

DISCUSSION DOCUMENT

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This document constitutes an exploration by a single individual wishing first to record and understand and then to communicate to others the exceptional scenic and wildlife qualities of a small but arguably important piece of natural Scotland. It is anticipated that others who have complementary knowledge of the place will contribute their own data and opinions to this collection, which it is intended, will soon be offered as a contribution to the Kyle Conversation.

The Plock of Kyle: Derelict Wasteland or Potential Local (*community*) Nature Reserve?

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SUMMARY

The area of land adjacent to Kyle of Lochalsh in the Scottish Highlands known as The Plock of Kyle consists of an unusually rich mosaic of habitats, unrivalled in the region. To date, no particular rarities have been recorded there, so it is the great diversity of habitats and rich species communities that make The Plock special, an area of outstanding natural interest and also of striking beauty. It is recommended that The Plock should be set aside as a Local Nature Reserve, in future managed by and for the community of Kyle for their enjoyment. If visits are to be encouraged, access needs to be improved, but development of that sort must take into account the

integrity of the aforementioned natural habitats and the peaceful character of the place. Interventional management should be kept to a minimum whilst routine maintenance can be carried out through co-operative community effort. Any current problems, such as undesirable weeds which should be controlled, are remarkably few and would be relatively easily surmounted.

AWARENESS RAISING: This report first describes the varied habitats and rich biodiversity present at The Plock with reference to extensive habitat/species lists. It notes that these exceptional qualities tend to be overlooked and need drawing to the attention of all with a direct or latent interest in The Plock. In most parts of the UK a site this quality would be probably be worthy of the designation Site of Special Scientific Interest (S.S.S.I.).

CONSERVATION: Secondly, the report expresses, with reasoning based upon the author's own observations and experience as a biologist, personal aspirations and reservations regarding any drastic changes or major 'improvements' at The Plock. To tell the truth, unless persuaded otherwise, he would probably prefer it if The Plock were left to its own devices, cautiously monitored to see if any undesirable ecological changes occur and, if they did, then help make decisions about benign management.

However, having a realistic turn of mind and the willingness to converse and compromise, he offers considered proposals for improving access for all at The Plock. It could become a place people will want to visit and can do so in relative comfort, whilst still experiencing the wild and natural qualities that have probably always been present, albeit modified by the pressure of human activity.

The ideal situation might be if the Kyle community were to take the area on as a **Local Nature Reserve** (LNR), status now enjoyed, for example, by a plot of wild land at Merkinch, Inverness (<http://www.merkinchlnr.org.uk>). If such a project were to be embarked upon it is likely to be eligible for funding and/or incorporation in the Community Outreach Programme currently being developed by Skye & Lochalsh Environment Forum (<http://www.slef.org.uk>).

This appraisal contrasts markedly with the view that The Plock is mere wasteland. It is recommended that all due consideration should be given to the future of what is there now and predictable consequences of hasty but irreversible modifications.

INTRODUCTION

The Plock of Kyle is a roughly oval peninsula to the west of Kyle of Lochalsh, the future of which is currently under consideration by its owners, the local community. Its shore acts as the eastern foundation of the Skye Bridge with most land situated north of the road (A87). The Plock has a chequered history, but significantly the land in question was bequeathed to the local community in 1946 by Lady Hamilton, widow of Sir Daniel Mackinnon Hamilton and owner, until then, of the entire Balmacara Estate. Therefore, land ownership and decisions regarding of The Plock appear to be in the remit of the people of Kyle of Lochalsh.

The Highland Council's local plan, adopted September 2010, has allocated The Plock of Kyle as "Open Space" with Heritage Features of Local/Regional Importance (Policy 4.1). Adjacent land around Pladaig Bay (part of The Plock) is allocated as "Community" with Heritage Features of National Importance (Policy 4.2). The Skye & Lochalsh Local Biodiversity Action Plan briefly describes interest at The Plock as "Nature conservation, informal recreation, green space".

Locally, The Plock of Kyle is variously considered to be:

1. Derelict and inaccessible.
2. Wild and delightful.
3. Worthless wasteland.
4. An area of special beauty and natural interest.
5. A place with stunning views.
6. A place suitable for the installation of a caravan site.
7. A place suitable for restoration of the abandoned golf course.
8. A place suitable for housing (not in Local Plan).
9. A local green space suitable for reflective recreation.
10. A local green space suitable for sporting recreation.
11. A place worthy of nature conservation: a Local Nature Reserve.
12. An ideal place for teaching natural history.

This list contains some startlingly diametric opposites which seem to require orderly evidence-based definition followed by well considered verification.

Before leaving York to live in the Highlands, I became involved with an urban conservation project situated not far from the city centre. The community was delighted with this new green space, though ‘conservation’ might be an over generous a descriptor. ‘Salvage’ might be more appropriate.

St Nicholas Fields (<http://www.stnicksfields.org.uk>) had been a brick works, then a refuse tip, capped and abandoned, later adopted by a group of enthusiasts determined to make something of it. To begin with, it was twenty-five acres of elder, bramble, stinging nettles, ground elder, dockens, thistles, field horsetail, rank grasses, rosebay and other plants generally considered (not without good reason) to be undesirable weeds. Occasionally something interesting would be found, such as chicory, already growing on a nearby disused railway line, half a dozen bluebells, relics of pre-brickworks, pre-tip woodland days, and once a bee orchid sprang up in imported chalk rubble. The indomitable warden cherished such treasures, but from a biologist’s viewpoint it was woefully lacking in interest. Enthusiasts took action and it did improve, gradually.

They tried planting trees, but on the dry clay dominated bank they chose for their new ‘woodland’, many died and survivors struggled. Only the existing elders, some willows around a wet place and craggy crab apples derived from cores thrown down long ago fared really well.

Somewhat implausibly at the time, St Nick’s was deemed fit for the title Local Nature Reserve, which probably made people feel it had some achieved special value and worthy of their further increased attentions. In reality, St Nick’s is a restoration project, whereas the following conservation proposals for The Plock constitute protection for nature and the community, more like the Sherwood Forest initiative mentioned below (see page 14).

It is fifteen years since the St Nicholas Fields project began and it is beginning to earn its grand Nature Reserve title. Considering its starting point, the ex-landfill site hosts a very respectable range of plants, birds and insects and is fulfilling the originator’s dream, but it could never match the stunning quality of Lochalsh’s own ‘wasteland’, dismissively described as: “A rocky, redundant outcrop” or “increasingly derelict ... and much of the land inaccessible” and needing to be “revitalised” (whatever that means).

People publishing uncomplimentary judgements about The Plock have evidently failed to notice that, set amidst some of the most wonderful views in Britain, it consists of a suite of classic natural habitats that are pretty well in pristine condition. Weeds are but a side issue here, not the norm, and only two constitute any cause for concern.

Indeed, The Plock is a place for which the word 'biodiversity' might well have been specially invented. For natural history interest, as well as scenery and sheer glorious quality of environment, this place knocks good old St Nick's into a cocked hat. More than *eighty* different flowering plants grow in the meadow area alone! So I vote we look after The Plock's assets and don't get sidetracked by erroneous presumptions of degraded conditions there.

I hear you say, "It's no good just saying that. Prove it". Please read on.

WILDLIFE SURVEYS

Ever since moving to in Lochalsh from Attadale in 2004, I have explored the area in great detail and claim to know it pretty well. The Plock of Kyle has been the subject of frequent visits during which I have become acquainted with the quality and diversity of its natural assets and convinced of its considerable value as a 'wildlife haven'. However, I never recorded what I saw.

During 2011, I have privately undertaken to build on several years worth of casually acquired experience of the place and discover precisely what wildlife occurs at The Plock, systematically recording the species that live there (Appendix 1) and mapping habitats and biodiversity values (Appendix 2). Since botany and seashore biology are my main strengths, they feature more strongly in this document than mammals, birds, insects etc., lists of which will be added by other local naturalists including Brian Neath, Barabara Macritchie and Roger Cottis.

In general terms, The Plock contains a striking variety of habitats of exceptional biodiversity. Far from being the wasteland perceived by some observers, The Plock consists of a mosaic of fascinating and extremely beautiful places, including: young woodland, wild flower meadows, dry heath, boggy heath, exposed lichen-encrusted rock with heath and 'minibogs', maritime 'rockery' and a seashore that rivals in biological quality any in the western Highlands.

On the down side, there are also places that have been invaded by native and non-native species, which tend to be unsightly (though when in flower gorse and rhododendron are undeniably spectacular), prickly, impenetrable and may prove too vigorous for nature to keep in check without our assistance, eradicating or controlling them appropriately using good management practices (sooner rather than later).

The distinct habitats at The Plock overlap in some places and blend: for instance well-drained meadow, damp heath-meadow and boggy heath. Each habitat can be described in terms of the prevailing conditions and the plants that grow under the those conditions.

I apologise to readers for whom biological names in the descriptions that follow seem unnecessary clutter. They are included partly according to convention and for preciseness of communication, but also to show that I know what I'm talking about and to allow what I assert to be verified.

1. Woodland

I have not been here long enough to make personal observations of woodland development on The Plock, but from its botanical composition I would deduce that it formed relatively recently and that, in places, it is expanding. This is dynamic young woodland as opposed to ancient woodland. The canopy is composed largely of downy birch (*Betula pubescens*) (with perhaps some silver birch (*B. pendula*) or their hybrid), with scattered rowans (*Sorbus aucuparia*) and the occasional young sessile oak (*Quercus petraea*). Oaks are relatively uncommon, but seedlings and saplings can be found among the tress and on the drier heathland, which might indicate that the next stage in woodland maturation has already begun. It might be wise to foster or at least not harm any seedling/sapling oaks that are found. Not far from the main road there is a small patch of aspens (*Populus tremula*), which is better represented (and less likely to have been planted) by a colony on the coastal fringe by outer Pladaig Bay.

Everywhere in the woodland understorey there are moribund and dead gorse bushes, which betray the previous condition of the land as gorse-infested and indicate a practicable method for gorse control (below). At various times of year the ground is carpeted with bluebells (*Hyacinthoides non-scripta*) and primroses (*Primula vulgaris*), mosses and liverworts, bilberry (*Vaccinium myrtillus*), tormentil (*Potentilla erecta*), honeysuckle (*Lonicera periclymenum*) and the full complement of woodland ferns including the lovely hay-scented buckler fern (*Dryopteris aemula*), though expected beech fern *Phegopteris connectilis* has yet to be found.

In some places where woodland is adjacent to heather moor (dry heath), small birch, willow (*Salix caprea*), rowan and even oak apparently thrive among the heather, indicative of woodland expansion. New oaks present an opportunity for considered conservation management.

2. Well-drained meadow

In early summer the meadows in the heart of The Plock are a delight. On a single visit I casually listed over eighty flowering plants and ferns growing in this area, which consists of well-drained and waterlogged land with two small ponds and substantial stretches of richly vegetated drainage ditch.

The appearance of the meadows changes as the year progresses and different wild flowers come into bloom. On the hillside the grasses (sweet vernal, common bent, crested dog's-tail and several fescues) wave in the breeze with millions of yellow common cat's-ear flowers and extensive bright white patches of heath bedstraw in their midst.

3. Damp meadow

Lower down the slope, orchids appear among scattered cotton grass tassels. The Plock has a fine collection: heath spotted (*Dactylorhiza maculata*), common spotted (*D. fuchsii*), northern marsh (*D. purpurella*), fragrant (*Gymnadenia conopsea*) and both butterfly orchids (*Platanthera chlorantha* & *P. bifolia*), plus a couple of magnificent specimens of the hybrid *Dactylorhiza* x *formosa*. Rushes can be a curse to the crofter, but here they exist in moderation – as does ragwort (*Senecio jacobaea*)! – among all the other meadow plants. Soft rush (*Juncus effusus*) is usually a villain but there is only a small population here and in its right places. We also have the compact rush (*J. compressus*), the heath rush (*J. squarrosus*) and a large patch in a damp hollow of the jointed rush (*J. articulatus*) where sneezewort (*Achillea ptarmica*, a relative of yarrow, also here) also grows among the tall, broad headed angelica (*Angelica sylvestris*).

Here we also find the delightful eyebright *Euphrasia nemorosa* which feeds benignly on grass roots and, in August, innumerable blue-purple heads of devil's-bit scabious (*Succisa pratensis*) a striking contrast with the rich purples of three heathers (*Calluna vulgaris*, *Erica cinerea* and *E. tetralix*).

There is nothing really rare here, but the *combination* of so many species in the one place is very unusual anywhere else in Skye and Lochalsh. There are croft meadows of equivalent quality far away at Glendale. Such is the excellence of The Plock of Kyle meadows.

4. Ponds and Ditches

One of the two little ponds has filled with vegetation, mostly *Iris pseudacorus*, marsh thistle (*Cirsium palustre*) and hardheads (*Centaurea nigra*), and is a possible case for carefully considered restoration management. The other still has open water where tadpoles thrive. Therefore, The Plock must have a healthy population of frogs, food for the otters that secretly frequent the place.

The vegetation of the ditches includes some exclusively wetland-inhabiting plants such as the marsh bedstraw (*Galium palustre*), water violet (*Viola palustris*), water forget-me-not (*Myosotis scorpioides*) and meadowsweet (*Filipendula ulmaria*). The ditches are also lined with woodland ferns (five species), thriving in the increased shady dampness of their banks. Any temptation to dredge these species rich ditches should be resisted, at least until the consequences of such action for ditch flora and associated fauna have been weighed up alongside the consequences of changing soil dampness in surrounding meadowland and knock-on consequences for flora established there.

5. Boggy heath

Heathland at The Plock can be divided into two distinct types according to elevation and wetness. Adjacent to the wild flower meadows, to the east, there are two patches of constantly waterlogged land where boggy heathland plants thrive. One is less boggy than the next and is a riot of cotton grass (*Eriophorum angustifolium*), assorted sedges and orchids in July. Examine the ground carefully and you will find the round-leaved sundew (*Drosera rotundifolia*), an insectivorous plant that catches flies on sticky blobs secreted by glandular hairs on its scarlet leaves.

The other boggy area, a little farther east and adjacent to dense bracken then woodland, has at its centre a sphagnum bog in miniature. Cotton grass is all but absent, but there is a lot of the sedge relative so-called deer 'grass' (*Scirpus caespitosus*) here that also forms the worn tussocks along the peaty path we walk along between the meadows and the woods.

6. Upland heath (moorland)

The higher, rocky places tend to be better drained than the boggy heath-meadows, though they are locally quite damp allowing *Spagnum* mosses and attendant bog plants like cotton grass, bog asphodel (*Nathecium ossifragum*) and bog myrtle (*Myrrhis odorata*) to flourish among the heather and the slender, elegant green-ribbed sedge (*Carex binervis*). These areas are the most likely to turn to woodland in the fullness of time, so management might include sapling removal if the flora of open land is the desired option. That would raise questions about what to do about the occasional vigorous young oak.

7. Maritime

There is a narrow border between the woodland of The Plock and the seashore proper, the maritime zone. There is an overlap of the floras of land and sea, but there are plants here that grow only where they can escape competition from more vigorous terrestrial plants whilst tolerating salt spray. The full list can be read in the appendix, but notable species are thrift (*Armeria maritima*), which accumulates salt in its leaves and then throws them away, succulent leafed scurvy 'grass' (*Cochlearia officinalis* – not a grass, but apparently it does ward off scurvy), the salt-marsh rush (*Juncus gerardii*), charming pink ragged robin (*Lychnis flos-cuculi*) and the characteristic sedges of salt-marsh *Carex extensa* and *C. distans*.

8. Seashore

The seashore runs all the way round The Plock from the Skye Bridge into Pladaig Bay, measuring ... well, a long way. Represented are almost all seashore habitats: solid rock, boulders, sand, old shells, shell sand, maerl and deep, gloopy mud. Because of this habitat diversity and supreme water quality the diversity of life on the west Highland coast is prodigious. The Plock of Kyle has most of that fabulous coastline in miniature. If you want to walk for miles along huge beaches, this is not the place for you. But if you enjoy pottering and exploring, hunting for sea creatures or sitting on the rocks with a good book and fabulous views, the Plock shore is perfect. One of the delights of this relatively remote shore is the approach, following winding green tracks through shady woodland or wandering through acres of wild flowers before diving downhill into a hidden cove where, more often than not, you have the place all to yourself.

It is impossible to describe concisely all there is to find here. The rock is draped with seaweeds in sequence down the shore according to exposure tolerance: channelled wrack, spiral wrack, bladder wrack, egg wrack, saw wrack and an assortment of kelps. Between the mainland and the farthest island there are the biggest 'furbelows' you ever saw (*Saccorhiza polyschides*) with their stems so frilly they resemble Elizabethan ruffs. The most sheltered places – where the seabed tends to be muddy – are where to look for the rare form of egg wrack, locally known as 'crofter's wig' (*Ascophyllum nodosum* ecad. *mackaii*), which in Britain is found only here the far northwest. Other specialities include crunchy beds of purple live maerl (*Lithothamnium fragilis* – not a coral, but a red seaweed) and little beaches stacked deep with its bleached fragments; sea squirts of great variety, attached to lower shore rocks where you have to seek them out; graceful peacock worms (*Sabella pavonina*); the spectacular (weird, actually) 6" burrowing worm *Chaetopterus variopedatus* and seashells in great variety.

Astonishing. One sunny July day at low tide, not far from the bridge, the water was full of baby cuttlefish (*Rossia macrosoma*, I think), no bigger than bumble bees. One, slightly larger, squirted ink when gently prodded and shot away. The ink was surprisingly gelatinous, not like pen ink at all. I didn't know that – thank you, Plock.

That sort of experience is usual at this place: The Plock is a constant source of surprises, always fascinating and always an *education*, a point upon which I will elaborate when I discuss my own preferences for the future of The Plock of Kyle.

CONTROL OF GORSE & INVASIVE NON-NATIVE PLANTS

Gorse has invaded The Plock in several places, always (and predictably) as a response to human disturbance. In places here the gorse requires periodic clearing around the picnic tables placed on hut bases associated with the 1940 anti-aircraft

installation now the viewpoint, which has a spectacular outlook. Clearing is not necessarily the best remedy, as I shall discuss below. In the same area, between the hut bases and by and over the steps, several vigorous garden plants (in particular, four *Cotoneaster* species) constantly need to be controlled if facilities are not to be smothered.

When the Skye Bridge was built, a corner of The Plock was used as its eastern foundations. Tons of rocks were poured onto the land and shore in order to create a level platform. On completion, that area became entirely populated with gorse, forming a continuous and utterly impenetrable sward. It looks hopeless, but there are signs of change – improvement – which will be discussed below. Other areas severely affected by gorse are the northwest corner, adjacent to woodland that surrounds main the access to the shore and in patches across the site, notably around the wartime concrete target practice wall in the middle of the meadows.

Gorse may be a native species, and a very attractive one in May, but where a lot of human activity has occurred, it can become a serious pest. People tend to notice, with a mixture of perplexity and amusement, the steps in the bridge wall which lead straight into impenetrable gorse. If we wish to control gorse, we can choose either to attack it or to observe and exploit its behaviour in the natural world. The first approach is quick, labour-intensive, messy and ineffective! The second is useful, in certain circumstances, ideal for removing individual and sparsely branched bushes. The third method requires time, patience and a little faith in the method, but labour is minimal and – eventually – it can work. Existing woodland here The Plock provides a classic illustration of what happens when trees take over from gorse, killing them slowly with darkness.

Method #1 Slash and/or Burn

Gorse clearance is the conventional approach to its control. This is done by cutting the bushes down and burning the resulting brash or burning bushes *in situ*. After such treatment, the result is usually gorse regeneration, often with increased vigour. Practitioners seem not to notice this shortcoming in their method or they vehemently blame gorse for doing what it does best: gorse is a primary coloniser of bare land. [It is a usual starter species in the ecological process known as ‘succession’ which, when it has completed its role, dies to make room for species that are likely to stay around longer. The usual climax at the end of the process is woodland, which in this region may stop at birch/rowan or hazel or continue to oak or mixed cover.]

Cut gorse stems re-sprout within a very short while and, if left unattended further, create a denser sward than previously. With branches removed, light can reach the soil so that a rich seed bank, waiting for such an opportunity, will flourish. Even after severe burning, gorse bushes are capable of sprouting anew whilst, as following cutting, seeds waiting in the seed bank will grow in profusion in soil enriched with gorse ash. Slash and/or burn may be considered appropriate, but it does not work.

Method #2 Lever and Mulch (see www.leverandmulch.co.uk)

This highly effective method for removing rhododendrons from the landscape was originally devised by Gordon French of Lochaline to deal with troublesome stands of gorse. Gordon is a great fan of gorse in its correct ecological location, but also maintains a profoundly practical attitude to it when it becomes a weed. Unlike rhododendron, gorse is extremely spiny, necessitating very special protective clothing, but with courage it is possible to dismantle and kill gorse bushes once-and-for-all, leaving only already fallen gorse seeds as a problem requiring follow-up action. The

seed bank is a legacy that should not be taken lightly and something can be done about it. The remains of bushes are not taken to the bonfire (which has its own, avoidable, severe ecological consequences). They are laid down where the bush once stood and will help to reduce the success of germinating seeds by depriving them of light. There may be the temptation to apply a herbicide to seedlings. It will be effective, but the collateral damage – several seasons with no vegetation followed by slow recolonisation, possibly by gorse – is, to my mind, unacceptable.

This method is ideal for the removal of isolated bushes, but is not suitable for extensive invasions, such as occur in several places at The Plock. For such situations, nature can be relied upon and if impatience for visible results is an issue, we can give nature a hand.

Method #3 Merryweather's Armchair Method

You don't really just sit and watch, but even the worst stand of gorse will eventually disappear as a victim of ecological processes if you are patient and don't mind if it's replaced by woodland. The secret is that gorse cannot tolerate shading, so it gradually diminishes and dies when overtopped by trees. I have been watching the huge gorse patch alongside the Skye Bridge for several years. During that time a few trees have emerged in the most unlikely places, right in the middle. You would think nothing could compete in such a densely crowded place, where little light ever reaches the ground, but there must be just enough to enable a sapling to work its way slowly upwards until it breaks through the gorse canopy. Then it can really get growing, and being a tree, it will spread like a parasol, shading the gorse to oblivion.

Much of the woodland at the Plock developed quite recently. In the gloom below the birches and rowans are the straggly ghosts (or 'ghorsts') of the last gorse bushes, struggling to survive. Where the woodland is more mature: no gorse.

Assuming woodland is a desirably end result, there are two ways to approach this method:

1. Be patient, let the trees grow and proliferate whilst resisting the temptation to attack the gorse.
2. If results are required sooner, take tall saplings (downy birch, rowan, hazel, sessile oak, around 2 metres high) grown from locally sourced seed and, wearing protective gear, enter the sea of gorse to plant them in positions in which a total-cover canopy will soon develop, thus encouraging the formation of woodland.

This 'armchair' method will not seem as satisfyingly efficient as hacking and/or burning the offending vegetation, but in fact the problem will be solved far more swiftly and there need be no more environmental damage than necessary (i.e. negligible). Also, labour – which in method #1 is counter-productive anyway – and cost will be minimised and the resulting woods will be delightful.

Rhododendron has invaded The Plock in a number of places, mainly in woodland, on the open hillsides and along the coastal fringes. Only one species out of many grown in gardens is problematical because of its ability to colonise entire landscapes excluding the native flora, *Rhododendron ponticum*, introduced to Britain from the Middle East in the eighteenth century. We all agree that when it flowers in May-June it is a breathtakingly beautiful plant, but it has a devastating effect on the landscape and we must remove it from The Plock as soon as possible, to avoid it getting a grip such as can be seen in Kyle itself and at Duncraig. There are several large seed-source bushes, but the number of smaller ones and little groves of seedlings is now

increasing. Experience tells us that the invasion is under way and, if we don't take action now, the problem will become insuperable (as it is at Duncraig!).

The remedy is relatively simple and cheap: Lever and Mulch (see method #2 above). There are few people in Britain who are conversant with this method, but here in Lochalsh we have those skills and could soon assemble a trained Plock Rhoddie-bashing Team. The entire site could be cleared of rhododendrons in a matter of a few days (plus follow-up visits).

Cotoneasters are a problem throughout Skye and Lochalsh. On Skye, entire hilltops are infested with a semi-prostrate *Cotoneaster* species, the cliffs at Portree are almost swamped with *Cotoneaster integrifolius* ("An invasive pest species in some places, obliterating the native flora of a rock outcrop." – West Highland Flora) and the 2-3 metre high Himalayan *C. simondsii* can be found replacing hedgerows, climbing rock faces and choking gullies from Kintail to Duntulm, ousting the native flora. There are problems with all three around the concrete platforms and the steps that link them on the hillside topped by the viewpoint.

The viewpoint has to be visited for the stunning views it provides and would be nice if the picnic places nearby were set in pleasanter surroundings. Thanks in the main to gorse, but also to cotoneasters and other undesirable/desirable garden escapes (plantings?), I for one, would not bother to stick around for lunch there.

Can we get rid of these pests and make the place more pleasant? I have already outlined methodologies for the eradication of gorse. At this site a rapid removal technique would seem desirable – we can't afford to wait for woodland to form and it might not be our first choice anyway. Indeed, this might be the place to remove the gorse in its entirety, cultivate the ground and plant the area as a park or low maintenance garden. The cotoneasters and any other undesirable plants could (should) be removed at the same time, whilst perhaps retaining such as the occasional *Berberis* (if it's doing no harm) and there is a very attractive *Potentilla fruticosa* cultivar with peach-coloured flowers that would probably be worth keeping.

Once replanted, the place would then need maintenance, but if the weeds could be eradicated before they get any worse and the whole area stabilised to create a low maintenance garden and locals and tourists encouraged to visit and use the place, surely advantages would be accrued. Of course, access would have to be improved: the road is in terrible condition, but its improvement would surely be a taken-as-read, essential part of any Plock development programme.

A PERSONAL APPRAISAL OF THE FUTURE OF THE PLOCK

If I were to provide my opinions about what should happen in future at The Plock of Kyle they would be as follows:

Condition of the site

Some people have been quoted as describing The Plock of Kyle as a redundant parcel of derelict land or similar. They could not be more wrong, as the evidence in this report clearly shows.

Stinging nettles, creeping thistle, spear thistle, docken, brambles, ragwort and fireweed are conspicuous indicators of dereliction. Brambles, nettles, docken and ragwort are rare plants at The Plock and they never occur in large numbers or form dense stands whilst the others are absent. Nature has jumped that weedy stage of

recovery after human intervention and instead has achieved the condition where biodiversity and lack of weeds (apart from gorse, rhododendron and a single small patch of montbretia) is its most striking quality.

Encouraging Visitors

The Plock is an excellent local green space with breathtaking scenery, but as critics have rightly pointed out, few people go there. It is just a little too far from the centre of Kyle for a casual visit on foot, as one might pop into a city park and enjoy the place for a few minutes, so more effort needs to be put into:

- Convincing people that the effort of getting there will be worthwhile.
Once the place has been made fit for locals and tourists of all motivations to visit, signposting should be installed to direct people to The Plock, perhaps with interpretation panels in town to show people what they can expect not very far away. Assuming the place is rendered pleasant, memories of previous visits would encourage people to return.

[N.B. In the next three titles I use the term “relatively comfortable”. The Plock of Kyle is a wild semi-natural place and to make a visit there fully comfortable would spoil the very qualities we wish to enjoy. A degree of adventurousness should be encouraged.]

- Making getting there relatively comfortable.
Road surface condition at the head of Heathmount Place and the road up to the viewpoint car park are disgraceful and the first thing to put people off proceeding any farther (even on foot). Therefore, it should be a priority to improve these roads. Anyway, currently no stranger can know The Plock is there. Adequate parking on site would also help make people less reluctant to advance onto the site, so this requires consideration. The area around old golf club car park/turning circle is probably the most weedy on the site (it is disturbed and has been used for dumping garden waste), so if its area were to be substantially increased, natural vegetation would suffer no significant harm. It is unlikely that increasing the width of the narrow access road could be increased, so passing/reversing considerations should be included in advance planning (and wide vehicles and motor homes banned). Picnic facilities are already in place around the viewpoint, nearest to Kyle for the less adventurous visitor, but their surrounding environment desperately needs improvement through routine management. This area has suffered most from human activity and, therefore, will require the most effort for its upkeep. A major problem is invasive weeds, which could be removed entirely, assuming that the area will be replanted and maintained thereafter.
- Making getting around the site also relatively comfortable.
There is a network of footpaths covering The Plock, but they are largely overgrown and indistinct and linking paths are often impossible to detect (for example, there is a path downhill across moorland from the bend in the road to the viewpoint, but it begins some 50-100 m into the vegetation where it cannot be seen or accessed in comfort). If well equipped, it is possible to find your way about The Plock off-piste, but this situation will put off a lot of potential visitors (already discouraged by the misapprehension that The Plock is a derelict no-man’s-land). Therefore, I recommend the reinstatement of footpaths with robust but modest signage so that anyone with a little spirit can find their way about with confidence

and in reasonable comfort. Conversation between the Kyle Development Group and the Highland Council's Core Paths Initiative and/or perhaps the National Trust for Scotland might prove informative regarding this matter.

Once a path network has been established, a leaflet with map would help people to find their way around as well as advising them what they might see during a visit.

Provision for the disabled is mandatory these days. However, most of The Plock is wild land which might be severely compromised if wheelchair access were universal. However, with eco-sensitive planning and construction, it is possible that wheelchairs might be able to enter and get around some of the wilder places. If anywhere, the viewpoint and surrounds must be made fully accessible.

- **Making being there a relatively comfortable experience.**

We might hope that, having arrived at The Plock, people will want to stay a while. Large numbers of visitors (perhaps an unrealistic prediction of a perhaps undesirable situation) would mean a need for basic facilities, perhaps to be sited at one or other car park. If this is practically and financially feasible, whichever place has the loos could be linked to the other by a relatively short path.

At a place where the main interest is in its natural qualities, thought should be given to the possibility of increased human and dog deposition of urea, phosphates, organic matter etc. It is well known that where animals habitually deposit their waste natural plant communities disappear, replaced by nettles and other weeds and at present The Plock is remarkably clear of such nastiness.

Provision for litter disposal (at present littering is a negligible problem) should also be considered.

- **Information.**

In order that locals and visitors should know about the existence of The Plock, how to get there, how to get around the site, what facilities are provided and what they are likely to enjoy whilst there, it will be necessary to publish that information and make it readily available. I propose a leaflet containing all the visitor information plus interpretation panels in Kyle as well as on site and a book telling the history of the place (fishing, golf, defence, local memories, more?) and describing its past and present natural history – for which a reasonable starter is contained in this document.

During conversations, several people have referred to the unoccupied Skye Bridge ticket office. We have no idea who it belongs to and whether or not it could be used, but in its redundant state it contributes nothing to Kyle whilst if converted it could be of great value.

Not only is there an apparently excellent building that would convert into a splendid Visitor Centre for The Isle of Skye but it could also function as an information point for The Plock. Also, it an excellent car park from which, if the wall were opened to allow pedestrian access, an existing track could be improved providing a direct to the old clubhouse from where it is not far to any part of The Plock. If we assume the building and car park could be acquired, then the possibilities are many.

Conservation and Management

The Plock of Kyle contains, all in the one place, many of the habitats found in the Highlands and they are of exceptional quality. Conservation projects a site that has been in human use is usually a battle with natural forces requiring resources that often overwhelm well meaning conservationists. Most of The Plock has reached a point of

environmental stability (n.b. not stasis) and lacks areas that require resource-hungry maintenance. Indeed, the main problems are gorse (which can be overcome and reduced cover tolerated) and rhododendron (which can be eradicated).

Otherwise, we can rely on the place looking after itself with minimal intervention, such as – after informed reflection – cutting the vegetation in the meadows and boggy heaths if we wish to keep them as such (if and only if they become threatened by encroachment of adjacent woodland).

Bracken, like gorse, is limited – sometimes fatally – by lack of light. Therefore, it behaves itself beneath the trees, but out in the open and usually in response to human activity, it forms vigorous monoculture patches. It will be important to monitor the spread or otherwise of bracken into areas we prefer to keep as they are.

Discussion and reflection on site has led to the conclusion that much of the area is best left alone and observed over the coming few years before any attempts at management are attempted. If it looks as though trees are encroaching onto land that would be better maintained in its current condition, trees can be removed. If meadow biodiversity shows any sign of declining, it may be wise to cut for hay or check for changes in drainage. If, at any time, it is thought that the drains should be cleared, consequences for surrounding land must be considered carefully as well as the fate of the specialised flora growing in ditches. Too often, ditches are dredged because drainage is considered ‘usual and necessary practice’. Such cure-all management is not necessarily desirable at a site where biodiversity is a primary concern.

Weed control

Only two weeds need serious attention, rhododendron first and as soon as possible and then the worst of the gorse, by the bridge, around the viewpoint (where cotoneasters also require eradication) and in other places that can be prioritised for attention (please refer to map in Appendix 2).

Weed control requires attentive, routine follow-up. In the case of rhododendron, seedling removal and hammering treatment to stubbornly persistent stumps for a decade or so (really not a lot of work). Perhaps the most difficult part of a gorse control programme is people control: preventing well-meaning folk from attempting wholesale cut and burn when consideration, time and minimal intervention will probably be more effective in the long term (discussed above).

The areas around the picnic table platforms and steps will require, perhaps, the most time, expenditure and routine management if they are to be freed of impenetrable spiny bushes (Lever & Mulch, above, or Remove and Replant) that are ugly and obscure the view and shrubs that rapidly obscure the stairways following episodes of ‘clearing’ attempts. The future and attractiveness of the picnic area will be better served than in the past if the area is considerably reinstated with plantings that cover the ground effectively and require low maintenance and, therefore, can realistically be managed.

Recommended activities

Picnics Another advantageous feature of a peaceful place is the opportunity to enjoy a picnic. Tables are provided by the viewpoint for more formal affairs, but there are plenty of places where a picnic can be taken *al fresco*, a feature that could and should be maintained (but see litter considerations, above).

The Viewpoint, once you have struggled to it along roads and through an area that badly need to be improved, has glorious vistas that make a worthy sole purpose for a visit. There are interpretation panels installed already, so all that is required would be a little routine pruning of view-blocking trees and perhaps some pleasant seating. How about some elevated seats for people who wish to spend time taking in the views?

Leisure I would recommend the place now for walking and resting any time, and if the path network were to become suitable, then running and orienteering would not break the peacefulness of the place. The more the place is used (within reason) for leisure pursuits, the more it is likely to be valued. A major activity should be education, because The Plock has a wide range of the most excellent resources (below). I for one would welcome any invitation to take parties of all ages and abilities round The Plock to show them its undoubted treasures.

Conflicting Interests In my opinion, The Plock is not a place where nature study, wildlife and peaceful pursuits can coexist with motor vehicles. Even bicycles would make walking less of a pleasure, though they could possibly be accommodated. As an elderly local and I agreed one sunny afternoon, The Plock of Kyle is a place for peace and reflection, which generally we currently positively enjoy.

It was shortly after that encounter that I realised there will be at least two diametrically opposed, incompatible attitudes to behaviour at a place like The Plock, and that, by the accumulation of years, I have irrevocably defaulted to the group that will inevitably include more mature members of the population. The opposite group will be the young, of whom some have no special desire to respect other people's wish that the place should be quiet and calm, or any concern for needs of wildlife. Between these groups will be the middle aged, who might express either polarised or mixed interests. I offer the following first-hand observations.

On Sunday 24th July 2011 the gentleman I met and I both witnessed the potential for environmental harm and disturbance of the peace as well as hazard to people by a motorcycle, driven recklessly all over the meadow area by an exuberant youth. The vegetation was laid flat wherever he went and my enjoyment of just being there had to be shelved until he eventually made his noisy exit. I could not relax my guard in case he suddenly appeared from behind a bush as he raced about the site, oblivious to the possibility of other people being there. Moreover, the safety of the people he met there, several of whom were children, was threatened as he drove his bike among and directly at them (I have photographs). They may have been his friends and they laughed and squealed at his antics, but the accident that did not happen easily could have done. Apart from predictable disturbance and hazard, more than one occasional motorbike would soon mean the appearance of something virtually absent here at present: mud, which currently does not affect pedestrian access (even if dripping vegetation along pathways can be annoying).

If planners wish to encourage bicycles, mountain bikes and motorised vehicles to use The Plock, a suitable area should be set aside for them. At present it is possible, in certain far places, not even to hear traffic on the Skye Bridge. I fear that if motorbikes

were permitted, even away from the central region, we should have to go elsewhere to find quiet.

On the morning of Tuesday 27th July I rose early to visit The Plock, to take advantage of fine sunshine at a low angle for photography. Looking down across the wild flower meadows from the viewpoint it was evident that something pretty devastating had been going on down there since the weekend.

I descended and when I reached the clubhouse it was obvious that some sort of four-wheeled vehicle had driven down the path, tearing and crushing the marginal vegetation. I walked onto and around the site and discovered to my distress that probably (I suspect) two quad bikes had been racing round and round the meadows, crushing the vegetation in great swathes. The glorious waving grasses dotted with wild flowers had largely been crushed flat. I was glad I had not been there to witness such wanton lack of care for the natural environment or to suffer the noise and alarm that wild driving would have caused. I recalled the trepidation with which I had stood and waited until Sunday's motorcyclist had left, uncertain where he might appear from at high speed with little regard for the possibility of people being in his path. How could I have comfortably (safely?) shared the meadows with two racing quad bikes?

The experience further convinced me that if motor vehicles are not excluded forthwith, then I and a number of others would no longer wish to visit The Plock.

Nature Study What an old-fashioned activity that sounds today, yet when I wanted an all-embracing term to use here, 'Nature Study' seemed ideal. It covers many, many activities suitable for all ages and all abilities. Anybody with the slightest interest in natural history will be satisfied by a visit to the Plock of Kyle, whether they be the loftiest professor or the youngest child learning about wildlife for the first time. Even my middle-aged daughters, who have received little formal biology education, trot around the shore with a fishing net and look into the darkest recesses to discover what life is there.

The Plock truly has a wealth of natural treasures, most special because of the richness of combinations, the biodiversity. The second best way I can inform the people of Kyle what they have on their doorstep is to write this report. The very best way would be to take them there and show it all off with the enthusiasm for which I am well known. Just ask me to and I'll take you there.

Education is a vital aspect of our lives. It begins in childhood, but continues – if we allow it in – to the grave. For me it is the most exciting of all things, to learn something new and perhaps connect to something already learnt. The more we know about the natural world, and the more we discover interconnections within our knowledge, the better able we will be to look after the place we live in properly.

Therefore, I consider The Plock of Kyle to be an excellent place for education. I would like to see local children (aged 0-100) taken there to be shown the wonders of nature, for at The Plock we have it in spades: seashore, woodland, meadow, bog and heath. If teachers to enlist the assistance of enthusiastic experts, this area abounds with them: zoologists, botanists, entomologists, pteridologists, geologists, ecologists or just plain nature study. For many of them, handing on their interests and skills is a driving priority – use them.

Skye & Lochalsh Environment Forum has applied for substantial funds to run a new outreach initiative. Kyle and its Plock could and should benefit from this, so please ask (secretary@slef.org.uk).

Local Nature Reserve As already mentioned, The Plock is an area of outstanding nature value. The idea of the Local Nature Reserve, run by and for the community, is not unknown and Merkinch at Inverness is a shining example of what people can do when they develop the enthusiasm for such a project.

A Plock LNR would make an ideal project for Skye & Lochalsh Environment Forum to lead, helping to source funding, providing advice on management from their pool of specialists, perhaps appointing a custodian and helping to organise working parties.

A Nature Hut My final suggestion has been inspired by something I saw at car parks among the dunes at Achmelvich, Clachtoll and Scourie in Sutherland. These are the Highland Ranger's huts with their information boards and inspiring exhibitions: children's art, rummage trays, seashell collections, books and leaflets, and all sorts of wildlife trophies that the rangers and people who went on their activity trips had found. The Scourie hut doubles as a bird hide, yet another good idea for The Plock.

What most impressed me was that the hut doors were open and stayed open so that people could have access at any time. Not only that, but the Achmelvich hut contained a small library of nature books, field guides that people refer to when identifying what they find, and nearby a notice inviting anybody to borrow the books. Just take the book you need and bring it back when you've finished with it, entirely on trust.

We could do that at The Plock. There's an excellent supplier of sheds in Broadford who could set us up with just the right hut and then the community, perhaps led by schools, could set about filling it with useful and interesting things and The Plock Library, full of guides to wild flowers, birds, insects, seashore creatures, trees, rocks, local history etc.

SHERWOOD FOREST, TRANSYLVANIA COUNTY, NORTH CAROLINA, USA

If you search for 3 Grouse Lane, Brevard at Google Earth you zoom in on a region of dense forest and small lakes, not far from several centres of population. The address belongs to friends of mine who live in an unusual sort of village, known as Sherwood Forest, where the residents do their best to exist mindfully within and 'with' the forest. Away from the timber houses, which you have to seek out or likely you will miss them during a hike, the forest seems untouched by humans. It was whilst wandering in Sherwood Forest that my conventional knowledge of biodiversity, ecology and people matured profoundly. The relatively small plots taken for a living space have only small gardens, for residents need only step outside to be in the midst of a wonderful wild garden. The forest they live in is the people's priority and they do their best to minimise the impact of their presence.

I am not suggesting that we build houses among the natural features of The Plock – far from it! The Plock is a tiny area compared with Sherwood and even a few residences would impair or destroy its precious natural qualities and make parts of a community-owned public space private property – just spoil the place.

However, I contend that we could learn some lessons from the Sherwood Forest trails system. There is a network of paths throughout the area (maps supplied) within the

Sherwood Forest boundary that are modest and unobtrusive, yet reasonably dry and sound, clear of vegetation and ingeniously log-stepped where necessary. A team of eager volunteers of all ages (a few in their nineties) meets every Thursday morning at the little gazebo by Betty Kay Lake from where, after conversation, refreshment and planning, they set off in small groups to exercise their various skills as they walk the trails, repairing damaged surfaces and steps, cutting back branches and enjoying a morning in their chosen environment. There are benches in pleasant places, all swiftly fashioned from logs resulting from the occasional felling of a tree. Informally, residents carry secateurs when out walking, to cut back vegetation invading the trails.

The atmosphere of community contentment in Sherwood Forest is palpable. We can aspire to generate a similar atmosphere here in Lochalsh.

APPENDIX 1 – Species Lists for the Plock of Kyle

MEADOWS

James Merryweather
29 June/13 July 2011

<i>Athyrium filix-femina</i>	Lady fern
<i>Blechnum spicant</i>	Hard fern
<i>Dryopteris affinis</i> (s.s.)	Golden scaly male fern
<i>Dryopteris dilatata</i>	Broad buckler fern
<i>Oreopteris limbosperma</i>	Lemon-scented fern
<i>Pteridium aquilinum</i>	Bracken
<i>Achillea millefolium</i>	Yarrow
<i>Achillea ptarmica</i>	Sneezewort
<i>Angelica sylvestris</i>	Wild angelica
<i>Bellis perennis</i>	Common daisy
<i>Callitriche</i> sp.	Starwort
<i>Calluna vulgaris</i>	Ling
<i>Centaurea nigra</i>	Knapweed, Hardheads
<i>Chrysanthemum leucanthemum</i>	Ox-eye daisy
<i>Cirsium palustre</i>	March thistle
<i>Conopodium majus</i>	Pignut
<i>Dactylorhiza fuchsii</i> (prob.)	Common spotted orchid
<i>Dactylorhiza maculata</i>	Heath spotted orchid
<i>Dactylorhiza purpurella</i>	Northern marsh orchid
<i>Dactylorhiza x formosa</i> (prob. x2)	<i>D. purpurella</i> x <i>D. maculata</i>
<i>Digitalis purpurea</i>	Foxglove
<i>Drosera rotundifolia</i>	Sundew
<i>Erica cinerea</i>	Bell heather
<i>Erica tetralix</i>	Cross-leaved heath
<i>Eriophorum angustifolium</i>	Common cotton-grass
<i>Euphrasia nemorosa</i>	Eyebright
<i>Filipendula ulmaria</i>	Meadow sweet
<i>Galium aparine</i>	Cleavers
<i>Galium palustre</i>	Marsh bedstraw

<i>Galium saxatile</i>	Heath bedstraw
<i>Gymnadenia conopsea</i>	Fragrant orchid
<i>Hyacinthoides non-scripta</i>	Bluebell
<i>Hypochaeris radicata</i>	Common cat's ear
<i>Iris pseudacorus</i>	Yellow flag
<i>Leontodon autumnalis</i>	Autumn hawkbit
<i>Lychnis flos-cuculi</i>	Ragged robin
<i>Myosotis scorpioides</i>	Water forget-me-not
<i>Oenanthe crocata</i>	Hemlock water-dropwort
<i>Plantago lanceolata</i>	Ribwort plantain
<i>Platanthera bifolia</i>	Lesser butterfly orchid
<i>Platanthera chlorantha</i>	Greater butterfly orchid
<i>Polygala vulgaris</i>	Common milkwort
<i>Potentilla anserina</i>	Silverweed
<i>Potentilla erecta</i>	Tormentil
<i>Prunella vulgaris</i>	Self-heal
<i>Ranunculus acris</i>	Meadow buttercup
<i>Ranunculus flammula</i>	Lesser spearwort
<i>Ranunculus repens</i>	Creeping buttercup
<i>Rubus idaeus</i>	Raspberry
<i>Rumex acetosa</i>	Common sorrel
<i>Rumex crispus</i>	Curled dock
<i>Sencio jacobaea</i>	Ragwort
<i>Solidago virgaurea</i>	Golden rod
<i>Succisa pratensis</i>	Devil's bit scabious
<i>Taraxacum officinale</i>	Dandelion
<i>Trifolium pratense</i>	Red clover
<i>Trifolium repens</i>	White clover
<i>Tripleurospermum maritimum</i>	Scentless chamomile
<i>Valeriana officinalis</i>	Valerian
<i>Ulex europaeus</i>	Gorse/Whin
<i>Veronica chamaedris</i>	Germander speedwell
<i>Vicia cracca</i>	Tufted vetch
<i>Vicia sepium</i>	Bush vetch
<i>Viola palustris</i>	Bog violet
<i>Carex binervis</i>	Green-ribbed sedge
<i>Carex echinata</i>	Star sedge
<i>Carex flacca</i>	Glaucous sedge
<i>Carex hostiana</i>	Tawny sedge
<i>Carex nigra</i>	Common sedge
<i>Carex panicea</i>	Carnation sedge
<i>Carex pulicaris</i>	Flea sedge
<i>Carex viridula</i>	Long-stalked yellow sedge
subsp. <i>Brachyrrhyncha</i>	
<i>Luzula multiflora</i>	Many-flowered woodrush
<i>Scirpus cespitosus</i>	Deer grass
<i>Juncus articulatus</i>	Jointed rush
<i>Juncus conglomeratus</i>	Common rush
<i>Juncus effusus</i>	Soft Rush
<i>Juncus squarrosus</i>	Heath rush

<i>Agrostis capillaries</i>	Common bent
<i>Anthoxanthum odoratum</i>	Sweet vernal grass
<i>Cynosurus cristatus</i>	Crested dog's-tail
<i>Festuca glauca</i>	Grey fescue
<i>Festuca pratensis</i>	Meadow fescue
<i>Festuca rubra</i>	Sheep's fescue
<i>Festuca vivipara</i>	Viviparous fescue
<i>Holcus lanatus</i>	Yorkshire fog

GREEN AT HOLE #1

James Merryweather

DATE: 24-07-11

<i>Pteridium aquilinum</i>	Bracken
<i>Carex nigra</i>	Common sedge
<i>Carex binervis</i>	Green-ribbed sedge
<i>Carex hostiana</i>	Tawny sedge
<i>Carex ovalis</i>	Oval sedge
<i>Carex echinata</i>	Star sedge
<i>Carex panicea</i>	Carnation sedge
<i>Juncus conglomeratus</i>	Common rush
<i>Juncus effusus</i>	Soft Rush
<i>Juncus squarrosus</i>	Heath rush
<i>Achillea millefolium</i>	Yarrow
<i>Achillea ptarmica</i>	Sneezewort
<i>Angelica sylvestris</i>	Wild angelica
<i>Bellis perennis</i>	Common daisy
<i>Calluna vulgaris</i>	Ling
<i>Conopodium majus</i>	Pignut
<i>Erica cinerea</i>	Bell heather
<i>Erica tetralix</i>	Cross-leaved heath
<i>Eriophorum angustifolium</i>	Common cotton-grass
<i>Euphrasia nemorosa</i>	Eyebright
<i>Hypochaeris radicata</i>	Common cat's ear
<i>Plantago lanceolata</i>	Ribwort plantain
<i>Polygala vulgaris</i>	Common milkwort
<i>Potentilla erecta</i>	Tormentil
<i>Prunella vulgaris</i>	Self-heal
<i>Ranunculus acris</i>	Meadow buttercup
<i>Ranunculus repens</i>	Creeping buttercup
<i>Rumex acetosa</i>	Common sorrel
<i>Sencio jacobaea</i>	Ragwort
<i>Succisa pratensis</i>	Devil's bit scabious
<i>Taraxacum officinale</i>	Dandelion
<i>Trifolium repens</i>	White clover
<i>Ulex europaeus</i>	Gorse/Whin
<i>Veronica chamaedris</i>	Germander speedwell

BOGGY HEATH/MEADOW

James Merryweather

DATE:

<i>Betula pubescens</i>	Downy birch
<i>Calluna vulgaris</i>	Ling
<i>Carex binervis</i>	Green-ribbed sedge
<i>Carex echinata</i>	Star sedge
<i>Carex nigra</i>	Common sedge
<i>Dactylorhiza maculata</i>	Heath spotted orchid
<i>Dactylorhiza purpurella</i>	Northern marsh orchid
<i>Drosera rotundifolia</i>	Round-leaved sundew
<i>Empetrum nigrum</i>	Cowberry
<i>Erica tetralix</i>	Cross-leaved heath
<i>Eriophorum angustifolium</i>	Common cotton grass
<i>Festuca rubra</i>	Sheep's fescue
<i>Juncus squarrosus</i>	Heath rush
<i>Molinia caerulea</i>	Purple moor grass
<i>Molinia caerulea</i>	Purple moor grass
<i>Narthecium ossifragum</i>	Bog asphodel
<i>Potentilla erecta</i>	Tormentil
<i>Salix capraea</i>	Goat willow/Sallow
<i>Scirpus caespitosus</i>	Deer grass
<i>Sorbus aucuparia</i>	Rowan
<i>Succisa pratensis</i>	Devil's-bit scabious

'DRY' HEATH & MOORLAND

James Merryweather

DATE: 24-07-11

<i>Pteridium aquilinum</i>	Bracken
<i>Betula pubescens</i>	Downy birch
<i>Calluna vulgaris</i>	Ling
<i>Erica cinerea</i>	Bell heather
<i>Erica tetralix</i>	Cross-leaved heath
<i>Eriophorum angustifolium</i>	Common cotton grass
<i>Eriophorum vaginatum</i>	Hare's tail grass
<i>Molinia caerulea</i>	Purple moor grass
<i>Myrrhis odorata</i>	Bog myrtle
<i>Populus tremula</i>	Aspen (by the shore)
<i>Quercus petraea</i>	Sessile oak
<i>Rhododendron ponticum</i>	Rhododendron (i/n-n)
<i>Scirpus caespitosus</i>	Deer grass
<i>Vaccinium myrtillus</i>	Bilberry
<i>Vaccinium vitis-idaea</i>	Bear berry

WOODLAND

James Merryweather

29 June/13 July 2011

<i>Athyrium filix-femina</i>	Lady fern
<i>Blechnum spicant</i>	Hard fern
<i>Dryopteris aemula</i>	Hay-scented buckler fern
<i>Dryopteris affinis</i> (s.s.)	Golden scaly male fern
<i>Dryopteris borreri</i> (s.s.)	Borrer's scaly male fern
<i>Dryopteris dilatata</i>	Broad buckler fern
<i>Hymenophyllum wilsonii</i>	Wilson's filmy fern
<i>Oreopteris limbosperma</i>	Lemon-scented fern
<i>Polypodium vulgare</i> (s.s.)	Common polypody
<i>Pteridium aquilinum</i>	Bracken
<i>Betula</i> spp.	
<i>Calluna vulgaris</i>	Ling
<i>Erica cinerea</i>	Bell heather
<i>Galium saxatile</i>	Heath bedstraw
<i>Hedera helix</i>	Ivy
<i>Hyacinthoides non-scripta</i>	Bluebell
<i>Ilex aquifolium</i>	Holly
<i>Lonicera periclymenum</i>	Honeysuckle
<i>Luzula multiflora</i>	Many-flowered woodrush
<i>Luzula sylvatica</i>	Wood woodrush
<i>Oxalis acetosella</i>	Wood sorrel
<i>Populus tremula</i>	Aspen (planted?)
<i>Potentilla erecta</i>	Tormentil
<i>Primula vulgaris</i>	Primrose
<i>Quercus petraea</i>	Sessile oak
<i>Rhododendron ponticum</i>	Rhododendron (N.N.I.S.)
<i>Rosa sherardii</i>	Sherard's downy rose
<i>Rubus fruticosus</i> agg.	Blackberry
<i>Sorbus aucuparia</i>	Rowan
<i>Teucrium scorodonia</i>	Wood sage
<i>Ulex europaeus</i>	Gorse, Whin
<i>Ulex europaeus</i>	Gorse/Whin
<i>Vaccinium myrtillus</i>	Bilberry
<i>Viola riviniana</i>	Common violet

SEASHORE

James Merryweather

DATE: 21-07-11

<i>Hymenophyllum wilsonii</i>	Wilson's filmy fern
<i>Polypodium vulgare</i> (s.s.)	Common polypody
<i>Armeria maritima</i>	Thrift
<i>Calluna vulgaris</i>	Ling
<i>Carex binervis</i>	Green-ribbed sedge
<i>Carex distans</i>	Distant sedge
<i>Carex extensa</i>	Long-bracted sedge
<i>Cochleria officinalis</i>	Scurvy grass
<i>Empetrum nigrum</i>	Cowberry

<i>Erica cinerea</i>	Bell heather
<i>Euphrasia nemorosa</i>	Common eyebright
<i>Festuca glauca</i>	Grey fescue
<i>Festuca rubra</i>	Sheep's fescue
<i>Galium aparine</i>	Goose grass/Cleavers
<i>Glaux maritima</i>	Sea milkwort
<i>Holcus lanatus</i>	Yorkshire fog
<i>Hypochaeris radicata</i>	Common cat's ear
<i>Juncus gerardii</i>	Salt mud rush
<i>Juncus squarrosus</i>	Heath rush
<i>Ligusticum scoticum</i>	Lovage
<i>Lonicera periclymenum</i>	Honeysuckle
<i>Lotus corniculatus</i>	Bird's-foot trefoil
<i>Luzula multiflora</i>	Many-flowered woodrush
<i>Luzula sylvatica</i>	Wood wood-sage
<i>Lychnis flos-cuculi</i>	Ragged robin
<i>Matricaria matricarioides</i>	Pineappleweed
<i>Molinia caerulea</i>	Purple moor grass
<i>Myrica gale</i>	Bog myrtle
<i>Plantago lanceolata</i>	Ribwort plantain
<i>Plantago maritima</i>	Sea plantain
<i>Populus tremula</i>	Aspen
<i>Potentilla erecta</i>	Tormentil
<i>Puccinellia maritima</i>	Common salt-marsh grass
<i>Rumex acetosa</i>	Common sorrel
<i>Rumex crispus</i>	Curled dock
<i>Scutellaria minor</i>	Lesser skull-cap
<i>Spergularia maritima</i>	Sea spurrey
<i>Succisa pratensis</i>	Devil's bit scabious
<i>Trifolium repens</i>	White clover
<i>Tripleurospermum maritimum</i>	Scentless mayweed

ROADSIDES & DISTURBED HABITATS (additional species)

James Merryweather

DATE: 21-07-11

<i>Bellis perennis</i>	Daisy
<i>Cerastium holosteoides</i>	Common mouse-ear chickweed
<i>Dactylis glomerata</i>	Cocksfoot
<i>Galium aparine</i>	Goose grass/Cleavers
<i>Geranium robertianum</i>	Herb Robert
<i>Hypericum perforatum</i>	Perforate St John's wort
<i>Plantago lanceolata</i>	Ribwort plantain
<i>Plantago media</i>	Hoary plantain
<i>Rhinanthus minor</i>	Hay rattle
<i>Rumex obtusifolius</i>	Broad-leaved dock/Docken
<i>Senecio jacobaea</i>	Ragwort
<i>Taraxacum officinale</i>	Dandelion
<i>Urtica dioica</i>	Stinging nettle
<i>Lolium perenne</i>	Rye grass

Dactylis glomerata

Cock's foot

VIEWPOINT

James Merryweather

DATE: 21-07-11

Betula pubescens

Ilex aquifolium

Quercus ?petraea

Rosa sherardii

Rubus idaeus

Salix sp.

Sambucus niger

Sorbus aucuparia

Downy birch

Holly

Sessile oak

Sherard's downy rose

Raspberry

Probably planted

Elder

Rowan

Invasive (i) native (n) & non-native species (n-n)

Ulex europaeus

Berberis sp.

Cotoneaster micropyllus

Cotoneaster simondsii

Cotoneaster sp.

Cotoneaster sp.

Potentilla ?fruticosa

Spirea sp.

Gorse/Whin (i/n)

Like *B. stenophylla* but larger leaves (n-n)

Small-leaved cotoneaster (i/n-n)

Himalayan cotoneaster (i/n-n)

Like *C. m.* larger leaves and less prostrate (i/n-n)

A small tree

Peach coloured flowers (n-n)

Flat inflorescences of pink flowers (n-n)

SEASHORE (incomplete)

James Merryweather

DATE: various

Lichens (very incomplete)

Anaptichia fusca

Caloplaca marina

Caloplaca thallincola

Lecanora atra

Black shields

Lecanora sordida

Lichina confinis

Ochrolechia parella

Ramalina siliquosa

Sea ivory

Verrucaria maura

Verrucaria mucosa

Xanthoria parietina

Yellow scales

Seaweeds

Ascophyllum nodosum

ecad. *Mackaii*

Crofter's wig wrack

Ascophyllum nodosum

Cladophora rupestris

Egg/knotted wrack

Corda filum

Mermaid's tresses

Ectocarpus sp.

Maiden's hair

Enteromorpha lactuca

Sea lettuce

<i>Enteromorpha intestinalis</i>	Gutweed
<i>Fucus serratus</i>	Saw wrack
<i>Fucus spiralis</i>	Spiral wrack
<i>Fucus vesiculosus</i>	Bladder wrack
<i>Himanthalia elongata</i>	Thongweed
<i>Laethesia difformis</i>	
<i>Laminaria digitata</i>	Tangle
<i>Laminaria hyperborea</i>	Cuvie
<i>Laminaria saccharina</i>	Sugar kelp
<i>Pelvetia canaliculata</i>	Channelled wrack
<i>Polysiphonia lanosa</i>	

Saccorhiza polyschides Furbelows

Just begun (28-07-11) and to be continued ...

Birds, butterflies, moths, dragonflies & other insects, mammals etc. to be added

APPENDIX 2 – Plock of Kyle Habitat Map

