

Extended Phase 1 Habitat Survey Cairngorms Local Development Plan

Site: Newtonmore H1

March 2011

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Summary

1. As part of the process of considering the suitability of Site Newtonmore H1, for inclusion into the Local Development Plan, the Cairngorms National Park Authority (CNPA) has commissioned Landcare NorthEast to undertake a desktop study and initial ecological survey.
2. A desktop study and subsequent ecological survey was conducted at Site Newtonmore H1, in March 2011.
3. The proposed development site is located on the outskirts of Newtonmore, at NN712984 and comprises approximately 11.8ha.
4. The main habitat is J1.1, improved farmland in rotation, currently reseeded grassland, with a small corner of A1.1.2, broad-leaved plantation woodland.
5. No notable plant species (those of UK conservation concern - see UK list of Vascular Plants of Conservation Concern <http://www.ukbap.org.uk> - or those listed on the Cairngorms LBAP list of priority species) were noted.
6. The site may provide bat and badger foraging habitat.



1.0 Introduction

Background

1.1 In order to make an assessment on ecological impacts of developments of sites that have been presented for inclusion in the Cairngorms Local Development Plan, CNPA require desktop studies and ecological surveys of each site to be undertaken.

1.2 With regard to this, an extended Phase 1 survey and habitat suitability assessment was conducted at Site Newtonmore H1.

1.3 The site is located on the outskirts of Newtonmore, at NN712984 and comprises approximately 11.8ha.

1.4 The survey work was conducted by Steff Ferguson and Flora Grigor-Taylor, both experienced wildlife surveyors, chartered environmentalists and members of IEEM.

Existing Data

1.5 A review of the data held on the National Biodiversity Network (NBN) gateway was undertaken to identify species of conservation concern that have been recorded on the proposed development site.

1.6 NBN results

Occurring within the 10km square the site is located in:

- Goldeneye
- Hen harrier
- Black grouse
- Capercaillie
- Redshank
- Netted mountain moth (1km record 200m SW & 200m E)
- Northern brown argus
- Pearl bordered fritillary
- Aspen bracket fungus
- Aspen hoverfly
- Freshwater pearl mussel
- Blunt-leaved bristle moss
- Scottish crossbill (2km square record within 100m)
- Scottish wildcat
- Cousin German
- Badger

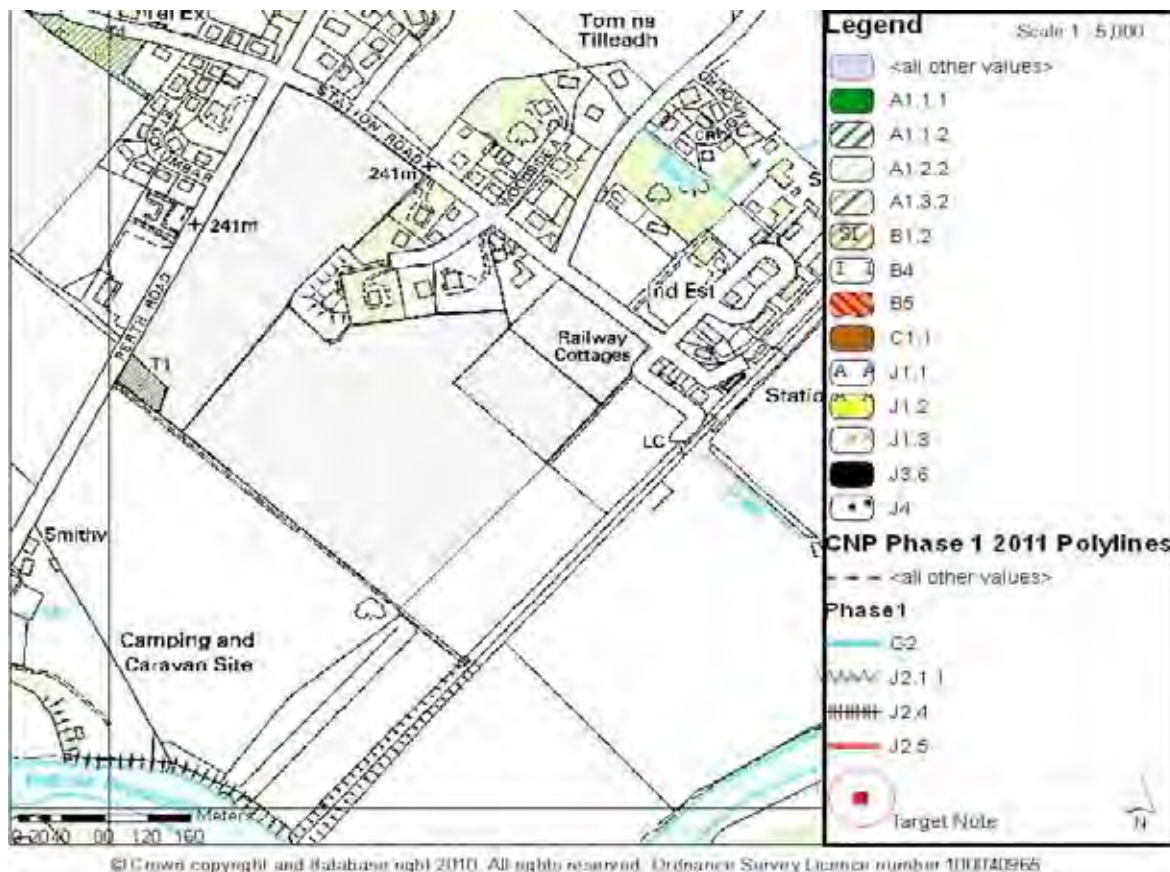
At 2km square level:

- Twite
- Lapwing
- Atlantic salmon
- Otter
- Daubentons bat

Fauna

2.8 No species of conservation concern and/or listed on the Cairngorms LBAP list of priority species were noted on site.

Fig 1 Survey Map



3.0 Assessment of Habitat Suitability for Mammals

3.1 The site itself offers no suitable breeding habitat for otter, water vole, bat and red squirrel. No badger setts were observed. There may be foraging opportunity for badger and bats, particularly along garden and woodland edges.

4.0 References

JNCC. 1990. *Handbook for Phase 1 habitat survey – a technique for environmental audit*. 2007 edition. Nature Conservancy Council

Stace, C.A. 1997. *New Flora of the British Isles*. 2nd Edition. Cambridge University Press.



APPENDIX 1 – TARGET NOTES

T1 NJ 710984

Fenced off area on western most corner of field. Rubble screened by young plantation of broadleaf trees (A1.1.2). Main species observed: oak (*Quercus* spp.), rowan (*Sorbus aucuparia*) and birch (*Betula* spp.).



APPENDIX 2 – SURVEY PHOTOGRAPHS



Newtonmore H1 –
Reseeded arable field



Small plantation
woodland in corner of
field (T1)



APPENDIX 3 – PHASE 1 CODES

PHASE 1 CODE	Description
A1.1.1	Broadleaved woodland - semi-natural
A1.1.2	Broadleaved woodland - plantation
A1.2.1	Coniferous woodland - semi-natural
A1.2.2	Coniferous woodland - plantation
A1.3.1	Mixed woodland - semi-natural
A1.3.2	Mixed woodland - plantation
A2.1	Scrub - dense/continuous
A2.2	Scrub - scattered
A3.1	Parkland/scattered trees – broad-leaved
A3.2	Parkland/scattered trees - coniferous
A3.3	Parkland/scattered trees – mixed
A4.1	Broadleaved woodland – recently felled
A4.2	Coniferous woodland – recently felled
A4.3	Mixed woodland – recently felled
B1.1	Acid grassland – unimproved
B1.2	Acid grassland – semi-improved
B2.1	Neutral grassland – unimproved
B2.2	Neutral grassland - semi-improved
B3.1	Calcareous grassland – unimproved
B3.2	Calcareous grassland – semi-improved
B4	Improved grassland
B5	Marsh/marshy grassland
C1.1	Tall herb & fen – bracken continuous
C1.2	Tall herb & fen – bracken scattered
C3.1	Other tall herb and fern - ruderal
D1.1	Dry dwarf shrub heath - acid
G2	Running water
J1.1	Cultivated/disturbed land – arable
J1.2	Cultivated/disturbed land – amenity grassland
J1.3	Cultivated/disturbed land – ephemeral/short perennial
J1.4	Cultivated/disturbed land – introduced shrub
J2.1.1	Intact hedge – native species rich
J2.1.2	Intact hedge – species poor
J2.3.2	Hedge with trees – species-poor
J2.4	Fence
J2.5	Wall
J2.6	Dry ditch
J3.6	Built-up areas - buildings
J4	Bare ground

Extended Phase 1 Habitat Survey Cairngorms Local Development Plan

Site: Newtonmore H2

March 2011

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APPENDIX 1 – TARGET NOTES

APPENDIX 2 – SURVEY PHOTOGRAPHS

APPENDIX 3 – PHASE 1 CODES



Summary

1. As part of the process of considering the suitability of Site Newtonmore H2, for inclusion into the Local Development Plan, the Cairngorms National Park Authority (CNPA) has commissioned Landcare NorthEast to undertake a desktop study and initial ecological survey.
2. A desktop study and subsequent ecological survey was conducted at Site Newtonmore H2 in March 2011.
3. The proposed development site is located at NN708987 and comprises approximately 5.2ha.
4. The main habitats are J1.1, recently reseeded grassland and A1.3.2, mixed plantation woodland.
5. No notable plant species (those of UK conservation concern - see UK list of Vascular Plants of Conservation Concern <http://www.ukbap.org.uk> - or those listed on the Cairngorms LBAP list of priority species) were noted.
6. The site has potential bat and badger foraging habitat.



1.0 Introduction

Background

1.1 In order to make an assessment on ecological impacts of developments of sites that have been presented for inclusion in the Cairngorms Local Development Plan, CNPA require desktop studies and ecological surveys of each site to be undertaken.

1.2 With regard to this, an extended Phase 1 survey and habitat suitability assessment was conducted at Site Newtonmore H2.

1.3 The site is located at NN708987 and comprises approximately 5.2ha.

1.4 The survey work was conducted by Steff Ferguson and Flora Grigor-Taylor, both experienced wildlife surveyors, chartered environmentalists and members of IEEM.

Existing Data

1.5 A review of the data held on the National Biodiversity Network (NBN) gateway was undertaken to identify species of conservation concern that have been recorded on the proposed development site.

1.6 NBN results

Occurring within the 10km square in which the site is located:

- Goldeneye
- Hen harrier
- Scottish crossbill (2km square record within 100m)
- Black grouse
- Capercaillie
- Redshank
- Northern brown argus
- Pearl bordered fritillary
- Aspen bracket fungus
- Aspen hoverfly
- Freshwater pearl mussel
- Blunt-leaved bristle moss
- Scottish wildcat
- Cousin German
- Netted mountain moth (1km record 200m SW & 200m E)
- Badger

At 2km square level:

- Twite
- Lapwing
- Pipistrelle bat spp.



At 1km square level:

- Atlantic salmon
- Red squirrel
- Otter
- Daubentons bat
- Brown/long-eared bat spp.

Designated Sites

1.7 There are no statutory designations on the land surveyed.

2.0 Survey

Method

2.1 An ecological survey was undertaken on the site in March 2011.

2.2 A Phase 1 Habitat Mapping & Protected Species Survey, also referred to as an Extended Phase 1 Ecological Survey, was undertaken for the site. Standard Phase 1 methodology was used, including detailed target notes of notable plant species (those of conservation concern; also those listed on the Cairngorms LBAP list of priority species).

2.3 An assessment of the habitat suitability within the proposed development site for mammal species was also undertaken.

2.4 The standard optimal time to undertake an Extended Phase 1 Survey is between April and the end of September. The survey time of early March was therefore outwith the optimal time, and where potential for botanical interest was noted, further survey may be necessary to provide comprehensive information on a site.

2.5 The habitats are described by the use of target notes, annotated to the survey map (see Fig.1). Common species names and scientific names (Stace C (1997) *New Flora of the British Isles. Second Ed.* Cambridge University Press.) are given in the text below.

Results

Vegetation

2.6 This site comprises a large, level field of reseeded grassland, J1.1, with a shelterbelt of mixed woodland plantation woodland to the northeast.

2.7 The shelterbelt is dominated by mature planted Scots pine (*Pinus sylvestris*), larch (*Larix* sp.) and Sitka spruce (*Picea sitchensis*). More recently planted additions include beech (*Fagus sylvatica*), birch (*Betula* spp.), common alder (*Alnus glutinosa*), oak (*Quercus* sp.) and Scots pine.

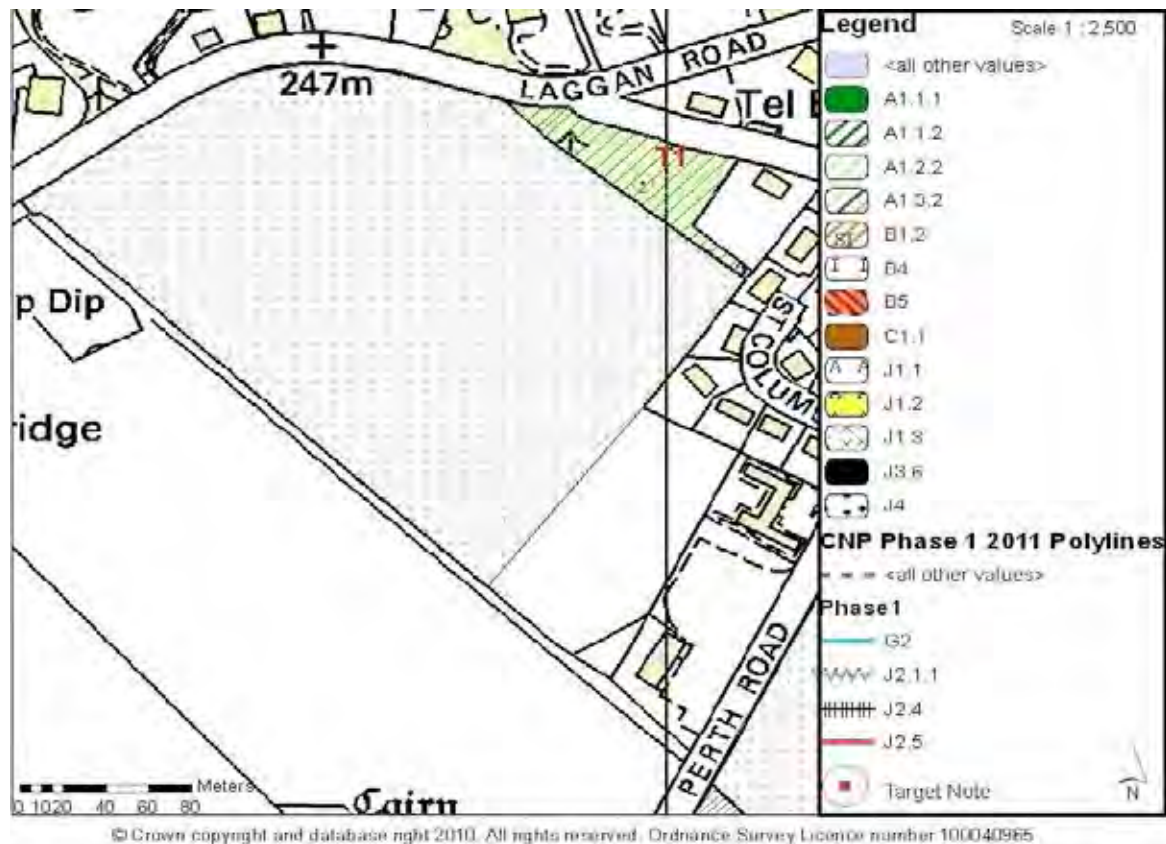
2.8 The shelterbelt offers value as a landscape feature, screening, wildlife corridor and habitat for a range of wildlife.

Fauna

2.9 No species of conservation concern and/or listed on the Cairngorms LBAP list of priority species were noted on site.



Fig 1 Survey Map



3.0 Assessment of Habitat Suitability for Mammals

3.1 The site itself offers no suitable breeding habitat for otter or water vole.

3.2 No badger setts were observed, however the site offers potential foraging opportunity for this species.

3.3 Red squirrel have been recorded in the immediate vicinity of this site (see NBN records). The shelterbelt with mature conifers offers potential foraging habitat for this species.

3.4 Several species of bat have been recorded in the area around this site. The woodland and woodland edge offers good foraging habitat for this group of species, while some of the mature trees may have bat roost potential.

4.0 References

JNCC. 1990. *Handbook for Phase 1 habitat survey – a technique for environmental audit*. 2007 edition. Nature Conservancy Council

Stace, C.A. 1997. *New Flora of the British Isles*. 2nd Edition. Cambridge University Press.



APPENDIX 1 – TARGET NOTES

T1 NJ 709987

Shelterbelt consisting of mixed plantation woodland.

The shelterbelt is dominated by mature planted Scots pine (*Pinus sylvestris*), larch (*Larix* sp.) and Sitka spruce (*Picea sitchensis*).

More recently planted additions (approximately 15 years old) include beech (*Fagus sylvatica*), birch (*Betula* spp.), common alder (*Alnus glutinosa*), oak (*Quercus* sp.) and Scots pine.

The shelterbelt offers value as a landscape feature, screening, wildlife corridor and habitat for a range of wildlife including red squirrel and bats.



APPENDIX 2 – SURVEY PHOTOGRAPHS



Newtonmore H2 –
reseeded field



Shelterbelt – mature
trees at the back,
younger planting at
front (T1)

APPENDIX 3 – PHASE 1 CODES

PHASE 1 CODE	Description
A1.1.1	Broadleaved woodland - semi-natural
A1.1.2	Broadleaved woodland - plantation
A1.2.1	Coniferous woodland - semi-natural
A1.2.2	Coniferous woodland - plantation
A1.3.1	Mixed woodland - semi-natural
A1.3.2	Mixed woodland - plantation
A2.1	Scrub - dense/continuous
A2.2	Scrub - scattered
A3.1	Parkland/scattered trees – broad-leaved
A3.2	Parkland/scattered trees - coniferous
A3.3	Parkland/scattered trees – mixed
A4.1	Broadleaved woodland – recently felled
A4.2	Coniferous woodland – recently felled
A4.3	Mixed woodland – recently felled
B1.1	Acid grassland – unimproved
B1.2	Acid grassland – semi-improved
B2.1	Neutral grassland – unimproved
B2.2	Neutral grassland - semi-improved
B3.1	Calcareous grassland – unimproved
B3.2	Calcareous grassland – semi-improved
B4	Improved grassland
B5	Marsh/marshy grassland
C1.1	Tall herb & fen – bracken continuous
C1.2	Tall herb & fen – bracken scattered
C3.1	Other tall herb and fern - ruderal
D1.1	Dry dwarf shrub heath - acid
G2	Running water
J1.1	Cultivated/disturbed land – arable
J1.2	Cultivated/disturbed land – amenity grassland
J1.3	Cultivated/disturbed land – ephemeral/short perennial
J1.4	Cultivated/disturbed land – introduced shrub
J2.1.1	Intact hedge – native species rich
J2.1.2	Intact hedge – species poor
J2.3.2	Hedge with trees – species-poor
J2.4	Fence
J2.5	Wall
J2.6	Dry ditch
J3.6	Built-up areas - buildings
J4	Bare ground

Extended Phase 1 Habitat Survey Cairngorms Local Development Plan

Site: Killiecrankie Battlefield

March 2011

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APPENDIX 1 – TARGET NOTES

APPENDIX 2 – SURVEY PHOTOGRAPHS

APPENDIX 3 – PHASE 1 CODES



Summary

1. As part of the process of considering the suitability of Killiecrankie Battlefield Site for inclusion into the Local Development Plan, the Cairngorms National Park Authority (CNPA) has commissioned Landcare NorthEast to undertake a desktop study and initial ecological survey.
2. A desktop study and subsequent ecological survey was conducted at Killiecrankie Battlefield Site in March 2011.
3. The proposed development site is located at NN 911639 northwest of Killiecrankie village and comprises approximately 42.36ha.
4. The main habitats are B4 Improved Grassland, A1.1.1 Broadleaved Semi-natural Woodland and A1.2.2 Coniferous Plantation. Other notable habitats present include B5 Marsh/Marshy Grassland, B1.2 Semi-improved Acid Grassland and A1.1.2 Broadleaved Plantation.
5. No notable plant species (those of UK conservation concern - see UK list of Vascular Plants of Conservation Concern <http://www.ukbap.org.uk> - or those listed on the Cairngorms LBAP list of priority species) were noted.
6. The site offers potential for bat roosts as well as badger and red squirrel breeding habitat. Foraging opportunities are present for bat, badger, otter and red squirrel.



1.0 Introduction

Background

1.1 In order to make an assessment on ecological impacts of developments of sites that have been presented for inclusion in the Cairngorms Local Development Plan, CNPA require desktop studies and ecological surveys of each site to be undertaken.

1.2 With regard to this, an extended Phase 1 survey and habitat suitability assessment was conducted at Killiecrankie Battlefield Site.

1.3 The site is located at NN 911639 northwest of Killiecrankie village, and comprises approximately 42.36ha.

1.4 The survey work was conducted by Steff Ferguson and Flora Grigor-Taylor, both experienced wildlife surveyors, chartered environmentalists and members of IEEM.

Existing Data

1.5 A review of the data held on the National Biodiversity Network (NBN) gateway was undertaken to identify species of conservation concern that have been recorded on the proposed development site.

1.6 NBN results

Occurring within the 10km square in which the site is located:

Goldeneye
Twite
Hen harrier
Black grouse
Capercaillie
Redshank
Lapwing
Atlantic salmon
Mason bee
Daubenton's bat

At 2km square level:

Northern brown argus
Pearl bordered fritillary
Kentish glory
Otter
Natterer's bat



At 1km square level:

Red squirrel
Scottish wildcat
Badger
Pipistrelle spp.
Brown/long-eared bat

At 100m square level:

Cousin German

Designated Sites

1.7 The majority of mature broadleaved woodland is included on the Ancient Woodland Inventory, designated as either Long-established woodlands of semi-natural origin (2a) or Long-established woodlands of plantation origin (2b)

1.8 The Cairngorms Massif SPA forms part of the boundary along the north edge of the battlefield site. The SPA is notified for its aggregations of breeding birds, notably breeding Golden eagle (*Aquila chrysaetos*).



2.0 Survey

Method

2.1 An ecological survey was undertaken on the site in March 2011.

2.2 A Phase 1 Habitat Mapping & Protected Species Survey, also referred to as an Extended Phase 1 Ecological Survey, was undertaken for the site. Standard Phase 1 methodology was used, including detailed target notes of notable plant species (those of conservation concern; also those listed on the Cairngorms LBAP list of priority species).

2.3 An assessment of the habitat suitability within the proposed development site for mammal species was also undertaken.

2.4 The standard optimal time to undertake an Extended Phase 1 Survey is between April and the end of September. The survey time of early March was therefore outwith the optimal time, and where potential for botanical interest was noted, further survey may be necessary to provide comprehensive information on a site.

2.5 The habitats are described by the use of target notes, annotated to the survey map (see Fig.1). Common species names and scientific names (Stace C (1997) *New Flora of the British Isles. Second Ed.* Cambridge University Press.) are given in the text below.

Results

2.6 The site comprises steeply sloping, generally south-west facing ground with an altitude range of 200-330m. It stretches from Orchilmore in the east to Mains of Orchil in the west and incorporates a network of drystone dykes (J2.5) and fences (J2.4 deer and stock) dividing woodland from grazing pastures. Minor ditches and streams feature along woodland edges and through open fields (G2).

Vegetation

2.7 This site incorporates a variety of improved and semi-improved habitats, demonstrating historical and current land management methods implemented for agriculture, forestry and sporting interests.

2.8 The main habitats are Broadleaved Semi-natural & Plantation Woodlands, Coniferous Plantation and Improved Grassland. Other notable habitats present include Marsh/Marshy Grassland, Semi-improved Acid Grassland and Broadleaved Plantations.

A1.1.1 Broadleaved Semi-natural Woodland

This habitat varies in structure, species composition and age across the site, as a result of variation in woodland origin, establishment and more recent forest management.

Dominant canopy species is birch (*Betula pendula* and *B. pubescens*) with occasional mature Scots Pine (*Pinus sylvestris*). The structure is open in places with rocky outcrops. Grazing is evident in some sections with no natural regeneration occurring, although deer fenced sections have evidence of birch regeneration.



Species present in the woodland ground layer include creeping buttercup (*Ranunculus repens*), common dog-violet (*Viola riviniana*), ribwort plantain (*Plantago lanceolata*), tormentil (*Potentilla erecta*), Germander speedwell (*Veronica chamaedrys*), common mouseear (*Cerastium fontanum*), heath milkwort (*Polygala serpyllifolia*), heath bedstraw (*Gallium saxatile*), occasional ling heather (*Calluna vulgaris*), fine grasses and sedges.

Stands of bracken (*Pteridium aquilinum*) occur below the birch canopy.

Other sections have been under-planted (approx. 10 years ago) with oak (*Quercus* sp), Scots pine, ash (*Fraxinus excelsior*), Alder (*Alnus glutinosa*), willow (*Salix* spp). Here the dominant canopy species (*Betula* spp) is mixed with other mature broadleaves – alder, Scots pine, oak and ash.

All the woodlands in this habitat category feature on the Ancient Woodland Inventory, as either 2a or 2b (definitions below).

Long-established woodlands of semi-natural origin (2a)

Sites shown as semi-natural woodland in c.1860 (i.e. those on the OS First Edition maps) but not shown as woodland on the 1750 maps. These are woodlands that have apparently arisen between 1750 and 1860.

Long-established woodlands of plantation origin (2b)

Sites shown as plantation woodland in c.1860 but not shown as woodland at all in 1750 or shown as plantation on these maps. These are woods that were apparently planted before 1860.

A single stand of wet woodland is present in association with a wet flush, north of Mains of Orchil. Dominant species are birch and alder.

A1.2.2 Coniferous Plantation Woodland

Four distinct sections within the survey area support this habitat. The blocks vary in age, structure and composition.

Main species are European larch (*Larix decidua*), Scots Pine and Sitka spruce (*Picea sitchensis*). Some feature broadleaves (rowan *Sorbus aucuparia*, birch *Betula* spp) established along the woodland edge and house pheasant rearing pens and feed hoppers.

B4 Improved Grassland

The majority of open ground supports improved pasture, affected by livestock grazing, drainage and probable re-seeding and lime/fertiliser applications. A limited range of grasses and a few common forbs are found. Stands of creeping thistle (*Cirsium arvense*) indicate local enrichment of the soil by grazing animals. Currently, the pastures are grazed by sheep and Highland cattle.

B5 Marsh/Marshy Grassland

Patches of marshy grassland/rush pasture associated with wet flushes occur on the improved grassland. These patches are dominated by jointed rush (*Juncus articulatus*) and tufted hair-grass (*Deschampsia cespitosa*).



B1.2 Semi-improved Acid Grassland

This area of hill-grazing land supports a transition from improved grassland to a sward with a more diverse range of species. This is indicative of a less intensive grazing regime and fewer artificial modifications. At the hill summit, rocky outcrops and *Calluna* hummocks feature.

The sward includes heath bedstraw (*Gallium saxatile*), ling heather (*Calluna vulgaris*), ribwort plantain (*Plantago lanceolata*), tormentil (*Potentilla erecta*), Devil's-bit scabious (*Succisa pratensis*), Germander speedwell (*Veronica chamaedrys*), heath wood rush (*Luzula multiflora*), creeping buttercup (*Ranunculus repens*), white clover (*Trifolium repens*), dandelion (*Taraxacum officinale*), fine grasses and sedges.

The habitat grades with altitude into dwarf shrub heath and bog myrtle (*Myrica gale*) lawns immediately to the north.

A1.1.2 Broadleaved Plantation.

The plantation east of Lettoch comprises mature birch, with some conifers (approx. 10%) and rowan along the woodland edge. A small stand of creeping willow (*Salix repens*) has become established at the southern end.

Other habitats present over small areas: C1.1 Continuous bracken, J4 Hardstanding

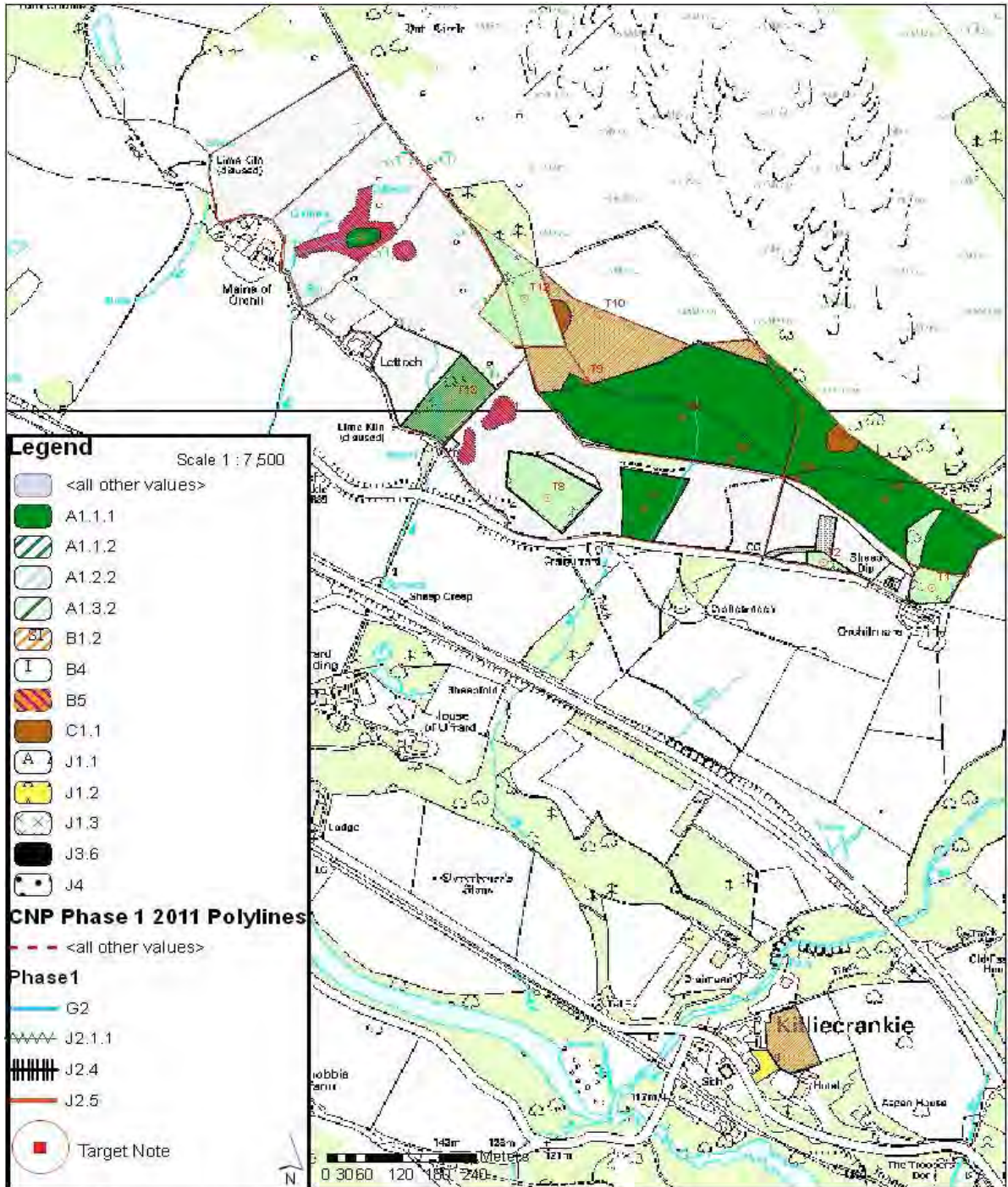
Fauna

2.9 No species of conservation concern and/or listed on the Cairngorms LBAP list of priority species were noted on site.

2.10 Stripped Sitka spruce cones were recorded on the forest floor of a conifer plantation (see Target Note 12), suggesting squirrel foraging.

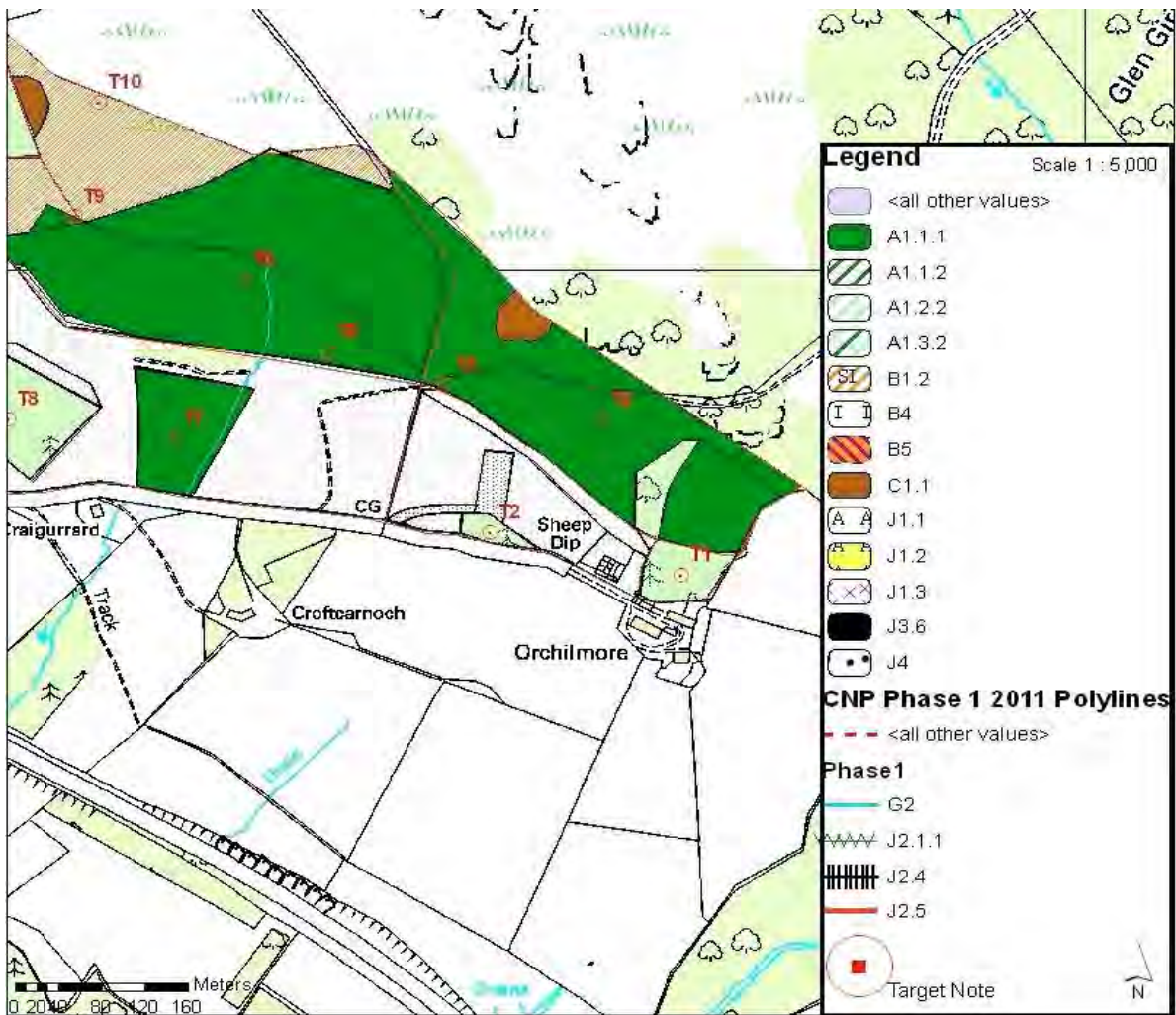


Fig 1 Survey Map – whole site



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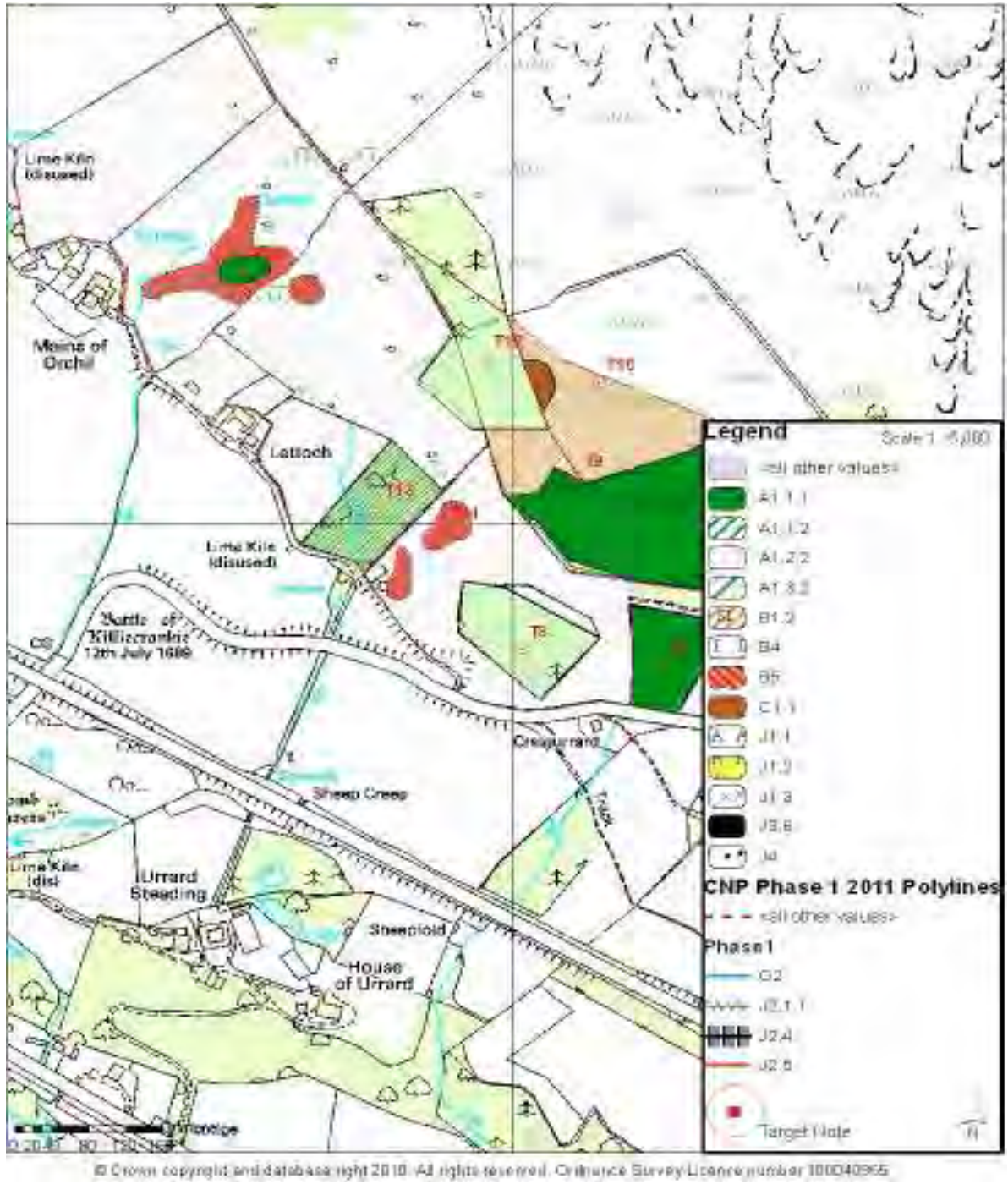
Fig 2 Survey Map – eastern section



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Fig 3 Survey Map – western section





3.0 Assessment of Habitat Suitability for Mammals

3.1 No badger setts, red squirrel dreys, otter holts or bat roosts were observed. However, the site does offer suitable breeding and foraging habitat for a number of protected species.

3.2 Mature woodlands contain numerous trees which offer potential roosting sites for bats. Open woodlands, grassland, woodland edges and linear features such as dykes offer excellent bat foraging opportunities. NBN records show that at least 4 species of bats have been recorded in the area, with Pipistrelle species and long eared bats within the same 1km square, Natterer's bat within the same 2km square.

3.3 Woodland blocks where the structure provides suitably dense cover may provide opportunities for badger breeding habitat, with the majority of the site offering foraging habitat for this species.

3.4 Suitable trees for red squirrel dreys are present within existing woodlands. NBN data shows red squirrel to have been recorded in the immediate vicinity (within same 1km square), and the results of this survey suggest presence within at least one of the conifer plantations (see Target Note 12).

3.5 Minor watercourses may present corridors for otter movement between foraging habitats.

3.6 Scottish wildcat records exist within the same 1 km square (from NBN data). Originally a forest creature, the species has evolved to utilise everything available to it. Individuals typically utilise a mixture of habitats in their territory, including farmland, natural meadow, forestry, mountain foothills and heather moor. These habitats occur within or adjacent to the survey area.

4.0 References

JNCC. 1990. *Handbook for Phase 1 habitat survey – a technique for environmental audit*. 2007 edition. Nature Conservancy Council

Stace, C.A. 1997. *New Flora of the British Isles*. 2nd Edition. Cambridge University Press.



APPENDIX 1 – TARGET NOTES

T1 - NN 916 637

Conifer plantation woodland north of Orchilmore farm buildings; dominant species European larch (*Larix decidua*), Scots pine (*Pinus sylvestris*) and Sitka spruce (*Picea sitchensis*).

T2 - NN 914 637

Conifer plantation woodland located south of recently constructed hardstanding area; comprises mature Scots pine (*Pinus sylvestris*) and Leyland Cypress × (*Cupressocyparis leylandii*) on south edge of woodland, along side of farm track.

T3 - NN 915 638

Section of mature birch woodland, with canopy varying in structure and composition. Canopy comprises *Betula pendula* and *B. pubescens* and is open in places, with occasional Scots pine (*Pinus sylvestris*).

Ground layer is grazed with no natural regeneration of trees evident. Ground flora includes creeping buttercup (*Ranunculus repens*), common dog-violet (*Viola riviniana*), ribwort plantain (*Plantago lanceolata*), tormentil (*Potentilla erecta*), germander speedwell (*Veronica chamaedrys*), common mouseear (*Cerastium fontanum*), heath milkwort (*Polygala serpyllifolia*), heath bedstraw (*Gallium saxatile*), occasional ling heather (*Calluna vulgaris*), fine grasses and sedges. Stands of bracken (*Pteridium aquilinum*) occur below the birch canopy.

This area is listed in the Ancient Woodland Inventory as 2b Long-established woodlands of plantation origin.

T4 - NN 914 638

Stand of mature oaks, possibly ancient/veteran tree specimens.

T5 - NN 912 639

Single ancient Scots pine, potentially of biological, aesthetic and cultural significance.

T6 - NN 912 639

Section of mature mixed broadleaved woodland. Dominant canopy species are birch (*Betula pendula* and *B. pubescens*), Scots pine, alder, oak and ash. Under-planted (approx. 10 years ago) with oak (*Quercus* sp), Scots pine, ash (*Fraxinus excelsior*), Alder (*Alnus glutinosa*), willow (*Salix* spp). Perimeter deer fencing is allowing regeneration to take place.

This area is included on Ancient Woodland Inventory as 2a Long-established woodlands of semi-natural origin.

T7 - NN 911 638

Semi-natural mature birch stand, included on Ancient Woodland Inventory as 2a Long-established woodlands of semi-natural origin.



T8 - NN 910 638

Conifer Plantation with species established in blocks – mature Scots pine and European larch with younger sections of Scots pine, Sitka spruce and approximately 10% birch.

T9 NN 910 640

Route of a historical thoroughfare, with ancient vegetation-covered wall alongside.

T10 - NN 911 641

Hill summit featuring rocky outcrops, *Calluna* hummocks and bracken patches where ground slopes steeply south west.

T11 - NN 909 640

Mosaics of wet grassland & flush dominated by jointed rush (*Juncus articulatus*) and tufted hair-grass (*Deschampsia cespitosa*).

T12 - NN 909 641

Plantation woodland (approx 30 years old) with conifer species established in distinct blocks of Scots pine, Sitka spruce & European larch. Pheasant rearing pens and feed hoppers present. Stripped Sitka spruce cones were recorded on the forest floor, suggesting squirrel foraging

T13 - NN 908 640

Broadleaved plantation east of Lettoch, featuring mature birch with younger conifers and rowan along woodland edge. A small stand of creeping willow (*Salix repens*) has become established at the southern end.

T14 - NN 907 643

One stand of wet woodland present in association with a wet flush, north of Mains of Orchil. Dominant species are birch and alder, with *Juncus* dominated understorey



APPENDIX 2 – SURVEY PHOTOGRAPHS



Target note 3: mature birch woodland, with open canopy – A1.1.1 Broadleaved Semi-natural Woodland



Target note 5: Single ancient Scots Pine



Target note 6: mature mixed woodland - A1.1.1 Broadleaved Semi-natural Woodland, with underplanting and improved grassland in the foreground



Target note 7: Mature birch stand - A1.1.1 Broadleaved Semi-natural Woodland



Target note 9: route of a historical thoroughfare, with ancient vegetation-covered walls alongside



Majority of the site is characterised by an improved grass sward B4 Improved Grassland, divided by a system of fences and drystone dykes



Target note 12: Stripped Sitka spruce cones noted on the forest floor of conifer plantation, suggesting squirrel foraging.



Target note 14: single stand of alder wet woodland surrounded by Juncus-dominated B5 Marshy Grassland

APPENDIX 3 – PHASE 1 CODES

PHASE 1 CODE	Description
A1.1.1	Broadleaved woodland - semi-natural
A1.1.2	Broadleaved woodland - plantation
A1.2.1	Coniferous woodland - semi-natural
A1.2.2	Coniferous woodland - plantation
A1.3.1	Mixed woodland - semi-natural
A1.3.2	Mixed woodland - plantation
A2.1	Scrub - dense/continuous
A2.2	Scrub - scattered
A3.1	Parkland/scattered trees – broad-leaved
A3.2	Parkland/scattered trees - coniferous
A3.3	Parkland/scattered trees – mixed
A4.1	Broadleaved woodland – recently felled
A4.2	Coniferous woodland – recently felled
A4.3	Mixed woodland – recently felled
B1.1	Acid grassland – unimproved
B1.2	Acid grassland – semi-improved
B2.1	Neutral grassland – unimproved
B2.2	Neutral grassland - semi-improved
B3.1	Calcareous grassland – unimproved
B3.2	Calcareous grassland – semi-improved
B4	Improved grassland
B5	Marsh/marshy grassland
C1.1	Tall herb & fen – bracken continuous
C1.2	Tall herb & fen – bracken scattered
C3.1	Other tall herb and fern - ruderal
D1.1	Dry dwarf shrub heath - acid
G2	Running water
J1.1	Cultivated/disturbed land – arable
J1.2	Cultivated/disturbed land – amenity grassland
J1.3	Cultivated/disturbed land – ephemeral/short perennial
J1.4	Cultivated/disturbed land – introduced shrub
J2.1.1	Intact hedge – native species rich
J2.1.2	Intact hedge – species poor
J2.3.2	Hedge with trees – species-poor
J2.4	Fence
J2.5	Wall
J2.6	Dry ditch
J3.6	Built-up areas - buildings
J4	Bare ground

Extended Phase 1 Habitat Survey Cairngorms Local Development Plan

Site: Dalwhinnie H1

March 2011

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APPENDIX 1 – TARGET NOTES

APPENDIX 2 – SURVEY PHOTOGRAPHS

APPENDIX 3 – PHASE 1 CODES



Summary

1. As part of the process of considering the suitability of Site Dalwhinnie H1, for inclusion into the Local Development Plan, the Cairngorms National Park Authority (CNPA) has commissioned Landcare NorthEast to undertake a desktop study and initial ecological survey.
2. A desktop study and subsequent ecological survey was conducted at Site Dalwhinnie H1, in March 2011.
3. The proposed development site is located at NN 637850 along the A889 through Dalwhinnie and comprises approximately 0.52ha.
4. The main habitat is B5 Marsh/Marshy grassland, part of a botanically diverse wetland of significant ecological interest.
5. No notable plant species (those of UK conservation concern - see UK list of Vascular Plants of Conservation Concern <http://www.ukbap.org.uk> - or those listed on the Cairngorms LBAP list of priority species) were noted.
6. The site may provide bat and badger foraging habitat.



1.0 Introduction

Background

1.1 In order to make an assessment on ecological impacts of developments of sites that have been presented for inclusion in the Cairngorms Local Development Plan, CNPA require desktop studies and ecological surveys of each site to be undertaken.

1.2 With regard to this, an extended Phase 1 survey and habitat suitability assessment was conducted at Site Dalwhinnie H1.

1.3 The site is located at NN 637850 along the A889 through Dalwhinnie and comprises approximately 0.52ha.

1.4 The survey work was conducted by Steff Ferguson and Flora Grigor-Taylor, both experienced wildlife surveyors, chartered environmentalists and members of IEEM.

Existing Data

1.5 A review of the data held on the National Biodiversity Network (NBN) gateway was undertaken to identify species of conservation concern that have been recorded on the proposed development site.

1.6 NBN results

Occurring within the 10km square in which the site is located:

Goldeneye

Hen harrier

Black grouse

Atlantic salmon (100m record 150m south)

Woolly willow

Scottish wildcat

Cousin German (1km record 250m north)

otter

badger

At 2km square level:

Twite

Redshank

Lapwing

At 1km square level:

Daubentons bat

Designated Sites

1.7 There are no statutory designations on, or sharing a boundary with, the land surveyed.



2.0 Survey

Method

2.1 An ecological survey was undertaken on the site in March 2011.

2.2 A Phase 1 Habitat Mapping & Protected Species Survey, also referred to as an Extended Phase 1 Ecological Survey, was undertaken for the site. Standard Phase 1 methodology was used, including detailed target notes of notable plant species (those of conservation concern; also those listed on the Cairngorms LBAP list of priority species).

2.3 An assessment of the habitat suitability within the proposed development site for mammal species was also undertaken.

2.4 The standard optimal time to undertake an Extended Phase 1 Survey is between April and the end of September. The survey time of early March was therefore outwith the optimal time, and where potential for botanical interest was noted, further survey may be necessary to provide comprehensive information on a site.

2.5 The habitats are described by the use of target notes, annotated to the survey map (see Fig.1). Common species names and scientific names (Stace C (1997) *New Flora of the British Isles. Second Ed.* Cambridge University Press.) are given in the text below.

Results

Vegetation

2.6 This site is on semi-improved flat ground located immediately east of the A889. Fenced and managed as rough grazing, historical drainage has modified water levels and therefore altered species composition. Ditches form the site boundary on 2 sides and a third smaller channel traverses the site.

B5 Marsh/Marshy Grassland

As the site was assessed early in the year and therefore outwith the ideal survey season, a complete species list could not be collated. Indications are that the wetland is botanically diverse and of significant ecological interest.

Plants noted include Hare's-tail cottongrass (*Eriophorum vaginatum*), matgrass (*Nardus stricta*), cross-leaved heath (*Erica tetralix*), heath wood rush (*Luzula multiflora*), soft rush (*Juncus effusus*), *Carex* and *Sphagnum* spp

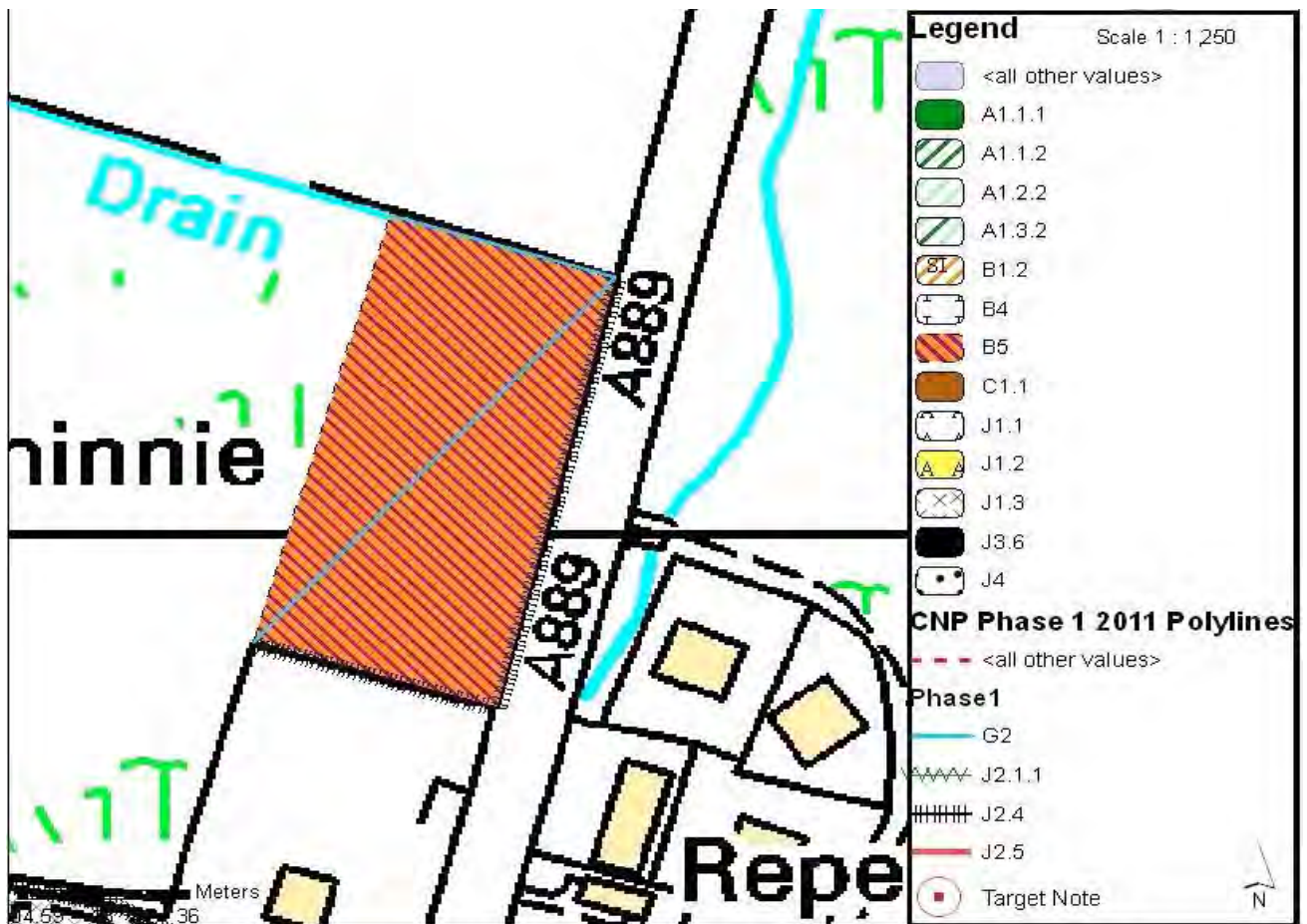
Moisture levels vary underfoot, giving a mosaic of sub-habitats varying in saturation.

Fauna

2.7 Three pairs of lapwing and a single snipe were recorded displaying breeding behaviour on ground immediately adjacent to the site. No other species of conservation concern and/or listed on the Cairngorms LBAP list of priority species were noted.

2.8 Wading birds such as lapwing, snipe and redshank require wet ground in order to provide invertebrates to feed chicks. Current ground conditions are clearly suitable for breeding waders but further drainage may affect water levels, degrade the site and render it unsuitable for breeding birds. Thus, development has the potential to impact negatively on local biodiversity, and wader populations in particular.

Fig 1 Survey Map



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3.0 Assessment of Habitat Suitability for Mammals

3.1 The site itself offers no suitable breeding habitat for otter, water vole, badger, bat or red squirrel. There may be foraging opportunity for badger and bats here and ditches may present corridors for otter movement between foraging habitats.

4.0 References

JNCC. 1990. *Handbook for Phase 1 habitat survey – a technique for environmental audit*. 2007 edition. Nature Conservancy Council

Stace, C.A. 1997. *New Flora of the British Isles*. 2nd Edition. Cambridge University Press.



APPENDIX 1 – TARGET NOTES

T1 - NN 637850

B5 Marsh/Marshy Grassland

The wetland is botanically diverse and of significant ecological interest. Plants noted include Hare's-tail Cottongrass (*Eriophorum vaginatum*), matgrass (*Nardus stricta*), cross-leaved heath (*Erica tetralix*), heath woodrush (*Luzula multiflora*), soft rush (*Juncus effusus*), *Carex* and *Sphagnum* spp

Moisture levels vary underfoot, giving a mosaic of sub-habitats varying in wetness



APPENDIX 2 – SURVEY PHOTOGRAPHS



*Above, proposed site in background with wet ground conditions & tussocky vegetation
Below, shows site itself supporting B5 Marsh/Marshy Grassland with a more tightly grazed
diverse sward and drainage channels*





APPENDIX 3 – PHASE 1 CODES

PHASE 1 CODE	Description
A1.1.1	Broadleaved woodland - semi-natural
A1.1.2	Broadleaved woodland - plantation
A1.2.1	Coniferous woodland - semi-natural
A1.2.2	Coniferous woodland - plantation
A1.3.1	Mixed woodland - semi-natural
A1.3.2	Mixed woodland - plantation
A2.1	Scrub - dense/continuous
A2.2	Scrub - scattered
A3.1	Parkland/scattered trees – broad-leaved
A3.2	Parkland/scattered trees - coniferous
A3.3	Parkland/scattered trees – mixed
A4.1	Broadleaved woodland – recently felled
A4.2	Coniferous woodland – recently felled
A4.3	Mixed woodland – recently felled
B1.1	Acid grassland – unimproved
B1.2	Acid grassland – semi-improved
B2.1	Neutral grassland – unimproved
B2.2	Neutral grassland - semi-improved
B3.1	Calcareous grassland – unimproved
B3.2	Calcareous grassland – semi-improved
B4	Improved grassland
B5	Marsh/marshy grassland
C1.1	Tall herb & fen – bracken continuous
C1.2	Tall herb & fen – bracken scattered
C3.1	Other tall herb and fern - ruderal
D1.1	Dry dwarf shrub heath - acid
G2	Running water
J1.1	Cultivated/disturbed land – arable
J1.2	Cultivated/disturbed land – amenity grassland
J1.3	Cultivated/disturbed land – ephemeral/short perennial
J1.4	Cultivated/disturbed land – introduced shrub
J2.1.1	Intact hedge – native species rich
J2.1.2	Intact hedge – species poor
J2.3.2	Hedge with trees – species-poor
J2.4	Fence
J2.5	Wall
J2.6	Dry ditch
J3.6	Built-up areas - buildings
J4	Bare ground

Extended Phase 1 Habitat Survey Cairngorms Local Development Plan

Site: Dalwhinnie H2

March 2011

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APPENDIX 1 – TARGET NOTES

APPENDIX 2 – SURVEY PHOTOGRAPHS

APPENDIX 3 – PHASE 1 CODES



Summary

1. As part of the process of considering the suitability of Site Dalwhinnie H2, for inclusion into the Local Development Plan, the Cairngorms National Park Authority (CNPA) has commissioned Landcare NorthEast to undertake a desktop study and initial ecological survey.
2. A desktop study and subsequent ecological survey was conducted at Site Dalwhinnie H2 in March 2011.
3. The proposed development site is located at NN 636 848 on Ben Alder Road, Dalwhinnie, and comprises approximately 0.49ha.
4. The main habitat is J1.3 Ephemeral/short perennial patchy plant associations with mounds of rubble from demolished buildings.
5. No notable plant species (those of UK conservation concern - see UK list of Vascular Plants of Conservation Concern <http://www.ukbap.org.uk> - or those listed on the Cairngorms LBAP list of priority species) were noted.
6. The site may provide bat and badger foraging habitat.



1.0 Introduction

Background

1.1 In order to make an assessment on ecological impacts of developments of sites that have been presented for inclusion in the Cairngorms Local Development Plan, CNPA require desktop studies and ecological surveys of each site to be undertaken.

1.2 With regard to this, an extended Phase 1 survey and habitat suitability assessment was conducted at Site Dalwhinnie H2.

1.3 The site is located at NN 636 848 on Ben Alder Road, Dalwhinnie and comprises approximately 0.49ha.

1.4 The survey work was conducted by Steff Ferguson and Flora Grigor-Taylor, both experienced wildlife surveyors, chartered environmentalists and members of IEEM.

Existing Data

1.5 A review of the data held on the National Biodiversity Network (NBN) gateway was undertaken to identify species of conservation concern that have been recorded on the proposed development site.

1.6 NBN results

Occurring within the 10km square in which the site is located:

Goldeneye
Hen harrier
Black grouse
Atlantic salmon (100m record 150m south)
Woolly willow
Scottish wildcat
Cousin German (1km record 250m north)
Otter
Badger

At 2km square level:

Twite
Redshank
Lapwing

At 1km square level:

Daubentons bat

Designated Sites

1.7 There are no statutory designations on, or sharing a boundary with, the land surveyed.



2.0 Survey

Method

2.1 An ecological survey was undertaken on the site in March 2011.

2.2 A Phase 1 Habitat Mapping & Protected Species Survey, also referred to as an Extended Phase 1 Ecological Survey, was undertaken for the site. Standard Phase 1 methodology was used, including detailed target notes of notable plant species (those of conservation concern; also those listed on the Cairngorms LBAP list of priority species).

2.3 An assessment of the habitat suitability within the proposed development site for mammal species was also undertaken.

2.4 The standard optimal time to undertake an Extended Phase 1 Survey is between April and the end of September. The survey time of early March was therefore outwith the optimal time, and where potential for botanical interest was noted, further survey may be necessary to provide comprehensive information on a site.

2.5 The habitats are described by the use of target notes, annotated to the survey map (see Fig.1). Common species names and scientific names (Stace C (1997) *New Flora of the British Isles. Second Ed.* Cambridge University Press.) are given in the text below.

Results

2.6 This brown field site is on flat ground located in the centre of the settlement of Dalwhinnie. The site's boundary is marked with stock, deer and wooden fencing. The site can be divided into 2 distinct sections, separated by a wooden fence: the western part comprises some rough grassland with a few trees, and large mounds of dumped rubble and burnt litter. The eastern end comprises a building, currently unused, which was the premises of a former takeaway/café and associated carparking.

Vegetation

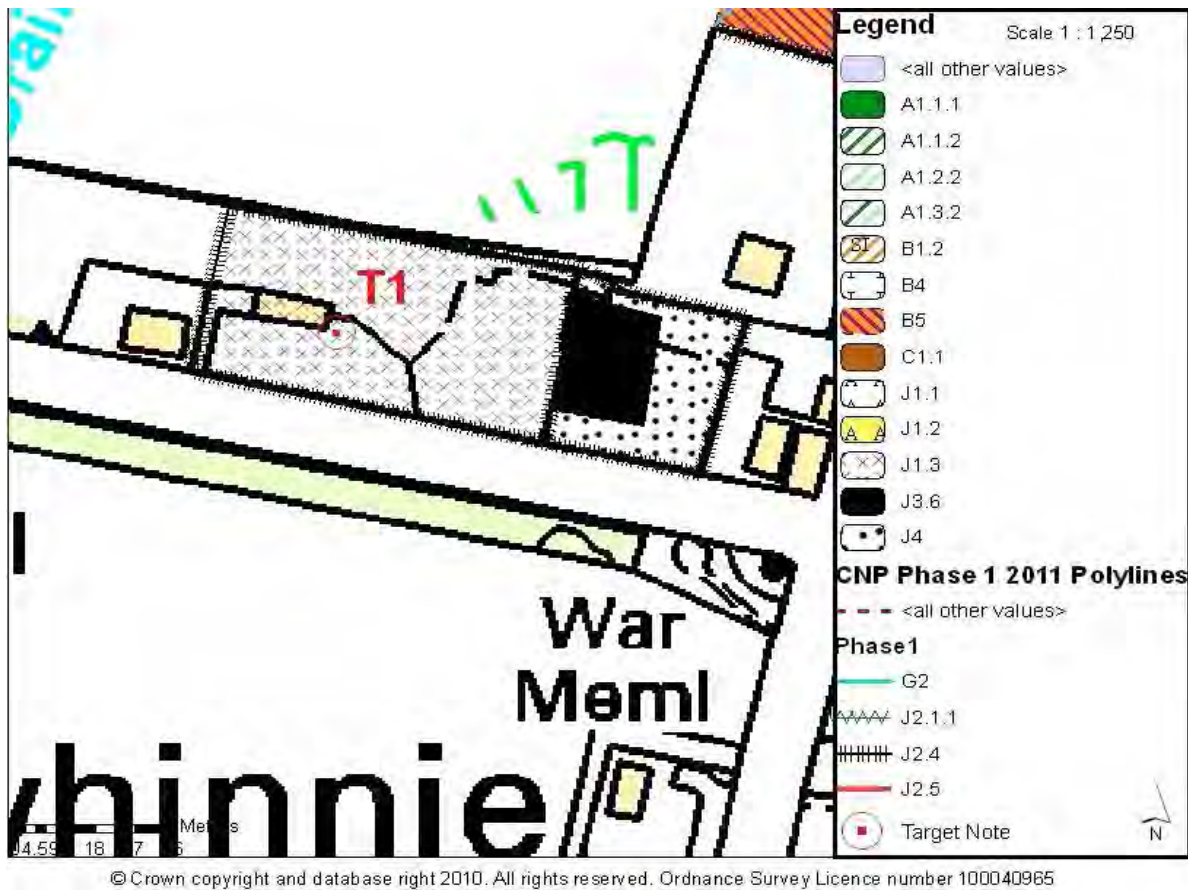
2.7 The western section is a derelict site, characterised by mounds of rubble and remnant foundations from demolished buildings and disturbed ground now vegetated over by short patchy plant associations and shrubs. Some mature trees feature along the site boundary: Sitka spruce (*Picea sitchensis*), birch (*Betula* sp), lime (*Tilia x europaea*) and ornamental spruce. A patch of rowan (*Sorbus aucuparia*) and bridewort (*Spiraea* Agg.) is located near the centre.

2.8 The eastern section has no botanical interest. Habitats present are J4 Bare Ground and J3.6 Built-up area

Fauna

2.9 No species of conservation concern and/or listed on the Cairngorms LBAP list of priority species were noted on site.

Fig 1 Survey Map



3.0 Assessment of Habitat Suitability for Mammals

3.1 The site itself offers no suitable breeding habitat for otter, water vole, badger or red squirrel. There may be foraging opportunity for badger and bats here.

3.2 Existing buildings and mature trees may offer bat roosting habitat.

4.0 References

JNCC. 1990. *Handbook for Phase 1 habitat survey – a technique for environmental audit*. 2007 edition. Nature Conservancy Council

Stace, C.A. 1997. *New Flora of the British Isles*. 2nd Edition. Cambridge University Press.



APPENDIX 1 – TARGET NOTES

T1 - NN 636 848

Derelict site, characterised by mounds of rubble and remnant foundations from demolished buildings and disturbed ground now vegetated over by short patchy plant associations and shrubs. Some mature trees feature along the site boundary: Sitka spruce (*Picea sitchensis*), birch (*Betula* sp), lime (*Tilia x europaea*) and ornamental spruce. A patch of rowan (*Sorbus aucuparia*) and bridewort (*Spiraea* Agg.) is located near the centre.



APPENDIX 2 – SURVEY PHOTOGRAPHS



Western section of site, with rubble piles and patches of shrub vegetation visible



Western section of site, looking east



Looking towards eastern section & existing disused café; remnant foundations in foreground

APPENDIX 3 – PHASE 1 CODES

PHASE 1 CODE	Description
A1.1.1	Broadleaved woodland - semi-natural
A1.1.2	Broadleaved woodland - plantation
A1.2.1	Coniferous woodland - semi-natural
A1.2.2	Coniferous woodland - plantation
A1.3.1	Mixed woodland - semi-natural
A1.3.2	Mixed woodland - plantation
A2.1	Scrub - dense/continuous
A2.2	Scrub - scattered
A3.1	Parkland/scattered trees – broad-leaved
A3.2	Parkland/scattered trees - coniferous
A3.3	Parkland/scattered trees – mixed
A4.1	Broadleaved woodland – recently felled
A4.2	Coniferous woodland – recently felled
A4.3	Mixed woodland – recently felled
B1.1	Acid grassland – unimproved
B1.2	Acid grassland – semi-improved
B2.1	Neutral grassland – unimproved
B2.2	Neutral grassland - semi-improved
B3.1	Calcareous grassland – unimproved
B3.2	Calcareous grassland – semi-improved
B4	Improved grassland
B5	Marsh/marshy grassland
C1.1	Tall herb & fen – bracken continuous
C1.2	Tall herb & fen – bracken scattered
C3.1	Other tall herb and fern - ruderal
D1.1	Dry dwarf shrub heath - acid
G2	Running water
J1.1	Cultivated/disturbed land – arable
J1.2	Cultivated/disturbed land – amenity grassland
J1.3	Cultivated/disturbed land – ephemeral/short perennial
J1.4	Cultivated/disturbed land – introduced shrub
J2.1.1	Intact hedge – native species rich
J2.1.2	Intact hedge – species poor
J2.3.2	Hedge with trees – species-poor
J2.4	Fence
J2.5	Wall
J2.6	Dry ditch
J3.6	Built-up areas - buildings
J4	Bare ground

Extended Phase 1 Habitat Survey Cairngorms Local Development Plan

Site: Dalwhinnie H3

March 2011

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APPENDIX 1 – TARGET NOTES

APPENDIX 2 – SURVEY PHOTOGRAPHS

APPENDIX 3 – PHASE 1 CODES



Summary

1. As part of the process of considering the suitability of Site Dalwhinnie H3, for inclusion into the Local Development Plan, the Cairngorms National Park Authority (CNPA) has commissioned Landcare NorthEast to undertake a desktop study and initial ecological survey.
2. A desktop study and subsequent ecological survey was conducted at Site Dalwhinnie H3 in March 2011.
3. The proposed development site is located at NN 636841, behind Dalwhinnie Garage off the A889 and comprises approximately 0.48ha.
4. The main habitat is A1.1.1 Broad-leaved semi-natural woodland.
5. No notable plant species (those of UK conservation concern - see UK list of Vascular Plants of Conservation Concern <http://www.ukbap.org.uk> - or those listed on the Cairngorms LBAP list of priority species) were noted.
6. The site may provide bat and badger foraging habitat.



1.0 Introduction

Background

1.1 In order to make an assessment on ecological impacts of developments of sites that have been presented for inclusion in the Cairngorms Local Development Plan, CNPA require desktop studies and ecological surveys of each site to be undertaken.

1.2 With regard to this, an extended Phase 1 survey and habitat suitability assessment was conducted at Site Dalwhinnie H3,

1.3 The site is located at NN 636841, behind Dalwhinnie Garage off the A889, and comprises approximately 0.48ha.

1.4 The survey work was conducted by Steff Ferguson and Flora Grigor-Taylor, both experienced wildlife surveyors, chartered environmentalists and members of IEEM.

Existing Data

1.5 A review of the data held on the National Biodiversity Network (NBN) gateway was undertaken to identify species of conservation concern that have been recorded on the proposed development site.

1.6 NBN results

Occurring within the 10km square in which the site is located:

Goldeneye
Hen harrier
Black grouse
Atlantic salmon (100m record 150m south)
Woolly willow
Scottish wildcat
Cousin German (1km record 250m north)
Otter (2km 100m south of site)
Badger

At 2km square level:

Twite
Redshank
Lapwing

At 1km square level:

Daubenton's bat

Designated Sites

1.7 There are no statutory designations on, or sharing a boundary with, the land surveyed.



2.0 Survey

Method

2.1 An ecological survey was undertaken on the site in March 2011.

2.2 A Phase 1 Habitat Mapping & Protected Species Survey, also referred to as an Extended Phase 1 Ecological Survey, was undertaken for the site. Standard Phase 1 methodology was used, including detailed target notes of notable plant species (those of conservation concern; also those listed on the Cairngorms LBAP list of priority species).

2.3 An assessment of the habitat suitability within the proposed development site for mammal species was also undertaken.

2.4 The standard optimal time to undertake an Extended Phase 1 Survey is between April and the end of September. The survey time of early March was therefore outwith the optimal time, and where potential for botanical interest was noted, further survey may be necessary to provide comprehensive information on a site.

2.5 The habitats are described by the use of target notes, annotated to the survey map (see Fig.1). Common species names and scientific names (Stace C (1997) *New Flora of the British Isles. Second Ed.* Cambridge University Press.) are given in the text below.

Results

2.6 The site is an area of wooded ground, positioned between the curtilages of two existing buildings. The site is open along its north boundary to a larger tract of mixed broadleaved woodland. A powerline and wayleave cross the site and the eastern section comprises an area of hardstanding, presumably associated with the adjacent garage.

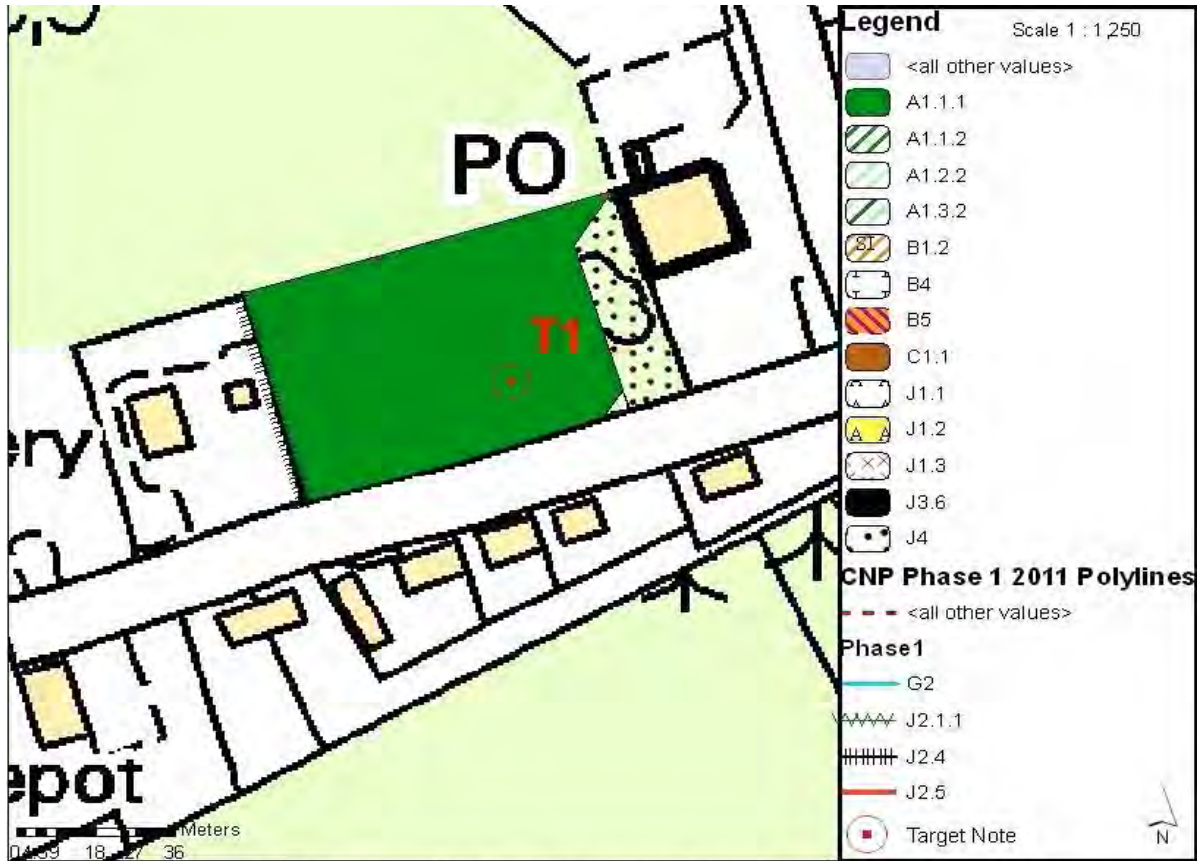
Vegetation

2.7 This site supports A1.1.1 Broad-leaved semi-natural woodland. Birch (*Betula* sp) is the dominant canopy species, interspersed with willow (*Salix* sp), rowan (*Sorbus aucuparia*) and occasional Scots pine (*Pinus sylvestris*). The canopy structure varies, with open scattered woodland giving way to patches of soft rush (*Juncus effusus*) and wet grassland species. Underplanting has taken place (c. 10 year old) below the canopy and natural regeneration of birch is evident along the wayleave. A small patch of ruderal vegetation - rosebay willowherb (*Chamerion angustifolium*), raspberry (*Rubus idaeus*), etc - has colonised a corner of disturbed ground adjacent to the J4 hardstanding by the garage.

Fauna

2.8 No species of conservation concern and/or listed on the Cairngorms LBAP list of priority species were noted on site.

Fig 1 Survey Map



3.0 Assessment of Habitat Suitability for Mammals

3.1 The site itself offers no suitable breeding habitat for otter, water vole or red squirrel. No badger setts or bat roosts were observed. There may be foraging opportunity for badger and bats here.

4.0 References

- JNCC. 1990. *Handbook for Phase 1 habitat survey – a technique for environmental audit*. 2007 edition. Nature Conservancy Council
- Stace, C.A. 1997. *New Flora of the British Isles*. 2nd Edition. Cambridge University Press.



APPENDIX 1 – TARGET NOTES

T - NN 636841

This site supports A1.1.1 Broad-leaved semi-natural woodland. Birch (*Betula* sp) is the dominant canopy species, interspersed with willow (*Salix* sp), rowan (*Sorbus aucuparia*) and occasional Scots pine (*Pinus sylvestris*). Canopy structure varies, with open scattered woodland giving way to patches of soft rush (*Juncus effusus*) and wet grassland species. Underplanting has taken place (c. 10 year old) below the canopy and natural regeneration of birch is evident under the wayleave.

A small patch of ruderal vegetation - rosebay willowherb (*Chamerion angustifolium*), raspberry (*Rubus idaeus*), etc - has colonised a corner of disturbed ground adjacent to the hardstanding by the garage.



APPENDIX 2 – SURVEY PHOTOGRAPHS



*Open scattered birch woodland, interspersed with willow and rowan; A1.1.1
Broad-leaved semi-natural woodland*



Eastern section, showing J4 hardstanding and adjacent garage

APPENDIX 3 – PHASE 1 CODES

PHASE 1 CODE	Description
A1.1.1	Broadleaved woodland - semi-natural
A1.1.2	Broadleaved woodland - plantation
A1.2.1	Coniferous woodland - semi-natural
A1.2.2	Coniferous woodland - plantation
A1.3.1	Mixed woodland - semi-natural
A1.3.2	Mixed woodland - plantation
A2.1	Scrub - dense/continuous
A2.2	Scrub - scattered
A3.1	Parkland/scattered trees – broad-leaved
A3.2	Parkland/scattered trees - coniferous
A3.3	Parkland/scattered trees – mixed
A4.1	Broadleaved woodland – recently felled
A4.2	Coniferous woodland – recently felled
A4.3	Mixed woodland – recently felled
B1.1	Acid grassland – unimproved
B1.2	Acid grassland – semi-improved
B2.1	Neutral grassland – unimproved
B2.2	Neutral grassland - semi-improved
B3.1	Calcareous grassland – unimproved
B3.2	Calcareous grassland – semi-improved
B4	Improved grassland
B5	Marsh/marshy grassland
C1.1	Tall herb & fen – bracken continuous
C1.2	Tall herb & fen – bracken scattered
C3.1	Other tall herb and fern - ruderal
D1.1	Dry dwarf shrub heath - acid
G2	Running water
J1.1	Cultivated/disturbed land – arable
J1.2	Cultivated/disturbed land – amenity grassland
J1.3	Cultivated/disturbed land – ephemeral/short perennial
J1.4	Cultivated/disturbed land – introduced shrub
J2.1.1	Intact hedge – native species rich
J2.1.2	Intact hedge – species poor
J2.3.2	Hedge with trees – species-poor
J2.4	Fence
J2.5	Wall
J2.6	Dry ditch
J3.6	Built-up areas - buildings
J4	Bare ground

Extended Phase 1 Habitat Survey Cairngorms Local Development Plan

Site: Blair Atholl H27

March 2011

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APPENDIX 1 – SURVEY PHOTOGRAPHS

APPENDIX 2 – PHASE 1 CODES



Summary

1. As part of the process of considering the suitability of Site Blair Atholl H27, for inclusion into the Local Development Plan, the Cairngorms National Park Authority (CNPA) has commissioned Landcare NorthEast to undertake a desktop study and initial ecological survey.
2. A desktop study and subsequent ecological survey was conducted at Site Blair Atholl H27 in March 2011.
3. The proposed development site is located at NN869653 in the small town of Blair Atholl and comprises approximately 0.19ha.
4. The site comprises a walled garden area (J1.3), as well as access track and existing residential housing (J4 & J3.6).
5. No notable plant species (those of UK conservation concern - see UK list of Vascular Plants of Conservation Concern <http://www.ukbap.org.uk> - or those listed on the Cairngorms LBAP list of priority species) were noted.
6. The site may provide limited bat foraging habitat.



1.0 Introduction

Background

1.1 In order to make an assessment on ecological impacts of developments of sites that have been presented for inclusion in the Cairngorms Local Development Plan, CNPA require desktop studies and ecological surveys of each site to be undertaken.

1.2 With regard to this, an extended Phase 1 survey and habitat suitability assessment was conducted at Site Blair Atholl H27.

1.3 The site is located at NN869653 in the small town of Blair Atholl and comprises approximately 0.19ha.

1.4 The survey work was conducted by Steff Ferguson and Flora Grigor-Taylor, both experienced wildlife surveyors, chartered environmentalists and members of IEEM.

Existing Data

1.5 A review of the data held on the National Biodiversity Network (NBN) gateway was undertaken to identify species of conservation concern that have been recorded on the proposed development site.

1.6 NBN results

Occurring within the 10km square the site is located in:

- Goldeneye
- Twite
- Hen harrier
- Black grouse
- Capercaillie
- Redshank
- Lapwing
- Freshwater pearl mussel
- Mason bee
- Scottish wildcat
- Kentish glory
- Otter
- Badger

At 2km square level:

- Northern brown argus
- Pearl bordered fritillary

At 1km square level:

- Atlantic salmon
- Red squirrel
- Pipistrelle bat spp.
- Brown/long-eared bat spp.

Designated Sites

1.7 There are no statutory designations on the land surveyed.

2.0 Survey

Method

2.1 An ecological survey was undertaken on the site in March 2011.

2.2 A Phase 1 Habitat Mapping & Protected Species Survey, also referred to as an Extended Phase 1 Ecological Survey, was undertaken for the site. Standard Phase 1 methodology was used, including detailed target notes of notable plant species (those of conservation concern; also those listed on the Cairngorms LBAP list of priority species).

2.3 An assessment of the habitat suitability within the proposed development site for mammal species was also undertaken.

2.4 The standard optimal time to undertake an Extended Phase 1 Survey is between April and the end of September. The survey time of early March was therefore outwith the optimal time, and where potential for botanical interest was noted, further survey may be necessary to provide adequate information on a site.

2.5 The habitats are described by the use of target notes, annotated to the survey map (see Fig.1). Common species names and scientific names (Stace C (1997) *New Flora of the British Isles. Second Ed.* Cambridge University Press.) are given in the text below.

Results

Vegetation

2.6 This site consists of a walled garden area, as well as access track and existing residential housing.

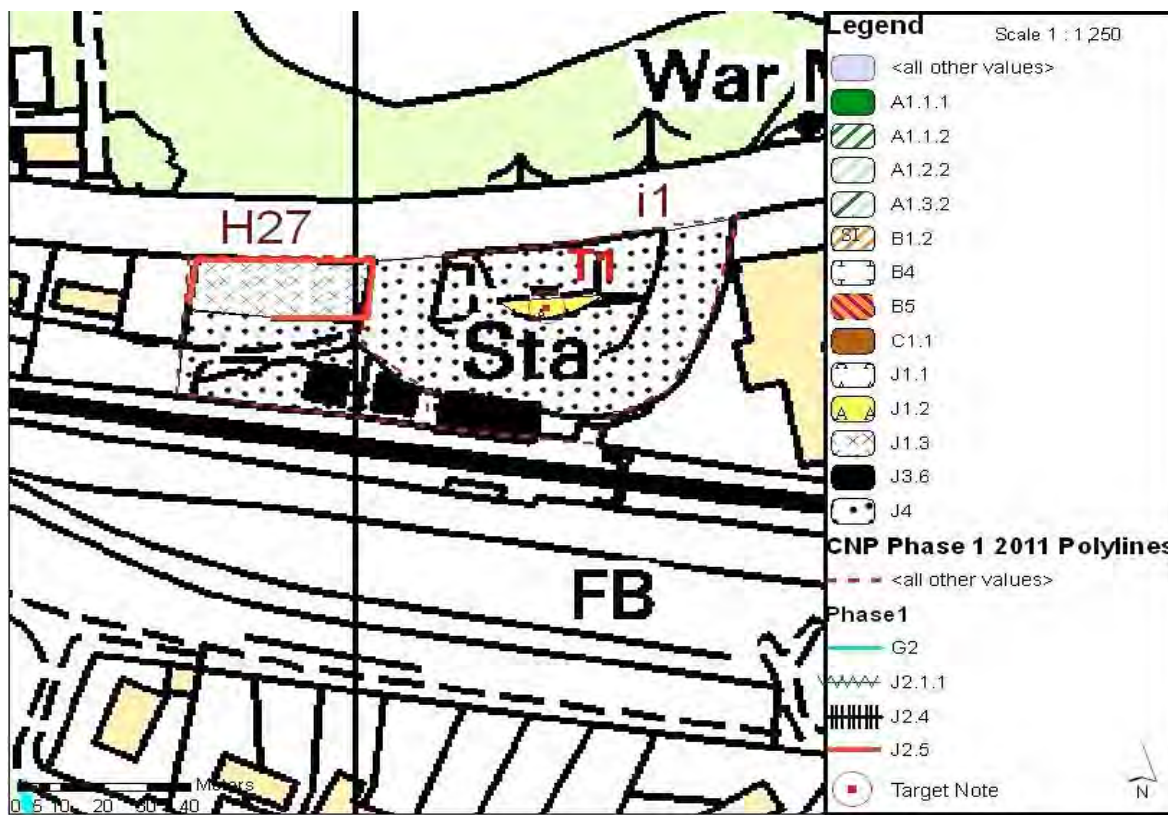
2.7 The walled area contains waste ground, a storage area for logs and C3, tall ruderal vegetation, including rosebay willowherb (*Epilobium angustifolium*), ragwort (*Senecio jacobaea*), cleavers (*Galium aparine*), broad-leaved dock (*Rumex obtusifolius*) and thistles (*Cirsium spp.*). The vegetation appeared to have been kept in check by strimming. Two coppiced wych elm (*Ulmus glabra*) stumps and some young oak (*Quercus spp.*) saplings are growing along the wall perimeter, adjacent to the main road.

Fauna

2.8 No species of conservation concern and/or listed on the Cairngorms LBAP list of priority species were noted on site.



Fig 1 Survey Map



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3.0 Assessment of Habitat Suitability for Mammals

3.1 The site itself offers no suitable breeding habitat for otter, water vole, bat and red squirrel. No badger setts were observed. There may be limited foraging opportunity for bats.

4.0 References

JNCC. 1990. *Handbook for Phase 1 habitat survey – a technique for environmental audit*. 2007 edition. Nature Conservancy Council

Stace, C.A. 1997. *New Flora of the British Isles*. 2nd Edition. Cambridge University Press.



APPENDIX 1 – SURVEY PHOTOGRAPHS



Site H27 – Walled area

APPENDIX 3 – PHASE 1 CODES

PHASE 1 CODE	Description
A1.1.1	Broadleaved woodland - semi-natural
A1.1.2	Broadleaved woodland - plantation
A1.2.1	Coniferous woodland - semi-natural
A1.2.2	Coniferous woodland - plantation
A1.3.1	Mixed woodland - semi-natural
A1.3.2	Mixed woodland - plantation
A2.1	Scrub - dense/continuous
A2.2	Scrub - scattered
A3.1	Parkland/scattered trees – broad-leaved
A3.2	Parkland/scattered trees - coniferous
A3.3	Parkland/scattered trees – mixed
A4.1	Broadleaved woodland – recently felled
A4.2	Coniferous woodland – recently felled
A4.3	Mixed woodland – recently felled
B1.1	Acid grassland – unimproved
B1.2	Acid grassland – semi-improved
B2.1	Neutral grassland – unimproved
B2.2	Neutral grassland - semi-improved
B3.1	Calcareous grassland – unimproved
B3.2	Calcareous grassland – semi-improved
B4	Improved grassland
B5	Marsh/marshy grassland
C1.1	Tall herb & fen – bracken continuous
C1.2	Tall herb & fen – bracken scattered
C3.1	Other tall herb and fern - ruderal
D1.1	Dry dwarf shrub heath - acid
G2	Running water
J1.1	Cultivated/disturbed land – arable
J1.2	Cultivated/disturbed land – amenity grassland
J1.3	Cultivated/disturbed land – ephemeral/short perennial
J1.4	Cultivated/disturbed land – introduced shrub
J2.1.1	Intact hedge – native species rich
J2.1.2	Intact hedge – species poor
J2.3.2	Hedge with trees – species-poor
J2.4	Fence
J2.5	Wall
J2.6	Dry ditch
J3.6	Built-up areas - buildings
J4	Bare ground

Extended Phase 1 Habitat Survey Cairngorms Local Development Plan

Site: Blair Atholl, H28

March 2011

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APPENDIX 1 – TARGET NOTES

APPENDIX 2 – SURVEY PHOTOGRAPHS

APPENDIX 3 – PHASE 1 CODES



Summary

1. As part of the process of considering the suitability of Site Blair Atholl H28, for inclusion into the Local Development Plan, the Cairngorms National Park Authority (CNPA) has commissioned Landcare NorthEast to undertake a desktop study and initial ecological survey.
2. A desktop study and subsequent ecological survey was conducted at Site Blair Atholl H28 in March 2011.
3. The proposed development site is located at NN870651 and comprises approximately 0.66ha.
4. The main habitat is B4, improved grassland, with a strip of riparian trees along the River Garry to the south.
5. No notable plant species (those of UK conservation concern - see UK list of Vascular Plants of Conservation Concern <http://www.ukbap.org.uk> - or those listed on the Cairngorms LBAP list of priority species) were noted.
6. The site may provide bat, otter and badger foraging habitat.



1.0 Introduction

Background

1.1 In order to make an assessment on ecological impacts of developments of sites that have been presented for inclusion in the Cairngorms Local Development Plan, CNPA require desktop studies and ecological surveys of each site to be undertaken.

1.2 With regard to this, an extended Phase 1 survey and habitat suitability assessment was conducted at Site Blair Atholl H28.

1.3 The site is located at NN870651 within the small town of Blair Atholl and comprises approximately 0.66ha..

1.4 The survey work was conducted by Steff Ferguson and Flora Grigor-Taylor, both experienced wildlife surveyors, chartered environmentalists and members of IEEM.

Existing Data

1.5 A review of the data held on the National Biodiversity Network (NBN) gateway was undertaken to identify species of conservation concern that have been recorded on the proposed development site.

1.6 NBN results

Occurring within the 10km square in which the site is located:

- Goldeneye
- Twite
- Hen harrier
- Black grouse
- Capercaillie
- Redshank
- Lapwing
- Freshwater pearl mussel
- Mason bee
- Scottish wildcat
- Kentish glory
- Otter
- Badger

At 2km square level:

- Northern brown argus
- Pearl bordered fritillary

At 1km square level:

- Atlantic salmon
- Red squirrel
- Pipistrelle bat spp.
- Brown/long-eared bat spp.

Designated Sites

1.7 The River Garry is located within the River Tay SAC



2.0 Survey

Method

2.1 An ecological survey was undertaken on the site in March 2011.

2.2 A Phase 1 Habitat Mapping & Protected Species Survey, also referred to as an Extended Phase 1 Ecological Survey, was undertaken for the site. Standard Phase 1 methodology was used, including detailed target notes of notable plant species (those of conservation concern; also those listed on the Cairngorms LBAP list of priority species).

2.3 An assessment of the habitat suitability within the proposed development site for mammal species was also undertaken.

2.4 The standard optimal time to undertake an Extended Phase 1 Survey is between April and the end of September. The survey time of early March was therefore outwith the optimal time, and where potential for botanical interest was noted, further survey may be necessary to provide comprehensive information on a site.

2.5 The habitats are described by the use of target notes, annotated to the survey map (see Fig.1). Common species names and scientific names (Stace C (1997) *New Flora of the British Isles. Second Ed.* Cambridge University Press.) are given in the text below.

Results

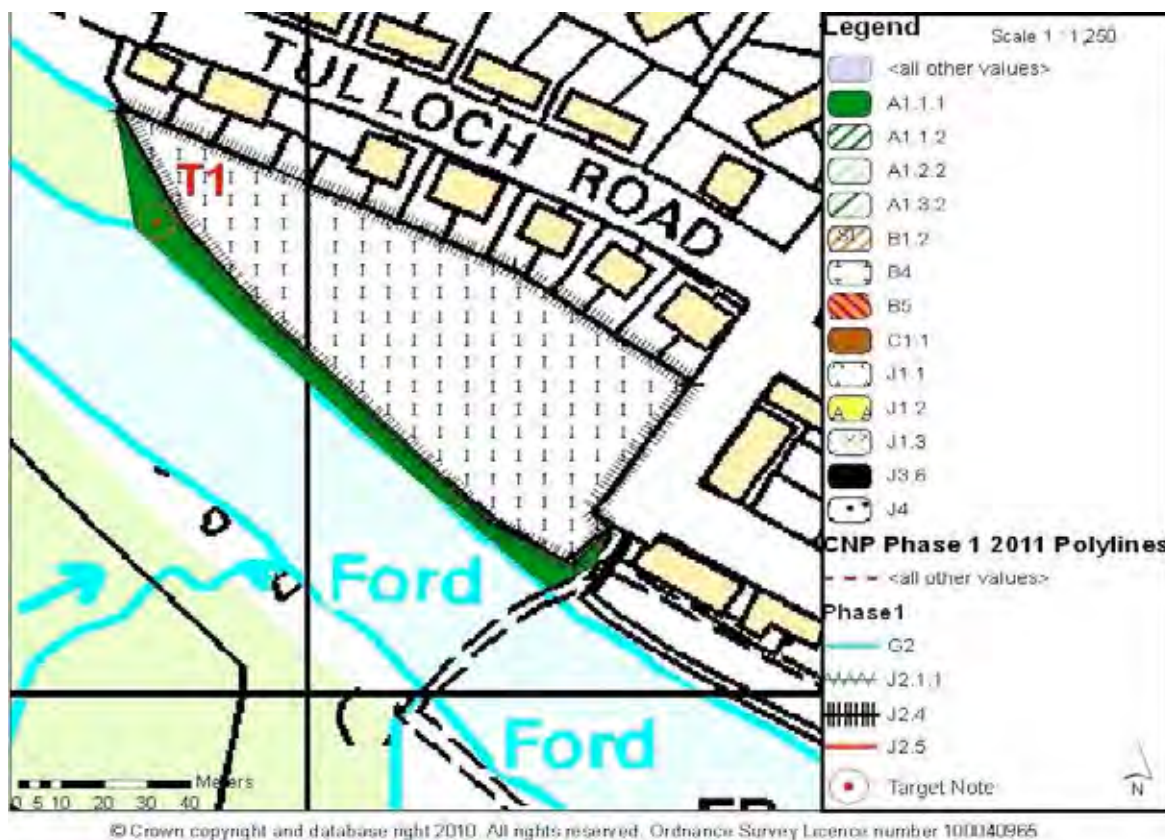
Vegetation

2.6 This site is a level grazed field of B4, improved grassland, currently grazed by sheep. A strip of mature riparian trees separates the grass field from the River Garry. The main tree species noted were common alder (*Alnus glutinosa*), ash (*Fraxinus excelsior*), oak (*Quercus* sp.) and willow (*Salix* spp.)

Fauna

2.7 No species of conservation concern and/or listed on the Cairngorms LBAP list of priority species were noted on site.

Fig 1 Survey Map



3.0 Assessment of Habitat Suitability for Mammals

3.1 The site itself offers no suitable breeding habitat for otter, water vole, bat or red squirrel. No badger setts were observed, although the grassland will offer foraging opportunities for this species.

3.2 The banks of the River Garry are highly likely to be utilised by otter, while the strip of mature trees will provide foraging opportunities for bats.

4.0 References

JNCC. 1990. *Handbook for Phase 1 habitat survey – a technique for environmental audit*. 2007 edition. Nature Conservancy Council

Stace, C.A. 1997. *New Flora of the British Isles*. 2nd Edition. Cambridge University Press.



APPENDIX 1 – TARGET NOTES

T1

Strip of mature trees along banks of River Garry, consisting of common alder (*Alnus glutinosa*), ash (*Fraxinus excelsior*), oak (*Quercus* sp.) and willow (*Salix* spp.).

This strip provides a valuable buffer to the river, part of River Tay SAC, as well as offering habitat for otter, bats, insects and a range of birds.



APPENDIX 2 – SURVEY PHOTOGRAPHS



Improved grassland at H28, Blair Atholl.



Riparian trees along River Garry, Blair Atholl H28



APPENDIX 3 – PHASE 1 CODES

PHASE 1 CODE	Description
A1.1.1	Broadleaved woodland - semi-natural
A1.1.2	Broadleaved woodland - plantation
A1.2.1	Coniferous woodland - semi-natural
A1.2.2	Coniferous woodland - plantation
A1.3.1	Mixed woodland - semi-natural
A1.3.2	Mixed woodland - plantation
A2.1	Scrub - dense/continuous
A2.2	Scrub - scattered
A3.1	Parkland/scattered trees – broad-leaved
A3.2	Parkland/scattered trees - coniferous
A3.3	Parkland/scattered trees – mixed
A4.1	Broadleaved woodland – recently felled
A4.2	Coniferous woodland – recently felled
A4.3	Mixed woodland – recently felled
B1.1	Acid grassland – unimproved
B1.2	Acid grassland – semi-improved
B2.1	Neutral grassland – unimproved
B2.2	Neutral grassland - semi-improved
B3.1	Calcareous grassland – unimproved
B3.2	Calcareous grassland – semi-improved
B4	Improved grassland
B5	Marsh/marshy grassland
C1.1	Tall herb & fen – bracken continuous
C1.2	Tall herb & fen – bracken scattered
C3.1	Other tall herb and fern - ruderal
D1.1	Dry dwarf shrub heath - acid
G2	Running water
J1.1	Cultivated/disturbed land – arable
J1.2	Cultivated/disturbed land – amenity grassland
J1.3	Cultivated/disturbed land – ephemeral/short perennial
J1.4	Cultivated/disturbed land – introduced shrub
J2.1.1	Intact hedge – native species rich
J2.1.2	Intact hedge – species poor
J2.3.2	Hedge with trees – species-poor
J2.4	Fence
J2.5	Wall
J2.6	Dry ditch
J3.6	Built-up areas - buildings
J4	Bare ground

Extended Phase 1 Habitat Survey Cairngorms Local Development Plan

Site: Blair Atholl i1

March 2011

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APPENDIX 1 – TARGET NOTES

APPENDIX 2 – SURVEY PHOTOGRAPHS

APPENDIX 3 – PHASE 1 CODES



Summary

1. As part of the process of considering the suitability of Site Blair Atholl i1, for inclusion into the Local Development Plan, the Cairngorms National Park Authority (CNPA) has commissioned Landcare NorthEast to undertake a desktop study and initial ecological survey.
2. A desktop study and subsequent ecological survey was conducted at Site Blair Atholl i1 in March 2011.
3. The proposed development site is located at NN870653 in the small town of Blair Atholl and comprises approximately 0.36ha.
4. The site consists mainly of tarmac surfacing (J4) for access and car parking for the train station (J3.6) and parking for a small shop. There is a small area of amenity grassland (J1.2) with ornamental trees and shrubs in the centre of the site.
5. No notable plant species (those of UK conservation concern - see UK list of Vascular Plants of Conservation Concern <http://www.ukbap.org.uk> - or those listed on the Cairngorms LBAP list of priority species) were noted.
6. The site may provide limited bat foraging habitat.



1.0 Introduction

Background

1.1 In order to make an assessment on ecological impacts of developments of sites that have been presented for inclusion in the Cairngorms Local Development Plan, CNPA require desktop studies and ecological surveys of each site to be undertaken.

1.2 With regard to this, an extended Phase 1 survey and habitat suitability assessment was conducted at Site Blair Atholl i1.

1.3 The site is located at NN870653 in the small town of Blair Atholl and comprises approximately 0.36ha.

1.4 The survey work was conducted by Steff Ferguson and Flora Grigor-Taylor, both experienced wildlife surveyors, chartered environmentalists and members of IEEM.

Existing Data

1.5 A review of the data held on the National Biodiversity Network (NBN) gateway was undertaken to identify species of conservation concern that have been recorded on the proposed development site.

1.6 NBN results

Occurring within the 10km square the site is located in:

- Goldeneye
- Twite
- Hen harrier
- Black grouse
- Capercaillie
- Redshank
- Lapwing
- Freshwater pearl mussel
- Mason bee
- Scottish wildcat
- Kentish glory
- Otter
- Badger

At 2km square level:

- Northern brown argus
- Pearl bordered fritillary



At 1km square level:

Atlantic salmon
Red squirrel
Pipistrelle bat spp.
Brown/long-eared bat spp.

Designated Sites

1.7 There are no statutory designations on the land surveyed.

2.0 Survey

Method

2.1 An ecological survey was undertaken on the site in March 2011.

2.2 A Phase 1 Habitat Mapping & Protected Species Survey, also referred to as an Extended Phase 1 Ecological Survey, was undertaken for the site. Standard Phase 1 methodology was used, including detailed target notes of notable plant species (those of conservation concern; also those listed on the Cairngorms LBAP list of priority species).

2.3 An assessment of the habitat suitability within the proposed development site for mammal species was also undertaken.

2.4 The standard optimal time to undertake an Extended Phase 1 Survey is between April and the end of September. The survey time of early March was therefore outwith the optimal time, and where potential for botanical interest was noted, further survey may be necessary to provide adequate information on a site.

2.5 The habitats are described by the use of target notes, annotated to the survey map (see Fig.1). Common species names and scientific names (Stace C (1997) *New Flora of the British Isles. Second Ed.* Cambridge University Press.) are given in the text below.

Results

Vegetation

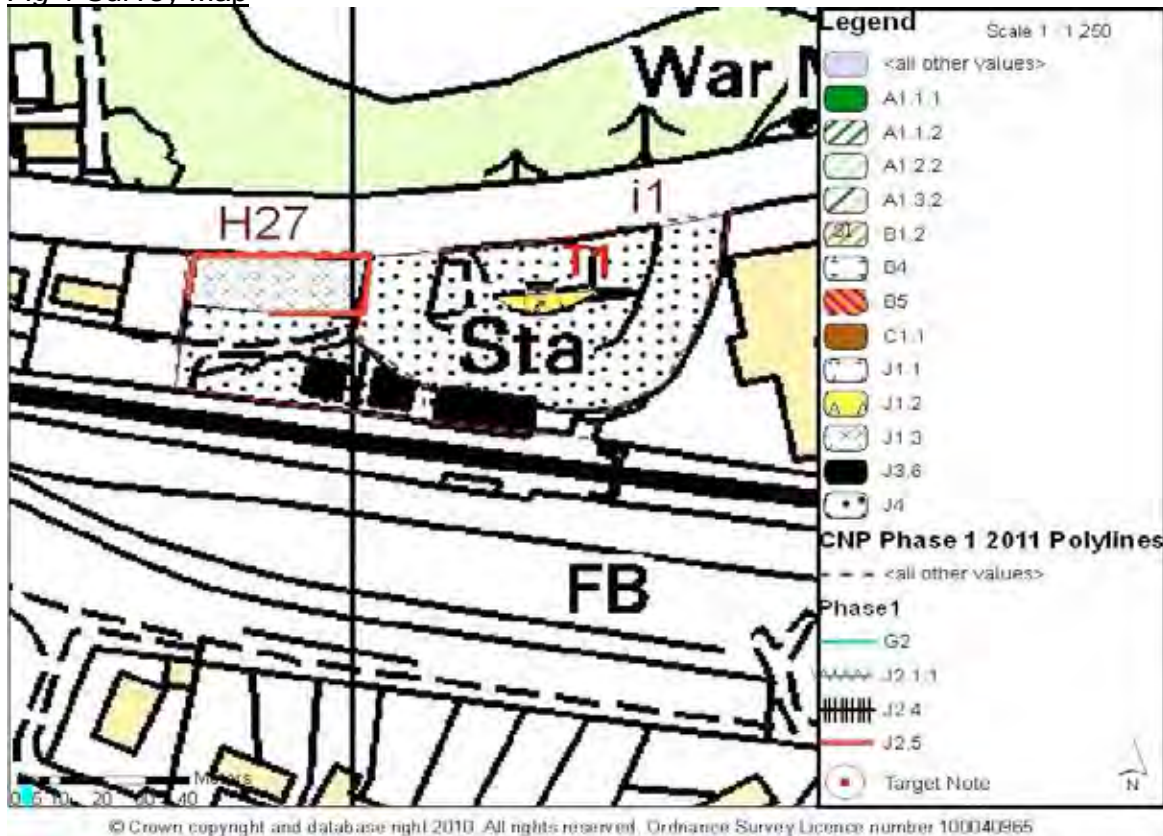
2.6 This site consists mainly of tarmac car parking for a small shop, housed in a wooden building near the main road, and the train station and associated access and parking to the north of the site.

2.7 There is a small area of improved grassland and ornamental trees and shrubs such as Leyland cypress (*Cupressocyparis leylandii*), snowberry (*Symphoricarpos albus*), sycamore (*Acer pseudoplatanus*), yew (*Taxus baccata*) and willows (*Salix spp.*) in the centre of the site.

Fauna

2.8 No species of conservation concern and/or listed on the Cairngorms LBAP list of priority species were noted on site.

Fig 1 Survey Map



3.0 Assessment of Habitat Suitability for Mammals

3.1 The site itself offers no suitable breeding habitat for otter, water vole, bat and red squirrel. No badger setts were observed.

3.2 The buildings on site may offer potential for bat roosts. There may be limited foraging opportunity for bats.

4.0 References

JNCC. 1990. *Handbook for Phase 1 habitat survey – a technique for environmental audit*. 2007 edition. Nature Conservancy Council

Stace, C.A. 1997. *New Flora of the British Isles*. 2nd Edition. Cambridge University Press.



APPENDIX 1 – TARGET NOTES

T1

Small area of amenity grassland (J1.2) , ornamental trees and shrubs such as Leyland cypress (*Cupressocyparis leylandii*), snowberry (*Symphoricarpos albus*), sycamore (*Acer pseudoplatanus*), yew (*Taxus baccata*) and willows (*Salix spp.*) in the centre of the site, the remainder of which consist of access road, car parking and buildings.



APPENDIX 2 – SURVEY PHOTOGRAPHS



Blair Atholl i1 – Car parking and small shop in foreground, amenity green & ornamental trees & shrubs behind, with station to the rear.

APPENDIX 3 – PHASE 1 CODES

PHASE 1 CODE	Description
A1.1.1	Broadleaved woodland - semi-natural
A1.1.2	Broadleaved woodland - plantation
A1.2.1	Coniferous woodland - semi-natural
A1.2.2	Coniferous woodland - plantation
A1.3.1	Mixed woodland - semi-natural
A1.3.2	Mixed woodland - plantation
A2.1	Scrub - dense/continuous
A2.2	Scrub - scattered
A3.1	Parkland/scattered trees – broad-leaved
A3.2	Parkland/scattered trees - coniferous
A3.3	Parkland/scattered trees – mixed
A4.1	Broadleaved woodland – recently felled
A4.2	Coniferous woodland – recently felled
A4.3	Mixed woodland – recently felled
B1.1	Acid grassland – unimproved
B1.2	Acid grassland – semi-improved
B2.1	Neutral grassland – unimproved
B2.2	Neutral grassland - semi-improved
B3.1	Calcareous grassland – unimproved
B3.2	Calcareous grassland – semi-improved
B4	Improved grassland
B5	Marsh/marshy grassland
C1.1	Tall herb & fen – bracken continuous
C1.2	Tall herb & fen – bracken scattered
C3.1	Other tall herb and fern - ruderal
D1.1	Dry dwarf shrub heath - acid
G2	Running water
J1.1	Cultivated/disturbed land – arable
J1.2	Cultivated/disturbed land – amenity grassland
J1.3	Cultivated/disturbed land – ephemeral/short perennial
J1.4	Cultivated/disturbed land – introduced shrub
J2.1.1	Intact hedge – native species rich
J2.1.2	Intact hedge – species poor
J2.3.2	Hedge with trees – species-poor
J2.4	Fence
J2.5	Wall
J2.6	Dry ditch
J3.6	Built-up areas - buildings
J4	Bare ground

Extended Phase 1 Habitat Survey Cairngorms Local Development Plan

Site: Cromdale Kirk Road

March 2011

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APPENDIX 1 – SURVEY PHOTOGRAPHS

APPENDIX 2 – PHASE 1 CODES



Summary

1. As part of the process of considering the suitability of Site Cromdale Kirk Road, for inclusion into the Local Development Plan, the Cairngorms National Park Authority (CNPA) has commissioned Landcare NorthEast to undertake a desktop study and initial ecological survey.
2. A desktop study and subsequent ecological survey was conducted at Site Cromdale Kirk Road in March 2011.
3. The proposed development site is located at NJ071286 and comprises approximately 4.36ha.
4. The main habitat is arable farmland.
5. No notable plant species (those of UK conservation concern - see UK list of Vascular Plants of Conservation Concern <http://www.ukbap.org.uk> - or those listed on the Cairngorms LBAP list of priority species) were noted.
6. The site may provide bat and badger foraging habitat.



1.0 Introduction

Background

1.1 In order to make an assessment on ecological impacts of developments of sites that have been presented for inclusion in the Cairngorms Local Development Plan, CNPA require desktop studies and ecological surveys of each site to be undertaken.

1.2 With regard to this, an extended Phase 1 survey and habitat suitability assessment was conducted at Site Cromdale Kirk Road.

1.3 The site is located at NJ071286 and comprises approximately 4.36ha.

1.4 The survey work was conducted by Steff Ferguson and Flora Grigor-Taylor, both experienced wildlife surveyors, chartered environmentalists and members of IEEM.

Existing Data

1.5 A review of the data held on the National Biodiversity Network (NBN) gateway was undertaken to identify species of conservation concern that have been recorded on the proposed development site.

1.6 NBN results

Occurring within the 10km square in which the site is located:

- Goldeneye
- Twite
- Hen harrier
- Scottish crossbill
- Black grouse
- Capercaillie
- Pearl bordered fritillary
- Twinflower
- Aspen bracket fungus
- Pine hoverfly
- Northern damselfly
- Aspen hoverfly
- Freshwater pearl mussel
- Blunt-leaved bristle moss
- Water vole
- Scottish wildcat
- Kentish glory
- Dark-bordered beauty
- Cousin German
- Netted mountain moth
- Badger
- Pipistrelle bat spp.
- Daubentons bat
- Natterers bat
- Brown/long-eared bat spp.



At 2km square level:

Redshank
Lapwing
Northern brown argus
Atlantic salmon
Otter

At 1km square level:

Red squirrel

Designated Sites

1.7 There are no statutory designations on the land surveyed.

1.8 The long distance Speyside Way route skirts the site to the north along the dismantled railway line.

2.0 Survey

Method

2.1 An ecological survey was undertaken on the site in March 2011.

2.2 A Phase 1 Habitat Mapping & Protected Species Survey, also referred to as an Extended Phase 1 Ecological Survey, was undertaken for the site. Standard Phase 1 methodology was used, including detailed target notes of notable plant species (those of conservation concern; also those listed on the Cairngorms LBAP list of priority species).

2.3 An assessment of the habitat suitability within the proposed development site for mammal species was also undertaken.

2.4 The standard optimal time to undertake an Extended Phase 1 Survey is between April and the end of September. The survey time of early March was therefore outwith the optimal time, and where potential for botanical interest was noted, further survey may be necessary to provide comprehensive information on a site.

2.5 The habitats are described by the use of target notes, annotated to the survey map (see Fig.1). Common species names and scientific names (Stace C (1997) *New Flora of the British Isles. Second Ed.* Cambridge University Press.) are given in the text below.

Results

Vegetation

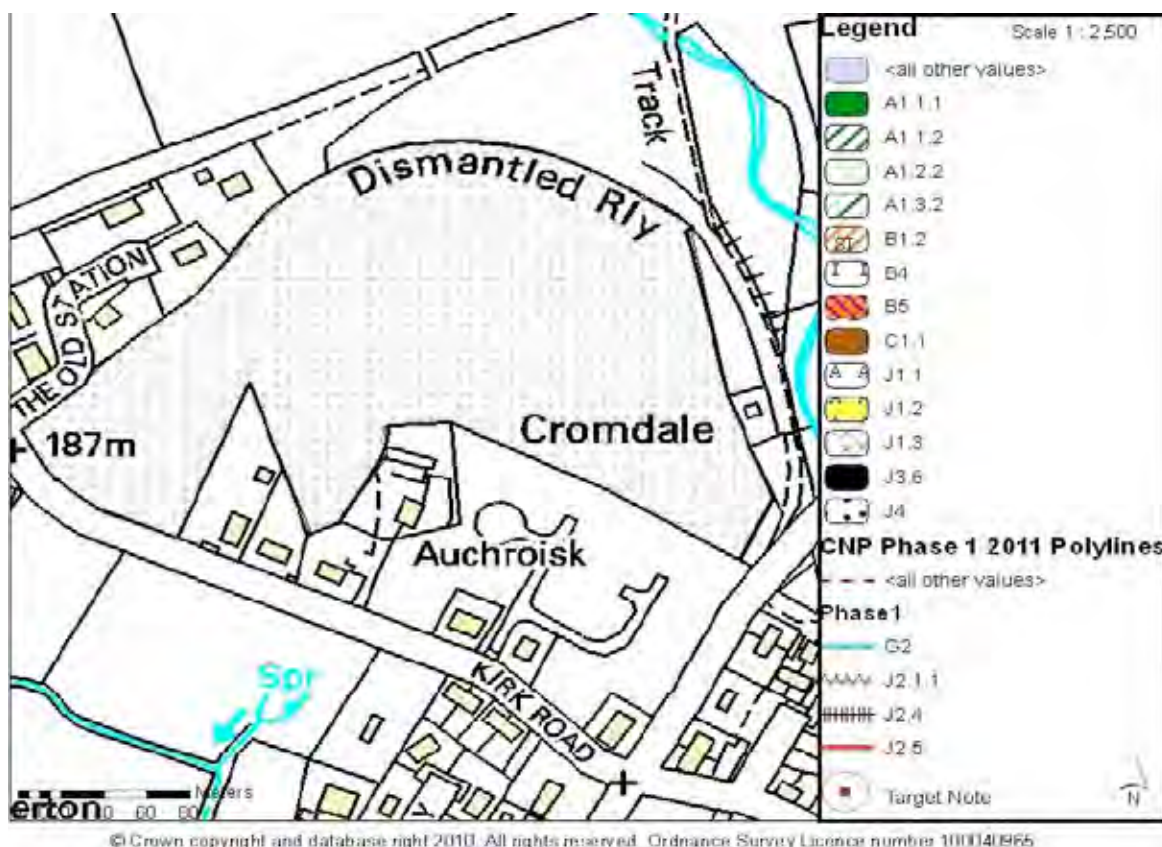
2.6 This site comprises a large field of arable farmland.



Fauna

2.7 No species of conservation concern and/or listed on the Cairngorms LBAP list of priority species were noted on site.

Fig 1 Survey Map



3.0 Assessment of Habitat Suitability for Mammals

3.1 The site itself offers no suitable breeding habitat for otter, water vole, bat or red squirrel. No badger setts were observed. There may be foraging opportunity for badger and bats here.

4.0 References

JNCC. 1990. *Handbook for Phase 1 habitat survey – a technique for environmental audit*. 2007 edition. Nature Conservancy Council

Stace, C.A. 1997. *New Flora of the British Isles*. 2nd Edition. Cambridge University Press.



APPENDIX – SURVEY PHOTOGRAPHS



Arable field,
Cromdale Kirk
Road



APPENDIX 3 – PHASE 1 CODES

PHASE 1 CODE	Description
A1.1.1	Broadleaved woodland - semi-natural
A1.1.2	Broadleaved woodland - plantation
A1.2.1	Coniferous woodland - semi-natural
A1.2.2	Coniferous woodland - plantation
A1.3.1	Mixed woodland - semi-natural
A1.3.2	Mixed woodland - plantation
A2.1	Scrub - dense/continuous
A2.2	Scrub - scattered
A3.1	Parkland/scattered trees – broad-leaved
A3.2	Parkland/scattered trees - coniferous
A3.3	Parkland/scattered trees – mixed
A4.1	Broadleaved woodland – recently felled
A4.2	Coniferous woodland – recently felled
A4.3	Mixed woodland – recently felled
B1.1	Acid grassland – unimproved
B1.2	Acid grassland – semi-improved
B2.1	Neutral grassland – unimproved
B2.2	Neutral grassland - semi-improved
B3.1	Calcareous grassland – unimproved
B3.2	Calcareous grassland – semi-improved
B4	Improved grassland
B5	Marsh/marshy grassland
C1.1	Tall herb & fen – bracken continuous
C1.2	Tall herb & fen – bracken scattered
C3.1	Other tall herb and fern - ruderal
D1.1	Dry dwarf shrub heath - acid
G2	Running water
J1.1	Cultivated/disturbed land – arable
J1.2	Cultivated/disturbed land – amenity grassland
J1.3	Cultivated/disturbed land – ephemeral/short perennial
J1.4	Cultivated/disturbed land – introduced shrub
J2.1.1	Intact hedge – native species rich
J2.1.2	Intact hedge – species poor
J2.3.2	Hedge with trees – species-poor
J2.4	Fence
J2.5	Wall
J2.6	Dry ditch
J3.6	Built-up areas - buildings
J4	Bare ground

Extended Phase 1 Habitat Survey Cairngorms Local Development Plan

Site: 005a
Land at Struan, near Calvine

September 2010

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Extended Phase 1 Habitat Survey Cairngorms Local Development Plan

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APPENDIX 1 – TARGET NOTES
APPENDIX 2 – PLANT SPECIES LIST
APPENDIX 3 – SURVEY PHOTOGRAPHS
APPENDIX 4 – PHASE 1 CODES

Summary

1. As part of the process of considering the suitability of Site **005a** for inclusion into the Local Development Plan, the Cairngorms National Park Authority (CNPA) has commissioned Landcare NorthEast to undertake a desktop study and initial ecological survey.

2. A desktop study and subsequent ecological survey was conducted at Site 005a, land at Struan, near Calvine on 18 August 2010.

3. The 4.3ha proposed development site is located at NN 801655.

4. The main habitats are Recently-felled Coniferous Woodland, Dry Dwarf Shrub Heath with some Marshy and Acid Grassland patches.

5. No notable plant species (those of UK conservation concern – see UK list of Vascular Plants of Conservation Concern <http://www.ukbap.org.uk> - or those listed on the Cairngorms LBAP list of priority species) were noted.

6. No species of conservation concern and/or listed on the Cairngorms LBAP list of priority species were recorded on site.

7. Some of the older trees may have potential roost sites for bats, in cracks, holes or under loose bark. The site is within 100m of the River Garry, where otters are known to be present. As such, site 005a is within potential otter foraging and breeding territory distance from the watercourse. There may be limited foraging opportunity for badger and bats here.

The site offers no suitable breeding habitat for water vole or red squirrel.

1.0 Introduction

Background

1.1 In order to make an assessment on ecological impacts of developments of sites that have been presented for inclusion in the Cairngorms Local Development Plan, CNPA require desktop studies and ecological surveys of each site to be undertaken.

1.2 With regard to this, an extended Phase 1 survey and habitat suitability assessment was conducted at Site 005a, land at Struan, near Calvine, Perthshire.

1.3 The 4.3ha site is located at NN 801655.

1.4 The survey work was conducted by Steff Ferguson and Flora Grigor-Taylor, both experienced wildlife surveyors, chartered environmentalists and members of IEM.

Existing Data

1.5 A review of the data held on the National Biodiversity Network (NBN) gateway was undertaken to identify species of conservation concern that have been recorded on the proposed development site.

1.6 Otter, badger, common pipistrelle and brown long-eared bat records exist at the 10km level for the vicinity of the site. Red squirrel and Scottish wildcat have been recorded within 1km square of the site.

1.7 Also recorded within 10km square of the site – Atlantic salmon, goldeneye, twite, hen harrier, black grouse, capercaillie, redshank, lapwing, northern brown argus, pearl bordered fritillary, mason bee, Kentish glory and netted mountain moth.

Designated Sites

1.8 The site is classified as Long Established Woodland of Plantation Origin (2b) on the inventory of ancient and long-established woodland sites. However, the woodland was felled in 2007.

1.9 To the west of the site sits Struan Wood SSSI, designated for beetles, a moth and upland birch woodland.

2.0 Survey

Method

2.1 An ecological survey was undertaken on the site on 18 August 2010.

2.2 A Phase 1 Habitat Mapping & Protected Species Survey, also referred to as an extended Phase 1 Ecological Survey, was undertaken for the site. Standard Phase 1 methodology was used, including detailed target notes of notable plant species (those of conservation concern; also those listed on the Cairngorms LBAP list of priority species).

2.3 An assessment of the habitat suitability within the proposed development site for mammal species was also undertaken.

2.4 The standard optimal time to undertake an extended Phase 1 survey is between April and the end of September. The survey time of mid-August is therefore optimal.

2.5 The habitats are described by the use of target notes, annotated to the survey map (see Fig.2). Common species names and scientific names (Stace C (1997) *New Flora of the British Isles, Second Ed.* Cambridge University Press.) are given in the text below.

Results

Vegetation

2.6 This site is on fairly flat ground, rising to the south of the site. Previously a long established plantation, the site was clear-felled in 2007. Layers of dead brash suppress vegetative growth across much of the site and create an uneven hummocky surface. Where areas are free of felled branches and windblow, a variety of wetland and heath plant communities thrive, interspersed with bryophyte-rich open pools and drainage ditches.

2.7 The main habitats present are felled layers of dead wood and dwarf shrub heath, with smaller areas of marshy and acid grassland, wet flushes and bracken stands. Main species present are listed in Appendix 2.

2.8 Recently-felled Coniferous Woodland A4.2

The main species felled are Sitka spruce (*Picea sitchensis*), larch (*Larix deciduas*) and Scots pine (*Pinus sylvestris*). Some silver birch (*Betula pendula*), willow (*Salix* sp) and Scots pine have been left standing and survive either as isolated individuals or in groups. Evidence of windblown willow and birch were noted.

2.9 Marsh/marshy grasslands B5

Where there are openings in the field layer of dead timber, ground conditions are wet throughout much of the site. Rushes are important constituents in the field layer (See Target Notes 1 & 6) with *Sphagnum* spp, bulbous rush (*Juncus bulbosus*) and broad-leaved pondweed (*Potamogeton natans*) frequent along ditch sides. Regenerating seedlings of birch, rowan (*Sorbus aucuparia*), elder (*Sambucus nigra*) and

occasionally oak (*Quercus* sp) were found where the ground layer of vegetation cover is less dense.

2.10 Dry dwarf shrub heath – acid D1

Although this community is damp in places, overall species composition is more characteristic of a dry heath. Ling heather (*Calluna vulgaris*) dominates, with small patches of cross-leaved heath (*Erica tetralix*) and blueberry (*Vaccinium myrtillus*) present (see Target note 5).

2.11 Acid grassland - unimproved B1.1

As the ground rises to the west end of the site, dominant species are those of acid grassland conditions, grading into dwarf shrub heath. Plants such as heath bedstraw (*Galium saxatile*), heath woodrush (*Luzula multiflora*), Germander speedwell (*Veronica chamaedrys*), wavy hair grass (*Deschampsia flexuosa*) and sweet vernal grass (*Anthoxanthum odoratum*) become more frequent in the field layer (see Target note 7).

2.12 Although some of the perimeter is fenced, most of the boundary is either open or delineated by drystone dyking.

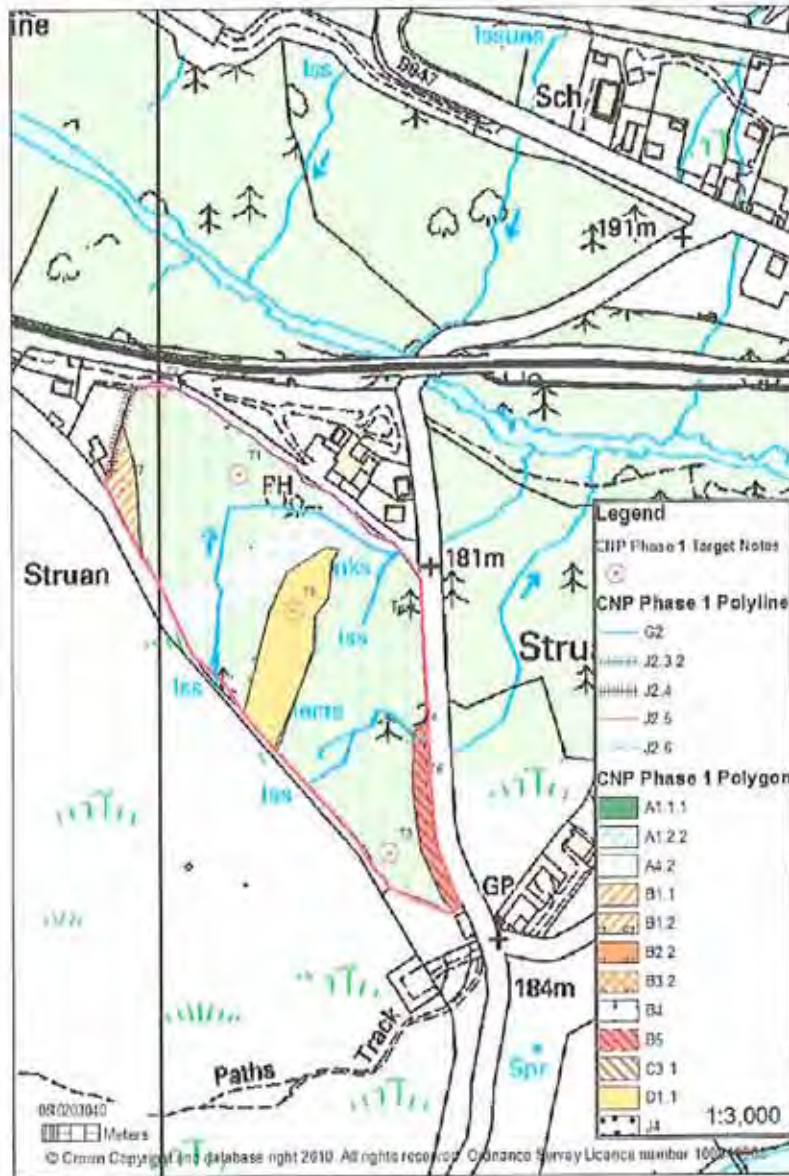
Fauna

2.13 No species of conservation concern and/or listed on the Cairngorms LBAP list of priority species were recorded on site.

However, a good range of invertebrates were noted, particularly butterflies and dragonflies. Other recorded fauna – common frog, wren utilising brash, blue tit, rabbit droppings, roe deer prints.



Fig 1 Survey Map



3.0 Assessment of Habitat Suitability for Mammals

3.1 Prior to felling, it is highly likely that this site would have been suitable for breeding and foraging badgers, red squirrels and possibly bats. However, at present, the site itself offers no suitable breeding habitat for water vole, or red squirrel, although there may still be limited foraging opportunity for badger and bats here.

Some of the older trees may have potential roost sites for bats, in cracks, holes or under loose bark. The site is within 100m of the River Garry, where otters are known to be present. As such, site 005a is within potential otter foraging and breeding territory distance from the watercourse.

No badger setts or otter holts were observed.

4.0 References

JNCC, 1990. Handbook for Phase 1 habitat survey – a technique for environmental audit. 2007 edition. Nature Conservancy Council

Stace, C.A. 1997. New Flora of the British Isles. 2nd Edition. Cambridge University Press.

UK list of Vascular plants of Conservation Concern <http://www.ukbap.org.uk>

Cairngorms LBAP Priority Species List www.cairngorms.co.uk

APPENDIX 1 – TARGET NOTES

T1 - NN 80059 65619

Wet flush at 190m altitude: rushes (*Juncus effusus*, *J. articulatus*), lesser spearwort (*Ranunculus flammula*), cuckooflower (*Cardamine pratensis*) and foxglove (*Digitalis purpurea*), *Sphagnum* spp, hard fern (*Blechnum spicant*), sedges (*Carex echinata*, *C. diandra*)

T2 - NN 79998 65677

Mature sycamore and birch on edge of site, with understorey of common nettle (*Urtica dioica*) on disturbed ground, with garden waste dumping evident and small open pools of standing water

T3 - NN 80164 65361

Stand of bracken (*Pteridium aquilinum*) with oak saplings

T4 - NN 80077 65567

Dragonflies - black darter and golden ringed

T5 - NN 80098 65526

Ling heather (*Calluna vulgaris*), tufted hairgrass (*Deschampsia cespitosa*), blaeberry (*Vaccinium myrtillus*), purple moor grass (*Molinia caerulea*), cross-leaved heath (*Erica tetralix*), tormentil (*Potentilla erecta*), birch regeneration

T6 - NN 80188 65405

Marshy grassland: Marsh thistle (*Cirsium palustre*), marsh willowherb (*Epilobium palustre*), cuckooflower (*Cardamine pratensis*), jointed rush (*Juncus articulatus*), soft rush (*J. effusus*), sharp flowered rush (*J. acutiflorus*), wood forget-me-not (*Myosotis sylvatica*), common dog violet (*Viola riviniana*), common marsh bedstraw (*Gallium palustre*), *Carex* spp., birch & willow regeneration

T7 - NN 79972 65609

Species-rich acid heath/grassland: wavy hair grass (*Deschampsia flexuosa*), heath bedstraw (*Galium saxatile*), heath woodrush (*Luzula multiflora*), germander speedwell (*Veronica chamaedrys*), Yorkshire fog (*Holcus lanatus*), common bent (*Agrostis capillaris*) with birch regeneration

APPENDIX 2 – PLANT SPECIES LIST

English	Scientific
Black knapweed	<i>Centaurea nigra</i>
Blaeberry	<i>Vaccinium myrtillus</i>
bracken	<i>Pteridium aquilinum</i>
Broad-leaved Pondweed	<i>Potamogeton natans</i>
Bulbous rush	<i>Juncus bulbosus</i>
Common bent	<i>Agrostis capillaris</i>
Common dog violet	<i>Viola riviniana</i>
Common foxglove	<i>Digitalis purpurea</i>
Common haircap moss	<i>Polytrichum commune</i>
Common marsh bedstraw	<i>Galium palustre</i>
Cross leaved heath	<i>Erica tetralix</i>
Cuckooflower	<i>Cardamine pratensis</i>
Devil's bit scabious	<i>Succisa pratensis</i>
Downy birch	<i>Betula pubescens</i>
Elder	<i>Sambucus nigra</i>
European larch	<i>Larix decidua</i>
Gemander speedwell	<i>Veronica chamaedrys</i>
Hard fern	<i>Blechnum spicant</i>
Harebell	<i>Campanula rotundifolia</i>
Heath bedstraw	<i>Galium saxatile</i>
Heath woodrush	<i>Luzula multiflora</i>
Jointed rush	<i>Juncus articulatus</i>
Lesser spearwort	<i>Ranunculus flammula</i>
Lesser tussock sedge	<i>Carex diandra</i>
Ling heather	<i>Calluna vulgaris</i>
Marsh thistle	<i>Cirsium palustre</i>
Marsh willowherb	<i>Epiobium palustre</i>
oak seedlings	<i>Quercus sp</i>
Purple moor grass	<i>Molinia caerulea</i>
Ragwort	<i>Senecio jacobaea</i>
Rowan	<i>Sorbus aucuparia</i>
Scots pine	<i>Pinus sylvestris</i>
Sharp flowered rush	<i>Juncus acutiflorus</i>
Silver Birch	<i>Betula pendula</i>
Silka spruce	<i>Picea sitchensis</i>
Soft rush	<i>Juncus effusus</i>
Star sedge	<i>Carex echinata</i>
Stinging nettle	<i>Urtica dioica</i>
Sweet vernal grass	<i>Anthoxanthum odoratum</i>
Sycamore	<i>Acer pseudoplatanus</i>
Tormentil	<i>Potentilla erecta</i>
Tufted Hairgrass	<i>Deschampsia cespitosa</i>
Wavy hair grass	<i>Deschampsia flexuosa</i>
Wild raspberry	<i>Rubus idaeus</i>

Phase 1 Habitat Survey
Site: 005g
Landcare NorthEast Sep 2010



Willows	<i>Salix spp</i>
Wood forget-me-not	<i>Myosotis sylvatica</i>
Yarrow	<i>Achillea millefolium</i>
Yorkshire fog	<i>Holcus lanatus</i>
	<i>Sphagnum spp</i>



APPENDIX 3 – SURVEY PHOTOGRAPHS



Clear-felling has led to brash restricting ground flora growth; individual trees left standing



Site 005a is rich in invertebrates: such as black darter and golden ringed dragonflies

APPENDIX 4 – PHASE 1 CODES

PHASE 1 CODE	Description
A1.1.1	Broadleaved woodland - semi-natural
A1.1.2	Broadleaved woodland - plantation
A1.2.1	Coniferous woodland - semi-natural
A1.2.2	Coniferous woodland - plantation
A1.3.1	Mixed woodland - semi-natural
A1.3.2	Mixed woodland - plantation
A2.1	Scrub - dense/continuous
A2.2	Scrub - scattered
A4.1	Broadleaved woodland - recently felled
A4.2	Coniferous woodland - recently felled
A4.3	Mixed woodland - recently felled
B1.1	Acid grassland - unimproved
B1.2	Acid grassland - semi-improved
B2.2	Neutral grassland - semi-improved
B3.2	Calcareous grassland - semi-improved
B4	Improved grassland
B5	Marsh/marshy grassland
C3.1	Other tall herb and fern - ruderal
D1.1	Dry dwarf shrub heath - acid
G2	Running water
J2.3.2	Hedge with trees - species-poor
J2.4	Fence
J2.5	Wall
J2.6	Dry ditch
J4	Bare ground

Phase 1 Habitat Survey
Site: 005b
Landcare NorthEast August 2010 

Extended Phase 1 Habitat Survey Cairngorms Local Development Plan

Site: 005b

**Land to the north of Blair Castle Caravan Park
Blair Atholl**

August 2010

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3.0 Habitat Suitability for Mammals	5
4.0 References	5

APPENDIX 1 – TARGET NOTES

APPENDIX 2 – SURVEY PHOTOGRAPHS

APPENDIX 3 – PHASE 1 CODES

Summary

1. As part of the process of considering the suitability of Site **005b**, Land to the north of Blair Castle Caravan Park, Blair Atholl for inclusion into the Local Development Plan, the Cairngorms National Park Authority (CNPA) has commissioned Landcare NorthEast to undertake a desktop study and initial ecological survey.
2. A desktop study and subsequent ecological survey was conducted at Site **005b**, Land to the north of Blair Castle Caravan Park, Blair Atholl on 19 August 2010.
3. The proposed development site is located at NN873661 and comprises approximately 4.9ha.
4. The main habitat is coniferous plantation woodland.
5. No notable plant species (those of UK conservation concern - see UK list of Vascular Plants of Conservation Concern <http://www.ukbap.org.uk> - or those listed on the Cairngorms LBAP list of priority species) were noted.
6. Signs of red squirrel foraging were noted. The site has good habitat potential for red squirrel, bats and badger.

1.0 Introduction

Background

1.1 In order to make an assessment on ecological impacts of developments of sites that have been presented for inclusion in the Cairngorms Local Development Plan, CNPA require desktop studies and ecological surveys of each site to be undertaken.

1.2 With regard to this, an extended Phase 1 survey and habitat suitability assessment was conducted at Site **005b**, Land to the north of Blair Castle Caravan Park, Blair Atholl.

1.3 The site is located at NN873661 and comprises approximately 4.9ha.

1.4 The survey work was conducted by Steff Ferguson and Flora Grigor-Taylor, both experienced wildlife surveyors, chartered environmentalists and members of IEEM.

Existing Data

1.5 A review of the data held on the National Biodiversity Network (NBN) gateway was undertaken to identify species of conservation concern that have been recorded on the proposed development site.

1.6 Badger, otter, wildcat and bat records exist at the 10km level for the vicinity of the site. Pearl bordered fritillary have been recorded within the 2km level. Red squirrel have been recorded within 1km square of the site.

1.7 Also recorded within 10km square of the site – goldeneye, twite, hen harrier, black grouse, capercaillie, northern brown argus, redshank and lapwing.

Designated Sites

1.8 The site is classified as Ancient woodland; Ancient wood replanted 2b

1.9 The River Tilt which flows parallel with the eastern edge of the site, is part of the River Tay SAC.

1.10 The land is located within Blair Castle Historic Gardens and Designed Landscape designated as outlined in the Highland Area Local Plan 2000, defined as "Areas that have been set out and planted in the past (mostly within the last 200-300 years) and which are still recognizable as representative of a particular style or quality of period".



2.0 Survey

Method

2.1 An ecological survey was undertaken on the site on 19 August 2010.

2.2 A Phase 1 Habitat Mapping & Protected Species Survey, also referred to as an extended Phase 1 Ecological Survey, was undertaken for the site. Standard Phase 1 methodology was used, including detailed target notes of notable plant species (those of conservation concern; also those listed on the Cairngorms LBAP list of priority species).

2.3 An assessment of the habitat suitability within the proposed development site for mammal species was also undertaken.

2.4 The standard optimal time to undertake an extended Phase 1 survey is between April and the end of September. The survey time of mid-August is therefore optimal.

2.5 The habitats are described by the use of target notes, annotated to the survey map (see Fig.1). Common species names and scientific names (Stace C (1997) *New Flora of the British Isles. Second Ed.* Cambridge University Press.) are given in the text below.

Results

Vegetation

2.6 The site consists of conifer woodland of plantation origin (A1.2.2). Stands of mature conifer form a closed canopy throughout most of the site and comprise mainly Scots pine (*Pinus sylvestris*), sitka spruce (*Picea sitchensis*) and larch (*Larix spp.*). Occasional sycamore (*Acer pseudoplatanus*), birch (*Betula spp.*), rowan (*Sorbus aucuparia*) and hawthorn (*Crataegus monogyna*) have self-seeded into open areas.

2.7 Ground flora is species rich (see Target Note 1 in Appendix 1), with stands of male fern (*Dryopteris filix-mas*), raspberry (*Rubus idaeus*) and a rich bryophyte layer. Forbs include common dog violet (*Viola riviniana*), germander speedwell (*Veronica chamaedrys*), wood sorrel (*Oxalis acetosella*), wild strawberry (*Fragaria vesca*), hedge woundwort (*Stachys sylvatica*), chickweed wintergreen (*Trientalis europaea*) and dog's mercury (*Mercurialis perennis*).

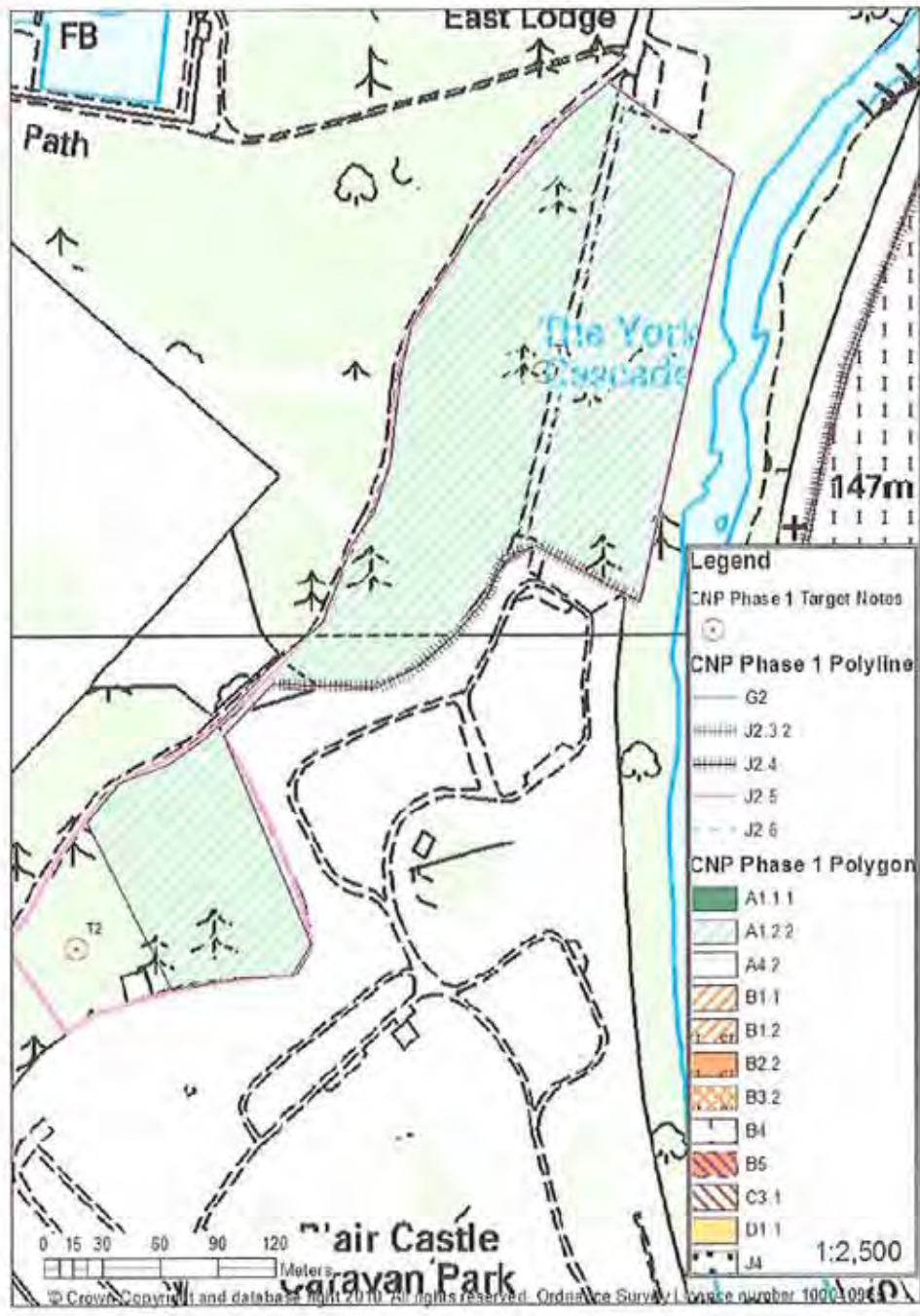
2.8 Phase 1 of holiday chalets in the southern most area of the site has been completed (Target Note 2).

Fauna

2.9 Fresh and abundant evidence of feeding remains of red squirrel were noted throughout the site.

2.10 Evidence in the form of droppings of rabbits, deer and hedgehog (live sighting) were noted on site.

Fig 1 Survey Map





3.0 Assessment of Habitat Suitability for Mammals

3.1 Evidence of red squirrel feeding on site was noted. The woodland type offers ideal habitat for this species, and dreys may be present on site.

3.2 Mature trees are likely to offer potential roost sites for bats within cracks, holes and loose bark. Bat foraging opportunities are ideal within woodland, woodland edge and surrounding parkland and farmland.

3.3 The site is adjacent to the River Tilt, where otters are likely to forage and potentially may breed. The River at this location is unlikely to offer suitable water vole habitat.

3.4 No badger setts were noted during the survey, however the habitat is suitable for this species.

4.0 References

- JNCC, 1990. *Handbook for Phase 1 habitat survey* – a technique for environmental audit. 2007 edition. Nature Conservancy Council
- Stace, C.A. 1997. *New Flora of the British Isles*. 2nd Edition. Cambridge University Press.

APPENDIX 1 – TARGET NOTES

T1 - NN 87379 66130

Species list woodland ground flora

American elder	<i>Sambucus canadensis</i>
Birch (seedling)	<i>Betula</i> sp
Blaeberry	<i>Vaccinium myrtillus</i>
Bugle	<i>Ajuga reptans</i>
Bush vetch	<i>Vicia sepium</i>
Chickweed wintergreen	<i>Trientalis europaea</i>
Cleavers	<i>Galium aparine</i>
Common bent	<i>Agrostis capillaris</i>
Common dog's violet	<i>Viola riviniana</i>
Common figwort	<i>Scrophularia nodosa</i>
Dog rose	<i>Rosa canina</i>
Dog's mercury	<i>Mercurialis perennis</i>
False brome	<i>Brachypodium sylvaticum</i>
Foxglove	<i>Digitalis purpurea</i>
Germander speedwell	<i>Veronica chamaedrys</i>
Great woodrush	<i>Luzula sylvatica</i>
Hedge woundwort	<i>Stachys sylvatica</i>
Male fern	<i>Dryopteris filix-mas</i>
Oak (seedling)	<i>Quercus</i> spp.
Pink purslane	<i>Claytonia sibirica</i>
Raspberry	<i>Rubus idaeus</i>
Rosebay willowherb	<i>Epilobium angustifolium</i>
Selfheal	<i>Prunella vulgaris</i>
Snowberry	<i>Symphoricarpos albus</i>
Stinging Nettle	<i>Urtica dioica</i>
Sycamore (seedling)	<i>Acer pseudoplatanus</i>
Tufted hairgrass	<i>Deschampsia cespitosa</i>
Wild strawberry	<i>Fragaria vesca</i>
Wood avens	<i>Geum urbanum</i>
Wood forget-me-not	<i>Myosotis sylvatica</i>
Wood sorrel	<i>Oxalis acetosella</i>

T2 - NN 87137 65846

Phase 1A of holiday chalets has been completed.



APPENDIX 2 – SURVEY PHOTOGRAPHS



005b – Mature stands of planted conifers



005b – Evidence of recent squirrel feeding



005b – Stands of male fern (*Dryopteris filix-mas*)

APPENDIX 3 – PHASE 1 CODES

PHASE 1 CODE	Description
A1.1.1	Broadleaved woodland - semi-natural
A1.1.2	Broadleaved woodland - plantation
A1.2.1	Coniferous woodland - semi-natural
A1.2.2	Coniferous woodland - plantation
A1.3.1	Mixed woodland - semi-natural
A1.3.2	Mixed woodland - plantation
A2.1	Scrub - dense/continuous
A2.2	Scrub - scattered
A4.1	Broadleaved woodland - recently felled
A4.2	Coniferous woodland - recently felled
A4.3	Mixed woodland - recently felled
B1.1	Acid grassland - unimproved
B1.2	Acid grassland - semi-improved
B2.2	Neutral grassland - semi-improved
B3.2	Calcareous grassland - semi-improved
B4	Improved grassland
B5	Marsh/marshy grassland
C3.1	Other tall herb and fern - ruderal
D1.1	Dry dwarf shrub heath - acid
G2	Running water
J2.3.2	Hedge with trees - species-poor
J2.4	Fence
J2.5	Wall
J2.6	Dry ditch
J4	Bare ground

**Extended Phase 1 Habitat Survey
Cairngorms Local Development Plan**

Site: 005c
Land at the Old Nursery, Old Blair, Blair Atholl

September 2010

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Summary

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APPENDIX 1 – TARGET NOTES
APPENDIX 2 – PHASE 1 CODES

Summary

1. As part of the process of considering the suitability of Site 005c for inclusion into the Local Development Plan, the Cairngorms National Park Authority (CNPA) has commissioned Landcare NorthEast to undertake a desktop study and initial ecological survey.
2. A desktop study and subsequent ecological survey was conducted at Site 005c, land at the Old Nursery, Old Blair, Blair Atholl on 18 August 2010.
3. The proposed development site is 1Ha, located at NN 867667.
4. The main habitat is wet Semi-improved Neutral Grassland and beech hedge.
5. No notable plant species (those of UK conservation concern – see UK list of Vascular Plants of Conservation Concern <http://www.ukbap.org.uk> - or those listed on the Cairngorms LBAP list of priority species) were noted.
6. The site offers suitable foraging habitat for badger and bats.

1.0 Introduction

Background

1.1 In order to make an assessment on ecological impacts of developments of sites that have been presented for inclusion in the Cairngorms Local Development Plan, CNPA require desktop studies and ecological surveys of each site to be undertaken.

1.2 With regard to this, an extended Phase 1 survey and habitat suitability assessment was conducted at Site 005c, land at the Old Nursery, Old Blair, Blair Atholl, Perthshire.

1.3 The 1Ha site is located at NN 867667.

1.4 The survey work was conducted by Steff Ferguson and Flora Grigor-Taylor, both experienced wildlife surveyors, chartered environmentalists and members of IEEM.

Existing Data

1.5 A review of the data held on the National Biodiversity Network (NBN) gateway was undertaken to identify species of conservation concern that have been recorded on the proposed development site.

1.6 Common pipistrelle, brown long-eared bat, wildcat, otter and badger records exist at the 10km level for the vicinity of the site. Red squirrel and Soprano pipistrelle presence have been recorded in 1km squares approx. 1km (or less) from the site.

1.7 Also recorded within 10km square of the site – goldeneye, twite, hen harrier, black grouse, capercaillie, redshank, lapwing, Northern brown argus, pearl bordered fritillary, mason bee and Kentish glory.

Designated Sites

1.8 There are no statutorily designated sites within the survey area itself, although Ancient Woodlands of Old Blair are close to the western boundary.

1.9 The land is located within Blair Castle Historic Gardens and Designed Landscape designated as outlined in the Highland Area Local Plan 2000, defined as "Areas that have been set out and planted in the past (mostly within the last 200-300 years) and which are still recognizable as representative of a particular style or quality of period."

2.0 Survey

Method

2.1 An ecological survey was undertaken on the site on 18 August 2010.

2.2 A Phase 1 Habitat Mapping & Protected Species Survey, also referred to as an extended Phase 1 Ecological Survey, was undertaken for the site. Standard Phase 1 methodology was used, including detailed target notes of notable plant species (those of conservation concern; also those listed on the Cairngorms LBAP list of priority species).

2.3 An assessment of the habitat suitability within the proposed development site for mammal species was also undertaken.

2.4 The standard optimal time to undertake an extended Phase 1 survey is between April and the end of September. The survey time of mid-August is therefore optimal.

2.5 The habitats are described by the use of target notes, annotated to the survey map (see Fig.2). Common species names and scientific names (Stace C (1997) *New Flora of the British Isles. Second Ed.* Cambridge University Press.) are given in the text below.

Results

Vegetation

2.6 This site comprises an enclosed field, previously managed as a tree nursery for growing young trees for commercial sale. The site is now unmanaged, with no sign of being grazed or mowed in past year or more. In place of trees, the area is now dominated by rushes, grasses and other tall wetland species and ruderals.

2.7 Semi-improved Neutral grassland B2

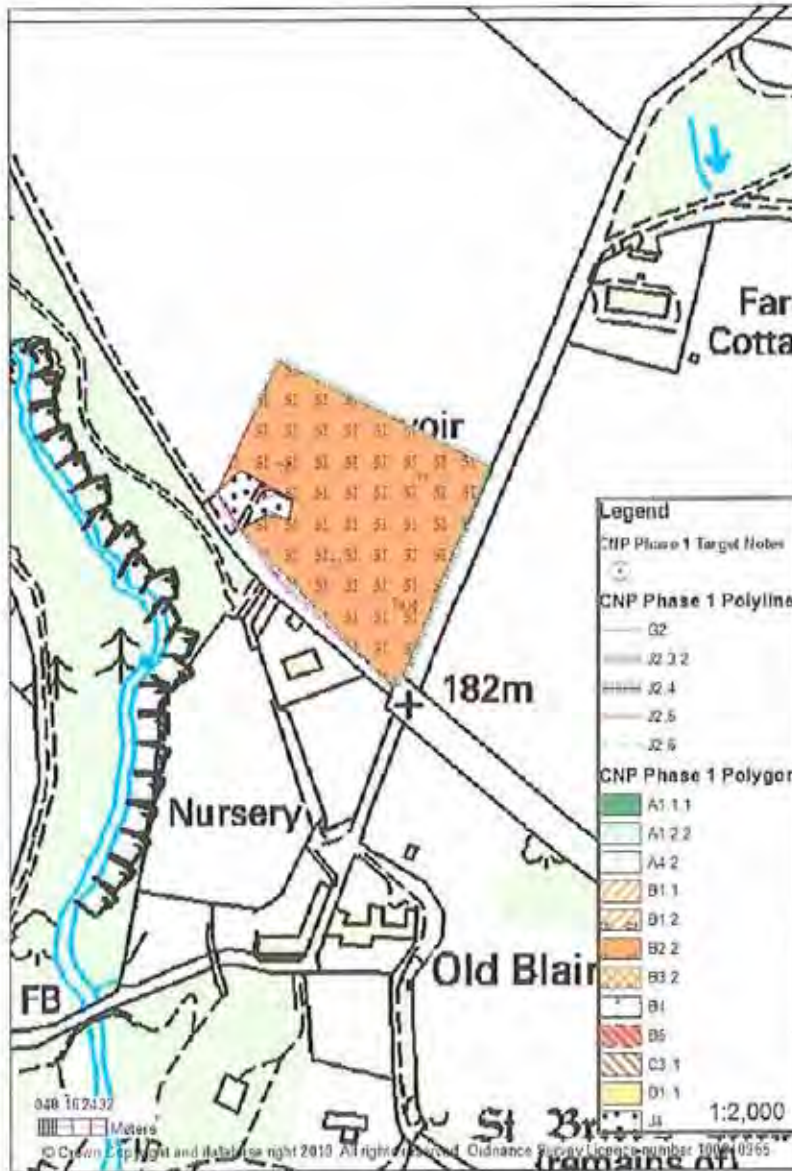
Much of the site is permanently moist-waterlogged. The main species present are soft rush (*Juncus effusus*), common hogweed (*Heracleum sphondylium*), creeping thistle (*Cirsium arvense*) and tufted vetch (*Vicia cracca*); see Target note 1 for species list. Patches of tall ruderals (see Target note 2) have colonised around the edge of an area of handstanding, now used as a farm storage site. Piles of brash and occasional moribund lichen-covered rowan (*Sorbus aucuparia*) were noted on the site.

2.8 The boundary is delineated by a beech hedge on all four sides, with some mature perimeter trees present – copper beech (*Fagus sylvatica 'purpurea'*) and sycamore (*Acer Pseudoplatanus*)

Fauna

2.9 No species of conservation concern and/or listed on the Cairngorms LBAP list of priority species were noted on site.

Fig 1 Survey Map



3.0 Assessment of Habitat Suitability for Mammals

3.1 The site itself offers no suitable breeding habitat for otter, water vole, bat, badger or red squirrel. It does offer suitable foraging habitat for badger and bats.

4.0 References

JNCC. 1990. Handbook for Phase 1 habitat survey – a technique for environmental audit. 2007 edition. Nature Conservancy Council

Stace, C.A. 1997. New Flora of the British Isles. 2nd Edition. Cambridge University Press.

UK list of Vascular plants of Conservation Concern <http://www.ukbap.org.uk>

Cairngorms LBAP Priority Species List www.cairngorms.co.uk

APPENDIX 1 – TARGET NOTES

T1 - NN 86776 66782

Main species in the sward: soft rush (*Juncus effusus*), common hogweed (*Heracleum sphondylium*), creeping thistle (*Cirsium arvense*) tufted vetch (*Vicia cracca*), Yorkshire fog (*Holcus lanatus*), meadow foxtail (*Alopecurus pratensis*), broad-leaved dock (*Rumex obtusifolius*), cleavers/goosegrass (*Galium aparine*), yarrow (*Achillea millefolium*), common ragwort (*Senecio jacobaea*), marsh willowherb (*Epilobium palustre*)

T2 - NN 86710 66787

Hard standing area used as farm storage site – silage wraps, feed trailers and feed rings Tall colonised vegetation on disturbed ground at edge, such as broad-leaved dock (*Rumex obtusifolius*), creeping thistle (*Cirsium arvense*)

T3 - NN 86735 66743

Line of trees, remnants of nursery – silver birch (*Betula pendula*), Norway spruce (*Picea abies*)

APPENDIX 2 – PHASE 1 CODES

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A1.2.2	Coniferous woodland - plantation
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D1.1	Dry dwarf shrub heath - acid
G2	Running water
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J2.5	Wall
J2.6	Dry ditch
J4	Bare ground