

1995 LOCH SURVEY EAST GRAMPIAN & STRATHSPEY

Code NN5702 Name LOCH PATRACK Grid Ref NN539790
 Date 6th JULY 1995 Surveyors TH/SSD Estate BEN ALDER
 Area 67 ha Altitude 420 m Catchment ha Geology 10/311/20
 Water colour COLOURLESS Clarity CLEAR Boat used NO Secchi disc depth m
 Loch type 3 Edge type(s) S10a; S9a; S22a (NVC codes)
 Status SSSI DENALDER & ADNACH BEAG Access 4a Road/houses present (underline)
 Land use % Open water Semi-natural Forestry Agriculture

Substrate types (underline main type, tick others present)

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

Use

USES AND DAMAGE

Observations

Adjacent forestry >30 yr old conifer plantation within 50m of N.E. margin of loch.
 Agricultural pollution
 Edge trampling Track - vehicles runs along part of eastern shore
 Fishing (edge/boat)
 Litter 3 drinks cans. Occasional bricks
 Shooting
 Water abstraction Small island platform off west shore - artificial island to promote diver breeding program

FAUNA

Mammals

Birds
C. Sand piper
Ringed Plover
Black-throated Diver
(-not seen but failed breeding 45
per cent)

Reptiles
Amphibians

Fish

Dragonflies &
 other invertebrates
Spongilla lacustris

SPECIES DIVERSITY

Edge 13
 Open water 14
 Total 26

WATER CHEMISTRY

Alkalinity 0.18 meq/l
 Conductivity 180 μ S/cm
 p.H. 6.66

RARE SPECIES

Rare in RPB area EF
 National Sub

1995 EAST GRAMPIAN & STRATHSPEY LOCH SURVEY: AQUATIC PLANT SPECIES LIST

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EMERGENT & EDGE SPECIES

Map code	Species	DAFOR
Ac	<i>Acorus calamus</i>	
<u>Ags</u>	<u><i>Agrostis stolonifera</i></u>	<u>0</u>
Al**	<i>Alisma lanceolatum</i>	
Apa*	<i>Alisma plantago-aquatica</i>	
Apn*	<i>Apium nodiflorum</i>	
Bar**	<i>Baldellia ranunculoides</i>	
Ber**	<i>Berula erecta</i>	
Bu	<i>Butomus umbellatus</i>	
Cap	<i>Caltha palustris</i>	
Cxat**	<i>Carex acuta</i>	
Cxat**	<i>Carex acutiformis</i>	
Cxa***	<i>Carex aquatilis</i>	
Cxl*	<i>Carex lasiocarpa</i>	
Cxli*	<i>Carex limosa</i>	
Cxn	<u><i>Carex nigra</i></u>	<u>F</u>
Cxpc*	<i>Carex pseudocyperus</i>	
Cxri**	<i>Carex riparia</i>	
Cxro	<u><i>Carex rostrata</i></u>	<u>0</u>
Cxv*	<i>Carex vesicaria</i>	
Ca**	<i>Catabrosa aquatica</i>	
Civ***	<i>Cicuta virosa</i>	
Clm**	<i>Cladium mariscus</i>	
Des**	<i>Deschampsia setacea</i>	
Ela***	<i>Eleocharis acicularis</i>	
Elm	<u><i>Eleocharis multicaulis</i></u>	<u>LP</u>
Elp	<u><i>Eleocharis palustris</i></u>	<u>R</u>
Elq	<i>Eleocharis quinqueflora</i>	
Elu	<i>Eleocharis uniglumis</i>	
Egf	<u><i>Equisetum fluviatile</i></u>	<u>F</u>
Eqp	<i>Equisetum palustre</i>	
Era	<u><i>Eriophorum angustifolium</i></u>	<u>0</u>
Gld	<i>Glyceria declinata</i>	
Glfi	<u><i>Glyceria fluitans</i></u>	<u>0</u>
Glm	<i>Glyceria maxima</i>	
Gln**	<i>Glyceria notata</i>	
Hip	<i>Hippuris vulgaris</i>	
Hyd	<i>Hydrocotyle vulgaris</i>	
Ip	<i>Iris pseudacorus</i>	
Iv	<i>Iris versicolor</i>	
Jac	<i>Juncus acutiflorus</i>	
Jaa***	<i>Juncus alpinoarticulatus</i>	
Ja	<u><i>Juncus articulatus</i></u>	<u>F</u>
Jb	<u><i>Juncus bulbosus</i></u>	<u>F</u>
Jc	<u><i>Juncus conglomeratus</i></u>	<u>R</u>
Je	<u><i>Juncus effusus</i></u>	<u>LF</u>
Lit	<i>Littorella uniflora</i>	
Lyc	<i>Lycopodiella inundata</i>	
Lyp*	<i>Lythrum portula</i>	
Lys	<i>Lythrum salicaria</i>	
Ma	<i>Mentha aquatica</i>	
Mt	<i>Menyanthes trifoliata</i>	
Mg	<i>Mimulus guttatus</i>	
Ml	<i>Mimulus luteus</i>	
Mm	<i>Mimulus moschatus</i>	

Map code	Species	DAFOR
Mi	<i>Mimulus sp.</i>	
Mon	<i>Montia fontana</i>	
Myl	<i>Myosotis laxa</i>	
Msc	<i>Myosotis scorpioides</i>	
Msec	<i>Myosotis secunda</i>	
Oc	<i>Oenanthe crocata</i>	
Of*	<i>Oenanthe fistulosa</i>	
Pam	<i>Persicaria amphibia</i>	
Pha	<i>Phalaris arundinacea</i>	
Phr**	<i>Phragmites australis</i>	
Pop	<i>Potentilla palustris</i>	
Rfl	<u><i>Ranunculus flammula</i></u>	<u>F</u>
Rh	<i>Ranunculus hederaceus</i>	
RI**	<i>Ranunculus lingua</i>	
Ro**	<i>Ranunculus omiophyllus</i>	
Rs*	<i>Ranunculus sceleratus</i>	
Roi	<i>Rorippa islandica</i>	
Rm	<i>Rorippa microphylla</i>	
Rna	<i>Rorippa nasturtium-aquaticum</i>	
Rxh**	<i>Rumex hydrolapathum</i>	
Sl*	<i>Schoenoplectus lacustris</i>	
St*	<i>Schoenoplectus tabernaemontani</i>	
Spem	<i>Sparganium emersum</i>	
Sper	<i>Sparganium erectum</i>	
Ta**	<i>Typha angustifolia</i>	
TI*	<i>Typha latifolia</i>	
Vaa**	<i>Veronica anagallis-aquatica</i>	
Vb	<i>Veronica beccabunga</i>	
Vc*	<i>Veronica catenata</i>	
Vs	<i>Veronica scutellata</i>	

SPECIES TOTAL

13

Other edge species

<u>Cxd</u>	<u><i>Carex viridula</i> ssp. <i>oedocarpa</i> (=C. <i>demissa</i>)</u>	<u>F</u>
<u>Cxe</u>	<u><i>Carex echinata</i></u>	<u>0/LF</u>
<u>Cxp</u>	<u><i>Carex panicea</i></u>	<u>0</u>
<u>Cxpa*</u>	<u><i>Carex paniculata</i></u>	<u>0</u>
<u>Gp</u>	<u><i>Galium palustre</i></u>	<u>R</u>
Sa	<i>Senecio aquaticus</i>	
<u>Tp</u>	<u><i>Triglochin palustre</i></u>	<u>0</u>
<u>Vp</u>	<u><i>Viola palustris</i></u>	<u>0</u>

Surrounding land use:

Blanket mire upland heath, acid grassland :- rough grazings
Forestry plantation

Note: */*# = plants in Highland/North East/ Tay River Purification Board area occurring in >100 10x10km squares in Great Britain but which still need special protection (Palmer & Newbold 1983)

**/*# = plants in Highland/North East/ Tay River Purification Board area occurring in <100 10x10km squares in Great Britain requiring special protection (Palmer & Newbold 1983)

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Map code	Species	DAFOR
Api*+##	<i>Apium inundatum</i>	
Apd	<i>Aponogeton distachyos</i>	
Bar**+##	<i>Baldellia ranunculoides</i>	
Cah	<i>Callitriche hamulata</i>	R.....
Cher***+###	<i>Callitriche hermaphroditica</i>	
Cpla	<i>Callitriche platycarpa</i>	
Cas	<i>Callitriche stagnalis</i>	
Ca	<i>Callitriche</i> sp.	
Ced**+##	<i>Ceratophyllum demersum</i>	
Cra**	<i>Crassula aquatica</i>	
Crh	<i>Crassula helmsii</i>	
Ela***+###	<i>Elatine hexandra</i>	
Elh**	<i>Elatine hydropiper</i>	
Ef+	<i>Eleogeton fluitans</i>	O.....
Ec	<i>Elodea canadensis</i>	
En	<i>Elodea nuttallii</i>	
Fon	<i>Fontinalis antipyretica</i>	R.....
Grd**+	<i>Groenlandia densa</i>	
Hip	<i>Hippuris vulgaris</i>	
Hop**	<i>Hottonia palustris</i>	
Hyd	<i>Hydrocotyle vulgaris</i>	
Isl	<i>Isoetes lacustris</i>	washed up only
Ise***+###	<i>Isoetes echinospora</i>	
Jb	<i>Juncus bulbosus</i>	A.....
Lm*	<i>Lemna minor</i>	
Lt*+##	<i>Lemna trisulca</i>	
Lit	<i>Littorella uniflora</i>	F.....
Lob	<i>Lobelia dortmanna</i>	O.....
Lun	<i>Luronium natans</i>	
Mal	<i>Myriophyllum alterniflorum</i>	FILA
Msp	<i>Myriophyllum spicatum</i>	
Ni***+###	<i>Najas flexilis</i>	
Nul*	<i>Nuphar lutea</i>	
Nup***+###	<i>Nuphar pumila</i>	
Na	<i>Nymphaea alba</i>	
Pam	<i>Persicaria amphibia</i>	
Ph#	<i>Persicaria hydropiper</i>	
Pil***+###	<i>Pilularia globulifera</i>	
Pal	<i>Potamogeton alpinus</i>	
Pbe	<i>Potamogeton berchtoldii</i>	
Pcol***+###	<i>Potamogeton coloratus</i>	
Pcom***+###	<i>Potamogeton compressus</i>	
Pcr*	<i>Potamogeton crispus</i>	
Pfil***+###	<i>Potamogeton filiformis</i>	
Pfr***+###	<i>Potamogeton friesii</i>	
Pgr	<i>Potamogeton gramineus</i>	
Plu*+##	<i>Potamogeton lucens</i>	
Pn	<i>Potamogeton natans</i>	LD.....
Pxne	<i>Potamogeton x nericius</i>	
Pxn	<i>Potamogeton x nitens</i>	
Pob*	<i>Potamogeton obtusifolius</i>	
Pxo	<i>Potamogeton x olivaceus</i>	
Ppec*	<i>Potamogeton pectinatus</i>	
Pper	<i>Potamogeton perfoliatus</i>	

Map code	Species	DAFOR
<u>Ppol</u>	<u>Potamogeton polygonifolius</u>	<u>0/LF</u>
Ppra**+###	Potamogeton praelongus	
Ppu*	Potamogeton pusillus	
Pr**#	Potamogeton rutilus	
Pxsp	Potamogeton x sparganifolius	
Pxz	Potamogeton x suecicus	
Pxz	Potamogeton x zizii	
Ra**	Ranunculus aquatilis	
Rb**+###	Ranunculus baudotii	
Rc+	Ranunculus circinatus	
Rf*+*	Ranunculus fluitans	
Rp*	Ranunculus peltatus	
Rpen**##	Ranunculus penicillatus	
	ssp. penicillatus	
Rpse**#	Ranunculus penicillatus	
	ssp. pseudofluitans	
Rtr**#	Ranunculus trichophyllus	
Rum**#	Ruppia maritima	
Spa*#	Sparganium angustifolium	
Spem	Sparganium emersum	
Spn	Sparganium natans	
Sp	<u>Sparganium sp.</u>	<u>0</u>
Spp#	Spirodela polyrhiza	
Sta	Stratoides aloides	
Sub**+###	<u>Subularia aquatica</u>	<u>LF</u>
Uti*#	Utricularia intermedia	
Um*	Utricularia minor	
Uo	<u>Utricularia ochroleuca</u>	<u>LF</u>
Us	Utricularia stygia	
Uva	Utricularia vulgaris/australis agg.	
Ut	Utricularia sp.	
Zan**+*	Zannichellia palustris	
		
		
		
Cha	Chara sp.	
Nit	Nitella sp. <u>opaca</u>	<u>0</u>

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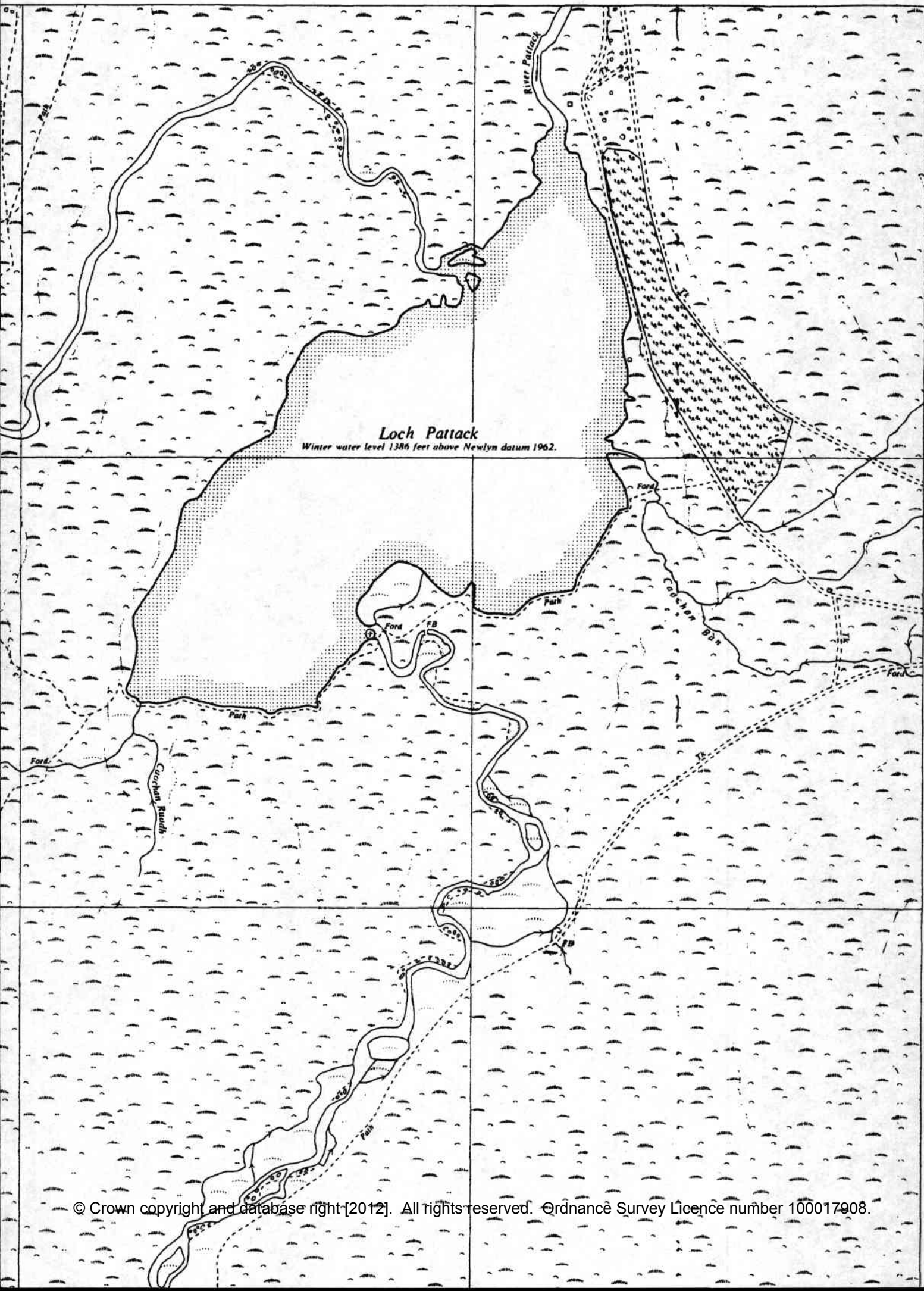
LF

Utricularia sp.

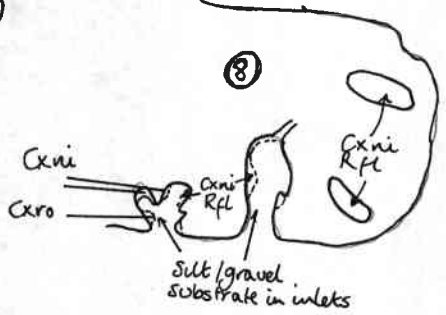
Nit flexagg(23/95) = N. opaca } id by
 ♂ + ♀ N.F. Stewart

US/195 = U. octoleuca } id by
N.F. Stewart

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- ① Inflow: Unvegetated sand/gravel/pebble deposits mid-channel. Bank and sand edge species: *Ta*, *Je*, *Egf*, *Tb*, *Tsq*, *Cxe*, *Cxnf*, *Ag*
- ②a Bank top-grass community (mesotrophic/acid): *Anthoxanthum odoratum*, *Festuca rubra*, *Nardus stricta* + *Plantago lanceolata*, *Festuca ovina*, *Thymus praecox*, *Pedicularis palustris*. Occasional patches of *Je*
- ② Inundation community on exposed sand/gravel beaches: *Cxnf*, *Rpl*, *Ced*, *Ta*, *N. stricta* (*Lotus corniculatus*, *Prunella vulgaris*)
- ③ Sand bar extending from shore to approx 30m: *Tb*, *Mal*, *Nit* (*Sparg*) *Elodea fluitans*. Sand/gravel beach with slumping peat hags supporting acid grass assemblage: *Agrostis canina*, *Luzula multiflora*, *Vp*, *Potentilla erecta*.
- ④ Dense stand of *Pn* + *Utricularia stygia*. Stand thins towards shore: (*Tb*), (*Mal*) present.
- ⑤ Inflow from blanket mire supporting *Tb*, *Cxro*. Peat deposits fanning out from inflow mouth over loch substrate. No submerged vegetation in this peat covered zone.
- ⑥ Sand/gravel substrate: *Tb* Sub, *Utricularia stygia*, *Mal*, *Nit*, (*Cxnf*). With distance north substrate stonier, same species assemblage with Sub more abundant. *Sp*. Vegetation less abundant on less exposed headlands
- ⑥a On north-west shore acid grassland extends to loch shore. Gravel beaches reduced to line of stones/boulders. Some peat slumping occurring. Grassland: *Molinia caerulea*, *Calluna vulgaris*, *Tricophorum cespitosum*, *Agrostis capillaris*, *canina*, *Erica tetralix*, *cinerea*, *Narthecium ossifragum*. Stony edge: *Rpl*, *Cxnf*, *Ta*, *Egf* (*Fon*)
- ⑦
- 
- ⑧ Blanket mire ends towards northwest end of loch. *Molinia* / *Calluna* community replaced by: *M. caerulea*, *Nardus stricta*, *Acanina*, *F. ovina*
- ⑨ Extent of inflow now increased. Approx. 7 channels leading into loch. Midstream islands supporting herb-rich flora: *Thymus praecox*, *P. lanceolata*, *Prunella vulgaris*. Backwater Pools - *Tb*
- ⑩ Eastern shore: stone/gravel beach, largely unvegetated, with acid/mesotrophic grassland behind as ②a + *M. caerulea*, *Lotus corniculatus*, *J. squarrosus*
- ⑪ Flushed area: *Je*, *Cxe*, *Tb*, *L. multiflora*, *Cxni*, *Vp*,
- ⑫ Shallow sandy bay. *Mal*, *Tb* (*Sparganium* sp.). Vegetation sparse close to shore. Density increasing offshore.
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- ⑬ Peaty outflow/seepage: *Tb*, *Rpl*, *Triglochin palustre*, *Alf*, *Je*, *Cxe*, *Ppl*.