

1987 SUTHERLAND/CATTNESS LOCH SURVEY

6401
NC6401

Loch name Loch Loyall Estate Ribigill No. 051
Grid reference NC 621 475 Date surveyed 4/8/87

Loch size 652.9 ha. Altitude 110 m Surveyor's name C.K.P. EW. S.B.
Catchment size 6347.0 ha

Water colour light brown Water clarity clear slight algal suspension nr inflow

Loch type VIII b 3 Catchment Geology 90% GRANITE 10% HORNBLENDIC GNEISS ^{34/10}

Edge type - area of 59/2 at one end. otherwise, no obvious edge community.

See 10

Substrate types (underline main type tick others present)

- Sand (0.1 - 4mm diam.)
- Bedrock
- Silt (< 0.1mm diam.)
- Boulders (>30cm max diam.)
- Organic mud
- Stones (5-30cm diam.)
- Peat
- Gravel (4-50mm diam.)
- Artificial embankment Jeff

Uses and Damage

Boat used

USE	AREA AFFECTED	DAMAGE
Water abstraction		
Sewage inflow		
Agricultural pollution		
Edge trampling by <u>sheep</u> livestock	<u>bangs</u>	<u>manure & disturbance</u>
Forestry - vehicles		
- run off		
Fishing (Edge/boat)		
Shooting (Cartridges)		
Others <u>Litter</u>	<u>road edge</u>	<u>Campfires, Litter</u>
<u>recreation</u>		

Fauna

- | | | | |
|-------------------------|----------------------|-----------------|------------------------------|
| Birds | Mammals | Molluscs | Dragonflies |
| Heron Common Gull 2 | <u>Other spraint</u> | | <u>Grellagma cyathigerum</u> |
| Dipper Common Sandpiper | <u>Water voles</u> | | <u>Cordulogaster</u> |
| Diver | <u>(inflow)</u> | | <u>boltonii</u> |
| Oystercatcher 2 | | | |

Species diversity

Conductivity: 90 umhos

Open Water .18...

Total 37 Species

SUBMERGED AND FLOATING SPECIES

Map code	DAFOR	EMERGENT AND EDGE SPECIES:	Map code	DAFOR
X Api	Apium inundatum*	X Pper	Potamogeton perfoliatus	R..
X Cah	Callitriche hamulata	Ppra	Potamogeton praelongus**	.....
X Cher	Callitriche hermaphroditica**	X Ppol	Potamogeton polygonifolius	LF..
X Cpla	Callitriche platycarpa	Ppu	Potamogeton pusillus*	.....
X Cas	Callitriche stagnalis	Ra	Ranunculus aquatilis	.....
X Hip	Hippuris vulgaris	Rtr	Ranunculus trichophyllus	.....
X Hyd	Hydrocotyle vulgaris	X Sf	Scirpus fluitans	O
X Ial	Isoetes lacustris	X Spa	Sparganium angustifolium	O..
X Iss	Isoetes setacea **	Sub	Subularia aquatica**	.....
X Jb	Juncus bulbosus var. fluitans	X Uti	Utricularia intermedia	R..
X Lm	Lemna minor (* in NW)	Um	Utricularia minor	.....
X Lit	Littorella uniflora	X Uva	Utricularia vulgaris/australis	R..
X Mal	Myriophyllum alterniflorum	Une	Utricularia neglecta	.....
X Msp	Myriophyllum spicatum	Zan	Zannichellia palustris	.....
X Na	Nymphaea alba	X Cha	Chara sp <u>globularis var globularis R.</u>	.....
X Nup	Nuphar pumila	Nit	Nitella sp <u>flexilis var flexilis LF?</u>	LF..
X Pil	Pilularia globulifera**	X Pon	Fontinalis antipyretica	O..
X Pam	Polygonum amphibium	X Lob	Lobelia dortmanna	LF..
X Pal	Potamogeton alpinus			.....
X Pbe	Potamogeton bertholdii			.....
X Pcr	Potamogeton crispus*			.....
X Pfil	Potamogeton filiformis**			.....
X Pfr	Potamogeton friesii**			.....
X Pgr	Potamogeton gramineus			.....
X Pn	Potamogeton natans			.....
X Pzn	Potamogeton X nitens			.....
X Pob	Potamogeton obtusifolius			.....
X Ppec	Potamogeton pectinatus			.....

Charophyte identification verified by J.M. Moore

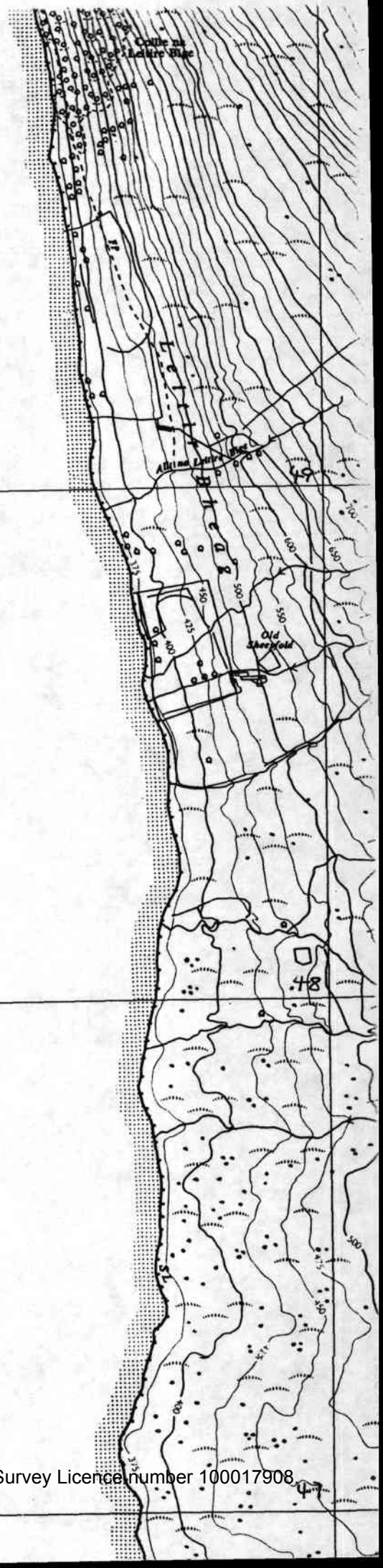
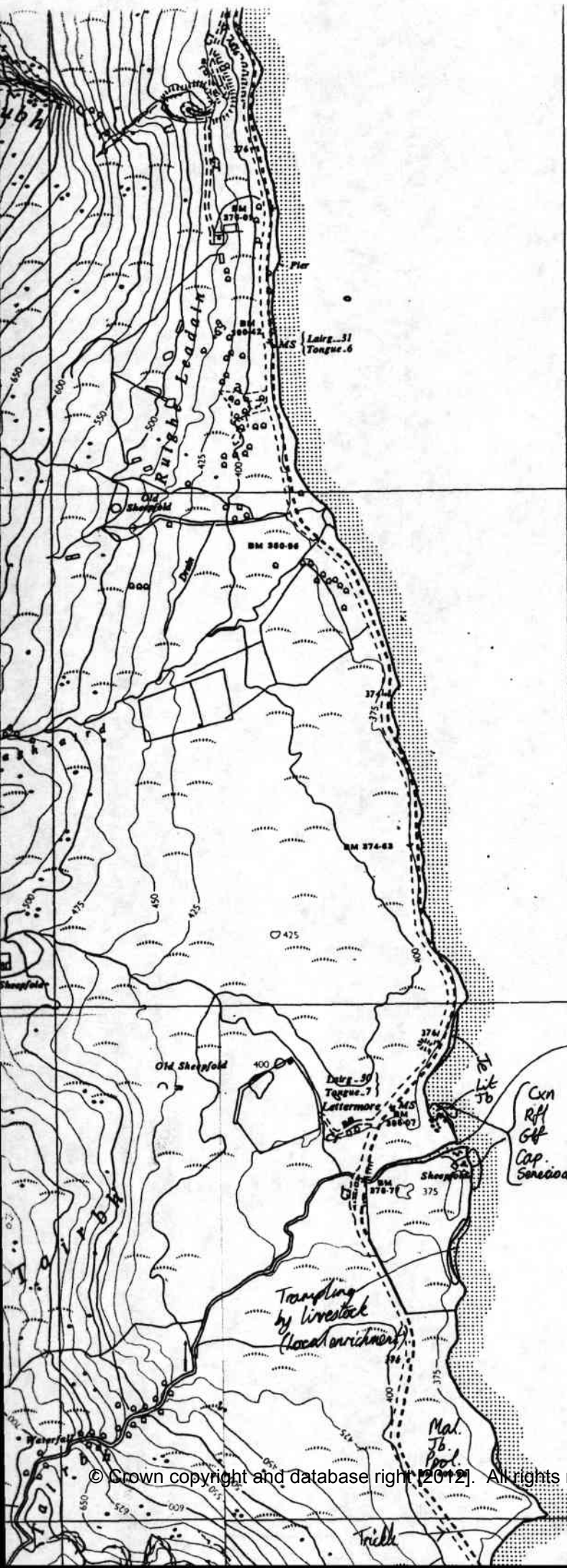
In inflows.
 1/ Cah. LF.
 .5/ Sf. F.
 1/ Spa. LF.
 1/ GA. LF.
 . Men. O.
 1/ Pha. LF.
 X Vs. LF.

EMERGENT AND EDGE SPECIES:

Map code	DAFOR	EMERGENT AND EDGE SPECIES:	Map code	DAFOR
X Ags	Agrostis stolonifera	X Ph	Phragmites australis	LF.
X Cap	Caltha palustris	Pam	Polygonum amphibium	.....
X Cxa	Carex aquatilis**	X Pop	Potentilla palustris	R..
X Cxl	Carex lasiocarpa	X Rfl	Ranunculus flammula	F..
X Cxli	Carex limosa	Ris	Rorippa islandica	.....
X Cxn	Carex nigra	Sl	Scirpus lacustris	.....
X Cxro	Carex rostrata	X Sper	Sparganium erectum	.....
X Cxv	Carex vesicaria	X Spem	Sparganium emersum	.....
X Elp	Eleocharis palustris	Vb	Veronica beccabunga	.....
X Era	Eriophorum angustifolium	Vaa	Veronica angallis-equatice	.....
X Glf	Glyceria fluitans	X Vs	Veronica scutellata	O..
X Hip	Hippuris vulgaris	X Sf	Equisetum fluviatile	LF.
X Hyd	Hydrocotyle vulgaris	X Ep	Equisetum palustre	O..
X Ip	Iris pseudacorus	X Vio	Viola palustris	O
X Ja	Juncus articulatus	X Carex	Carex panicea	R..
X Jb	Juncus bulbosus	X C. d.	C. d. <u>denudata</u>	O..
X Je	Juncus effusus	X March	Marchantia <u>polymorpha</u>	O..
X Lit	Littorella uniflora	X Senecio	Senecio aquaticus	LF.
X Lycop	Lycopodiella inundata**	X Nolin	Nolinia caerulea	O.
X Lyp	Lythrum portula *	X Galium	Galium palustre	O.
X Ma	Mentha aquatica	X Cardamin	Cardamine pratense	O.
X Mt	Menyanthes trifoliata	X Salix	Salix sp.	LF.
X Mim	Mimulus guttatus	X Algae	Algae	LA.
X Mon	Montia fontana			.....
X Myo	Myosotis laxa/caespitosa			.....
X Msc	Myosotis scorpioides			.....
X Mas	Masturtium officinale			.....
X Pa	Phalaris arundinacea			.....



Scale
1:10,560

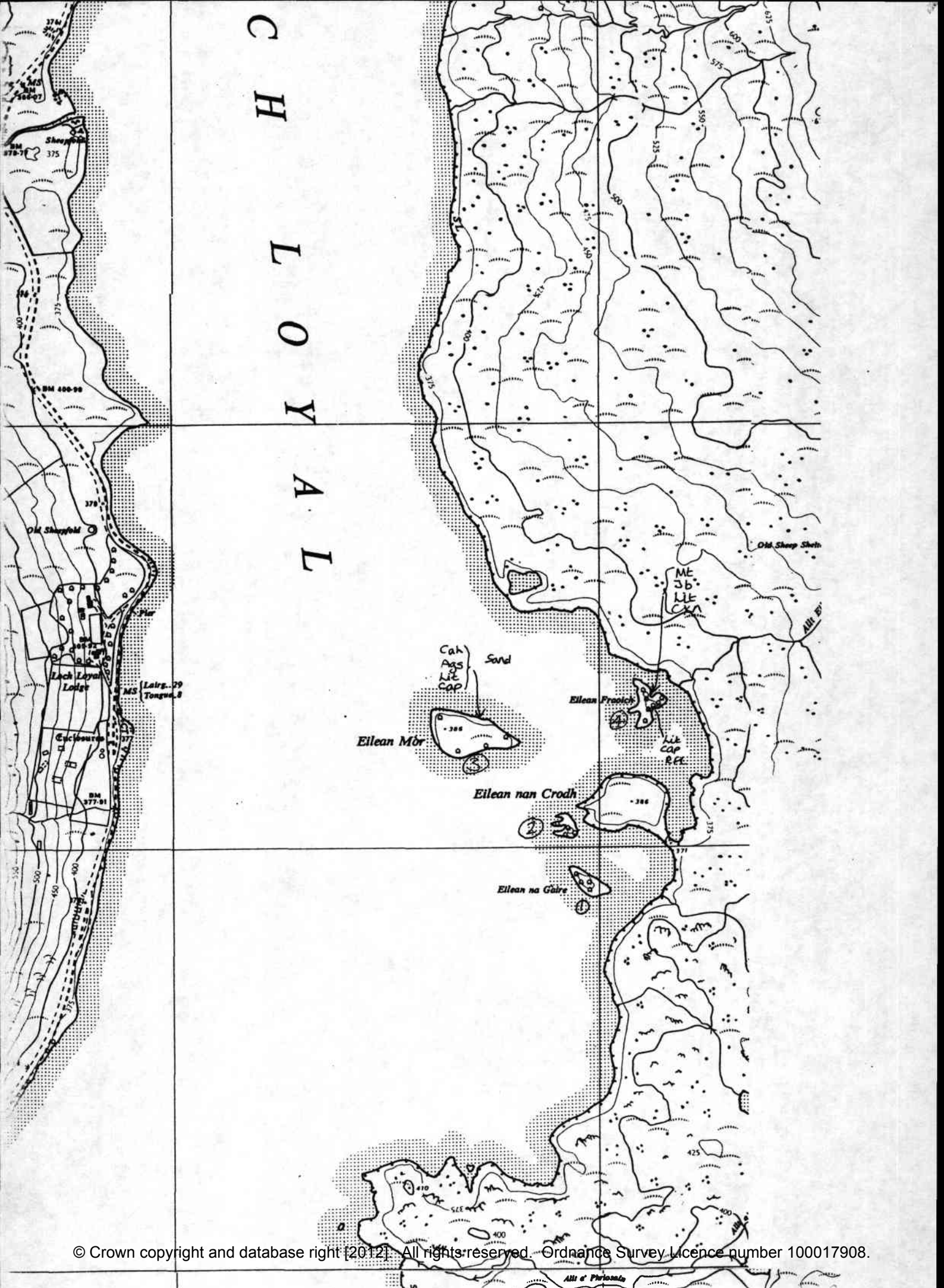


Scale 1:10,560

L
O
H
L
O
Y

INFLOW.
 ELP. Men. Jb. Cas.
 Gf. Cap. Pool.
 Galium palustre.
 Gf. Vs.
 Cah. Rff.
 Cxn
 Rff
 Gf
 Cap.
 Senecioaquaticus.

C
H
L
O
Y
A
L



EILEAN NA GAIRE ① on map

Dry Calluna heath with ground cover of heath mosses covers this island with scattered birch, willow and Rowan. Other species present include:

<i>Pteridium aquilinum</i>	<i>Rubus fruticosus</i> agg.
<i>Digitalis purpurea</i>	<i>Euphrasia</i> sp.
<i>Potentilla erecta</i>	<i>Rosa</i> sp.
<i>Succisa pratensis</i>	<i>Filipendula Ulmaria</i>
<i>Vaccinium myrtillus</i>	<i>Aegopodium podagraria</i>
<i>Leontodon</i> sp.	<i>Cirsium</i> sp.
<i>Prunella vulgaris</i>	

Species occurring at the island's edge:

<i>Achillea ptarmica</i>	<i>Ranunculus flammula</i>
<i>Juncus bulbosus</i>	<i>Calltha palustris</i>
<i>Salix</i> sp.	<i>Littorella uniflora</i>
<i>Fartinalis antipyretica</i>	<i>Juncus effusus</i>
<i>Senecio aquaticus</i>	

SMALL ISLAND NEAR EILEAN NAN CRODM ②

Mainly covered by grassland with occasional Alder Scrub. *Calluna vulgaris*, *Leontodon* sp and *Succisa pratensis* were the main additional species. *Littorella* occurred LF on shore in water.

EILEAN MOR ③

Shore is covered with boulders resulting in no aquatic vegetation. A small sheltered bay on the North shore contained *Callitriche hamulata* and *Agrostis*, *Calltha* and *Littorella*. Terrestrial vegetation was dominated by *Pteridium aquilinum* giving way to grassland adjacent to the shore.

<i>Senecio aquaticus</i>	<i>Cirsium</i> sp.	<i>Digitalis purpurea</i>
<i>Urtica dioica</i>	<i>Succisa pratensis</i>	<i>Prunella vulgaris</i>
<i>Rumex</i> sp.	<i>Filipendula Ulmaria</i>	<i>Juncus effusus</i>
<i>Bellis perennis</i>	<i>Potentilla erecta</i>	<i>Plantago lanceolata</i>
<i>Geranium robertianum</i>	<i>Oxalis acetosella</i>	<i>Leontodon</i> sp.
<i>Silene dioica</i>	<i>Alchemilla</i> sp.	<i>Veronica chamaedrys</i>
<i>Ranunculus acris</i>	<i>Angelica sylvestris</i>	<i>Stellaria</i> sp.

Fartinalis occurs occasionally in the water

Rowan trees are occasional

Signs of deer grazing.

EILEAN FRAOICH ④

Rowan and birch trees occur on the eastern side elsewhere spongy grassland, ^{with *Carex* spp.} by the loch shore grades into Calluna moorland

Carex panicea, *C. demissa*, *Succisa pratensis*,
Potentilla erecta, *Myrica gale*, *Juncus bulbosus*,
Pteridium aquilinum, *Prunella vulgaris*, *Euphrasia* sp.
Digitalis purpurea, *Viola palustre*, *Juncus effusus*,
Filipendula ulmaria, *Cirsium* sp, *C. nigra*
Pinguicula vulgaris, *Pedicularis sylvatica*

some *Littorella*, *Ranunculus flammula* and *Caltha palustris* occur on the east shore

Menyanthes, *Juncus bulbosus*, *Littorella* and *Carex nigra* occur on the north shore.

Signs of deer grazing.