

Lochaber 'native woodland' and the Native Woodland Survey of Scotland

Discussion Paper, 2018-2019

1. Preamble

The following comments have arisen from ongoing discussions between neighbouring Deer Management Groups [DMGs] in West Lochaber, with the aim of raising the profile of what has been achieved in woodland management in the district and of conservation strategies past, present and future. The participants (to date) are:

- West Lochaber Deer Management Group
- Moidart Deer Management Group
- East Loch Shiel Deer Management Group

2. Critique

The Native Woodland Survey of Scotland [NWSS] was carried out by the Forestry Commission, 2006-2013, to establish an authoritative picture of the country's native woodlands. The purpose of the survey was to identify and map the location, extent, type and condition of all Scotland's native woodlands. The results were released in February 2014 and offer a national inventory and guidance for future action. The documentation can be accessed at:

www.scotland.forestry.gov.uk/supporting/strategy-policy-guidance/nwss

The NWSS supplies information for carrying out regional and local assessments and for formulating policies and strategies; these can then be benchmarked against the larger and national picture, and plans and actions towards woodland improvement and restoration or expansion set out and measured against national targets.

3. Continuum

Woodland inventories show us the significance of the continuity and survival of what has been termed 'Ancient Woodland', and especially in areas where it is still relatively abundant such as in Lochaber and coastal Argyll and Inverness-shire. In this area, the present extent of woodland, both deciduous and coniferous, holds a mirror to 'woodland history' where the region's reputation for abundance of timber was proverbial: 'that would be to take wood to Lochaber' (*B'e siud a bhiodh 'toirt fiodha do Lochabar e*) ran the Gaelic proverb as a northern version of the futility of taking 'coals to Newcastle'. There is early evidence of woods and timber from prehistory (in peat bog stumps and logs) and history (in references to the oak woods of Loch Shiel in Adamnan's *Life of Columba*), and a clear understanding that woodland was a resource that was regularly and persistently both husbanded and harvested. The NWSS subscribes to this significance: 'Native woodlands have played an important part in Scottish culture, having been used for wood, shelter, hunting and forage throughout our history.' In more modern times, charcoal-burning and the tan-bark industry had a destructive effect on oakwoods but coppicing was accepted as part of systematic woodland management (according to an example of local documentation, 1856). In today's terms, native woodland is a significant and valuable habitat which merits close study and preservation. This is recognised on all the landholdings in the region where native woodland survives and has been a management objective to a greater or lesser extent for two or three generations.

4. Survival

In terms of the wider region of the Highlands and Islands, few districts compare for such extensive areas of native woodland with their significant historical continuum. These are relatively free of the intrusion of conifer planting, road construction, or other land-use practices destructive of the natural environment. Localised circumstances contrast sharply with monoculture woodland and industrial-scale

roadways undertaken through the agency of the state or public sector in the course of the twentieth century. Public agencies have in the past often been the catalyst for damage rather than nurture.

Lochaber, North Argyll and Western Inverness-shire are characterised, especially towards their westerly exposure, by nutrient-poor soil types comparatively inimical to tree regeneration and growth. Moreover there is a bedrock that is resistant to erosion and highly acidic, with overlying and base-poor and heavily leached soils, or, since the Atlantic Period, the development of acidic peat, none of which supports healthy tree growth. More research could be done to interpret and attribute this 'survival' of native woodland as opposed to publicly defining an apparently prevailing situation of decline to potential extinction. A long-term view would suggest that the situation is a positive one with so much post-glacial birch-pine forest and oakwoods surviving in such exposed and relatively harsh conditions.

5. *Ancient Woodland*

To qualify for the attributive of 'Ancient Woodland', it must be evidenced in the first instance from our available historical documentation. In these districts, woodland is represented on all known maps since the mid-eighteenth century General Roy's Survey (1747-1755) and earlier maps such as Blaeu's *Atlas Novum* (1654). These show areas of Lochaber and Western Inverness-shire to be well wooded in the early seventeenth century. The First Edition of the OS map surveyed in the early 1870s shows the woodland distribution to be broadly similar to that of the present day.

It is something of a fallacy of popular history and literature that 'native woodlands' have been in constant and exponential decline since approximately the beginnings of the Neolithic era or the beginnings of human settlement and exploitation during the post-glacial 8,500 years. To sustain this version of events, there is an assumption of dense forest or extensive canopy as climax tree-growth emerging in the millennia following the last Ice Age, whereas the idea that ours was a densely wooded landscape is probably over-optimistic. The destruction then begins with the 'birth' of settled agriculture. Scotland, according to this version of events, has shared in this long-term trend with many regions of Northern Europe. The fallacy extends to present an ideal of woodland restoration grounded in concepts of very low-density occupation of the ground. Local studies and in-depth ecological analysis can be used to challenge this view, for example, from pollen analysis that the proportion of woodland cover may not have significantly declined in that time.

6. *A 'cultural landscape'*

Since the life-cycle of many hardwood species is so long, it is worth keeping aspects of the 'cultural landscape' in the debate. Trees and woodland were the prime elements in a status quo of great significance over at least a millennium; trees of most species were highly valued in Gaelic culture and the literature preserves copious evidence of attitudes and an ideology that chime remarkably with our contemporary 'philosophy' of conservation of the natural heritage. Conservation of the natural heritage in Gaelic Scotland is not therefore an 'innovation' of the twentieth century. It was universally understood that healthy tree growth was at the heart of a natural order which symbolised the well-being of land and people. At a local level, the conservation of woodland was actively embraced by historical land management regimes such as by the MacDonalds of Clanranald in Morar, Arisaig and Moidart; the random use of timber (even for fuel) was stringently controlled or prohibited under Baron Court regulations and the terms of leases. Grazing was a part of this regime but was customarily controlled by close and constant herding of animals. Many areas of woodland (oak woods, for example) were retained directly under the landlord's control, and in Arisaig and Moidart were protected by 'Wood Keepers' or *Buachaillean Fiodha*. In the post-clan territories period, it would appear that woodlands were proactively managed for the more 'useful' species which is why many of today's 'oakwoods' have such a strong element of oak; the value of charcoal

was high and it is reasonable to expect that those who pursued this enterprise went to lengths to nurture their supply. This is in fact evident from the 1856 Lochaber documentation cited above.

7. Destructive forces

Traditional management regimes in the region were abandoned with the large-scale introduction of sheep farming in the closing decades of the eighteenth century. In Moidart, for example, this can be seen as cataclysmic and the effects of this still need more than anecdotal analysis. Charcoal-burning in the late-eighteenth and early-nineteenth centuries was another widespread extractive industry in the district. Extensive long-term sheep grazing has been one factor behind Fraser Darling's characterisation of the West Highland landmass as 'devastated terrain'. Long-term population decline is another factor contributing to characterisation of the area as 'wild land'. From a local perspective, this terminology and associated ideology is not always in the best interests of those who live and work in the region.

8. Local circumstances

The NWSS records areas of 'native woodland' under high herbivore impact, including designated sites and areas of Lochaber included in four local DMGs. The NWSS data, for example, shows that Moidart has the highest proportion of native woodland impacts in Mainland Scotland, and on the basis of this judgement, it is considered that the condition of native woodland habitats is far from satisfactory and to the detriment of the public benefit. The neighbouring DMG areas of West Lochaber and East Loch Shiel also have 'high impacts'. It must be significant that so much highly impacted woodland is today to be found in one geographic area and this can be offered for interpretation; the principle consideration must be that historically this was where the 'ancient woodland' was, and surviving in sufficient abundance to draw the comment of today's conservation-conscious generation. In equal measure, effort and planning over many years have gone into woodland improvement, restoration and creation in the area and, in 2018, a process of dialogue was initiated between neighbouring DMGs about native woodland impacts to achieve a better understanding of the 'problem' and to develop a response strategy. As ongoing process, some of this is summarised in the following 'response'.

9. Response

West Lochaber DMG

- Arisaig WGS (early 1990s) created over 250 Ha of native woodland with a mixture of regeneration and planting
- increase in nationally rare plant and insect species monitored
- extension of Glen Beasdale SAC with 40 Ha of SAC qualifying habitat
- 5-year Rhododendron control programme
- management of older woodlands by monitoring deer numbers and adjusting livestock numbers within the woodland
- programme of small-scale planting and cattle grazing as proactive ongoing environmental management regime
- Glenfinnan native woodland expansion and regeneration, 230 Ha fenced in 1997 and still deer-proof
- Rhododendron removal programme 2018-2019 adjacent to Glenfinnan Church
- Loch Shiel SSSI (in agreement with SNH in 1986) thinning of birch to encourage oak regeneration at River Callop on A830

Moidart DMG

- types of woodland habitat found in this area well understood and defined. Condition of native woodland habitats under scrutiny as part of 'Forest Plan' process
- Glenuig WGS, 1997, 500 Ha fenced and still deer-proof, with a mixture of regeneration and planting of native species, and including existing native woodland SSSI on south shore of Loch Moidart
- approval and adoption of LTFPs by Kinlochmoidart, Eilean Shona, Lochshiel

and Glenaladale

- Lochshiel LTFP 2018-2037 includes 520.39 Ha, with objectives of maintaining woodland cover, improving woodland structure and moving designated sites to favourable condition
- Kinlochmoidart LTFP (February 2019) towards the sustainable regeneration of the native woodland and, in detail, to contribute to the improved condition of native forests and SSSI, to promote natural regeneration, to restore PAWS and increase the distribution and area of native woodland; increased cull of low ground deer to balance this already in progress
- some increase of planted areas of native woodland, deer-fenced eg. removal of Brunery Wood (conifer) and replaced with native woodland as extension to the oakwood of Brunery
- Roshven, regeneration of oak and native broad leaf in 75 Ha former FCS plantation, removal of non-native species in 1994
- eleven exclosures established on Glenaladale in 1992-1994, covering 91 Ha and spaced out to cover all aspects and types of native woodland
- establishment of three small 'exclosures' for native woodland regeneration at Slatach, 2010-2017
- natural regeneration on several Ha at Samalaman, Glenuig, in areas bare of trees 50-100 years ago now with dense growth of birch and other native species
- Glenuig 20-year Rhododendron removal programme with repeat removal of regrowth and roots
- Rhododendron removal programme, Glenmoidart 2017, programme 50% complete
- Rhododendron removal, Slatach, 2016-2018, and programme restarting summer 2019

East Loch Shiel DMG

- types of woodland habitat found in this area are well understood and defined. Condition of native woodland habitats is under scrutiny as part of various properties' Long Term Forest Plans
- Conaglen Estate fenced approximately 30 Ha of the main body of the designated Ardgor Pinewood SAC/SSSI for natural regeneration around 1971-1972
- Glen Scaddle Estate fenced approximately 700 Ha at Nathrachain and Aryhoulan for woodland expansion and regeneration in the mid-1990s
- Ardgor Estate fenced approximately 700 Ha at Ghearraidh for woodland expansion and regeneration in the early-1990s
- in 1990, Conaglen Estate established a 22 Ha broadleaf woodland through planting opposite the designated pinewoods
- in 1993, Conaglen Estate established a 58 Ha broadleaf woodland for natural regeneration of oak and native broadleaf trees on opposite side of Glen Cona to the designated pinewoods
- subsequently from the 1990s, Conaglen Estate through the WGS and SFGS have extensively expanded the area of the woodland within the designated Ardgor Pinewood landscape via a mixture of regeneration and planting schemes:
 - o in 1990, 101 Ha of the main pine woodlands in Glen Cona were fenced; of which 26 Ha were planted and the remainder were allowed to naturally regenerate
 - o in 1995, a further 29 Ha of the designated pinewood area located to the north of Glen Cona towards Duisky were fenced for natural regeneration
 - o in 1999, towards the western end of Glen Cona 34 Ha of new pinewoods were planted, of which 11 Ha is still fenced today.
 - o in 2005, 29 Ha of former spruce and lodgepole pine plantation south of Duisky was cut to waste and fenced to encourage natural regeneration of Scots Pine and native broad leaves; subsequent follow-up cutting to remove non-native species has been completed
 - o in 2009, at Callop 64 Ha were fenced for regeneration of which 27 Ha were subsequently planted in 2015
 - o in 2018, the northernmost part of the central area of the designated

Ardgour Pinewoods which extend towards Garvan were fenced for natural regeneration

- Conaglen Estate undertook an extensive rhododendron removal programme between 2014-2019, expanding to in excess of 200 Ha and this continues today with follow-on spraying to prevent re-establishment in the Doire Donn SSSI.

10. *Actions*

The circumstances of 'high impact' are only part-explained in the current documentation in the public domain and now need to be further defined and mapped. For example, explanation is offered in terms of high deer numbers but other areas with higher deer numbers or densities do not display comparable 'high impacts' in the NWSS data. Within those areas subjected to repeated wildfire (whether related to the West Highland Line or not), fire impacts have probably been of greater import in terms of woodland survival than deer impacts. There are numerous examples of regeneration that have managed to establish themselves in spite of the presence of deer but which have subsequently been burned. The repeated loss by burning of nutrients contained within the biomass is far more damaging for such slow-growing species on poor, acidic soils than the attention of nutrient-recycling herbivores.

We propose to further scrutinise NWSS data and match their maps to sites in order to build narratives and strategies on what is occurring in the different areas. This should reveal that the effects of 'high impact', if critical in the short-term, may be considered not critical and recoverable in the mid- to longer terms. In addition, in the interests of sustainable deer management and a healthy social and economic demographic, cases might be put forward for high impacts being appropriate and sustainable in some sites in these districts which can demonstrate a convincing and effective record of native woodland conservation and creation.

4 May 2019