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INSTITUTE OF TERRESTRIAL ECOLOGY  
(NATURAL ENVIRONMENT RESEARCH COUNCIL)

THE INVERTEBRATE FAUNA OF THE MATURE TIMBER HABITAT  
SURVEY OF AREAS - SITE REPORTS - SCOTLAND  
(NCC/NERC CONTRACT NO F3/03/77 : ITE PROJECT NO 405)

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THE INVERTEBRATE FAUNA OF THE MATURE TIMBER HABITAT

SURVEY OF AREAS - SITE REPORTS

SCOTLAND

The following collection of site reports is arranged by Nature Conservancy Council regions. The section of reports for each region is prefaced by a list of all the areas visited as part of the survey, with dates of visits and references to the site report numbers and/or area descriptions.

Region	Section Number
South-east Scotland	9
South-west Scotland	10



# THE INVERTEBRATE FAUNA OF THE MATURE TIMBER HABITAT

## SURVEY OF AREAS

### 9. South-east Scotland Region

The following areas have been visited as part of a national survey commissioned by N.C.C. from I.T.E. The background and sources of this survey are outlined in the contract report of March 1976. Some areas were reported on in detail. These reports are included herewith in numerical order according to the following list. The remaining areas have, for various reasons, not warranted detailed reports. Summary descriptions of them have been made and included in either of the contract reports (March 1976 or March 1977) where the descriptions appear in the numbered "Area Descriptions" section.

All visits, with the exception of Dalkeith Old Oakwood, were made by P.T. Harding, almost invariably with the prior permission of the owner or his agents (except in the case of public access areas). All opinions expressed are related to the conservation value and potential of a given area for the invertebrates of mature and overmature trees, dead wood and associated biotopes.

Area, County	Date visited	Report number/ Area description
Abbey St. Bathans Woods, Borders	July 1976	1977-34
Pease Burn (Bridge) Glen, Borders	July 1976	1977-35
The Hirsell, Borders	July 1976	1977-36
Dalkeith Old Oakwood, Lothians	July 1975	9.1*/1976-50

\*Report by Dr. R.C. Welch



## DALKEITH PARK (OLD OAKWOOD)

## LOTHIANS

National Grid reference : 36/337687

Visited : 26 July 1975

Owner : Historic Seat of the Duke of Buccleuch but house is in ruins.

Dalkeith Park in total area encircles the northern side of Dalkeith. It extends south-westwards to the King's Gate and the western boundary is defined by the railway line and then along its northern boundary by the track from Sheriffhall Mains to Castle Steads. The eastern boundary is the A6094 Dalkeith to Wallyford road. Most of the area between the south River Esk and the A6094 is arable. Much of the remainder of the park has been planted with a wide variety of tree and shrub species enclosing areas of open pasture, namely Westgate Park, Deanhead Park, Howlands Park and Steel Park. Dalkeith House is now partly ruined and much of the grounds appear to be used for exercising greyhounds or for public recreation. A commercially installed Nature Trail, erected by the Elwes Brothers has been laid out with marker posts incorporating a squirrel motif. The Old Oakwood (Dalkeith Oakwood S.S.S.I.) is situated between the confluence of the North and South Esk rivers north of Dalkeith House and is approached by crossing Steel Park although there is access by means of three footbridges; two at the Meeting of the Waters in the northern tip and one in the northwest of Howlands Park. A footpath leads between these two points.

The soils consist of a series of river terraces and fluvio-glacial sand and gravel with boulder clay (Fairbairn 1972). Most of the old Oakwood is at an altitude of between 30 and 40 metres. There are steep slopes along its boundary with the two rivers.

The wood is without doubt on a primary woodland site. According to R.A. Crowson (1962) the park was declared a royal hunting forest by King David I in 1163, and is the same age as Hamilton High Parks. (However according to Whittaker's Almanac 1975 King David reigned from 1124-1153). Fairbairn, however, refers to King Malcolm, who reigned from 1057-1093, as being the earliest authentic records of the times although not specifically mentioned in relation to Dalkeith which was held by the De Graham family from the time of William I (The Lion) (1165-1214) until 1342, before eventually passing into the Buccleuch family circa 1650.

The earliest map is by Timothy Pont, dated 1630 which appears in the Gerald

Mercator Atlas. This shows continuous woodland in much the same area as the present S.S.S.I. boundary. J. Adair's map of 1735 and General Roy's map of 1756 (reproduced by Fairbairn p.8) both show continuous woodland in the Old Wood. The Ordnance Survey 1854 six inch map is the first to show an open meadow in the area now known as Lady's Seat. In 1936 the excursion of the Royal Scottish Forestry Association suggested fencing an area on the right bank of the North Esk immediately below Montague Bridge. This was done in 1938. Wylie Fenton (1941) describes the resulting sparse oak regeneration. The area was cleared between 1955 and 1957. The 1960 OS six inch map showed that the areas to the east (compt. 31, 4.7 ha, which included the fenced plot) and west (compt. 26, 6.96 ha) carried old oak until felled in the period 1957-62. These two areas were replanted with oak, beech, larch and sycamore. The seed for the oak plantings was taken from 18 selected trees in the remaining old wood which covers 19.30 ha.

The present Old Oak Wood is leased for grazing and at the time of my visit contained a herd of cattle and two sheep which have reduced the ground vegetation to a grassy sward (Holcus mollis) with patches of bracken, nettle and bramble. The tenant apparently has the right to saw off any low branches which he considers to be potentially dangerous to his stock.

Wylie Fenton lists the ground vegetation and Fairbairn lists some 33 species of herbs and 21 spp. of tree or shrub. At present it is only along the steep banks of the rivers that any variety of herbaceous vegetation survives, although there is also a small area around a pond in the south of the wood which is fenced. It is also along the river banks that all tree species, other than the oaks, are to be found.

#### Principal Tree Species

The whole plateau of the Old Oak Wood, with the exception of Lady's Seat and the extreme southern area near the entrance gate, is fairly uniformly covered with oaks, (see National Coal Board Open Cast Executive Aerial Photograph, March 1968, reproduced in Fairbairn, p.6).

Quercus petraea appears to be native in the area but much of the Q. robur has been planted. Fairbairn notes plantings in about 1700, 1820 and 1850 and from his own studies produced figures of:-

21.5%	<u>Q. petraea</u>
9.8%	introgressed
68.5%	<u>Q. robur</u>

Many of the trees have grown from old coppice stools.



Fairbairn estimated that the 300 trees used in his studies represented approx. 20% of the total number in the Old Oak Wood. Reference to the somewhat muzzy aerial photograph would suggest a much smaller total number of oaks than the 1684 given by Fairbairn in Table 2 (p. 21).

There are 4 or 5 mature beech north of Laundry Bridge but these were not inspected during my visit. There is also a group of six oaks in the south-east of Steel Park estimated by Fairbairn to be 150 years old. (I would have inclined to put them slightly younger than this)

Elsewhere in the grounds of Dalkeith Park a very wide variety of native and exotic species have been planted in the past and, judging by recent plantings of American red oaks along the road west of Montague's Bridge, are still being planted. The most noteworthy tree seen during this visit was a huge sweet chestnut at the ride junction south of Westgate Park, which itself contains eight scattered large sycamore.

#### Succession and Dead Wood

Despite the almost complete lack of natural regeneration the present succession of oaks is good. Fairbairn (p.25) records a ring count of 272 years on one tree and estimates others at 300 years or more on size. Other trees measured were aged at 166, 161 and 200 years. Annual rings averaged about 15 rings to the inch but a maximum of 35 was also recorded.

I was surprised by the variety of age classes. Certainly many of the trees are in the 300+ category. Some of these are hollow in part and red-rot was visible in a few. However, the majority of the trees appear much younger in the 100-200 age group (corresponding to the 19th century plantings). Cut stumps on the southern part of the wood were aged at 120 and 150+ years (centre rotted). Fairbairn (p. 21) gives an average stem diameter of approx 68 cm which when taken with an average of 15 rings/inch would make most 270 years old. Fairbairn does add that "increment on close grown oaks over 200 years is minimal", so the trees may be older than they look at first sight. Occasional seedlings of oak, beech, sycamore and birch were seen on the steep river banks but it is almost certain that these will never establish themselves whilst present grazing persists. However, the 13-18 year old oaks in the southern plantations should provide a suitable young generation to succeed the overmature trees.

Many old cut stumps are present but weathering and centre rot makes dendro-chronology difficult. A surprising amount of large limbs and branches were lying on the ground. Most had long since lost their bark but still provided moist micro-habitats beneath. These are particularly important on such well drained

soils and more especially during the current dry period. Heart rot in many logs also provided a valuable habitat. Polyporus sulphureus was seen both on fallen branches and on a standing oak. Fairbairn gives the following figures (p. 21) for the condition of the oaks:-

25% dead or dying  
57% fairly good  
18% of good quality

It seems likely that the first category has been reduced even in the last three years. Branches recently sawn up into short log lengths were plentiful in the south and eastern parts of the wood. It is believed that they will be removed for firewood at the next convenient occasion by tractor and trailer.

#### Evaluation and Management Suggestions

The present Dalkeith Old Oak Wood undoubtedly stands on a primary woodland site and appears to have had continuous woodland cover throughout historical times until the clearance of Lady's Seat (the 1968 aerial photograph shows ridge and furrow ceasing abruptly at the southern boundary of the Old Oak Wood).

The coleopterous fauna associated with the old oaks provides the most conclusive evidence of the importance of this site in Scotland. Crowson (1962) lists 10 species from the wood, all except one on oak (or fungi on oak). Five of these are at present not known from any other sites in Scotland (see Appendix I). A further 56 species of Coleoptera were recorded by myself during this visit and further records should be forthcoming from the Crowsons. Most of the species recorded are common and widely distributed and were found under oak logs lying on the ground, in two lots of Polyporus sulphureus on oak, in sheep dung and in cut grass (at the edge of the western plantation). Hallomenus binotatus is perhaps the only species worthy of mention.

The present custom of leaving a considerable amount of fallen and felled oak scattered about the wood is very fortunate and should be encouraged or at least if it is to be removed for firewood, the longer it is left in the wood the better.

Obviously the ground flora (and fauna?) will not improved as long as intensive grazing persists. I believe it was Crowson who suggested the NCC should buy the grazing rights and then leave the wood ungrazed (a good but probably impractical suggestion). Certainly fencing of the NE corner and the right bank of the North River Esk would result in very rapid changes in the shrub and herb flora. There is much holly in this area and one can visualize it rapidly growing to develop the type of understorey found in Staverton Thicks and parts of the New Forest.

It is difficult to view Dalkeith subjectively. In the southern half of England such a park would doubtless support many rare species but nearly all such species apparently require a warmer climate or a longer summer. The net result is that from a purely Scottish viewpoint the wood has a greatly enhanced value. From a British national viewpoint all its "rare" species are much more abundant and widespread in southern England.

#### References

- Crowson, R.A. 1962. Observations on Coleoptera in Scottish Oak Woods. Glasgow Nat., 18 (4), 177-195.
- Crowson, R.A. 1964. Additional records of Coleoptera from Scottish oak-wood sites. Glasgow Nat. 18 (7) 371-375.
- Fairbairn, W.A. 1972. Dalkeith Oak Wood. Scottish Forestry, 26 (1), 5-28.
- Fenton, J. Wylie 1941. The Oak in Scotland. Forestry, 15.
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- Joy, N.H. 1932. A Practical Handbook of British Beetles. London, 2 vols.
- Murray, A. 1853. Catalogue of the Coleoptera of Scotland. Edinburgh, 147 pp.

R. Colin Welch

#### APPENDIX I

##### COLEOPTERA FROM DALKEITH OAK WOOD

(abstracted from Crowson, R.A. 1962. Glasgow Naturalist 18 (4) 177-195)

##### STAPHYLINIDAE

Anomagnathus cuspidatus (Er.) 23.9.59 under oak bark. Recorded from "Lanark" by Fergusson (1913) and Joy (1932) includes Scot. 1 in its distribution. Crowson (1964) also records it from Dunbartonshire and Lanarkshire.

Quedius cruentus Ol. 23.9.59 in Polyporus sulphureus. RAC has also had it at Hamilton High Park and Fergusson gives Rannoch.

##### DERMESTIDAE

Ctesias serra F. larvae under oak bark, only other known Scottish locality is Hamilton High Park where adults were also found.

##### LYCTIDAE

Lyctus brunneus Steph. dead adults 23.9.59 under dead oak bark and larva in fallen branches 22.10.59. Usually found indoors in seasoned timber.

## PTINIDAE

Ptinus subpilosus Sturm. adults recorded from Dalkeith, three Lanark localities, Ballater (Aberdeen) and Forres (Moray) and larvae recorded from "several places" unspecified).

## MELYRIDAE

Haplocnemus nigricornis F. recorded by Murray (1853) from Dalkeith and on 6.9.57 RAC found a larva which he attributed to this species.

Dasytes aerosus Kies. also recorded by Murray (1853) from Dalkeith.

## LATHRIDIIDAE

Cartodere elongata Curt. only known to RAC in Scotland from old Polyporus at Dalkeith.

## SCOLYTIDAE

Scolytus intricatus Ratz. occurs in abundance at Dalkeith but unknown to RAC elsewhere in Scotland.

Scolytus scolytus in elm bark at Dalkeith and in Roxburgh are only Scottish localities known to RAC.

## APPENDIX II

SOME COLEOPTERA RECORDED IN DALKEITH PARK (OLD OAK WOOD), MIDLOTHIAN, BY  
R. COLIN WELCH ON 26 JULY 1975

## CARABIDAE

Leistus ?rufescens (F.) 1 dead larva in litter under oak log.

Nebria brevicollis (F.) few under oak logs.

Notiophilus biguttatus (F.) in litter under oak logs.

Pterostichus madidus (F.) under oak logs and stones.

Calathus melanocephalus (L.) in litter under oak logs.

## HYDROPHILIDAE

Sphaeridium lunatum F. several in sheep dung.

Cercyon haemorrhoidalis (F.) in sheep dung.

C. melanocephalus (L.) in sheep dung.

C. unipunctatus (L.) in sheep dung.

Megasterum obscurum (Marsh) in sheep dung and cut grass.

## PTILIIDAE

Ptenidium nitidum (Herr) 2♀ in cut grass.

## LEIODIDAE

Anisotoma humeralis (F.) 1 in Polyporus sulphureus on oak log.

## STAPHYLINIDAE

Megarthus denticollis (Beck) 1 ♂ in grass under tuft fungus on oak stump.

M. sinuaticollis (Lac.) 1 in cut grass.

M. depressus (Plc.) common in sheep dung.

Anotylus tetracarinatus (Block) common in cut grass and sheep dung.

A. rugosus F. common in sheep dung.

Atrechus affinis (Pk.) 1 in rotten centre of cut oak stump.

Gyrophypus myrmecophilus (Kies.) several in litter under oak logs.

G. antustus (Steph.) 1 in oak litter.

Philonthus decorus (Gr.) 1 under oak log.

Lordithon thoracicus (F.) 2 ♂♂ in P. sulphureus on oak, 1 ♀ in grass at base of tuft fungus on oak stump.

L. lunulatus (L.) 2 ♀♀ in P. sulphureus on oak.

Sepedophilus nigripennis (Steph.) 1 in P. sulphureus on oak log, 3 ♂♂ in litter under oak logs, 2 in cut grass.

Tachyporus chrysomelinus (L.) 1 ♂ 1 ♀ in litter under oak logs.

T. hypnorum (F.) 1 ♀ in litter under oak log.

T. obtusus (L.) 2 in oak litter.

Tachinus signatus Gr. 1 ♀ in P. sulphureus on oak.

T. marginellus (F.) 1 ♂ 2 ♀♀ in P. sulphureus on oaks, many in sheep dung.

T. corticinus Gr. 1 ♀ under oak log.

Gyrophana affinis Sahlb. many in grass at base of tuft fungus on oak stump, 1 ♂ 2 ♀♀ in P. sulphureus on oak.

G. bihamata Thoms. several at base of tuft fungus on oak stump.

Bolitochara lucida (Gr.) 3 in P. sulphureus on oak.

B. obliqua Er. 1 ♀ in P. sulphureus on oak.

Autalia rivularis (Gr.) 1 in cut grass, common in sheep dung.

Sipalia circellaris (Gr.) 1 in litter under oak log.

Atheta (Tetropla) nigricornis (Thoms.) several in P. sulphureus on oak.

A. (Stethusa) castanoptera (Man.) 1 ♂ in P. sulphureus on oak.

A. (Stethusa) pertyi (Heer) several in P. sulphureus on oak.

A. (Acrotona) aterrima (Gr.) 1 ♂ in cut grass.

A. (Acrotona) fungi (Gr.) several in cut grass.

A. (Amidobia) amicula (Steph.) 1 ♀ in cut grass.

Aleochara lanuginosa Gr. common in sheep dung.

## SCARABAEIDAE

Aphodius rufipes (L) common in sheep dung.

## ELATERIDAE

Melanotus rufipes Hbst. larva under bark of oak log.

## RHIZOPHAGIDAE

Rhizophagus dispar (Pk.) 1 under bark of oak log.

## CERYLONIDAE

Cerylon ferrugineum Steph. 1 under oak bark.

## LATHRIDIIDAE

Aridius nodifer Westw. in cut grass.

A. bifasciatus Reitt. 1 in cut grass.

## MYCETOPHAGIDAE

Pseudotriphyllus suturalis (F.) 4 in P. sulphureus on oak.

## MELANDRYIDAE

Hallomenus binotatus (Quens.) 2 in P. sulphureus on oak log.

## CURCULIONIDAE

Barypithes araneiformis (Schr.) 1 in oak litter.

Rhychaenus fagi (L.) 1 in P. sulphureus on oak.

## SCOLYTIDAE

Dryocoetinus villosus (F.) dead under bark of oak logs.

Mag Var 10° 00' W  
(See note below)

NEWTON 32

33.5645

34







# THE INVERTEBRATE FAUNA OF THE MATURE TIMBER HABITAT

## SURVEY OF AREAS

### 10. South-west Scotland Region

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Area, County	Date visited	Report number/ Area description
Garroch Glen and Kenmure, Dumfries and Galloway	May 1976	10.1/1977-37
Glentool Woods, Dumfries and Galloway	May 1976	10.2/1977-38
Knockman and Garlies Woods, Dumfries and Galloway	May 1976	10.3/1977-39
Lochwood, Dumfries and Galloway	May 1976	10.4/1977-40
Cadzow (Hamilton High Park), Strathclyde	May 1976	10.5/1977-41
Fiddlers Gill and Nethan Gorge, Strathclyde	May 1976	10.6/1977-42
Milton-Lockhart, Strathclyde	May 1976	10.7/1977-43



## GARROCH GLEN AND KENMURE

## DUMFRIES AND GALLOWAY

National Grid reference : 25/5.8, 25/6.7 and 25/6.8

Visited : 25 May 1976

Owners : Multiple ownership

This area is rather diffuse and no attempt was made to examine it in any detail due to lack of time. The Crowsons recommend the area for various uncommon woodland Coleoptera and Crowson (1962) lists among other records, Silvanus unidentatus and Saperda scalaris from Garroch and Tetratoma desmaresti from Kenmure Castle. Francis Rose found Long Wood, Glenlee Park and Glenlee Glen to be structurally, and in terms of epiphytic lichens, of outstanding importance.

My visit was limited to what could be seen from the public roads. The overall impression obtained was of much mature oak woodland with some overmature oaks and some exotic species in Glenlee Park and around Garroch Wood. The area is sheltered and in generally south-east facing valleys. Some active forestry seems to be carried out, but this is mainly of hardwoods although there are some areas of conifers.

From the evidence of Rose and the Crowsons this area could well be of importance and would probably repay more detailed survey of the fauna. Much of the area falls within the Garroch Woods and Kenmure Holms scheduled sites, but Long Wood and the Glenlee areas appear to be omitted.

#### Summary

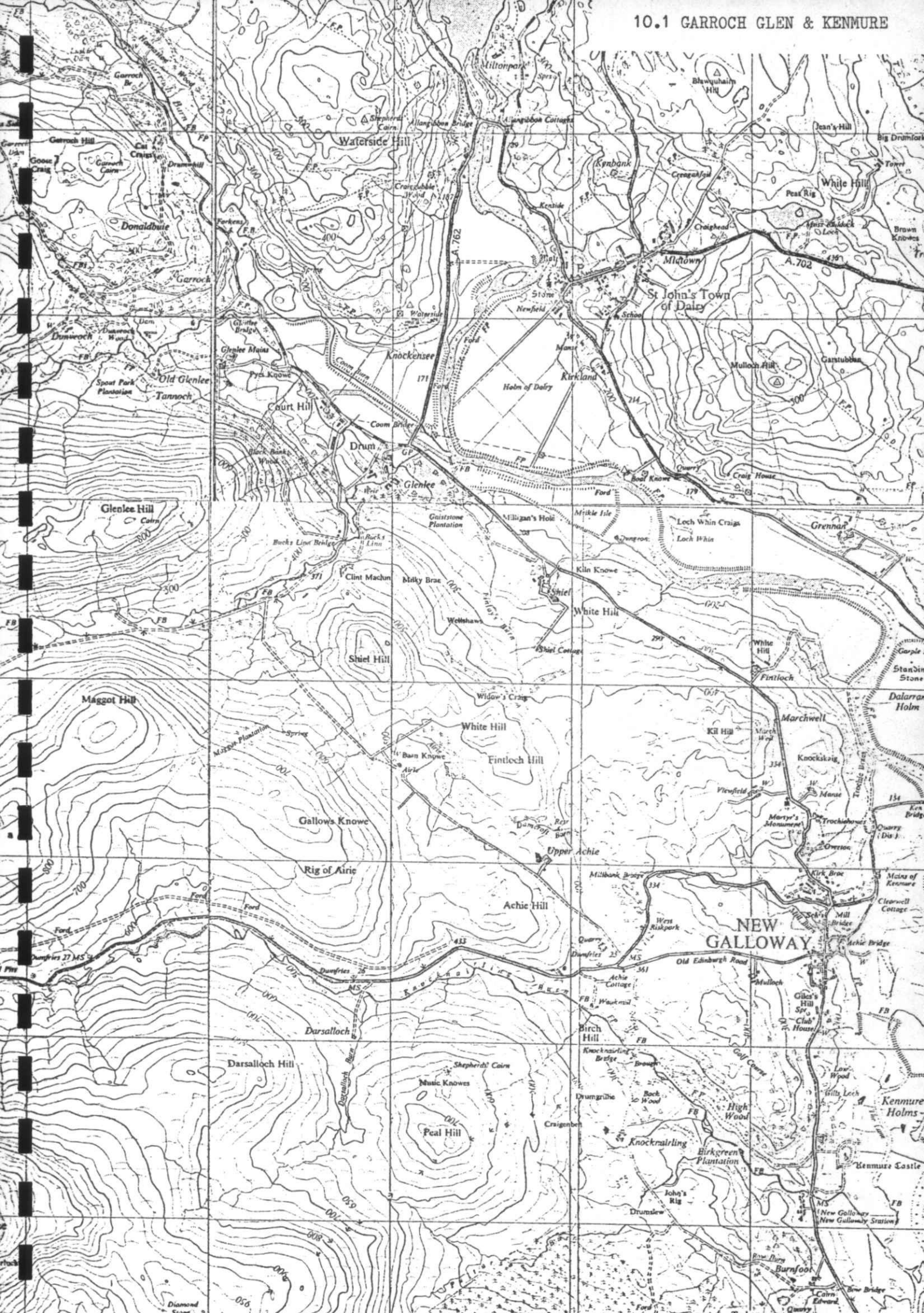
The woods of the Garroch Glen/Glenlee valley and those around Kenmure Castle are known to be the sites for several rare Coleoptera (Crowson 1962). They are also highly rated by Rose for the epiphyte flora of overmature oaks and other species. The area was not surveyed in detail. The amount of mature timber present and the known interest of the woods are sufficient to suggest that this area may be locally important.

#### Reference

Crowson, R.A. (1962). Observations on Coleoptera in Scottish oak woods.

Glasg. Nat. 18, 177-195.

Paul T. Harding



## GLENTROOL WOODS

## DUMFRIES AND GALLOWAY

National Grid reference : 25/3.7 and 25/4.8

Visited : 26 May 1976

Owners : Forestry Commission

Glenhead Wood (25/4280)

Mature sessile oak maidens over a hazel understorey with some large birch and also rowan. Alder is present on the flatter area near the stream. Many of the oaks are fine upright trees with breast height girths up to 2.5 m. There are some younger oaks and oak coppice. Dead wood is limited to a few dead lower branches on the larger oaks, and to some fallen birch. The whole wood is heavily grazed through by cattle and sheep and regeneration is absent.

Buchan Wood (25/4180)

The oaks are more stunted than in Glenhead Wood, some on the slopes having the appearance of pollards, with girths in excess of 2.5 m. There are taller oaks on the flat area near the loch. There is some birch and rowan, but little hazel. There is a public car park near here and much of the wood is used for walking etc, and it is grazed through.

Caldons Wood (25/3978)

The lower part of this wood, which appears to be the only part with mature oaks, contains a Forestry Commission camp site complex and is rather open. Elsewhere the woodland is mainly young/mature birch, ash, alder and hazel with a few oaks, but with some larger and overmature birch. There is some fallen dead wood but near the camping area this is obviously cleared away rapidly.

Summary

The three component woods - Glenhead, Buchan and Caldons contain typical examples of mature oak/birch dominated oceanic type woodland. There are areas of overmature oak and birch in all three woods, but dead wood appears to be scarce and there is little evidence of insect attack. The epiphyte flora is predictably rich.

Paul T. Harding



## KNOCKMAN AND GARLIES WOODS

## DUMFRIES AND GALLOWAY

National Grid reference : 25/4169

Visited : 26 May 1976

Owner : The Earl of Galloway

The two woods lie on the slopes above the Penkiln Burn and the River Cree, about 2 miles north of Newton Stewart. They rise from about 65 m at the lowest point to over 200 m where the woodland grades into the open moorland of Cumloden Deer Parks.

Both woods have high stone walls on the south, east and west sides, these presumably formed the edge of the deer park. The woods are on undulating ground with numerous stream courses including some rocky gorges. In the higher parts of Knockman Wood the streams rise in some large areas of Sphagnum bog.

The oldest trees are probably some beech around the ruins of Garlies Castle and along the south side of Knockman Wood. There is some evidence of beech grove running through the lower part of Knockman Wood although it is now very fragmented. Elsewhere the woodland is mainly oak with some birch, rowan, crab and hawthorn with alder and a few Wych elm along the streams. The oak is apparently mainly of coppice origin or is regenerated within the last 50-100 years. There are some older oaks, of which ring counts give an age of about 150 years (about 2 m breast height girth). These are contemporary with the beech (girths average 3 m). There is little oak of less than 50 years. Garlies Wood contains more young oak, mainly of coppice origin.

The epiphyte flora is apparently rich (F. Rose) but it is probably enhanced by the presence of the non-native beech and also a few sycamore.

Dead wood is plentiful, mainly as fallen coppice stems, but some of the older trees have dead branches. Insect attack in the dead wood seems limited but it is certainly present and some large flight holes were seen in oak. The woods are probably as good as one will see in this area for mature and overmature trees.

#### Summary

The woods rise on the slopes above the Penkiln Burn valley to the open moorland of Cumloden Deer Parks. The woodland is fairly open canopy oak with birch and rowan, and some 150 year beech in places. The oaks range between 50 and 150 years and dead wood is quite plentiful, mainly as fallen coppice stems. There

are streams, some with rocky gorges, with alder and Wych elm and areas of Sphagnum bog. The woods are rich in epiphytes and some evidence of insect attack in dead wood was observed but it has not yet been surveyed by entomologists. It is likely to be of interest if only because of its structure which is rather different to that of other Galloway woods.

Paul T. Harding







## LOCHWOOD

## DUMFRIES AND GALLOWAY

National Grid reference : 35/0897

Visited : 28 May 1976

Owner : P. Hope Johnstone, Esq., Raehills, Lockerbie.

The oaks of Lochwood spread north from the Lochwood Castle Mount running downhill towards the blanket bog (now drained) which surrounds this spur of rock on 3 sides. The oaks are alleged to be between 300 and 600 years old and the oldest pollards, on the Mount itself, may be in excess of 300 years old. There are some good maiden oaks of about 200 years and a number of younger (100-150 years) trees mainly on the western side. A bank and ditch runs due north from the south-western corner and to the west of this is an area of 100-150 year old maiden beech and oak. There is a group of circa 200 year old oak maidens in an area of pasture due east of the Castle site which is unaccountably outside the S.S.S.I.

A public road cuts through the wood and north-east of this the wood drops steeply into a carr of birch, willow and alder over Sphagnum and Juncus. A small area of open carr remains on the blanket bog to the north, but the rest of the bog which is within the S.S.S.I. has been drained for afforestation.

Dead wood is plentiful as fallen boughs, hollow trees and also dead limbs in the canopy. The exposed hearts of the old pollard oaks are flakey without developing any red wood mould, and insect attack appears negligible. Some dead wood is obviously removed; some fallen beeches had been sawn up recently.

Natural regeneration of oak is limited to the carr area where there is also ample regeneration of rowan, willow and birch. Beech is regenerating in and near the western edge. Hawthorn is very scarce.

The area is reported to be of outstanding interest for epiphytes (D.A. Ratcliffe & F. Rose) but R.A. Crowson who has collected here has no notable Coleoptera records. N.C.C. has a list of Coleoptera collected by Mark Young of Aberdeen University but the list is mainly of Carabidae and Staphylinidae likely to be common in open woodland.

The nearby Kinnel Glen is also believed to be of interest for epiphytes and this area was observed from public roads. It seems to contain some areas of overmature oaks and some boundary pollards in places.

Summary

The wood lies on a rocky spur running north from the site of Lochwood Castle. It contains oaks of between 100 and over 300 years old. The oldest trees are mainly hollow pollards. The woodland grades into a birch/willow/alder carr on the north side and has an area of beech/oak plantation on the west side. The origin of the wood is obscure and it is rich in epiphytes but there are no reports of any interesting Coleoptera although the site has been worked by R.A. Crowson.

Paul T. Harding





## CADZOW

## STRATHCLYDE

National Grid reference : 26/7353

Visited : 27 May 1976

Owner : Hamilton & Kinnaird Estates

This area is also known as Hamilton High Parks. Much of the old park is now open arable and pasture, but two areas of ancient oak pollards remain. The largest area lies about 300 yards due south of Cadzow Castle. It contains the famous herd of white cattle which Whitehead (1953) states originated in the 13th century. This area contains about 150 ancient pollard oaks over improved pasture. A further, more diffuse, group of about 50 pollard oaks lies to the west of Cadzow Castle. This area is grazed by sheep and bullocks.

The white cattle enclosure is clearly the more important area. In places the oaks form an almost closed canopy. The trees, although ancient, are clearly not even aged. A ring count of one of the younger trees gave an age of 250+ years. There is no regeneration and there are probably few trees under 200 years old. The fallen dead wood seems to be removed and there was a very large stack of branches etc in one place. Many of the pollards are hollow and have dead limbs. There are a few hawthorns nearby.

The smaller area of trees is more open in structure and exposed in situation. Dead wood is again scarce except as hollow trees and dead branches in the trees. The age structure is similar to that in the larger area, and regeneration is absent.

Crowson (1962) records several extremely rare old forest species of Coleoptera which place the area in a class with Dalkeith Oakwood. The view has been expressed by Crowson (pers. comm.) that this area has functioned as a nucleus from which some species have spread upstream along the Avon and Clyde to places such as Milton Lockhart, Fidler's Glen and Nethan Gorge. Some of the Hamilton High Park's rarities were in fact recorded from the near part of Avondale, but the gorge woodlands were not examined by me.

#### Summary

There can be few places in Scotland with trees of the age of the oak pollards at Cadzow. Crowson (1962) lists several very rare species of Coleoptera which make the area of high regional importance. The age structure

is mixed but all the trees in the two areas of parkland are overmature and there appear to be no oaks of less than about 200 years old. The gorge woodland of Avondale below Cadzow has a wide range of tree species and ages. This area may provide for continuity of habitat if the woods are not replanted as has been the case along much of the Avon valley. Cadzow is one of the few remaining White Cattle Parks and all the parkland area is improved pasture which is grazed.

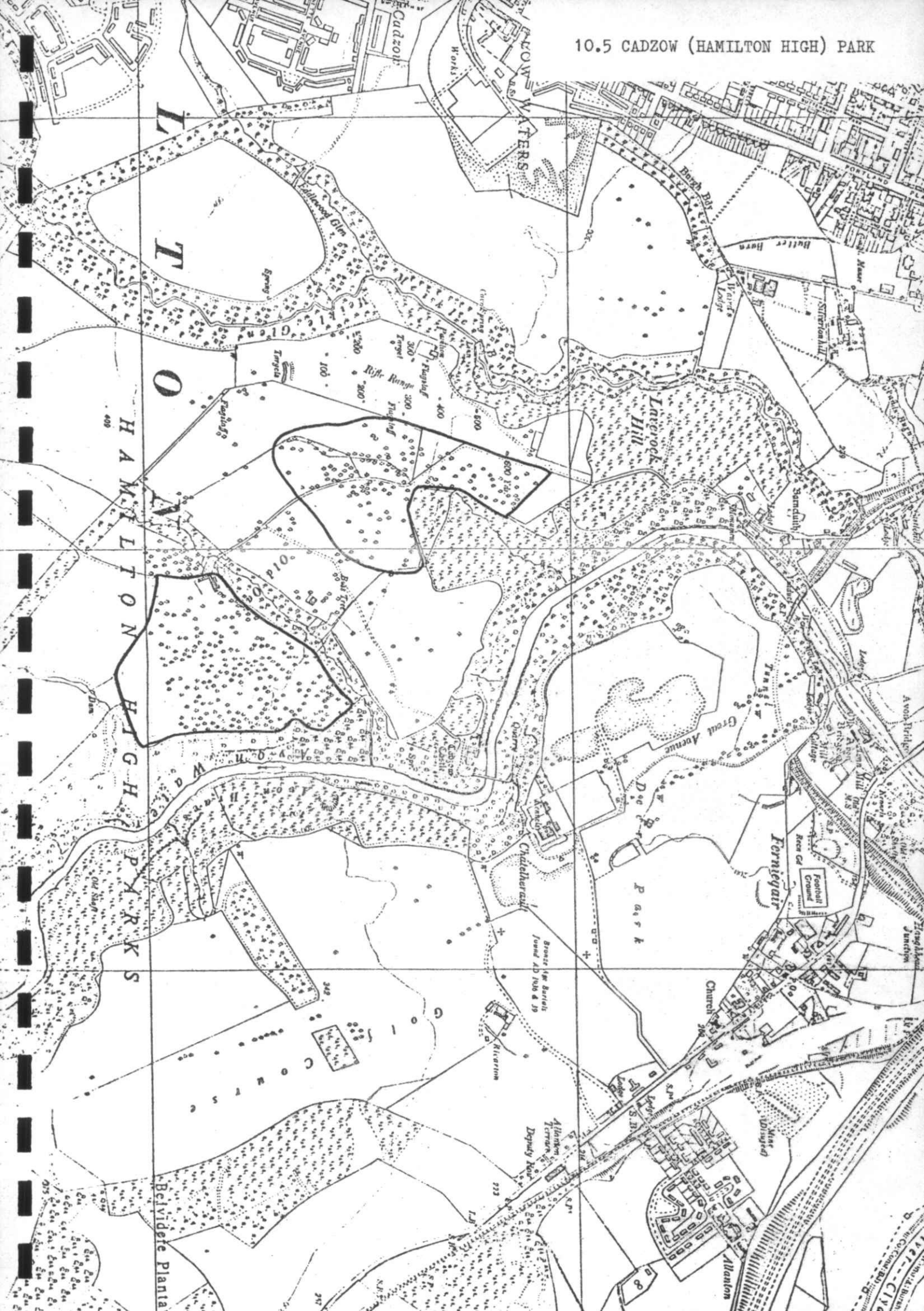
Reference

Crowson, R.A. (1962). Observations on Coleoptera in Scottish oak woods.  
Glasg. Nat. 18, 177-195.

Paul T. Harding



10.5 CADZOW (HAMILTON HIGH) PARK





## FIDDLERS GILL AND NETHAN GORGE

## STRATHCLYDE

National Grid references : 26/8447 and 26/8146

Visited : 27 May 1976

Two woodland sites which are considered by Dr. Crowson and by N.C.C. to be of considerable regional importance. Both are in steep-sided gorge situations and are probably the largest remaining examples of this type of woodland still under semi-natural vegetation in the Clyde valley. From the composition of the tree and shrub element and of the ground flora, there is every probability that both areas are, at least in part, ancient woodland. Both are essentially coppice woodland, although Nethan Gorge does contain some mature oaks. Both contain large amounts of dead wood mainly derived from decayed and fallen coppice stems.

Dr. Crowson has recorded several interesting species of Coleoptera from the two areas, but with one exception these are essentially woodland species, not particularly associated with mature timber/dead wood. The exception is a presumed record of Ptinus subpilosus Sturm based on a single larva collected at Fiddlers Gill (Crowson 1964). In Scotland this species is known from Dalkeith Oakwood and 6 other localities.

#### Summary

Two coppice woodland sites in steep-sided gorges above the River Clyde. Both are reported by Dr. Crowson to be of importance for a variety of woodland Coleoptera, but only one species (Ptinus subpilosus Sturm) could be counted as indicative of the continuity of mature timber on the site. Clearly both woods are of regional importance as large examples of linear ancient woodland, but it is unlikely that they are of national importance for mature timber habitats.

#### Reference

Crowson, R.A. (1964). Additional records of Coleoptera from Scottish oak-wood sites. Glasg. Nat. 18, 371-5.

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## MILTON - LOCKHART

## STRATHCLYDE

National Grid reference : 26/8149

Visited : 27 May 1976

This small estate was visited briefly with Eric Bignal. It lies on a bluff above a sharp bend in the River Clyde and contains an area of steep south-facing policy woodland. Dr. Crowson recommends this area as being of interest for several woodland Coleoptera rarely recorded in Scotland. Apparently most of his recording was done on the south facing slope above the river.

Parkland extends back from the river frontage up a deep dry valley to the north of the house. It contains a number of exotic species - lime and horse chestnut as well as some large mature oaks, some of which, mainly in the dry valley, are rich in epiphytes. Decaying trees are scarce except for a couple of old oaks in the lower park.

The bluff above the river is a mixture of mature plantations and Rhododendron scrub, but a few large decaying beech and ash are present, mainly on the crest of the ridge. There are also some decaying birch throughout the policy woodland area.

Summary

Dr. Crowson recommends this area as being of interest for some of the woodland Coleoptera which he suggests have colonised up the Clyde Valley from Cadzow. His records refer mainly to the "sun-trap" area on the south facing slope above the river which contains some large decaying beech, ash and birch in plantation woodland and Rhododendron scrub. The parkland includes a dry valley containing some large mature oaks which appear to be rich in epiphytes. Although the site in no way compares with Cadzow, it may well be of considerable regional interest.

Paul T. Harding

