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THE

ENVIRONMENTAL STATEMENT

FOR

THE BIALLAID

Woodland Grant Scheme Application

November 1995

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2. SUMMARY

The proposed afforestation by natural regeneration, at Biallaid, covers 292.6 ha on the east side of Creag Dhubh, the aim being to restore the semi-natural broadleaved woodland within the Creag Dhubh Site of Special Scientific Interest, to the benefit of both landscape and nature conservation. Although there will be a significant impact on the environment, the woodland will develop gradually to produce a natural looking landscape.

The scheme meets the objectives of the **Cairngorms Straths Environmentally Sensitive Area** by protecting and enhancing areas of herb-rich grassland and wetlands; by protecting, enhancing and extending areas of native woodlands; and by protecting features or areas of historic or archaeological interest. The scheme also meets the requirements of Scottish Natural Heritage for the management of the **Creag Dhubh Site of Special Scientific Interest** by maintaining and extending the woodland; by protecting the important grassland sites through controlled grazing; and by protecting the insect-rich areas.

The area is of scenic importance and the scheme will recreate a diverse semi-natural woodland akin to the natural climax vegetation of the site, in keeping with the rugged landscape. The tops of the hill will remain open, with deer fencing being kept below the skyline; this will maintain the intregrity of the views and landscape features. Open space centred around the important grassland vegetation and insect sites, and the flush and mire areas will be maintained, in consultation with SNH, by controlled grazing. Grazing pressure will be controlled by removing deer and goats from within the site, and by careful winter domestic stock grazing allied to a monitoring programme. Access to the deer wintering areas in Glen Calder will be maintained, while the level of culling on the remainder of the Estate is unlikely to be affected by the scheme. There will be no quantifiable displacement of deer caused by the scheme and there will be very heavy culling within the fenced area.

There may be a small, short to medium term, positive impact on the raptors of the area, following expected increased prey availability. Deer fencing may pose a small but negative impact on black grouse.

The owners intend to carry out long-term monitoring studies of the woodland, in order to assess vegetation change and the effects of grazing on the important habitats.

3. CONTENTS

3. CONTENTS (cont)

4. INTRODUCTION

The purpose of an Environmental Statement is to assist the Woodland Grant Scheme consultation process by providing information on the environmental effects of the development for the Forest Authority, consultees and the general public, to enable them to make an informed assessment of the proposals. It is compiled under the terms of the European Community Directive No. 85/337 and conforms with the Environmental Assessment (Afforestation) Regulation 1988 (SI 1988/1207).

The Forest Authority called for an Environmental Assessment because the 292.6 hectares proposed afforestation on Creag Dhubh lies

- wholly within the **Creag Dhubh Site of Special Scientific Interest** (SSSI),
- within the **Cairngorm Straths Environmentally Sensitive Area** (ESA) and
- within the **Sensitive Zone** of the Highland Regional Council's Indicative Forest Strategy.

The proposal could have a significant impact on the environment.

The key issues to be addressed within the assessment are:

- **the impact on the important grasslands and the associated insect species,** and
- **the landscape**

Unless otherwise noted, value judgements are those of the author.

5. DESCRIPTION OF THE PROPOSALS

The proposals cover 292.6 ha of hill ground on the eastern slopes of Creag Dhubh, Netwonmore. Map 1 (Appendix 1) shows the location of the scheme in relation to surrounding forests. The scheme is made up of the following:

Table 1 The Species Composition at Biallaid

Species	Area(ha)	%
Existing broadleaf	126.8	43.3
Regeneration	138.4	47.3
Open ground	27.4	9.4
TOTAL	292.6	100.0

Appendix 2 (the WGS application) illustrates the forest design, showing the unplanted areas and the location of species.

5.1 PURPOSE OF THE DEVELOPMENT

The objectives of the scheme are to

- **restore** and improve the existing semi-natural woodland,
- **conserve** the important grasslands, and
- **enhance** the landscape by expansion of the woodland.

5.2 LAND USE CONTEXT

The site covers around 300 ha of hill land which is currently grazed by sheep and ponies; wild populations of red deer, rabbits and goats also graze the land. The land is currently a Site of Special Scientific Interest on account of its vegetation, ornithological and invertebrate interest. Fuller details are given in Sections 6.5, 6.6 and Appendix 1. The proposed land use, if approval for this scheme is given, would result in an extension of the existing native broadleaved woodland into areas that are intrinsically woodland sites. The scheme would ensure the survival, and improvement, of existing important wildlife habitats by controlling the grazing by both wild and domestic animals.

5.3 ALTERNATIVES

a) Continue the status quo. This would not meet the objectives of the scheme as continued high grazing pressure would restrict woodland cover to its present status, and may, in the longer term, alter and damage the calcicolous grassland composition. If grazing pressure remains high, regeneration will not replace the existing mature trees when they die.

b) Afforestation - the inclusion of commercial conifers by direct planting within the scheme would have a significant negative impact on the nature conservation and landscape value of the site It would not meet the objectives of the scheme.

- increased broadleaved regeneration: a significant increase in the broadleaved area would jeopardise the grasslands and the insect-rich areas. It would not meet the objectives of the scheme.

c) Wilderness - the value of this area in wilderness terms is not high and is not considered a priority area by the owners.

d) Alternative locations. SNH wish to encourage the extension of semi-natural woodland within this SSSI (in-house Management Brief), and other locations would not meet this requirement.

5.4 SPECIES CHOICE

About 40% of the WGS application area is occupied by native broad-leaved woodland. These areas will be expanded by regeneration. The existing broad-leaved woods will be linked to form a more or less continuous woodland block on the slopes around Creag Ruadh, Coille na Creige Duibhe and Creagan Beag, except for areas of rock and scree and in the important grasslands. The scheme will follow the FC Guideline No.6 'The Management of semi-natural woodlands: Upland Birchwoods.'

The pattern of open ground as shown on the plan (Appendix 2) includes both hill-tops and flat and flushed areas. These areas will include the species-rich flushes where notable or scarce habitats exist, and where floristic diversity may be high. Due to the steeply sloping nature of the site, most of this will be visible from the tops of the surrounding high ground to the north, south and east, from the A9 on the opposite side of the Spey valley, and from the adjoining A86.

5.5 ESTABLISHMENT TECHNIQUES

Deer fencing will be erected around 251.1 hectares of the proposal in order to control more effectively the movement of deer and goats within the site and to reduce the grazing pressure. Deer and goat numbers will be closely controlled within subcompartment 'a' to maintain open ground, and winter stock grazing (August - April) will be used to maintain and improve this habitat. The precise area of subcompartment 'a' and the grazing regime is to be agreed with SNH.

There will be no cultivation within the existing woodland, and removal of grazing should result in natural regeneration in the open areas. Control of regeneration will be undertaken manually where necessary to maintain the open ground. Manual weeding of bracken and other species will be carried out as required to ensure successful regeneration.

All existing access points will be maintained, while a number of new ones will be created. Under this scheme, no roading will be required.

Deer control will be carried out by the Estate's wildlife managers, by a carefully controlled cull as agreed with the Red Deer Commission and Forest Authority, in which an intensive close season cull under licence, will be undertaken at the start of the programme and continued as required by the results of the proposed monitoring scheme (in consultation also with SNH). Additionally, culling of goats will be carried out in parallel with this, after initially driving out the goats from the deer-fenced area.

Pest and predator control will be carried out by the Estate's wildlife managers.

All forestry operations will be carried out in accordance with the following Forestry Commission publications:-

- Forest and Water Guidelines (3rd Edition)
- Forest and Landscape Guidelines
- Forest Nature Conservation Guidelines
- The Management of Semi-natural Woodlands
- Creating New Native Woodland (Bulletin 112)

6. SITE DESCRIPTION

6.1 LOCATION AND LAND USE CONTEXT

Biallaid is located between the Rivers Calder and Spey near their confluence, adjoining Newtonmore (Highland Region) in an area used extensively for stock-farming and forestry. The area has a significant role in tourism, in its own right and as a connecting link with the Cairngorm Mountain massif and National Scenic Area and the far north and west of Scotland.

The site adjoins a number of other forests and woods as indicated in Map 1 (Appendix 1) and is recognised in the Highland Region Structure Plan as being within the **Sensitive zone** for afforestation. The strategic conservation interests are landscape, wildlife and agriculture. The woodlands along the slopes above the River Spey have been identified by SNH as **ancient or long-established woodland** of semi-natural origin (Map 3, Appendix 1) and are included in the Structure Plan as **Woodland of Regional Wildlife Importance**. The Draft Badenoch and Strathspey Local Plan (as yet not adopted) includes a presumption against detrimental development within the Creag Dhubh SSSI

The whole of the site lies within the **Creag Dhubh Site of Special Scientific Interest (SSSI)** which was declared for its grasslands, woodland, mire and invertebrate interest (see Appendices 1 and 3). The WGS application area lies within the **Cairngorm Straths Environmentally Sensitive Area (ESA)** which was declared because of its high natural heritage value and for the diversity of habitats and species (Map 2, Appendix 1).

Currently the whole area is grazed by deer, sheep, rabbits, ponies and goats.

The site lies within a high scenic and conservation interest area, which is highly visible to the public from the main north-south tourist route.

6.2 GEOLOGY AND SOILS

The area lies over metamorphic Moinian schists with local base-rich outcrops. Part is overlain by peaty gleys, peaty podsols and in places peat. The last is present mainly on the watershed, on the plateau of Creag Dhubh and in basins, with peaty gley, peaty podsols and peat flushes on the gentle slopes. The slopes are characterised by small rock faces, screes and boulder beds.

The site falls within the Macaulay Land Use Classification type 6.2 and 6.3, suitable for use only as rough grazings. Two very small areas fall within type 4.2 (land capable of producing a narrow range of crops).

6.3 ELEVATION AND ASPECT

The site rises from about 250 metres beside the A86 Newtonmore to Spean Bridge trunk road to 734 metres at Creag Dhubh just outwith the WGS application area. The highest point within the WGS area is approximately 550 metres, east of Aisre na Creige Duibhe.

9The aspect is varied, ranging from north through east to southeast. There are steep north-, east- and south-east - facing slopes overlooking both the Rivers Calder and Spey. The whole site is highly visible from the main A9 trunk route and forms a distinctive feature of the landscape.

6.4 HYDROLOGY

The site is bounded on the north and north-east by the River Calder, receiving water from several small burns draining north or east from the ridge formed by Creagan Mor and Creagan Beag. The eastern section of the site contains a number of small burns which drain east or southeast into the River Spey.

There are areas of mires and flushes within the site (Appendix 1, Map 4).

6.5 VEGETATION

The WGS area contains an extensive area of mainly birch woodland with abundant hazel over a rich ground flora, the whole dominating the more base-rich southern slopes which are broken by large areas of exposed rock and blocky scree. The grasslands on the southern slopes of Creag Dhubh and below Creag Ruadh to the A86 are species-rich, locally markedly calcicolous, sheeps' fescue - bent (*Festuca - Agrostis*) grassland developed around base-rich flushes and on outcropping rock. On the lower slopes the grasslands become more acidic, to give either mesotrophic herb-rich short turf or mildly acidic communities.

There are large areas of flushes dominated by mixtures of bog myrtle (*Myrica gale*), purple moorgrass (*Molinia caerulea*) and various sedges (*Carex* spp.). Again there is some evidence of mineral enrichment with a number of calcicolous species present and a number of fen and fen-meadow communities.

There are 3 main blocks of deciduous woodland of semi-natural origin which extend along most of the eastern slopes in the area, with upto 5 National Vegetation Classification (NVC) communities present represented by at least 7 subcommunities. The principal type is birch (W11), with birch-ash (W9) below the eastern cliffs. In general terms the woodland flora has a high proportion of Continental and Northern Montane vascular plant species. There is a rich carpet of mosses and liverworts, some of which are Atlantic western species, unusual in this part of Scotland. A commercial conifer plantation forms the south-western boundary (outwith the WGS application).

Full vegetation details are given in Appendix 3.

6.6 FAUNA

Ornithological information provided by SNH indicates that there is an impressive range of breeding bird species, which include black grouse, pied flycatcher, redstart, siskin, woodcock, tree

pipit, wood warbler and buzzard. A small number of raptor species is known to use the SSSI for breeding and/or feeding. There are no capercaillie and no significant red grouse numbers.

The site is entomologically rich with a wide variety of micro- and macro-Lepidoptera (butterflies and moths, including micro-moths) and beetles (Coleoptera).

Red, roe and sika deer, goats (around 100 feral animals) and rabbits are present on the site, with cattle between September and April. Sheep from neighbouring estates and ponies also graze the site.

No published data are available for other animal groups.

6.7 LANDSCAPE

The landscape of the site is a distinctive feature of the area. It consists of a north-east to south-west ridge rising to over 730 metres, the northern and eastern part lying within the area of the WGS application. The ridge is characterised by steep-sided slopes with rocky outcrops and screes, with gentler lower grassy slopes running down to the A86. The adjoining Spey valley contrasts strongly with the rugged nature of the hill, while the richer grasslands of the site contrast with the often open nature of the deciduous woodland and the darker colours and uneven texture of the mires and flushes. The public east-west road (the A86) runs partly along and partly near to, the south-eastern boundary of the WGS area, while the site is clearly visible from the A9 trunk road and the mainline rail route on the opposite side of the Spey valley.

A full report is included in Appendix 4.

6.8 ARCHAEOLOGY

There are a number of unscheduled archaeological sites within the WGS application area. These include a number of dykes, areas of field clearance, hut circles, houses and rigs and a possible burial cairn. A full report by Highland Region's Archaeologist is given in Appendix 5.

6.9 DESIGNATIONS

The site lies within the Creag Dubh SSSI (see Appendix 3) and within the Cairngorms Straths ESA (see Appendix 1).

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7. SITE ASSESSMENT

7.1 PEOPLE

Currently one person is employed part-time on the site for agricultural purposes.

On the site of the proposed planting there are no formal recreational uses or rights of way. The O.S. 1:50,000 map indicates the presence of a footpath within the north-east corner of the WGS application area. The Creag Dhubh hill race takes place within the SSSI and pony trekking occurs throughout the year.

7.2 FLORA

The whole of the WGS proposal lies within the **Creag Dhubh Site of Special Scientific Interest** (SSSI), declared in part for its flora.

The broad-leaved woodland consists of three areas identified as **ancient or long-established woodland** by SNH (Ancient Semi-natural Woodland Inventory). It forms the **fourth largest** and **one of the most varied birchwoods** in the Badenoch and Strathspey District, with the W11c community being the **largest** in Badenoch and Strathspey District. The NVC W9 community is **rare in the District**, comprising only 0.6% of semi-natural deciduous woodland in Badenoch and Strathspey. Over 60% of this occurs in the Creag Dhubh woodlands below the eastern cliffs and it differs from the typical NVC type by having a birch-dominated canopy. The W9b community is one of the **two largest areas** within Badenoch and Strathspey District. Wych elm occurs at **one of its few stations** within the District, while the Rock whitebeam (*Sorbus rupicola*) which occurs on the site, is a **nationally scarce species.**

Nationally rare woodland types (<10,000 hectares in the UK) present on the site include elm-hazel, birch-hazel and acid wet alder (Peterkin stand types 1A, 12B and 7B respectively).

The woodland flora contains a **high proportion of Continental and Northern Montane** vascular plants (such as *Sedum roseum* and *Trollius europaeus*), while the bryophyte flora contains two **locally rare species** (*Cynodontium jenneri* at its **British stronghold**, and *C. tenellum*) in addition to a **declining ancient woodland species** (*Antritrichia curtipendula*). The lichen flora contains 11 **East of Scotland old woodland indicator species**, 4 **West of Scotland old woodland indicator species** and one **provisional Red Data Book species** (*Sclerophora peronella*).

Two **locally rare plant species** are wych elm (*Ulmus glabra*) and dogs mercury (*Mercurialis perennis*), while the Delicate maidenhair spleenwort (*Asplenium trichomanes trichomanes*) is notable as a **restricted species.**

The WGS proposal lies wholly within the **Cairgorm Straths Environmentally Sensitive Area** (ESA) on account of its high natural heritage value and its diversity of habitats and species. One of the objectives of the ESA is ' to protect, enhance and extend .... native woodland' (see Appendix 1).

Full details are given in Appendix 3, which identifies all areas of high local conservation value.

7.3 FAUNA

The whole of the WGS proposal lies within the **Creag Dhubh Site of Special Scientific Interest** (SSSI), declared in part for its avifauna and invertebrate interest.

The site holds an impressive range of upland and woodland breeding birds, and is part of the hunting range of a number of raptors. Of these, six are listed on Schedule 1 of the Wildlife and Countryside Act 1981, under Annex 1 of the EC Directive 79/409 on the Conservation of Wild Birds, and Annex II or III of the Berne Convention, and are of **national importance** (less than 1,000 breeding pairs in the UK). A further species is listed under the Game Act, under Annex II/2 of the EC Directive 79/409 on the Conservation of Wild Birds and Annex III of the Berne Convention. A further 4 species are **candidate species** for the Red Data List. There is a significant black grouse population in Glen Banchor.

The deer fence in the NW corner of the scheme runs into Glen Banchor and may pose a hazard to black grouse in that area.

The area has long been acknowledged as entomologically rich, containing a rich assemblage of breeding insects with at least **two Red Data Book species** (the moths *Gabrius scoticus* and *Xylena exosoleta*). There are **5 other notable species** with restricted distribution which occur here, being the only known site in Badenoch and Strathspey for 2 of them. The site supports a large colony of the Northern brown argus butterfly (*Aricia artaxerxes*).

The Red Deer Commission have shown that red deer herds overwinter beside the River Calder in Glenbanchor (Appendix 7).

There are no known other species of note within the site.

7.4 GEOLOGY

The geology is not unique, and is similar to other areas within the District. There is no known value for research or teaching that cannot be gained elsewhere in the District.

7.5 WATER

The site occupies part of the watershed between the Rivers Calder and Spey, but contributes only a few small burns into these rivers. The site is outwith any Sensitive 10 km squares for Critical Loads.

7.6 LANDSCAPE

The site is visible from the three roads (A9, A86 and the Glen Banchor road) passing within 2km of the site, and from the mainline rail route along the Spey valley between Inverness and the south. It forms a prominent feature of the area, being adjacent to the village of Newtonmore.

7.7 ARCHAEOLOGY

There are no Scheduled Monuments on the site. Reference to Appendix 5 indicates that further archaeological sites may be found during proposed additional field survey work.

8. SIGNIFICANT EFFECTS OF THE PROPOSALS

8.1 PEOPLE

A keeper will be employed in the near future for management of the scheme.

Forestry employment in the short term for locally based fencing contractors will be expanded. Monitoring of woodland change within the site will provide limited employment, as will the possible increased research potential. Deer and goat control will be undertaken by the Estate's wildlife managers. Bracken control, in consultation with SNH, may be undertaken as required and will provide limited employment

8.2 FLORA

All areas identified as **Ancient or Long-established semi-natural woodland** will be maintained, and increased by natural regeneration, which will conserve the genetic integrity of the existing stock. Regeneration of the native woodland will be of benefit to a variety of plant species which will colonise the area from the existing woodland. The area for regeneration is intrinsically woodland and the present scheme will convert these areas towards the pre-existing semi-natural community. The site will regenerate rapidly once stock grazing has been eliminated (this is already occurring with abundant birch, rowan and hazel seedlings and saplings). This accords with one of the principles of the ESA (see Appendix 1).

For those areas identified in Appendix 3 as habitats in good condition, and the mires and flushes shown in Map 4 Appendix 1, control of regeneration by manual cutting will be undertaken as required. Bracken control will be undertaken as necessary. The Applicant proposes that long-term monitoring of the vegetation should be undertaken, in order to define the management requirements of the grassland sites.

The grassland and mire communities will be shaded by the growing woodland, except for those areas where open space has been left to protect grassland and mire/flush habitats and in other open space. That beneath the broadleaved woodland will alter with an increase in the plant species typical of mesotrophic or calcareous upland broadleaved woodland. By expanding the area under woodland, woodland species diversity may increase.

Similarly, the available woodland for colonisation by bryophytes and lichens will be greatly increased.

8.3 FAUNA

Extension of the existing woodland will, in the medium to long term, provide further habitat for a range of broadleaved woodland bird and insect species. Since the area under native woodland will

be considerably increased, it is possible that an increased number may become established from other reproductive sources.

Sheep/pony grazing is to be stopped in the scheme area except for some controlled cattle grazing in compartment 'a'. With the controlled grazing, the extra growth of grass and herbs should increase the small mammal population, thereby increasing prey availability for the raptors (although taller grass and herb height may minimise this effect by making it more difficult for the raptors to catch their prey). In the shorter term, this increase may be dramatic, with populations levels declining as the canopy closes. Overall the benefit to raptors may be minimal.

Deer fencing may pose a threat to black grouse, since the birds may collide with the fencing as they move between the open hill ground to feed, and the shelter of the developing woodland. Deer fencing already exists along the lower margins of the WGS application area; that around the remainder of the site, especially on the upper margins, will have limited tree regeneration near it. It is expected that this open ground may alleviate the potential for bird strikes, as the fence will be more clearly visible to the birds. To minimise the risk of bird strikes, in the NW corner in particular, SNH/Game Conservancy would be invited to a site meeting to inspect the marked out fence line prior to its erection. Any areas of particular risk will be identified, so that the fence can be flagged to improve its visibility. If required, minor changes to the fence line could be made to further reduce the risk of bird strikes.

Golden eagle, peregrine, merlin, buzzard and raven occur within the SSSI, which is part of their hunting ranges. In view of the expected increase in live prey species outlined above, it is possible that the potential loss of feeding area will be compensated for by increased live prey availability.

Both deer and goats will be excluded from the site after driving them out. Thereafter culling will be linked to monitoring of the regeneration. The Red Deer Commission indicate that no quantifiable displacement of red deer will be caused by the scheme. Culling within the fence area will be very heavy, while on the remainder of the Estate culling will be undertaken at a level which will prevent excess damage. This level of culling on the rest of the Estate is not likely to be affected by the scheme.

8.4 SOIL AND GEOLOGY

There are no notable geological features which will be hidden by the forest.

8.5 WATER

There will be no fertiliser application within the WGS area to affect the the burns within the site nor to provide nutrient-enriched run-off to the oligotrophic River Calder. There will be no ground preparation which might affect water quality through siltation.

8.6 AIR

There are unlikely to be any significant effects on air quality as a result of the development.

8.7 CLIMATE

There will be no significant effect.

8.8 LANDSCAPE

The proposed scheme will have a significant effect on the landscape. Regeneration of native broadleaved woodland will create a more dense canopy in those areas with current sparse cover. However, as vegetation types mirror soil types, the diverse mosaic of soil classes and bare rock will be reflected in a diverse woodland canopy, e.g. there will be no regeneration on the rock faces, and

very little regeneration in the wet hollows. The top margin of the regenerated woodland will appear natural as the environment will create a reduction in tree size and density as elevation increases. As with most vegetation systems at the same elevation, the environment for regeneration on spurs is more hostile than in depressions and therefore the tree line will reflect the topography.

The new forest will have a margin consisting of open space and broadleaves where it borders the public road. If this area were to be left ungrazed, rapid natural regeneration would occur, while the reduction of deer and goat grazing would allow the grasslands to become rank and less diverse. This open space will be managed through carefully controlled stock (both domestic and wild) grazing to create a floristically diverse border, and assist retention and enhancement of the herb-rich communities. The owners anticipate that a long-term monitoring programme will be initiated in order to monitor the effect of grazing on the vegetation, and to allow fine tuning of the grazing regime, in consultation with Scottish Natural Heritage.

The proposal includes the erection of deer-fencing along the upper margins of the area. However this will be held back from the tops of the ridge so that it will not be visible against the skyline. As the trees regenerate, so the fencing should be partly hidden from view.

Appendix 4 contains the full landscape appraisal.

8.9 MATERIAL ASSETS

There will be no effect on the material assets of the area.

8.10 CULTURAL HERITAGE

Except for field clearance areas and rigs, any natural regeneration will be removed from the hut circles, paths indicated and other identified features. Only sample areas (to be identified later if regeneration occurs) of rigs and field clearance will be kept clear of regeneration. Any further archaeological sites discovered on site will be protected as appropriate, following discussions with Highland Regional Council's Archaeologist. The Royal Commission on Ancient and Historic Monuments in Scotland (RCAHMS) is to undertake a full field survey of the site in due course.

The applicant undertakes to control regeneration within such sites as the respective bodies deem appropriate.

9. CONCLUSIONS

There are two significant areas in the proposals where consultation should focus:

landscape and nature conservation.

The proposed woodland will affect the landscape. The existing woodland cover will increase but due to the nature of the terrain and the proposed method of establishment (i.e. natural regeneration) a diverse, semi-natural woodland will develop. This type of woodland will increase the importance and value of this area in terms of scenic and conservation value. Indeed this extended woodland will add to the landscape because it is the natural scenery of the area which has mainly been lost due to man's action over time.

Maintaining the flushes and grasslands as planned open space by controlled grazing results in a number of beneficial effects:

- retention of the areas of high botanical interest, and
- retention of the high entomological interest.

Careful management of the open space within the WGS should considerably improve and extend the habitat for a number of bird species, by providing increased prey species (insects, small mammals and birds). There may be a small but significant effect on the incidence of bird strikes by black grouse with the deer fencing.

Goat and deer numbers within the WGS application area will be reduced and controlled. Access to their wintering areas beside the River Calder will be largely unimpeded. The level of culling on the rest of the Estate is unlikely to be affected by the scheme. A keeper will be employed by the Estate for management of the scheme.

The scheme meets the criteria of both Site of Special Scientific Interest and Environmentally Sensitive Area management. It also meets the criteria for protection of Ancient semi-natural woodland as laid down in various Forestry Commission publications.

SNH and The Game Conservancy Trust will be consulted about the potential hazard of the deer fencing for bird strikes.

APPENDIX 1

Maps

1 Location map

2 Designations map

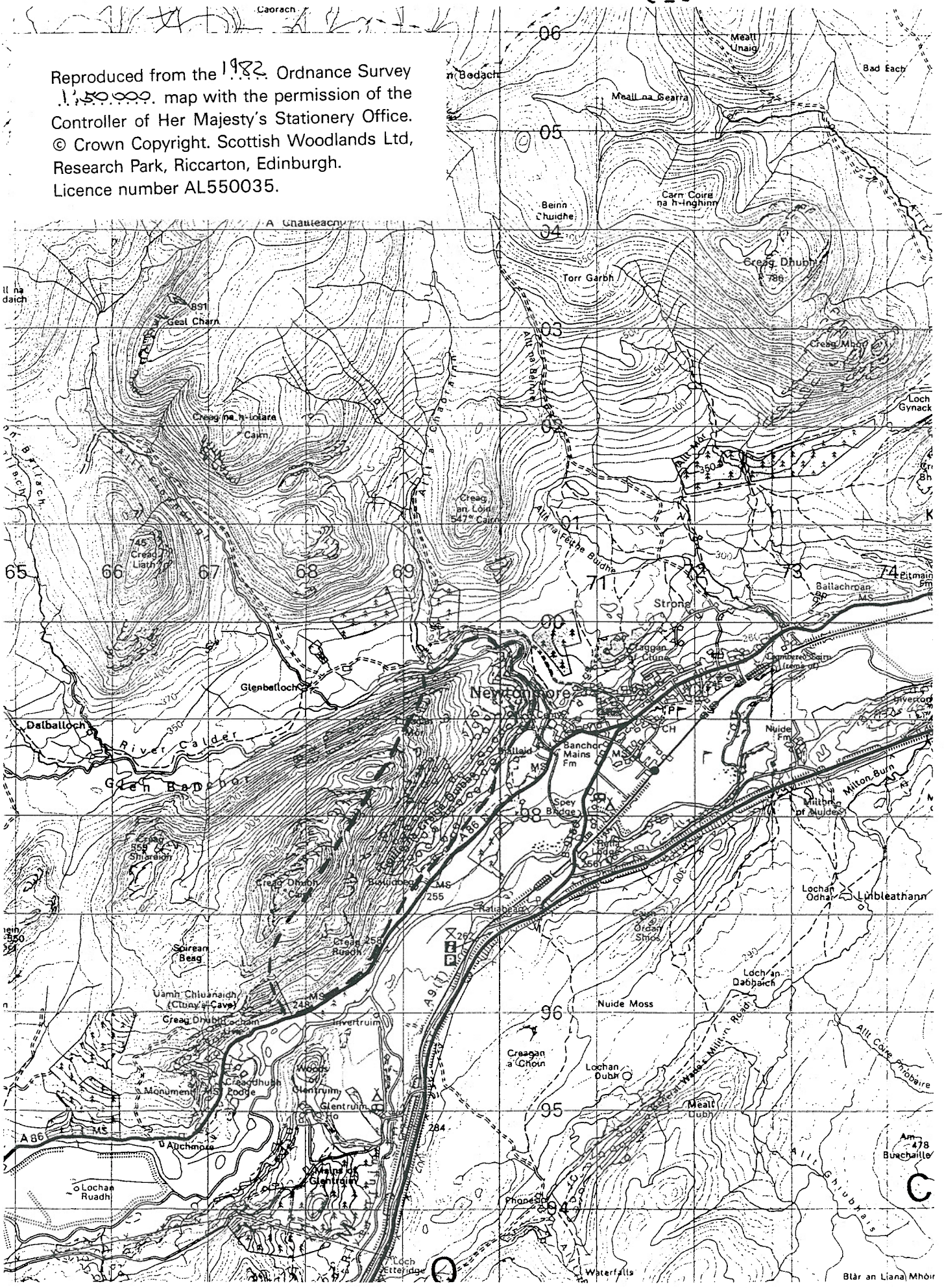
3 ESA Objectives

4 Ancient Semi-natural Woodland

5 Hydrology

MAP 1 LOCATION MAP NN 69/79

SCHEME AREA -



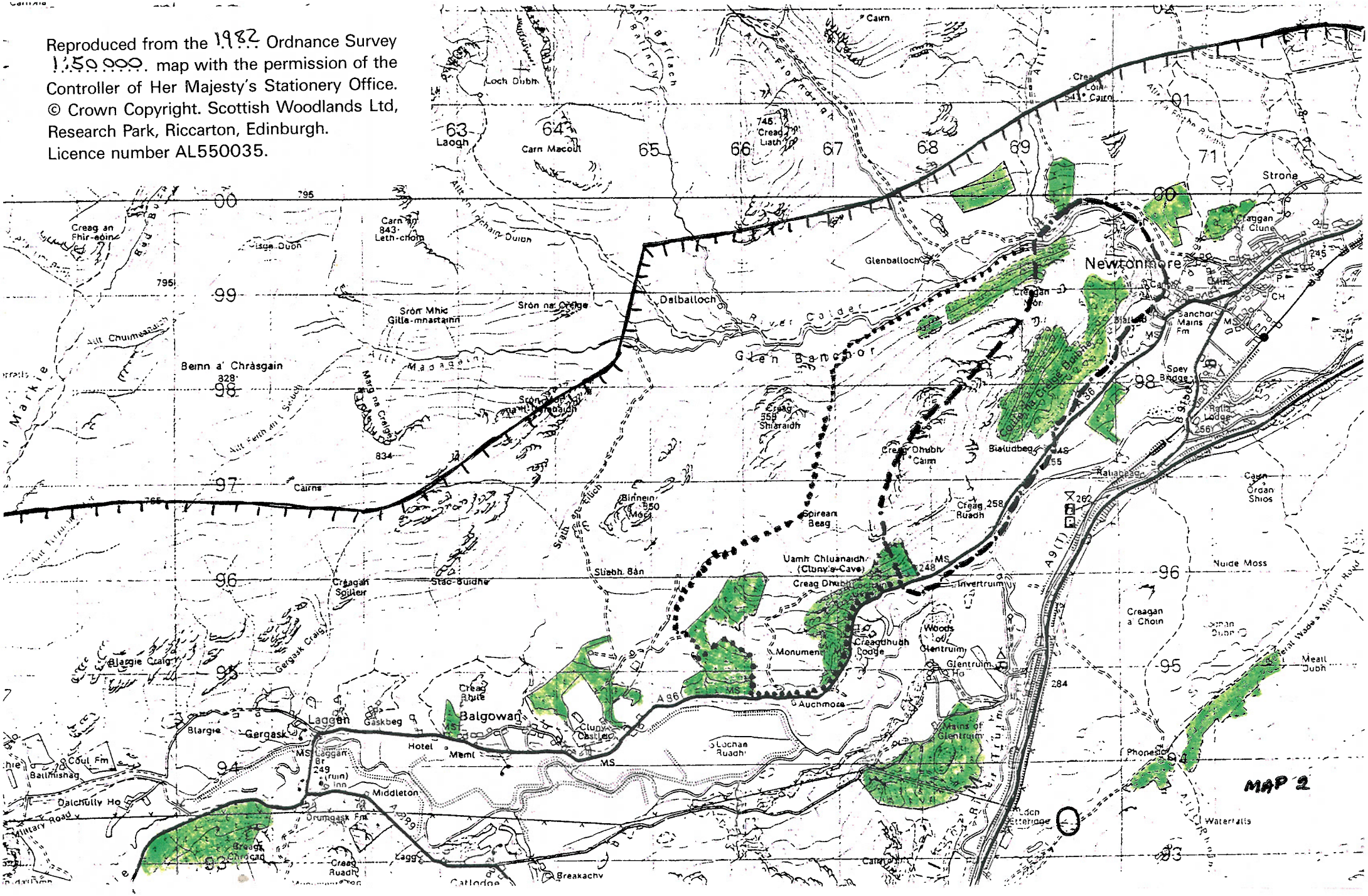
KEY

Approximate northern boundary of the Cairngorm Straths ESA (taken from 1:300,000 map)

Creag Dhubh SSSI boundary

WGS application

Existing woodland (coniferous and broadleaved)



Part II - The ESA Scheme

What is an Environmentally Sensitive Area?

3. An ESA is an area designated by the Secretary of State for Scotland, on the basis of recommendations made by Scottish Natural Heritage, where farming practices have helped create distinctive landscapes and have maintained wildlife habitats and historic features. The purpose of each ESA Scheme is to support the continuation of these farming practices and to encourage measures that will enhance the environment.

Why has the Cairngorms Straths been designated?

4. This area has been selected, following consultation with Scottish Natural Heritage, because it is recognised to be of the highest natural heritage value and much of the land is influenced by farming. The main farming enterprise is livestock rearing; this has created a variety of habitats of conservation and landscape interest, with heather moorland on the upper slopes providing the backdrop to the straths and glens. The high proportion of native woodland interspersed with the farmland is a notable landscape feature of the area and supports a variety of mammal and bird life. Gorse scrub, often in association with field boundaries, particularly on Deeside, provides habitat for birds such as linnet, whitethroat and yellow hammer. Wetland, rushy pasture, acidic and neutral grassland occur in the upper straths and support breeding populations of a variety of waders. Some of the grasslands are botanically important, particularly where basic conditions occur and hay cutting is still carried out. Arable and rotational grassland becomes more important at lower altitudes and, where appropriate management is carried out, is an important habitat for winter feeding flocks of finches and buntings. The Rivers Dee and Spey along with their tributaries are notable for the unpolluted nature of the water. The wild salmon stocks are biologically as well as commercially important, and the rivers are also associated with otters as well as a variety of birds such as dipper, goosander, red-breasted merganser and common sandpiper.

5. Maintenance of the existing features of natural heritage interest therefore largely depends on the continuation of sensitive farming practices. Over the past decades losses to the natural heritage have occurred through reclamation of moorland, drainage of wetlands, ploughing, re-seeding and fertilising of botanically or ornithologically interesting grasslands. A large proportion of the woods in the area are continuously grazed, preventing their regeneration and the developent of under-storey vegetation. An ESA Scheme would enhance the internationally important natural heritage and involve an important section of the community in the future management of the natural resources.

What are the aims of this ESA?

6. In order to conserve and enhance the characteristic landscape and habitats and to protect features of historic interest in the area, the aims of the ESA are:

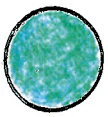
- to encourage traditional agricultural practices which contribute to sustaining and enhancing habitats and species and which complement or reinforce existing landscape quality;
- to protect, enhance and extend areas of herb rich unimproved grassland, moorland, native woodland, amenity woodland, scrub, water margins and wetlands;
- to rectify the neglect of traditional dykes and stone banks and restore ponds where appropriate;
- to encourage the introduction or continuation of cropping or fodder production which conserves and enhances the conservation value of the inbye land;
- to protect features or areas of historic or archaeological interest.

ORIGIN CATEGORIES FOR WOODLAND INVENTORIES

1. Ancient woodland

Sites shown as woodland on all available map sources from 1750 onwards, and having the appearance of semi-natural woodland on the 1750 map. These are sites with a proven continuity of woodland cover for at least 230 years, and which are likely to be modified remnants of Scotland's original forest cover.

2a. Long-established woodland of semi-natural origin

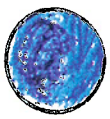


Sites which appear to be semi-natural woodland on maps of c1860, but not shown as woodland at all on the 1750 map. These are woods that have apparently arisen between 1750 and 1860 and thus have a proven continuity of woodland cover for at least 120 years. In fact omissions from the 1750 maps were such that many of the sites are very likely to be ancient, but cannot be proved to be so.

2b. Long-established woodland of plantation origin

Sites which appear to be plantation woodland on maps of c1860, but not shown as woodland at all in 1750 (or shown as a plantation on these maps). These are woods that were apparently planted between 1750 and 1860 (or even before 1750) and thus have a proven continuity of woodland for at least 120 years. In fact, omissions from the 1750 maps will mean that some of these sites may well be ancient in origin. Many of the older plantations have considerable conservation value in their own right.

3. Other woods on "Roy" woodland sites

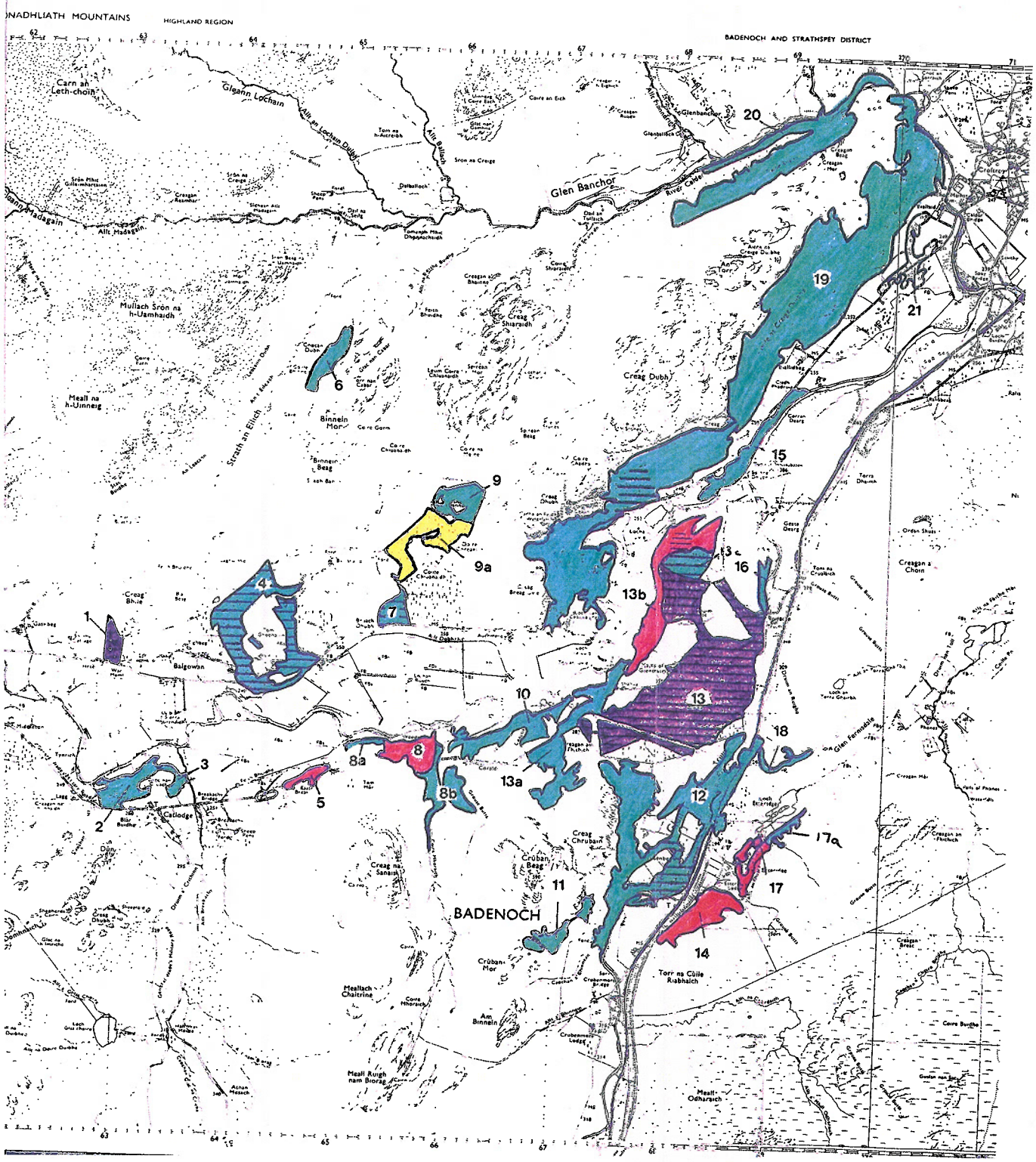


Sites which were shown as unwooded in 1860 but which were present as woodland in 1750 and are shown as woodland on the recent maps. At most such sites have had only a short break in continuity of woodland cover, and although some groups may have been lost (eg lichens) much of the value of the site may have remained. Because the maps of 1860 may have omitted some remote woods, some of these sites may in fact be ancient.

4. Other woodland

Any other woods known from recent ground survey to be important for nature conservation. These are frequently small woods in narrow valleys which have often been omitted from the older maps. Many are believed to be fragments of ancient woodland.

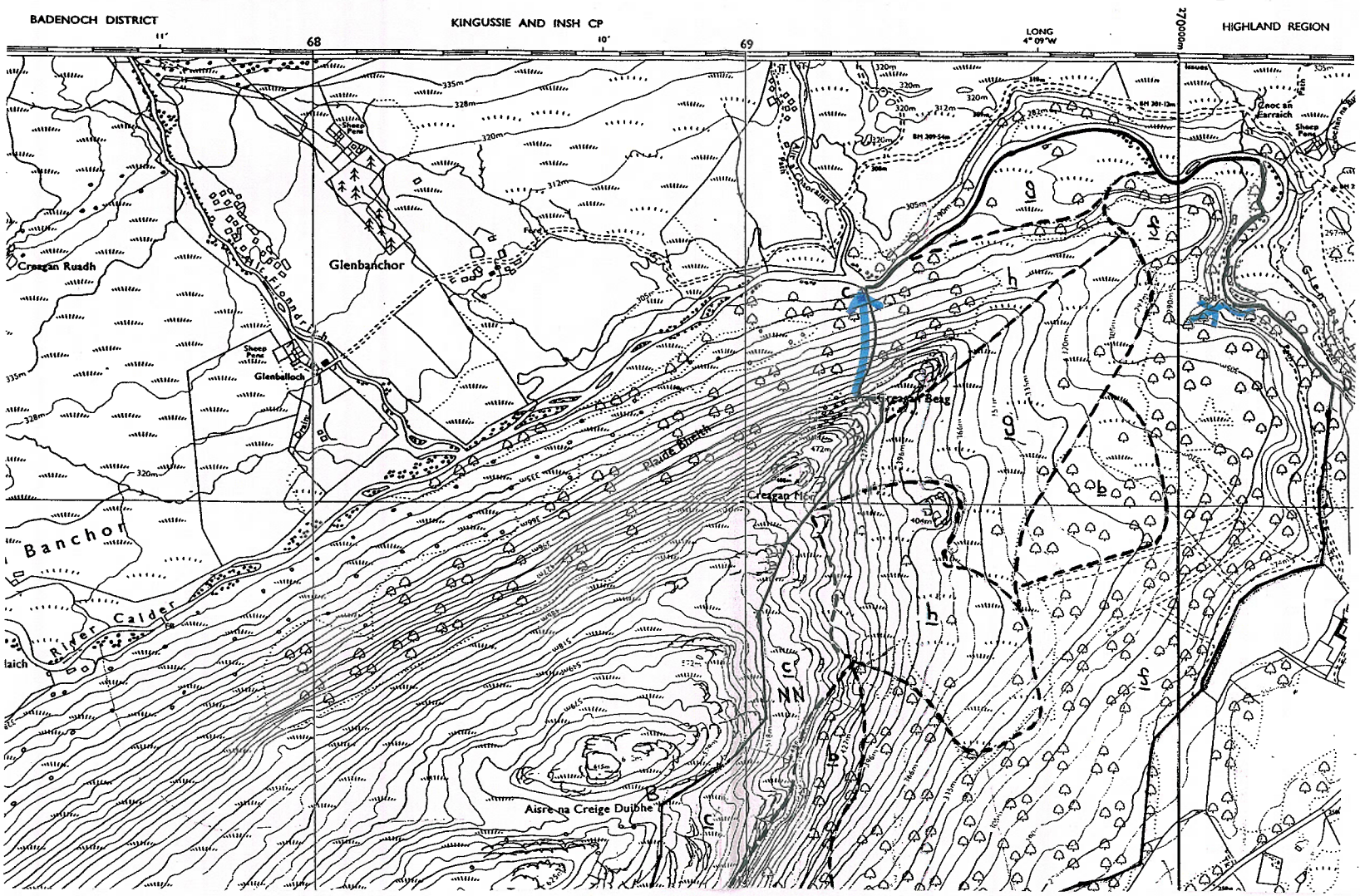
MAPS USED - OS 1:25,000 Second Series (1950s to 1970s)
OS 6" First Edition (ca. 1860)
The Military Survey of Scotland 1747-55 (Roy Maps)



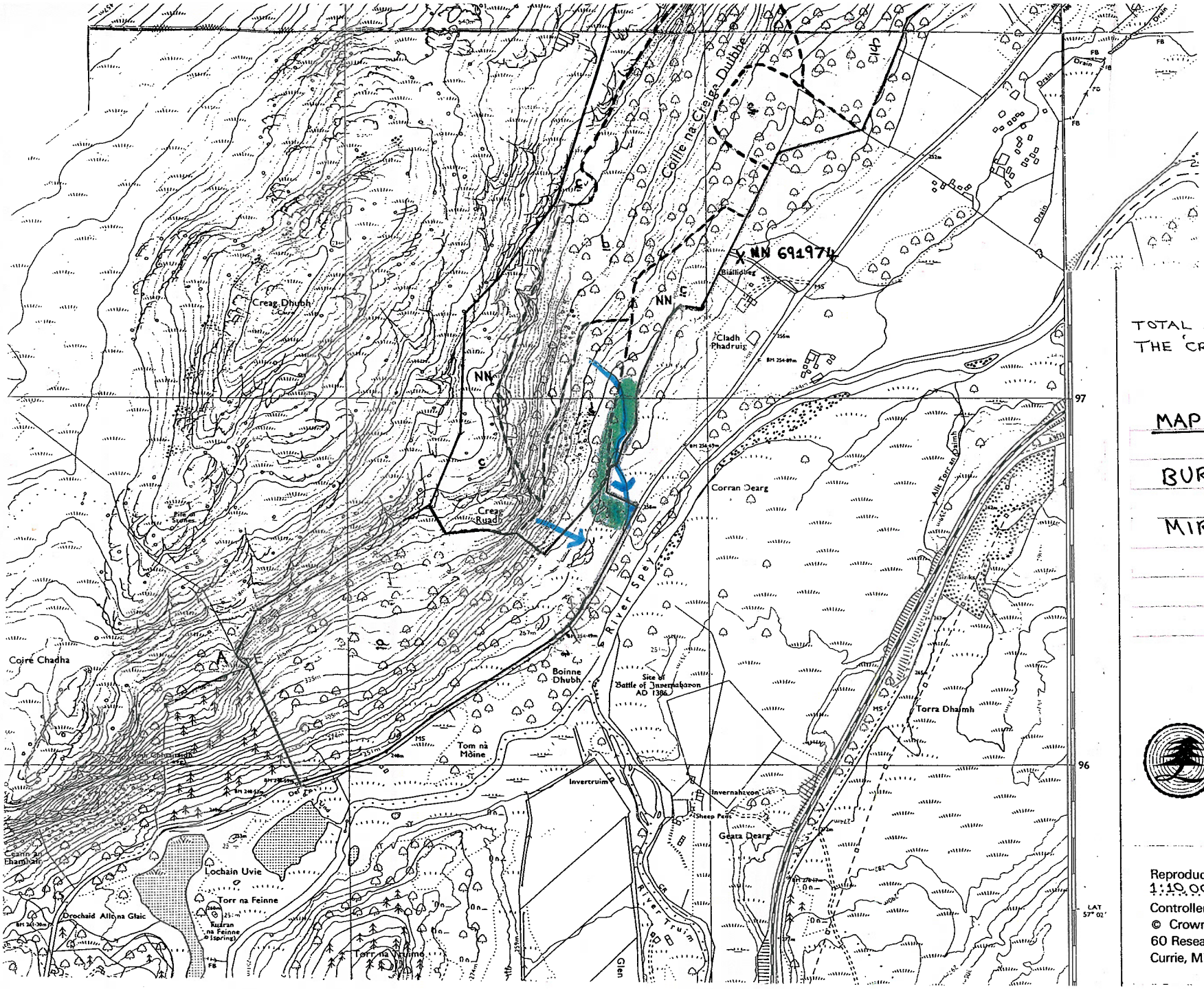
MAP 3

IANCE SURVEY

SHEET NN 69 NE



N



BIALLAID

TOTAL AREA OF PROPOSAL IS WITHIN THE 'CREAG DHUBH' SSSI.

MAP 4 HYDROLOGY.

BURNS

MIRE

Scottish Woodlands Ltd
14 The Square, Grantown-on-Spey, Morayshire PH26 3HG
Telephone: 0479 87 2455
Fax: 0479 87 2189

APPENDIX 2

—

Woodland Grant Scheme Application

WGS reference number 030/000757

Woodland Grant Scheme

WGS 1

Application

It is essential that you read the Guidance notes as you complete your application.

1 The property

Woodland or property name
BIALLIAD

Nearest town or village
NEWTONMORE

Use of property
MAINLY WOODLAND

OS grid reference of the access point
NN 691974

Local Authority
BADENOCH & STRATHSPEY

2 Ownership category

a BUSINESS OCCUPIER

b *Owner* ☑ *Lessee* ☐

3 Occupants details

Name
J. D. CARNEGY-ARBUTHNOTT

Organisation
M. J. HAYWOOD'S 1974 TRUST - BIALLIAD

Position

Address
BRODIES WS, LAND & ESTATE AGENCY DEPT.,
[illegible] CRESCENT,
EDINBURGH

Postcode
EH3 8HA

Telephone

Fax

WOODLAND GRANT SCHEME
WGS
The Forestry Authority
Forestry Commission

4 Any other applicants

Name

Organisation

Position

Address

Postcode

Telephone

Fax

5 Your agent or manager

Name DAVID S. LESLIE / ACTING SOLICITORS - BRODIES WS

Organisation LAND & ESTATE AGENCY DEPT.
SCOTTISH WOODLANDS LTD.,

Address SPEYSIDE OFFICE,
BALLINDALLOCH,
BANFFSHIRE,

Postcode AB37 9BJ.

Telephone 01807 500710

Fax 01807 500711

6 Area to the nearest tenth of a hectare

a *Total area of application* 292.6

b

	Conifers	Broadleaves
New planting	•	138 • 4
Restocking	•	27 • 4
All management grant	•	126 • 8
Thinning	•	•
Felling	•	•

10 Your objectives

	Priority		
	High	Medium	Low
Producing wood and marketable timber			
Managing or regenerating forests or woodlands		✓	
Enhancing the landscape			✓
Maintaining and creating new wildlife habitats	✓		
Providing public recreation			
Providing sporting use			
Providing employment			
Providing an alternative to agricultural production			
Restoring or improving industrial or derelict land			
Providing shelter			
Conserving archaeological features			
Please specify others			

11 Any explanation of your objectives

The proposed scheme is intended to ensure and improve the natural regeneration of the existing woodland. It will also allow this important woodland area to increase in size. The proposed scheme will ensure and improve existing important wildlife habitats and create new habitats with the expansion of the woodland area. The landscape will be enhanced by the natural regeneration and expansion of the woodland.

Now complete *your Proposals* (WGS 2)

Design Spencer Brown & Co for Design & Interpretation Branch D1/4/2-SB/1H-80M-APR 93

7 Existing Grants and Felling Licences

a *Forestry Commission*

b *Other Government Departments*

8 I also want to apply for

Farm Woodland Premium Scheme	☐	*Native Pinewoods*	☐
Community Woodland Supplement	☐	*Plan Preparation Grant*	☑

9 Special areas and protected land

Abbreviation	*Comments*
SSSI	The entire area covered by this application falls within the 'Creag Dhubh' SSSI which contains one of the largest and most diverse birchwoods in the Spey Valley.
ESA	Cairngorm Straths Environmentally Sensitive Area.

WGS reference number 030/000757

Woodland Grant Scheme

WGS 2

Proposal

It is essential that you read the *Guidance notes* as you complete your proposal.

1 The property

Name BIALLIAD

2 Describe your general work proposals

All operations will be carried out in consultation with SNH.

The proposed scheme will be enclosed by a deer fence. The purpos of the fencing is not to exclude deer from the site but to allow more effective control by restricting their movement. A new deer fence will be erected between points C and D (see map).

The existing deer fence (section A to B on map) will be repaired and upgraded where required. All fences will be maintained as required in the future. The fencing proposals will restrict the movement of deer and goats and allow their numbers to be more effectively controlled. The resultant deduction in grazing pressure will greatly improve the regeneration of birch and other important flora. Sub compartment 'a' will be separated from the rest of the scheme by a stock fence between E and F (see map).

This is because the area contains open ground which is an important habitat for a number of rare species of flora and fauna and is preserved by grazing. Deer and goat numbers will be closely controlled in this area and winter stock grazing (August-April) will be used to improve and maintain this habitat. If required, birch regeneration will be cut manually to prevent the loss of open ground. The existing pest and predator control already carried out by the Estate will be continued and improved.

Stock not agreed with FA.

W·O·O·D·L·A·N·D GRANT SCHEME WGS

The Forestry Authority

Forestry Commission

Details of your proposal

1 *Name or number of management unit*	2 *Area of management unit in hectares*	3 *Activity*	4 *Planting year*	5 *Species*	6 *Area of activity in hectares*
BIALLIAD 1a	41.5	EN		BI	3.3
		SM		"	38.2
1b	54.9	NN	1994	"	27.5
		EN		"	1.4
		SM		"	26.0
1c	40.6	NN	1994	"	40.6
1d	8.9	NN	1994	"	5.8
		EN		"	0.2
		SM		"	2.9
1e	6.2	NN	1994	"	4.0
		EN		"	1.5
		SM		"	0.7
1f	82.0	NN	1994	"	24.6
		EN		"	2.9
		SM		"	54.5
1g	28.2	NN	1994	"	26.8
		EN		"	1.1
		SM		"	0.3
1h	[illegible]	NN	1994	"	5.1
		EN		"	17.0
		SM		"	4.2

7

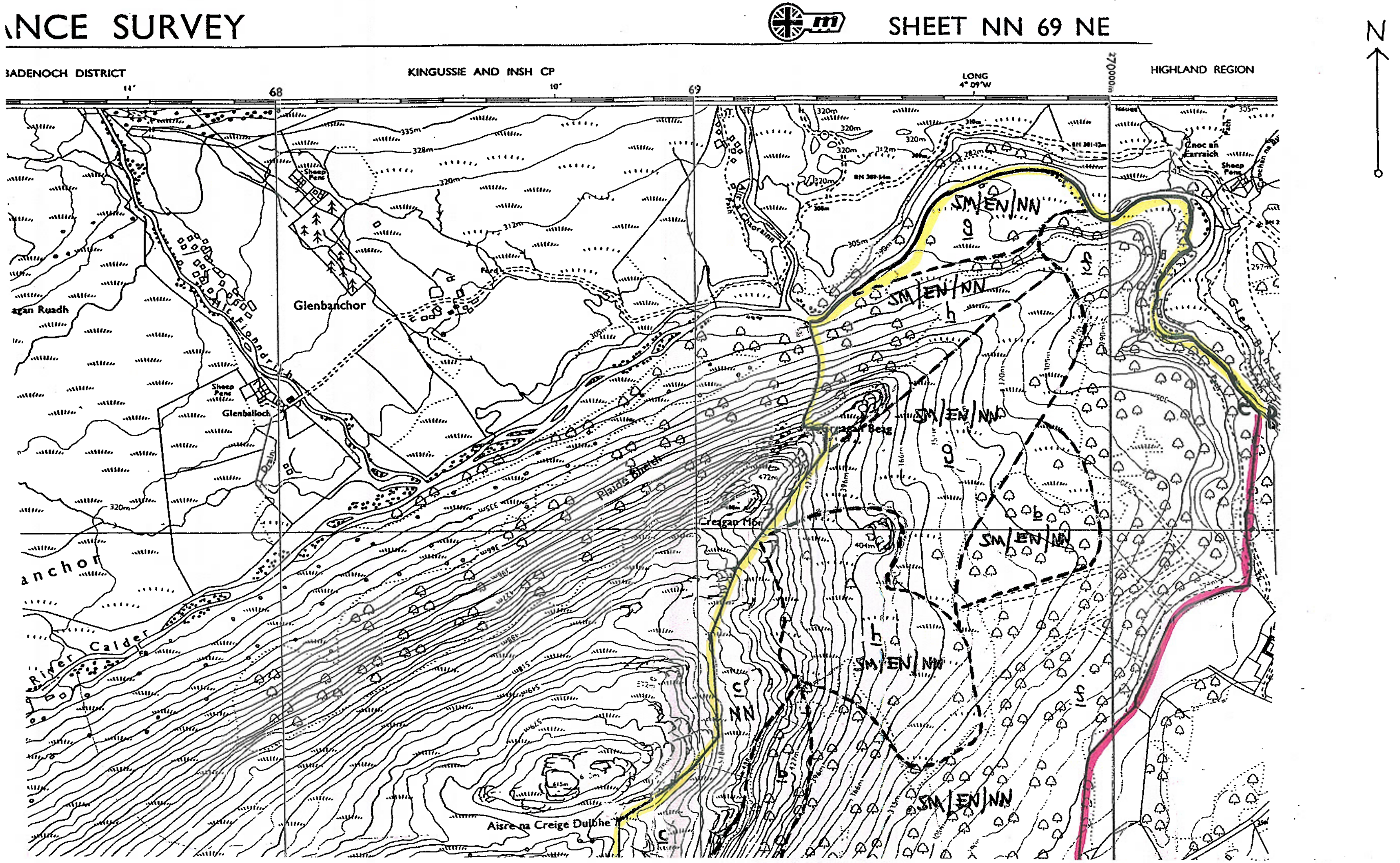
Dec. not agreed with F.C.

If any of the work opposite has not been described on page 1 please do so here.

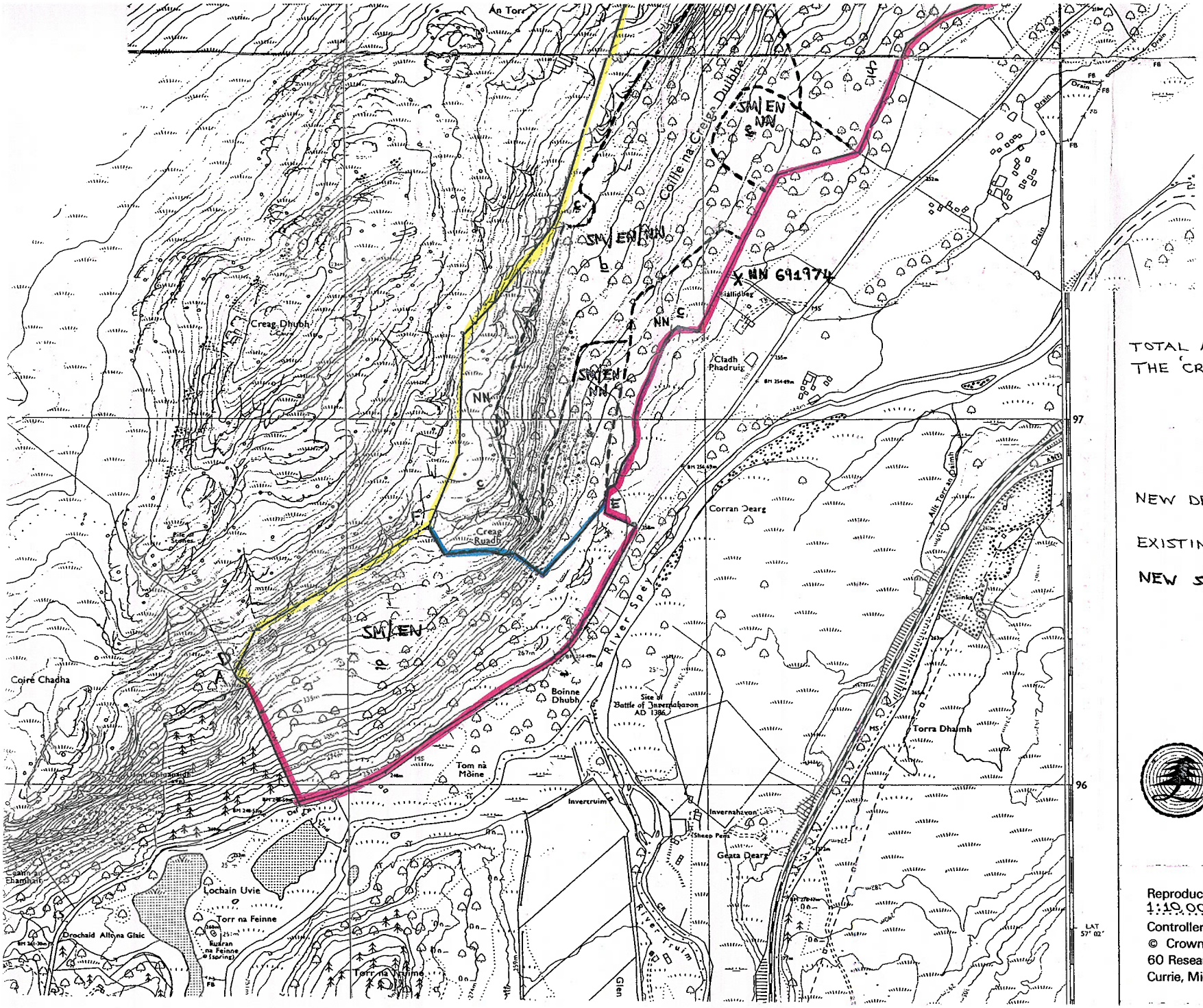
Control of pests will be carried out by the Estates own wildlife managers. High seats will be erected. On completion of fencing deer and goats will be driven out. Intensive culling of deer and goats will be carried out in the first 2-3 years. A licence for out of season culling of deer will be applied for. Open space will occur naturally due to areas being unsuitable for natural regeneration. These areas are mainly rock and scree. The open space will be an important part of the sites diversity and will form less than 20% of the total area of the proposal. Existing access points and paths will be maintained and a number of new access points created. Bracken and other weeds will be controlled as required using manual methods. in relation to what.

A long term survey of the sites flora will be undertaken in association with an environmental consultant or some other suitable expert party.

The archaeological sites within the scheme are to be kept clear of any natural regeneration which occurs except for field clearance/rig features, of which only example areas require to be kept clear. These would be identified by Highland Regions Archaeological Department. Any archaeological sites identified in the future will be kept clear of natural regeneration if required.



NCE SURVEY
SHEET NN 69 NE
BADENOCH DISTRICT
KINGUSSIE AND INSH CP
HIGHLAND REGION
68
69
Glenbanchor
Glenballoch
Sheep Pens
SM/EN/NN
NN
Creagan Beag
Creagan Mor
Aisre na Creige Duibhe
River Calder
Cnoc an Carraich
N



BIALLAID

TOTAL AREA OF PROPOSAL IS WITHIN THE 'CREAG DHUBH' SSSI.

NEW DEER FENCE (PROPOSED) -

EXISTING DEER FENCE -

NEW STOCK FENCE (PROPOSED) -

Scale 1:10000

Scottish Woodlands Ltd

14 The Square, Grantown-on-Spey, Morayshire PH26 3HG
Telephone: 0479 87 2455
Fax: 0479 87 2189

APPENDIX 3

Botanical reports

CREAG DHUBH

SSSI

DISTRICT	:	BADENOCH AND STRATHSPEY
PLANNING AUTHORITY	:	HIGHLAND REGION
DATE NOTIFIED UNDER THE 1949 ACT	:	1964
DATE NOTIFIED UNDER THE 1981 ACT	:	1986
NATIONAL GRID REF.	:	NN 680970
O.S. 1:50,000 SHEET NO.	:	35
1:25,000 SHEET NO.	:	NN 69/79
AREA (HECTARES)	:	1059

DESCRIPTION

This varied site contains one of the largest and most diverse birchwoods in the Spey Valley encircling a hill which reaches a height of 734 m. Grassland, heathland and ombrogenous bog (nourished by rainwater) are all present and support a rich variety of fauna and flora.

BIOLOGY

The vegetation types vary according to height, aspect, drainage and underlying geology, producing a great diversity of habitats which is reflected in the rich insect, bird and plant life.

Woodland

Birch (Betula sp) woodland with abundant Hazel (Corylus avellana) over a herb rich ground flora dominates the more base-rich southern slopes. These slopes are broken by large areas of exposed rock which support a variety of species amongst which the Rock Whitebeam (Sorbus rupicola) and Maidenhair Spleenwort (Asplenium trichomanes) are the most notable. The blocky scree below the cliffs has scattered Hazel and Birch with a rich carpet of bryophytes. Some of these bryophytes are Atlantic western species, unusual in this part of Scotland.

The north facing slopes support an unusual woodland type, a Birch/Rowan (Sorbus aucuparia) woodland, which is more representative of western Scotland. Alder (Alnus glutinosa) growing in a Rush - Bog Asphodel (Juncus-Narthecium ossifragum) bog occurs on the wet flushes on lower ground.

Moorland

The upland area has a rich mosaic of habitats with common heather (Calluna vulgaris) heath on the drier slopes grading into Purple Moor-grass-Bog Myrtle mire (Molinia-Myrica) on

ombrogenous bog on the flatter ground. The higher areas support Common heather - Hares-tail Cotton Grass (Calluna - Eriophorum vaginatum) bog as well as the rare Dwarf Birch (Betula nana) and Cloudberry (Rubus chamaemorus).

Insects

Creag Dhubh has an important assemblage of breeding insects with at least two Red Data Book species including the moths Gabrius scoticus and Xylena exosoleta (Sword Grass), the former occuring on no other site in Speyside. Numerous other species with limited distributions can be found and there is a large colony of Northern Brown Argus (Aricia artaxerxes) butterflies.

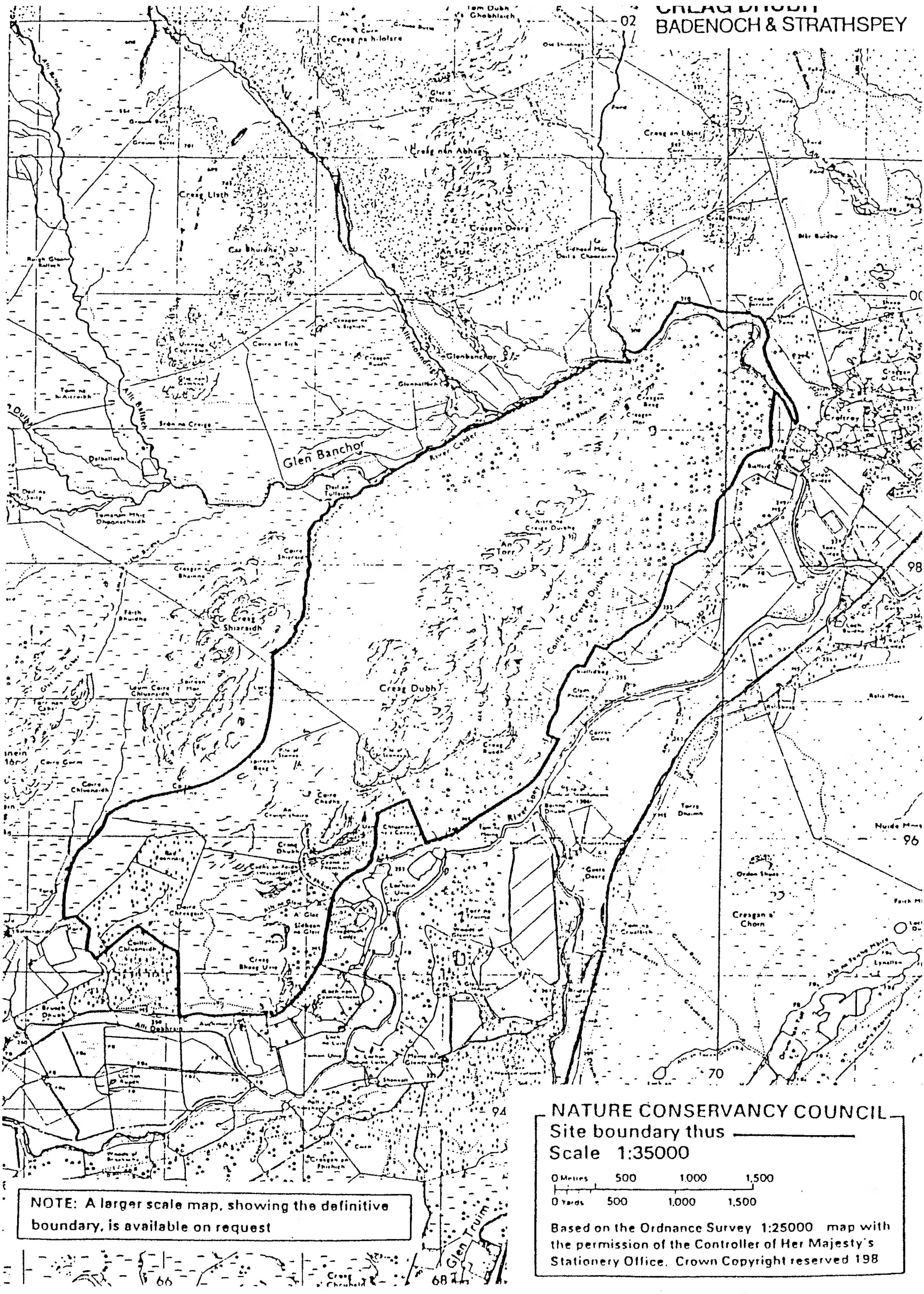
Birds

The variety of habitats support an impressive range of breeding birds including several species of national and international importance. Black Grouse and Scottish Crossbill breed in the woodlands which also support a representative range of other woodland species including Pied Flycatcher, Redstart and Siskin.

REMARKS

The site has been increased by 951 hectares.

CREAG DHUBH
BADENOCH & STRATHSPEY



NOTE: A larger scale map, showing the definitive boundary, is available on request

NATURE CONSERVANCY COUNCIL

Site boundary thus

Scale 1:35000

0 Metres 500 1,000 1,500

0 Yards 500 1,000 1,500

Based on the Ordnance Survey 1:25000 map with the permission of the Controller of Her Majesty's Stationery Office. Crown Copyright reserved 198

CREAG DHUBH

Date Notified: 10-7-86

SSSI

OPERATION LIKELY TO DAMAGE THE FEATURES OF SPECIAL INTEREST

Standard Ref. No.	Type of Operation
1.	Cultivation, including ploughing, rotovating, harrowing and re-seeding.
2.	The introduction of grazing and changes in the grazing regime including type of stock or intensity or seasonal pattern of grazing and cessation of grazing.
3.	Stock feeding and the introduction of stock feeding.
4.	The introduction of mowing or other methods of cutting vegetation and changes in the mowing or cutting regime (including hay making to silage and cessation).
5.	Application of manure, fertilisers and lime.
6.	Application of pesticides, including herbicides (weedkillers).
7.	Dumping, spreading or discharge of any materials.
8.	Burning and changes in the pattern or frequency of burning.
9.	The release into the site of any wild, feral or domestic animal, plant or seed.
10.	The killing or removal of any wild animal*, including pest control.
11.	The destruction, displacement, removal or cutting of any plant or plant remains, including tree, shrub, herb, dead or decaying wood, moss, lichen, fungus, leaf-mould, turf etc.
12.	Tree and woodland management+ the introduction of tree and woodland management+ and changes in tree and woodland management+.
13a.	Drainage, including moor-gripping and the use of mole, tile, tunnel, or other artificial drains.
13b.	Modification of the structure of water courses (e.g. rivers, streams, springs, ditches, dykes, drains), including their banks and beds, as by re-alignment, re-grading and dredging.
13c.	Managment of aquatic and bank vegetation for drainage purposes.

* "animal" includes any mammal, reptile, amphibian, bird, fish or invertebrate.

+ Including afforestation, planting, clear and selective felling, thinning, coppicing, modification of the stand or underwood, changes in species composition, cessation of management.

14. The changing of water levels and tables and water utilisation including irrigation, storage and abstraction from existing water bodies and through boreholes.

15. Infilling of ditches, drains, ponds, pools, marshes or pits.

20. Extraction of minerals, including peat, shingle, sand and gravel, topsoil, subsoil and spoil.

21. Construction, removal or destruction of roads, tracks, walls, fences, hardstands, banks, ditches, or other earthworks, or laying, maintenance or removal of pipelines and cables, above or below ground.

22. Storage of materials.

23. Erection of permanent or temporary structures, or the undertaking of engineering works, including drilling.

24. Modification of natural or man-made features (including cave entrances), clearance of boulders, large stones, loose rock or scree and battering, buttressing or grading rock-faces and cuttings.

25. Removal of geological specimens, including rock samples, minerals and fossils.

26. Use of vehicles or craft likely to damage or disturb features of interest.

27. Recreational or other activities likely to damage features of interest.

28. Game management and hunting practices, introduction of game management and changes in game management and hunting practice.

SCIENTIFIC,

Creag Ruahd grasslands, Creag Dhubh SSSI

Calcicolous grassland associated with mica-schist outcrops is present on the north and south slopes of Creag Dhubh: below Creag Ruadh and adjacent to Plaide Bheith birchwood.

The Creag Ruahd grasslands, situated between the steep, wooded and bracken-clad slopes of Creag Ruadh and the A86 to Newtonmore (some 4 km to the north-east), consist of species-rich, locally markedly calcicolous, *Festuca-Agrostis* grassland developed around base-rich flushes and on outcropping rock.

Helianthemum nummularium is abundant in the calcicolous grasslands (CG10) here and a variety of other calcicoles are present, including *Linum catharticum, Gentianella campestris, Polygonum viviparum* and *Brachypodium pinnatum*. On the lower slopes the grasslands are less calcicolous, tending to more mesotrophic grassland in the west and acidic grassland in the east, both characterised by an absence of *H. nummularium*, the acidic grassland also with frequent *Galium saxatile* (cf U4c). The more mesotrophic grassland is partly calcicolous, with species such as *L. catharticum* and *G. campestris* still occuring, but, though grazed quite short (< 5 cm), is rich in tall, mostly mesophilous, herbs such as *Geranium sylvaticum, Cirsium helenoides, Filipendula ulmaria, Centaurea nigra,* and *Leucanthemum vulgare,* and bares close comparison with the NVC's *Anthoxanthum odoratum-Geranium sylvaticum* meadow (MG3b). *G. campestris* is quite frequent in the most heavily of these stands (eg. T.Note 15), where *G. sylvaticum* is less frequent.

The flushes are dominated by mixtures of *Myrica gale* and *Carices*, mainly *C. panicea* and *C. hostiana*, with frequent *Narthecium ossifragum, Drosera rotundifolia* and *Campylium stellatum*. A variety of calcicoles including *L. catharticum* and *Sphagnum contortum* are present. *Drosera longifolia* occurs in several localities. The fens are best considered as a variant, *Myrica*-rich form of *Pinguiculo-Caricetum* (M10) with local gradations to *Caricion nigrae* poor-fen where acidophilous *Sphagna* are prominent. A local profusion of *Trollius europaea* and *Crepis paludosa* in a small *Carex echinata* flush on the lower slopes (T.Note 16b) is suggestive of the NVC's *Molinia caerulea - Crepis paludosa* fen-meadow (M26).

Management.

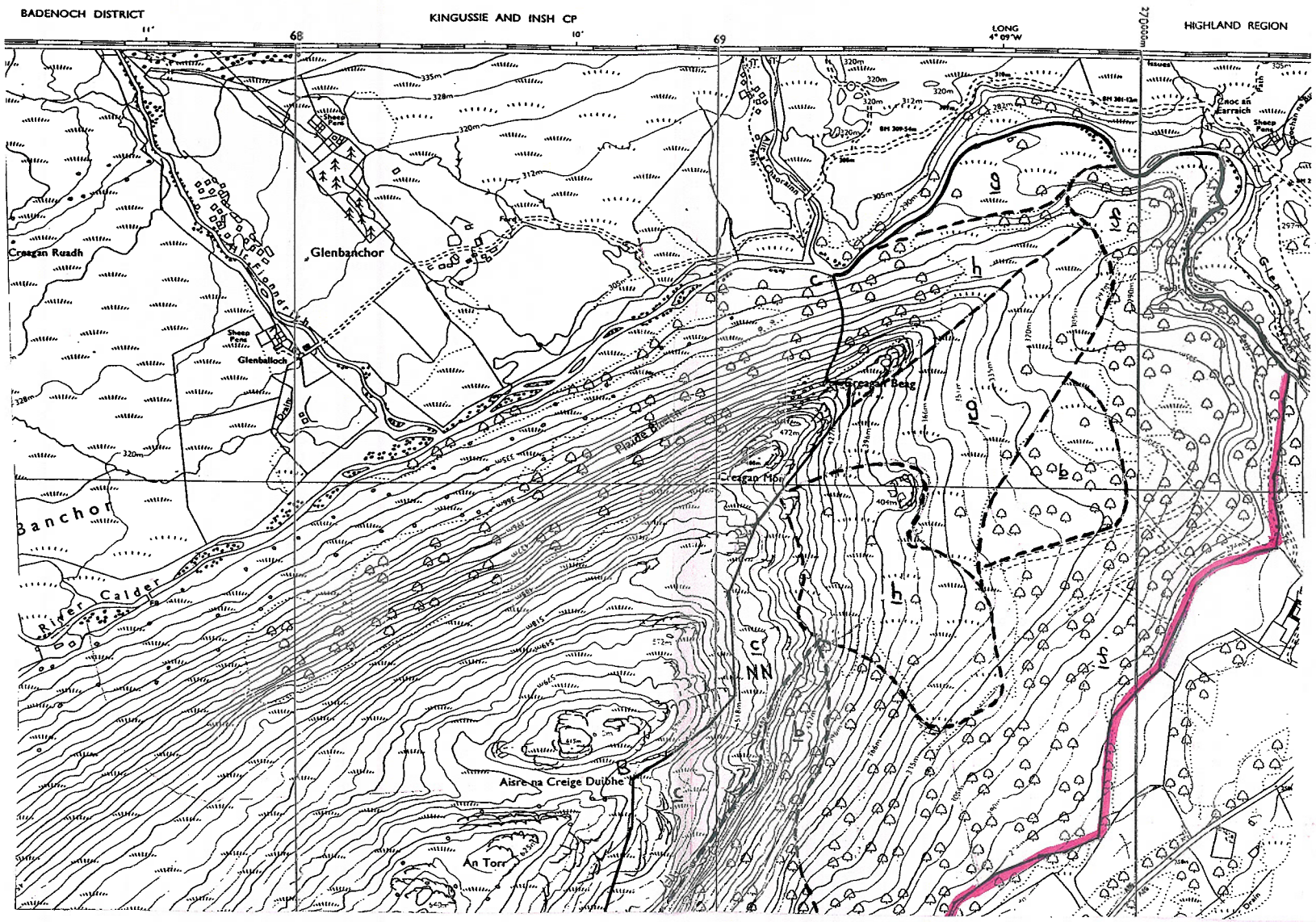
The Creag Ruadh grasslands ares grazed by ponies and goats, as well as rabbits and deer (probably at a higher intensity in the past than at present). Grazing levels on the calcicolous grasslands are about right, though stands on the upper slopes are being invaded by *Betula* seedlings. Pony grazing is concentrated in the east of the site, where the grassland is cropped quite short (c. 3cm), but is species-rich, except where poached, with frequent Succisa pratensis for example. Continued grazing at this intensity may result in a decrease in species diversity and an increase in *Nardus stricta* and *Nardo-Galion* species in this area, and possibly also at the expense of the more valued mesotrophic and calcicolus communities to the west. Small areas of *Nardus* grassland currently occur around the margins of flushes in the more heavily grazed east and *N. stricta* appears to be expanding into the species rich mesotrophic grassland (at T.Note 20).

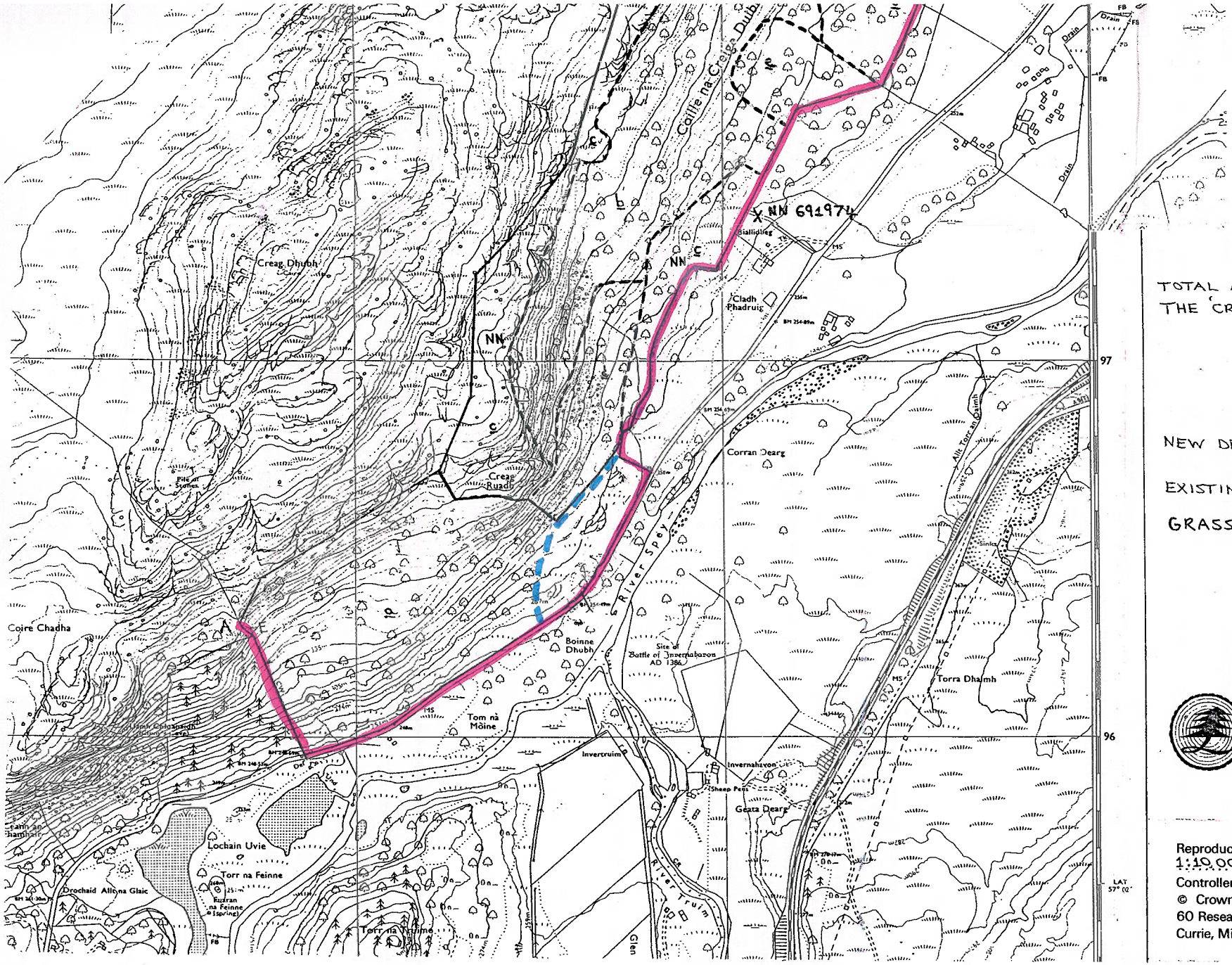
Evaluation and Conservation

An SSSI quality site.

ANCE SURVEY

SHEET NN 69 NE





BIALLAID

TOTAL AREA OF PROPOSAL IS WITHIN THE 'CREAG DHUBH' SSSI.

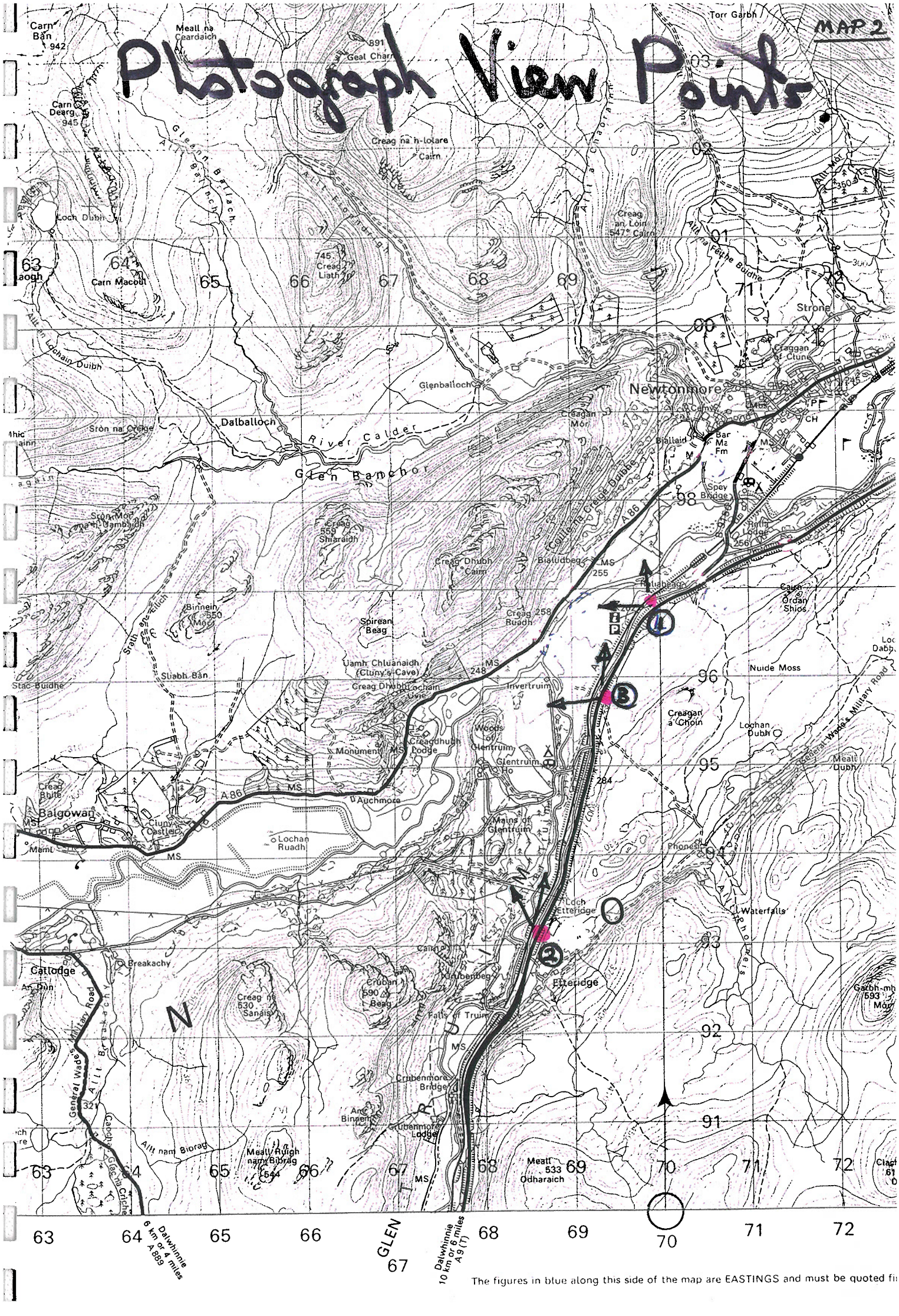
NEW DEER FENCE (PROPOSED) - ———

EXISTING DEER FENCE - ▬▬

GRASSLAND (APPROX) - - - -

Scottish Woodlands Ltd

14 The Square, Grantown-on-Spey, Morayshire PH26 3HG
Telephone: 0479 87 2455
Fax: 0479 87 2189


Photograph View Points
MAP 2
Carn Ban 942
Meall na Ceardaich
Geal Charn 891
Torr Garbh
Carn Dearg 945
Creag na h-Iolaire
Cairn
Allt a' Chaorainn
Allt Mor
Loch Dubh
Creag an Loin 547 Cairn
Allt a' Feithe Buidhe
Carn Macoul
Creag Liath 745
Strone
Allt an Lochain Duibh
Glenballoch
Newtonmore
Craggan of Clune
Dalballoch
Sron na Creige
River Calder
Creagan Mor
Glen Banchor
Bialaid
Bar Mz Fm
Spey Bridge
Sron Mor
Creag Shiaraidh 559
Creag Dhubh Cairn
Bialidbeg
Coillie na Creige Duibhe
A 86
Ruthin Lodge
Binnein Mor 550
Spirean Beag
Creag Ruadh 258
Cairn Ordan Shios
Strath an Eilich
Uamh Chluanaidh (Cluny's Cave)
Sliabh Ban
Stac Buidhe
Creag Dhubh Lochain Uvie
Invertruim
Nuide Moss
Creagan a' Choin
Woods of Glentruim
Creagdhubh Lodge
Monument
Glentruim Ho
Lochan Dubh
General Wade's Military Road
Meall Dubh
Creag Bhite
Baigowan
A 86
Auchmore
Cluny Castle
Mains of Glentruim
Lochan Ruadh
Phones
Loch Etteridge
Waterfalls
Allt Ruadh
Catlodge
Breakachy
An Dun
Allt Breakachy
Creag nan Sanais 530
Cruban Beag 590
Etteridge
Allt Ruadh
Falls of Truim
Crubenmore Bridge
Crubenmore Lodge
Allt nam Biorag
Meall Ruigh nam Biorag 544
Meall Odharaich 533
Gaick-mh 593
Dalwhinnie 6 km or 4 miles A 889
Dalwhinnie 10 km or 6 miles A 9 (T)
GLEN
The figures in blue along this side of the map are EASTINGS and must be quoted fi

NATURE CONSERVANCY COUNCIL

Upland Survey Project, Chief Scientist's Team

CREAG DUBH

Inverness

NN 6796

Field Survey by D Freeman, D Horsfield
14.6-18.6.1982

Produced by D Horsfield
11.1982

CREAG DUBH

Site description

This small site attains a maximum altitude of 734m at the summit of Creag Dubh. The major part of the vegetation is of birch woodland (J2) and sub-montane Calluna vulgaris heath (B1) with lesser amounts of ombrogenous bog, soligenous mires and grassland.

Coille na Creige Duibhe is a herb-rich birch wood (J2b) in which the ground flora is dominated either by the ferns Oreopteris limbosperma (Mountain Fern) or Pteridium aquilinum (bracken), or by a variety of grasses and forbes. In Glen Banchor the birch wood has both the herb-rich and a Vaccinium myrtillus-rich type (J2a). The latter is poorer than the former in herb species and has an abundance of the mosses Hylocomnium splendens and Dicranum scopanium. Around the edges of the north-eastern half of Coille na Creige Duibhe birch is regenerating and forming dense patches of scrub.

Molinia caerulea-Myrica gale mires (H1) with Salix aurita present locally are extensive within Coille na Creige Duibhe. Patches of Agrostis-Festuca grassland (C1) and dense stands of bracken (D7) occur in open areas within the wood. Some of the grassland is herb-rich (C1e).

Ombrogenous bogs on deep peat occur on flat ground. The low ground has Western blanket bog (G1a), which in Glen Banchor is largely unmodified and has a high cover of Sphagna. On high ground there is Calluna vulgaris-Eriophorum vaginatum bog (G4a) with Rubus chamaemorus and Betula nana. The wet hollow between Creag Shiaraidh and Spirean Beag has a valley bog, similar in floristics to G1 though with a greater abundance of Molinia caerulea and less dwarf shrubs.

Tall Calluna heath (B1) covers much of the site. This occurs as two facies, the dry type (B1a) with abundant hypnaceous mosses, which is the more extensive, and the damp type (B1b) with Sphagnum. A variety of woodland herbs are found in the Calluna heath including Trientalis europaea, Lathys montana, Geranium sylvaticum, Pyrola minor, Anemone nemorosa, Trollius europaeus, Cirsium heterophyllum, Luzula sylvatica and Gymnocarpium robertianum.

Molinia-Myrica mires occur within the Western blanket bog while oligotrophic Trichophorum-Carex mires (H3a) are widespread within the Calluna-Eriophorum bog and Calluna heath. The calcicolous Carex panicea - brown moss mire (H3f) and the stony Carex demissa-Saxifraga aizoides flush (I1b) occur on the slopes overlooking Coille na Creige Duibhe.

The slopes above Glen Banchor have stands of Alchemilla alpina-rich Agrostis-Festuca grassland with Thymus drucei (C1d). By the River Calder the grassland is mainly species-poor Agrostis-Festuca (C1a) with Viola lutea.

The area is well managed with only localised overgrazing by a herd of cattle and small numbers of sheep. There is a herd of red deer. Burning is carried out in small patches and is relatively restrained.

MAP 1 APPENDIX 3.

APPENDIX 4

Landscape report

LANDSCAPE REPORT

Bialliad occupies the greater part of the southern side of Creag Dhubh and the north-east end of the same ridge. It lies on a rugged north-east to south-west ridge rising to about 730 metres above the flat fertile valley of the River Spey, west of Newtonmore, in Badenoch and Strathspey District.

Creag Dhubh is clearly visible as the first hills on the north side of the Spey Valley, which is backed by the outliers of the Monadhliath Mountains. It is a prominent feature of the landscape from both the A9 (T), the major route between the north Highlands and south, and from the A86 which in part forms the southern boundary of the site. The northern side of this hill is bounded by the River Calder and a minor road up Glen Banchor, from which the site again forms a distinct feature.

The ridge is steep sided at its western end, with exposed rock faces below which there are boulder beds. These boulder beds give way to more gently sloping ground both to the east and towards the A86. The vegetation ranges from heather clad tops and steep slopes, to open canopied woodland around the boulder beds, and to grassland and mire at the western end.. There are scattered clumps and individual trees throughout this part of the site. There is dense semi-natural broadleaved woodland clothing the eastern part of the site. (See Figures 1a and 2a). Burns on the site are few in number and usually very short in length; they do not form prominent features of the site. The whole gives a varied landscape which contrasts strongly with the flat agricultural land of the Spey valley.

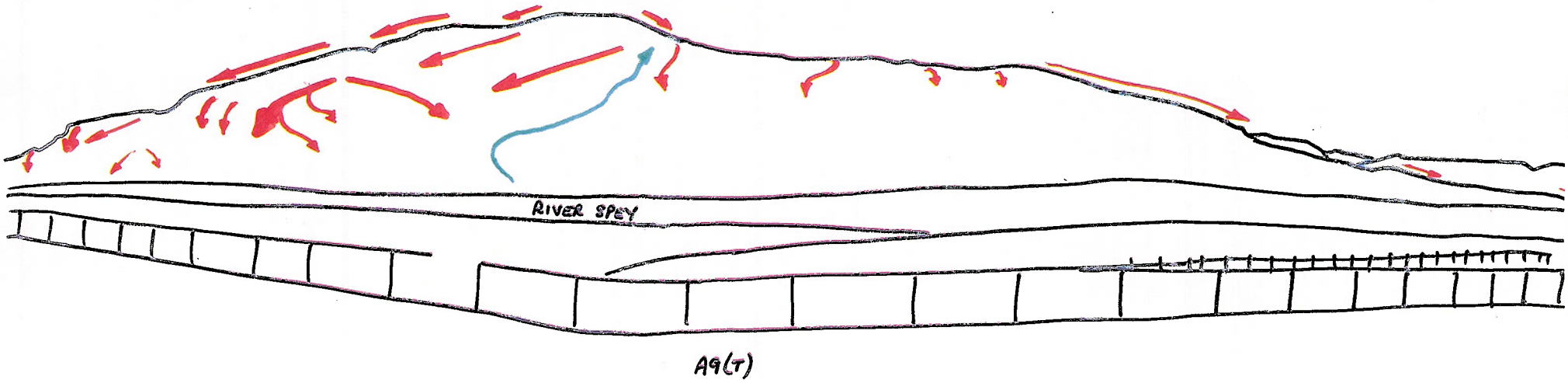
The lower margins of the site have been deer-fenced, and there are dykes alongside part of the A86 and internally around the mires. These are shown on various maps within this report.

The lines of force are shown in Map 1, with the strongest lines around the western part of the site. Visual analysis of the photomontages is given in Figures 1b, 2b and 3b with the visual envelopes being shown in Map 2. For future reference, other views have been taken as requested by SNH from both the A9 (T) and A86 roads, in order to monitor the change in canopy if the scheme is approved. These have not been included in the Environmental Statement.

In both views, the deer-fencing will be below the skyline, along the top of the steep slopes and will not form a prominent line visible from any of the major roads or the rail line. As the trees regenerate, the fenceline will be further screened from view, with the irregular development of the regeneration breaking up any straight lines. At the south-western end, the canopy of trees will be broken up by maintenance of the open grassland; this will maintain the existing patchwork of habitats and create further diversity of landscape as seen from either the A9 (T) or the A86.

The tops of the slopes and the steepest rock faces will not allow regeneration, so that these areas will retain their existing communities of heather, rock ledge communities and bare rock. These will maintain the visual diversity of the site. The effects at 30 years from the present have not been included within the photomontages as regeneration is dependent on natural processes. The resulting landscape will reflect the topography of the site and produce a natural landscape.

FIGURE 1a: FEATURES



AG(T)

FIGURE 1b: VISUAL ANALYSIS

FIGURE 2A : FEATURES

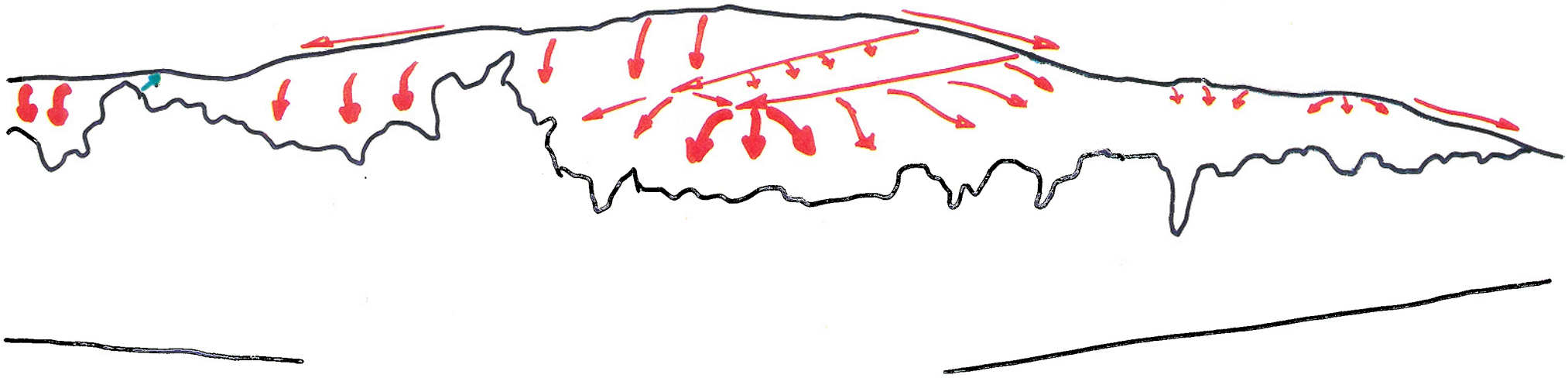


FIGURE 2B : VISUAL ANALYSIS

FIGURE 3a: FEATURES

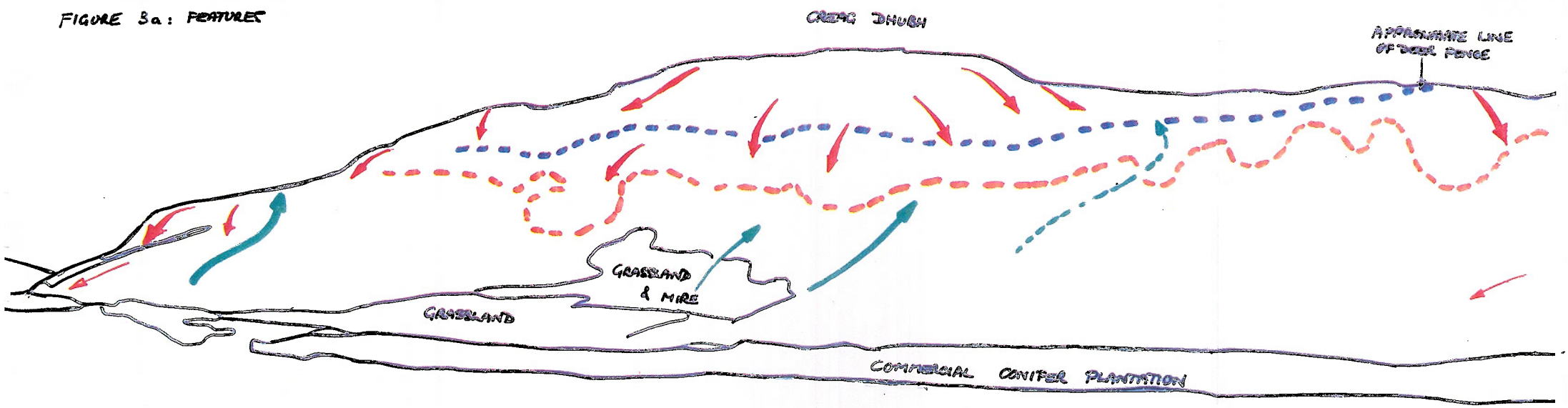
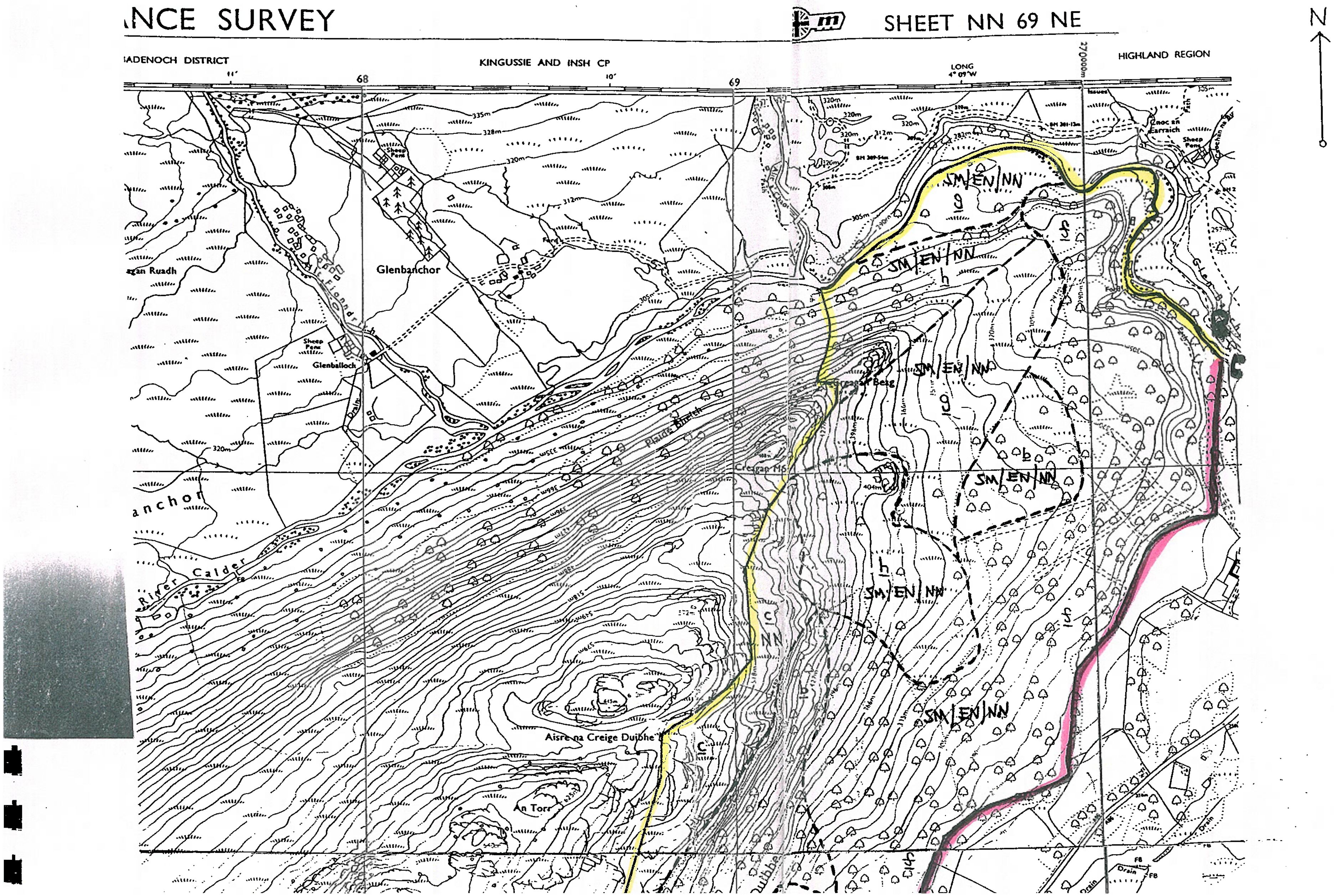
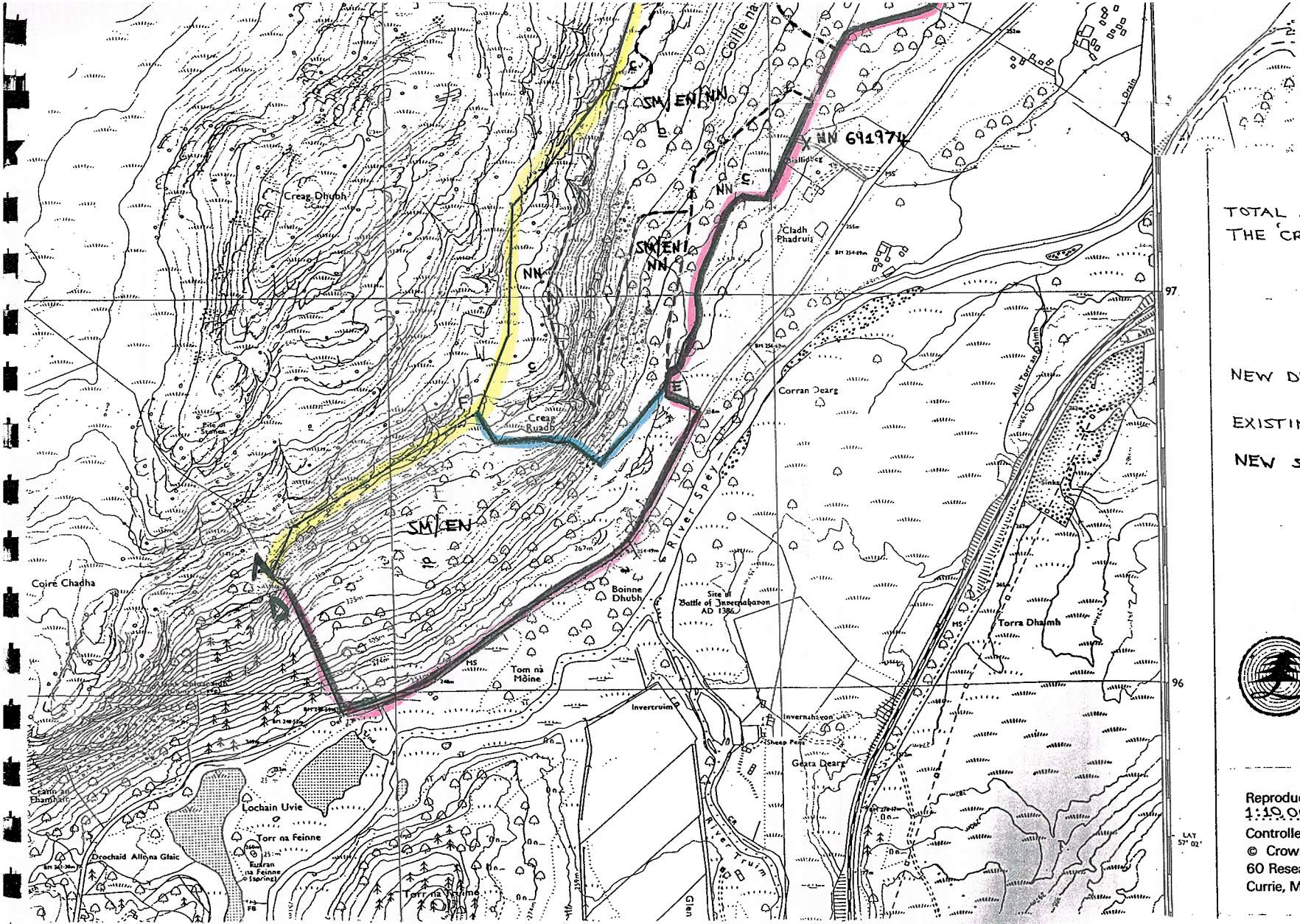


FIGURE 3b: VISUAL ANALYSIS

VALLEY OF RIVER SPEY.



N
ANCE SURVEY
SHEET NN 69 NE
BADENOCH DISTRICT
KINGUSSIE AND INSH CP
HIGHLAND REGION
68
69
270000m
LONG 4° 09' W
Glenbanchor
Glenballoch
Sheep Pens
Creagan Ruadh
anchor
River Calder
Plaide Bheith
Creagan Beag
Creagan Mòr
Aisre na Creige Duibhe
An Torr
Cnoc an Earraich
Glen
SM/EN/NN
g
h
a
b
c
NN



BIALLAID

TOTAL AREA OF PROPOSAL IS WITHIN THE 'CREAG DHUBH' SSSI.

NEW DEER FENCE (PROPOSED) –

EXISTING DEER FENCE –

NEW STOCK FENCE (PROPOSED) –

Scale 1:10000

Scottish Woodlands Ltd
14 The Square, Grantown-on-Spey, Morayshire PH26 3HG
Telephone: 0479 87 2455
Fax: 0479 87 2189

FIGURE 3a (CONT): PEATLAND

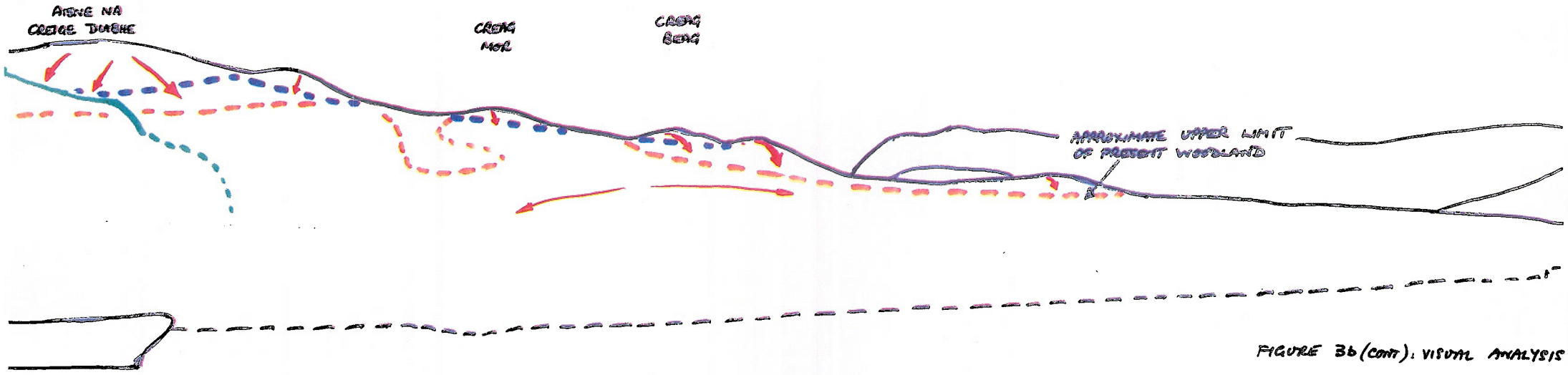


FIGURE 3b (CONT): VISUAL ANALYSIS

APPENDIX 5

Archaeological report

BIALLIAD

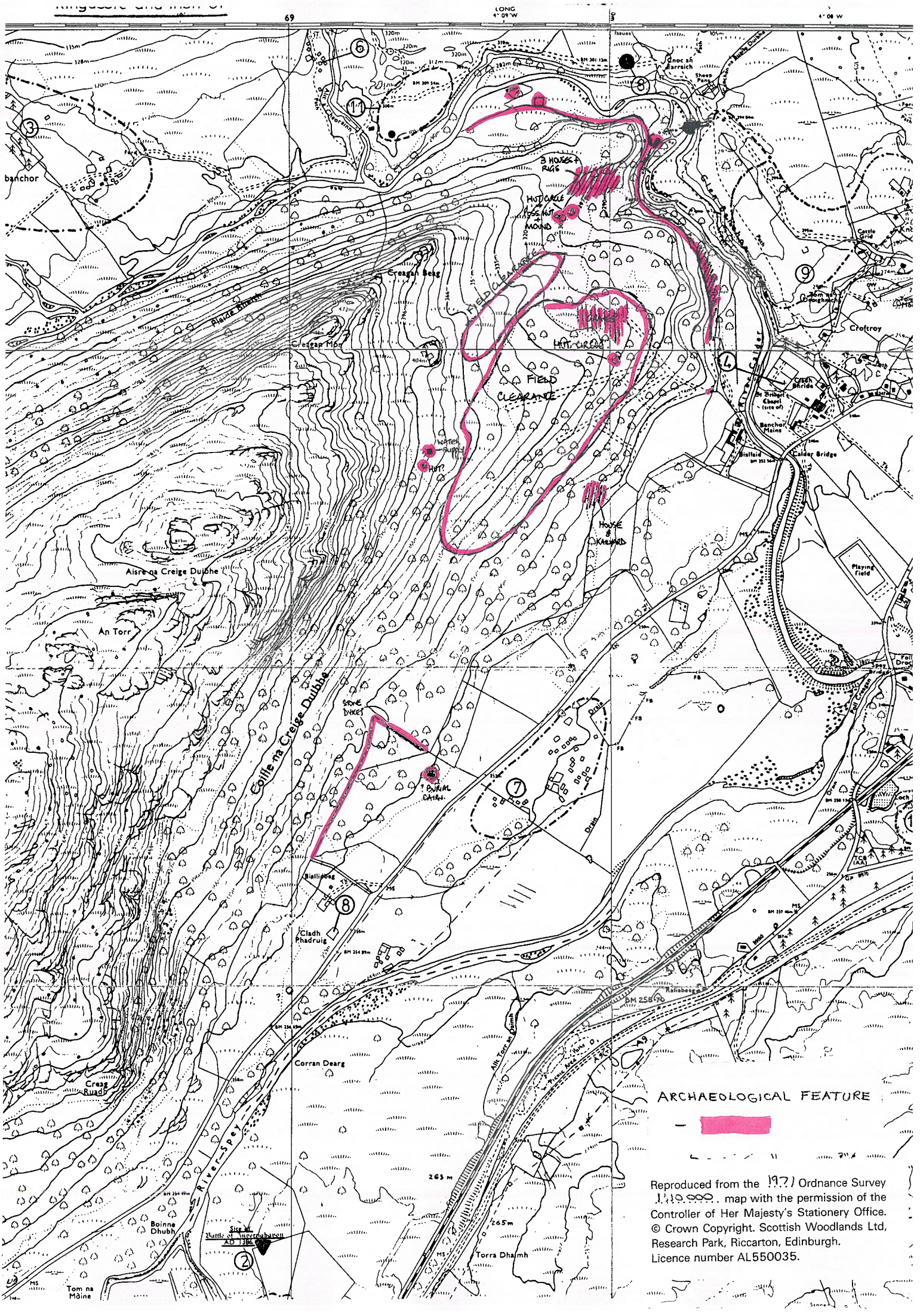
ARCHAEOLOGICAL REPORT

The archaeological survey carried out by Highland Regional Council identified a number of features within the scheme area.

Regarding the identified archaeological features, Highland Regional Council requested the following:-

1. All features identified on the survey map to be kept clear of any natural regeneration. In the case of rig/field clearance features only sample areas require to be kept clear of natural regeneration.

2. Additional archaeological features identified in the future to be kept clear of natural regeneration if required.



APPENDIX 6

Interaction matrices

Magnitude, significance & time horizons of environmental impacts

	Magnitude				Significance		
	Short	**Medium**	**Long**		**Short**	**Medium**	**Long**
Humans							
Employment	+	?	?		+s	?	+s
Landscape	+m	+m	+M		+s	+s	+S
Recreation	+/-	+/-	+/-		+/-	+/-	+/-
Agriculture	na	na	na		na	na	na
Infrastructure					na	na	na
Flora							
Woodland	+m	+m	+M		+s	+s	+S
Mire	-m	-m	-M		-s	-s	-S
Heather moorland	-	-	-		-s	-s	-s
Fauna							
Red deer	+m	+m	+m		-S	-S	-S
Golden eagle	?	-m	-m		-s	-s	-s
Woodland birds	+/-	+	+m		+/-	+s	+S
Moorland birds	-M	-M	-M		-S	-S	-S
Woodland invertebrates	+/-	+	+M		+/-	+s	+S
Soils							
Disturbance	-	?	+/-		+/-	+/-	+/-
Erosion	na	na	na		na	na	na
Acidification	?	?	?		?	?	?
Water							
Sedimentation	-	+/-	+/-		+/-	na	na
Acidification	?	?	?		?	?	?
Nutrients	?	?	?		?	?	?
Yield	+/-	+/-	+/-		?	?	?
Peak flow	+	+	+		+/-	+s	+s
Base flows	?	?	?		?	?	?
Cultural heritage							
Archaeological sites	+	+m	+m		+	+s	+s

short = 0-5 years, medium = 6-20 years, long = 21+ years

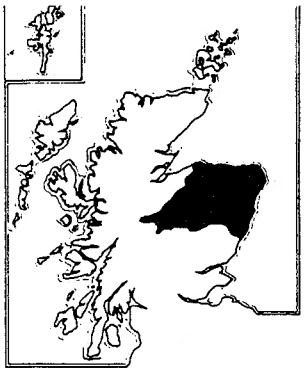
Significance of medium/long term effects of forestry operations on the natural heritage

		Forestry	operations		
	Fencing	Wildlife control	Spraying	Canopy closure	Weeding
Flora					
Mire	+/-	+M	+m	-M	na
Heather moorland	+m	+/-	na	-m	na
Broadleaved woodland	+M	+M	na	?	na
Fauna					
Golden eagle	+/-	-m	na	-M	na
Moorland birds	-M	?	na	-M	na
Woodland birds	-	?	na	+M	na
Woodland invertebrates	na	?	?	+M	na
Red deer	-M	-M	na	na	na
Goats	-M	-M	na	+/-	na
Soils					
Erosion	-m	?	na	+m	na
Acidification	na	na	na	?	na
Water					
Sedimentation	na	na	na	na	na
Acidification	na	na	?	?	na
Nutrients	na	?	na	?	na
Yield	na	na	na	?	na
Peak flow	na	na	na	-m	na
Base flows	na	na	na	-	na
Cultural heritage					
Archaeological sites	na	na	na	?	na

From Year 5 after operation

APPENDIX 7

Consultees' letters



NORTH EAST RIVER PURIFICATION BOARD

General Manager/Clerk **Professor David W. Mackay**, CBIOL, FIBIOL, FIWEM, MIFM, FBIM

Please address all communications to General Manager

If telephoning or calling ask for

Mr. D. Shaw (Elgin)

Our Ref: DS/MEB/A.31(i)

16 June 1994

Mr D S Leslie
Scottish Woodlands Ltd
14, The Square
GRANTOWN-ON-SPEY
Morayshire

20 JUN 1994

Dear Mr Leslie

Woodland Grant Scheme Application
Environmental Assessment - Biallaid

I refer to the application forwarded to me by the Forestry Authority for forestry development at Biallaid.

To protect the oligotrophic nature of the River Calder, the use of fertilisers should be avoided. From my records there does not appear to be any water user directly affected by this scheme and provided that the Forestry Commission's guidelines on Forests and Water are closely followed I have no objections to the proposals.

Yours faithfully,

David W Mackay

General Manager

pp

Greyhope House, Greyhope Road, Torry, Aberdeen AB1 3RD **Tel. (0224) 248338** **Fax. (0224) 248591**
28 Perimeter Road, Pinefield, Elgin IV30 3AF Tel. (0343) 547663 Fax. (0343) 540884
55 Mid Street, Fraserburgh AB43 5EP Tel. (0346) 514623 Fax. (0346) 515444

THE SCOTTISH OFFICE

Agriculture and Fisheries Department

Highland Area Office
Longman House
28 Longman Road
Inverness IV1 1SF

Telephone 0463 234141
Fax 0463 711495

D S Leslie
Scottish Woodlands Ltd
14 The Square
GRANTOWN-ON-SPEY
Morayshire PH26 3HG

17 JUN 1994

16 June 1994

Dear Mr Leslie

WOODLAND GRANT SCHEME APPLICATION
ENVIRONMENTAL ASSESSMENT (AFFORESTATION)
BIALLAID

I refer to the Environmental Statement which the Forestry Authority have requested in respect of the above application.

The land concerned lies within the boundaries of the Cairngorm Straths Environmentally Sensitive Area. The main aims of the ESA are to encourage traditional agricultural practices which sustain and enhance habitats and species and to protect, enhance and extend areas of herb rich unimproved grassland, native woodland and wetlands. Features or areas of historic or archaeological interest are also protected.

Should you require further information from SOAFD to help in the preparation of the Environmental Statement, then please contact the above address.

Yours sincerely

A McIVOR
for Principal Agricultural Officer

Red Deer Commission

Please address any reply to
The Secretary
Knowsley 82 Fairfield Road
Inverness IV3 5LH

Telephone STD 0463 231751
Fax 0463 712931

Mr D S Leslie
Scottish Woodland Ltd
14 The Square
GRANTOWN-on-Spey
Moray, PH26 3HG

02 AUG 1994

Your ref

Our ref RWY/CT 17/4/2

Date 1 August 1994

Dear Mr Leslie

WGS APPLICATION/ENVIRONMENTAL ASSESSMENT
BIALLAID - GLENBANCHOR

In response to a letter from the Forestry Authority I have pleasure in enclosing my comments on this scheme for your consideration in the preparation of the Environmental Assessment.

The RDC carried out a deer count in the Monadhliaths in March 1987 and I have pleasure in enclosing a section of that count map which includes Glenbanchor. Most wild deer overwinter in Glenbanchor itself beside the River Calder. The estate also set up a sizeable deer farm in lower Glenbanchor centred on the Home Farm but all stock have now been dispersed.

An FGS with similar objectives was submitted for this area in July 1986 and at that time the Commission supported the application.

The area is to be deer fenced and deer and goats are to be rigorously controlled until satisfactory establishment has been achieved and the desired stocking density and distribution of trees obtained. Controlled grazing is to be used as a management tool to limit the scale of regeneration and to maintain open ground for habitat/heritage purposes.

Intensive culling of deer and goats should be carried out at the start of the programme and thereafter, culling should be linked to the monitoring scheme.

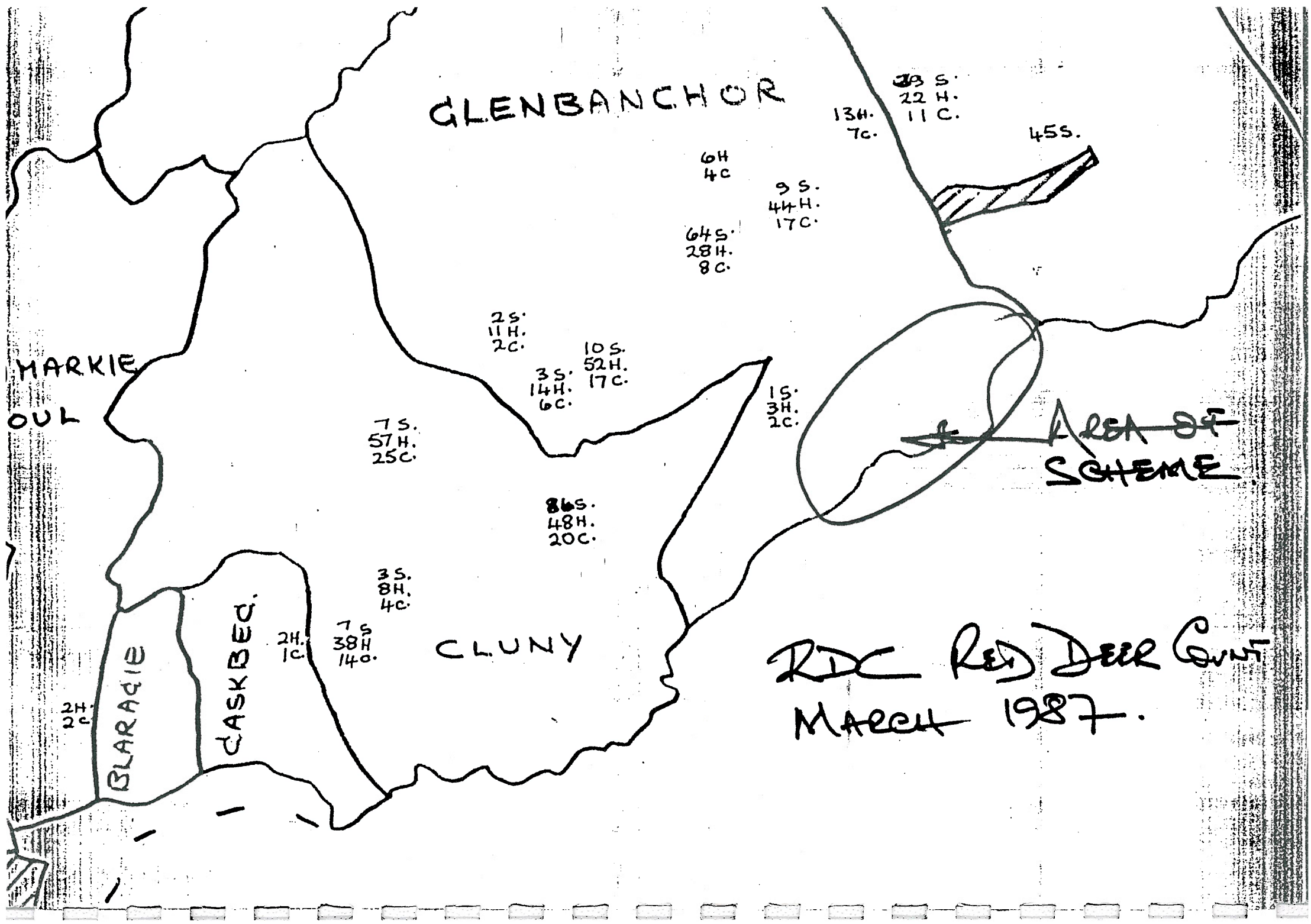
Details of work include provision for the culling of deer in the close season under authorisation.

As Sub-Compt "a" will not be entirely enclosed by a deer fence, it will not be possible to kill deer out-of-season - the area is not "enclosed woodland". The new deer fence C - D will channel deer to Sub-Compt "a" which will act as a "bag-net".

Consideration should be given to closing the gap on Sub-Compt "a" with a deer fence and carrying out controlled grazing within it with a few sheep.

Yours sincerely

R W YOUNGSON
Technical Director


GLENBANCHOR
MARKIE
OUL
CLUNY
BLARADIE
CASKBEC
6H
4C
9 S.
44H.
17C.
64S.
28H.
8C.
2S.
11H.
2C.
10 S.
52H.
17C.
3S.
14H.
6C.
7 S.
57H.
25C.
1S.
3H.
2C.
86S.
48H.
20C.
3S.
8H.
4C.
7S
38H
14C.
2H.
1C
2H
2C
13H.
7C.
39 S.
22 H.
11 C.
45S.
AREA OF SCHEME
RDC RED DEER COUNT
MARCH 1987.

14

Roinn na Gaidhealtachd Highland

Department of Libraries and Leisure Services
H. W. Wilkinson M.A., M.I.L.A.M.
Director of Libraries and Leisure Services

Highland Regional Council
Kinmylies Buildings
Leachkin Road
Inverness
IV3 6NN

Telephone 0463 703506
Facsimile 0463 711177

Please ask for	Mr R Gourlay	Our ref.	FCC/RBG/1619		
Direct Dial No.	0463 711176	Your ref.	030/000757/M4/1	Date	24.6.94

The Forestry Authority Scotland
Highland Conservancy
Hill Street
DINGWALL
Ross-shire IV15 9JP

06 JUL

Dear Sirs

FORESTRY GRANT APPLICATIONS - ARCHAEOLOGICAL CONSIDERATIONS

Thank you for your enquiry. Our Archaeologist wishes to make the following observations and comments in relation to this application.

APPLICATION TYPE: WGS ENVIRONMENTAL ASSESSMENT

LOCATION: BIALLAID

COMMENTS: Aerial photograph check will be advised.

Yours Faithfully

pp. Director of Libraries & Leisure Services

Spey District Board

121 HIGH STREET,
FORRES,
MORAYSHIRE, IV36 0AB.

TELEPHONE (0309) 672216
FAX 0309 673161
RUTLAND EXCHANGE No. 690

Clerk: C.D.R. Whittle, M.A., FRICS, W.S.

DATE 14 July 1994 OUR REF CW.SNH YOUR REF 030.000757.M4.1

The Forestry Authority Scotland
Highland Conservancy
Hill Street
Dingwall
Ross shire
IV15 9JP

Dear Sirs

Woodland Grant Scheme Application
Environmental Assessment
Biallaid

We acknowledge, with thanks, receipt of your letter of 13 June 1994 regarding the above, and would advise that we have no objections to your proposals.

Yours faithfully

pp C L Whittle

Dictated by Colin Whittle
and signed in his absence

Highlighted sites are within WGS area.

1619

Draft list of sites recorded on Biallaid Estate, Autumn 1995.

✓86	Luib	Building
✓87	Luib	Building
✓88	Luib	Building
✓89	Biallaid	Building
✓90	Biallaid	Building
✓91	Creagan Beag	Hut-circle
✓92	Creagan Beag	Hut-circle
✓93	Biallaid	Hut-circle
✓94	Biallaid	Cairn (possible)
✓95	Biallaid	Hut-circle
✓96	Biallaid	Hut-circle
97	Spey Bridge	Hut-circle
98	Spey Bridge	Hut-circle
99	Spey Bridge	Small cairns
550	Biallidbeg	Kiln
551	Biallidbeg	Building
552	Biallidbeg	Building
553	Biallidbeg	Building
554	Biallidbeg	Building
555	Biallidbeg	Building
556	Biallidbeg	Building
557	Biallidbeg	Building
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561	Biallidbeg	Building
562	Biallidbeg	Building
563	Biallidbeg	Building
564	Biallidbeg	Building
565	Biallidbeg	Kiln
566	Biallidbeg	Building
567	Biallidbeg	Kiln (possible)
568	Biallidbeg	Building
569	Biallidbeg	Building
570	Biallidbeg	Kiln
571	Biallidbeg	Kiln
572	Biallidbeg	Banks; Field clearance
573	Biallidbeg	Hut-circle
574	Biallidbeg	Field clearance; Bank; Enclosure
575	Biallidbeg	Hut-circle
576	Biallidbeg	Small cairns
577	Biallidbeg	Rig
578	Biallidbeg	Hut-circle
579	Biallidbeg	Rig; Field clearance
580	Biallidbeg	Small cairns
581	Biallidbeg	Clearance

582 Biallidbeg	Hut-circle
583 Biallidbeg	Small cairns
584 Biallidbeg	Building
585 Biallidbeg	Rig
586 Biallidbeg	Trackway
587 Biallidbeg	Burnt mound
588 Biallidbeg	Rig
589 Biallidbeg	Rig
590 Biallidbeg	Hut-circle
591 Biallidbeg	Small cairns
592 Biallidbeg	Building
593 Biallidbeg	Building
594 Biallidbeg	Building
595 Biallidbeg	Building
596 Biallidbeg	Building
597 Biallidbeg	Building
598 Biallidbeg	Building
599 Biallidbeg	Cairn
600 Biallidbeg	Building
601 Biallidbeg	Building
602 Biallidbeg	Building
651 Biallaid	Building
652 Biallaid	Small cairns
653 Biallaid	Hut-circle
654 Biallaid	Building
655 Biallaid	Building
656 Biallaid	Hut-circle
778 Biallaid	Building
779 Biallaid	Building
780 Biallaid	Building
781 Biallaid	Building
782 Biallaid	Building
783 Biallaid	Building
784 Biallaid	Building
785 Biallaid	Building
786 Biallaid	Kiln
787 Biallaid	Building
809 Biallidbeg	Rifle range target
810 Biallaid	Hut
811 Biallaid	Small cairns
812 Biallaid	Small cairns

The draft overlay also shows four undefined areas of small cairns in the birch woods, which we didn't attempt to plot. The largest is between hut circles 93 & 94.

One other site not surveyed is an old quarry below Creag Ruadh. Worked faces and levelled working areas are visible at the base of the crags, roughly where the 1:10000 sheet depicts an area of scree at NN 685 966. A track zig-zags downhill to the SE, petering out above the layby on the road at NN 6864 9645.

RCAHMS

Mr J McNeil
Archaeology
The Old School
High Street
Clachnaharry
INVERNESS
IV3 6RB

5 March 1996

Dear Jim

A plot of the sites recorded on the Biallaid Estate is enclosed, along with a site list. The plot is a draft version, and I have added some corrections in pencil. All the sites in the Biallaid area were surveyed with EDM, and tied into local map control.

As I said on the phone we trawled through the woodland at least twice, up to the point where the ground became so steep as to make settlement remains unlikely, and we did not walk the summit ridge. I would like to think that we picked up most structures, but we may have missed one or two - in particular I feel slightly uneasy about the size of the 'gap' between hut-circles 93 and 95.

I also enclose a map of our survey boundary, which you might find useful. If you need further information on any of the Biallaid sites, or on other parts of our survey area, please let me know.

Best Wishes

S.D.Boyle

Royal Commission on the Ancient and Historical Monuments of Scotland
(National Monuments Record of Scotland)
John Sinclair House, 16 Bernard Terrace, Edinburgh EH8 9NX **Tel: 0131-662 1456 Fax: 0131-662 1477 / 0131-662 1499**

Ancient and Historical Monuments of Scotland
JOHN SINCLAIR HOUSE , 16 BERNARD TERRACE , EDINBURGH EH8 9NX , TELEPHONE 0131-662-1456