Archibald B (Brian)

From: Nina Turner <Nina.Turner@snh.gov.uk>
Sent: 28 April 2016 16:52
To: Archibald B (Brian)
Cc: 'ABROWNRIGG@aberdeencity.gov.uk'; Pallant S (Simon); 'Cowe, Ian'
Subject: RE: PROPOSED ABERDEEN LOCAL DEVELOPMENT PLAN - FURTHER INFORMATION REQUEST 06 - ISSUE 11 – ALLOCATED SITES AND GENERAL AREA STRATEGY - DEESIDE
Attachments: Aberdeen City LDP2 - examination - 160428 - OP52 and OP109 - SNH answers to Reporters questions - Annex I A guide to understanding the Scottish Ancient Woodland Inventory.pdf; Aberdeen City LDP2 - examination - 160428 - OP52 and OP109 - SNH answers to Reporters questions - Annex II ACC Green Space Network webpage for Annex to response letter.pdf; Aberdeen City LDP2 - examination - 160428 - OP52 and OP109 - SNH answers to Reporters questions.pdf

Hi Brian
Please find attached the SNH response to the Reporter's questions, and the two Annexes referred to in our letter. Should you or the Reporter have any queries, please let me know (however note I am out of the office Friday and Monday, so wont be able to action anything until Tuesday 3 May).
Many thanks
from
Nina

I no longer deal with renewables: queries about renewables should be directed to the relevant Area office to your development (or for internal queries, to the RECAs).

Note that I am studying a MSc part time until April 2017. From mid-April to September 2016, I will usually be out of the office on Mondays OR Fridays. My availability will change each semester – I will update this message accordingly.

Nina Turner, Planning Advisor (north)
Scottish Natural Heritage
Great Glen House
Leachkin Road
Inverness
IV3 8NW
Tel. external direct dial: 01463 725216 / internal direct dial from Silvan or Bby: 7005216 / internal direct dial from GGH: 5216

From: Brian.Archibald@gov.scot [mailto:Brian.Archibald@gov.scot]
Sent: 06 April 2016 10:18
To: Nina Turner
Cc: ABROWNRIGG@aberdeencity.gov.uk; Simon.Pallant@gov.scot
Subject: RE: PROPOSED ABERDEEN LOCAL DEVELOPMENT PLAN - FURTHER INFORMATION REQUEST 06 - ISSUE 11 – ALLOCATED SITES AND GENERAL AREA STRATEGY - DEESIDE

Hello Nina

Thanks for your e-mail below. The reporter has agreed to accommodate an extension of the FIR response until the 29 April for all parties

I hope this is helpful
Thanks
Brian

From: Nina Turner [mailto:Nina.Turner@snh.gov.uk]
Sent: 05 April 2016 16:08

To: Archibald B (Brian); 'ABROWNRIGG@aberdeencity.gov.uk'; Pallant S (Simon)
Subject: RE: PROPOSED ABERDEEN LOCAL DEVELOPMENT PLAN - FURTHER INFORMATION REQUEST 06 - ISSUE 11 – ALLOCATED SITES AND GENERAL AREA STRATEGY - DEESIDE

Hello Brian
As discussed, I would be very grateful if you could see whether the Reporter would be able to accommodate an extension of a week, to Friday 29 April? The reason I ask is two-fold;

- The questions asked are very detailed, requiring careful analysis of the information we hold. We will need to consider if we hold all the information required to form our advice, or if we need to access other available sources. Preparing our advice is also likely require a site visit by myself and our woodland specialist. Both of us are based in Inverness, so a site visit will be more time consuming than perhaps for the other parties who are relatively more locally.

- Unfortunately I am away from the office tomorrow and from 9 – 19 April (inclusive), which leaves only 4 working days to carry out the analysis, site visit, internal discussion and sign off of our advice to the Reporter, as well as deal with other active statutory consultations.

It might be possible for me to ask one of my colleagues to deal with the Reporter's request, however I don't know if they have capacity to take on additional work (particularly as they are not familiar with the area or the issues raised in our response to the proposed LDP). So they are also likely to face the same time pressures as me.

I would be very grateful if the Reporter could allow the requested extension of a week in the circumstances. If possible, please could you let me know the Reporter's response before Friday at noon, so I have time to either set up the site visit or pass the case to one of my colleagues.
Many thanks
from
Nina

I no longer deal with renewables: queries should be directed to the relevant Area office to your development (or for internal queries, to the RECAs).

Note that I am studying a MSc part time until April 2017. From mid-April to September 2016, I will usually be out of the office on Mondays OR Fridays. My availability will change each semester – I will update this message accordingly.

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From: Brian.Archibald@gov.scot [mailto:Brian.Archibald@gov.scot]
Sent: 05 April 2016 15:17
To: ABROWNRIGG@aberdeencity.gov.uk; Nina Turner; Simon.Pallant@gov.scot
Subject: PROPOSED ABERDEEN LOCAL DEVELOPMENT PLAN - FURTHER INFORMATION REQUEST 06 - ISSUE 11 – ALLOCATED SITES AND GENERAL AREA STRATEGY - DEESIDE

Sent to: Aberdeen City Council
Scottish National Heritage
Forestry Commission Scotland

LDP-100-2

5 April 2016

Dear All

PROPOSED ABERDEEN LOCAL DEVELOPMENT PLAN
THE TOWN AND COUNTRY PLANNING (DEVELOPMENT PLANNING) (SCOTLAND) REGULATIONS 2008
NOTICE: FURTHER INFORMATION REQUEST 06 - ISSUE 11 – ALLOCATED SITES AND GENERAL AREA STRATEGY - DEESIDE

I am writing regarding the above plan which has been submitted to DPEA for examination by Scottish Ministers. Under Regulation 22 of the Town and Country Planning (Development Planning) (Scotland) Regulations 2008, the appointed reporter can request, by way of notice, further information in connection with the examination. This request is a notice under Regulation 22.

The reporter has identified that further information, as listed below, should be provided by various parties. It would be helpful if you could send this information to me to pass on to the reporter by 5pm on the 22 April 2016. Please ensure you also send a copy to the other parties.

The reporter is seeking further information from the council and from the statutory bodies with responsibilities for woodland conservation (SNH and Forestry Commission Scotland) to enable him to determine whether sites OP52 and OP109 could be developed, if necessary with smaller numbers of houses, in a way that avoids any loss of ancient semi-natural woodland.

Please e-mail your response, however, if it is more than 10 pages or in colour, please also provide a hard copy. Please note that DPEA cannot accept hyperlinks to documents or web pages. When replying to this request please quote the request number above.

Background

Opportunity sites OP52 (Malcolm Road, Peterculter) and OP109 (Woodend, Peterculter) are both partly occupied by ancient and semi-natural woodland. Policy NE5 of the proposed plan presumes against development that will result in the loss of, or damage to, trees and woodlands that contribute to nature conservation, landscape character, local amenity or climate change adaptation and mitigation. Scottish Planning Policy (paragraph 194) aims to protect and enhance ancient semi-natural woodland as an important and irreplaceable resource, while paragraph 218 refers to the Scottish Government's Control of Woodland Removal Policy, which similarly seeks to protect such woodland. Representations by Scottish Natural Heritage and Forestry Commission Scotland cast doubt on whether the development of these sites, at least with the numbers of houses indicated in the proposed plan, would be compatible with these policies.

Information requested

The following information is requested from the **council (all items)** and from **SNH and Forestry Commission Scotland (items a, b, d, e, f and i).**

In respect of site OP52:

a. Whether residential development on this site would be possible without any removal of ancient semi-natural woodland from the site and, if so, the number of houses that could be accommodated;

b. Whether road access to the development could be achieved without removal of any of the boundary trees beside Malcolm Road;

c. Whether the site requires a planning brief (as indicated on page 15 of the proposed plan) or a masterplan (as stated on page 85);

d. Assuming the principle of development is accepted, the changes that are required to the text on page 85 to reflect the need to retain ancient semi-natural woodland, any consequent reduction in house numbers or change in access arrangements, and clarification of the need for a planning brief or a masterplan.

In respect of site OP109:

e. While the text on page 86 of the proposed plan states that ancient woodland on the south of the site is to be protected, please indicate whether there is ancient woodland on any other parts of the site;

f. Whether residential development on this site would be possible without any removal of ancient semi-natural woodland from the site and, if so, the number of houses that could be accommodated;

g. Whether the part of the site currently occupied by disused built development can be regarded as a brownfield site and, if so, why it is not identified in Appendix 1 of the proposed plan;

h. Why a drainage impact assessment is required (page 86) if the council's position is that there are no known flooding risks or drainage issues at the site;

i. Assuming the principle of development is accepted, any changes that are required to the text on page 86 to reflect the need to retain additional ancient semi-natural woodland, any consequent reduction in house numbers, and clarification of the need for a drainage impact assessment.

Please acknowledge receipt of this request and confirm that your response will be provided within the time limit.

A copy of this request will be published on the DPEA website, together with a copy of the council's response.

http://www.dpea.scotland.gov.uk/CaseDetails.aspx?id=117092

Please do not hesitate to contact me if there is anything you would like clarified.

Brian Archibald
Development Plan Officer

The Scottish Government
Planning and Environmental Appeals Division
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www.scotland.gov.uk/Topics/Built-Environment/planning/decisions-appeals/Appeals/dpea

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A guide to understanding the Scottish Ancient Woodland Inventory (AWI)

Summary and policy statement

This summary is intended for developers, planners, foresters, ecologists and others who need to use the AWI in their work. It defines Ancient Woodland, briefly describes why it is important and gives the meaning of the categories in the AWI.

Ancient Woodland

In Scotland, Ancient Woodland is defined as land that is currently wooded and has been continually wooded, at least since 1750.

Ancient Woods are important because:

- They include all remnants of Scotland's original woodland; their flora and fauna may preserve elements of the natural composition of the original Atlantic forests.
- They usually have much richer wildlife than that of more recent woods.
- They preserve the integrity of soil ecological processes and associated biodiversity.
- Some have been managed by traditional methods for centuries and demonstrate an enduring relationship between people and nature.
- Woods and veteran trees are ancient monuments whose value to the local community and historians may be as great as that of the older buildings in a parish.
- Once destroyed, they cannot be recreated.

Although there is no legislation specifically protecting ancient woodland, Scottish Planning Policy identifies it as **an important and irreplaceable national resource that should be protected and enhanced**, as should other native and long established woodlands with high nature conservation value. SNH will seek to use the planning system to protect ancient woodland. The Scottish Government's policy on control of woodland removal states that there is a strong presumption against removing ancient semi-natural woodland or Plantations on ancient woodland sites, amongst other types of woodland.

Other woodlands, hedgerows and individual trees, especially veteran trees, may also have significant biodiversity value and make a significant contribution to landscape character and quality, so should be protected from adverse impacts resulting from development.

If a development would result in the severing or impairment of connectivity between important woodland habitats, workable mitigation measures should be identified and implemented, potentially linked to the creation of green networks.

The Ancient Woodland Inventory is a map-based tool that shows the location of many of our most valuable woodlands.

The Ancient Woodland Inventory

The Ancient Woodland Inventory (AWI) is a PROVISIONAL guide to the location of Ancient Woodland. It contains three main categories of woodland, all of which are likely to be of value for their biodiversity and cultural value by virtue of their antiquity:

i. Ancient Woodland (1a and 2a)
Interpreted as semi-natural woodland from maps of 1750 (1a) or 1860 (2a) and continuously wooded to the present day. If planted with non-native species during the 20th century they are referred to as Plantations on Ancient Woodland Sites (PAWS).

ii. Long-established woodlands of plantation origin (LEPO) (1b and 2b)
Interpreted as plantation from maps of 1750 (1b[1]) or 1860 (2b) and continuously wooded since. **Many of these sites have developed semi-natural characteristics, especially the oldest ones, which may be as rich as Ancient Woodland.**

iii. Other woodlands on 'Roy' woodland sites (3)
Shown as unwooded on the 1st edition maps but as woodland on the Roy maps. Such sites have, at most, had only a short break in continuity of woodland cover and may still retain features of Ancient Woodland.

A note of caution
The AWI was derived from the Roy maps (c1750) and the OS 1st edition (c1860). It is not definitive and should be used with care; when evaluating woods it is important to:

a) Examine the site on the ground, looking for archaeological, biological and other indicators of antiquity and of its current biodiversity value

b) Examine old maps; the OS 1st edition and Roy maps are available on www.nls.uk. **Woods not shown on the AWI, but present on the historic maps, are likely to be ancient and should be treated as such** unless evidence is available to the contrary.

c) seek specialist advice if in doubt

Information on AWI can also be accessed form the Land Information Search (LIS) from the Forestry Commission Scotland.

[1] This category was not originally used, although the information was preserved in the database. At digitisation these sites were reclassified as 1b (Plantation on Roy map) to recognise their greater age.

Detailed guidance on understanding the Ancient Woodland Inventory (AWI)

This detailed guidance is intended for those who would like to understand the background to the concept of Ancient Woodland (and its limitations), why such woodland is important and how it can be identified, and the development of the AWI (and its limitations).

The concept of Ancient Woodland

1.1 History of the concept

The concept of Ancient Woodland can be traced back to at least the early 19th century (Watkins 1988), but was first actively promulgated as a tool for conservation in the 1970s. Peterken (1977) proposed that

'*as a matter of practical convenience it is valuable to have a category of ancient woodland (Rackham 1971) or medieval woodland (Peterken & Harding 1974) whose status can be proved. It is contrasted with recent secondary woodland and distinguished simply by a threshold date, origin before which qualifies a wood to be ancient*'.

1.2 Ancient or Primary?

In the early days of the development of the idea of Ancient Woodland it was generally believed that many Ancient Woods, perhaps most, were primary relicts.

Badenoch (1993) describes the post-glacial evolution of broadleaved forest in the Borders and its decline after the Iron age through clearance, war and pasturage. By 1500 the only woods remaining in Ettrick Forest were on steep slopes, cleuchs gullies and in gorges, which had escaped grazing and burning. Some of them still remain.

Carlisle (1977) commented that

'*Highland pinewoods were probably little affected* [by management] *until lowland timber was exhausted in the 16th and 17th centuries*',

and that

'*the Highland forests at this time* [12th to 16th centuries] *were still more or less intact, and that it is unlikely that the remote pinewoods were greatly affected by man except for local grazing, accidental fire and tillage*'.

However, it was recognised that some woods were not primary; O'Sullivan (1977) reports pre-historic forest clearance around Loch Garten, which has since become re-wooded.

Subsequent investigations have revealed a more complicated picture; Smout et al. (2004) suggest that even as early as 1700-1900 BC, human related activity was opening up the pine woodland. It is likely that all woodland in Scotland has been managed in various ways over the centuries and the idea that a more pristine pine forest survived until quite recent times is

'*based on total misconception about the reality and extent of a great wood of Caledon in Roman times and on presumptions about its later survival*' (Smout et al 2004).

1.3 Reference date

There will always be room for discussion around an appropriate definition of 'ancient'. The challenge is to select a date for which there is reasonable confidence that woodland in existence from that point either has a strong connection to the original, primary woodland or arose naturally on land that had been cleared. Such a date should be meaningful in relation to the history of land use in general and woodland in particular. It will also help if there is a source – or sources – of evidence to enable us to identify woodland dating from that time.

Peterken (1977) suggested that

'*the threshold itself can for convenience be placed about 1600, before which time secondary woods were rarely created by planting*.'

Rackham (1980) stated that

'It is difficult to prove that any particular wood is primary and it is more useful to discuss ancient woods, in existence before some date such as A.D. 1700, as opposed to those which are more recent'.

The date initially chosen for the inventories, 1600, was based on English – and particularly lowland – conditions: the end of the medieval period, the point at which good maps started to become more common and prior to the impetus for new woodland planting from the publication of Evelyn's Sylva (1670).

In Scotland however, the history of land use is different. The Union of the Crowns in 1603, and Union of the Parliaments in 1707, did bring some peace and stability, and increased opportunities for lairds to travel and exchange improving practices and ideas, including estate planning, tree planting and forestry which increased through the 18th century (Crawford pers com). In the Highlands. major changes in land use followed the Jacobite rebellion of 1745, including the clearances, the switch from a cattle-based to a sheep-based economy and the rapid increase in commercial plantations, which had only occurred on a small scale until the work of the 'Planting Dukes' of Atholl around 1740 (Smout et al. 2004).

This is also the era when maps of the whole country were first produced. General Roy's Military Survey of Scotland (c 1750) became the major source for the Scottish AWI. Older maps, including those of Pont (1580s-90s) and the Blaeu Atlas of Scotland (1654), are now available on www.nls.uk and provide additional evidence of the history of woodland cover for certain areas.

1.4 Limitations of the Ancient Woodland concept

Whilst the concept of Ancient Woodland is extremely useful and has underlain many of the advances in woodland conservation since the 1970s, it does have limitations of which it is important to be aware.

1.4.1 Continuity of different elements of woodland structure

The term 'ancient' tells us that woodland cover has been continually present on a site since the reference date. It tells us nothing about current composition, woodland structure or the continuity of individual elements. An area may have been felled and replanted, or coppiced, breaking the continuity of the canopy of past and current woodland – although continuity of soils and ground flora may be unaffected. A distinction is usually made between:

- Ancient Semi-Natural Woodland (ASNW) which has a semi-natural structure and is generally composed of native tree species, and
- Plantations on Ancient Woodland Sites (PAWS) which have been underplanted, or felled and replanted, with non-native species, often commercial conifers. The Scottish Forestry Strategy and UK Woodland Assurance Standard contain targets for restoring such sites to native woodland cover. A great deal of guidance is available (e.g. Thompson et al 2003) to assist in selecting and restoring such sites.

This can be important when we consider species characteristic of Ancient Woodland. Whilst the AWI will narrow down the selection of areas where we can expect such species to occur, their actual distribution will depend on other factors. A lichen which requires continuity of canopy cover to persist, is unlikely to occur in ASNW which was coppiced during several decades of the 19th century (see section 3.3), although the ground flora of such a wood may contain a wide variety of Ancient Woodland Vascular Plants.

1.4.2 Ancient Woodland in the uplands

The conceptual boundary between ancient and recent woodland is much less distinct in the uplands (Whitbread 1990). Lowland woods are often discrete fragments of semi-natural habitat, surrounded by arable or improved grassland. This is a hostile environment for many woodland species, which cannot easily spread through it to colonise new woods. These species are thus generally confined to woodlands dating from a time before fragmentation became so extreme, and can be used as indicators of Ancient Woodland.

In the uplands, and especially in Scotland, woods are often surrounded by a mosaic of other semi-natural habitats: grassland, heathland, scrub and scattered trees. Many 'woodland' species thrive in these areas (e.g. wood anemone, lesser celandine). Such woods may also be less isolated than they appear on the map, being connected by damp, shady streams and gorges. As a result of this greater connectivity of semi-natural habitats, new woodland regenerating on open ground may acquire 'woodland' species relatively quickly.

Other groups of species are more restricted to Ancient Woodland, especially those which depend on continuity of woodland structure – e.g. lichens of the Lobarion (except in the extreme west Highlands where they are less restricted to woodlands) and Graphidion communities (see section 3.3).

Ancient Woodland in the uplands may thus be more likely to function as a source from which woodland species can colonise suitable new habitat, and recent woodland in these areas is likely to be richer in such species than similarly aged, isolated woodland in the lowlands. In both situations greater diversity is likely to develop if new woodland adjoins existing woodland.

2 Importance of Ancient Woodland

"Ancient Woodland" includes all lineal descendants of Britain's original woodland, whose wildlife communities, soils and (sometimes) structure have had the longest time to develop. Where large, old trees have been continually present for several centuries they provide refuges for characteristic inhabitants of primeval woodland such as lichens. In places the patterns of their tree and shrub communities preserve the natural composition of Atlantic forests (Rackham 2006).

Peterken (1983) also noted that the wildlife communities of Ancient Woodland are generally (but not invariably) richer than those of more recent woods – so we can use 'ancientness' as an indicator of woods which are likely to be of high value in relation to other aspects of the natural heritage. Many species associated with them require continuity of various features of the woodland, whether tree cover (which provides shade and a typically humid microclimate) or of the trees themselves (see section 3.3).

Ancient Woodlands may have been managed by traditional methods for centuries and may show evidence of historical land use (Peterken 1983; Rackham 1976). This has also been shown for continental woods: e.g. Ename Wood, Belgium, has records from the 11th century (Verheyen et al. 1999), the structure of forests in the Kuhmo region, Finland (Wallenius et al. 2002) reflects past burning history. Woods and veteran (or "culturally modified") trees may be considered as ancient monuments (Ericsson et al. 2003, Axelsson and Östlund 2001) whose value to the local community and historians may be as great as that of the older buildings in a parish (Read 2000). Where traditional management continues or can be revived, Ancient Woods can demonstrate a stable enduring relationship between people and nature (Peterken 1983). Once destroyed, they cannot be recreated.

Not all individual Ancient Woodlands are equal – whilst they include the richest, most extensive and most beautiful of our native woodlands, some may have a very simplified age structure resulting from past coppicing or heavy grazing by wild or domestic herbivores. Others have been underplanted with commercial conifers, or suffered from fly-tipping or colonisation by non-native species.

On the other hand, many, more recent woodlands are also very valuable, especially where they adjoin existing woodlands or incorporate features such as burns or gorges (see 1.4.2) from which species may colonise.

The Native Woodland Survey of Scotland (NWSS) project, led by Forestry Commission Scotland, is surveying all native woodlands and PAWS, and providing detailed spatial information on their current composition, structure and composition, together with guidance on using the information. Summary reports are being published for each local authority area.

3 Identification of Ancient Woodland

3.1 Presence on maps and in records

If woodlands are present on old maps and are still present today then it is likely that they have existed continuously over that period. The Roy maps of 1750, the 1st edition OS maps of the 1860s and various older maps, including those of Pont (1580s-90s) and the Blaeu Atlas of Scotland (1654), are all available on http://www.nls.uk/maps/index.html and provide valuable evidence of the history of woodland cover.

Information on woodland cover and management may also be detailed in estate records, forfeited estate papers and the Statistical Account of Scotland. Gaelic woodland place names may also indicate the long-standing presence of woodland.

3.2 Archaeological evidence

Dendrochronology and palaeoecology may be informative, and features demonstrating ancient use of woodland may be visible on the ground. Artefacts can be divided into:

- archaeology **in** the woods – providing evidence of non- or pre-woodland phases and
- archaeology **of** the woods – demonstrating woodland use and management, including Q-pits, charcoal hearths, and managed trees (pollards, coppice stools etc) (Rotherham 2007).

Archaeological surveys have been carried out in various ancient oakwoods in western Scotland, which were coppiced for charcoal for the iron industry. A study of the woods on the north side of Loch Sunart covered some 12.7 square miles and identified 1799 sites.

The woodland history group (http://www.nwdg.org.uk/history_group_4.html), within the Native Woodland Discussion Group, brings together people from academic and practical backgrounds, as well as amateur enthusiasts. Guidance on identifying the historic environment in woodland is available in Ritchie & Wordsworth (2010), whilst Quelch (2001) gives very useful information on identifying ancient wood-pasture.

3.3 Indicator species

The presence of species (usually vascular plants), which appear to be more or less confined to Ancient Woodlands, have been used to identify and evaluate such sites since the 1970s. Few species are totally restricted in this way, and those that are, are generally quite uncommon, so it is important to consider the flora as a whole rather than individual species. The presence in a wood of a single indicator species provides little evidence of antiquity, but as the number of such species increases, so does the probability that the wood is ancient. On the other hand, many indicator species – being reasonably uncommon and relying on relatively undisturbed habitats with a degree of continuity – can also be considered good indicators of habitat quality. A wood with a large number of such species is very likely to be a valuable habitat – and may be just as important for nature conservation – whether or not it is ancient. Conversely, the absence of 'Ancient Woodland indicators' does not prove that a wood is recent – although it may suggest that its value (at least floristically) is limited.

Indicators can also be used in evaluating Plantations on Ancient Woodland Sites (PAWS), to decide which would most benefit from restoration to native woodland (see section 1.4.1).

Most lists of indicators were developed in England, and often for specific areas (e.g. Lincolnshire). They are not recommended for use in Scotland for several reasons (from Crawford 2006):

- English lists include species which are absent from or uncommon in Scotland, and miss woodland species specific to Scotland.
- Ecological conditions are different in much of England, e.g. temperature (often higher), geology (more basic and less acidic rock near the surface than in Scotland), landform (more upland in Scotland), which may mean that different suites of species are associated with English Ancient Woods than Scottish ones.
- Management differences, e.g. coppice management is still carried out in many English woodlands and this may favour a different suite of plants (adapted to cycles of light and shade) to those in Scottish woods where this form of management is less frequent, giving longer periods of summer shade.
- Many English woodland species are equally common in open habitats in Scotland, particularly in upland, western and other coastal zones. In general, lists of Ancient Woodland vascular plants may well be most useful in the south-eastern lowlands and of more limited value in the Highlands (see also 1.4.2).

Several lists have been compiled for parts of Scotland at various times, e.g. Miles & Miles (1997) and Crowther (2006). Most recently Crawford (2009) revised her 2006 paper, and tabled a Scottish list of 74 species, using existing lists and consulting a wide range of practitioners in the field. She discusses numerical thresholds but cautions that care is needed if using numbers of vascular plant indicators and site size only; soils and management history, as well as geography and longevity, will affect the species present. Lists for different regions of Scotland are the next step.

The discussion so far has related to the use of vascular plants as indicators. These are generally easy to find and identify, but may not be the species most typical of Ancient Woodlands. Crawford (2009) suggests that other groups, especially lower plants, should also be considered, and are likely to be particularly important in the uplands and the west.

Different groups of species indicate continuity of different elements of the woodland ecosystem. Vascular plants may demonstrate continuity of soils and of shady, humid conditions, and may persist regardless of how the trees are managed. Many woods have been heavily managed over the centuries; most oakwoods on the west coast are likely to have been coppiced for tanbark and charcoal until the early 1800s – and often later. Although these woods are ancient, they do not provide the structural continuity required by lichens, which need a continuous supply of stems with the right kind of bark in order to survive. If a large area is coppiced, all the lichens on the felled stems are lost and recolonisation will be very slow. Indices of ecological continuity (Coppins & Coppins 2002) have been developed to enable evaluation of the structural continuity of woodland.

At present, lists of indicators have not been developed for other groups (e.g. bryophytes, fungi, invertebrates) which may also depend on continuity of different aspects of woodlands.

4 Ancient Woodland Inventories

4.1 Development of the inventories

The Scottish AWI was compiled in the 1980s (Walker & Kirby 1987) using the Roy maps of c1750 (The Military Survey of Scotland, compiled by General Roy – see section 1.3) and the OS 1st edition maps of c1860. At that time five categories of woodland were identified:

a. Ancient Woodland, shown on map sources from the Roy maps onwards and having the appearance of semi-natural woodland on the earliest maps.
b. Long-established woodland of semi-natural origin, interpreted as semi-natural woodland on the OS 1st edition but not shown as woodland at all on the Roy maps.
c. Long-established woodland of plantation origin, interpreted as plantation woodland on the OS 1st edition but not shown as woodland at all on the Roy maps or shown as plantation on these maps.
d. Other woods on Roy woodland sites, shown as unwooded on the OS 1st edition, but present as woodland on the Roy maps and shown as wooded on the current maps. At most, such sites have had only a short break in the continuity of woodland cover.
e. Other woodland, known from recent ground survey to be important for nature conservation. These are frequently small woods in narrow valleys which are likely to have been omitted from maps.

These inventories were originally compiled on paper copies of the OS sheets current in the 1970s; as technology developed, the decision was taken in the 1990s to digitise the boundaries for use in GIS (Kupiec 1997). At the same time the decision was taken to revise the classification, to recognise the limitations of the map sources used.

4.1.1 Limitations of maps

Whilst these historic maps are invaluable, being the only source of data on the distribution of woodlands across the whole of Scotland, it is important to realise their limitations:

- The Roy maps have no accurately measured base grid and so can be difficult to relate to Ordnance Survey maps; they are (in Roy's words) '*rather…a magnificent military sketch, than a very accurate map of a country*'.
- Some woodlands known to have been present when the maps were compiled are not shown on the Roy maps, e.g. narrow burnside woods, open canopy wood-pasture or woods distant from the main highways of the day. They may not have been considered to be of strategic importance and so excluded from the military maps.
- A green wash, believed to represent woodland, occurs on the original Roy maps but was not visible on the black and white copies used in compiling the AWI.
- The 1st Edition maps represent different types of woodland in different ways, and symbols now recognised to represent sparse woodland, or wood-pasture, were not included in the AWI. Some of these areas may actually have been wooded since the times of the Roy maps and may originally have been included in category d (other Roy).

Because of these limitations, and especially since there is a high probability that many woods not shown on Roy's maps are truly ancient, a revised classification was adopted.

4.1.2 Current classification

The AWI now contains three main categories of woodland (Kupiec 1997), which should be used when referring to any such woodland. The alphanumeric codes in brackets preserve additional historical information. All these categories of woodland are likely to be of value for their biodiversity and cultural value by virtue of their antiquity.

i. Ancient Woodland (1a and 2a)

Sites shown as semi-natural woods on maps from 1750 (1a) or 1860 (2a) and continuously wooded to the present day. If planted with non-native species during the 20th century they are referred to as Plantations on Ancient Woodland Sites (PAWS).

ii. Long-established woodlands of plantation origin (1b and 2b) (LEPO)

Sites shown as plantations on maps from 1750 (1b[2]) or 1860 (2b) and continuously wooded since. Many of these sites have developed semi-natural characteristics, especially the oldest ones which may be as rich as Ancient Woodland.

iii. Other woodlands on 'Roy' woodland sites (3)

Sites shown as unwooded on the 1st edition maps but as woodland on the Roy maps. Such sites have, at most, had only a short break in continuity of woodland cover and may still retain features of Ancient Woodland.

The former category 'e' (recent woods of value to nature conservation) is no longer included in the AWI, as it was felt that this was not its purpose.

Woods may not be easily separable into these categories on the ground; e.g. LEPO on Roy maps (1b) may be indistinguishable from Ancient Woodland (1a and 2a) because (Crawford pers com):

- It is sometimes impossible to be certain whether a wood on Roy is semi-natural or plantation; some woods which were at that time semi-natural may have been wrongly classed as plantation by the compiler.

[2] This category was not originally used, although the information was preserved in the database. At digitisation these sites were reclassified as 1b (Plantation on Roy map) to recognise their greater age.

- Native woodland may not have been completely replanted, but merely supplemented with non-native trees for ornamentation (e.g. gorge walks on estates, which remained essentially semi-natural)
- 18th century plantations were often on semi-natural sites and included areas with some characteristics of woodlands (e.g. scrub or river gorges) whose associated species survived and often thrived.

4.2 Provisionality of the AWI

The AWI should always be referred to as provisional. It comprises a subset of Ancient Woodland rather than claiming to cover the whole resource. Whilst presence of a woodland on the AWI is evidence of its antiquity, its absence from the AWI does not prove that it is recent. In any cases of doubt the original old maps should be referred to, but no source of data is infallible and it is possible that Ancient Woodlands exist which are not shown on either set of maps. In some cases estate records may demonstrate the continued existence of woods from past centuries. Archaeological remains, including ancient trees themselves, may also provide evidence of antiquity.

Apart from the caveats set out in 4.1.1 above, which relate to the original old maps, there are some additional caveats which relate to the way the AWI was compiled and digitised.

- Only woods which were larger than 2ha on the OS 1: 25,000 2nd Series (1956-1979) maps are included. This helped to limit the work involved in producing the AWI – which tended to be more closely linked to the number of sites rather than to their size.

  The distinctiveness of Ancient Woodland may break down at some (unspecified) lower size limit, especially in the lowlands. Small woods are more likely to be subject to edge effects: loss of humidity to adjacent open ground (Kirby 2004) or impacts of spray drift (Gove et al. 2004). There can be more overlap between the number of indicator species present in small ancient and recent woods (Hill 2003), so the significance of the flora as a guide to history is more difficult to interpret. This may not be the case in the uplands, where small woodlands are often very rich in vascular and lower plant species, especially ravine woodland, where the topography maintains humidity and shelter.

  Whether ancient or not, any woodland is likely to have some value in the local area. Many very small woods, especially in urban areas and parts of Scotland with very low woodland cover, are extremely important for local biodiversity, recreation and landscape, regardless of their historical status. Such patches may also act as a source of species to enrich adjacent recent woods or other semi-natural habitats. The NWSS, mentioned in section 2 above, is surveying all patches of native woodland covering at least 0.5ha.

- Records of LEPO – whether dating from 1750 or 1860 – are very incomplete in the Borders. It is estimated that some 8,000 ha. exist, but for reasons of economy during the original paper compilation only 1,500 ha. were recorded.

- When the AWI was being compiled, the individual carrying out the work had to use the information available to make a judgement as to where the Ancient Woodland boundary should lie. The details of that judgement process can usually be reconstructed from information held on the original data-sheets, but may not be apparent from the digitised boundary and the limited information held on the associated attribute tables.

- If the AWI is used in a GIS with other datasets, the polygons often do not match up exactly. However, whilst it may appear that one polygon (on the AWI) is equivalent to a similar or overlapping polygon in a different dataset, we cannot be sure that we are justified in making this assumption. There are several possible sources of error:

- Errors in the original maps due to limitations in the techniques used by, and the intentions of, the cartographer
- Errors in interpretation of the original maps when compiling the paper AWI
- Errors in digitising the boundaries from the paper AWI.
- Digitisation of different sets of boundaries at different scales.

We also have to consider the possibility that the misalignment is not due to error at all but to changes in woodland cover. The landscape changes, especially in the uplands – woodland cover may advance and retreat – for example, if grazing pressure fluctuates over time. An existing wood may now be similar in shape and size to its ancestral form but not equal to it. This is especially likely in unenclosed upland situations and so it will be impossible to exactly reconcile the historic pattern of woodland with the existing pattern of semi-natural woodland.

Where there are slight differences in the boundaries of an Ancient Woodland polygon and an existing feature, it is generally best to assume that the whole area is ancient, unless evidence is available to the contrary.

There are no plans to update the AWI, but the NWSS is a new dataset that can provide current boundaries and estimates of woodland loss since the AWI was produced, as well as current composition and condition.

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ABERDEEN
CITY COUNCIL

Green Space Network

Green Space Network is a strategic network connecting various habitats and species, urban and rural green spaces to each other and the communities around them. It offers a wide range of social, health economic and environmental benefits.

Policy NE1 of Aberdeen Local Development Plan (ALDP) explains the purpose of the network and how it will be protected and enhanced through the planning process. The network has been identified to protect and enhance designated natural heritage sites; to improve connectivity between habitats and open spaces; and to promote opportunities for physical activity and access to the outdoors. It also takes into account climate change adaptation opportunities and flood risk or alleviation, the distribution of existing open spaces and their relationship with communities, development opportunities, health and deprivation information and transport issues.

Aberdeen's Green Space Network is made up from three types of component:

Cores - Large or key areas of existing green space

Links - Existing or desirable corridors of green space linking other green spaces together such as paths or core paths, waterbodies and wildlife corridors

Stepping Stones - Isolated green spaces which may be difficult or inappropriate to link to the rest of the network using a continuous green corridor, but which may still offer opportunities to deliver the benefits of Green Space Network.

You can view our Green Space Network through the Council's GIS Interactive Mapping system and second mouse button clicking on an area of Green Space will bring up a window showing information concerning the site clicked:

GIS Green Space Network

Please refer to the following list for further information about the abbreviations used and links to the source data, designations, organisations and projects referred to in our Green Space Network GIS tool.

Aberdeen Greenspace

Aberdeen Western Peripheral Route

Ancient Woodland and Semi-Natural Woodland

NE Scotland Biodiversity Action Plan

Core Paths Plan

Greenspace Scotland

Natural Heritage - District Wildlife Sites, Local Biodiversity Action Plan, LNCS, Local Nature Reserves, Nature Conservation Strategy, Sites of Special Scientific Interest and Sites of Interest to Natural Science.

Dee Catchment Management Plan

Forestry Commission Scotland

SEPA - Good Ecological Status and River Basin Management Plan

Aberdeen Local Development Plan - Proposed Sites and Opportunity Sites

Native Woodland Survey of Scotland

North East Scotland Biological Records Centre

PAN 65 Typology

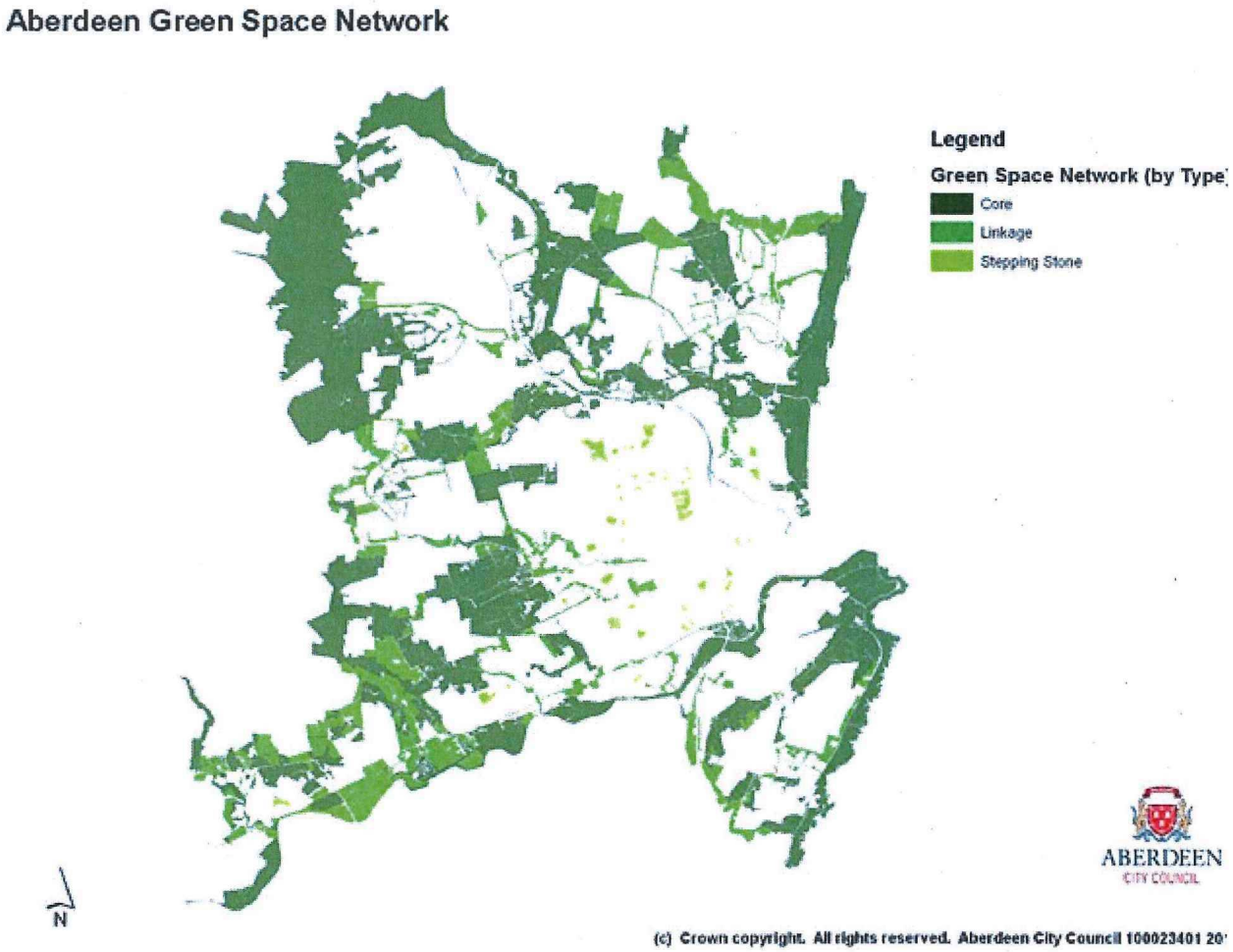
Scottish Natural Heritage - Special Areas of Conservation

Tree Preservation Orders

United Kingdom Biodiversity Action Plan

Woodlands In and Around Town

To see the mapping in detail please click on the image map below and second mouse button clicking on an area of Green Space will bring up a window showing information concerning the site clicked:



Useful Links

Aberdeen's Open Space Strategy and Audit

Aberdeen Outdoor Access Forum

Contact
Aftab Majeed
Environmental Planner
Planning and Sustainable Development
Aberdeen City Council
Ground Floor North
Business Hub 4
Marischal College
Broad Street
Aberdeen
AB10 1AB
Phone: 01224 523464
Email: **amajeed@aberdeencity.gov.uk**

Back to **Outdoor Access** page.

Scottish Natural Heritage
Dualchas Nàdair na h-Alba
All of nature for all of Scotland
Nàdar air fad airson Alba air fad

BY EMAIL
Brian Archibald, Development Plan Officer
The Scottish Government
Planning and Environmental Appeals Division
4 The Courtyard
Callendar Business Park
Falkirk
FK1 1XR

Our reference: CPP140801

28 April 2016

Dear Mr Archibald

Proposed Aberdeen Local Development Plan
SNH answers and advice in relation to the Reporter's Further Information Request

Thank you for your letter of 5 April 2016 requesting answers from SNH on the Reporter's questions in relation to allocation sites OP52 and OP109 for the proposed Aberdeen Local Development Plan. We also thank the Reporter for granting us an extension to the consultation period to enable us to carry out a site visit.

When providing our advice, we have presumed that the Reporter has copies of Scottish Planning Policy, the Control of Woodland Removal Policy and the Aberdeen City Council's proposed Local Development Plan (LDP) and associated Supplementary Guidance, all of which contain policies relevant to the natural heritage interests at OP52 and OP109. We also assume the Reporter has a copy of our response to the proposed LDP of 22 May 2015, which should be read alongside our advice below. We have not provided copies of these documents, however should the Reporter require a copy, we would be happy to provide one.

OP52 and OP109 are both included in the Ancient Woodland Inventory (AWI). Therefore, before providing our answers to the Reporter's questions, we feel it is important to provide some information about such woodlands. We also describe the extent of the existing woodland interest for both sites, and provide some outline information about their recreational and biodiversity value. This is to help provide context for our answers to the Reporter's questions.

1. Biodiversity and recreational role, importance and value of woodlands
As referred to by Forestry Commission Scotland (FCS) in their response to the Reporter dated 27 April 2016, both OP52 and OP109 are included in the AWI as they contain 'long-established woodlands of plantation origin'. Such woodlands are described in the below referenced document as "…*plantation from maps of 1750 …or 1860 … and continuously wooded since. Many of these sites have developed semi-natural characteristics, especially the oldest ones, which may be as rich as Ancient Woodland".* Such woodlands are important not just because of the trees, but for the soil structure and diversity of flora created over time.

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www.snh.gov.uk/gaelic

We provide below an extract from the SNH policy statement contained within *A guide to understanding the Scottish Ancient Woodland Inventory (AWI),* (full text provided in Annex I):

"*In Scotland, Ancient Woodland is defined as land that is currently wooded and has been continually wooded, at least since 1750. Ancient Woods are important because:*

- *They include all remnants of Scotland's original woodland; their flora and fauna may preserve elements of the natural composition of the original Atlantic forests.*
- *They usually have much richer wildlife than that of more recent woods.*
- *They preserve the integrity of soil ecological processes and associated biodiversity.*
- *Some have been managed by traditional methods for centuries and demonstrate an enduring relationship between people and nature.*
- *Woods and veteran trees are ancient monuments whose value to the local community and historians may be as great as that of the older buildings in a parish.*
- *Once destroyed, they cannot be recreated.*"

Therefore when considering how development may affect woodlands included in the AWI, the impact on the soil structure and function is as an important a consideration as the impact on the individual trees.

Based on a site visit carried out on 27 April 2016, the woodlands at OP52 and OP109 have biodiversity and recreational value. During our site visit, people were seen out walking and there was evidence that the OP52 was used by horse riders. In addition to the biodiversity value of the woodlands themselves, a lot of badger activity was observed within both OP52 and OP109, with evidence of connectivity between the sites also seen. Badgers and their setts (defined as any structure or place which displays signs indicating current use by a badger), are protected under the Protection of Badgers Act 1992 (as amended). Offences under the Act include:

- wilfully taking, injuring or killing badgers
- cruelty
- intentionally or recklessly interfering with a badger sett
- selling and possession
- marking and ringing

Interfering with a badger sett includes damaging or destroying a badger sett or any part of it, obstructing access to a sett, disturbing a badger whilst it is in a sett, or causing or allowing a dog to enter a badger sett. This has implications for the potential for development at locations where badger setts are found.

The biodiversity and recreational value of OP52 and OP109 is recognised by their inclusion as 'core' green spaces in the Council's Green Space Network. Policy NE1 of the proposed LDP therefore applies. (Annex II provides a copy of the Council's information about the green space network, taken from the below link.
http://www.aberdeencity.gov.uk/planning_environment/planning/outdoor_access/pla_green_space_network.asp)

2. Extent of woodland interest

The Native Woodland Survey of Scotland (NWSS) provides information on what extent of woodland FCS considers to exist in Scotland.

There is some disparity between the AWI maps published in 1987 (figure 1) and the NWSS map of the more recent survey of the extent of woodland shown in figure 2 and, for OP109, the situation on the ground for OP109 (as shown in Appendix II of the FCS response). This is mainly a result of felling that has occurred in the intervening period.

Figure 1 – map showing extent of woodland from the 1987 AWI in relation to the two sites, outlined by hand in red with OP52 to the left and OP109 to the right.

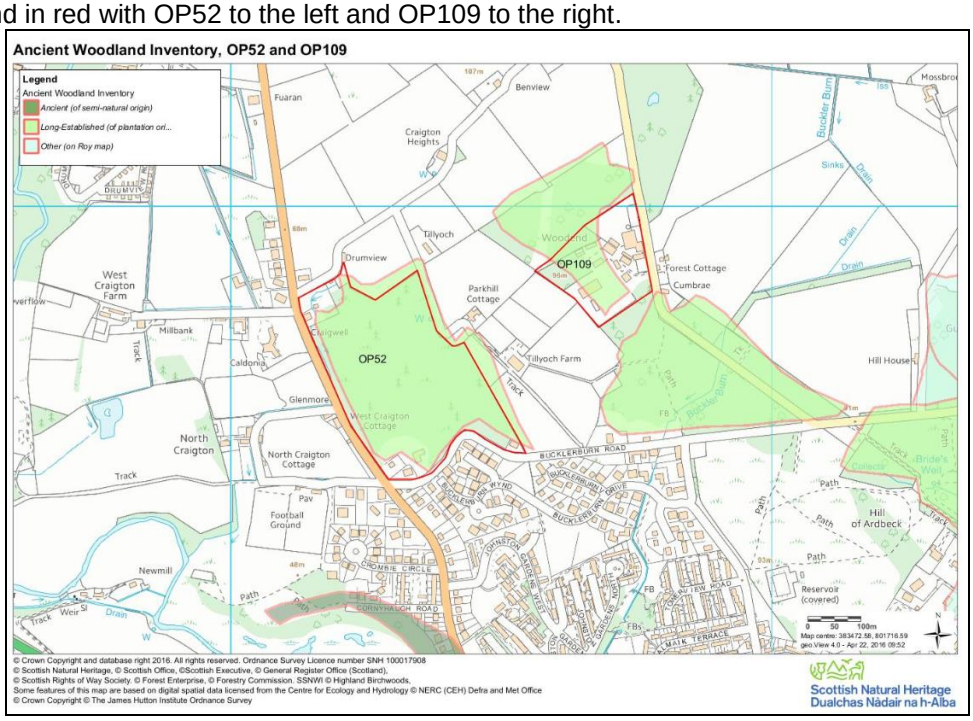
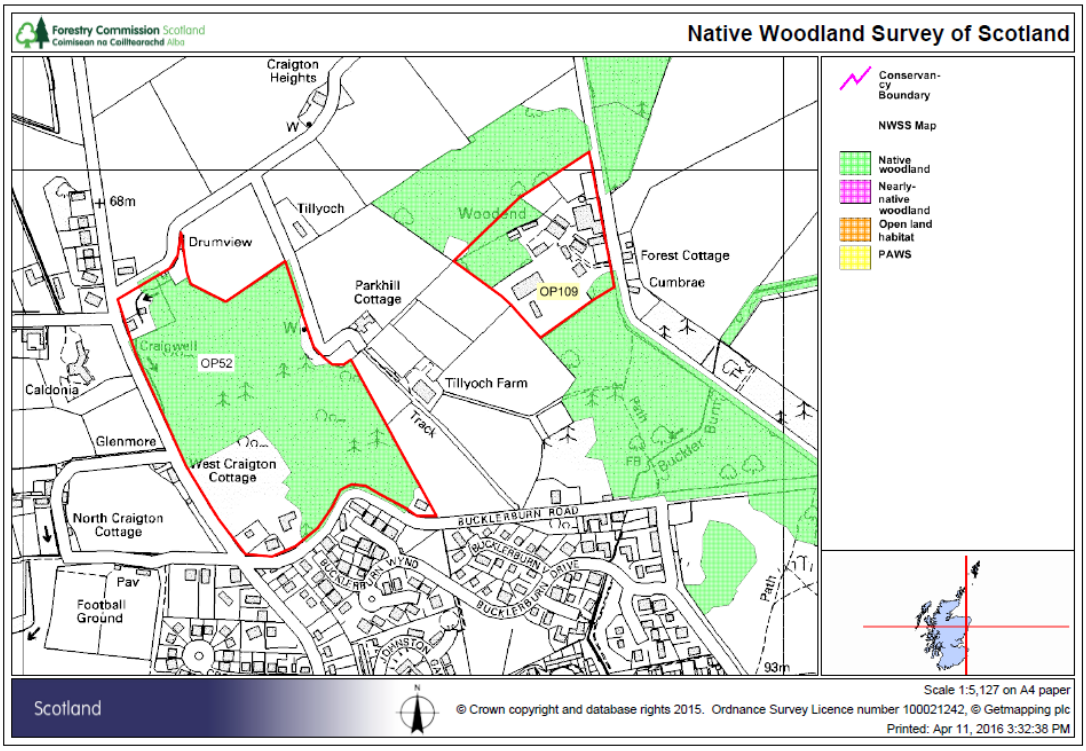


Figure 2 – map showing extent of woodland remaining within the two sites, outlined by hand in red with OP52 to the left and OP109 to the right (source: FCS). With the exception of the green area to the south eastern corner of OP109, the areas in green within the red boundaries are considered to be intact woodland, with the white areas being no longer considered woodland.



We checked the general type and extent of woodland present on OP52 and OP109 by a site visit carried out on 27 April 2016. The area of woodland shown in the south eastern corner of OP109 in figure 2 is no longer present, so is excluded from our calculations of the extent of remaining woodland (Appendix II of the FCS response clarifies the location of the remaining woodland). Our site visit confirmed that approximately 20% of OP109 is considered to be woodland. This contrasts with OP52, where approximately 83% of the site is still considered to be woodland. We found that the majority of the remaining woodland at OP109 contains birch. It was not possible to determine, by non-invasive walk over survey, whether this location was previously coniferous plantation. However, for OP52, it appears from the decaying tree stumps found within the site that this area was previously a Plantation on an Ancient Woodland Site (PAWS), which has been restored to native woodland. Restoration of PAWS to native woodland is a priority under the Scottish Forestry Strategy. It appears that coniferous plantation woodland was felled some time ago (based on the decomposition of the stumps, we estimate approximately 20 – 30 years ago). Depending on location within OP52, the site appears to have subsequently been restocked with/regenerated by native deciduous woodland tree species such as rowan, birch, bird cherry, elder, ash and holly. FCS have advised us that more recently there was an approval for the whole of the woodland at OP52 to be felled. This was on the condition for the site to be replanted so as to remain woodland in the future. The approval however expired in 2009 without the site having been felled. For clarity, FCS advise us that tree felling and management of the woodland would be acceptable as part of sustainable woodland management, however development to another land use will permanently destroy the ancient woodland habitat and would not be not appropriate. We agree with the FCS advice for this location.

We understand from FCS that there is no current approval for further tree removal at either site. Both OP52 and OP109 should therefore be treated as containing the extent of woodland identified in the NWSS (with the exception of the south eastern corner of OP109).

3. SNH answers to the Reporter's questions for OP52

a. Whether residential development on this site would be possible without any removal of ancient semi-natural woodland from the site and, if so, the number of houses that could be accommodated;

Given the extent of woodland remaining at OP52 and the strong policy protection for the green space network and woodlands included in the AWI (as outlined in our response to the LDP in May 2015), we consider that this site has very limited, if any, capacity to accommodate further development. Our advice is that whether there is capacity requires to be informed by further information and assessment:

- Based on the NWSS (figure 2), confirmed by our site visit, we consider that approximately 17% of OP52 is no longer classed as woodland and so might have the potential to accommodate development. This is the area identified in white in figure 2. It should be noted however that part of the white area contains existing development, so the area with scope for further development would be less than 17%.

- Our advice is that the precise area that might be able to accommodate development would require further analysis to take account of the impacts identified in the point below, and our answer to question d, in consultation with the relevant authorities such as FCS and the Scottish Environment Protection Agency (SEPA). For example, we understand that a detailed ecological survey would need to be carried out to inform FCS advice on how the Control of Woodland Removal Policy would apply. Ie whether development is appropriate, if so in what location, whether compensatory planting would be required, etc. FCS are best placed to advise on the application of the Control of Woodland Removal Policy and what level of survey work would be required.

- Our advice is that in addition to individual tree removal, other impacts on the woodland would need to be taken into consideration for a capacity assessment. Such impacts would include, for example; soil compaction and changes in drainage that would adversely affect the soil structure and function, the trees (roots and above surface structure), other vegetation and wildlife that rely on it; other impacts such as loss of habitat for wildlife relying on the trees, other vegetation and soil for food and shelter. Consideration of the impacts on and compliance with the law for protected species such as badger would also be required.

- We are unable to advise on how many, if any, houses OP52 might accommodate, as it is outwith our area of expertise to identify how many houses could be accommodated in any location. We acknowledge that it may be determined, after the relevant assessment has been carried out, that there is some capacity for development that would not have significant adverse impacts on the woodland or other interests. If so, we would expect the Council to advise the Reporter on how many houses they believe the site could accommodate. This should be based on the size of area identified as having capacity, and the type and size of housing that the Council aspire to be developed at this allocation. With reference to our answer to question b below, we would expect other land take factors to also be included in the capacity assessment. These would include things like infrastructure and services such as roads, water mains, gardens and green spaces, etc, as well as root protection buffers for trees adjoining any area identified as having capacity for development.

b. Whether road access to the development could be achieved without removal of any of the boundary trees beside Malcolm Road;

Based on our site visit, it may be possible to take access from Malcolm Road, however this would require tree removal (as indicated in the FCS response of 27 April). Alternative access may be possible along Bucklerburn Road, which runs along the south of OP52. However this road does not appear to be adopted, is single track and in poor condition, down to bedrock in places with water flowing along it. It is also constrained in places by existing development to the south. It is therefore likely that significant improvements and greater encroachment into the woodland would be required to bring it up to adoptable standard, when compared with access off Malcolm Road.

The official standards and technical requirements for road access are outwith our area of expertise. The Council's roads department would be best placed to provide details of the location, size and technical specifications necessary to accommodate road access to the required standard. Once this information is available, it should be possible to for the Council to identify to what extent further tree removal would be necessary.

Meantime, our advice is that in addition to tree removal, the other impacts identified in our answer to question a, and also question d in relation to drainage and flooding, would also require to be taken into account.

d. Assuming the principle of development is accepted, any changes that are required to the text on page 85 to reflect the need to retain ancient semi-natural woodland, any consequent reduction in house numbers or change in access arrangements, and clarification of the need for a planning brief or a masterplan.

It is not possible for us to offer conclusive advice on whether the principle of development in OP52 is appropriate. This will depend on the outcome of the further assessment outlined in our answer to question a, and other factors such as flooding identified below.

We consider that there is a strong likelihood that the application of Scottish Planning Policy, the Control of Woodland Removal Policy and the Council's own policies on green space networks, woodlands and the natural heritage (respectively policies NE1, NE5 and NE8 in the proposed LDP) will result in there being no practical capacity for development being identified at OP52.

However, we acknowledge that it may be determined, after the relevant assessment has been carried out, that there is some capacity for development that would not have significant adverse impacts on the woodland or other interests. Should that be the case, then we recommend the following amendments are made to the text on page 85 of the proposed LDP:

Page 85 of the proposed LDP currently states for OP52 that there is "*Opportunity for 71 houses. Masterplan required. Boundary trees to be retained. Site (or part of) is at risk of flooding. Developers will be required to provide a Flood Risk Assessment (FRA) in support of any development proposals for this site*." Taking each sentence in turn, our advice is that:

- The number of houses will need to be reduced from 71 to the number and type identified following revision of the boundary to exclude the woodland interest, and more detailed consideration of remaining capacity.
- We agree with the proposed LDP text that a masterplan should be produced for development at OP52. This is to ensure that the relevant factors are taken into account and used to inform design and layout of development, and the structure and function of the woodland is retained.
- We recommend replacing "*boundary trees to be retained*" with explicit reference to the requirement for compliance with proposed LDP policies NE1 Green Space Network (OP52 being identified by the Council as a core part of the green space network), NE5 Trees and Woodlands (particularly the requirement for a Tree Protection Plan to be agreed with the Council prior to any development activity commencing on site), and the Supplementary Guidance on Trees and Woodlands.
- In relation to the remaining two sentences, any increase in flooding is likely to adversely affect the woodland and, due to the slope, the existing neighbouring properties to the south and the surrounding road network. We would therefore recommend adding text that the FRA should include consideration of the impacts of development on flooding within and outwith the developed area that could affect the woodland and other interests (such as existing properties). The advice of SEPA should be sought as part of the FRA, as they are best placed to advise on flooding and flood risk.
- Given the level of badger activity at the site, reference should be made to the protected species survey requirements as described in the Supplementary Guidance for policy NE8 (Natural Heritage) of the proposed LDP.

With respect to other changes/additions that might be required to the text, these will depend on the outcome of the points raised in our answers to questions a and b.

4. SNH answers to the Reporter's questions for OP109

e. While the text on page 86 of the proposed plan states that ancient woodland on the south of the site is to be protected, please indicate whether there is ancient woodland on any other parts of the site;

We refer to section 2 of this letter and Appendix II of the FCS response, which identifies where the woodland is considered to occur within OP109. The area to of woodland within OP109 is located to the north-western corner (rather than the south of the site), so is not referred to on page 86 of the proposed LDP.

f. Whether residential development on this site would be possible without any removal of ancient semi-natural woodland from the site and, if so, the number of houses that could be accommodated;

In contrast to OP52, we consider that OP109 has greater capacity to accommodate development, due to the significant larger area that is not considered woodland. Based on FCS response Appendix II, confirmed by our site visit, we consider that approximately 80% of OP109 is no longer classed as woodland and so might have the potential to accommodate development.

We refer the Reporter to our answer to questions a and b, as many of the same points will apply to OP109 in terms of identifying what capacity there is for development and how many houses could be accommodated. However, because of the greater scope for development at OP109, our advice is that a detailed ecological survey would not be required at this stage to inform what capacity there is – provided the recommendations made in answer to question i below are implemented. (It should however be noted that surveys to assess the impacts on protected species, in particular badger, would be required.)

i. Assuming the principle of development is accepted, any changes that are required to the text on page 86 to reflect the need to retain additional ancient semi-natural woodland, any consequent reduction in house numbers, and clarification of the need for a drainage impact assessment.

Page 86 currently states for OP109 that there is "*Opportunity for 19 houses. Drainage Impact Assessment required to consider protection of potential wet habitats/woodlands adjacent to the site and the potential requirement for a buffer to prevent any increase in drainage of wet habitats/woodlands. Ancient Woodland on the south of the site is to be protected."* Taking each sentence in turn, our advice is that:

- The number of houses may need to be reduced from 19 to the number identified following revision of the boundary to exclude the woodland interest to the north-western section of the current site, and more detailed consideration of capacity in relation to accommodation of associated infrastructure (as outlined in our answers to questions a and b), and protected species (badger).
- In relation to second sentence, changes in drainage patterns have the potential to adversely affect the adjoining woodland, surrounding roads and adjacent properties. We would therefore recommend adding text that the Drainage Impact Assessment should include consideration of the impacts of changes in drainage (caused by the development) within and outwith the developed area that could affect the adjoining woodland (and wetlands), roads and properties. It should be noted that changes in drainage could be both decreases as well as increases.
- Rather than the final sentence, we recommend inserting explicit reference to the requirement for compliance with proposed LDP policies NE1 Green Space Network (both OP52 and OP109 are identified by the Council as being part of the green space network), NE5 Trees and Woodlands (particularly the requirement for a Tree Protection Plan to be agreed with the Council prior to any development activity commencing on site) and the Supplementary Guidance on Trees and Woodlands. Given the level of badger activity at the site, reference should also be made to the protected species survey requirements as described in the Supplementary Guidance for policy NE8 (Natural Heritage) of the proposed LDP.
- We recommend additional text that a masterplan should be produced for development at OP109. This is to ensure that the relevant factors are taken into account and used to inform design and layout of development, and that the structure and function of the woodland is retained.

With respect to other changes/additions that might be required to the text, these will depend on the outcome of the points raised in our answers to question f.

5. Concluding remarks

Should you have any queries about this letter, please let me know.

Yours sincerely

Nina Turner
Planning Advisor (North)