

Review of areas fenced for tree and scrub regeneration on Mungrisdale, Saddleback and Bowscale Commons

Part of Skiddaw Group SSSI and the Lake District High Fells SAC

Naomi Dalton

Natural England

June 2023

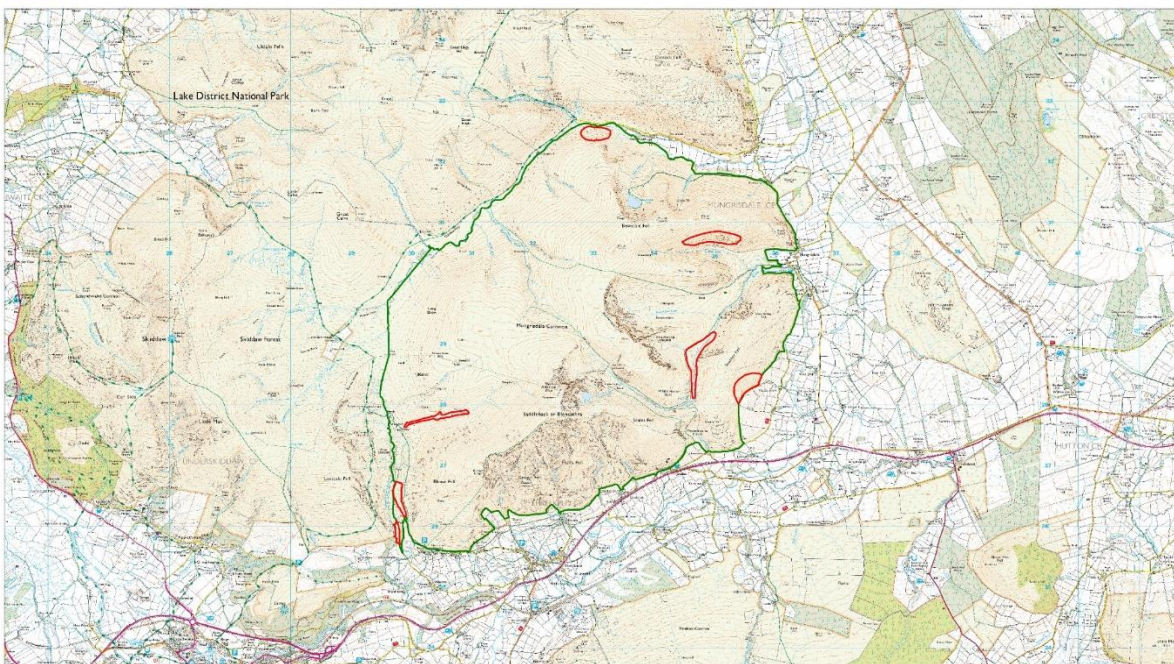
1. Background

Almost 15 years after the fences were installed, this report reviews the outcomes of the woodland enclosures on Mungrisdale, Saddleback and Bowscale Commons in the Lake District National Park (Table 1, Map 1).

Table 1: Enclosures assessed in this report and subject to renewal of Secretary of State permission for fencing.

Common	Enclosure	Area (ha)
Saddleback (CL66)	Roughten Gill	5.47
	Glenderaterra South	5.47
	Glenderaterra North (Girl Guides Wood)	2.07
Mungrisdale (CL293)	Souther Fell	11.38
	Glenderamackin	14.16
	Young Wood	14.00
Bowscale (CL60)	Swineside Valley Juniper	9.00

Mungrisdale Commons
Woodland & Scrub Project Proposal



Map 1: Location of fenced woodland enclosures

1.1 Aims

The original stated aim of the project was “to redress the woodland imbalance by establishing temporarily fenced enclosures ... to add or consolidate native woodland and scrub” (Woodland and Scrub Project Proposal, 2008).

Prior to installation of these enclosures, remnant woodland was present in a few gill areas and on some steep rocky/scree slopes with restricted regeneration due to the pressure of sheep grazing. Restoration and creation of areas of woodland and scrub was intended to support the conservation objectives of Skiddaw Group SSSI and Lake District High Fells SAC. The primary objective of the fencing was to remove pressure from livestock in order to protect tree planting and allow for natural habitat regeneration. The main benefits of doing this are:

- **Biodiversity:** trees, scrub and associated lush ground flora are a habitat in short supply on the Lake District fells. Where present, woodland, scrub and scattered trees contribute significantly to the overall diversity and health of the upland ecosystem.

Woodland and scrub habitats have been affected the most by historic heavy sheep grazing and are subsequently highly fragmented.

Allowing some areas to develop this sort of vegetation allows a variety of plants to grow and flower throughout the year. These plants in turn provide cover and food (including pollen and nectar) for a wide range of invertebrates (eg insects and spiders). The invertebrates are essential food for many birds and mammals, as are seeds and berries. Berries are particularly important for ring ousel – a ‘mountain blackbird’ that needs to feed up on berries before it migrates to Africa for the winter. In time the trees will also provide nesting sites for many bird species.

Patchy, naturalistic regeneration of trees and scrub (as opposed to dense ranks of trees as may be found in plantations established for timber production) provides for a wide variety of conditions suitable for a large range of native species. It is highly beneficial to have trees of mixed ages and ‘open grown’ trees that have a large surface area and therefore flower and fruit more abundantly.

Tree nest sites are in short supply in the Skiddaw area. Increased tree cover can support increased populations of small birds, and also the birds of prey that may feed on them.

- **Water management:** trees and other bulky plants catch rainwater on their leaves and the fact that their roots penetrate deep into the ground increases infiltration of water into the soil. Therefore, trees and other dense vegetation ‘slow the flow’ which helps reduce risk of flooding and maintains water flows in times of drought.

In addition to the trees and shrubs themselves, thicker ground vegetation (a deeper sward of grasses and mosses) that develops as a result of reduced grazing pressure also acts as a natural sponge to soak up rainfall and control water flows.

Tree roots also help to stabilize soils and prevent erosion and landslips – in turn reducing the speed at which sediment accumulates in watercourses (a factor that can exacerbate flooding and may be harmful to river life such as spawning fish).

- **Climate:** trees, other vegetation and associated soils absorb carbon from the atmosphere and thus contribute to climate change mitigation
- **Landscape:** adding to the visual diversity and attractiveness of the area. Very large areas of the commons are expanses of species-poor grassland or bracken. Woodland and scrub areas and scattered trees are important landscape features. The fencelines and tree planting were designed to fit with the landform, and the establishment of naturalistic, patchy and mixed-age native trees adds to a soft and pleasing appearance of these areas.

The areas fenced were carefully designed in consultation with graziers and other users of the site, in particular:

- to fit in with agricultural practices (eg not to hinder and if possible to help with the hefting of sheep and gathering of stock from the common)
- to avoid any damage to historic landscape features
- to fit in with recreational use of the commons (they do not interfere with main access routes, but gates provide access to these areas should people wish to explore them)

The sites selected for woodland restoration / scrub planting are former woodland sites as indicated by the species found in these locations, such as bracken, gorse and the more obvious example of Young Wood or the isolated birch, rowan or willow that can be found in the gill areas.

1.2 Government Policy

The Government's [Environmental Improvement Plan](#) contains an 'Apex Goal' to improve nature (Thriving plants and wildlife). These woodland and scrub areas contribute to several of the targets and commitments that fall under this goal in the Plan:

- Halt the decline of species abundance by 2030, and then increase abundance by at least 10% to exceed 2022 levels by 2042
- Restore or create more than 500,000 hectares of wildlife-rich habitat by 2042, alongside our international commitment to protect 30% of our land and ocean by 2030
- 50% of SSSIs to have actions on track to achieve favourable condition by 31 January 2028
- Increase tree canopy and woodland cover from 14.5% to 16.5% of total land area in England by 2050, with a new interim target to increase this by 0.26% (34,000ha) by 31 January 2028

1.3 Permissions for fencing

In 2008, permissions were given under section 38 of the Commons Act to fence off 7 areas on Mungrisdale, Saddleback and Bowscale Commons, totalling 61.55 ha (see Table 1)

Young Wood and Swineside Valley Juniper are enclosures of existing remnant woodland, these have had no supplementary planting and are fenced to allow for natural regeneration. All other enclosures are areas of woodland/scrub creation, where planting of trees commenced in 2009 and have been subject to care and maintenance since.

Mungrisdale, Saddleback and Bowscale Commons combined are 3295ha in size, so together these equate to less than 2 percent of the common.

1.4 Agri-environment agreements

Mungrisdale Saddleback And Bowscale Fell Commons Association entered into a Higher Level Stewardship (HLS) agreement (AG00353862) in 2007, this has recently been renewed for 5 years until December 2028 .

The HLS agreement includes (amongst other things) area payments for stock exclusion and for maintenance of the trees and scrub in the areas that have been fenced off.

Once this agreement expires, provided all necessary conditions are met, the commoners are likely to have a choice as to whether to enter the commons further extends the HLS agreements for a time until they are able to enter the new Environmental Land Management (ELM) Schemes.

Any future agreement will need to be in line with the management that is happening on the ground and underpinned by any necessary permission or consents. Under any scheme, payments will be available for creating or maintaining valuable habitats such as woodland and scrub. Therefore, the future management of the above areas will need to be clear.

1.5 Detailed planting plans and choice of tree and shrub species

At the time of establishment of these areas, detailed planting plans were drawn up that ensured that suitable native species were chosen and matched to the variety of different soils found in the fenced areas (see Woodland and Scrub Project Proposal, 2008). Planting was planned to have random clusters of varying shape and size with feathering of density the further the planting goes away from the gill to simulate natural regeneration patterns for a mixed native woodland.

Swineside Juniper and Young Wood are existing areas of woodland that have been fenced for protection and to allow regeneration; no supplementary planting has occurred in these areas.

1.6 Maintenance

The areas have been maintained by the commoners. The latest restocking took place in late 2020, maintenance of fences and gates has been ongoing since. All enclosures have a number of access gates to maintain open access, as originally proposed. A separate report by Tom Dawson at Northern Habitat Ltd (May 2023) details maintenance and condition of fences and tree protection.

2. Observations

Enclosures on these three commons have been visited recently to ascertain the condition and effects of fences now they have been in place for almost 15 years. Photos are presented in Annex 1. All photos included in this report were taken by Naomi Dalton on the following visit dates, except where otherwise indicated.

- Roughten Gill, Glenderaterra North & South: 3rd May 2023,
- Young Wood and Glendamackin: 11th May 2023, also with Rob Vatcher
- Swineside Juniper and Souther Fell: 29th June 2023, viewed from roadside only

This was not a detailed survey, so lists of species are far from comprehensive – the emphasis was on noting general ecological condition.

2.1 Young Wood

Young Wood is an exceptionally important site, being the highest altitude oak woodland in the UK and the only surviving fragment of mature oak woodland (as opposed to recently established plantations) within the whole of the Skiddaw Group SSSI (which is 10,000ha in extent). The habitat is one of the features for which both the SSSI and SAC was designated. Its continued protection is essential for the SSSI and SAC to be considered to be in progressing towards favourable condition in line with the government's Environmental Improvement Plan targets.

All access gates seen to the enclosure were secure; the fence appeared to be functional with no obvious sheep ingress, however some sections are deteriorating and will need refitting soon.

The benefits of a fenced enclosure are clearly showing at Young Wood. Woodland is in good condition with trees appearing healthy and an understorey dominant with bilberry. Many young oak trees were seen a good distance (up to 20m) from the main stand, demonstrating successful current regeneration likely by acorns, as well as growth from roots closer to the parent tree. Continued protection over time will allow this young regeneration to survive and the woodland to gradually expand.

The enclosure holds a diverse vegetation structure not seen elsewhere on these fells. The well-developed stand of dry heath, with heathers, bilberry and crowberry as dominant and frequent dwarf shrubs. Below this is a thick moss layer, also with abundant lichens. Bilberry in particular is growing well with a shrubby form developed that is often restricted by grazing pressure. Gorse is locally abundant, particularly at the eastern end, it does not seem to be limiting the woodland or heath growth, and adds an important nectar source and further structural diversity to the habitat.

Beyond the current woodland extent, there is clear differentiation in vegetation above and below fenceline along the base of the enclosure, demonstrating its impact in allowing heath to recover away from grazing pressure.

Throughout the enclosure lots of rowan and some juniper regeneration were seen. Some rowan is also spreading outside enclosure, showing this as an important source for wider regeneration when conditions allow.

Although not identified specifically, much bird song was heard in and around the woodland.

The occasional large conifer requires removal (or ring barking).

There is some grazing pressure on peripheral areas and a trod through the woodland, this is considered to be from deer but does not appear to be at a level to impeded regeneration or hinder the benefits of the fence line.

The fenceline is visible from public right of way along base of the valley. It is envisaged that overtime regeneration will progress towards this point, and can thus demonstrate to visitors a rarely seen Lake District habitat.

2.2 Swineside Valley

This is another particularly important site, being one of only 3 significant stands of mature juniper scrub within the Skiddaw Group SSSI. The habitat is one of the features for which both the SSSI and SAC was designated. Its continued protection is essential for the SSSI and SAC to be considered to be in progressing towards favourable condition in line with the government's Environmental Improvement Plan targets.

This enclosure was only viewed externally. No planting was undertaken here as the fencing was installed to protect an existing area of juniper scrub and to support regeneration of this rare habitat.

The ground vegetation even from afar appears different to adjacent areas outside the enclosure, giving the many benefits of thicker grass swards and more structurally diverse vegetation. Some bracken stands are present, but predominantly recovering heath and scrub. Juniper in the enclosure is widespread with a variety of forms (both upright and prostrate), and with a mix of ages. Younger plants were seen adjacent to the lower fence indicating signs of successful rejuvenation. Previous assessments (eg by Rob Vatcher in 2019) have looked at this enclosure in more detail and found juniper regeneration evident. Rowan trees are scattered through the enclosure, showing natural colonisation and regeration of scrub and woodland once the grazing pressure has been removed.

A large bracken stand along the eastern boundary conceals the fenceline, but appears not to be precluding juniper restoration.

2.3 Roughten Gill

The bottom wash gate of this enclosure was intact; fences and access points seen on this visit appeared functional and accessible. The fence line for this enclosure is along the upper edge of the gill and set back from the main track and bridleway.

Tree survival and growth was ok, slower rates of growth here than at some of the other enclosures due to the conditions at the site and previous issues with establishment. Tree height reached a maximum of about 3m tall. A mix of hawthorn, birch, rowan, alder, hazel,

holly and oak all present and growing. Some work is needed to right tubes and trees that are blown or knocked over. At the lower end of the gill, north of the watercourse, an area of newer planting was not yet showing above tubes but was not inspected closely on this visit to ascertain survival rates.

The south side of the gill was walked on this visit. This area is mostly damp acid grass with lots of sphagnum growth, as well as other mosses, cotton grass and some bilberry starting to establish. On the opposite bank heather appears to be establishing, especially on shallower rocky soils.

Compared to previous photos some erosion scars appear to be stabilising, with more vegetation covering them.

Although tree and scrub growth in this enclosure is slower and sparser than other compartments, there is a marked difference in the ground vegetation compared to outside of the fence. The thick grass sward and moss layer is good for invertebrates, small mammals and will soak up much more rainfall than a close-grazed sward. Other species seen included tortoiseshell butterflies, skylarks and bumblebee.

Sparse planting and low survival on the steep north side of the gill is not considered to be a failure due to the ongoing benefits of excluding stock from this area. There is a noticeable gradual vegetation change here with more heather, thicker grass sward and less exposed ground compared to baseline photos.

2.4 Glenderaterra North (Girl Guides Wood)

Survival and growth of trees in this enclosure has been very good. About 80% of tubes had alive trees within them. Species present included birch, rowan, oak, holly and hazel. Some trees in the northern extent of this enclosure looked younger, perhaps the result of some more recent supplementary planting. Natural regeneration was also occurring in this enclosure, with many rowan and hawthorn seedlings seen outside of protected plantings. The exclusion of sheep has allowed these to grow.

The development of ground flora in this enclosure is also remarkable, particularly in the central area, with mature ling heather plants, alongside younger pioneer growth, showing a good age range and restoration of dry heath habitat including bilberry, crowberry and lichens. Wood anemone was also frequent in this enclosure. Towards the northern extent of the enclosure, less heath is establishing, but there are a number of *Sphagnum*-rich flushes and thicker grassland has many small mammal holes. Two pairs of meadow pipits seen.

Overall this enclosure is becoming a more visually and ecologically interesting mosaic of vegetation types.

2.5 Glenderaterra South

The area appeared stockproof with no evidence of recent sheep ingress, access gates in good condition and useable. Planting in this enclosure has been sparse. Although survival rates are moderate, with about 40% empty tubes observed, the growth on trees present is very good, with many reaching excellent height and girth already. Species seen to be

thriving include oak, holly, birch and rowan. Can consider removing tubes on some trees that are well established, and also clearing out stakes and tubes of any dead/absent planting. The southern end of the enclosure in particular has a dense stand of gorse. Trees were seen to be emerging above the scrub height. As a moderate amount of gorse within the landscape, this adds a rich nectar source and is excellent nesting habitat for birds, many small birds were seen and heard during the visit. Birds were observed to be passing between this area and nearby woodland/scrub, highlighting the value of extending the network of trees and scrub in the landscape.

A large stand of bracken centrally in the enclosure has relatively few trees, additional trees should be planted here.

Around the edges of the scrub ground flora was developing that included common dog violet, fox gloves, wood sorrel (indicator of historic woodland), pignut and scaly male ferns.

Many self-sown tree seedlings were seen, including a cluster of birch seedlings near the watercourse and a hawthorn showing natural habit unrestricted by grazing.

2.6 Souther Fell

This enclosure wasn't walked over. However viewed from the road, there is clearly very good establishment and growth of trees with a naturalistic spread up the hill side.

2.7 Glenderamackin

This enclosure has suffered the most from poor maintenance and stock ingress, for example on this visit the watergate appears to be partially open at the lower end and at least 6 sheep were in the enclosure. Survival rates of trees is low, in areas only about 20% of stake have a growing tree adjacent. It is unclear whether this can also be attributed to site conditions, such as soil and wind. There are areas where growth of trees is good, perhaps in more sheltered aspects. Species that have survived best are the usual early natural pioneers such as rowan, hawthorn and birch, many of these reach 3-4 m and are filling tubes. There is also occasional hazel and holly. Elsewhere in the enclosure the majority of tubes are fallen over and/or empty.

Stock proofing issues mean vegetation growth on the ground has been slow, bracken is the predominant understory. Continuation of fencing for this enclosure, as long as it is kept stock free, would allow the surviving tree plantings to become better established and give opportunity for ground vegetation to develop without grazing pressure.

Replanting of pioneer species, such as rowan, hawthorn and birch, should be undertaken to replace those lost to stock ingress and poor maintenance. This should be focused on the more sheltered areas where there has been some survival of previous planting, and north-west of the river. By maintenance of the fencing and ensuring stock enclosure, complimentary natural regeneration will allow further growth of trees in niches where they thrive naturally.

Whilst not looked at in detail, some increased vegetation cover on the steep south-east side is apparent compared to above the fence line and this will have the benefit of reducing soil run off into Glenderamackin catchment.

3. Conclusions and Recommendations

Fencing has been in place for 15 years, and the benefits of this are showing. To continue this nature recovery we have the following recommendations:

- 3.1 The continued protection of the oak woodland at Young Wood and the juniper scrub at Swinside is essential for the SSSI and SAC to be considered to be progressing towards favourable condition in line with the government's Environmental Improvement Plan targets.
- 3.2 The natural regeneration of habitats and associated benefits that has been observed would not continue if sheep (at current levels) were allowed back into the fenced areas. Habitat recovery without fences would only be possible if there was a drastic reduction in grazing pressure across the common, which is something the commoners are unwilling to do. With the current stocking level, if the fences were removed at the end of 2023 it is likely that sheep would congregate in these areas due the recent plentiful vegetation growth and cause damage to young trees (many are still of a size where they would be vulnerable both to grazing damage and the stem size not of sufficient girth to withstand animals rubbing against them). Sheep would also have very significant impacts on the ground flora, and the diverse community of plants that have started to develop would be lost. The ground flora would revert to relatively species-poor acid grassland and there would be less vegetation structure, pollen and nectar. Any removal of fences at this point in time would undo the successes of the past 15 years.

It is therefore recommended that the fencing at these locations is retained for the enclosures to continue along the current trajectory of habitat restoration. Given the slow rates of growth of vegetation in upland areas, it is advised that at least a further 20 years of protection is again necessary to protect and support regeneration of these habitats. This will necessitate an application to the Secretary of State for renewed permission to retain the fences.
- 3.3 Although the current HLS agreement has been extended for 5 years (until the end of 2028), the commoners have the option to withdraw early and transfer to a new agri-environment scheme, once the details of the new scheme are known (expected to be clarified within the next year or two). The alternative is for the commoners to apply for a new agreement at the end of the 5 years. Both options will need a great deal of preparatory work, so we would not recommend adding to this workload by applying for s38 permission only for the few remaining years of the HLS. Any new agreement is likely to be at least of 10 years' duration, so a time-period of over 15 years is therefore recommended for any s38 consent, to cover both the remainder of the HLS and the next potential agreement.
- 3.4 Given that the majority of enclosures are stock proof, whilst still fitting with landscape and access sensitivities, it is recommended that the current design of fencing is retained.

As noted in Tom Dawson's report, several of the fences will need replacement in the next few years to ensure they remain stock proof. Subject to renewed s38 permission,

this should be planned and implemented in a timely manner. Likewise condition of fences, gates and water gates should continue to be routinely assessed and maintained. Particular attention must be paid to Glenderamackin to remedy the particular problems that have occurred here. The occasional large conifer in Young Wood requires removal (or ring barking).

- 3.5 Additional trees should be planted in Glenderaterra South and Glenderamackin. Reference should be made to the original planting plans. Give careful consideration of the tree and shrub species mix being established and continue to tailor species-choice to soils and ground conditions as described in [Forestry Commission Bulletin 112](#).

A large stand of bracken centrally in the Glendererra South enclosure has relatively few trees, the additional trees should be planted here.

In the Glenderamackin enclosure replanting of pioneer species, such as rowan, hawthorn and birch, should be undertaken to replace those lost to stock ingress and poor maintenance. Planting should be focused on the more sheltered areas and north-west of the river where there has been some survival of previous planting.

- 3.6 Start to remove and dispose of tree guards as trees outgrow them
- 3.7 Consideration installing interpretative materials where enclosures are visible from a PROW.

Annex 1. Photos

A1.1 Young Wood



Photo from 2007, before fence installed.



Similar view in 2023, alot of spread of heath in enclosure and possible widening of woodland itself.



View of enclosure from footpath. Clear difference in vegetation. Overtime, as the woodland spreads further, this habitat will be more visible for visitors to appreciate.



Lots of regeneration, particularly rowan saplings, and growth of dwarf shrubs.



Young trees (rowan and oak) found growing above main block of woodland towards upper fenceline.



Healthy understorey with bilberry dominant and oak tree growth of varying ages.



Areas of shorter oak growing above main woodland unit, potential new growth from root extension. Conifer to be cut or ringbarked.



Young oak found 20m from main woodland block, possible regeneration from acorn.



Marked difference in vegetation at lower fenceline, demonstrating benefits of enclosure in allowing woodland regeneration and recovery of dry heath.

A1.2 Swineside Valley



Juniper scrub abundant in enclosure. Fenceline concealed by bracken bed.





Photos taken by Rob Vatcher in 2019 of young juniper plants showing successful natural regeneration.

A1.3 Roughten Gill



Photo from 2007, before planting and enclosure



Similar view 2023, following 15 years of enclosure. Note tree growth, covering of erosion scar and heather growth (dark mounds) on north slope.



Reasonable survival of trees, some of these trees are more recent plantings. Few trees planted further up the gill and denser than intended at the top of slopes. Good heather growth on north slope.



Development of thicker vegetation on the ground with mix of Sphagnum and other mosses and bilberry starting to establish.

A1.4 Glenderaterra North (Girl Guides Wood)



Photo from 2007, before planting and enclosure



Similar view 2023, following 15 years of enclosure. Trees growing well.



Wood anemone



Vegetation development, including semi-mature and young growth heather, bilberry, mosses and lichens.



Natural regeneration of rowan



Mix of vegetation establishing in central area of enclosure with mosaics of dry heath growing well.



North end of enclosure

A1.5 Glenderaterra South



Strong tree growth in much of this enclosure



Areas of the enclosure with sparser planting to be restocked.



Developing ground flora includes wood sorrel and common dog violet, along with a thicker grass sward.



Hawthorn growing without stake and tube, likely self-sown, has a natural open form as a result of removal of grazing pressure.

A1.6 Souther Fell



Photo from 2007, before planting and enclosure



Similar view 2023, following 15 years of enclosure.



Trees within enclosure showing up fellside as a naturalistic extension of existing woodland.



Good tree growth as seen from main road.

A1.7 Glenderamackin



Good tree growth in areas of enclosure, particularly rowan and birch.



Poorer survival of trees and sparser planting further up glen. Heather can be seen establishing on East (left) slopes.



Sheep ingress has limited change within the enclosure, however a difference in vegetation below and above the fence line is still evident on the far side (East slopes). Thicker grass sward here will be controlling water and sediment runoff.