments. These regulations are otherwise known as “the habitat regulations”. It is the purpose of this assessment to inform the decision making body (the CNPA) on the effects of the above development upon the relevant Natura sites to allow them to determine the application in accordance with the European Habitat Directive 92/43/EEC.

European Directive 92/43/EEC is transposed into law in Scotland by the habitat regulations. This requires that plans and projects considered by competent authorities that could have a likely significant effect on a Natura site, should be subject to an assessment of their potential impacts upon the site. Regulation 48 directs that:

“48.-(1) A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which—
(a) is likely to have a significant effect on a European site in Great Britain (either alone or in combination with other plans or projects), and
(b) is not directly connected with or necessary to the management of the site,
shall make an appropriate assessment of the implications for the site in view of that site’s conservation objectives. “

It further states that:

“48 - (5) In the light of the conclusions of the assessment, and subject to regulation 49, the authority shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site. “

The Cairngorms National Park Authority, as the determining and therefore competent authority, is therefore required in law to undertake this assessment in order to comply with these regulations.

Within the Habitats and Birds directives there are two categories of protected sites, both of which are found within the Cairngorms National Park. In addition, in Scotland, sites designated for protection under the Ramsar Convention (1971) are treated as if they are Natura sites as a matter of policy. Sites put forward for designation under Natura (provisional sites) are also fully protected until the time when the designation is either confirmed or refused. The types of site considered for this appraisal are therefore:

- Special Area of Conservation (SAC and pSAC) – a European designation which protects natural habitats and wild flora and fauna other than birds
- Special Protection Area (SPA and pSPA) – a European designation which protects wild birds
- Ramsar Site – Sites designated under the Ramsar Convention 1971 which protects wetlands

This process of assessment is known formally as a Habitats Regulations Assessment (HRA). This is not to be confused with an Appropriate Assessment (AA), which is one component of the process of the HRA.

Background to the assessment

The proposed development which is the subject of this assessment consists of the erection of 30 houses, 2 house plots, associated roads and footways on land 200m west of the football field, Craigie Avenue, Boat of Garten. A previous application one was determined by the CNPA in 11/11/2011. This was for a larger housing scheme (77 units) and the HRA could not conclude that there would be no adverse effect upon any Natura site. It was consequently refused. Following this the applicant, Seafield Estate, Scottish Natural Heritage and the CNPA worked to assess the implications and appropriate mitigation required. The identification of existing issues connected with capercaillie conservation was addressed by many of the mitigations and action has been taken since then to implement some of these measures. Other measures required for mitigating the effects of the development have been proposed within the application.

This assessment considers all these measures. Those currently implemented will have an effect upon existing baseline conditions and those proposed through the development address the additional impacts attributable from that source. However it is not possible to be specific about the balance of measures and effects and from which source. This is why they are treated together within the assessment.

The principle documents which have been taken into account for this assessment are:

1. Planning application form
2. Planning application supporting information
3. MBEC Supporting information: Ecology and Nature Conservation November 2010
4. MBEC Further information report (ecology) September 2011
5. MBECV outline Ecological management Plan November 2010
6. Drawings:
 - a. 2532/01-02
 - b. 2532/01-04
 - c. HLD 1753.13SC01
7. SNH representation 9/5/13 and accompanying Natura appraisal
8. Public consultation representations:
 - a. RSPB 15/5/13
 - b. Badenoch and Strathspey Conservation Group 6/5/13

c. R Turnbull 6/5/13

d. C Ormison

Reference has also me made to the previous application and subsequent documentation outlining the mitigation development.

Section 2: Methodology

There is no prescribed method for a Habitats Regulations Assessment. The CNPA has therefore consulted the guidelines prepared by David Tyldesley and Associates for the Welsh Assembly Government. These are contained within TAN 5 “Nature conservation and Planning” and where necessary they have been adapted for the situation in Scotland. In addition EU guidelines have also been consulted in this process, see references for details.

Table I Stages of Assessment

Stages of Assessment	
Stage 1	Decide whether proposal is subject to HRA
Stage 2	Identify Natura Sites that should be considered and gather information about the Natura Sites
Stage 3	Consultation on the method and scope of the appraisal with SNH and others. Request additional information from applicant if required.
Stage 4	Screening the proposal for likely significant effects on Natura sites including mitigation measures included within the proposal
Stage 5	Screen for “in combination effects” with other plans or projects
Stage 6	Appropriate Assessment to determine effect upon conservation objectives. Preliminary conclusion about adverse effect upon the integrity of any site.
Stage 7	Consultation with SNH (and others if considered appropriate)
Stage 8	Apply additional mitigation measures, if required, via conditions to ensure that there is no adverse effect on site integrity
Stage 9	Conclusion on Integrity test
Stage 10	Section 49 derogation procedures. This only applies if adverse effects remain and Competent Authority still wishes to approve the application

Further details of the methodology applied during screening and appropriate assessment are given in the relevant sections.

Section 3: Initial stages 1-5 describing the Natura sites and Screening

Stage 1: The development proposal and the decision to screen

The proposal for the housing at Boat of Garten is close to a number of Natura sites and is within the definition of a project under Regulation 54 of the Natura regulations.

Regulation 54 states that:

“Regulations 48 and 49 (requirement to consider effect on European site) apply, in Scotland, in relation to–

(a) granting planning permission on an application under Part III of the Town and Country Planning (Scotland) Act 1972.”

The proposed development is not wholly concerned with the necessary management of a European site for nature conservation and requires planning permission and so the plans must be subject to assessment under the terms of Directive 92/43/EEC.

Stages 2: Identification of Natura Sites and gathering their details

An assessment of all possible sites affected by the proposed development has been undertaken. This has considered any possible outcomes of the development together with any conceivable effect. The list below is those sites that have been taken forward to screening for likely significant effects. See Appendix I for details on each site and its qualifying features. Other sites were considered but have not been taken forward. For example the Cairngorms Massif, because the development would be too small and distant to have any plausible effect upon the qualifying interest (Golden Eagle) and Kinveachy SAC where the qualifying interests are habitats that would not be effected by the small number of likely visits arising from this development.

Special Area of Conservation (SAC)

- River Spey

Special Protection Area (SPA)

- Abernethy Forest
- Anagach Woods
- Cairngorms
- Craigmore Wood
- Kinveachy Forest
- Loch Vaa

Stage 3: Discussions on the method and scope of the appraisal and requests for additional information

Advice has been sought from SNH for several sites and plans on a number of matters but in particular capercaillie impacts. Natura advice was received from SNH on 9th May 2013 this follows previous meetings on the 2nd and 8th May 2013. An additional meeting was held subsequently on 17th May 2013.

Advice has also been sought from Tim Poole (Capercaillie Project officer) on issues relating to the development including habitat improvements and screening requirements in the Boat woods. These discussions have been held and meetings on and off site over the past 12 months. The CNPA access team has also advised on issues around the public access and recreation use of the woodlands and footpath network. There has been a constant dialogue with the access team since prior to the initial application was refused in 2011.

The UK Capercaillie BAP Group and Robert Moss (independent scientist and grouse specialist) were also consulted when collating evidence for the previous Appropriate Assessment for the earlier Planning Application.

No additional information has been asked of the applicant following submission of the application. The CNPA is content that the advice it has received during consultation has provided adequate baseline information on which to determine the effects of the development. This baseline has been built from existing knowledge on the location and behaviour of capercaillie in the vicinity and survey work undertaken with the residents of Boat to assess the nature and distribution of access within the woodlands.

Stage 4: Screening the proposal for likely significant effects

The test in regulation 48 is whether the proposal is likely to have a significant effect, either alone or in combination with other plans or projects, on the Natura sites identified in stage 2 above. This clearly requires an initial assessment, or screening, for which interest features of any Natura site may be affected and if it is likely or significant.

In considering what is 'likely' the CNPA is mindful of existing case law in relation to the application of the habitats regulations. The CNPA notes the ruling of the ECJ in case C-127/02 (known as the Waddenzee judgement). This rules (in paragraph 45) that an appropriate assessment must be undertaken if "it cannot be excluded, on the basis of objective information, that it will have a significant effect on that site, either individually or in combination with other plans or projects". Consequently we take the word 'likely' not to mean 'probable' but 'possible'.

The ruling also gives useful clarification for the word 'significant'. In Paragraph 47 it states that: "where such a plan or project has an effect on that site but it is not likely to undermine its conservation objectives, it cannot be considered likely to have a significant effect on the site concerned." The CNPA draws from this that it must be confident that any significant effects can be excluded on the basis of objective information in order to conclude that there will be no effect on the conservation objectives.

In considering the part of the test which is "alone or in combination with other plans or projects" we understand that this refers to proposed or incomplete plans or projects.

Completed developments will also be considered but as part of the baseline for assessment if they have continuing effects on any site and “point to a pattern of progressive loss of site integrity “. If a development would have a significant effect alone then it is to be assessed alone, an in combination assessment is therefore not required, until it is no longer considered to have an effect alone.

When considering in combination tests only projects and plans that are relevant to the effected sites will be included. Furthermore they will be excluded unless the effects they have are related to the effects of the development being assessed here.

The first step of the screening process will consider what the level of any effect these may be: no effect, likely insignificant or likely significant. If likely insignificant effects are found these will be further screened at stage 5 in combination with other plans or projects. If there are any significant effects found, either alone or in combination, then these will be considered in detail within an Appropriate Assessment.

Table 2; the four possible outcomes from the screening process

Screening outcome	Description	Stage of process outcome found
No effect	there is no adverse effect at all upon the qualifying interests	Stage 4
No likely significant effect in combination	Where there is an insignificant effect from the development itself and even in combination with other plans and projects does not amount to a significant one.	Stage 5
Likely significant effect in combination	Where there is an insignificant effect from the development itself but in combination with other plans and projects becomes significant.	Stage 5
Likely significant effect alone	where there is a possible significant effect from the development by itself	Stage 4

Table 3: Screening for LSE from Boat of Garten Housing application

Abernethy Forest SPA					
Qualifying Feature Affected	Possible effect of development	Likely significant effect	Duration	Discussion	Screening outcome
Capercaillie	Increase in recreational activity from residents of new development within the SPA	Disturbance to lekking, brood rearing and feeding habitats from recreational activity.	permanent	A small increase in occasional use of the SPA closest to Boat of Garten. This part of the SPA already attracts approximately 40,000 visitors per annum to visitor centre. The area is managed by RSPB to minimise effects by visitors, as far as possible, through encouraging use of promoted paths which are out with key habitat and lekking sites. The RSPB currently deploys Trail Wardens to raise awareness of these issues with a particular emphasis on dog ownership and recreation.	Likely Insignificant effect (taken to Stage 5 in combination screening)
	Increase in recreation within Boat woods (Non SPA) from residents of new development	Reduction in productivity within Boat wood population reducing the viability of meta-population though decreased migration and in effective increased habitat fragmentation	permanent	Proximity of new housing likely to mean frequent additional use of woods by new residents. Lek site is out of site from paths but high quality habitat for brood rearing is close so disturbance is likely especially from daily dog walking. Mitigations offered within development include screening and awareness raising to improve access behaviour.	Likely significant effect alone
	Occupation of new housing	Disturbance to birds within Boat woods adjacent to housing limiting habitat	permanent	Disturbance is not likely beyond 200m of development. This area is low habitat quality for caper and infrequently used by the birds. Mitigations within development includes tall rear garden fence and restrictions on gates being added to prevent ad-hoc access.	No effect

	Construction activity	Disturbance to birds within Boat woods adjacent to housing limiting habitat	During construction phase only	Disturbance is not likely beyond 200m of development. This area is low habitat quality for caper and infrequently used by the birds. Limits have been placed upon activity times and measures are included for visual screening.	No effect
Scottish Crossbill	Increase in recreational activity from residents of new development within the SPA and in the woodlands at Boat	Disturbance to nesting sites and feeding habitat	permanent	<p>There is no evidence that species affected by disturbance; species does not nest on the ground. Therefore birds within SPA are unlikely to be affected.</p> <p>The development site has pole stage plantation which is not preferred habitat; amount of total habitat loss is small (less than 1% of Boat Pine woodlands). Therefore it can be concluded that this planning application will have no effect on the species there. Consequently there will be no effect upon meta-population.</p>	No effect
Osprey	Increase in recreational activity from residents of new development within the SPA and in the woodlands at Boat	Disturbance to nesting sites	permanent	<p>Nest sites are managed and protected by RSPB. Visitor centre provides opportunity for viewing without disturbance. General recreation managed by RSPB to minimise effects, as far as possible, by providing promoted paths away from nest sites.</p> <p>Boat woodland has no recorded nesting in the woodland or no feeding loch. Therefore it can be concluded that this planning application will have no effect of the species. Consequently there will be no effect upon meta-population.</p>	No effect

Anagach woods SPA

Qualifying Feature Affected	Possible effect of development	Likely significant effect	Duration	Discussion	Screening outcome
Capercaillie	Increase in recreational activity from residents of new development within the SPA	Disturbance to lekking, brood rearing and feeding habitats from recreational activity.	permanent	SPA is already well used from Granttown residents (circa 2,200) woodlands are unlikely to be a significant target destination from Boat. Woodlands already have well used promoted paths with signage about caper requesting responsible access. Likely access points to woodlands mostly away from key caper areas.	No effect
	Increase in recreation within Boat woods (Non SPA) from residents of new development	Reduction in productivity within Boat wood population reducing the viability of meta-population though decreased migration and in effect increased habitat fragmentation	permanent	Proximity of new housing likely to mean frequent additional use of woods by new residents. Lek site is out of site from paths but high quality habitat for brood rearing is close so disturbance is likely especially from daily dog walking. Mitigations offered within development include screening and awareness raising to improve access behaviour.	Likely significant effect alone

Cairngorms SPA					
Qualifying Feature Affected	Possible effect of development	Likely significant effect	Duration	Discussion	Screening outcome

Capercaillie	Increase in recreational activity from residents of new development within the SPA	Disturbance to lekking, brood rearing and feeding habitats from recreational activity.	permanent	A small increase in occasional use of the SPA closest to Boat of Garten. The SPA already attracts 500,000 visitors per annum. The area is well managed by FCS and Rotheimurchus to minimise possible effects by visitors through encouraging use of promoted paths which are out with key habitat and lekking sites.	No effect
	Increase in recreation within Boat woods (Non SPA) from residents of new development	Reduction in productivity within Boat wood population reducing the viability of meta-population though decreased migration and in effect increased habitat fragmentation	permanent	Proximity of new housing likely to mean frequent additional use of woods by new residents. Lek site is out of site from paths but high quality habitat for brood rearing is close so disturbance is likely especially from daily dog walking. Mitigations offered within development include screening and awareness raising to improve access behaviour.	Likely significant effect alone
Scottish Crossbill	Increase in recreational activity from residents of new development within the SPA and in the woodlands at Boat	Disturbance to nesting sites and feeding habitat	permanent	There is no evidence that species affected by disturbance; species does not nest on the ground. Visits from development residents to SPA too infrequent to have any effect. 500,000 visits to SPA area from existing residents and visitors. The development site has pole stage plantation which is not preferred habitat; amount of total habitat loss is small (less than 1% of Boat Pine woodlands). Therefore it can be concluded that this planning application will have no effect on the species. Consequently there will be no effect upon meta-population.	No effect
Osprey	Increase in recreational activity from residents of new development within the SPA and in the	Disturbance to nesting sites	permanent	Nest sites are well managed and protected by Rotheimurchus. General recreation managed by FCS and Rotheimurchus to encourage recreational access to promoted paths away from nest sites. Boat woodland has no recorded nesting in the	No effect

	woodlands at Boat			woodland or no feeding loch. Therefore it can be concluded that this planning application will have no effect of the species. Consequently there will be no effect upon meta-population.	
Dotterel	Increase in recreational activity from residents of new development within the SPA and in the woodlands at Boat	Increase disturbance to nesting from more visitors to relevant habitats in the SPA	permanent	<p>Nest sites are in remote uplands. The number of likely visits generated by new development too small to have an effect.</p> <p>The location and habitats present on the development site are unlikely to be of use for the species. Therefore it can be concluded that this planning application will have no effect on the species. Consequently there will be no effect upon meta-population.</p>	No effect
Golden eagle	Increase in recreational activity from residents of new development within the SPA and in the woodlands at Boat	Increase disturbance to nesting from more visitors to relevant habitats in the SPA	permanent	<p>Nest sites are in remote uplands. The number of likely visits generated by new development to the SPA is too small to have an effect.</p> <p>The location and habitats present on the development site are unlikely to be of use for the species. Therefore it can be concluded that this planning application will have no effect on the species. Consequently there will be no effect upon meta-population.</p>	No effect
Merlin	Increase in recreational activity from residents of new development within the SPA and in the woodlands at Boat		permanent	<p>The number of likely visits generated by new development to the SPA is too small to have an effect.</p> <p>The location and habitats present on the development site are unlikely to be of use for the species. Therefore it can be concluded that this planning application will have no effect on the species. Consequently there will be no effect</p>	No effect

				upon meta-population.	
Peregrine	Increase in recreational activity from residents of new development within the SPA and in the woodlands at Boat		permanent	<p>The number of likely visits generated by new development to the SPA is too small to have an effect.</p> <p>The location and habitats present on the development site are unlikely to be of use for the species. Therefore it can be concluded that this planning application will have no effect on the species. Consequently there will be no effect upon meta-population.</p>	No effect

Craigmore wood SPA					
Qualifying Feature Affected	Possible effect of development	Likely significant effect	Duration	Discussion	Screening outcome
Capercaillie	Increase in recreational activity from residents of new development within the SPA	Disturbance to lekking, brood rearing and feeding habitats from recreational activity.	permanent	SPA is not a popular destination with one promoted path which skirts southern edge and no core paths. New development is unlikely to generate significant increase in users to paths. RSPB management strategy is to keep numbers low by promoting other less sensitive areas.	No effect
	Increase in recreation within Boat woods (Non SPA) from residents of new	Reduction in productivity within Boat wood population reducing the viability of meta-population though decreased migration and in effect increased	permanent	Proximity of new housing likely to mean frequent additional use of woods by new residents. Lek site is out of site from paths but high quality habitat for brood rearing is close so disturbance is likely especially from daily dog walking. Mitigations offered within development include screening and	Likely significant effect alone

	development	habitat fragmentation		awareness raising to improve access behaviour.	
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Kinveachy Forest SPA					
Qualifying Feature Affected	Possible effect of development	Likely significant effect	Duration	Discussion	Screening outcome
Capercaillie	Increase in recreational activity from residents of new development within the SPA	Disturbance to lekking, brood rearing and feeding habitats from recreational activity.	permanent	The SPA is not easily accessed from Boat of Garten. Access infrastructure is not well developed; Lek sites are remote and away from path network. The SPA currently attracts a small number of cyclists and walkers from surrounding settlements, Aviemore, Carrbridge as well Boat.	No effect
	Increase in recreation within Boat woods (Non SPA) from residents of new development	Reduction in productivity within Boat wood population reducing the viability of meta-population though decreased migration and increased habitat fragmentation	permanent	Proximity of new housing likely to mean frequent additional use of woods by new residents. Lek site is out of site from paths but high quality habitat for brood rearing is close so disturbance is likely especially from daily dog walking. Mitigations offered within development include screening and awareness raising to improve access behaviour.	Likely significant effect alone
Scottish Crossbill	Increase in recreational activity from residents of new development within the SPA and in the woodlands at	Disturbance to nesting sites and feeding habitat	permanent	There is no evidence that species affected by disturbance; species does not nest on the ground. The development site has pole stage plantation which is not preferred habitat; amount of total habitat loss is small (less than 1% of Boat Pine woodlands). Therefore it can be concluded that this planning application will have no effect on the	No effect

	Boat			species. Consequently there will be no effect upon meta-population.	
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Loch Vaa SPA					
Qualifying Feature Affected	Possible effect of development	Likely significant effect	Duration	Discussion	Screening outcome
Slavonian grebe	Increase in recreational activity from residents of new development within the SPA	Disturbance to the birds during breeding and brood rearing	permanent	The Grebe is not generally very sensitive to disturbance. The main risk comes from disturbance on the nest if parents are scared off the nest the eggs or young are prone to predations. However the nests at Loch Vaa are away from general recreation areas. The types of recreation of concern have been fishermen; photographers and bird watchers. Walkers, and even dog walkers, are of less concern, given that they are unlikely to venture far into the wet areas frequented by the birds. Outwith nesting season the birds can escape onto the water. It is not a well-used site for recreation; it is considered that most use is from people who park nearby on the A95, not people who walk all the way from Boat. We therefore conclude that the additional houses will not add to disturbance form the development.	No effect

River Spey SAC					
Qualifying Feature Affected	Possible effect of development	Likely significant effect	Duration	Discussion	Screening outcome
Otter	Increase in recreational activity adjacent to the SAC from residents of new development	Disturbance to otters resting and breeding sites. Disturbance to otters feeding	permanent	There is already an informal path along this route, probably used mostly by fishermen, so there is already some recreational disturbance. Apart from a short section of woodland immediately adjacent to the road bridge over the Spey, the riverbank habitat is grazed grassland with little cover for otter. We therefore conclude that it is unlikely that there are any holts or resting places along this stretch of river bank, or that otters could be significantly disturbed.	No effect
	Construction activity close to water courses	Pollution from chemical leakage and siltation clouding water	Construction period	Construction is not close to water course feeding into the Spey	No effect
Sea Lamprey					
	Construction activity close to water courses	Pollution from chemical leakage and siltation clouding water	Construction period	Construction is not close to water course feeding into the Spey.	No effect
Freshwater Pearl Mussel	Pollution from waste water	Increase phosphorous levels in the water may affect FWPM	permanent	Consent for extension to Waste Water treatment works was granted in 2010. Letter from Scottish water 7/8/12 confirms that capacity will be available once completed in Summer 2013. Consent notice includes advice note that new WWTW would need a CAR licence from SEPA to ensure discharge quality. Phosphorous levels will be monitored as part of standard process by	No effect

				SEPA. Arrangements have been confirmed by email from SEPA 5/6/13	
	Construction activity close to water courses		Construction period	Construction is not close to water course feeding into the Spey	No effect
Atlantic Salmon					
	Construction activity close to water courses		Construction period	Construction is not close to water course feeding into the Spey	No effect

Stage 5: In-combination effects

Regulation 48(1)a. is clear in setting out a requirement to include the assessment of the impacts of any development *in combination* with other plans and projects. This is to ensure that any cumulative and synergistic effects that are likely to be significant to the conservation objectives are identified.

The plans and projects in Table 4 have been searched for any likely insignificant effects that may combine with those identified the proposed development. Of these only the project for widening the A9 and the Draft Cairngorms Local development Plan are seen to have any insignificant effects upon the sites considered within this Assessment.

The A9 widening has been assessed a having possible insignificant effect upon the River Spey SAC. This study has not found any such effects and so there is no possible in combination effect. This has not been taken further.

The Draft Cairngorms Local development Plan has found possible insignificant effects for five for the SPAs considered in this study. These are Abernethy Forest, Anagach, Craigmore Woods, Cairngorms and Loch Vaa. The screening in stage 4 identified a likely insignificant effect only at Abernethy Forest SPA. Therefore this site alone will be taken forward to in combination screening below. There is also a likely significant effect upon Abernethy Forest SPA. It is usual not to screen for in combination effect if there are also significant effects. It is assumed that the latter would take precedence. However the nature of the effects are different and so the in combination screening will be done to ascertain if this too is likely significant. If it is then it too will be taken forward to the appropriate assessment stage.

Table 4: Other Plans and projects

Plan or Project	Aspect	Residual effect on Natura site within study
Scotland's National Transport Strategy 2006	A9 widening	River Spey SAC
Transport Scotland Strategic Transport Projects Review	A9 widening	River Spey SAC
Cairngorms National Park Partnership Plan 2012-2017		
Cairngorms National Park Local Plan - October 2010		
Cairngorms National Park Local Development Plan - draft March 2013	Settlement allocations	Abernethy Forest SPA Loch Vaa SPA Craigmore wood SPA Anagach SPA Cairngorms SPA
Cairngorms Nature Action Plan 2013-2017		

River Spey Catchment Management Plan		
Cairngorms National Park Outdoor Access Strategy		
Strategy and Action Plan for Sustainable Tourism in the Cairngorms		
Cairngorms Core Paths Plan		
Cairngorms Forest and Woodland Framework		

Table 5: In-combination effects

Natura Site: Abernethy Forest SPA							
Aspect of plan (Source)	Description of source of effect	Qualifying feature potentially effected	Nature of effect: Recreational disturbance	Nature of effect: Pollution of water course	Nature of effect: Siltation of water course	Nature of effect: Loss of habitat	Nature of effect: Loss of supporting habitat
Boat of Garten Housing application 2103/0115/DET	Increase in recreational activity from residents of new development within the SPA	Capercaillie	Disturbance to lekking, brood rearing and feeding habitats from recreational activity.	n/a	n/a	n/a	n/a
Draft Cairngorms Local Development Plan: Allocation of housing at Carr Bridge	Increase in recreational activity from residents of new development within the SPA	Capercaillie	Disturbance to lekking, brood rearing and feeding habitats from recreational activity.	n/a	n/a	n/a	n/a
Draft Cairngorms Local Development Plan: Allocation of housing at Dulnain Bridge	Increase in recreational activity from residents of new development within the SPA	Capercaillie	Disturbance to lekking, brood rearing and feeding habitats from recreational activity.	n/a	n/a	n/a	n/a
Is combination likely to be a significant effect? Why?		The three settlements are all to the west of the SPA and new residents are most likely to visit the corresponding side of the SPA. This is because of proximity and that the best known car parks are also on this side. This area of the SPA is not used by capercaillie. The SPA already attracts approximately 40,000 visitors per annum to the visitor centre through active promotion by the RSPB. The visitor centre provides a managed facility for those wanting to view capercaillie lekking without disturbing the birds. The area is managed by RSPB to minimise, as far as possible, effects by visitors through encouraging use of promoted paths on the western side of the SPA which are out with key habitat and lekking sites. The					

	<p>RSPB also deploy Trail Wardens to raise awareness of the issues with a particular emphasis on dog ownership and recreation. This package of management measures, aimed at conserving the capercaillie population, facilitates the recreation of the large numbers of visitors without impacting upon the birds. The increase in the use of the SPA from these three developments together is not considered to be significant because of the likely area for recreation is little used by the birds and the management measures in place by the RSPB.</p>
<p>Conclusion:</p>	<p>There are no likely significant effects in combination. Therefore these effects will not be considered further in the appropriate assessment.</p>

Section 4: Assessment and Conclusions

Stage 6: Appropriate Assessment

The proposals have been screened in Stages 4 and 5. It was found that for some Natura sites there were likely significant effects upon the qualifying interests. Consequently an appropriate assessment is required to ascertain the implications for the conservation objectives for each site. The appropriate assessment follows the standard structure as used by SNH.

6.1 Name of Natura sites affected

- Abernethy Forest SPA
- Anagach Woods SPA
- Cairngorm SPA
- Craigmore Wood SPA
- Kinveachy Forest SPA

6.2 Name of component SSSIs if relevant

- Abernethy SSSI
- Glenmore Forest and North Rothiemurchus Pinewood SSSIs
- Kinveachy Forest SSSI

6.3 European qualifying interest(s):

- Abernethy Forest SPA: capercaillie, osprey and Scottish crossbill
- Anagach Woods SPA: capercaillie
- Cairngorm SPA: capercaillie, dotterel, golden eagle, merlin, osprey, peregrine and Scottish crossbill
- Craigmore Wood SPA: capercaillie
- Kinveachy Forest SPA: capercaillie and Scottish crossbill

6.4 Conservation objectives for qualifying interests:

Conservation Objectives for Abernethy Forest Special Protection Area

To avoid deterioration of the habitats of the qualifying species:

- Capercaillie
- Osprey
- Scottish crossbill

or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained.

To ensure for the qualifying species that the following are maintained in the long term:

- Population of the species as a viable component of the site
- Distribution of the species within site
- Distribution and extent of habitats supporting the species
- Structure, function and supporting processes of habitats supporting the species
- No significant disturbance of the species

Conservation Objectives for Anagach Wood Special Protection Area

To avoid deterioration of the habitats of the qualifying species:

- Capercaillie

or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained.

To ensure for the qualifying species that the following are maintained in the long term:

- Population of the species as a viable component of the site
- Distribution of the species within site
- Distribution and extent of habitats supporting the species
- Structure, function and supporting processes of habitats supporting the species
- No significant disturbance of the species

Conservation Objectives for Cairngorms Special Protection Area

To avoid deterioration of the habitats of the qualifying species

- Capercaillie

or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained.

To ensure for the qualifying species that the following are maintained in the long term:

- Population of the species as a viable component of the site
- Distribution of the species within site
- Distribution and extent of habitats supporting the species
- Structure, function and supporting processes of habitats supporting the species
- No significant disturbance of the species

Conservation Objectives for Craigmore Wood Special Protection Area

To avoid deterioration of the habitats of the qualifying species:

- Capercaillie

or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained.

To ensure for the qualifying species that the following are maintained in the long term:

- Population of the species as a viable component of the site
- Distribution of the species within site
- Distribution and extent of habitats supporting the species
- Structure, function and supporting processes of habitats supporting the species
- No significant disturbance of the species

Conservation Objectives For Kinveachy Forest Special Protection Area

To avoid deterioration of the habitats of the qualifying species:

- Capercaillie
- Scottish Crossbill

or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained.

To ensure for the qualifying species that the following are maintained in the long term:

- Population of the species as a viable component of the site
- Distribution of the species within site
- Distribution and extent of habitats supporting the species
- Structure, function and supporting processes of habitats supporting the species
- No significant disturbance of the species

6.4 Is the operation directly connected with or necessary to conservation management of the site? YES/NO *If YES give details:*

No

If yes and it can be demonstrated that the tests in 3b have been applied to all the interest features in a fully assessed and agreed management plan then consent can be issued but rationale must be provided, including reference to management objectives. If no, or if site has several European qualifying interests and operation is not directly connected with or necessary to the management of all of these then proceed to 3b.

6.5 Is the operation likely to have a significant effect on the qualifying interest? Consider each qualifying interest in relation to the conservation objectives.

This assessment takes into account the appropriate assessment made by CNPA in October 2011

(for Planning Application Ref: 08/272/CP), in February 2012 (for Planning Application Ref: 2013/0115/DET); and the Natura Appraisal undertaken by SNH in February 2012 and May 2013 (Ref: CNS/DC/Hi/BOGH) It also takes into account the mitigation proposals investigated in consultation with the Boat of Garten Community.

Abernethy Forest SPA Qualifying Interest:

Capercaillie – The capercaillie issues are common to five of the SPAs. These have been taken together for simplicity and to avoid repetition. see section below.

Osprey – Screened out in table 3

Scottish crossbill – Screened out in table 3.

Anagach Woods SPA Qualifying Interest:

Capercaillie - The capercaillie issues are common to five of the SPAs. These have been taken together for simplicity and to avoid repetition. see section below.

Cairngorm SPA Qualifying Interest:

Capercaillie - The capercaillie issues are common to five of the SPAs. These have been taken together for simplicity and to avoid repetition. see section below.

Dotterel – Screened out in table 3.

Golden eagle – Screened out in table 3.

Merlin – Screened out in table 3.

Osprey – Screened out in table 3.

Peregrine – Screened out in table 3.

Scottish crossbill - Screened out in table 3.

Craigmore Wood SPA Qualifying Interest:

Capercaillie - The capercaillie issues are common to five of the SPAs. These have been taken together for simplicity and to avoid repetition. see section below.

Kinveachy Forest SPA Qualifying Interest:

Capercaillie - The capercaillie issues are common to five of the SPAs. These have been taken together for simplicity and to avoid repetition. see section below.

Scottish crossbill – Screened out in table 3.

Site Condition

Site condition for species potentially impacted upon at each of the considered Natura sites:

Kinveachy Forest SPA – Capercaillie: favourable maintained.

Abernethy Forest SPA – Capercaillie: favourable maintained.

Anagach Woods SPA – Capercaillie: not monitored to date.

Craigmore Wood SPA – Capercaillie: unfavourable no change.

Cairngorm SPA – Capercaillie: favourable maintained.

Capercaillie

In this section the capercaillie is considered for all of the SPAs for which it is a qualifying interest.

Capercaillie use of Boat of Garten wood

Boat of Garten wood (Craigie Wood) hosts a significant population of capercaillie which are a qualifying interest on four nearby SPAs – Abernethy Forest, Anagach Woods, Cairngorms, Craigmore Woods and Kinveachy. Due to the proximity of the forests of Strathspey and the known dispersal distances of capercaillie, the birds using the area have to be considered as one ecological unit or meta-population. Strathspey is the last refuge of the species containing c.75% of the UK population, with populations still in decline in all other areas.

Boat of Garten wood has been monitored for a number of years so a reasonable picture exists of population size. Collated records of capercaillie sightings and signs (feathers and droppings) from 1994 to 2013 (not complete) showed that capercaillie were widely recorded through much of the wood. Research shows that the birds generally avoid the area around the existing houses and the tracks (Moss et al, 2009 and 2010). SNH and CNPA have no records of capercaillie on the development site.

There is one known lek site within the wider Boat of Garten woods (approx. 1km away from the proposed development site). Table 6 below details the number of male capercaillie recorded at the known Boat of Garten lek site between 1999 and 2013:

Table 6

Year	99	00	01	02	03	04	05	06	07	08	09	10	11	12	13
No. of Leking Males	3	2	-	1	2	5	5	6	4	5	3	3	3	3	4

In accordance with the Capercaillie BAP Group and RSPB (who employ the Capercaillie Officer), this Appropriate Assessment uses the x4 multiplier to estimate population levels, which makes a consideration for males not counted at the lek (capercaillie can lek over a very wide area), juvenile birds that do not present themselves at the lek, birds that may not have appeared at the lek at that particular morning (the lek period is several weeks long, with no sure way of knowing when the peak of activity will be) and a variation in the sex ratio (there seem to be more females than males in the population). This is not consistent with the SNH advice (SNH use a x2 multiplier, and will continue to do so until an alternative method has been peer reviewed), but CNPA believe the x4 method displays the best scientific logic. Recommendations for the acceptance of the x4 multiplier have been recently submitted to the Avian Population Estimates Panel and subsequently to the SPA & RAMSAR Working Group, but they were unable to make a definitive decision and further work is required which may take some time. As a result, while SNH have not officially moved to using a

x4 multiplier, they have acknowledged to the Capercaillie Biodiversity Action Plan (BAP) Group, etc that they accept that a x2 multiplier is likely to be an underestimate.

Table 7 below shows the lek count data for Boat of Garten wood compared with number of males recorded nationally (no lek count data is available for 2001). This gives an indication of the importance of the woods in a National context - a local population is considered of national importance if it contains more than 1% of National population:

Table 7

	'99	'00	'02	'03	'04	'05	'06	'07	'08	'09	'10	'11	'12
Boat of Garten Wood	3	2	1	2	5	5	6	4	5	3	3	3	3
Total no. Cocks counted	100	121	179	184	222	234	206	220	213	192	213	224	202
BoG as a total of National Pop.	3	1.65	0.56	1.09	2.25	2.14	2.91	1.82	2.35	1.56	1.41	1.34	1.49

Research on productivity in the woods through brood counts indicates that the woods are productive, with chick density at or higher than the national average, which could potentially mean that Boat of Garten woods could be producing a surplus of chicks that could be recruited into the neighbouring SPA's as a source population. Table 8. gives details of capercaillie observed during brood counts undertaken on site in 2008, 2009, 2011 and 2012.

Table 8. Boat of Garten capercaillie brood counts 2008, 2009, 2011 & 2012:

Year	Males	Females	Chicks	Average Productivity
2008	6	6	4	0.6 chicks per hen
2009	4	4	5	1.25 chicks per hen
2011	4	2	3	1.5 chicks per hen
2012	3	2	6	3 chicks per hen

No brood counts were undertaken on the site in 2010. Research indicates that a productivity success of 0.6 chicks per hen (in the absence of fence strike mortality) is required for a population to be sustained.

Links between the site and the SPAs

The Scottish capercaillie population declined significantly between the 1970s and 1990s. From an estimated 20,000 birds in 1970, numbers fell to 2189 birds in the first national survey in 1993/94. A survey in 1998/99 estimated a population of just 1073 birds (95% C.L.549-2041) - a decline of 51%

between the two surveys. The 2003/04 survey gave an estimate of 1980 birds, which could potentially be considered an overestimate in light of results developing from the 2009/10 survey which indicates a population size of 1285 (a non-statistically significant decline) (Ewing et al. 2012). Despite this uncertainty, it is considered that the national population of capercaillie is currently stable after a period of rapid and significant decline (Eaton et al, 2007). However, the national population is still small (the UKBAP target for the species was 5000 birds by 2010 and this target has not been met by a substantial margin) and its range is contracting significantly. The 2003/04 Capercaillie national survey suggested that the range of Capercaillie had contracted into core habitat, with over 60% of all birds recorded occurring in Strathspey (Eaton et al, 2007). This figure has recently been estimated to now be c.75% in Strathspey (Poole, 2010) due to reductions elsewhere. 77% of Capercaillie cocks observed during lek surveys from the spring of 2012 were in Strathspey (Table 9.). Although capercaillie numbers have held up in Strathspey, the population is now extremely vulnerable elsewhere. Capercaillie persist in other areas (Deeside, Donside, Easter Ross, Moray and Perthshire) but these populations are more fragmented, numbers are lower and breeding success poorer. The Strathspey capercaillie population is crucial to the long-term survival of the species in the UK.

Table 9. Summary of total and average number of cocks on active leks in Scotland in 2012:

Region	No. of active leks	Min No. of cocks	Mean cocks/lek
Perthshire and Loch Lomond	2	3	1.50
Deeside and Donside	12	19	1.58
Moray and Nairnshire	9	12	1.33
Easter Ross	6	13	2.17
Strathspey	42	155	3.69
TOTAL	71	202	3.00

Whilst Boat of Garten wood is not designated as a Natura site, it does host a significant proportion of the population which are a qualifying interest on four nearby SPAs that are being assessed as part of this Appropriate Assessment: Abernethy (~ 0.9 km at nearest points), Kinveachy (~ 1.5 km), Cairngorms (~ 4.5 km) and Craigmore Wood (~ 8 km). These distances are well within maximum capercaillie dispersal distances known from the literature. Storch (1995) radio-tracked 40 capercaillie in the Bavarian Alps and found that throughout the year distances of females from the leks they attended in spring averaged 1.3 km (Standard Error = 0.1 km). In winter and spring males aggregated within a 1 km radius of the lek, but dispersed within a 3 – 4 km radius during summer. Storch (2001 cited in Moss et al 2006) concluded that most males settle close to their chick range but young female dispersal distances were typically 5 – 10 km. A radio-tracking study of males at leks in Russia and Norway recorded average dispersal distance of males to summer range of 2.3 km, SE = 0.37 (Russia 2.2.km, SE = 0.70; Norway 2.4 km, SE = 0.43) (Hjelford et al. 2000). Storch & Segelbacher (2000) summarised known movements as average seasonal movements of 1 – 2 km for adults and median dispersal distances of < 10 km for juveniles. The distances recorded in a Scottish study (Moss et al. 2006) are somewhat longer than those above, which may be related to the fragmented nature of Scottish forests. This study showed first-winter dispersal distances of 13 hens radio-tracked ranged within 1 – 30 km (median: 11, mean 12.3, SD 9.8).

Habitat suitable for capercaillie in Scotland is heavily fragmented into comparatively small areas of forest. None of the capercaillie populations in these individual woodlands have the capability to be

self-sustaining in the long term. For genetic diversity to prevent inbreeding depression, discrete groups of birds must be linked with nearby groups (i.e. recruiting and exporting birds) forming a metapopulation. Conservation of capercaillie requires consideration at the metapopulation scale as well as at the scale of individual sites. Boat of Garten wood is in a central location between Abernethy Forest, Anagach Woods, Cairngorms, Craigmore Wood and Kinveachy Forest SPAs. The area is important both as a habitat used by capercaillie that supports the meta-population as well as functioning as a vital 'stepping stone' by facilitating movement between SPAs.

Sensitivity of capercaillie to disturbance

Capercaillie is listed in Schedule 1 Part 1 of the Wildlife and Countryside Act 1981 and Annex 1 of the EU Birds Directive. It is a criminal offence to intentionally or recklessly disturb leking or breeding capercaillie. According to Article 6.2 of the EU Habitats Directive: 'Member States shall take appropriate steps to avoid, in the special areas of conservation, the deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated, ***in so far as such disturbance could be significant in relation to the objectives of this Directive.***' Article 7 of the Habitats Directive states that Article 6.2 applies to the Birds Directive.

There is a growing body of evidence indicating capercaillie and other grouse species are adversely affected by disturbance resulting from human recreational activities. Our knowledge on the impacts of recreational disturbance has increased during the last few years due to the increasing body of research undertaken, although it is very difficult to measure scientifically. Human disturbance and disturbance by dogs can affect capercaillie by reducing the availability of otherwise suitable habitat (including habitat used for roosting, feeding, nesting and brood rearing), displacing the birds from leks, disrupting behaviour patterns, increasing the risk of predation, separating chicks from hens and the direct killing of chicks and adult birds. These effects can occur separately or additively. Capercaillie are sensitive to disturbance at all life stages but especially so when attending leks, incubating eggs (late April to mid June) or rearing broods (late May - late August but critically during June and July when the chicks are small and dependent on the hen for warmth), which coincides with when people are mostly likely to be using the woods. Reported responses to disturbance include a decline in local capercaillie numbers (Brenot et al. 1996 cited in Thiel et al. 2007) and abandonment of lek sites (Labigand & Munier 1989 cited in Thiel et al. 2007).

Capercaillie have been shown to avoid habitat close to tracks, which may reduce overall carrying capacity in forests with a high density of tracks. Fewer droppings are found in areas of woodland close to heavily used tracks. A study in neighbouring Abernethy Forest estimated that 21-41% of suitable woodland habitat at Abernethy could be lost due to avoidance of tracks by capercaillie (Summers et al., 2007). The studies looking at the distribution of capercaillie droppings on transects in Boat of Garten woods found that droppings were sparser within 700 m of a much-disturbed zone near the village (significantly so up to 250 m), and within 250 m of tracks (significantly so up to 120 m). Results were consistent with those from other studies at Anagach Woods and Glenmore Forest. Distances between tracks of > 500 m would be required to provide capercaillie with relatively peaceful havens between tracks, a criterion just satisfied by the two biggest track-free blocks of woodland at Boat of Garten. Cocks' droppings were about twice as common as hens, suggesting a sex ratio skew (consistent with evidence that suggests hens are more susceptible to disturbance than cocks). In the most recent Strathspey study at Glenmore, findings indicated that capercaillie avoid areas around busy entry points (Moss et al, 2010).

A study in Central Europe showed that flushing distance was greater in the presence of regular disturbance events (Thiel et al, 2007). Flushing distances are greater in open forests where the availability of cover is low (Thiel et al, 2007) as in Boat of Garten woods. Other European studies show that raised stress hormone metabolite levels were noted in capercaillie regularly disturbed by off-piste skiers, (Thiel et al., 2005, 2008). Repeated flushing, such as could occur due to increased

disturbance caused by new residents, increases the energy burden. This impact is likely to be of greatest significance in very cold weather, when birds are already close to their physiological limit (Zeitler, 2000). Disturbed capercaillie are also likely to be more visible and will need to spend more time feeding to counteract the increased energy losses, possibly increasing exposure to predators. It has been recommended that the establishment of regulations requiring hikers to stay on trails and closing trails where inter-trail distances fall below 100m (Thiel et al, 2007). An example of such management in the Bayerischer Wald National Park, Bavaria, resulted in capercaillie returning to the surrounding woodland (Scherzinger 2003 cited in Summers et al. 2007). It is worth noting that most of the inter-trail distances in the zone of high quality brood habitat at Boat of Garten greatly exceed 100m. The distances are considerably less in the north east corner of the wood, adjacent to the village.

Habitat structure has been shown to modify the alert distance of a number of bird species, with increasing bird tolerance associated with greater availability of escape cover (Fernandez-Juricic et al. 2001). In the specific case of capercaillie, Thiel et al. (2007) recommended planting or preserving evergreen conifer trees along track verges thus reducing the degree of visibility between capercaillie and recreationists. This could increase the habitat available to capercaillie in forests with predictable recreation activities.

Grouse experts questioned as part of the Delphi study (Marshall, 2005) suggested that dogs off leads during the breeding season were the most significant issue for capercaillie in Scotland. Dogs off-lead can have a greater impact by flushing birds further away from paths, so further limiting the amount of available habitat; can separate broods from the hen which could result in chicks becoming cold and wet; and dogs can catch and kill both chicks and adult birds. Due to the large size, especially of males, chicks require a large amount of energy to grow to adult size during a short period. Due to poor nutritional qualities of their food, they are more susceptible to the effects of disturbance than smaller birds and have a higher mortality rate over a longer period. Chicks are more robust, and therefore more likely to survive, if a hen has good energy reserves during egg development.

The main period of sensitivity for breeding capercaillie in relation to dogs has been defined by the Caper BAP Group as between 1st April and 15th August. This is currently being reconsidered following a recommendation from the Caper BAP Group to extend the end date. CNPA, as the Access Authority, has sought further advice from the Cairngorms Local Outdoor Access Forum, who have recommended that the dates are not altered until further work on a CNPA led Strathspey-wide capercaillie framework considering habitat management, recreation and development management is complete.

In summary, capercaillie are very vulnerable to disturbance. They are ground nesting and are therefore most vulnerable at the early part of their lifecycle as eggs or chicks. At this stage, they can be directly killed by dogs, or killed by predators such as crows or foxes when the hen is flushed from the nest or brood, or killed by exposure if a hen is flushed. Capercaillie are also very vulnerable to disturbance on the lek. While some cock birds become over-aggressive, the vast majority of males are very easily driven away. Although capercaillie are vulnerable to disturbance at all times of year, they are especially so in spring and summer. The Capercaillie BAP (Biodiversity Action Plan) Group highlight the period between 1 April – 15 August as the most critical period. It is concluded that capercaillie are sensitive to disturbance by people and dogs, and that dogs off leads present the greatest risk. Off-path recreational use is likely to be more disturbing than on-path use because it is less predictable and birds are less likely to habituate to it. Evidence from Boat of Garten woods shows that use by capercaillie of the parts of the woods within 125 m of paths and tracks is reduced and that this disturbance has a significant impact on their behaviour.

Loss of capercaillie habitat

Direct loss of habitat resulting from this planning application is 1.6Ha. The habitat at Boat of Garten woods is Scots pine plantation. The habitat quality of the wider wood is relatively good, which is evidenced by sustained chick productivity and the persistence of the population in the area despite current levels of disturbance. Trees are relatively well spaced and there is an understory of heather, blaeberry and cowberry of varying quality as capercaillie brood habitat (this has been assessed by the Capercaillie Officer). The area of highest quality (which includes the area most often used for the lek) is considered the most sensitive because of the vulnerability of the nesting stage of the life cycle. This area is in the most distant part of the woods from the village, and where the distances between adjacent paths and tracks are the greatest (~500m). The woods closer to the village have low quality brood habitat, and a denser network of paths.

It is reasonable to assume that the existing level of disturbance means that apparently suitable habitat for capercaillie is effectively unavailable to them. Research on habitat use in the woods through analysis of droppings suggests that there is an avoidance of certain areas. This is probably attributable to the disturbance experienced from existing sources and cumulatively creates a larger area of unavailable habitat, which is a more significant concern than the direct loss from the development site. Capercaillie need large areas of habitat. Chicks require high quality protein food to grow rapidly, which can be distributed patchily over a wide area. Chicks are born precocial and move constantly over a big area to find food and avoid predation (Wegge *et al*, 2007).

As highlighted above, capercaillie have declined significantly in recent times. Studies have suggested that the national decline was driven by low productivity (Moss *et al.*, 2001). A programme of targeted habitat management in capercaillie core areas seems to have halted the population decline in Strathspey. Among the factors that may limit capercaillie populations in Scotland are habitat fragmentation and limited habitat availability. In order to address this conservation groups including the Caper BAP group are seeking to ensure opportunities to increase the amount of habitat that is available are developed to ensure that connectivity is increased. This is also a key priority for the CNPA as set out in the National Park Plan and in the new Cairngorms Nature Action Plan. Additional effort needs to focus on increasing productivity and addressing issues that may impact upon it i.e. reducing disturbance. Fragmentation of the Strathspey core area would be increased if the functioning of this woodland diminished and would be in conflict with conservation aims.

As already highlighted, Strathspey is the most important area of woodland in the UK for capercaillie, holding c.75% of the population (Poole, 2010). The species requires large, connected areas of woodland for the metapopulations to function effectively. Therefore, the woodlands of Strathspey need to be considered as one ecological unit for the purposes of capercaillie management. This Appropriate Assessment needs to be as certain as possible that direct habitat loss and/or reduction in available habitat through habitat avoidance by capercaillie due to disturbance do not result from this proposed development.

The likely significant effect on capercaillie

While the direct loss of habitat resulting from this planning application is unlikely to be significant, the likelihood of increased recreational disturbance has the potential to impact on capercaillie in the adjacent woodland area. Given the level of use of Boat of Garten Wood by capercaillie, its proximity to SPAs, the known dispersal distances of capercaillie, the need to manage capercaillie at metapopulation scale and their sensitivity to disturbance, this planning application is likely to have a significant effect on capercaillie in the SPAs. The developer has submitted a package of mitigation measures as part of the planning application. The impact of this planning application has to be considered including these measures. The measures and their likely effectiveness are described below.

Proposed Mitigation

Current levels of disturbance are already having an impact on the capercaillie population using the

area and this had been documented previously (Moss et al, 2010). It shows areas of habitat being avoided, but also there is some evidence of a sex-ratio skew, with less females using the area than males, which if increased further could potentially have a significant impact on productivity within the woods.

The planning application includes mitigation measures that have been developed in conjunction with SNH, CNPA and the local community as part of and as a consequence of the previous planning applications on this site.

The overall outcome sought by the mitigation measures is that there must be no increase in disturbance to the capercaillie at Boat of Garten woods as a result of this development. In particular, the mitigation proposals must ensure that the development will not affect the ability of the capercaillie there to continue living and breeding successfully, at levels which do not impact the SPA's.

Table 10. shows a summary of the measures and the outcomes they are designed to deliver are:

Measure	Overall outcome this will achieve
Measure 1: Requesting that people keep dogs on a lead on paths in the areas of medium and high brood habitat quality during the period 1st April – 15th August.	No increase in disturbance to capercaillie by dogs ranging off-paths in the sensitive parts of the woods at the sensitive time of year
Measure 2: Requesting that people stay on paths in the areas of medium and high brood habitat quality during the period 1st April – 15th August.	No increase in disturbance to capercaillie by people off-paths in the sensitive parts of the woods at the sensitive time of year.
Measure 3a: Develop native vegetation screening alongside paths in the areas of high brood habitat quality.	No increase in disturbance (especially visual disturbance) to capercaillie from an increase in people using existing paths.
Measure 3b: Prior to any new housing being occupied, install temporary screening (e.g. hessian) into areas necessary to deliver an effective screen before vegetation grows sufficiently.	No increase in disturbance (especially visual disturbance) to capercaillie from an increase in people using existing paths.
Measure 4: Limit construction access to the development site, and retain a screen of trees around the site.	No increase in disturbance of capercaillie arising from construction.
Measure 5: Fencing any new development within the woodland, and providing a single direct access to the woods at the east end of the development. (NB the information submitted by the developers refers to a double fence, but in fact they are proposing a single fence)	No new informal 'desire line' paths in the woods.
Measure 6: Promoting, improving and/or developing alternative off-lead dog walking areas and routes close to the village.	No increase in disturbance to capercaillie by dogs ranging off-paths in the sensitive parts of the woods at the sensitive times of year.

These mitigation measures were assessed by the following criteria devised by CNPA and SNH in consultation with the developer as part of the previous planning application.

Criterion 1 - Current and estimated recreational use and provision: The mitigation proposals

should be based on a detailed and evidence-based understanding of current recreational use of the area, (both spatially and temporally) in terms of numbers, distribution, behaviour and reasons and take account of the predicted future recreation demand arising from the proposed development.

Criterion 2 - Best practice: The mitigation proposals should be built on best practice and reference should be made to relevant examples elsewhere in UK or Europe where similar approaches have been proven to be effective in such situations

Criterion 3 - Location and time-specific: The mitigation proposals should be designed to avoid an increase in disturbance throughout the parts of Boat of Garten wood currently used by Capercaillie. They should analyse information on the sensitivity of different parts of the wood for Capercaillie, and the sensitivity of different times of the day and year, alongside consideration of current and likely future levels and patterns of recreational use.

Criterion 4 - Paths and peoples' use: The proposals should consider the need for a reduced network of paths, which still meets the needs of the community, addresses the management needs of Capercaillie and are practical and enforceable mechanisms. The proposals should identify how they will ensure that there is no increase in recreational disturbance that might affect the nearby Special Protection Areas by people and dogs off paths, or on minor / informal paths, as a result of this development and that how the proliferation of new informal paths will be avoided.

Criterion 5 - Community engagement and support: The proposals should demonstrate effective engagement with the community and recreational users and a sufficient degree of support to ensure the proposals are effective.

Criterion 6 - Alternative recreational provision: The mitigation proposals should demonstrate how any predicted increases in the types of recreational use that are likely to disturb Capercaillie (e.g. dogs ranging off paths) will be catered for and diverted to a suitable location that won't disturb Capercaillie.

Criterion 7 - Any Screening proposals, including planting and vegetation management, requires to be effective and commensurate with the phasing of the development, including the construction phase.

Criterion 8 - Practical enforcement: The mitigation proposals should demonstrate that the measures will be practically enforceable and maintained for the lifetime of the development at no cost to the public purse.

Criterion 9 - Phasing: The mitigation proposals should identify how mitigation measures will be effective at the appropriate time in line with the construction and development phasing.

Criterion 10 - Monitoring, review and adaptive management: The mitigation and management measures must be monitored and reviewed to ensure effectiveness for the lifetime of the development and a mechanism put in place to take further management measures to reduce disturbance if necessary.

Mitigation will be monitored for effectiveness and the repeating of the camera survey reported in MBEC (2011) will be undertaken in summer 2013 by SNH. The CNPA will repeat the capercaillie dropping survey undertaken by Moss et al (2010) periodically though the first 10 years following the start of development, on advice from SNH.

The 2012 Ranger Report indicated a high proportion of continuing off-lead access. The Ranger reflected in this report that at the end of the 2012 season, after 5 weeks of observing the behaviour pattern of the dog walkers, that 'reasonable behaviour was taking place regularly', suggesting that dogs were still under control despite a high preponderance of off-lead access being taken. This will

be closely compared with camera survey work to decide if additional or alternative methods are required.

An adaptive management approach will be taken by the CNPA. This uses the outcomes of monitoring to determine if additional management measures are required to prevent an increase in disturbance over the 2012 level. Additional options, including path closures or by-laws are held in reserve as a last resort option. Management approaches are more likely to succeed over restrictive ones. This is reflected in the measures proposed which are based on the provision of alternative access including the promoted path along the riverside and promotion of the fairy Hill area; the provision of information and education about the natural heritage specifically capercaillie, and the presence of a friendly, but persuasive person, on the ground to communicate the messages regarding responsible dog ownership.

Based on the scientific research, experience elsewhere, best practice and specialist advice, CNPA and SNH are confident that the mitigation represents the best possible package of measures and will be effective. This planning application has been assessed against all the information sources, using the evidence gained through the Community engagement and the evidence collated from the Boat of Garten Ranger in 2012. All advisors consulted agreed that collective delivery of all mitigation measures are essential.

Conclusions to section 6.5 regarding a likely significant effect on qualifying interests:

It is concluded that the development has a likely significant effect on capercaillie in the Kinveachy Forest SPA , Abernethy Forest SPA, Anagach Woods SPA, Craigmore Wood SPA or Cairngorm SPA.

6.6 Assessment of the implications for the site in view of the site's conservation objectives.

i) Describe for each European qualifying interest the potential impacts of the proposed operation detailing which aspects of the proposal could impact upon them and their conservation objectives

ii) Evaluate the significance of the potential impacts, e.g. whether short/long term, reversible or irreversible, and in relation to the proportion/importance of the interest affected, and the overall effect on the site's conservation objectives. Record if additional survey information or specialist advice has been obtained.

iii) In the light of the appraisal, ascertain whether the proposal will not adversely affect the integrity of the site for the qualifying interests. If conditions or modifications are required, proceed to 6.7.

In this assessment, the implications of the planning application for the sites' conservation objectives are assessed in order to answer the question: "Can it be ascertained that the proposal will not adversely affect the integrity of the sites?"

The over-arching conservation objective of SPAs is to avoid deterioration of the habitats of the qualifying species, or significant disturbance to the qualifying species, thus ensuring that the integrity of the sites is maintained. This over-arching conservation objective can be broken down into the following detailed elements:

To ensure that the following are maintained in the long term for the qualifying species:

- Population of the species as a viable component of the sites
- Distribution of the species within sites

- Distribution and extent of habitats supporting the species
- Structure, function and supporting processes of habitats supporting the species
- No significant disturbance of the species

For the purpose of this assessment, it is important to note that the conservation objectives apply to the Natura sites, i.e. the elements of the conservation objectives relating to supporting habitats apply only to habitats **within** the SPAs and the supporting habitat within the SPAs is protected in its own right as part of a 'most suitable territory'. Birds which use SPAs may also use suitable habitat outwith the SPAs, but this habitat does not have the same level of protection – it is important only in so far as it affects the SPAs' abilities to maintain their populations and the distribution of those populations within the sites' boundaries. We must also consider the effects of disturbance from the proposals on birds within Boat of Garten Wood that are linked to SPAs.

If these factors have the potential to affect the maintenance of the populations as viable components of the SPAs, or if impacts on off-site habitat may affect distribution within the SPAs, then these effects will have to be sufficiently mitigated or excluded, in order to ascertain that the proposal would not adversely affect the integrity of the sites.

In combination effects

As described at Stage 5 (screening); identification of in combination effects is required to identify where cumulative and synergistic effects are likely to be significant. The screening identified only one likely insignificant effect. This was the effect from new resident of the development recreating in Abernethy Forest SPA. This was subsequently screened for in combination effects in table 4 against other such insignificant effects for this site that were previously identified in the draft Cairngorms Local Development Plan. It was concluded that there are no likely significant effects in combination upon the SPA.

The assessment against the Conservation Objectives:

Capercaillie

I. Population of capercaillie as a viable component of the sites and distribution of capercaillie within the Special Protection Areas

Boat of Garten Wood has proven to be a productive site, consistently producing chicks (see brood count surveys noted above in Table 3.), so can be considered as a functioning part of the Strathspey meta-population. It therefore has potential to export birds to the five surrounding SPAs. Scotland's capercaillie population contains six meta-populations, of which Strathspey is the largest and most important. The more birds that there are in the meta-population, the more viable the population and the more robust it would be to a catastrophic event at any one site.

Capercaillie will move from site to site, sometimes over large distances (Moss et al, 2006). Boat of Garten wood forms a link between Abernethy Forest, Anagach Woods, Cairngorms, Craigmore Woods and Kinveachy SPAs, all of which support significant elements of the Strathspey meta-population. Boat of Garten woods may be a key element for dispersal and relocation of birds and therefore an important area of habitat for the species in the wider countryside. Given its location, structure and size, Boat of Garten Wood can be considered to function as a potential 'stepping stone' for capercaillie, e.g. by facilitating movement between SPAs and also with the undesignated countryside. This may be a vital location in its function of facilitating the retention of genetic diversity in the metapopulation and avoiding inbreeding depression.

If recreational disturbance increased as a result of the proposed housing development, the wood could become unsuitable for capercaillie and connectivity between SPAs on each side of Strathspey

may be impaired and the 'meta-population' could suffer as a result.

It is concluded that the population of capercaillie as a viable component of the SPAs, and the distribution of capercaillie within the SPAs, could be indirectly affected by the proposals if that part of the metapopulation using the Boat of Garten wood were to be subject to an increase in disturbance as a result of this development.

If, through delivery of effective mitigation (as specified in the planning application), the capercaillie in Boat of Garten Wood are not subject to an increase in disturbance and can continue to live and breed successfully, then the population using the SPAs would be unaffected by this housing development (this is addressed further Below).

2. Distribution and extent of habitats supporting capercaillie and structure, function and supporting processes of habitat supporting capercaillie

The direct and cumulative effects of the proposed housing development in terms of loss of capercaillie habitat and the resulting avoided adjacent area due to recreational pressure is not significant to the viability of the Boat of Garten woods and lies outwith all of the SPAs.

It is concluded if the mitigation measures are fully implemented that there will be no effect upon this conservation objective.

3. No significant disturbance of capercaillie

There are three ways in which the proposed housing development could cause increased disturbance to capercaillie:

- Disturbance during construction.
- Disturbance arising directly from the housing site once it is occupied.
- An increased number of people recreating in the wider woodland.

Disturbance during construction

It was concluded at screening in table 3 that there is no effect from this source.

Disturbance arising directly from the housing site once it is occupied

It was concluded at screening in table 3 that there is no effect from this source.

An increased number of people recreating in the wider woodland

It is reasonable to assume that recreational use of the wood would increase as a result of the proposed housing developed, because the overall number of people living in the village will increase. This would be a long-term and permanent effect. Of the potential effects described so far, this is the one which causes the greatest concern since the additional recreational use arising from any of the proposed developments could increase disturbance. In combination with the effects of the existing recreational disturbance, this could potentially result in significant disturbance to capercaillie using the SPAs.

Information on current recreational use of the woods at Boat of Garten is derived from two main sources. A comprehensive survey was carried out on behalf of the developers, comprising a questionnaire survey and information from fixed point cameras on footpaths for a short period in summer (MBEC, 2011). Additional information was collected from recreational users of the woods

at a drop-in session held by CNPA and SNH on 11 January 2012.

In the 2001 census, Boat of Garten's population was 665. Of the 32 dwelling units (30 houses plus 2 house plots) proposed in this development, 10 will be affordable housing. These tend to have a higher occupancy level than private market homes, and the developer estimates that they will be occupied by a total of 34 people. SNH calculate that if the remaining 22 private market homes will be occupied at the present average occupancy rate for homes in Boat of Garten, which is 2.217 (665 people living in 300 households), they will be home to 49 people. Using these calculations we can expect this development to increase the village population by a total of approximately 83 people, or 12%. We can expect a broadly similar increase in levels of recreational use of the woods, although in practice the percentage increase may be lower than this because we know from anecdotal evidence that the woods are used for recreation by visitors to the area, as well as local residents. Most of the mitigation put forward by the developers aims to reduce overall levels of recreational disturbance in the woods, taking into account the potential for impacts from this increased number of people taking recreation in the wider woodland and existing levels of disturbance.

Four key risks have been identified from the earlier work relating to this site. These risks, the outcomes that address the risks and the mitigation measures to deliver the outcomes are summarised in table 11 below.

Table 11

Risks	Outcome that mitigation must deliver to address this risk	Proposed mitigation measures to deliver the outcome	Mitigation measures already undertaken, and planned by the developers
1. Increased number of dogs ranging off paths in areas used by capercaillie.	No increase in disturbance to capercaillie by dogs ranging off-paths in the sensitive parts of the woods at the sensitive times of the year.	Requesting that people keep dogs on lead on paths in the area of high brood habitat quality during the period 1 st April – 15 th August. Also: Promoting, improving and/or developing alternative off-lead dog walking areas and routes close to the village.	This request is already being promoted by means of seasonal signage, interpretive signage, a new Seasonal Ranger post, and an article in the local community newsletter. These methods will be supplemented by guidance in a revised version of the local paths leaflet, and an information pack for residents of the new development. The mitigation measures describe appropriate arrangements for long term delivery, maintenance, review and adaptive management of these methods. In particular, should these methods be less successful than anticipated, there are reserve options agreed between CNPA and SNH such as byelaws, and excluding land from access rights, that could be deployed as required. Advisory requests are being used in the first instance because evidence from the consultations with the local community indicates they are likely to be more successful in the long term. Alternative off-lead dog walking routes have been identified. Short and long length routes already exist and will be promoted by the methods given above. A medium length route has been identified

			but still has to be made suitable for off-lead dog walking. This will be delivered prior to occupation of the first house. The mitigation document does not identify responsibilities for maintaining this new path in the long term, but CNPA have since indicated that they will take responsibility for this.
2. Increased off-path use by people in areas used by capercaillie.	No increase in disturbance to capercaillie by people off-paths in the sensitive parts of the wood at the sensitive times of the year.	Requesting that people stay on paths in the area of high brood habitat quality between 1 st April – 15 th August.	This is being implemented by the seasonal ranger, supplemented by a leaflet, articles in the community newsletter, a residents' information pack and signs, as described above.
3. Increased use of paths by people and dogs.	No increase in disturbance (especially visual disturbance) to capercaillie from an increase in people using existing paths.	Develop native vegetation screening alongside paths in the areas of high brood habitat quality. Also: Prior to any new housing being occupied, install temporary screening (e.g. hessian) into areas necessary to deliver an effective screen before vegetation grows sufficiently.	The main forest operations required to develop path-side screening are now complete. The wood has been thinned along the lines where screening is required; the ground has been disturbed and will provide a suitable seedbed for natural regeneration. Juniper and holly have been planted in areas where a thick cover is desirable. Further operations including scarification and deer culling will be carried out as necessary whilst the trees that will eventually comprise the screens regenerate and grow. The mitigation measures describe appropriate arrangements for long term maintenance, review and adaptive management. Areas for temporary screening have been identified and agreed. They will be implemented if necessary, using an adaptive management approach by agreement of CNPA and SNH.
4. A proliferation of informal 'desire line' paths in the woods around the new development.	No new informal desire line paths in the woods.	Fence the perimeter of the new development and provide a single direct access to the path network in the woods at the east end of the development site.	The developers have confirmed they will install a (single) 2m high closed boarded fence around all parts of the site where properties back onto woodland (house numbers 22, 24-30, 18-17), and that various legal measures will ensure that householders are not permitted to build gates / openings through the fence into the woods. A new path from the east end of the development to the paths in the woods will be provided. The mitigation measures describe appropriate arrangements for long term monitoring and maintenance of the integrity of the fence. NB Measure 5 in the 'mitigation measures' document submitted by the developers refers to a double fence, but

			in reality a single fence is proposed. Given the height of the single fence and the measures that will be taken to prevent breaches, this is an adequate measure to address the risk.
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The mitigation measures submitted by the developers describe robust methods for addressing all these risks, including appropriate arrangements for long-term maintenance, review and adaptive management.

We have considered the evidence and advice offered by SNH and others and concluded that the package of mitigation measures will mitigate the risks from the additional recreational use of the woodland from the development in combination with existing recreational disturbance, and that significant disturbance to capercaillie in the SPAs will be avoided. Consequently there will be no adverse effect upon any of the conservation objectives for Abernethy Forest, Anagach Woods, Craigmore Woods, Cairngorms and Kinveachy Forest SPAs.

6.7 Conditions or modifications required.

Indicate conditions/modifications required to ensure adverse effects are avoided, & reasons for these.

No further mitigation is required

6.8 Advice sought.

Include here details of or clear reference to, any advice sought from colleagues etc.

SNH, Capercaillie BAP Group, Tim Poole (Capercaillie Project Officer), Robert Moss (independent scientist and grouse specialist). *This advice was sought when collating evidence for the previous Appropriate Assessment for the earlier Planning Application.

CNPA Access Team.

Stage 7: Consultation

Regulation 48(3) requires the authority to consult with the appropriate conservation body and to have regard to their representations. In Scotland this is SNH. The draft report and its conclusion were subject to such consultation. Their response is contained within an email (11/6/2013) and the pertinent points are listed below in table 12.

Wider consultation of the draft report is at the discretion of the competent authority. In the case of Boat of Garten it was decided that consultation with the RSPB should be undertaken because of their central interest in the main subject of the assessment. A meeting was held with RSPB on the 11/6/2013 to discuss the draft HRA and the pertinent points from this discussion are also included within table 12.

Table 12: Draft report consultation responses

Summarised comment	CNPA response	Action taken
SNH		
They do not consider there to be an effect on Slavonian Grebe on Loch Vaa SPA from recreational users.	We agree with this assessment.	This has been removed from the appropriate assessment and outcome on screening in table 3 has been adjusted. The full reasons are included in table 3.
They do not consider there to be an effect on otter in the River Spey SAC from recreational users.	We agree with this assessment.	This has been removed from the appropriate assessment and outcome on screening in table 3 has been adjusted. The full reasons are included in table 3.
In a number of places within the appropriate assessment items were repeated from the screening stage even where no effect was identified.	We agree with these comments	The text has been reviewed and repeated items removed. Where screening identified 'no effect' these items were removed from the appropriate assessment.
RSPB		
They do not consider there to be an effect on Slavonian Grebe on Loch Vaa SPA from recreational users.	We agree with this assessment.	This has been removed from the appropriate assessment and outcome on screening in table 3 has been adjusted. The full reasons are included in table 3.
Too much weight seems to have been given to reserve management arrangements at Abernethy to give certainty of effect. Long term maintenance of these arrangements is not guaranteed.	We have noted the comment but conclude that the reference reflects to current operations and therefore is relevant to baseline conditions. We understand that it is not a foolproof system and have not given undue weight to the arrangements. Future changes to management arrangements will be assessed in line with general monitoring for the species across Strathspey but as there are no immediate plans to change the arrangements it is not relevant to this application.	We have reworded this section in table 3 to give clarity on the weight to be given to the arrangements. However we have not changed our conclusion within screening.
It would be better to keep the double fence originally specified along the southern edge of the development.	The objective here is to prevent informal pathways being developed which in turn would draw activity to the quieter areas of the wood. There are good legal arrangements to ensure this happened with a single fence. In addition monitoring will be undertaken by ranger services and informal neighbour observations.	The wording of the planning condition within the consent notice will be explicit as to the prohibition of any opening or crossing in

	Enforcement of breaches would be undertaken by CNPA.	perpetuity.
How would the residents pack be taken forward to subsequent owners of properties within the development? How would it be made 'future proof'?	The residents pack will be produced by the developer and subject to the approval of the CNPA. An appropriate mechanism will be used to ensure future owners are aware of the information. In addition the CNAP will undertake to maintain the information and distribute it periodically for the information of all Boat of Garten residents. It will be in a form that can change according to changes in situation.	The planning condition will require the developer to produce the information by approval of the CNPA.
Arrangements for monitoring are not clear enough about the duration, frequency and outcomes of the process.	We agree that there is potential ambiguity about these issues.	The appropriate assessment was been rewritten to make it clear what the monitoring should be undertaken and how the outcomes must lead to changes in action if it is required.

Stage 8: Additional mitigation

Natura site regulation 48(6) requires the competent authority to:

“(6) In considering whether a plan or project will adversely affect the integrity of the site, the authority shall have regard to the manner in which it is proposed to be carried out or to any conditions or restrictions subject to which they propose that the consent, permission or other authorisation should be given”

In cases where significant effects have been identified upon the qualifying features the authority must give consideration to what additional measures may be applied by way of a condition to ensure that there are no adverse effects so that the integrity of the site is maintained.

The conclusion of the appropriate assessment within this draft report shows that there is no likely significant effect upon any qualifying interest of any natura site. It is concluded therefore that no additional measures are required.

Stage 9: Conclusion on the integrity test

The assessment based upon the best available scientific evidence and advice offered from SNH and others has shown that there is no likely significant effect from the proposed development , in combination with the additional mitigation identified, upon the qualifying features or the conservation objectives for the following Natura sites:

- River Spey SAC
- Abernethy Forest SPA

- Anagach Woods SPA
- Cairngorms SPA
- Craigmore Wood SPA
- Kinveachy Forest SPA
- Loch Vaa SPA

We therefore conclude that the proposed development will not adversely affect the integrity of any of these sites.

Stage 10: Section 49 (derogation)

The conclusion that there is no adverse effect upon the integrity of any of the Natura sites covered in this report means that regulation 49 is not relevant.

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Habitat Regulations process

- Council Directive 92/43/EEC “the Habitats Directive” EEC adopted 1992
- Managing Natura 2000 sites – EU communities 2000
- Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC - EC 2007
- The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended)
- Welsh Assembly Government TAN 5: Nature Conservation and Planning - 2009
- Habitat Regulations Appraisal of Plans – Guidance for Plan Making Bodies in Scotland SNH/DTA August 2012 (Version 2.0)

Other sources

- Cairngorms National Park Core Paths Plan 2010 – CNAP - 2010
- Cairngorms Outdoor Access Strategy 2007-2012 – CNPA 2007
- Census data 2001 – General Census Office for Scotland
- National Travel Survey 2010 Statistical release Department of Transport. 2011
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Appendix I - Details of Natura 2000 sites within, or adjacent to, the Cairngorms National Park

Name of European Site	Abernethy Forest
Site Type	Special Protection Area
Conservation Objectives	<p>To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and</p> <p>To ensure for the qualifying species that the following are maintained in the long-term:</p> <ul style="list-style-type: none"> • Population of the species as a viable component of the site • Distribution of the species within the site • Distribution and extent of habitats supporting the species • Structure, function and supporting process of habitats supporting the species • No significant disturbance of the species
Qualifying Species	<ul style="list-style-type: none"> • Capercaillie (<i>Tetrao urogallus</i>) • Osprey (<i>Pandion haliaetus</i>) • Scottish crossbill (<i>Loxia scotica</i>)
Site Condition	<ul style="list-style-type: none"> • Capercaillie, breeding, 2009. Favourable maintained. • Osprey, breeding, 2007. Favourable maintained. • Scottish crossbill, not monitored to date.
Factors currently influencing site	In terms of development, no factors currently influencing site
Vulnerabilities to change/potential effects of the Plan	<ul style="list-style-type: none"> • Disturbance from construction and recreation arising from neighbouring development • Relevant settlements: Boat of Garten, Nethy Bridge

Name of European Site	Anagach Woods
Site Type	Special Protection Area
Conservation Objectives	<p>To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and</p> <p>To ensure for the qualifying species that the following are maintained in the long-term:</p> <ul style="list-style-type: none"> • Population of the species as a viable component of the site • Distribution of the species within the site • Distribution and extent of habitats supporting the species • Structure, function and supporting process of habitats supporting the species • No significant disturbance of the species
Qualifying Species	<ul style="list-style-type: none"> • Capercaillie (Tetrao urogallus)
Site Condition	<ul style="list-style-type: none"> • Breeding capercaillie, not monitored to date.
Factors currently influencing site	Impact from disturbance from adjacent village and footpaths within the wood
Vulnerabilities to change/potential effects of the Plan	<ul style="list-style-type: none"> • Disturbance from construction and recreation arising from neighbouring development • Relevant settlements: Grantown-on-Spey

Name of European Site	Cairngorms
Site Type	Special Protection Area
Conservation Objectives	<p>To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and</p> <p>To ensure for the qualifying species that the following are maintained in the long-term:</p> <ul style="list-style-type: none"> • Population of the species as a viable component of the site • Distribution of the species within the site • Distribution and extent of habitats supporting the species • Structure, function and supporting process of habitats supporting the species • No significant disturbance of the species
Qualifying Species	<ul style="list-style-type: none"> • Capercaillie (<i>Tetrao urogallus</i>) • Dotterel (<i>Charadrius moninellus</i>) • Golden eagle (<i>Aquila chrysaetos</i>) • Merlin (<i>Falco columbarius</i>) • Osprey (<i>Panion haliaetus</i>) • Peregrine (<i>Falco peregrinus</i>) • Scottish crossbill (<i>Loxia scotica</i>)
Site Condition	<ul style="list-style-type: none"> • Breeding dotterel, 1999. Favourable maintained. • Breeding golden eagle, 2003. Favourable maintained. • Breeding osprey, 2006. Favourable maintained. • Breeding peregrine, 2002. Favourable maintained.
Factors currently influencing site	In terms of development, none at present
Vulnerabilities to change/potential effects of the Plan	<ul style="list-style-type: none"> • Recreational disturbance to species from neighbouring development • Relevant settlements: An Camus Mòr, Boat of Garten – also developing of, or extension of existing, recreational facilities • Wind farms could impact on young golden eagles, given their mobility

Name of European Site	Craigmore Wood
Site Type	Special Protection Area
Conservation Objectives	<p>To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and</p> <p>To ensure for the qualifying species that the following are maintained in the long-term:</p> <ul style="list-style-type: none"> • Population of the species as a viable component of the site • Distribution of the species within the site • Distribution and extent of habitats supporting the species • Structure, function and supporting process of habitats supporting the species • No significant disturbance of the species
Qualifying Species	<ul style="list-style-type: none"> • Capercaillie (Tetrao urogallus)
Site Condition	<ul style="list-style-type: none"> • Capercaillie, 2009. Unfavourable no change.
Factors currently influencing site	In terms of development, none at present
Vulnerabilities to change/potential effects of the Plan	<ul style="list-style-type: none"> • Recreational disturbance from development in neighbouring areas • Relevant settlements: Boat of Garten, Nethy Bridge

Name of European Site	Kinveachy Forest
Site Type	Special Protection Area
Conservation Objectives	<p>To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and</p> <p>To ensure for the qualifying species that the following are maintained in the long-term:</p> <ul style="list-style-type: none"> • Population of the species as a viable component of the site • Distribution of the species within the site • Distribution and extent of habitats supporting the species • Structure, function and supporting process of habitats supporting the species • No significant disturbance of the species

Qualifying Species	<ul style="list-style-type: none"> • Capercaillie (<i>Tetrao urogallus</i>) • Scottish crossbill (<i>Loxia scotica</i>)
Site Condition	<ul style="list-style-type: none"> • Capercaillie (<i>Tetrao urogallus</i>), 2009. Favourable maintained. • Scottish crossbill (<i>Loxia scotica</i>), not monitored to date.
Factors currently influencing site	In terms of development, none at present.
Vulnerabilities to change/potential effects of the Plan	<ul style="list-style-type: none"> • Recreational disturbance from development in neighbouring areas • Relevant settlements: Boat of Garten

Name of European Site	Loch Vaa
Site Type	Special Protection Area
Conservation Objectives	<p>To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and</p> <p>To ensure for the qualifying species that the following are maintained in the long-term:</p> <ul style="list-style-type: none"> • Population of the species as a viable component of the site • Distribution of the species within the site • Distribution and extent of habitats supporting the species • Structure, function and supporting process of habitats supporting the species • No significant disturbance of the species
Qualifying species	<ul style="list-style-type: none"> • Slavonian grebe (<i>Podiceps auritus</i>)
Site Condition	<ul style="list-style-type: none"> • Slavonian grebe (<i>Podiceps auritus</i>), 2010. Unfavourable no change.
Factors currently influencing site	In terms of development, none at present
Vulnerabilities to change/potential effects of the Plan	<ul style="list-style-type: none"> • Effects on water quality including sewerage treatment, release of minerals, contamination or other waste

Name of European Site	River Spey
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Site Type	Special Area of Conservation
Conservation Objectives	<p>To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and</p> <p>To ensure for the qualifying habitats that the following are maintained in the long-term:</p> <ul style="list-style-type: none"> • Population of the species, including range of genetic types for salmon, as a viable component of the site • Distribution of the species within site • Distribution and extent of habitats supporting the species • Structure, function and supporting processes of habitats supporting the species • No significant disturbance to the species • Distribution and viability of freshwater pearl mussel host species • Structure, function and supporting processes of habitats supporting freshwater pearl mussel host species
Qualifying Interest(s)	<ul style="list-style-type: none"> • Atlantic salmon • Freshwater pearl mussel • Otter • Sea lamprey
Site Condition	<ul style="list-style-type: none"> • Atlantic salmon, 2005. Unfavourable recovering. • Freshwater pearl mussel, 2005. Unfavourable recovering. • Otter, 2007. Favourable maintained. • Sea lamprey, 2007. Favourable maintained.
Factors currently influencing site	In terms of development, none at present
Vulnerabilities to change/potential effects of the Plan	<ul style="list-style-type: none"> • Effects on water quality including sewerage treatment, release of minerals, contamination or other pollution and waste • Functioning of flood plains and the river system • Abstraction of water • Relevant settlements: Dalwhinnie, Newtonmore, Kingussie, An Camus Mòr, Aviemore, Inverdrue, Kincaig, Insh, Boat of Garten, Carr-Bridge, Dulnain Bridge, Nethy Bridge, Granttown-on-Spey, Cromdale

Appendix 2

Methodology for screening likely disturbance effects on capercaillie

The same methodology used in the HRA for the Proposed Local Development Plan is used here. Screening for LSEs on capercaillie considers the relationship between the size of housing developments and their distance from the Natura site. The table below is from the Proposed LDP HRA and sets out the significance of effect in relation to the size of development and proximity to the site. Dog walking is considered to be the most significant potential source of recreational disturbance to capercaillie.

For the purposes of screening, thresholds based on evidence of recreational behaviour were used to determine LSEs:

- 2 km threshold reflects the distance around settlements where most dog-walking is likely to take place.
- Thresholds of 5 and 10 km were also used to assess the impact of increasing distance between a settlement and a site.
- Beyond the distance of 10 km from a settlement, it is considered that the volume of people would be so low as to be negligible.

The same thresholds have been adopted for this HRA.

Table 2: Screening thresholds for capercaillie SPAs and housing development

No. units /distance from site	Less than 2 km	2-5 km	5-10 km	More than 10 km
Less than 100 houses	LSE	MRE	MRE	No effect
100-300 houses	LSE	LSE	MRE	No effect
More than 300 houses	LSE	LSE	LSE	No effect

Appendix 3

Glossary of terms and abbreviations

Appropriate Assessment (AA)	The part of the Habitats Regulations Assessment process that considers the effects of an aspect of a plan upon the conservation objectives for a Natura site.
CNPA	Cairngorms National Park Authority
Competent Authority	The decision making body required under the Habitats Directive to undertake HRA. This includes Scottish Government, National Park Authorities or Local Authorities.
CPP	Core Paths Plan
Habitats Regulation Assessment (HRA)	The whole appraisal process for determining effects upon Natura Sites. It includes Appropriate Assessments. It is a requirement by the Habitats Directive that competent authorities carry out HRAs where a plan or project affects a Natura site.
CLDP	Draft Cairngorms National Park Local Development Plan
Natura Sites	Collective term for Special Protection Areas and Special Areas of Conservation
Ramsar sites	Ramsar sites are wetlands of international importance designated under the Ramsar Convention 1971. Not technically Natura sites they are however usually also SPAs. They are included within the HRA process by policy.
Special Area of Conservation (SAC)	An area designated for the protection of habitats and species. Authorised under Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (commonly called the “Habitats Directive”). One of three designation to be considered in a HRA
Special Protection Area (SPA)	An area designation for the protection of birds. Authorised by the Directive 2009/147/EC of the European Parliament and of the Council (commonly called the “Birds Directive”). One of three designation to be considered in a HRA