PIPER'S WOOD, GLEN EY.

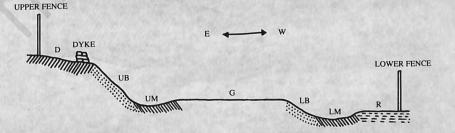
HEATHER SALZEN

The deer fence completed in May 1989 has a perimeter of 537 metres and encloses an area of 1.47 hectares (4.33 acres). The plot includes some fixed river gravel, a wet marshy area between this and a low stony bank, a flat grassy area with the ruins of former croft houses, a steep higher bank with an old head dyke at the top and a strip of grass and heath above the dyke.

The surviving trees of Piper's Wood nearly all grow on the two banks. They are so few, scattered and in poor shape that at present the site is a wood only in name. Within the fenced plot there are 8 birches and 1 rowan on the upper bank and 8 birches on and below the lower bank. In autumn 1989 some 10 birches produced some seed, in most case only in small quantity. Birch seedlings are quite numerous, especially on heather hummocks above the dyke, on the upper bank, the lower bank and the fixed gravel beside the river. Many, if not most of these seedlings, are actually several to many years old, having been continually grazed down to ground level by deer and sheep. One of these is 20cm across and only 5cm high. With cessation of grazing small retarded birches like this one will, hopefully, grow upward and form many-stemmed bushy trees. First-year birch seedlings are very small and none were noted in 1989. If any are present they will be visible in their second year and, being ungrazed, should grow into normal straight-stemmed trees.

The ground vegetation of Piper's Wood.

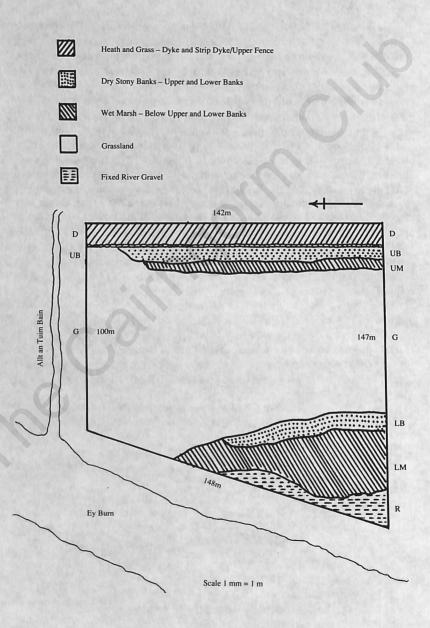
The enclosed plot includes 5 distinct habitats – fixed river gravel, wet marsh, well-drained stony banks which may have been river terraces, level grassland, and mixed grass and heath above the dyke. Two of these habitats occur twice, so for convenience and extra precision in recording the plot has been divided into 7 zones as shown on the sketchmap (not to scale) and detailed as follows.



Site Profile - not to scale

The plot lies just below the 460m contour with a slight slope to the river interrupted by the upper and lower banks.

Habitat types and habitat zones - sketch map



Habitat zones-

D - The dyke and the strip of grass and heather hummocks

This lies between the dyke and the upper fence. A small drainage runnel enters near the SE corner and runs through the dyke and down the upper bank ending in a small area of marsh at the bottom of the bank.

This zone is remarkably rich in species for such a small area due to having well-drained turf, dry heather hummocks, the stones of the tumbledown dyke and a tiny wet area with running water. In 1989 there were two large flowering colonies of the fragrant orchid *Gymnadenia conopsea*, one with 24 and one with over 50 flowering spikes.

A single spike of the marsh orchid, *Dactylorhiza incarnata*, a distinctive species now becoming very local, flowered where the runnel enters the dyke.

Species noted June to September 1989. For common names see "Flora of Piper's Wood"

Alchemilla alpina Antennaria dioica Anthoxanthum odoratum Achillea millefolium A. ptarmica Briza media Calluna vulgaris Carex dioica C. flava Cirsium heterophyllum Dactylorhiza incarnata Erica cinerea Eriophorum angustifolium Euphrasia brevipila Festuca ovina Galium boreale (dyke) G. saxatile G. verum Gentianella campestris Helianthemum nummularium Helictotrichon pratense

Juncus squarrosus Lathyrus montanus Lotus corniculatus Luzula campestris Molinia caerulea Leontodon autumnalis Nardus stricta Narthecium ossifragum Oxalis acetosella (dyke) Pinguicula vulgaris Plantago lanceolata Potentilla erecta Prunella vulgaris Polygala serpyllifolia Ranunculus acris R. flammula Salix repens Senecio jacobaea Sieglingia decumbens Vaccinium myrtillus Veronica officinalis

UB - The upper bank.

Dry and quite steep. A colony of the moonwort *Botrychium lunaria* near the N end and in 1989 a large colony of the field gentian, *Gentianella campestris* is notable.

Specimens noted June to September 1989:

Alchemilla alpina	Hieracium pilosella
A. glabra agg.	Lotus corniculatus
Anthoxanthum odoratum	Luzula campestris
Achillea millefolium	Leontodon autumnalis
Anemone nemorosa	Polygala serpyllifolia
Ajuga reptans (S end)	Linum catharticum
Bellis perennis	Luzula multiflora
Betula pubescens (8 poor specimens)	Polygonum viviparum
Botrychium lunaria (near N end)	Ranunculus acris
Calluna vulgaris	Senecio jacobaea
Carex panicea	Sorbus aucuparia
Campanula rotundifolia	Succisa pratensis
Cirsium arvense	Taraxacum sp.
Centaurea nigra	Thymus praecox
Conopodium majus	Trifolium repens
Geranium pratense (not flowering)	Trientalis europaea
Erica cinerea	Vaccinium myrtillus
Euphrasia sp.	V. vitis-idaea
Galium saxatile	Veronica officinalis
G. verum	V. chamaedrys
Gentianella campestris	Viola riviniana
Helianthemum nummularium	

UM – Upper marsh.

The narrow strip of wet ground at the base of the upper bank. At the end of May 1989 there was a small pool at the S end. By the end of a very dry June this was reduced to mud but by early September there was again some open water. The only locality within the plot where the marsh arrow-grass *Triglochin palustris* was noted in 1989.

- Drosera rotundifolia Carex dioica Juncus bufonius J. conglomeratus Equisetum palustre Narthecium ossifragum
- Pinguicula vulgaris Potamogeton sp. Triglochin palustris Selaginella selaginoides Viola palustris

G - Grassland.

The level, well-drained grassy turf, site of former habitation, inbye pasture and possibly cultivation. Notable for the presence of the spignel *Meum athamanticum* which occurs in the centre of the turf area in some numbers. Grasses remain to be identified when they come into flower with cessation of grazing.

Achillea ptarmica A. millefolium Conopodium majus Calluna vulgaris Festuca ovina Meum athamanticum Linum catharticum Nardus stricta Succisa pratensis

LB - Lower Bank.

Below the grassland and much lower than the upper bank which is eroding at the top, is very dry and has some open soil. The flora is much more limited than on the upper bank but does include the following-

Blechnum spicant	Hieracium pilosella	
Centaurea nigra	Gymnadenia conopsea - 1 spike only	
Campanula rotundifolia	Nardus stricta	

LM - Lower Marsh.

The lower marsh occupies a level area below the lower bank and the fixed river gravel. This area is very wet most of the year especially at the S end and usually has two pools of open water. These dried out to mud in the summer of 1989.

Drosera rotundifolia on Sphagnum	Festuca vivipara
Carex nigra	Geum rivale
C. dioica	Juncus squarrosus
C. panicea	Molinia caerulea
C. ovalis?	Ranunculus flammula
Caltha palustris	Pedicularis palustris
Eriophorum angustifolium	Taraxacum palustre

R - River gravel.

Dry, well-drained stony area beside the river now almost completely covered with low vegetation. A very restricted flora but many birch seedlings.

Antennaria dioica Alchemilla alpina Calluna vulgaris Vaccinium myrtillus V. vitis-idaea Genista anglica Lotus corniculatus Nardus stricta Solidago virgaurea

FLORA OF PIPER'S WOOD

Order and nomenclature as in "Excursion Flora of the British Isles" by Clapham, Tutin & Warburg Second Edition 1973.

Recorded by H. Salzen 1989

D = Dyke and ground above dyke to upper fence UB = Upper bank. UM = Upper marsh below upper bank. G = Grassland. LB = Lower bank. LM = Lower marsh. R = River gravel.

Pteridophyta

Selaginellaceae

SELAGINELLA SELAGINOIDES - Lesser clubmoss. UM, LM

Equisetaceae

EQUISETUM PALUSTRE - Marsh horsetail. UM

Filicopsida

BOTRYCHIUM LUNARIA – Moonwort. UB BLECHNUM SPICANT – Hard fern. LB

Angiospermae – Dicotyledons

Ranunculaceae

CALTHA PALUSTRIS – Kingcup. LM ANEMONE NEMOROSA – Wood anemone. UB RANUNCULUS ACRIS – Buttercup. D, UB, UM, G, LM R. FLAMMULA – Lesser spearwort. D, LM

Violaceae

VIOLA RIVINIANA – Common violet. UB, LB V. PALUSTRIS – Marsh violet. UM, LM

Polygalaceae

POLYGALA SERPYLLIFOLIA - Milkwort. UB, D

Cistaceae

HELIANTHEMUM NUMMULARIUM - Rockrose. D, UB

Linaceae

LINUM CATHARTICUM - Purging flax. UB, G

Geraniaceae

GERANIUM PRATENSE - Meadow cranesbill. UB

Oxalidaceae

OXALIS ACETOSELLA - Wood sorrel

Leguminosae

GENISTA ANGLICA – Petty whin. R TRIFOLIUM REPENS – Clover. UB LOTUS CORNICULATUS – Bird's foot trefoil. D, UB, R LATHRYUS MONTANUS – Bitter vetch. D

Rosaceae

POTENTILLA ERECTA – Tormentil. D, UB GEUM RIVALE – Water avens. LM ALCHEMILLA ALPINA – Alpine lady's mantle. D, UB A. GLABRA AGG. – Lady's mantle. UB SORBUS AUCUPARIA – Rowan. UB

Droseraceae

DROSERA ROTUNDIFOLIA - Sundew. UM, LM

Umbelliferae

CONOPODIUM MAJUS – Earthnut, pignut. UB, G MEUM ATHAMANTICUM – Spignel. G

Polygonaceae

POLYGONUM VIVIPARUM - Viviparous bistort. UB

Betulaceae

BETULA PUBESCENS - Birch. UB, LB, R

Salicaceae

SALIX REPENS - Creeping willow. D

Ericaceae

CALLUNA VULGARIS – Heather. D, UB, G, LB, R ERICA CINEREA – Bell heather. D, UB, R VACCINIUM MYRTILLUS – Blaeberry. D, UB, LB, R V. VITIS-IDAEA – Cowberry. UB, R

Primulaceae

TRIENTALIS EUROPAEA - Chickweed wintergreen. UB

Gentianaceae

GENTIANELLA CAMPESTRIS - Field gentian. D(S), UB(S), G(NW)

Scrophulariaceae

VERONICA OFFICINALIS – Common speedwell. D, UB V. CHAMAEDRYS – Germander speedwell. UB PEDICULARIS PALUSTRIS – Marsh lousewort. LM EUPHRASIA MICRANTHA – Eyebright. UB, G E. BREVIPILA – Eyebright. D, UB, G

Lentibulariaceae

PINGUICULA VULGARIS - Butterwort. D, UM, LM

Labiatae

THYMUS PRAECOX – Thyme. UB, LB PRUNELLA VULGARIS – Self-heal. D, UB AJUGA REPTANS – Bugle. UB(S)

Plantaginaceae

PLANTAGO LANCEOLATA - Ribwort. UB

Campanulaceae

CAMPANULA ROTUNDIFOLIA - Harebell. UB, LB

Rubiaceae

GALIUM BOREALE – Northern bedstraw. D G. VERUM – Lady's bedstraw. D, UB G. SAXATILE – Heath bedstraw. D

Dipsacaceae

SUCCISA PRATENSIS - Devil's-bit scabious. UB, G

Compositae

SENECIO JACOBAEA – Ragwort. D ANTENNARIA DIOICA – Cat's foot. D, R SOLIDAGO VIRGAUREA – Golden-rod. R BELLIS PERENNIS – Daisy. UB ACHILLEA MILLEFOLIUM – Yarrow. UB, D A. PTARMICA – Sneezewort. D, G CIRSIUM PALUSTRE – Marsh thistle. LM C. ARVENSE – Field thistle. UB C. HETEROPHYLLUM – Melancholy thistle. D LEONTODON AUTUMNALIS – Autumnal hawkbit. D CENTAUREA NIGRA – Lesser knapweed, hardheads. UB, LB HIERACIUM PILOSELLA – Mouse ear hawkweed. UB TARAXACUM PALUSTRE – Marsh dandelion. LM

Angiospermae - Monocotyledons

Juncaginaceae

TRIGLOCHIN PALUSTRIS - Marsh Arrow-grass. UM

Potamegetonaceae

POTAMOGETON - Pondweed. UM, LM pools

Liliaceae

NARTHECIUM OSSIFRAGUM - Bog asphodel. D, UM, LM

Juncaceae

JUNCUS SQUARROSUS – Heath rush. D, G, UM, LM J. BUFONIUS – Toad rush. G, UM, LM J. CONGLOMERATUS – Conglomerate rush. UM, LM LUZULA CAMPESTRIS – Field woodrush. D, UB, LB L. MULTIFLORA – Many-headed woodrush. D, UB, LB

Orchidaceae

GYMNADENIA CONOPSEA – Fragrant orchid. D, G, LB DACTYLORHIZA INCARNATA – Marsh orchid. D

Cyperaceae

ERIOPHORUM ANGUSTIFOLIUM – Common cotton-grass. D, LM CAREX DIOICA – Dioecious sedge. D, UM, LM C. FLAVA AGG. C. PANICEA – Carnation sedge. UB C. NIGRA – Common sedge. C. OVALIS ? – Oval sedge. LM

Graminea

SIEGLINGIA DECUMBENS – Heath grass. D FESTUCA OVINA – Sheep's fescue. D, UB, G F. VIVIPARA – Viviparous fescue. LM BRIZA MEDIA – Quaking grass. D HELICTOTRICHON PRATENSE – Meadow oat. D ANTHOXANTHUM ODORATUM – Sweet vernal-grass. D, UB, G NARDUS STRICTA – Mat-grass. D, LB, R MOLINIA CAERULEA – Purple moor-grass. D, LM