



native woodlands  
discussion group

newsletters 1-12

**NEWSLETTER**

**NUMBER 9**

**SUMMER 1981**

NATIVE WOODLANDS DISCUSSION GROUP

NEWSLETTER NUMBER 9

SUMMER 1981

CONTENTS

1. The 1981 Field Meeting: Central Region Woods p. 1
2. Talking about woodlands Rawdon Goodier p. 2
3. Research and Planning for Nature Conservation and Amenity  
in Woodlands. An Account of the 1981 Recreation Ecology  
Research Group Meeting Alan Mowle p. 4
4. First steps towards the conservation of the Glen Falloch  
Native Pinewood Richard Keymer p. 6
5. Notes on the 1980 Meeting in Argyll p. 7
6. Revised Mailing List p. 11

1. THE 1981 FIELD MEETING

The 1981 field meeting is to be held in the Central Region between 8-10th October. It will be based on Drymen and will involve visits to woodlands on Loch Lomondside and the Stirling area. The emphasis of the meeting will be on the management of broadleaved woodlands for conservation and production. It would be helpful to the organisers of the meeting if members wishing to attend would complete the enclosed form and return it by 31st August to:

Dr R Keymer  
Nature Conservancy Council  
12 Hope Terrace  
Edinburgh  
EH9 2AS.

A detailed programme for the meeting will be sent, by the middle of September, to those members returning the forms.

TALKING ABOUT WOODLANDS  
BY RAWDON GOODIER

While last year's meeting in Argyll of the Native Woodland Discussion Group, organised by the NCC's South West Region, was the seventh in the series of annual meetings since the group's initial formal inauguration as the Native Pinewood Discussion Group in Inverness in 1974, 1980 marked the tenth anniversary of annual discussions on native woodlands and their conservation in Scotland. At its recent meetings I have usually tried to recapitulate on the past history of the Discussion Group, but, finding it increasingly difficult to do so 'off the cuff' I thought it would be of interest to try to set down the story of its development and involvement, which has often been quite significant in the development of native woodland conservation strategy in Scotland.

The first meeting was convened in the Department of Forestry in the University of Aberdeen in November 1970. The 17 participants included four from the NC - Dr Eggeling, Hugh Brown, Bob Bunce and myself, from the FC - Dick Richards, David Seal, Andy Neustein and Bob Crathie, from Aberdeen University - Professor Matthews, Drs Murray, Millar, Kenworthy and Fitzpatrick and, from the private forestry sector - Lord Glentanar, Duncan Ross, Colonel Grant of Rothiemurchus and Major Duncan of SWOA.

The stimulus for the initial meeting came from a recognition of the need to promote further survey work on the native pinewoods to serve as a basis for conservation strategy and also from the suggestion, made in the final chapter of Steven and Carlisle's book on the native pinewoods of Scotland, that in relation to conservation of the native pinewoods - "It would probably help to further this enterprise if the different owners, public and private, together with foresters and other biologists especially interested in the native pinewoods were linked together informally so that there could be a periodic exchange of information about them, and

also some cooperative planning of investigations. This should not be difficult to organise and perhaps the two government departments interested, the Forestry Commission and the Nature Conservancy might take the lead".

The initial 1970 meeting was largely devoted to discussing proposals for a new survey to be carried out by the NC's woodland research section which would have the aim of obtaining more quantitative information on the pine woods and investigating the classification of the pinewood remnants and the plant communities they contained. The meeting also highlighted some of the main issues, such as the conditions necessary for pinewood regeneration, which were to dominate the group's discussions during the succeeding years.

In 1971 the discussions were continued by several participants at the original meeting within the framework of a meeting of the Silvicultural Group of the Royal Scottish Forestry Society held at Pitlochry and visiting the Blackwood of Rannoch where vigorous disputation took place concerning the adequacy, or otherwise, of natural regeneration of the degree to which intervention was needed to promote it.

I can find no record of a 1972 meeting but in 1973 an augmented meeting of the original group took place in Aberdeen to consider the results of the Pinewood Survey, which had continued under the auspices of ITE after the "split". However as well as discussing the survey results this meeting was of particular interest because it accepted the principle, outlined in a paper submitted by the NCC, that four types of management strategy were appropriate in achieving social, economic and nature conservation objectives in native pinewood areas.

1. Management aimed towards the development of a natural ecosystem with management input limited to the control of excessive grazing.

2. Management aimed towards the development of a natural ecosystem with some timber extraction allowed, but replenishment restricted to natural regeneration.
3. Forest management for deer shelter and feed as the principal objective with planting limited to Scots pine of local provenance.

These conclusions were reached because it was recognised that it would not be possible to achieve native pinewood conservation by removing all the remaining resource from the sphere of timber production, however it was also agreed by most of the participants at the meeting that the greater part of the remaining native pinewood area should be within the first two categories. These ideas were later refined to produce proposals for "strict reserve zones", "extraction zones" and "planting zones" in the Abernethy and Glentinar pine forests and were subsequently incorporated in a modified form in the FC's Basis 3 Nive Pinewood Scheme.

In 1974 the Native Pinewood Discussion Group semi-formally established itself at a meeting in Inverness which was attended by 43 participants and discussed pinewood ecosystems, soils and management as well as visiting the Glen Affric pinewood and making plans for a symposium to be held in 1975.

In May 1975 the discussion group's activities were devoted to sponsoring, under the aegis of ITE and NCC, the major Symposium on the "Ecology and Conservation of the Native Pinewoods of Scotland" which was held at Coylumbridge on Speyside and resulted in the symposium volume published by ITE in 1977.

The 1976 meeting of the group was held in Wester Ross and included visits to the Coulin, Achnashellach, Coille na Glas Letire and LOch Maree Islands native pinewoods.

In 1977 the meeting was held at

Ballachulish and included visits to Coille Coire Chuilc, Glen Orchy, Doire Darrach, Cona Glen and Glen Loy native pinewoods.

At the 1978 meeting, which was held at Dornoch, it was agreed that the remit of the group should be expanded to include all Scottish native woodlands and this was implemented at the meeting by including visits to the Mount Alderwoods and Drummondreach oakwood as well as to the pinewoods at Amat and on the Monadh Mor.

The 1979 meeting in Deeside included visits to the Glentinar native pinewoods and birchwoods on Dinnet Muir, Glen Gairn and Morrone.

The 1980 meeting in Argyll, which included visits to woodlands at Glasdrum, Glen Nant, Clais Dhearg and Doire Darach, saw the initiation of discussions on the very difficult problem of broadleaved woodland conservation in Scotland. It was recognised from the outset that this is a very much more complex issue than that of native pinewood conservation, the resource is more diverse and of greater total area but highly fragmented.

Also recent surveys had shown that the broadleaved woodlands of Scotland have greatly diminished over the last thirty years and that a substantial proportion of the remainder are under threat, or vulnerable. Any conservation strategy which goes beyond the relatively small proportion of the remaining resource that it would be feasible to include in nature reserves will need, like the strategy for pinewood conservation outlined above, to cater for a spectrum of aims as well as a diversity of situations. The discussions on this issue are likely to be a significant feature of future meetings of the Native Woodland Discussion Group, including the next one which will be held in the Central Region of Scotland this autumn. Future plans of the Group also include the sponsoring of a major symposium on the ecology and conservation of Scottish native woodlands, possibly in 1982.

RESEARCH AND PLANNING FOR  
NATURE CONSERVATION AND AMENITY  
IN WOODLANDS

AN ACCOUNT OF THE RECREATION  
ECOLOGY RESEARCH GROUP MEETING  
AT BALLOCH 25/26 APRIL 1981  
BY ALAN MOWLE

Each paper is briefly summarised as a basis for a final discussion which extends the conclusion reached to establish priorities for further developments.

The meeting opened with a talk from Sandy Kerr (NCC) which briefly reviewed the attitudes of the various individuals and groups concerned with broadleaved woodland. These are numerous and include owners, Forestry Commission, timber merchants, farmers, conservationists, keepers, developers, recreation managers, and amenity organisations. The problem was how to resolve the conflicts between these groups while maintaining the integrity of the resource. Thus the scene was set for the weekend.

On Saturday morning Ian Langdale Brown (Edinburgh University) described his recently completed work on land-use change in lowland Scotland. This had quantified the decline and changing nature of small woods in the countryside. He listed the more direct means available to tackle the problem. Exhortation of owners was clearly ineffective. Tree Preservation Orders were a negative tool offering no incentive to appropriate management. Management agreements appear to be a more appropriate option, but only when carefully designed. Agreements which paid owners not to do things would only ever be applicable to a limited range of situations. The most drastic option was a change of ownership to someone more able or willing to maintain the wood (eg Nature Conservancy Council). The final option of establishing formal planning control over small woods was rejected as impractical.

Alan Fishwick of the Lake District Special Planning Board described the attempts of the Board to maintain the broadleaved woods of the Lake District through the National Parks Planning System since the first Lake District Plan in 1954. He concluded that the current situation required new grants, management orders and more explicit national policy along the lines of the recent Sherfield Report on scientific aspects of forestry.

Keith Kirby of NCC's Chief Scientist's Team described recent research into the status and characteristics of semi-natural woodland. There was clearly a need for information on a range of topics, but particular difficulty is encountered in attempting to assess the quality as distinct from the distribution of the resource. This led to further problems when the time came to offer management prescriptions for a particular wood.

After lunch, the participants divided into three groups for field visits. The first visited Inchcailloch where the problems of a National Nature Reserve under heavy recreation pressure were reviewed. The second group visited the Rowardennan Oakwoods, all owned by Forestry Commission and surrounded by coniferous plantations. Here no management has taken place since 1970, but there are clearly regeneration problems deriving from grazing pressures on one side and an absence of oak regeneration on another. The problems of resolving forestry, nature conservation and recreation needs were discussed on site. The third group visited Queen Elizabeth Forest Park, where Forestry Commission have established visitor facilities and are integrating the management of three oakwoods into their forest plan.

Saturday's proceedings ended with a paper from Cathy Hearn of the National Trust reviewing the problems encountered by the Trust as an amenity organisation managing its own oakwoods in England and Wales. The Trust generally tried to provide public access to its property which

was sometimes incompatible with conservation of the woodland flora and fauna:

On Sunday morning, Neil Paterson from Thornhill (Dumfries) described the origins and activities of the recently established National Hardwoods Project. This began when timber merchants, saw-millers and foresters concerned about the dwindling supply of home grown hardwoods got together at Weston Park (home of the Earl of Bradford) to see what could be done to improve the situation. The National Hardwoods Project have a three man Steering Committee (of whom Paterson is one) and extremely limited funds. They intend to concentrate on the identification and propagation from cuttings of elite oak trees. Discussion after this paper included a debate on the relative importance of managing genotype or site conditions in improving broadleaved woods; it was generally agreed that concentration of research and development on softwood problems had left an unfortunate gap in our knowledge of broadleaved species.

Bill Grant of the Forestry Commission described the major effort made to integrate recreation and forestry along with other land-uses at Grizedale in the Lake District. The clear success of this commendable effort left one wondering why this approach had not been adopted to the same extent elsewhere in the Forestry Commission and whether a private owner could ever have mounted such an effort. Intensive management is clearly expensive and returns are not always clear-cut.

Finally Alastair Fraser of the International Forest Science Consultancy gave a fascinating paper emphasising the importance of small woods and the opportunities they offer to local communities. This provided a useful speculative starting point to a short final discussion which brought together the various strands identified in the weekend's proceedings. The remainder of this paper uses this as a starting point for further discussion of the problem of declining

broadleaved woods.

Several speakers referred to the need for a revision of public policy in relation to broadleaved woods. Langdale Brown's work is concrete evidence of the decline in their area which seems to be accompanied by decline in appropriate management. However, these woods are not without use. Nature conservationists value them as remnants of the natural vegetation of much of the country. The woods are valued for amenity reasons as a component of the landscape. They have sporting value and can be useful for agriculture, offering shelter to stock and windbreaks for crops. The forester values them as a source of homegrown hardwoods and local communities can obtain a useful resource of fuel. The problem with this complex of uses is that in relatively few cases is one of these uses sufficient to justify retention of the wood. Generally speaking therefore small broadleaved woods require two or more management objectives to be integrated before management can be worthwhile.

Given the range of uses, diversity of woodland types and the many ownership circumstances there is clearly no single model of management which will be universally applicable. There should however be a limited range of options which could be defined, supported by the relevant interest groups and implemented through demonstration and introduction of appropriate policy tools in the form of grant and fiscal incentives, legislative control and advice. This amounts to a broadleaved woodland strategy; the first problem is to see how such a strategy could be initiated given the wide range of interests involved. The recent House of Lords Select Committee on Science and Technology Report on 'Scientific Aspects of Forestry' (Chairman Lord Sherfield) recommended that such a strategy should be established and implemented, although it did not develop the idea in detail. This is an issue which could well be the main focus of attention at future meetings of the Native Woodland Discussion Group.

FIRST STEPS TOWARDS THE  
CONSERVATION OF THE GLEN  
FALLOCH NATIVE PINWOOD

by Richard Keymer

Glen Falloch is the most southerly native pinewood in Great Britain (Steven and Carlisle, 1959). Stewart has recently carried out pollen analysis research in Glen Falloch and has concluded that Glen Falloch has had a continuous cover of pine woodland at least since 1585 BP (Stewart, 1979).

There are only 35 native pinewoods in Great Britain (Steven and Carlisle, 1959) and within this total both Bunce (1977) and Forrest (1980) have recognised, on botanical and biochemical grounds respectively, different groups of sites with different characteristics. In each case Glen Falloch occurred in a small southern group of sites. The case for conserving the native pinewood remnant at Glen Falloch is therefore strengthened by the fact that it has characteristics shared by very few other native pinewoods.

At present there are 133 Scots Pine trees scattered over c.152 ha (376 acres). Most of these are old trees although there are a few young trees along the River Falloch. The need for action to conserve this remnant was therefore urgent.

Boyle (1978) has investigated the reproductive characteristics of the Scots Pine at Glen Falloch and found that in 1976, under ideal conditions, self-pollination accounted for only about 35% of the total pollination but he concluded that in other years this figure would probably be increased thus decreasing the amount of full seed and therefore of the number of useful seedling which could be obtained. Boyle found that the average number of seeds per cone was 10.0 (s.d. = 1.07g/1000). The average germination percent by the tenth day was 67.5% (s.d. = 19.2%).

The management required at Glen Falloch

was considered to involve the erection of a deer-proof enclosure in which young Scots Pine grown on from seed collected from the Scots Pine trees in Glen Falloch would be planted. This approach was considered necessary, in preference to relying on natural regeneration, because of the degraded nature of the vegetation which, over most of the area, was purple moor grass (Molinia caerulea) and deer sedge (Trichophorum caespitosum). The ground vegetation therefore has more affinities with open moorland than with pinewoods. The site has been heavily grazed by sheep and cattle for many years.

At the present time the site is not a Site of Special Scientific Interest (SSSI) although notification of it is proposed. This meant that it was not possible for NCC to enter into a formal management agreement with the owners of the wood Messrs E J and R N Lowes. There was no other forestry on the state and the application of the new arrangements under the Basis 3 Dedication Scheme for the owners of native pinewood sites were not judged appropriate in the present case, neither would the Small Woods Grant Scheme have been particularly helpful because of the high cost of the deer fencing required and the rather specialised nature of the treatment planned within the enclosure.

The owners had indicated that they were very interested in the project and would allocate an area of land to allow construction of an enclosure to protect the planted Scots Pine seedlings.

When it finally appeared as though there was no way in which the money for this project could be obtained until the site was notified as a SSSI Central Regional Council kindly offered a grant of £500 towards the project. The Men of the Trees had also given a £100 to the project so the money from these two bodies was used to buy the wire and timber materials for 500 m of deer fencing. By this time NCC found itself in a position to be able to make a small grant towards this project and an application was submitted by the owner.



Meanwhile a rocky knoll with a number of Scots Pine growing on it had been selected as providing suitable conditions for the growth of Scots Pine.

In late May 1981 when a BTCV training course on high tensile deer fencing was required it was possible to encourage them to practise their skills at Glen Falloch under the eyes of an experienced fencer and previous BTCV Field Officer, Tim Turner. Accordingly the enclosure was then erected.

It is proposed to plant up the enclosure with Scots Pine and other native species such as Alder in the autumn using three year old seedlings collected as seed from Glen Falloch. Further seed was collected during 1981 and is being grown on to provide seedlings for beating up.

#### References

- Boyle, T. 1978. Reproductive Characteristics of a Near Derelict Scots Pine Remnant. BSc Thesis, University of Edinburgh.
- Bunce, R G H. 1977. The range of variation within the pinewoods from Native Pinewoods of Scotland, Proceedings of the Aviemore Symposium, 1975, ed. by R G H Bunce and J N R Jeffers, pp. 10-25. Institute of Terrestrial Ecology, Cambridge.
- Forrest, G I. 1980. Genotypic variation among native Scots Pine populations in Scotland based on Monoterpane analysis. Forestry, 53: 101-128.
- Steven, H M & Carlisle, A. 1959. The Native Pinewoods of Scotland. Oliver and Boyd.
- THE NATIVE WOODLAND DISCUSSION GROUP 1980 FIELD MEETING IN ARGYLL
- The meeting was held on 2nd-4th October and based on the Dunstaffnage Arms Hotel at Connel in Argyll. Discussion mainly

focussed on the problem of broadleaved woodland management and conservation although, at the end of the meeting, the Native Pinewood of Doire Darach was visited to inspect the progress made in the management of that pinewood relict. The following woods were visited.

#### SITE DESCRIPTION<sup>1</sup>

GLASDRUM WOOD, ARGYLL Grade 1\*  
NN 0545. 65 ha

This wood lies on the south-east slope of Ben Churalain overlooking the head of Loch Creran and rises from sea-level to 180 m. Dalradian rocks, with calcareous beds along the lower sections passing to acidic rocks above, produce variable soil conditions. Near the road there is a flat, narrow strip of alder woodland with Crepis paludosa and Carex remota on wet mull soils. A hanging ash-hazel wood occupies the middle zone. This is broken by a line of calcareous schist outcrops drained by bryophyte-rich rills. Some ash standards reach 24 m, but patches of dense young growth also occur. Hazel forms a tall scrub layer throughout and alder occupies the damper pockets on the higher slopes. Wych elm, birch, rowan and hawthorn also occur.

The dominants of the field layer are Brachypodium sylvaticum, Mercurialis perennis and ferns (mainly Dryopteris filix-mas, Thelypteris oreopteris and Athyrium filix-femina), but the flora is herb rich and includes Allium ursinum, Anemone nemorosa and Circaea lutetiana. Grasses such as Poa trivialis and Deschampsia cespitosa are common.

Above the escarpment with its calcicolous flora, the soils are more acidic and the prevailing woodland type is sessile oak with some birch which grades into birch scrub and moorland at about 270 m. The field layer is grassier with Holcus lanatus, Melampyrum pratense and Potentilla erecta. Many oceanic species of bryophytes occur on the screes, blocks and trees; these include Adelanthus decipians

and Hylocomium umbratum.

The NNR lies within a large Forestry Commission area and, like Glen Nant, it is a good example of a north-western mixed deciduous woodland, but approaches closely to ash-hazel wood on limestone.

1. A Nature Conservation Review Vol. 2  
Ed. D A Ratcliffe. 1977.

#### SITE DESCRIPTION<sup>1</sup>

GLEN NANT WOODS, ARGYLL Grade 1  
NN 0128. 200 ha

This site comprises a narrow ravine in andesite and basalt lavas of Old Red Sandstone age, with drifts of glacial origin. The valley contains a north-western type of mixed deciduous woodland over a range of soils. An ash-hazel association is dominant on the calcareous volcanic rocks, with a sparse shrub layer of hawthorn, blackthorn and guelder rose. Elsewhere sessile oak and birch are most abundant with a scattering of rowan, holly and bird-cherry. Other woody species include sych elm and gean, with alder and sallows in the less steep areas. Coppicing has been widespread and large mature trees are rare. Acidophilous ground flora communities are most widespread, particularly on the higher slopes. Two main types occur, a fern-dominated one with Dryopteris borrieri, Thelypteris oreopteris and Athyrium filix-femina; and a heathy facies with Vaccinium myrtillus, Calluna vulgaris, Pteridium aquilinum. The basiphilous patches have an abundance of herbs including Allium ursinum, Primula vulgaris and Fragaria vesca, but are dominated by Brachypodium sylvaticum and Deschampsia cespitosa. Some of the flowering plants of particular interest include Melica nutans, Trollius europaeus and Neottia nidus-avis. There is a rich Atlantic bryophyte flora which includes Hylocomium umbratum, Adelanthus decipiens, Plagiochila punctata and Herberta hutchinsiae with the ferns Hymenophyllum wilsonii and Dryopteris aemula.

1. A Nature Conservation Review Vol. 2  
Ed. D A Ratcliffe. 1977.

#### SITE DESCRIPTION<sup>1</sup>

CLAIS DHEARG, ARGYLL Grade 2  
NM 9331 759 ha

Clais Dhearg, in the Lorne district of Argyll, lies to the south of Connel at the mouth of Loch Etive. The site occupies some 600 ha of land varying between 30 and 120 m in altitude, on an uneven plateau of Andesitic lavas and draining into the Blach Lochs to the north-west.

The uniform bedrock and land-use produce a small range of floristic variation, comprising a complex of acidophilous communities, including sessile oakwood amounting to about 200 ha, acid grassland and grass heath, bracken fern meadow, blanket bog and small soligenous mires associated with the pattern of drainage.

The woodland has developed for a long period under relatively heavy grazing by cattle and sheep. Most of the area is oakwood, with trees up to 18 m in height and of small girth forming a single canopy. Hazel, rowan, hawthorn, blackthorn and occasionally birch introduce diversity in the canopy and sparse shrub layer but there are no young trees or shrubs. Alder and willows are of restricted distribution. The ground flora under open canopy conditions is dominated by bracken but elsewhere there are associations of Deschampsia flexuosa, Oxalis acetosella, Anthoxanthum odoratum, Polytrichum formosum, Hylocomium splendens and Thuidium delicatulum. Also abundant in these associations are Potentilla erecta, Galium saxatile and Holcus lanatus. Species present locally are Vaccinium myrtillus, Melampyrum pratense, Stellaria holostea, Pteridium aquilinum and the moss Rhytidiadelphus loreus. Plants sensitive to grazing such as species of fern and tall herbs are absent, and Vaccinium myrtillus, Luzula sylvatica, Primula vulgaris, Endymion non-scriptus and even Calluna

vulgaris are very local or exist in very depauperate forms. The marshy communities of damper depressions under closed canopy woodland comprise Poa trivialis, Filipendula ulmaria, Deschampsia cespitosa and Oxalis acetosella, with Sphagnum-Polytrichum hummocks locally.

Tree bases in closed woodland are frequently covered with epiphytic bryophytes and lichens, usually dominated by Hypnum cupressiforms, but the oceanic species characteristic of humid western woods appear to be restricted in abundance and variety.

1. A Nature Conservation Review, Vol. 2  
Ed. D A Ratcliffe. 1977.

DOIRE DARACH, ARGYLL                      SSSI  
190 ha

The central part of this small native pinewood on the south side of Loch Tulla is subject to a management agreement under Section 15 of the Countryside Act. Under the 99-year agreement there is an agreed management policy between the owner and the NCC which is designed to safeguard the Native Pinewood, under which exclosures have been fenced for regeneration of 50% grant aided by the NCC.

#### LIST OF PARTICIPANTS IN 1980 FIELD MEETING

Dr I Alexander, Department of Botany,  
University of Aberdeen.

Dr E M Bignal, Assistant Regional Officer,  
NCC.

Dr R G H Bunce, ITE, Merlewood.

Mr R Goodier, Survey and Advisory  
Section, NCC.

Mr F A Hunter, MAFF, Leeds.

Mr A J Kerr, Regional Officer, NCC.

Dr R J Keymer, Assistant Regional  
Officer, NCC.

Dr K Kirby, Chief Scientist Team, NCC.

Mr R McIntosh, FC, Roslin, Midlothian.

Miss S J D MacKenzie, CCS, Battleby.

Mr C McLean, FC, Roslin, Midlothian.

Dr D N McVean, Fearnock, Ardentallen,  
Lerags, by Oban.

Mr A D Mowle, Advisory Unit, NCC.

Mr R Ogilvy, Fountain Forestry, Kingussie.

Mr R Scott, Assistant Regional Officer,  
NCC.

Dr J R Smith, Department of Geography,  
University of Aberdeen.

Mr J B Teasdale, FC, Edinburgh.

Dr P J Tilbrook, Deputy Regional Officer,  
NCC.

Mr P Wormell, Assistant Regional Officer,  
NCC.