

Drystone Walls Biological Value Survey May 2014



wildwaterforestmountains
ennerdale

Background:

Report of survey work commissioned by the Forestry Commission to evaluate the biological value of the valley bottom walls at the above location in the respect of Lichens and Bryophytes. Surveyor Mr. D. E. McCutcheon.

Survey Work:

Field work was carried out 12,13th & 14th May 2014 in ideal dry conditions for this type of survey. All walls were closely examined and an overall species list compiled of the species of lichens found and an estimate of overall abundance plus the conservation assessment on a National level. The lichen flora was extremely rich in places and the bryophytes were typical of the mountainous situation and including interesting species rarely found elsewhere.

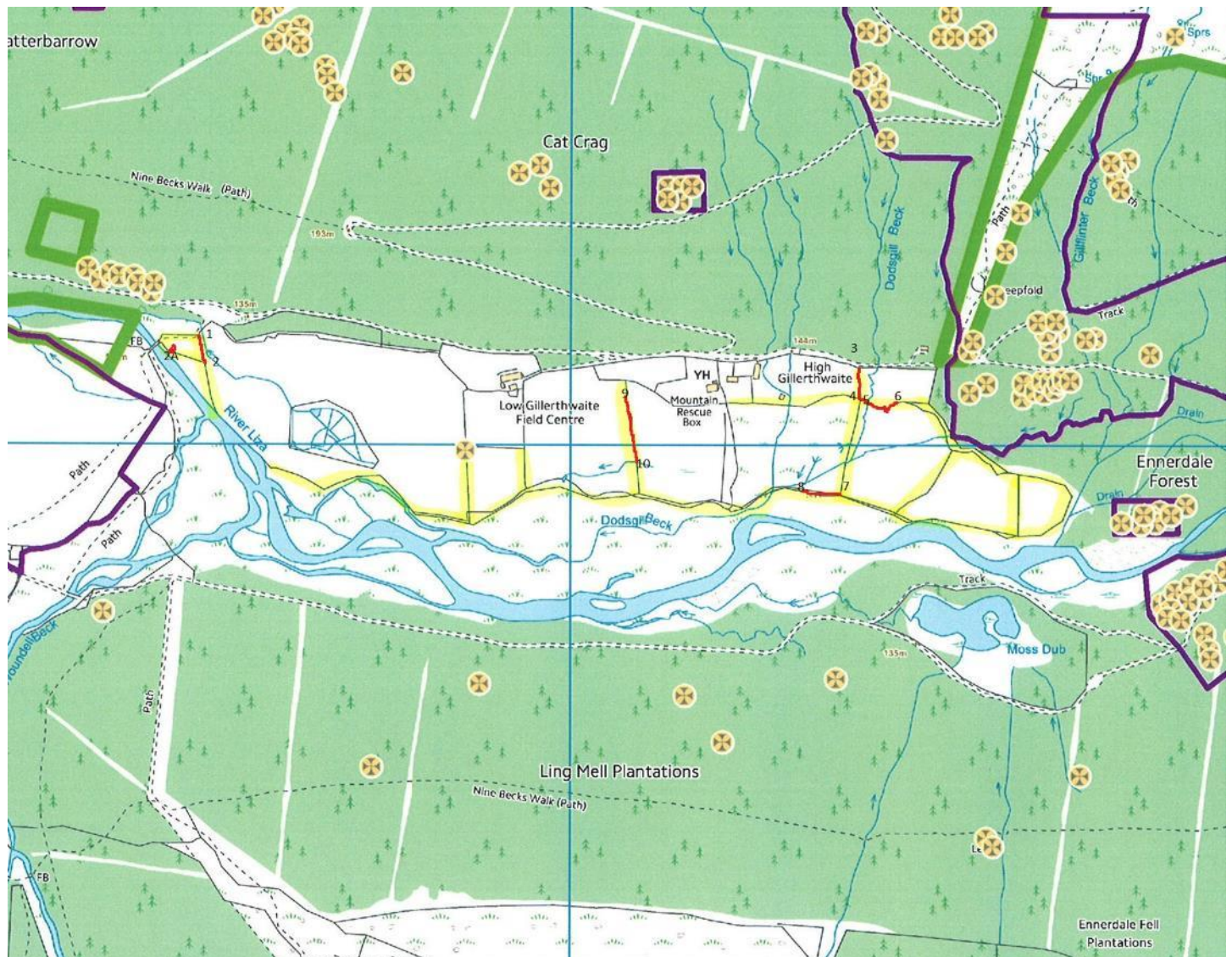
Field Marking:

The lengths of wall marked in red on the map and numbered at each end are the areas that I judge to host the best assemblages of species and include colonies of all the species found on the survey also they occupy different aspects as this is important for niche species. Regard was also taken to the longevity of the sections of the walls and most of the collapsing areas avoided although they are certainly not without interest as they become recolonised eventually from the surrounding seed bank. Considerable areas of wall were overgrown with many stones removed and now remain only as raised grassy ridges but a lot of stone remains overall. Canes with small flags and numbers are jammed into the wall at each end of the selected sections and a GPS reference given as follows.

Flag 1 NY13441-14168	Alt.122m	accuracy within 7m
Flag 2 NY13447-14126	Alt.120m	accuracy within 4m
Flag 2A NY 13422-14122	Alt.124m	accuracy within 2m
Flag 3 NY14440-14115	Alt.143m	accuracy within 15m
Flag 4 NY14438-14073	Alt.139m	accuracy within 5m
Flag 5 NY14449-14061	Alt.139m	accuracy within 6m
Flag 6 NY14499-14067	Alt.138m	accuracy within 7m
Flag 7 NY14404-13922	Alt.131m	accuracy within 6m
Flag 8 NY14367-13929	Alt.133m	accuracy within 6m
Flag 9 NY14093-14065	Alt.130m	accuracy within 7m
Flag 10 NY14098-13980	Alt.128m	accuracy within 5m

Altitude is taken from GPS reading which is not always precisely accurate.

Survey Map:



Red highlighted walls host the best assemblages of species and include colonies of all the species found on the survey also they occupy different aspects as this is important for niche specie most.

Summary:

A total of 72 species of lichens were identified (see Appendix 1) and 23 species of Bryophytes which is a high number for acidic stone. Only one piece of limestone was seen hosting 4 common and characteristic species.

The most noteworthy bryophytes were *Andraea mutabilis*, *Andraea rupestris*, *Grimmia donniana*, several species of *Racomitrium* and the uncommon liverwort *Barbilophozia atlantica*. Most of these usually occur at higher altitude but interestingly enough have colonised the walls at lower elevation in the mountainous setting.

Several Drinker moth caterpillars were noted sunning themselves on the stones at the base of some of the walls.

References:

A Conservation Evaluation of British Lichens R.G.Woods & B.J.Coppins British Lichen Society London

The Moss Flora of Britain and Ireland A.J.E.Smith Cambridge Press

Appendix 1 Species Results:

Key Codes

LC = least concern NS = Nationally scarce

Abundance is on the DAFOR scale D = dominant A = abundant F = frequent O = occasional R = rare

BLS no.	Taxon name	National Status	Local Abundance
0010	Acarospora fuscata	LC	A/O
1000	Arctoparmelia incurva	LC	A/R
0104	Aspicilia cinerea s.lat.	LC	A/R
0176	Baeomyces rufus	LC	A/F
0200	Buellia aethalea	LC	A/O
1334	Bunodophoron melanocarpum	LC	A/O
0311	Catillaria lenticularis	LC	A/O
0369	Cladonia cervicornis subsp. cervicornis	LC	A/O
0371	Cladonia chlorophaea s.lat.	LC	A/R
1749	Cladonia diversa	LC	A/O
0396	Cladonia macilenta	LC	A/D
0408	Cladonia polydactyla var. polydactyla	LC	A/A
0477	Cystocoleus ebeneus	LC	A/F
0495	Diploschistes scruposus	LC	A/R
0515	Fuscidea cyathoides var. cyathoides	LC	A/R
0527	Fuscidea lygaea	LC	A/O
0525	Fuscidea praeruptorum	LC NS	A/F
0582	Hypogymnia physodes	LC	A/R
0583	Hypogymnia tubulosa	LC	A/A
1013	Hypotrachyna revoluta	LC	A/O
1723	Placopsis lambii	LC	A/O
0653	Lecanora gangaleoides	LC	A/A
0656	Lecanora intricata	LC	A/O
0667	Lecanora polytropa	LC	A/O
0674	Lecanora rupicola var. rupicola	LC	A/R
0679	Lecanora soralifera	LC	A/F
0715	Lecidea diducens	LC NS	A/O
0724	Lecidea fuscoatra	LC	A/O
0743	Lecidea lithophila	LC	A/F
0764	Lecidea plana	LC NS	A/F

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BLS no.	Taxon name	National	Status	Local Abundance
0823	Lepraria caesioalba		LC	A/O
0820	Lepraria incana s.lat.			A/R
0998	Melanelixia fuliginosa subsp. fuliginosa		LC	A/F
0880	Micarea lignaria var. lignaria		LC	A/R
0739	Miriquidica leucophaea		LC	A/O
0766	Miriquidica pycnocarpa f. pycnocarpa		LC NS	A/A
0921	Ochrolechia androgyna		LC	A/O
0556	Ophioparma ventosa		LC	A/O
1006	Parmelia omphalodes		LC	A/F
1015	Parmelia saxatilis		LC	A/F
1043	Peltigera hymenina		LC	A/F
1056	Pertusaria albescens var. albescens		LC	A/O
1070	Pertusaria aspergilla		LC	A/R
1066	Pertusaria corallina		LC	A/F
1077	Pertusaria lactea		LC	A/F
1089	Pertusaria pseudocorallina		LC	A/O
1145	Platismatia glauca		LC	A/A
0562	Porpidia cinereoatra		LC	A/R
0568	Porpidia macrocarpa f. macrocarpa		LC	A/R
1690	Porpidia soledizodes		LC	A/O
0572	Porpidia tuberculosa		LC	A/R
1189	Protoblastenia rupestris		LC	A/R
0633	Protoparmelia badia		LC	A/R
1193	Pseudevernia furfuracea var. ceratea		LC	A/O
1200	Psilolechia lucida		LC	A/R
1257	Rhizocarpon geographicum		LC	A/A
1270	Rhizocarpon polycarpum		LC NS	A/O
1266	Rhizocarpon reductum		LC	A/A
0722	Rimularia furvella		LC	A/O
1333	Sphaerophorus globosus		LC	A/R
1355	Stereocaulon evolutum		LC	A/F
0630	Tephromela atra var. atra		LC	A/O
0654	Tephromela grumosa		LC	A/O
1432	Trapelia glebulosa		LC	A/O
1434	Trapelia obtogens		LC	A/R
1595	Trapelia placodioides		LC	A/R
1582	Trapeliopsis pseudogranulosa		LC	A/R

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BLS no.	Taxon name	National	Status	Local Abundance
1451	Umbilicaria polyphylla		LC	A/O
1461	Usnea flammea		LC	A/R
1471	Usnea subfloridana		LC	A/R
0988	Xanthoparmelia conspersa		LC	A/F
1005	Xanthoparmelia mougeotii		LC	A/O

Appendix 2 Photos:



Wall 1-2



Wall 2A



East from 2A



Wall 3 - 4



Wall 5 – 6



Wall 7-8



Wall 9-10



Collapsed Wall



Overgrown Wall