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DUCHESS WOOD LOCAL NATURE RESERVE COMMITTEE

9 November 2015

NOTICE OF MEETING

A meeting of the **DUCHESS WOOD LOCAL NATURE RESERVE COMMITTEE** will be held in the **BRAEHOLM, 31E MONTROSE STREET, HELENSBURGH** on **TUESDAY, 17 NOVEMBER 2015** at **10:00 AM**, which you are requested to attend.

Douglas Hendry
Executive Director of Customer Services

BUSINESS

- 1. APOLOGIES
- 2. **MINUTE** (Pages 1 6)

The Minute of the previous Duchess Woods Committee meeting held on 18 August 2015.

3. FRIENDS OF DUCHESS WOOD REPORTS (Pages 7 - 8)

Report by Friends of Duchess Wood.

4. DRAFT FIVE-YEAR MANAGEMENT PLAN - OCTOBER 2016-SEPTEMBER 2021 (Pages 9 - 40)

Report by Stewart Campbell, FODW.

5. **WIAT FUNDING APPLICATION** (Pages 41 - 48)

Report by Stewart Campbell and David Lewin, FODW.

6. ARGYLL AND BUTE COUNCIL MAINTENANCE AND FINANCIAL UPDATE

Report by Amenity Performance Manager

- 7. **TERMS OF REFERENCE AND MEMBERSHIP** (Pages 49 50)
- 8. ANY OTHER COMPETENT BUSINESS
- **9. MEETING DATES FOR 2016** (Pages 51 52)

DUCHESS WOOD LOCAL NATURE RESERVE COMMITTEE

Councillor Aileen Morton (Chair)

Contact: Theresa McLetchie - Tel: 01436 657621



MINUTES of MEETING of DUCHESS WOOD LOCAL NATURE RESERVE COMMITTEE held in the BRAEHOLM, 31E MONTROSE STREET, HELENSBURGH on TUESDAY, 18 AUGUST 2015

Present: (Chair)

Councillor Aileen Morton

Attending: Charlie Cairns – Lower Clyde Green Space

Johanna Urquhart – Principal, Lomond School Stuart McCracken – Argyll and Bute Council Stewart Campbell – Chairman of Friends of Duchess Wood Alastair Macbeth – Secretary of Friends of Duchess Wood Eileen Kay – Argyll and Bute Council Morevain Martin – Argyll Voluntary Action

1. APOLOGIES

The Chair welcomed everyone to the meeting.

Apologies for absence were intimated from:-

Iain Wilkinson - Luss Estates

2. MINUTE

The Minute of the previous meeting which was held on 19 May 2015 was approved. as a true record, subject to the following amendment:

7. Development of the Wood

The Chair agreed upon a further response on behalf of the Duchess Wood Local Nature Reserve Committee to Luss Estates that the Committee were happy to move forward in regards Community Ownership.

Action: The Chair would instigate further contact with Luss Estates on this issue.

Matters Arising

The issue of the recent Cross Country run undertaken by the MOD was raised and the Amenity Performance Manager confirmed that he had emailed the MOD in regards seeking prior permission, but, as yet, he had not received a reply.

It was highlighted that the Fairy Tale Wood Committee were seeking Scottish Charitable Incorporated Organisation (SCIO) status which would enable them to change their structure.

3. FRIENDS OF DUCHESS WOOD REPORTS

The Committee considered a report which outlined the work undertaken by Friends of Duchess Wood (FODW).

The forthcoming Community Woodlands Association (CWA) event scheduled for 1 September was highlighted and the programme of events and booking form were tabled.

Other issues within the Wood were pointed out and these included:-

Thanks to the Amenity Services team for disposing of the remains of a dead deer;

Culvert cleaning;

The effectiveness of anti-graffiti paint which had been utilised on garage doors:

Recent damage to the bridge in the south east corner.

Decision

The Committee agreed:

- 1. to note the report; and
- 2. the information provided on the forthcoming CWA event on 1 September 2015.

4. FUNDING UPDATE / DEVELOPMENT OF THE WOOD

The Committee gave consideration to a report which updated on the meeting held on 10 June 2015 in regards the Funding and future Development of the Wood.

Discussion followed around the possibility of adapting the Management Plan to match the criteria of the WIAT application and the implications of any change to the Management of the Wood. Further issues raised included expanding on Stakeholder Engagement and the dates for the next Management Plan (if this would be a 4 or 5 year duration).

The Committee were advised that the Friends of Duchess Wood (FODW) had recently been exploring the potential for timber sales to supplement any future grant funding in terms of taking forward the Wood's Management Plan. A further meeting is expected to be held in October. It was recognised that discussion with Luss Estates may be required regarding this proposal.

Any tree felling/timber extraction could have an impact on path maintenance and it was highlighted that costs of repairs would need to be factored into a decision; and timetabling of work undertaken should reflect these considerations.

Decision

The Committee agreed:

- 1. That Stewart Campbell would complete a draft Management Plan and circulate to the Duchess Wood Committee; and
- 2. That the Duchess Wood Committee would receive an update on the meeting scheduled for October between the FODW and the log merchant; and
- That Charlie Cairns would endeavour to source the 2 arboriculture safety surveys undertaken a number of years ago to inform the meeting in October; and
- 4. That the Sub-Group would arrange a further meeting to give further discussion to the WIAT application; and
- 5. That Stewart Campbell would make further contact with Diane Oliver, CWA for advice on the completion of the WIAT application.

(Reference: Report by the Lower Clyde Green Space Manager, dated August 2015, submitted).

5. ENGAGEMENT WITH SCHOOLS/COMMUNITY

Eileen Kay provided a verbal update on the Outdoor Learning Activities and outlined to the Committee that this would be a 1 page document which would be disseminated to all local schools with a covering email. This would focus on Web-based resources and would be updated each term, providing information on different opportunities. Information would also include links to various Awards, with relevant information for both primary and secondary schools.

Discussion followed and it was highlighted that Fiona Hughes was back Alastair Macbeth provided an update on outdoor learning undertaken at Rhu Primary School; the pupils had produced a booklet which outlined the fun activities which could be undertaken as part of outdoor learning. Copies of the booklet are available from Rhu Primary school.

The possibility of a photo shoot and the provision of information on the Forest School was raised with the intention to include this on the next FODW Newsletter. In addition, the Principal of Lomond School was asked if there would be a notification on display in the Duchess Wood alerting users to the Outdoor School.

FODW highlighted their many links with the local Community and also national groups/bodies.

Decision

The Committee agreed:

- 1. To note the update from Eileen Kay.
- 2. That Eileen Kay would provide a short summary on the Outdoor Learning Activities to Stewart Campbell for inclusion in the Management Plan.
- 3. Johanna Urquhart would liaise with Stewart Campbell regarding awareness raising about the Forest School.

6. ARGYLL AND BUTE COUNCIL MAINTENANCE AND FINANCIAL UPDATE

The Committee gave consideration to a report from the Amenity Performance Manager. He highlighted that the tree works on the boundary between Duchess Wood and the West Highland Railway had, as yet, still to be completed. He would liaise with the Argyll and Bute Council Procurement team to ascertain the hold up to the progression of this work.

Decision

The Committee agreed:

- 1. To note the report.
- That Stewart Campbell would liaise with Stuart McCracken to determine the requirements for the material to infill the culverts in Duchess Wood.
- 3. Stuart McCracken will look to get planings provided for the car park surface.

(Reference: Report by the Amenity Performance Manager dated August 2015, submitted).

7. ANY OTHER COMPETENT BUSINESS

The Chair opened the meeting for Any Other Business and the following issues were raised:-

MOD Volunteers:

Morevain Martin advised the Committee that the MOD had 23/25 young Naval personnel available to work on local community projects on Tuesday, 13 October.

Decision:

The Committee agreed:

- That Morevain Martin would liaise with Stewart Campbell and Charlie Cairns to determine the specific area(s) of work that the MOD volunteers would be tasked with and also clarify with the MOD if they could provide any picks and shovels for the volunteers to use.
- 2. That an update come to the next Duchess Wood meeting in November on the work undertaken by the MOD volunteers and to give further discussion on how to take this forward on a seasonal basis.

Terms of Reference and Membership:

The Committee agreed to table these issue for discussion at the November meeting.

Dog Issues/Training:

Charlie Cairns advised that SNH had published a new document – *Taking the Lead* – regarding this issue and advised that this was available on the SNH website.

The Committee agreed to further discussion on this issue at the February 2016 meeting.

8. DATE OF NEXT MEETING

The date of the next meeting was scheduled for Tuesday, 17 November 2015 at 10.00a.m. with a provisional booking to be made for Braeholm.

The Chair thanked everyone for attending the meeting and providing informative updates and reports.





Page 7 Agenda Item 3 The Friends of Duchess Wood

Report to Duchess Wood LNR Committee 17th November 2015

1. The Annual General Meeting of FODW was held on Wednesday 28th October in the Sports Centre of Lomond School. The previous executive committee members were re-elected and the office bearers remain the same. The accounts were approved. The formal part of the AGM was followed by an excellent talk by Pete Minting, Scottish Project Officer of the Amphibian and Reptile Conservation Trust.



Pete Minting, our speaker at the AGM.

- 2. A preliminary draft 5-year Management Plan for the Wood for the period 1st October 2016 30 September 2021 has been drawn up by FODW for consideration by the DWLNRC.
- 3. The "A Wood of Our Own"
 Forum of the Forestry
 Commission and the
 Community Woodlands
 Association held at Duchess
 Wood with FODW.

Duchess Wood was selected for this event, held on 1st September. FODW was asked to assist with its organisation.



There were speakers (including from the FODW) and discussion in the morning and tours of Duchess Wood in the afternoon, after a buffet lunch. The successful event attracted participants from different parts of the west of Scotland and the Wood was much admired.

4. **Lomond School public orienteering event.** This first event of its kind was held in Duchess Wood and was very well organised by Lomond School and was popular with the public. FODW will leave it to Lomond School to report in more detail, but FODW congratulates the school for its initiative.



Navy trainees assist FODW. FODW was grateful to the Faslane Base for the help of more than 20 Navy trainees who joined FODW members for a full day's work deepening ditches, clearing the insides of culverts, re-proofing the woodwork of the information hub and digging test-holes for water retention. This work was carried out on 13th October.

6. **Regular maintenance.** FODW has continued with its regular maintenance work, clearing litter, cutting back unwanted growth, making repairs, etc.

- 7. **Logs.** FODW has been storing lengths of timber in its rented garage to dry. These are now being sawn regularly into logs for sale as firewood, and donations being sought for bags or trailer loads.
- 8. **Vandalism.** Over a weekend in late September the map board at the car park was uprooted and the frame and map smashed it was also dragged up to the Pony Field. Three other waymarkers were pulled out and thrown away. Picnic tables were damaged by knives and one also suffered fire damage. The waymarkers have been repositioned and work is in hand to repair the map board and tables. The police were contacted and they offered the thought that a recent heavier police presence in the town centre might have moved anti-social behaviour out to the town fringes.

Duchess Wood Local Nature Reserve Committee Meeting 17 November 2015

Draft Management Plan 1 October 2016 – 30 September 2021

Attached for your interest and comment is a draft of a revised Management Plan for the Duchess Wood LNR. It is closely based on the current MP and has been revised only to take into account changes, developments and fresh perspectives over the last four years. It takes into account comments by Charlie Cairns and Alastair Macbeth on an earlier draft.

However this is still a working draft, so please note:

- 1. The cover picture will be changed to make it different from the current plan.
- 2. Photographs and maps have been removed for the moment to make it easier to transmit electronically. They will be restored.
- 3. Page numbers in the index and cross-reference page numbers and bibliography references etc within the text will be adjusted when the draft is agreed. Section/Paragraph sub-structures, spacing and indents need further adjustment in places eg para18.
- 4. The table of objectives, policies and actions at the end of the text has also been removed from this version, but will be restored and edited once the text is agreed.
- 5. The bibliography is still at the end, but will also be revised and extended later.
- 6. There may still be some inconsistencies between the Executive Summary and the main text any comment on these would be particularly appreciated.

Unfortunately, I will miss the 17 November meeting so if anything immediate leaps out, please get in touch before then. I hope it will be possible to set a date for comments at the meeting, and we can then finalise and agree the MP at the following meeting.

Best wishes.

Stewart Campbell

Chair, FODW

4 November 2015



New photo to be inserted here. Removed for the moment to make transmission easier

Duchess Wood Local Nature Reserve Committee

DRAFT MANAGEMENT PLAN 1 October 2016 – 30 September 2021

for the

DUCHESS WOOD LOCAL NATURE RESERVE

Helensburgh

Argyll and Bute

(draft 3 November 2015)

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ABBREVIATIONS USED IN THIS PLAN.

A&B = Argyll and Bute

A&BC = Argyll and Bute Council

CWA = Community Woodlands Association

DW = Duchess Wood

DWLNRC = Argyll and Bute Council Duchess Wood Local Nature Reserve

Committee

FCS = Forestry Commission Scotland

FODW = Friends of Duchess Wood

LBAP = Local Biodiversity Action Plan

LCG = Lower Clyde Greenspace

LDP = Local Development Plan

LE = Luss Estates Company

LNR = Local Nature Reserve

MA = Management Agreement

MP = Management Plan

2007-2011 MP (The third plan)

2012-2016 MP (The fourth plan)

1 October 2016 – 30 September 2021 MP (This plan, the fifth)

NVC = National Vegetation Classification

SNH = Scottish Natural Heritage

EXECUTIVE SUMMARY

The Management Plan 1 October 2016 - 30 September 2021

- i. This is the fifth consecutive Management Plan for Duchess Wood. It serves three main purposes:
 - a. to provide a basis for actions within the five year span;
 - b. to provide longer term policy within which the five-year work is set;
 - c. to provide the basis for seeking funding to support the actions.

Overall aims of the Management Plan

Duchess Wood will be managed as a semi-natural area, to conserve and enhance its biodiversity and landscape value, to encourage research, and to provide visitors with reasonable access and opportunities for responsible and quiet recreation and education.

Location

ii. Duchess Wood lies at the western edge of Helensburgh, north of Rhu Road Higher and south of the West Highland railway line. It is bounded on the east by a residential area and on the west by semi-improved wet grassland. At the southern edge there are sports pitches and some housing. Further housing is planned adjacent to the south west boundary.

Designation

iii. Duchess Wood is one of only two Local Nature Reserves in Argyll and Bute. Duchess Wood lies within the Green Belt, is a Local Nature Conservation Site, is an Open Space Protection Area, and is part of the proposed Helensburgh Green Network being developed in 2015 as a supplement to the A&BC Local Development Plan (LDP). It is a "Woodland of Long Established Plantation Origin" on the Scottish Natural Heritage Ancient Woodland Inventory.

Value

iv. Duchess Wood is highly valued by the local community and much used by local people and visitors. The importance of Duchess Wood has been recognised in official reports. The "Greenspace Audit and Action Plan" (2006) identified Duchess Wood as one of just four "most valued sites" in the Helensburgh area, and one of only seven designated for priority action. The "Green Belt Landscape Study" (2010, p76) defined Duchess Wood as of high value and described it as "managed well". The main paths in Duchess Wood were designated by A&BC as Core Paths in 2015. The Woodland Trust has described Duchess Wood as "A model nature reserve and community woodland".

Management responsibilities

v. The landowner is Luss Estates Company which in 2010 renewed its Management Agreement with Argyll and Bute Council for the Council to manage the Wood as a Local Nature Reserve for a further ten years, until 31 July 2020. Responsibility has been delegated to the Duchess Wood Local Nature Reserve Committee (DWLNRC), chaired by a councillor, and supported by A&BC officials, to oversee the management of the Wood on behalf of the Council. The DWLNRC has prepared this plan. One of the broad issues that the DWLNRC will keep under review during the currency of this plan is the impact of the Community Empowerment (Scotland) Bill/Act on the management or stewardship of

the Wood and the potential for transfer to a form of community ownership or partnership with A&BC.

Partnership

- vi. The DWLNRC is a partnership body and partnership with other organisations is integral to the management of the Wood. The DWLNRC has representatives of Luss Estates, A&BC, Lomond School (as the main neighbour landowner), wider educational interests, Lower Clyde Greenspace (LCG) and Friends of Duchess Wood (FODW). Scottish Natural Heritage maintains an overview of LNRs, including Duchess Wood, and advises and supports as appropriate. Lower Clyde Greenspace acts as the Council's agent over some aspects especially in relation to obtaining and managing major grants for which the Council can apply. The voluntary Scottish charity Friends of Duchess Wood assists with day-to-day safeguarding tasks and carries out certain management and educational tasks delegated to it by the DWLNRC; it also seeks funding related to those tasks. Other official and voluntary organisations assist in different ways and they are listed in the body of this Plan. Duchess Wood is much valued in terms of biodiversity and recreational value by local residents and visitors. Partnership working helps foster a sense of service to the community and brings the community together.
- vii. Partnership is the key characteristic, not only in terms of representation, but also in taking action. The Chair and other A&BC members of DWLNRC work with a range of administrative and legal personnel. FODW, representing the local community, has regular contact with police, fire, environmental and other local services on behalf of DWLNRC; with the Community Payback team; press and other public information links; research groups; as well as with local voluntary groups and national and regional organisations. LCG has partnership links to help arrange works in the Wood and to raise the necessary external grants. A number of other groups and organisations may also manage improvement works in the Wood. In brief, cooperative partnership is the essence of DW operations.
- viii. The DWLNRC has decided to manage the woodland in a fashion which encourages multipurpose uses and outcomes. Such an approach complements guidance available from organisations such as SNH and Forestry Commission Scotland. The Plan takes into account the primary designation of the Wood as a Local Nature Reserve (and the protection and enhancement of its biodiversity), its function as community woodland with a wide range of users, and the possibility, arising from the management activities, of using timber from the Wood for a variety of purposes. We will do this by working in partnership both with official and with voluntary organisations, and by taking into account the needs of the different users of the Wood.

Long-term objectives

- ix. The long term objectives are likely to remain largely unchanged for the foreseeable future, and reflect the aims above:
 - a. to manage the Wood so as to maintain and enhance its semi-natural mostly broad-leaved habitat and conserve and improve its biodiversity;
 - b. to provide and enhance provisions for public access;
 - c. to maintain access ways and other facilities used by visitors;
 - d. to encourage and publicise research;
 - e. to encourage and promote education, including the use of the Wood for forest nursery or forest school initiatives;
 - f. to encourage recreational uses of the Wood, including appropriate sporting and entertainment activities;
 - g. to support voluntary involvement.

Medium term objectives and priorities for action

x. Within each long-term objective are several medium-term objectives, and medium and short term actions, which we anticipate will be met during the life of this plan, but with the proviso that many of the actions depend on the necessary external funding being found, and this is a major challenge. The delivery of all of these objectives is supported by a number of agreed operational policies which help determine the approach to be taken. In the context of limited availability of funding it is important to be clear about where the priorities lie; the main elements are summarised below and set out in a comprehensive action table in the MP.

a. Woodland management:

- continue to restructure the woodland to a more native composition and condition and to assess, protect and enhance its biodiversity;
- implement the strategy and action plan for the boundaries;
- support the increase of "woodland corridors" linking Duchess Wood to other local woodlands;
- increase the biodiversity of the Wood by digging and maintaining suitable pond(s) to provide a still-water habitat;
- continue to investigate the use of timber from the Wood which becomes available as the result of action in support of the MP.

Action priorities

- * secure professional advice on woodland management
- * remove selected storm-damaged trees
- * thin sycamore and ash in selected areas
- * create open glades/fell sycamore near peripheral path
- * eradicate Japanese knotweed and rhododendron
- clear fell small coups of sycamore
- plant/replant where opportunities arise
- manage and protect areas of new planting
- * dig trial ponds to assess viability
- * boundary management
- * use of timber from Wood

b. Public access:

- Support and publicise access policies based on the Scottish Outdoor Access Code and SNH guidelines for LNRs
- provide and maintain clear signage to the Wood and around the main paths;
- create no new paths but improve existing constructed paths, particularly at burn crossing points.

Action priorities

- complete an all-abilities loop path and make the car park as suitable as possible for all-abilities use
- * new car park sign from Rhu Road Higher
- * additional direction and information signs in Wood
- replace three bridges by large culverts
- * regularly review access policies.

c. Maintenance:

 maintain paths and drainage and other facilities to ensure the Wood remains an attractive, diverse and reasonably safe natural woodland through regular inspection, repair and safeguarding;

Action priorities

- * maintain existing paths, drainage, fencing and signs
- deal with storm damage where it affects access or safety
- clear litter and report problems to fire, police and other services
- work in partnership with official and voluntary organisations.

d. Research:

 encourage research into the Wood's plants and wildlife and publish the results.

Action priorities

- engage with the "Citizen Science" initiative as a framework for further research
- conduct surveys of mammals, other animals (reptiles, amphibians, etc), birds, insects and spiders, and water life
- * the surface geology and soils
- * maintain and improve existing checklists.

e. Education:

- enhance the use of the Wood for educational purposes and maintain and improve its educational values and facilities.
- support the use of the Wood for forest nursery or forest school initiatives
- provide information on the Wood's biodiversity for all visitors.

Action priorities

- * liaise with schools and tertiary education centres
- make information for schools available through website
- evaluate impact of Forest Nursery on Wood environment,
- * visitor survey
- * maintain website and publish information leaflets
- * keep information hub up to date

f. Recreation and community engagement

• keep under review policies for recreation and community engagement which take account of the different needs of users.

Action priorities

- encourage recreational uses of the Wood, including appropriate sporting and entertainment activities;
- monitor recreational and sporting uses of the Wood and where necessary require formal approval (while taking a proportionate approach to small scale events);
- ensure such activities cause no damage to the Wood.

g Voluntary effort:

 support voluntary effort to protect, maintain and enhance the Wood and its facilities.

Action priorities

- support the Friends of Duchess Wood and their coordination of voluntary effort
- xi. Some of the priorities will need substantial funding; some will need limited funding, whereas others can be undertaken by voluntary action. These priorities indicate a balanced and positive approach which should lead to significant improvements in the biodiversity of the Wood and its value to the local and wider communities.

Conclusion

xii. Duchess Wood is a long-established woodland, recognised as an outstanding example of a Local Nature Reserve with a high level of planning protection. It is much used and valued as a local facility which also attracts visitors from afar. It is a good example of partnership working, not just between the Council and the Friends of Duchess Wood, but involving a wide range of other contributors. Its long-term value to the people of Helensburgh, to tourism and to biodiversity close to a major town is exceptional, and it is essential that such a facility is fostered for future generations.

MANAGEMENT PLAN 2016-21

INTRODUCTION

- 1. Duchess Wood, in the Green Belt to the west of Helensburgh, has been a Local Nature Reserve (LNR) since 1998. It is one of only two LNRs in Argyll and Bute. The landowner is Luss Estates Company (LE) which in 2010 renewed its Management Agreement (MA) with Argyll and Bute Council (A&BC) to manage the Wood as a Local Nature Reserve for a further ten years, until 31 July 2020. This is the fifth Management Plan (MP) for the Wood, although the two earliest plans, dating back to 1994, were of a different nature, and not consecutive.
- 2. Management of the Wood is the responsibility of A&BC which exercises that responsibility through the Duchess Wood Local Nature Reserve Committee (DWLNRC), a sub-committee of A&BC. In addition to a Councillor (as Chair) and A&BC officials, membership of the DWLNRC includes representatives of Luss Estates Company, Lower Clyde Greenspace (LCG), Friends of Duchess Wood (FODW), Lomond School (one of the main neighbouring landowners), and wider educational and voluntary organisations. LCG acts as agent for A&BC, including in relation to major fund-raising exercises. FODW is a local voluntary Scottish charity set up to support the DWLNRC, and to assist in the Wood's management, safeguarding, education and community liaison. Scottish Natural Heritage (SNH) assists the DWLNRC in an advisory capacity. The DWLNRC prepared this Plan, which was noted and approved by A&BC's Helensburgh & Lomond Area Committee on XXXX, and where "we" is used in the text it signifies the partnership represented through the DWLNRC.
- 3. This combination of interests, working in partnership, has shown itself to be dynamic, and a great deal has been achieved in the span of the 2012-16 MP, especially regarding access (paths, culverts, bridges), fencing (including new fencing along the West Highland railway line), clearing of rhododendron and sycamore, the planting of native trees (including native fruiting trees), the removal of the old railway carriage, biodiversity recording, educational activities, a much increased recreational use of the Wood, and greater community involvement. Duchess Wood is a much valued and used local facility deserving both protection and increased woodland management. It is significant that A&BC continues to support it at a time of financial pressure, but external grants will be essential if the momentum is to be maintained.
- 4. This Management Plan covering the five years from 1 October 2016 30 September 2021 has been drawn up by the DWLNRC, and is an edited and revised version of the MP for 2012-2016. That in turn was based upon the third MP prepared by Erika Luukas of Scottish Origins LLP. The main emphases for this period will be:
 - i. Woodland management
 - ii. Access
 - iii. Maintenance
 - iv. Research
 - v. Education
 - vi. Recreation
 - vii. Voluntary effort
- 5. The Plan covers a wide range of activities, some quite substantial, and actions have generally been expressed in positive language such as "X will be done". However all of the major "woodland management" and "access" actions, and some less substantial actions, depend on the necessary funding being found, and this will be a challenge. At the same time, many other actions will continue to be undertaken through voluntary and partnership efforts.

DESCRIPTION

Location / designation of Duchess Wood

- 6. Duchess Wood lies at the western edge of Helensburgh, north of Rhu Road Higher and south of the West Highland railway line between Glasgow and Fort William. It is bounded on the east by a residential area and on the west by semi-improved wet grassland. At the southern edge there are sports pitches and some housing. Further housing is planned at the lower boundary of the western edge. The Duchess Wood car park access grid reference is NS 2842 8337. A new map showing the location, accessways and facilities of the Wood is on page 10. This map is also included in Annex 6, along with a section of the Ordnance Survey map of 1862, which shows the outline of the Wood much as it is today, and a map taken from the 2007-2011 MP which shows the designated "compartments" which help in subdividing the Wood. The importance of Duchess Wood has been recognised in official reports. The "Greenspace Audit and Action Plan" (2006) identified Duchess Wood as one of just four "most valued sites" out of 59 Helensburgh sites assessed, and one of only seven designated for priority action. The Ironside Farrar Report "Green Belt Landscape Study" (2010, p76) defined Duchess Wood as of high value and described it as "managed well". The Woodland Trust has described Duchess Wood as "A model nature reserve and community woodland".
- 7. The Wood is designated in the A&BC Local Development Plan (2015, map 25) as Green Belt, as a Local Nature Reserve, a Local Nature Conservation Site, and an Open Space Protection Area. It is a "Woodland of Long Established Plantation Origin" (LEPO) on the SNH Ancient Woodland Inventory and is on the A&BC list of Sites of Importance for Nature Conservation. It appears in the Argyll and Bute (A&B) Biodiversity Action Plan. The main paths in Duchess Wood have been designated by A&BC as Core Paths, and the Wood is part of the proposed Green Network for Helensburgh.
- 8. The Wood's aspect is south-south-westerly, its altitude is between 20 and 65 metres above mean sea level and its gradients range from flat to 30°. No site specific soil survey has been carried out, although general surveys of the area suggest that the soil may include gley soils, and forest brown earth soils. Rainfall is about 60 inches a year. The geology underlying the Wood shows two faults running through the area and they form the boundaries between three main rock groupings: (i) Bullrock Greywacke (a form of sandstone) to the north-west, (ii) Sandstone and red-brown siltstone with nodules of limestone to the south-east, and (iii) Rosneath conglomerate to the south and south-east. Small burns with steep-sided banks / gullies run down the hill. The quality of the burn water is clear. Some web links to explanations of the geology are given in the Bibliography at (1).
- At 23ha, Duchess Wood LNR is a significant remnant in a largely urban landscape of Semi-Natural Woodland, parts of which are most probably of ancient origin, although its initial extent is currently unknown. Although classed as of Long Established Plantation Origin, this assessment is based on the Roy Maps of 1750 which were prepared for military purposes and thus woodlands not of military importance were often not mapped. The 25 inch Ordnance Survey map from 1862 (See Annex 6) shows the woodland area (which was possibly part of the designed landscape of Ardencaple Castle grounds) almost the same as it is today. A summary of the historical context of the Wood is given in Annex 1. The natural woodland is dominated by oak, ash, birch, alder, Scots pine, rowan, and hazel, but there are also significant stands of sycamore and beech. Local information suggests that the dominance of sycamore in sections of the Wood dates back to the great west of Scotland gale of 1968. Ring counting of a recent fallen Scots Pine in the plantation north of Rhu Road Higher suggests that this dates to the period between the first and second world wars. The understorey trees and shrubs and the groundflora are also varied and interesting. The Wood is home to a wide range of animals (including roe deer, fox, moles and bats); birds (including owls, sparrowhawk,

jay, and bullfinch); and insects (although the types of insect life are not well known at present). In shaping this MP much helpful information has been taken from "Woodland management: a practical guide" and "A handbook of Scotland's trees"; the full references are given in the Bibliography at (2).

- 10. A full ecological evaluation using the Ratcliffe (1977) Criteria was prepared for the 2007-11 MP, and this (with some revisions and updates) is attached as Annex 1. This emphasises the value of the Wood as an ecological resource and the potential for continuing to protect and develop its biodiversity.
- 11. The 2007-11 MP also contained a report detailing the results of a survey of the Wood, using the National Vegetation Classification (NVC) framework, and this is attached as Annex 2, with some revisions to make it more readable for a lay audience, and updates. This description remains an important resource and will continue to inform the management of the Wood during the five year period 2012-16 and beyond. It identifies three main woodland types:
 - Oak-Birch-Wood sorrel (the most abundant type)
 - Alder-Ash-Yellow pimpernel
 - Ash-Rowan-Dog's mercury

The report pointed out that the three types occurred in an intricate mosaic with each other throughout the Wood.

Map removed to make electronic transmission easier

Map of Duchess Wood, prepared by Babcock International, 2015, and based on a map by John Dale, A&BC, 6.9.2012

- 12. The A&B Local Biodiversity Action Plan (LBAP) identifies woodland as a priority habitat and emphasises the vital role that woodlands play in conserving threatened plants, animals and fungi. The LBAP recognises that A&B woodlands hold one of the most diverse ranges of moss, liverwort and lichen communities in the world and are home to many important protected and priority species. Although focused on the opportunities created by the harvesting of commercial forests, the LBAP's vision of increasing woodland habitat networks to help reverse the pattern of habitat fragmentation that has occurred over the centuries is very relevant to the future management of Duchess Wood.
- 13. The Work Programme in the LBAP includes a number of actions, some of which may have an impact, directly or indirectly, on this MP, such as native woodland expansion and the control of invasive species. The LBAP reference is given in full in the Bibliography at (3) and a fuller summary of the LBAP is given in Annex 3. This 2016-2021 MP aims to address all the biodiversity issues in the LBAP, and seeks to support and learn from the actions envisaged for woodland habitats.

Duchess Wood - what we know already

- 14. During the period of the 2007-11 MP, the Friends of Duchess Wood arranged the compilation of a number of constantly evolving and updated checklists of species found in the Wood; these now comprise:
 - Bryophytes (Mosses and liverworts)
 - Ferns
 - Fungi
 - Trees and shrubs
 - Birds
 - Flowers and flowering shrubs
 - Mammals.

Several of these invaluable checklists (attached in annex 4) were based on longer professional reports – see the Bibliography at (4) and (5). They confirm the diversity of species found in the Wood and the value of the Wood as a haven for a large number of plant and animal species. It will be important during the next period to continue to revise the existing checklists and undertake additional surveys.

- 15. This description confirms that a great deal is now known about the ecology and biodiversity of Duchess Wood, but that there is much still to be discovered. In essence, we need to know what currently exists. This offers great opportunities for further research and educational work. The development of the "Citizen Science" movement in recent years can shape research which not only aids our understanding of the Wood, but can also contribute nationally to important issues (and see P XX). This updated plan will:
 - seek to act on and develop our knowledge,
 - integrate the different approaches to classifying the ecology of the Wood,
 - identify the biodiversity priorities for the Wood,
 - investigate where enhanced protection or support is needed.

MANAGEMENT PRINCIPLES, AIMS AND OBJECTIVES

Overall aims

Duchess Wood will be managed as a semi-natural area, to conserve and enhance its biodiversity and landscape value, to encourage research, and to provide visitors with reasonable access and opportunities for responsible and quiet recreation and education.

- 16. In line with the views of Scottish Natural Heritage and Forestry Commission Scotland our intention is to manage the Wood as a multipurpose facility see the web reference at Bibliography (4). The context for its effective management therefore contains a number of strands:
 - i. The Management Plan implements the terms of the Management Agreement between Luss Estates Company and Argyll and Bute Council.
 - ii. The primary designation of the Wood as a Local Nature Reserve means that we must meet the SNH objectives for such sites (see Bibliography at (5).
 - iii. At the same time we must be conscious of the significant community use of the wood, and while giving priority to the MA and the LNR objectives, take account of the Community Woodland Association objectives for community woodland.
 - iv. We will do this by working in partnership with both official and voluntary organisations, and by paying attention to the needs of the different users of the Wood.
 - v. A&BC ensures that any legal obligations in relation to public access provisions and health and safety legislation are met.
 - vi. A&BC has established the A&BC DWLNRC under the chairmanship of a local councillor to manage the implementation of these objectives, monitor and record all activities, and report to the Council and to the community.
- vii. The DWLNRC delegates authority to FODW to carry out many relevant day-to-day actions

This plan sets out what we hope are achievable objectives and actions, in the short term (over the first two years 2016-18); in the medium term (over the next three years 2018-2021); and in the long term (beyond the end date of this MP (30 September 2021). These objectives are structured in the context of the overall aims for the Wood. The actions in relation to the objectives are described in general terms and specific actions are related to the compartment structure used in the 2007-11 MP, and illustrated in the map on page 9 and in Annex 6.

During the currency of this plan the DWLNRC may evaluate and review the possible relevance and impact on the management of the Wood of the Community Empowerment (Scotland) Act and its supporting legislation and guidance, and consider the potential for transfer to a form of community ownership or partnership with A&BC. During the period covered by the fourth MP (up to 2016) a number of ideas were put forward for different uses of the Wood. We will evaluate and where appropriate support suggestions for innovative uses of the Wood, for example the establishment of forest nurseries or schools, or the provision of autumn illumination events.

Long-term objectives

- 17. The following long term objectives are likely to remain unchanged for the foreseeable future, and reflect the aims above:
 - i. to manage the Wood so as to maintain and enhance its semi-natural broad-leaved habitat and conserve and improve its biodiversity;
 - ii. to provide and enhance provisions for public access;
 - iii. to maintain access ways and other facilities used by visitors;
 - iv. to encourage and publicise research;
 - v. to encourage and promote education including the use of the Wood for forest nursery or forest school initiatives;
 - vi. to encourage recreational uses of the Wood, including appropriate sporting and entertainment activities;
- vii. to support voluntary involvement.

Medium-term objectives

18. Within each long-term objective are a number of medium-term objectives, and medium and short term actions which we anticipate will be met during the life of this plan (but with the strong proviso set out in paragraph 5). The delivery of all of these objectives is aided by a number of agreed operational policies which help determine the approach to be taken. The detailed objectives, policies and actions are described in the full text which follows, and are set out in table 1 at the end of the text; the main elements are summarised below:

i. Woodland management:

- a. following the principles of good woodland management and in the context of the available resources, continue to restructure the woodland to a more native composition and condition;
- b. establish a programme of selective thinning of sycamore and beech, both to create additional open glades and to allow the planting or replanting of native species;
- c. identify individual native trees, or groups of trees, which can be managed as a demonstration of good forestry practice to enhance their later value
- d. eradicate rhododendron and Japanese knotweed and reduce other nonnative invasive species;
- e. assess the biodiversity of habitats and species in the Wood to improve understanding of how it can be protected and enhanced;
- f. manage and protect the fruiting trees/shrubs and the oak and other trees planted by FODW around the Pony Field and in other areas of the Wood.
- g. increase the biodiversity of the Wood by digging and maintaining suitable pond(s) to provide a still-water habitat;
- h. establish a strategy and action plan for the boundaries which meets the needs of both the woodland and its neighbours;
- i. increase the "woodland corridors" linking Duchess Wood to other nearby woodlands;
- j. encourage the use of timber from the Wood and in the context of the primary management objectives, sell redundant timber for firewood and make timber from the Wood available for craft purposes.

ii. Public access:

 Support and publicise access policies based on the Scottish Outdoor Access Code and SNH guidance for LNRs

- b. Provide and maintain clear signing to the Wood and around the main paths;
- c. create no new paths, but improve existing constructed paths particularly at burn crossing points.

iii. Maintenance:

a. clear litter, maintain paths and drainage and other facilities in the wood, to ensure that the Wood remains an attractive, diverse and reasonably safe natural woodland, through regular inspection, repair, and safeguarding.

iv. Research:

a. encourage research into the Wood's plants and wildlife and publish the results.

v. Education:

- a. enhance the use of the Wood for educational purposes and maintain and enhance its educational values and facilities;
- b. support the use of the Wood for appropriate childrens' forest nursery or forest school initiatives

vi. Recreation

a. keep under review policies for recreation which take account of the different needs of users.

vii. Voluntary effort:

a. support voluntary effort to protect, maintain and enhance the Wood and its facilities.

Woodland management

- 19. Effective woodland management is potentially the most demanding aspect of protecting and enhancing the Wood and professional advice is likely to be necessary to help plan and undertake this work. Useful source texts which this section draws on are "Woodland management: a practical guide" and "A handbook of Scotland's trees", as well as the FCS, SNH and CWA websites.
- 20. The management context for the Wood is established firstly by the requirements of the LEC/A&BC Management Agreement which has as its objective to "preserve and enhance the appearance of the Managed Land, and to promote the enjoyment of the countryside by the public". The agreement refers to a range of maintenance and access works (which are dealt with later), but also to the proper management of the Wood and the inspection of all trees for obvious signs of disease/damage. FCS guidance supported by SNH emphasises the importance of a multiple use approach, and specific SNH quidance on LNRs concentrates on enhancing recreation, education and biodiversity. The aims of the Community Woodlands Association add economic development, renewable energy and social inclusion to the mix. The A&B Biodiversity Action Plan (see paragraphs 12 and 13) identifies a number of important issues for woodlands which this plan will help address. The overall **policy** is to manage the Wood so as to protect and enhance its biodiversity and its landscape value, while providing suitable public access. At the same time we will examine whether it will be possible to sell, or otherwise make available, unwanted timber from the wood to aid local businesses and craft workers. A

primary important **action** will be to secure professional support and advice on woodland management.

Native trees

- 21. The Wood has a wide range of native trees, including oak, ash, birch, hazel, alder, rowan, wych elm, willow and others. One main aim of this plan is to conserve and protect the native trees, but also to manage them in a way which gives a variety of age and spacing, and helps encourage greater biodiversity of the understorey, of ground flora and wildlife. **Action** may, in places, involve thinning of native trees and their replacement by the same or different species (see photograph) and while this work is being done, the removal or thinning of any non-native trees see below.
- 22. We also propose to identify individual native trees, or groups of trees, which can be managed as a demonstration of good forestry practice, to show what can be done to help produce local timber suitable for a variety of uses, such as furniture, construction, turning and other crafts, woodfuel and charcoal. This approach will also include some of the non-native species discussed below. The establishment of good forestry practice will have a strong educational element and should also help the rural or woodland-based economy.

Dead wood

23. Leaving dead wood standing or lying naturally or in man-made heaps brings a lot of advantages in terms of creating habitats to support a wide variety of bird, animal and insect life. The Wood already has a fair number of standing and fallen trees. "Woodland Management" suggests a minimum ratio of three standing and three fallen trees per hectare, spread throughout the woodland. The Wood probably has this minimum at present, though it tends to be concentrated in certain areas. The storms during the 2011 - 2014 period left a large number of fallen and broken trees which will add to the deadwood in time. Another problem is that there are many dead, diseased or damaged trees close to the peripheral path (mostly sycamore, some ash), and for safety reasons we propose that the more fragile of these should be felled and the timber left to decay, or removed for other uses. It may also be possible to "ring bark" some trees deeper in the Wood to create standing dead wood in areas where there is little at present. This **action** will be covered by the short term work proposed in the section below.

Sycamore and ash

- 24. **Action** to change the Wood to a more natural woodland will mean gradually removing quite substantial numbers of sycamore. The photograph here shows how little light penetrates the dense sycamore canopy. FODW work parties have observed that extensive areas of the Wood are now dominated by sycamore. It is the greatest arboreal threat to the character of Duchess Wood and much the biggest challenge to the Wood's management. Experience in the Wood suggests that in current conditions, sycamore is self-seeding freely only in localised areas, although there are many saplings perhaps 20-30 years old, and regrowth from old stumps is very vigorous. The variation in re-seeding of sycamore is something that will merit further research and testing to see how reseeding can best be controlled. Although the sycamore canopy blankets areas of the Wood thus reducing flower and other lower growth, it is thought that mature trees can support a high (although not particularly diverse) population of wildlife. It appears that ash does self-seed successfully around the Wood, and in several areas ash and sycamore grow side by side, and removal of some mature ash with the sycamore will be necessary.
- 25. The **policy** is therefore that a number of mature sycamores and ash are identified for retention as specimens through the Wood, but that a major part of the workplan for the next five years and beyond should involve the progressive removal of the rest of the

sycamore, and ash where appropriate. FODW has already started a campaign of removing sycamore saplings through its work parties, but there is urgency to obtain funding for professional felling of the larger trees. Discussion with FCS and with felling and woodfuel selling contractors suggests that there may be sufficient value in sycamore and ash in certain areas to at least cover the cost of felling/thinning and this will be factored into any application for funding under the "Woodlands In and Around Towns" (WIAT) grant scheme. While planning this work, tests will be made to identify whether any of the trees are of the "ripple" form of sycamore, which may have significant commercial value. As the more detailed description below suggests, thinning or clear felling may cause significant disruption but should also enable us to begin the restructuring of the Wood into a more natural and biodiverse environment. Without this short-term pain, it will be difficult to achieve the long-term gain that is the main objective of this plan.

26. This policy has a number of important implications:

- i. Such extensive work may, on occasion, necessitate professional support and assistance
- ii. Much of the work can only be carried out with mechanised (or possibly horsedrawn in some places) equipment.
- iii. The main peripheral path and some other parts of the paths network may have to be improved to take small log-handling transporters. Experience suggests that this can be managed in an attractive way, commensurate with the setting. Such improvements would also improve accessibility for some users for example horseriders and those with buggies.
- iv. However, while the work is being carried out some areas of the Wood may have to be closed to users.
- v. Although some of the cut wood will be left in the Wood, most will have to be removed, and arrangements will have to be made for the disposal of the timber, which could involve selling wood for a range of purposes.
- vi. This offers opportunities to work with local arboriculturists, tree surgeons, timber and wood fuel merchants, craft workers and others who can use the timber. Areas may have to be created near the main road access (and possibly rail access) points to enable timber to be stored and removed. Removal may also damage access paths and planning of the operations will need to include provision for restoration of the paths.
- vii. Dealing with the brash from tree felling will also have to be considered and while some can again be left to decay, experience has shown that very large quantities can be produced from some trees. Chipping (which may also have some commercial value, or can be used as a mulch in the Wood) or burning may have to be considered.
- viii. Any extensive removal from the main sycamore-dominant areas (north of the garages and along the northern boundary with the railway) will leave quite bare areas for some years. A policy of progressive thinning of sycamore and ash may be more acceptable in certain areas, particularly the heavily used areas near entrances and there will also be biodiversity and maintenance advantages in identifying and clearing a number of small open glades. The cleared or thinned areas can then be replanted with a native mixture of oak, ash, alder, rowan, hazel and other trees and shrubs, the mix depending on the ground conditions and other factors. Another option may be to allow the open glades to be recolonised naturally and to study over time how the woodland develops compared to the replanted areas this could be a useful research and education opportunity.
- ix. Volunteer work parties organised by FODW can manage the removal of seedlings, regrowth and small saplings, but not anything more than about 100mm in diameter.

- x. In the short term we propose to seek professional advice and seek funding to begin to create open glades and to thin and remove sycamore and ash from close to the main peripheral path and the south/north path from the eastern Rhu Road Higher and Millig Street entrances; these areas are generally easier to access and maintain. We will also look carefully at standing dead or diseased trees near paths and where appropriate fell or prune. With professional advice we will also use the period to plan for the clearance or thinning of a larger area of sycamore (roughly one third of this section) along the northern boundary, then carry out the works at a suitable time. Depending on the success or otherwise of these works we will then plan for the clearance or thinning of the remaining sycamore-dominated area along the northern boundary at a later stage. The timetabling for this work may also depend on the nature of the grants that might be available to support the work.
- xi. It will also be necessary to consider what to do with the cut stumps whether to try to kill or remove the stump or to allow it to coppice. This is another area where professional advice will be important.

Beech

27. Beech is more widespread in the Wood than a casual look might suggest. Although not a native tree, it is thought that its natural climatic limit has not yet been reached in the UK, and its presence can be accepted in a sensible way in our natural woodland, contributing to the biodiversity. It is an attractive tree particularly in its spring and autumn colours. There are a number of very large and old mature trees around the boundaries (beech in photograph in NW corner) and it is the **policy** that these should be protected and retained. However, beech seems to regenerate quite successfully in the Wood (better than sycamore) and it needs to be monitored and controlled. Possible **action** is to allow it to regenerate in a managed way in the north west corner compartment where the mature trees are concentrated. In time it is likely that the beech would become the dominant species there. A number of other semimature trees would be identified around the Wood for retention and protection, while the remaining trees would be removed at the same time as other operations were being carried out in the area.

Scots Pine plantation

28. The Scots Pine plantation (which possibly has other pines mixed in) between Rhu Road Higher and the Millig Street garages needs to be managed as a separate section. It is narrow and has a long boundary facing the prevailing wind direction, so edge effects will be important. It is also home to a large rookery, with over 80 nests (spring 2015) which needs to be protected. However there is a fairly substantial undergrowth of sycamore and ash in places, and the pine trees are now of such a size that they should be thinned. Much of the undergrowth can be dealt with by volunteer action, but thinning the larger trees and the complexities involving the rookery will need professional advice. There may be timber value in the felled trees which could help fund other work in the Wood.

Other mature trees

- 29. Around the Wood there are a number of other mature trees including different conifers, several limes, and a few sweet (Spanish) chestnut. We propose a **policy** to protect and retain these trees, with the proviso that if any become unsafe near to paths, **action** will be taken to assess and manage the problem trees.
- 29A FODW has planted a number of new trees in recent years for example the group of 100 oak trees in the middle section of the north of the Wood, the group of fruiting trees and shrubs around the boundaries of the Pony Field, and smaller groups where opportunities presented. It is important to look after these trees while they are

still young and subject to deer damage in particular. The **policy** is to continue to look for opportunities to replant, and **action** is to fence and protect, and nurture new plantings. Major opportunities for replanting will occur if any significant sycamore coups are felled.

Other invasive species

- 30. As well as the sycamore and beech trees, there are a number of other non-native invasive species which have a major impact on the Wood and its biodiversity, and our **policy** is to control and eradicate them. They include:
 - Rhododendron. Scattered throughout the Wood, sometimes in substantial clumps. **Action** to continue removing the bushes and control of regrowth is a short-term priority for this plan. Dealing with the brash involves the same considerations as for the trees, but recent experience has shown that it can successfully be burned.
 - Japanese Knotweed (see photograph). Present in a number of locations around the Wood and has been regularly attacked. **Action** to remove and to continue control of regrowth is also a short-term and urgent priority.
 - Laurel. Only present in a few locations, mainly in the south west corner. Its removal and control of regrowth is a medium term priority for **action**.
 - Lamium galeobdolon (Tri-coloured archangel). Present in a number of locations around the eastern boundary of the wood. Will be monitored initially, and consideration given to **action** to remove in the medium term.
- 31. In addition, two native species will be monitored and action considered:
 - Bracken. In open areas mainly in the south half of the Wood. The areas are
 not extensive but one of the few open areas in the Wood is being taken over
 and trial action is being undertaken in the short term to examine if the
 bracken in part of this area can be beaten and bruised and thereby sufficiently
 weakened to go into decline. Results so far have been encouraging. Care will
 also be taken to ensure that other ferns are not damaged.
 - Brambles are not generally a problem, except that they can erupt and make
 the ground impassable when a section of woodland is felled but they can be
 managed in such circumstances. However there is also a large area of mixed
 trailing brambles and sub-erect brambles (which are relatively uncommon) at
 the east end of the pony field, and they are steadily extending their coverage.
 Professional advice will be sought on how best to control this area.

Boundary issues

32. Many of the issues identified above are more significant near the boundaries of the Wood, particularly where the boundary is with houses. Duchess Wood is bordered on its east side by a number of residential streets. From the north, they are Macleod Crescent, Macleod Drive, Duchess Drive, and Duchess Park; as the eastern boundary continues south, it runs alongside the end property in Millig Street, then after the garages, alongside Strathclyde Court and its lengthy garden. Kathleen Park in the south west corner also borders the Wood, although it is separated from the Wood by the south bank of the burn which runs behind the houses. It is also important to bear in mind that the northern boundary is formed by the West Highland railway line. A more detailed note on boundary issues is attached as Annex 5. In addition a new housing development in and to the north of the old Dobbie's garden centre beyond the south west corner of the Wood has been designated in the LDP for housing. The development will be contiguous with the Wood and there will be access from it to the Wood; it will be important to monitor the detail of the development and the impact it might have on the Wood.

- 33. The management of the Wood should take into account the safety (and to an extent the amenity) of neighbouring residents. Branches and trees have fallen into gardens and onto garages in recent years and particularly during the severe storms between 2011 and 2014. Action has been taken by A&BC and FODW to deal with emergency issues that have arisen. An informal survey of the state of the trees close to boundaries was carried out in December 2011, but this preceded the gale of 3 January 2012 when there was a great deal of tree damage. Further informal surveys have since been carried out. In the short term, occasional boundary surveys will be needed. It will then be necessary to consider how to maintain a safe and suitable boundary or transition zone. In carrying out work in the transition zone around the boundary (which could be perhaps 5m wide) we should follow the principles set out in paragraphs 21-31 in relation to particular species and retain native mature trees where they are safe, retain other native trees and some non-native mature trees, but remove and thin drastically other non-native trees (while remembering edge effect issues). Lower, fruiting and flowering native trees such as rowan, hazel, hawthorn and blackthorn could then be planted in the transition zone to create a food-rich environment for birds, animals and insects.
- 34. At the same time, one of the broader aims of the MP is to ensure that neighbouring residents gain a greater understanding of the management needs of the Wood. There is no strict boundary as far as the wildlife is concerned and gardens are in essence an extension of the Wood. Residents can help protect and improve wildlife in the Wood, particularly the bird life. Boundary residents will also be encouraged to respect the needs of the Wood and not dump inappropriate garden waste (especially where there is a risk of spreading non-native invasive species).

Pond provision

34A In terms of enhancing the biodiversity of the Wood, one of the main habitats which is lacking at present is a still water pond, which could provide a habitat for frogs, toads and newts, but also be a resource for animals, birds and insects. Although there are numerous relatively fast-flowing burns in the Wood, which provide a special habitat, a still-water pond would help attract a wider range of wildlife. The pond or ponds would need to be a fair size and in a relatively open area so that it can warm up, and a number of possible sites have been identified. The first priority will be to test the ground to check whether it is sufficiently impermeable to sustain a pond, or whether some form of lined pond might be necessary.

Public access

35A Access to Duchess Wood will take into account both the Scottish Outdoor Access Code and the SNH Guidelines for LNRs.

The Outdoor Access Code is based upon three key principles:

- Respect the interests of other people. Visitors to the Wood should act with courtesy, consideration and awareness and should respect the needs of other people enjoying the outdoors.
- Care for the environment. The DWLNRC's role is to help maintain the natural and cultural features which make the Wood attractive to visit; visitors are expected to look after the Wood and leave the land as they find it.
- Take responsibility for your own actions. The DWLNRC, on behalf of A&BC will act with care at all times for people's safety. Visitors must remember that the outdoors cannot be made risk-free and should act with care at all times for their own safety and that of others.

The Code allows access for example by cyclists, horse riders, dog walkers, etc., but emphasises the importance of responsible access which takes account of other users of the Wood.

The Guidelines for LNRs draw attention to the general objectives of LNRs and explain that access is necessary to:

- maintain and improve biodiversity
- provide opportunities for environmental research and education
- enable people can become involved in nature conservation activities
- quietly enjoy their natural heritage.

The principles in the Access Code and the LNR guidelines are compatible with one another and are built in to the objectives of this management plan.

Paths

- 35. The paths network has been steadily improved since the first Management Agreement was signed, and particularly so since 2002. There are now a number of "constructed" paths, most of which are now designated by A&BC as Core Paths. There are four recognised access points (and the north-west access links the Wood to the round-Helensburgh footpath network and routes to the National Park), a well-laid peripheral path, an all abilities path at the flat, lower part of the Wood (which has been made a circular path thanks to cooperation with the Cricket and Rugby Club when they were carrying out other work), and two subsidiary paths. A small car park is available at the Kathleen Park entrance. In addition, a number of informal or "desire line" paths exist throughout the Wood which are used much less frequently and give access to the more central parts of the Wood. Discussion between local residents and A&BC has been initiated to examine options for new footpaths associated with the possible housing development next to the south west corner of the Wood.
- 36. There are five main **policies** which will inform future actions in relation to the paths network:
 - To help provide and maintain relatively undisturbed "refuges" for wildlife (within the peripheral path, the south-west corner, and the "hammerhead" between Duchess Park and MacLeod Drive), general visitors should be encouraged to use the existing "constructed" paths network. This plan does not envisage the creation of any new paths other than temporary paths to facilitate access for the removal of timber or woodland management, and perhaps paths associated with any new housing beyond the south west corner.
 - The paths should be as natural as possible, and support the semi-wild nature of the Wood. This means that any fencing will be limited to narrow bridges, and when the fencing which is currently installed on one side of the Victorian stone bridge on the eastern path, and on part of the steep bank to the south, rots or is damaged, it will not be replaced. A similar approach will be taken to the small section to the south of the Strathclyde Court garages. However, the section of fencing at the bottom of the Scots Pine plantation on Rhu Road Higher should be maintained as it provides an effective barrier to visitors, particularly children and dogs, running onto a busy road.
 - The main paths may need to be improved to allow small timber-handling and maintenance vehicles access around the Wood (although any contractor involved would have experience of dealing with such terrain). It may also be necessary to create some temporary paths into other areas of the Wood. The planning for any such use will take into account the need for path restoration. Such improvements/changes may also have benefits for horse riders and others. Clearances over and around paths will also have to be checked and improved to allow vehicles or horses to pass freely.
 - The "constructed" paths should be well made, well drained and mud-free, and easy to maintain.

- The "informal" paths should be left as they are, with no attempt at improvement, or management, but should be monitored to check for over-use, and appropriate action taken if this appears to be a problem.
- 37. The short term priority for action is to resurface, and in places regrade, the allabilities path which has deteriorated over the last decade. This will restore the smoothness of that path to its state ten years ago to make it more suitable for wheel-chairs and push-chairs. In addition, if any substantial removal of trees is undertaken (as envisaged above), the main paths may need to be improved, and in places widened, to allow access for tree handling equipment. Even if such major works are not carried out, most of the peripheral path will need some maintenance in the medium term as some of the edges are deteriorating and some wash-away of the path covering has occurred. Although drainage has been much improved, (following a survey and report by the Paths for All Partnership, commissioned by FODW see Bibliography at (6)), there are still some areas where paths are damaged by rain and spate erosion, and crisis action will be needed to maintain the paths.

Burn crossings and drainage

- 38. Apart from the Victorian stone bridge on the eastern path, the bridges are wooden; three were constructed around 20 years ago and one about ten years ago. They are showing signs of wear. The three older bridges have been repaired regularly, but their life-span is limited. They are also relatively narrow, and two of the three are in awkward positions which do not lend themselves to substantial improvement. The newer bridge (the "Thurgood Bridge") is in good condition, but the steps down to it are exceptionally steep, and maintaining the fill of the steps is a problem. The steps were improved and refilled during 2014, but they remain a problem for the longer term. By contrast, two large culverts and a number of small culverts installed over the last ten years have so far proved easier to maintain (although the smaller culverts can block easily). The pathways over the larger culverts are also wide enough to take tree-handling equipment if this is brought in, and horses.
- 39. Many of the drainage culverts and ditches were installed and dug on the basis of a detailed report by the Paths for All Partnership in 2009 commissioned by the Friends of Duchess Wood. Of the 37 recommendations in that report, those rated as "High priority" and most of those designated as "Medium priority" have been implemented, much of the work having been done by the A&BC Employability Team. This is a good example of how partnership working also furthers the social inclusion potential of work in the Wood. The ditching needs regular maintenance, and the upstream and downstream stonework on the smaller culverts needs occasional maintenance, all of which can largely be carried out by voluntary effort. Other drainage improvements have taken place in the last five years (for example around the information boards on the pony field), and we will continue to monitor and improve areas of the paths which do not drain freely.
- 40. The **policy** is to continue to review and repair the remaining wooden bridges and maintain other crossings and drainage ditches and as the bridges approach the end of their usefulness and/or become unsafe, to replace them with wider, large diameter culverts (see photograph). The Thurgood Bridge, being only ever likely to be used for pedestrian access, will be maintained as a bridge.
- 41. A range of **actions** is envisaged in the short and medium term. Depending on other action, in the short term, the bridge to the west of the Pony Field, and in the medium term the north-east bridge, will be replaced by culverts. The south east bridge is likely to remain in reasonable repair in the short term. It is not essential for vehicular access to the peripheral path that it is replaced, but for ease of maintenance, a culvert will be advantageous in the longer term. Access into and out of the burn on the west side of the south east bridge has been graded to allow horses to cross easily, and this

approach may be necessary at the other crossings, depending on when culverts can be provided. The Thurgood Bridge will remain, but the gradient of the access steps will be reviewed.

Signposting

- 42. There are seven categories of signage in the Wood at present:
 - Main Information Boards at the Pony Field
 - LNR biodiversity information notices
 - Duchess Wood LNR signs
 - Finger signposts, mostly at entry points
 - Map boards at each entry point
 - A stone marking the establishment of the Wood as a LNR
 - Waymarkers for the spring flower walk/all-abilities path (green arrows) and main peripheral path (red arrows).

The main Information Boards installed in 2015 give many useful facts and illustrations of the management, history and wildlife of the Wood. The robust Duchess Wood LNR signs installed by Lower Clyde Greenspace remain in good condition and have been supplemented by the new mapboards. The finger signposts and biodiversity information signs are starting to deteriorate and some have broken and been repaired. The car park is not signposted.

- 43. The **policy** is to maintain the existing signage, and develop additional clear, helpful guidance to users of the Wood.
- 44. The **action** planned in the short term is to maintain, repair and where necessary replace all deteriorated signs and to confirm the request for a brown tourist sign from Rhu Road Higher to the car park.

Horse riding route

45. Horse riding is permitted in the Wood and follows the Scottish Outdoor Access Code. A preferred horse trail has been discussed in the past, but it has not been possible to provide this facility. Given the relatively small size of the Wood, and the need to maintain the "refuge" nature of the central part of the Wood, a separate horse trail raises problems. Equally, mixing horseriders, walkers and dogs on paths which have not been designed for horse riding also brings potential difficulties. The recent regrading of the burn crossing by the south-east bridge has been welcomed by riders, and some of the proposed access developments (such as the provision of culverts rather than bridges) should make riding around the wood easier. No clear **policy** on this issue has emerged, and at present the **action** planned is to consult further to try to determine the best way ahead which balances the needs of all users.

Maintenance

- 46. The **policy** in relation to maintenance is to make sure that the Wood as a whole is kept in a safe condition for users, while respecting the semi-wild character of the LNR, and that access ways and equipment provided in the Wood are kept in good condition. Many aspects of the maintenance function have been mentioned above, which can be divided into two broad categories: emergency rectification and safety, and routine maintenance.
- 47. Emergencies, some minor, some significant, arise for a number of reasons. Recent examples have included path erosion due to excessive rain, damage to fencing and bridges, vandalism and wind damage from storms. Responsibility for the

management of the Wood rests with A&BC and safety is a fundamental part of that duty. The major crisis maintenance is carried out by A&BC and LCG, while minor work is undertaken by FODW. FODW regularly liaises with the police, fire and other services, and provides a safeguarding function, rectifying what is within its capacity and reporting to the appropriate authority anything that is not.

- 48. A routine maintenance schedule, attached as Annex 7, has been approved by A&BC and the local environment services section of the Council has the responsibility to apply it. The schedule recognises that routine maintenance is very much a partnership activity. A&BC regularly empties the litter bins placed at all four entry points to the Wood. FODW not only carries out daily clearance of litter beside paths, but periodically holds a litter sweep deeper into the Wood. A&BC then arranges to collect the findings. Bins are generally well-used by the public, including scooping by most dog-owners. However there are continuing problems with dog scoop bags being left for later collection by some owners and then forgotten. Other maintenance includes strimming beside the picnic benches and cutting back undergrowth (especially over and around paths), and clearing culverts to protect paths, especially at the leaf fall in the autumn. FODW has been greatly assisted in these activities by the local Community Payback team and other voluntary effort.
- 49. In general the **action** envisaged for the 2016-2021 MP will focus on dealing with any emergencies that arise, continuing the present level of regular maintenance in line with the agreed schedule, and undertaking specific action identified in earlier sections; these specific actions are brought together in the Action table below.

Research

- 50. The earlier MPs and the research undertaken so far (summarised in paragraph 14) help to understand the diversity of life in the Wood. Since the MP 2012-16 was drawn up, the concept of Citizen Science has developed, and the **policy** for the next four years will be to participate in relevant Citizen Science projects and to encourage and undertake further research in the Wood to help understanding of:
 - Which species might need protection
 - Which species might need to be controlled
 - How greater biodiversity can be encouraged
 - How the Wood relates to the local community and to tourism
- 51. Citizen Science is defined as "scientific work undertaken by members of the general public, often in collaboration with or under the direction of professional scientists and scientific institutions" and SNH leads and coordinates much of the activity in Scotland. The SNH website gives access to the report on an important workshop in May 2015. Amongst the topics which could usefully be pursued in Duchess Wood are
 - The use of "camera traps" to help identify mammals, birds, amphibians and reptiles and other wildlife present in the wood
 - Air quality surveys through the monitoring of lichen and tar spot on sycamore
 - Tree health
 - Soil and earthworm surveys
 - Pond and flowing water surveys.

The development of Citizen Science in the Wood could involve schools and families in a coordinated way and contribute not only to research specific to the Wood, but also to help build the national picture in those areas of interest.

52. Paragraph 14 above refers to the research already carried out within Duchess Wood and to the seven checklists already prepared by FODW (see Annex 4). In addition, we will continue to monitor the rookery population and we will seek help in surveying

- mammals
- other animals (reptiles, amphibians, etc)
- insects and spiders
- water-living species
- the surface geology and soils
- and we will continue to update and extend the existing species checklists.

The short term priorities will be the rookery, mammals, particularly bats, and butterflies/moths. Bats are a European Protected Species, and like the other priorities for surveys, will have to be considered in the context of adjacent woodland and other habitats. Bat surveys during the 2012-2016 period have shown Pipistrelle and Soprano Pipistrelle bats at least, using the Wood for feeding; where their roosts are remain unclear though guidance suggests that houses and other buildings around the Wood may be their hosts. It is difficult to predict at this stage what the most appropriate priorities might be in the medium term.

53. It is likely that specialist advice or support will be necessary to help plan and undertake some of this work, and contact has been made with the Buglife, Plantlife, the Bat Conservation Trust, Butterfly Conservation, and the Amphibians and Reptiles Conservation Trust, all of whom have been supportive of this work. We hope that this essential research can involve local schools and colleges and volunteer groups, and significantly enhance the educational value of the Wood.

Education

- 54. The educational value of the Wood has been long appreciated and the **policy** over the five years of this plan will be to develop further both the support which the Wood can give to education and the support that education can give to the Wood. It is important for the long-term management and use of the Wood that children become involved and interested in the Wood from an early age. It should be noted that "education" does not refer only to children since information for adults is as important (see para 57).
- An Education Pack aimed at primary schools was developed some years ago by 55. the Forestry Commission Scotland but consultation during the period of the 2012-2016 MP has confirmed that in the context of the new curriculum, this is now of limited value. FODW will continue to make the material available on the website, with a suitable warning that parts may be obsolescent and that it needs read in the context of the new curriculum. Primary schools visit the Wood for a range of activities including classroomlinked learning, activities working towards the John Muir award, and Citizen Science related projects. Primary schools also participated during 2014 in a guided visit to the Wood by the Buglife Project Officer and this kind of activity will be pursued further. A more interactive approach to schools' use of the Wood will be developed which will allow activities and information to be shared. One of the two local secondary schools uses the Wood regularly for small-scale sporting and developmental activities such as orienteering and team-building, and discussions have taken place with the other secondary school to identify how their pupils could also benefit from the resources offered by the LNR. One of the schools has also liaised with the National Park Service to refurbish bat boxes installed some years ago, and this activity will be helpful in understanding the bat and bird population. Local colleges and universities have used the Wood for project work. There should also be opportunities to use the Wood in rural skills courses, and in the art and science parts of the curriculum.
- 55A One of the main developments during the 2012-16 MP period was the introduction of the Lomond School Forest Nursery for pre-primary children in the north west of the Wood. It will be interesting to see how this develops, and the DWLNRC will monitor progress and developments.

- The other side of the coin is the contribution that pupils and students can make to the maintenance and development of the Wood. For example, primary school pupils have assisted in gulley clearance, litter sweeps, and tree mulching. A secondary pupil has assisted in the preparation of the FODW Flowers checklist, and university students have carried out mapping activities. There are many ways in which teachers, pupils and students of all ages could assist further, particularly in relation to survey work, identifying species in need of protection, building nest boxes, preparing signs and maps, IT developments, and general environmental improvement work. These kinds of activities can also contribute to the "Volunteering" element of the Duke of Edinburgh's Award Scheme. The Wood has also been regularly used by scouts, guides, cubs and brownies and this should continue.
- 57. Education and lifelong learning for adults of all ages are also important. The checklists have attracted broad interest and the development of the Spring Flower Walk, and the guide leaflet, have also proved attractive. Similar leaflets giving guidance on other things to be seen in the Wood will also be considered. A range of local groups use the Wood. Tuition sessions have been organised by FODW about topics including edible fungi, plant identification and foraging, while others value the Wood to hone interests such as ornithology or painting.
- 58. **Action** will be taken over the five years of the plan to help improve the educational value of the Wood for teachers, pupils, students and adults of all ages. Further leaflets to help visitors understand the biodiversity of the Wood will be developed. Steps will also be taken to encourage greater involvement by local schools and colleges in supporting the work to improve the woodland described in this Plan.

Recreation

- 59. It is important to emphasise that the Management Agreement requires A&BC to "preserve and enhance the appearance of the Managed Land, and to promote the enjoyment of the countryside by the public". The Wood has been enjoyed and used for recreation by local residents and visitors for many years. As a recreational facility, the Wood is very successful, and FODW have received many complimentary comments on the attractiveness of the Wood. Earlier work suggested a minimum figure for visits of around 100,000 a year and this figure does not seem too fanciful. Most visitors come simply to walk (especially with dogs), but running, cycling, horseriding, bird watching, foraging, painting, photography and general appreciation of the environment are enjoyed by many visitors. Children enjoy a range of more vigorous activities, such as den and dam building, tree climbing, paddling and leaping burns, and collecting cones and leaves. An increasing number of tourists use the Wood and its paths are now linked to the round-Helensburgh footpaths network, and the 50km Three Lochs Way from the south to the north of Loch Lomond via Helensburgh. A&BC's proposed new Green Network includes Duchess Wood.
- 60. In terms of **policy**, this Plan expects that activities will generally be small-scale, involving individuals, families or other small groups, and that organised activities, other than those involving schools, will be kept to a minimum and cleared through the DWLNRC and see para 61A below). It is also intended that recreational facilities such as tables, benches and information signage will be confined to the vicinity of the main paths and the Pony Field area.
- 61. The Pony Field is the focus for information in the Wood and in view of its open, level nature, and its proximity to the car park and rugby pitches it may offer an opportunity to create a small recreational area with enhanced facilities, such as a form of shelter and some natural play facilities (perhaps supported by a mobile phone application, an "App") and current species records (for example of bird sightings). It is recognised that such facilities might be difficult to guard against vandalism, but we think

it appropriate to consider them. The edges of the Pony Field are now being treated as an extension of the boundary transition zones discussed earlier and appropriate flowering and fruiting trees such as crab apple, rowan, wild cherry, blackthorn, hawthorn and a small selection of Scottish fruit trees have been planted to provide additional food sources for birds and animals and better opportunities to observe wildlife. As mentioned earlier some sensitive improvements to the area will be necessary if the pony field is to develop in this way, such as limited levelling of the site, and control of the extensive bramble patch on the east side. We will also consider encouraging photography, painting and wood sculpture and displaying the results. Fixed point photography to record the changing seasons and changes in habitats may be valuable both artistically and from a diversity management point of view.

- Ouring the period of the 2012-2016 MP, a number of more substantial proposals for recreational use of the Wood were made, including cross-country relay competitions, major orienteering events, several well-attended performances by the Walking Theatre Company and a major night-time "horror" run. Other initiatives were considered for example a fantasy light show, similar to that mounted successfully near Pitlochry for several years. The DWLNRC has viewed these developments positively as long as they have been properly planned and controlled and any unintended damage quickly rectified. We have developed an Events Policy which should help promoters of such events understand the special circumstances of the Wood and the processes which must be gone through before the Wood can be used in this way.
- The DWLNRC Events Policy distinguishes between small-scale informal events (such as scout group outings) and larger events involving large numbers of people. The latter must obtain permission from A&BC which has an events pack to guide applicants. Where organisations seek to derive income from an event (e.g. commercial events, Rugby Club, etc.) it may be appropriate for a donation to be made to FODW in recognition of the fact that FODW carries out the day-today maintenance of the Wood. Practical requirements for larger events include advance notices at the four entry points to the Wood a week prior to the event alerting the public, clearing up the Wood after the event, and forbidding use of shoes with spikes or metal studs that might damage wooden bridges.
- 62. The "promotional" aspect of the Management Agreement is also important, particularly in terms of reaching those who might benefit from the recreational and educational opportunities presented by the Wood. FODW produce regular newsletters, publish a number of leaflets, and maintain a website (www.duchesswood.org.uk) which give a lot of background information on the Wood, and information on activities. Good relationships have been established with the local media who have given excellent coverage to activities in the Wood.
- 63. In the short term **action** will focus on encouraging the use of the Wood for appropriate sporting and recreational activities, and monitoring such use, so that no damage is caused to the Wood. Ensuring that organisers understand the need where necessary for formal approval will also be important. We will also maintain the existing facilities and examining the possibility of developing the Pony Field area further (while completing hawthorn hedging work begun earlier), which could be pursued in the medium term. In relation to promotion, the existing sources of information will be used to try to reach a bigger audience and publicity through the local media and national organisations enhanced.

In the end

64. A suggestion has been made that a small part of the Wood might be set aside for interring cremation ashes. This has philosophical attractions, recognising the circle of life in an environment where life is constantly being renewed. It might also have

mercenary attractions if donations or fees could help offset other costs in the Wood. However the Wood is relatively small and well used and local residents and visitors might be sensitive to such use. In the short term, informal consultation will take place to gauge reaction to the idea.

Voluntary effort

65. While the primary management responsibility rests with A&BC, much of the progress which has been made in the Wood in the past has depended on a wide range of voluntary effort, and it will be essential to support and encourage this over the period of this MP, and beyond. Many of the earlier paragraphs of the MP describe the work that volunteers have undertaken much of which has been led and organised by FODW, supported by several other local volunteer groups. We are committed to working closely with voluntary groups, particularly FODW, on the delivery of this MP and we will continue to take **action** on behalf of A&BC to support the work of FODW and other local voluntary groups. Direct support for insurance costs of FODW will continue to be covered by A&BC. FODW will represent the local community on the DWLNRC and will coordinate volunteer input to the Committee. More generally, local groups will, where necessary, coordinate their activities and priorities so as to make as efficient and effective use of resources as possible. We will alert groups to opportunities to secure funding and for training and development.

Conclusion

Duchess Wood is a long-established woodland, recognised as an outstanding example of a Local Nature Reserve with a high level of planning protection. It is much used and valued as a local facility which also attracts visitors from afar. It is a good example of partnership working, not just between the Council and the Friends of Duchess Wood, but involving a wide range of other contributors. Its long-term value to the people of Helensburgh, to tourism and to biodiversity close to a major town is exceptional, and it is essential that such a facility is fostered for future generations.

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Duchess Wood Local Nature Reserve Committee Tuesday 17 November 2015

Woodlands In and Around Towns (WIAT) grants and related actions

1. At the last meeting (18 August), this issue was discussed under Agenda Item 4 and considered Charlie Cairns' paper "Funding update/development of the Wood". In relation to action 1, the Management Plan, the draft has now been circulated. This note gives an update on the other actions identified as a result of that discussion.

WIAT

- 2. Members will recall that the WIAT grant scheme (which has provided funding for the Wood in the past) has been revived this year. This initiative provides grant aid for urban woodland management with the objectives of enhancing the amenity value and biodiversity of urban woodlands. Duchess Wood could benefit from aid under this scheme for activities such as tree thinning/ glade creation, footpath upgrades, signage and tree planting, bridges and small culverts. In early June FODW (Stewart Campbell and David Lewin) had a meeting with Forestry Commission staff to discuss the new scheme and how Duchess Wood might be able to benefit from it. On the following day, Charlie, Stewart, David and Alastair Macbeth met as the DWLNRC sub-committee to discuss the way ahead (Stuart McCracken was unable to attend). Charlie's paper to the last meeting and Alastair's notes summarised the outcome of these discussions. For anyone wanting to know more about WIAT, here is a link to the SG Rural Payments and Services homepage: https://www.ruralpayments.org/publicsite/futures/topics/allschemes/forestry-grant-scheme/woodland-improvement-grant/woods-in-and-around-<u>towns/</u> . You will see that it is quite a complex matter!
- 3. One of the main issues to emerge from these discussions was that while parts of the WIAT scheme seemed to provide adequate funding, there was a possibility that the part covering tree felling might not meet the cost of the such operations (and see para 6 below for the latest advice). It was decided to examine whether the production and sale of wood fuel/logs from the felling operations could make up the shortfall. David Lewin approached a number of local wood fuel/log sellers and got one positive response from Iain Stewart of Stewart Timber & Forestry near Cumbernauld. A very useful meeting and site visit were held on 28 July with Iain Stewart (IS), and the information obtained is summarised in Annex 1. Iain suggested that it would be worth speaking to a specialist woodfuel/log felling contractor and put us in touch with Simon Lockwood (SL) of Lockwood Forestry Services (LFS). In addition discussions have also held with Diane Oliver and Jon Hollingdale of the Community Woodlands Association who have given advice on WIAT and the preparation of a WIAT-compatible plan. Charlie also had discussions with FCS about the acceptability of the current Management Plan as a WIAT plan, but this seems unlikely, although it should be possible to copy and paste a lot of it. Charlie also confirmed with FCS that any ownership changes after a WIAT grant had been made, would not necessarily affect any continuing WIAT grant.
- 4. It was not possible to arrange to meet Simon until 18 October, but this too was an interesting and informative visit; the information obtained is summarised in Annex2.

This is a link to a relatively recent article by him on "Managing small woodlands": http://www.reforestingscotland.org/wordpress1/wordpress1/wp-content/uploads/2014/10/Firewood-all1.pdf which is also reproduced in Annex 3.

- 5. As a result of these discussions it became clear to us that while in the past we have thought of the timber in the Wood as having little commercial value, in fact a lot of the sycamore and ash which has been concerning us is now an ideal size for extraction and sale as logs. Based on this information, it should be possible to carry out the kind of thinning and felling in several areas of the Wood, which is a core aim of the Management Plan. This could be carried out at no net cost (although probably with upfront costs) and even make a small profit which could be ploughed back into improving and enhancing the Wood further. SL explained that the transport of trees from where they were cut to the storage/uplifting area was a particularly important factor in the economics, but considered that even the trees near the northern boundary could be extracted at reasonable cost. Luss Estates Company have in the past indicated that they were happy for smaller scale extraction and log sales to go ahead without reference to the company, but it would be helpful to confirm LEC's views on the suggestions in this paper.
- 6. The net gain from such operations might have an impact on any WIAT funding for felling, although this is not entirely clear at this stage. Further discussions have been held with FCS and the CWA, and it seems possible that if the trees could be felled at no net cost, funding might **not** be available, but the position is a little obscure. This is the very latest guidance from the FCS (2 November):

The option guidance Woodland Clearance and Extraction and the option guidance for Thinning states:

This item is only available where the net cost of the operation will exceed the standard cost. You must supply such cost projections as supporting information within your application. This should include harvesting and forwarding costs and the value of the product at roadside.

The option guidance for Felling Only –doesn't say anything about costs but states:

....available for the clear felling of trees (greater than six metres in height) or woodland to waste (i.e. timber left on-site) where the removal of a tree crop meets the objectives of the Woodland Improvement Grant – Habitats and Species or Woodland Improvement Grant – Woods In and Around Towns options

You should also keep in mind the individual large tree items which might still be tree surgeon job – also attract some funding-if linked to a tree safety survey.

So it might be that funding support for felling/thinning could be obtained for parts of the plan (for example the uneconomic felling of large sycamore near a boundary) or if other factors were taken into account.

7. It is important to bear in mind that other elements of WIAT funding, for example for paths and bridges, would not be affected and that we can press on with pursuing this source as soon as we can.

8. FCS is keen for a WIAT application to be submitted for Duchess Wood and has encouraged us to apply for the available grant of £1.3k for the preparation of an Urban Woodland Management Plan. As Argyll & Bute Council holds the SGRPID registration for the Wood with FCS, it is the Council that would apply for the WIAT funding. Given that this would involve work being carried out then the grant being paid at a later stage, it will probably be essential for the Council's weight to be behind the process.

The way forward

- 9. We should be able to get the £1.3k grant to help draw up the WIAT management plan, but this grant itself needs to be applied for. **How could the preparation of an application for this grant best be taken forward?** Is Lower Clyde Greenspace in a position to lead on this on behalf of the DWLNRC, with support from FODW and the Council? Or could we look to employing say Simon Lockwood's company to act as an agent on behalf of the Council (they have done this for others). Given the relatively small size of a likely contract it might not be subject to tendering processes. Advice from A&BC procurement services would be helpful.
- 10. If such an application were successful, **how could the preparation of the plan best be taken forward?** The same points apply could LCG take this on or would we look to external support?
- 11. Looking further ahead if the WIAT grant application was successful, **how would the work best be managed?** Acknowledging the experience and expertise of LCG and Charlie in particular, FODW sees value in perhaps looking to a hybrid arrangement involving both LCG and an external contractor; LCG being able to link directly into Council systems and resources and an external contractor being able to link directly to buyers of woodfuel/logs. We do not want to end up in a position where we have paid for lots of trees to be felled and then find nobody wanting to buy them; this was a point heavily emphasised by FCS in our recent discussions.
- 12. In the longer term, (and thinking particularly of any Community Empowerment Act implications) it is worth thinking of the possibility of employing a management agent to look after the wood as a whole. LFS charge £25/30 per hour for services as an Agent. This compares to a Chartered Forester costs of £70/hour. **Again any thoughts on this would be welcome.**

Testing the water now

13. More immediately, given all this information, we suggest that there would be value in "testing the water" now by A&BC entering into a contract with Simon Lockwood and Iain Stewart to carry out an exercise to thin sycamore and ash trees in the section of Duchess Wood between Rhu Road Higher and Millig Street to develop a better understanding of the practical implications of thinning/ timber extraction and cost/income flows. This exercise would involve thinning approximately 100 sycamore and ash trees in the section of Wood between Rhu Road Higher and Millig Street. Care would have to be taken in selecting trees at the western edge by the cricket pitch, and the eastern edge by Strathclyde Court. Another major factor is the rookery in the pine trees, so advice would have to be taken on when and how the trees could best be felled so as to create least disturbance. While no healthy pine trees would be felled, it might be that unstable or diseased pine trees would be identified which might need to dealt with.

- 14. It is anticipated that approximately 60/70t (tonne) timber could be removed which would be stored inside the lower fence adjacent to Rhu Road Higher. Felling / storage would take 2/3 days. The timber could then be loaded onto a HIAB equipped lorry at the roadside on Rhu Road Higher outside normal peak traffic times. The net income from such an exercise might be £1000 with proceeds being used for woodland enhancement or maintenance.
- 15. The information from this exercise would be used to be assess the practical implications and suitability of a full WIAT grant application for Duchess Wood, and whether and how a felling grant might be applied for as part of a broader WIAT application.

Conclusion

16. A lot of information has been generated over the past three months, and while this note suggests possible strategic directions, we suggest it would be helpful if the DWLNRC Subgroup could meet again in the near future to work out the practical implications, which would then be communicated to the Committee and feed into a new WIAT Plan. It would be essential for A&BC to be represented in these subgroup discussions (and possibly Luss Estates).

Stewart Campbell

David Lewin

FODW

6 November 2015

Annex 1. Information from Iain Stewart (IS)

IS confirmed there are stands of both sycamore and ash suitable for felling and conversion to wood fuel and have value. The current price paid for timber such as sycamore is £40/ t roadside or £50 delivered to a sawmill. Hard woods like sycamore are desirable particularly for supply to the domestic market for use in wood burning stoves. He said there was sufficient timber in the Wood to make a felling operation worthwhile but extraction was the issue. A felling licence from FCS would be needed and details of the approximate number of trees, species, reason for felling and remediation plans would need to be included in an application.

The most cost-effective extraction process is to place a timber harvester into the a wood which fells the trees, strips off branches and cuts to a standard length for loading on to an articulated lorry which would be positioned as close to the harvester as possible. However given the limited access points to the Wood and the impact of this process on an amenity wood such as Duchess Wood his initial conclusion was this type of operation would not be practical.

The alternative is manual felling and extraction using a vehicle such as a mini forwarder (which carries the sections of trunk from the stump to the storage area). These types of vehicle could operate on the type of paths in the Wood and cope with the sloping terrain. IS said that it was important to use a contractor with specialist experience of felling trees for woodfuel/logs, and volunteered to speak to Simon Lockwood, a felling contractor with whom he had worked and who had experience of working in sites such as Duchess Wood. Essentially the felling contractor cuts and extracts the timber to a roadside where it can be bought by the woodfuel/log contractor. Sale of timber can be done in several ways. Electronic auctions are popular or alternatively tendering. Timber can be sold standing or extracted.

IS commented that a good chainsaw operator should fell a typical DW sycamore/ash tree, trim off branches, and cut into manageable lengths in about 15/30 minutes. He thought that some of the larger sycamore trees were possibly too big now and present a challenge for felling and extraction.

Annex 2. Information from Simon Lockwood (SL)

SL agreed that Duchess Wood has extractable timber and all parts of the Wood were accessible with the type of equipment operated by LFS. LFS could offer a range of services including:

- A simple commercial arrangement thinning sycamore and ash mainly for wood burning stoves and buying the timber.
- Woodland management activities including grant applications for activities such as footpath upgrade, culvert installation and replanting after felling. (LFS have been successful in obtaining Post Code lottery funding for various timber woodland related activities).
 - A complete long-term woodland management service.

LFS are involved in various timber based activities including log supplies for wood burning stoves, timber for specialist uses such as house building, saw mill operation and woodland management in the UK and Europe.

The current retail price for hardwood firewood logs is about £80 for a large bag containing about 330kg or about £240/t. Prices have increased significantly as old stock from the 2010 to 2012 winter gales has been sold off while there has been a significant increase in the number of wood burning stoves. Cut medium size sycamore and ash trees for logs is valued at £40/t roadside with cutting and extraction costs £20/22/t depending on the distance from the lorry loading point which could generate a profit of around £20/t. Pine for planking is worth about £55/t. A substantial burr oak trunk can be worth about £3k and a 10/12ft length of ripple sycamore £300- £500.

The typical felling rate is 2 to 3 trees per hour depending on size. Trees for logs are normally cut to 10ft lengths. Larger sycamore trees, say over 1 metre diameter are difficult to handle. The branches can be used for logs but the lower timber can only be used for chock timber (ie the production of wedging chocks, eg for large vehicles) and is of limited value.

The section of the Wood from the garages down to Rhu Road Higher probably contains c 75t (equivalent to 3 lorry loads) of extractable timber for logging excluding any pine. The section of the Wood north from the garages and to the triangle contains roughly 120 sycamore of various sizes plus about 60 ash trees. SL's view was that both these areas and the Wood generally would benefit hugely from thinning the sycamore and ash, particularly multi stem trees.

Felled timber cut to length has to be stacked prior to loading with a Hiab equipped vehicle. For Duchess Wood this could be an area of hard standing/ storage adjacent to the Rhu Road Higher entrance. Loading could be direct to lorry parked up on the road, or off road if it was possible to create a gated area of hard standing. This location would probably have to be used for storage and

loading timber from all parts of the Wood as the access by the garages isn't suitable for lorries and the car park is too far away. In the upper part of the Wood, adjacent to the railway line, Network Rail has to be informed of any trees felled within 2 tree lengths of the track (with the implications we have discussed before about line closures).

After a walk around the Wood, initial estimate was there was probably 250t of extractable timber for logs worth about £10k with extraction costs of about £5k. This is timber reasonably close to the main paths and not within the centre of the Wood which wasn't walked. SL advised that thinning would ideally be carried out over a period of 2/3 years to avoid undue disruption and visual impact on the Wood for visitors - accompanied of course by consultation with members and information for visitors. Replanting with native species would follow. Brash is normally left stacked to rot down.



Terms of Reference Duchess Wood Local Nature Reserve Committee 2014

Purposes

The Duchess Wood Local Nature Reserve Committee's primary purposes are as follows:

- To establish the purposes and management objectives for the LNR
- To prepare, monitor and review the Local Nature Reserve Management plan
- To oversee and co-ordinate the active management of the LNR
- To secure funding for the future management of the LNR
- To foster a partnership approach to the management of the LNR
- To realise the education opportunities/potential of the woodland working with the key Education stakeholders

Membership and administration

The Committee will be chaired by an elected member from Argyll and Bute Council. Argyll and Bute Council shall resource the meetings of the Committee and the administrative support.

The core membership of the Committee shall be as follows:

- Argyll and Bute Council 4 representatives consisting of elected member (Chair),
 Development & Infrastructure officer, Education officer and admin support provided by Area Governance Assistant
- Lower Clyde Greenspace 1 representative
- Luss Estates 1 representative
- Friends of Duchess Wood 2 representatives (normally Chair and Secretary)
- Lomond School 1 representative (representing neighbours of the Wood)
- Health 1 representative
- Youth 1 representative

With the agreement of the Committee, membership may be extended to representatives of voluntary and community organisations covering different sections of the community. It is expected that there will normally be no more than one representative on behalf of an organisation or group of organisations representing a particular interest.

Circulation List

To ensure wide engagement with the community, Duchess Wood Local Nature Reserve Committee is recognised by the Helensburgh & Lomond Community Planning Group as a Key Strategic Partnership and will received Committee minutes on a quarterly basis, and further reports as required. This ensure s that local organisations such as the Police, Fire and Helensburgh Community Council are all updated on the work of the Committee. In addition, the following organisations shall receive copies of the Minutes of DWLNRC and shall be invited to attending meetings as dictated by the Agenda:

- Scottish Natural Heritage
- Helensburgh and District Access Trust
- Paths for All Partnership Organisation
- Forestry Commission
- Helensburgh Cricket and Rugby Club
- Relevant Council officers Environment Warden, Anti-social Behaviour Officer

Frequency and location of meetings

The LNR Committee shall meet 4 times per year with the dates for the meeting being set in advance on an annual basis.

The meetings shall take place in locations as decided by the Committee, or in the absence of directions from the Committee, by the Chair.

Committee Working arrangements

An invitation to suggest items for the agenda will be sent out 3-4 weeks ahead of each meeting. The agenda will then be circulated a week prior to the meeting, along with any reports for consideration.

Minutes of each meeting shall be prepared by the administrative support as defined under Membership and administration above and, following consultation with the Chair, shall be circulated timeously to the members of the Committee. The draft minutes shall also be circulated to those detailed on the circulation list and placed on the Argyll & Bute Council website.

The Minutes shall be considered and approved, with amendments where necessary, at the subsequent LNR Meeting. If there are any amendments to be made the approved minutes shall be circulated to those detailed on the circulation list and placed on the Argyll & Bute Council website.

Decisions shall be taken by consensus, indicted by a show of hands if necessary.

Where necessary Working Groups/Sub Committees can be set up to deal with specific items.

Communication with the media

If any member of the Committee is in contact with the media in relation to Duchess Wood LNR, a copy of any printed material or a brief summary of any verbal update given should be noted with the Area Governance Assistant. If high profile, or likely to result in other members of the Committee being contacted, the Area Governance Assistant will pass details onto all Committee members. Otherwise, a brief report on all media coverage of the Wood will be provided at each Committee meeting.

Actions

All activity undertaken in the Wood by any member organisation of the Committee should be with the prior agreement of the Committee as a whole.

The exception to this is work undertaken by the Council to ensure the Wood is safe.

Review of Terms of Reference

The Terms of Reference should be reviewed annually.

PROPOSED MEETING DATES FOR 2016

DUCHESS WOOD LOCAL NATURE RESERVE COMMITTEE

Tuesday 16th February, 2016

Tuesday 17th May, 2016

Tuesday 16th August, 2016

Tuesday 15th November, 2016

