

LAND REPORT
2017

JOHN
MUIR
TRUST

FOR
wild LAND &
wild PLACES

Managing wild land for people and wildlife

johnmuirtrust.org



Pictured this page: Crossing the wire bridge at Steall Gorge with Trust land behind
Opposite page: Dwarf willow, Sandwood



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Cover image: Skye property manager Ally Macaskill collecting hawthorn seeds

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Welcome

WELCOME TO THE LATEST John Muir Trust Land Report which highlights the range of work carried out on the land we manage. Thanks to the generous support of our members, we own and care for almost 24,500 hectares (60,500 acres) of wild land in the UK, ranging from Ben Nevis, Sandwood Bay in the far northwest Highlands, Schiehallion in Perthshire, Quinag in Assynt, part of the Cuillin on Skye, and Li & Coire Dhorrcail in remote Knoydart to the far more accessible Glenlude in the Scottish Borders.

Each area of land has its own distinct character. And each area is managed to both protect and enhance it, while also encouraging local communities and visitors to use and enjoy it to the full for their businesses, recreation, or through the John Muir Award.

In 2016 alone, more than 2,500 people achieved their John Muir Award as part of direct involvement with Trust properties and partnerships.

The following report, essentially a snapshot of our recent work, illustrates the huge variety of activities carried out on Trust land, and the breadth of people involved. For walkers, climbers, cyclists, musicians, artists, military personnel, hospital patients, local residents, tourists and many others, our land offers people of all ages and interests an opportunity to experience some of the best wild land in the country.

Our small but dedicated team of land staff, contractors and volunteers manage and monitor this land to ensure its wild land qualities are maintained and enhanced for the benefit of the landscape, its wildlife and people. Between us, we plant trees, fix footpaths, monitor wildlife and vulnerable flora, cull deer to restore ecological balance, aid habitat recovery, remove litter from coasts and summits, and much more besides.

Managing such important areas of wild land is a never-ending job, but it is a role we relish. And as you will read in these pages, our efforts to conserve and enhance habitats and biodiversity for the benefit of all are reaping rewards at many of our properties.

I hope you enjoy learning more about what we do on our land, and why. Our work is only possible with support from our members, volunteers and funders and we are very grateful for all they do to protect wild land.



Mike Daniels
Head of Land Management



PHOTOGRAPH: DON O'DRISCOLL

On the tourist trail

A bewitching place, Sandwood is an increasingly popular destination for tourists in the northwest Highlands, explains Don O'Driscoll

THE NAME SANDWOOD COMES from the Norse 'Sandvatn' meaning sandy loch, and refers to the land around the famous bay that draws visitors to this striking part of Sutherland all year round.

It's a wild place. Just south of Cape Wrath, Sandwood often feels the full force of the Atlantic weather systems that roll in. The colour of the landscape changes almost daily, while the lack of light pollution means that night skies can be spectacular – particularly when the Northern Lights appear.

Our Sandwood estate is a national Site of Special Scientific Interest, with large parts also designated as a European Special Area of Conservation. It's also a land of great archaeological interest.

Almost half of the estate is covered by blanket bog, although there are also hills, lochs, dunes, weathered sea cliffs and machair – a flower-rich habitat found only in certain parts of Britain and Ireland. Highly valued by crofters for the rich feeding it provides stock, machair land was once also important for growing oats and potatoes.

The machair holds more than 220 species of wildflower and is a riot of

colour in summer. It is also home to eight species of bumblebee including the rare great yellow which is now confined to this very specific habitat.

With machair-friendly grazing schemes in place, the health of this important habitat is carefully maintained by crofters in nearby townships. The Trust is working with one of the local grazing committees and Scottish Natural Heritage to instigate a land management scheme designed to benefit crofters and the wider moorland environment.

We also work closely with local schools, helping deliver rural skills programmes and educating pupils about issues such as marine litter.

Habitat monitoring

The Trust's monitoring work extends beyond the machair to include heather, blanket bog and juniper, which are all checked for grazing and trampling impacts. With declining sheep numbers and red deer kept at around 150 animals (a density of two/three per square kilometre), the ground is lightly grazed.

Sandwood is home to a healthy number of otters, a small but stable population of mountain hare, and a range of other mammals such as

Fast facts

- > Sandwood covers 4,703 hectares (11,621 acres) of wild and crofted land just a few miles from Cape Wrath, the most northwesterly tip of mainland Britain
- > The vast beach at Sandwood Bay is guarded on its south side by the sea stack Am Buachaille (the shepherd)

stoat, weasel, fox, mice and water vole – although the latter is in decline.

We keep a close eye on seabirds too, although our long-term monitoring continues to highlight a steady decline in numbers across a variety of species, including fulmar (see graph). There is more positive news for breeding pairs of raptors such as peregrine falcon, golden eagle, and sea eagle which are all holding steady.

From the shore, common and grey seals are often spotted, while lucky visitors can also catch a glimpse of various cetaceans, sometimes including orca and bottlenose dolphin.

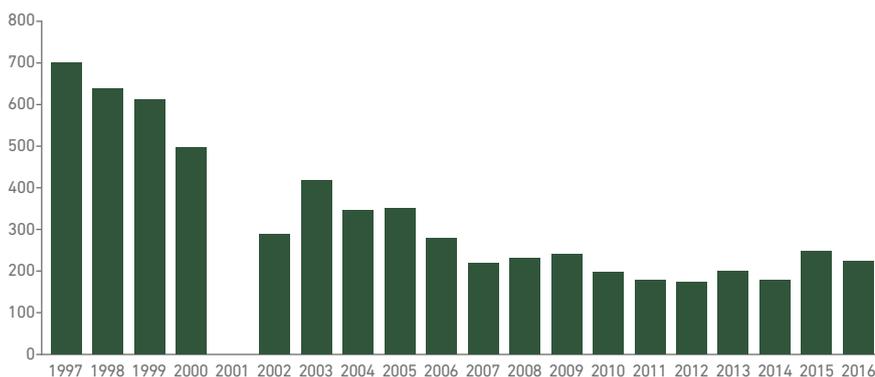
Unsurprisingly, tourism is hugely important to the area with the recent development of the North Coast 500 generating a considerable boost in tourist numbers across the North Highlands, with around 15,000 visitors now coming to Sandwood Bay each year.

Acutely aware of the fine balance between facilitating access and limiting damage to this fragile landscape, the Trust has invested heavily in upgrading the Sandwood footpath, plus providing a car park and toilets at the trail head.



Don O'Driscoll is the Trust's Sandwood & Quinag Property Manager

Sandwood Estate | Maximum fulmar numbers 1997-2016





PHOTOGRAPH: JACK TAN

Sandwood perspectives

Graeme Smart

Acting Head Teacher, Kinlochbervie and Durness Schools



“ We have always had a very good working relationship with the John Muir Trust and particularly with our local ranger who has worked in and out of school with a range of pupils on a variety of projects including John Muir Awards and our Rural Skills programme. I fully expect that to continue in the future, and our pupils will continue to benefit greatly from the experience.”

Pictured: Beach cleaning at Sandwood (main); machair in full flower



PHOTOGRAPH: NICKY MCCLURE

A living landscape

Working in partnership with local communities is key to enhancing this particularly wild part of Assynt, writes **Romany Garnett**

ASSYNT IS A HILL walker's paradise, with Quinag one of the most popular mountains of all. It's easy to see why. With three summits – Sàil Gharbh, Sàil Ghorm and Spidean Coinich – striking ridges, and sweeping views, it's a special place to be.

Up high, it's possible to glimpse golden eagle, ptarmigan and ring ouzel, while on the shoreline sightings of seals and dolphins are common. Bridging the two are otters that hunt along burns, often following them from the shore to the bealach high above.

A small section of the north part of the estate is designated as a Special Area of Conservation and also as a Site of Special Scientific Interest. With such designations, we work hard to ensure that nature is given the best chance to flourish. This work includes reducing the grazing pressure of deer, monitoring invasive species such as mink, and repairing footpaths.

Working with the local community

Fast facts

- > Quinag covers 3,699 hectares (9,140 acres) of the Assynt-Coigach National Scenic Area
- > Quinag is an anglicisation of its Gaelic name, A' Chuinneag (meaning the milk pail)
- > We maintain the mountain path to Quinag's three summits, and also work to restore deer populations to a sustainable level
- > The Ardvar Woodlands on the north side of Quinag are one of the most northern remnants of native oak woodland in the British Isles

is also key as we help people to reconnect with the landscape through educational activities, guided walks and volunteering opportunities.

Annual monitoring

As part of our annual monitoring programme in late-spring, we check the progress of 155 marked seedlings that are scattered over a range of habitats. Species include downy birch, rowan, hazel, willow, aspen and holly. The average seedling growth in 2016 was 2.1 cm, with 67% of seedlings taller than the previous year. While such results demonstrate some degree of regeneration there is still a need to further reduce browsing pressure.

At our dwarf shrub heath plots, the mean height for heather was 19.8cm in 2016, slightly down on the previous year. In total, 85.3% of plots were lightly browsed, while 73.7% of plots had deer dung present, which indicates prolonged browsing.

In terms of fauna, we also record butterflies – from the small pearl bordered fritillary to large heath and an abundance of magpie moths – plus birds such as stonechat, skylark, snipe and curlew. Water voles are also monitored every year.

Guided activities

Our popular programme of summer guided walks attracts locals and visitors alike. Walks vary from historic forays to learning Gaelic in the landscape and high mountain treks. All offer a chance to explain the Trust's work and help bring the landscape to life for all ages.

We've hosted pupils from Lochinver, who learnt about ecological monitoring for their John

Muir Award, while a Wildlife Watch group also spent time with Trust staff finding out more about bugs and beasties.

In 2016, adult volunteers from the surrounding area helped with footpath repairs during a special footpath skills training day, while naturalist David O'Brien held an ID training day on Quinag looking at the many amphibians and reptiles that are found on the property.

The Trust also recently teamed with the Rotal Botanic Gardens, Kew in a project to collect tree seeds from our various properties. The project, which aims to establish a national collection of native tree seeds for long-term conservation, saw us collect seeds from birch, holly, rowan, wych elm and honeysuckle at what is one of the most northerly collection sites for the project.

Hill to grill

In another exciting initiative, we are working with the Coigach & Assynt Living Landscape Partnership on its Outdoor and Woodland Learning Project to deliver a programme with Ullapool High School called Hill to Grill.

Funded by the Heritage Lottery Fund, the Scottish Wildlife Trust-led programme sees pupils spend three days on the hill learning about everything from stalking deer with cameras to butchering, processing, cooking and eating wild venison. The programme, which encourages the concept of eating sustainable local food, is just another example of how we help people connect with the land.



Romany Garnett is the Trust's Quinag Conservation Officer.



Quinag perspectives

Dr Laura Hamlet

Geoarchaeologist, North West Highlands Geopark



“ Quinag is one of the great Torridonian mountains of Assynt. Capped with a thin veneer of Cambrian quartzite and resting on a foundation of Lewisian gneiss, it represents three billion years of Earth’s history. Not only does the mountain provide insight into the relationships between these rock types, but it also bears the scars from millennia of glaciation.

Quinag has been of particular importance to quaternary geology as it was here that the investigation of frost-shattered rock led to the observation that the mountains of the northwest Highlands were once nunataks – mountains that poked up higher than the ice sheet and stood proud for long periods of time, providing key data on palaeo-climatic events and the behaviour of ancient glaciers. Quinag is a textbook example of a glaciated landscape and contains many observable features which contribute to our knowledge of ice behavior.

The mountain is frequented by geologists of every walk of life, from school pupils to the international research community. Quinag is listed in the Local Geodiversity Action Plan as one of the most impressive features of the North West Highlands UNESCO Global Geopark.”

Dave McBain

Hill walker and local accommodation provider



“ I’d recommend Quinag to anyone looking to climb their first mountain. It’s an easy walk in, with at least one peak just a steady trek, so you can be up and down in three hours or so. Choose from one peak or make a whole day of it and climb the full set, with its mix of drops, bowls and ridges. You can’t ask for much more from a mountain.

There’s also a cracking loch at the bottom if you fancy a swim after your climb. And if you follow the burn out rather than the path, there are a couple of glorious waterfalls to enjoy. Perhaps best of all, there are three amazing lumps on Sail Garbh that look like something out of the Hobbit. Look out too for the cattle byre (where raiders once hid stolen cattle) which is just an amazing pasture with a hidden waterfall and cave right in the middle. And that’s before you even reach the top!

Of course if you’re a wanderer, there are fascinating erratics all around the northeast side, including a rock the size of a large shed dumped on top of three stones with a stream running under it. It’s a great place to see ptarmigan, grouse, deer, eagles and buzzards.

Much more than a mountain, Quinag is a walker’s playground with at least a couple of dozen cracking routes in one self-contained range. Photographers will love it too.”

Pictured: A group enjoying one of the Trust’s guided walks on Quinag

People and place

Full of mystery and variety, Skye is a place where the land and its people are inextricably linked, says **Sarah Lewis**

COMBINING RUGGED BEAUTY with deep-rooted crofting traditions, the Trust's trio of adjoining estates on southern Skye – Strathaird, Sconser and Torrin – include most of the Red Cuillin hills plus outliers to the main Black Cuillin, such as Blà Bheinn.

This rich physical and cultural landscape is also a land full of energy, with a growing number of local volunteers helping with everything from habitat monitoring and footpath maintenance to native tree seed collection and beach clearances.

Collaboration and engagement are at the centre of our work here. This includes our involvement with the Rural Skills Course at the West Highland College UHI which sees the Trust provide technical footpath training and upland path awareness through our ongoing Skye Footpath Project.

Similarly, our work with students on the Scotland Rural College's Countryside Management course



PHOTOGRAPH: SARAH LEWIS

A rowan ablaze with berries

has seen a sharing of knowledge and the future promise of retaining local skills to help with maintaining our most heavily-used paths such as the main route up Blà Bheinn and the path from Sligachan to Loch Coruisk.

And our commitment to improving the footpath network on our properties has not gone unnoticed. "I've been up Blà Bheinn several times but stopped going because the path was so eroded," commented one retired local resident recently. "Now that it's been repaired, it's much better."

Wildlife and ecology

This is truly a place where the wild things are: seals, basking sharks and a variety of other marine life are often spotted from the shore. There are otters here too, while our Skye properties are also in the heart of both golden and sea eagle territory.

The hope is that habitat for a variety of species will improve further following the establishment of a range of tree seedlings across Glen Skaladel, Camasunary and on towards the remote Loch Coruisk. The fortunes of young rowan, aspen and birch have been improved by a reduction in grazing.

Similarly, in the wilder and more remote areas of the Black Cuillin, the presence of new seedling growth amongst the sub-alpine juniper heath is also encouraging.

Meanwhile, following replanting and natural regeneration, we are seeing new areas of native woodland covering much of the Faolin site at Strathaird, which is helping draw together the wider coastal woodland fringe.

Elsewhere, the forestry compartment around the old cleared

Fast facts

- > The Trust's largest property, our three estates on Skye cover a combined 12,000 ha (29,650 acres)
- > Much of our Skye property lies within the Cuillin Hills National Scenic Area
- > The farm at Strathaird has been under agriculture for possibly thousands of years
- > The Trust is responsible for around 60km of footpaths on Skye

village of Keppoch is being harvested and partially restocked with native broadleaf species. The hope is that cultural heritage will find expression again with the opening of access to the ruins of the village, while a percentage keep of the harvest will provide firewood for local communities.

Other work on Skye includes efforts to improve the ecological and agricultural condition of the farm at Strathaird, which is used by a small number of crofters for rotation of sheep, growing silage and other seasonal uses.

The management of the fields here provides an example of the symbiotic relationship between livestock use and ecological quality of worked land. Meanwhile, wild flower margins, created on once bare ground, now attract pollinating insects and offer a seed supply for birds in the autumn.

Looking ahead, the possible development of the old kirk could bring further shape to the farm, with scope to communicate the fascinating history of the area and its people to the growing number of visitors to this part of Skye.



Sarah Lewis is the Trust's Skye Conservation Officer



Skye perspectives

Mike Lates

Skye Guides



We guide clients most days in summer on Blà Bheinn and are blessed to have a footpath, built and maintained by the John Muir Trust, that makes the approach far easier than it used to be. Some of our guests want to take in what is considered the best mountain vista in the UK from the summit, while the more adventurous tackle perhaps the best scramble in the British Isles – the traverse of Clach Glas. Ease of access also makes it a prime venue for rock and ice climbing.

Walking through Trust land is a delight with eagles, deer and otters commonly seen. Another route we frequently recommend and guide takes walkers into the bay at Camasunary before following the coastal path south into the fishing village of Elgol.

The Trust does an amazing job of running the Strathaird estate, keeping visitors and residents happy in a mutually beneficial relationship. Preserving this landscape is key and the Trust gives assistance to local people to work the land in a sustainable manner.”



Hector Nicolson

Crofter and Chair of Sconser Management Committee



As a fourth generation crofter in Sconser, the environment, its people and management of the land are very important to me, and have been the focus of my time as Chair of Sconser Management Committee.

As a committee we have enjoyed good working relationships with employees of the John Muir Trust down the years. Personally, I have engaged with schools, both primary and secondary, promoting the land and helping people achieve their John Muir Awards. This has been very rewarding as, in my view, the future of crofting and land management will flourish through educating and encouraging youngsters for them to take it forward.

Looking to the future, I believe it would be of benefit to both the John Muir Trust and the people living and working on the land to have consultation meetings with the trustees on a more regular basis to discuss local issues and policies.”



Heather McNeill

Course Leader, Crofting & Countryside Skills, West Highland College UHI



Staff and students of West Highland College UHI's National Certificate in Crofting & Countryside Skills Course enjoy a strong and rewarding partnership with the John Muir Trust.

The course is based at our Broadford College Centre and is now in its fourth consecutive year. We encourage working with local land owners in order to enhance the students' knowledge and understanding of the environment, compare land management styles, gain practical skills, and introduce students to potential future employment opportunities.

Working with the John Muir Trust has enabled us to gain insight into its ethos, participate in habitat studies, and undertake tasks such as tree planting and footpath building projects, all with the benefit of having experienced Trust staff who are keen to share their knowledge and love of the countryside with our students.”



Pictured: Habitat monitoring high in the hills of Skye

A recovering land

Significant ecosystem recovery continues at the Trust's first property, writes **Mike Daniels**

RUGGED AND REMOTE, Li and Coire Dhorrcail within the Knoydart National Scenic Area was the Trust's first land acquisition in 1987. Thanks to 30 years of hard work, this once ecologically impoverished landscape continues to recover, with native woodland spreading and the wider ecosystem slowly returning to life.

In 2015, we launched an appeal to raise £60,000 to continue expanding coverage of native woodland in Knoydart, and help regenerate habitat for a range of plants, animals and insects. Our goal was to plant 50,000 trees over four years, increasing native tree cover to over 10% and make a significant difference to the area's biodiversity.

Thanks to the incredible generosity of our supporters, we managed to beat our fundraising target, and since then our staff and volunteers have been busy planting, weeding and growing. Over the last year, the Trust has planted 11,000 birch, hazel and alder trees, germinated 15,000 Scots pine seeds, and built a new tree nursery at Inbhir

Dhorrcail. With the facility now ready for use, we will plant thousands more trees in the years to come.

Alongside the planting work, staff and volunteer work parties have spent time clearing invasive species, repairing paths, maintaining fencing to protect the seedlings, and collecting birch seeds for further seedling production.

As the woodland gradually develops and expands, native wildlife such as pine martens, otters, bats and woodland birds are all beginning to return to the area. The hope is that as the woodland continues to expand, more and more native wildlife will make its home in Knoydart.

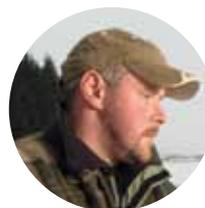
Browsing pressure

Deer management is essential to the re-establishment of woodland on Knoydart. Planted and regenerating seedlings are under constant threat from artificially high deer numbers

maintained by some neighbouring sporting estates. The good news is that as the woodland develops, so the shelter and forage quality for deer improves.

Fences are a temporary measure but can only protect a limited area for a short period of time. Ultimately, deer numbers need to be controlled across the wider area by culling. Due to the remoteness of the property – an area accessible only on foot or by boat – culling is tough work made harder by the contentious issue of reducing populations in an area where high numbers are sought by some.

Overall, we are making good progress in Knoydart – a property that continues to showcase what can be achieved over time and through the dedication of Trust staff and volunteers.



Ally Macaskill is the Trust's property manager for Skye and Knoydart. He took over from the previous property manager for Knoydart, Lester Standen, in early 2017.

Fast facts

- > Li & Coire Dhorrcail extends to 1,255 hectares (3,100 acres) on the north-eastern slopes of Ladhar Bheinn
- > A reduction in deer numbers has seen significant natural regeneration of birch, oak, hazel, rowan and Scots pine
- > With help from volunteers, we also maintain the old stalker's path into Coire Dhorrcail
- > In 2015, the Trust's work at Li & Coire Dhorrcail was recognised by Scotland's Finest Woods Awards as 'an exemplar of sustainable land management'



Native tree cover returns to Li & Coire Dhorrcail

PHOTOGRAPH: STEPHEN BALLARD



PHOTOGRAPH: JAMES BROWNHILL

Knoydart perspectives

Angela Williams

Knoydart Foundation

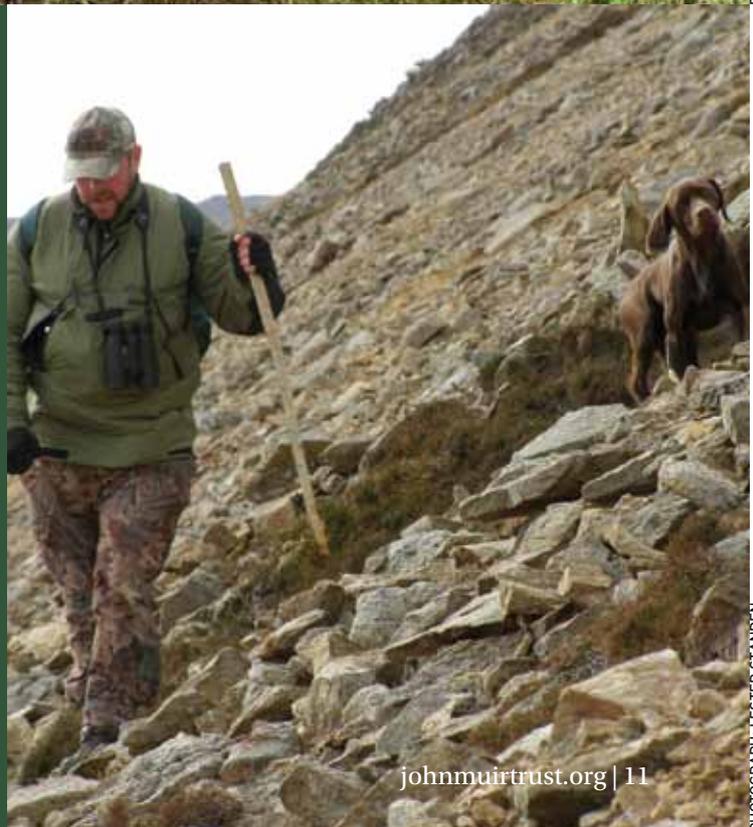


“The Knoydart Foundation and the John Muir Trust have had a close working relationship for many years now. The Trust was a key supporter of the buyout in 1999 and has played an active role on the board of the Foundation since then.

The Trust has also been a member of the Foundation’s land management group and, more recently, have helped establish the West Knoydart Deer Management group to cooperate on deer management planning. While the two organisations have different objectives with regard to deer management, there is still a close working relationship on the ground, with respect for the different approaches taken.

The Trust has also helped support Foundation activity through the conservation fund. Trust volunteers are warmly welcomed regular visitors to Knoydart, undertaking work that we would struggle with on our own.”

Pictured: Staff and volunteers creating a tree nursery at Inbhir Dhorrcail (main); new Knoydart property manager Ally Macaskill and faithful friend



PHOTOGRAPH: LESTER STANDEN

Fire, feet and flora

From fire to rockfall and 140,000 visitors, life is rarely dull when working on the UK's highest summit, writes **Alison Austin**

AS BEFITS THE HIGHEST peak in the UK, Ben Nevis is a hugely popular destination. More than 100,000 people walk to the summit each year, while around 40,000 enjoy the rather less arduous route through Steall Gorge to the base of the Steall Ban waterfall.

A large portion of our work at Nevis sees us manage such visitor impact by maintaining the upper section of the Ben Nevis summit path, plus the trail through Steall Gorge. We also undertake regular wildlife and habitat surveys, and continue to restore the wider ecology of the area, including expansion of native woodland.

Sometimes, unexpected events can have a major impact. Sadly, a fire that originated on the Steall path in early 2016 damaged more than half of the marked tree seedlings planted in 2008. Thankfully, in 2014, we established a further cohort of 100 seedlings to monitor into the future.

The same area was also hit by a major landslide in October 2016,

with 100 tonnes of rock smashing its way down the hillside above the Steall Path, damaging the woodland and path below. We had to close the path for several weeks to enable a rope access team to assess the fallen debris, move any remaining unstable blocks, and cut broken trees that were a hazard to walkers on the path.

An expensive and time consuming operation, we are very fortunate to have such generous donors who gave to our Wild Ways Appeal and allowed us to move quickly to reopen the path.

Key partnership

Beginning in 2013, our work alongside the Heritage Lottery-funded Nevis Landscape Partnership (NLP) has been particularly important. As part of this partnership, the Trust carried out extensive repairs to the base of the cairn supporting the trig point on the summit of Ben Nevis in 2015.

As well as general repairs of the summit structures, the work culminated in Ordnance Survey re-surveying the height of Ben Nevis and realising that it was a little higher than previously measured! Thanks to the gaining of a few centimetres, the summit is now officially recorded as 1,345m.

Meanwhile, 2016 also saw the third and final year of an NLP-led project to re-survey the north face of Ben Nevis for rare arctic-alpine species. Previous populations of mouse-ears, saxifrages, grasses and various sedges appeared vulnerable, with many being damaged by trampling. However, the survey exceeded all expectations, finding and doubling or more our record of many species, and mapping them

with GPS records.

A collaborative project between botanists, geologists and mountain guides, the survey was a resounding success and one we hope to repeat. A host of mountain guides have now been inspired to share the hidden value of some of these unassuming plants with a much wider audience.

Lower down, in Glen Nevis, our monitoring of tree seedlings continues to highlight slow but steady signs of recovery, with an average increase in the height of marked broadleaf seedlings of 22.8cm since 2008. This corresponds with monitoring carried out on neighbouring land which shows small but encouraging signs of growth.

Sadly, however, there is no sign of any regeneration of Scots pine seedlings. To remedy this, we are planting a series of seedlings that have been collected and grown on in Glen Nevis by NLP's Future Forest Projects. The hope is that this will help re-establish a younger cohort of Scots pine alongside the ageing granny pines to ensure the future survival of this vital component of the area's native woodland.

One way that we are delivering our message about the importance of these wild places is by forging ever closer links with the annual Fort William Mountain Festival. In 2017, the Trust became the lead sponsor for the festival's prestigious film competition, which enabled us to share our vision for wild land with a wide audience.



Alison Austin is the Trust's Ben Nevis Property Manager.

Fast facts

- > Our Nevis estate covers 1,761 hectares (4,351 acres) within the Ben Nevis Special Area of Conservation
- > As well as Ben Nevis, the estate includes the summits of two other Munros: Carn Mor Dearg and Aonach Beag
- > We maintain 7kms of path on the Nevis Estate
- > We undertake litter clearances on the summit of Ben Nevis every quarter (removing more than 18 bin bags of rubbish on one recent clearance)



Ben Nevis perspectives

Mark Greaves

Geodetic Consultant, Ordnance Survey



“The new height of Ben Nevis relates to the highest natural point on the summit and was measured as 1,344.527m. I double checked everything and asked others to do so too. What is amazing is how close the surveyors in 1949 were. The measured height has changed by centimetres, but those centimetres mean we now need to round up rather than down. So that’s why Ben Nevis will now be officially known as 1,345m.”

Pictured: Building materials being heli-lifted to the summit of Ben Nevis

Mike Pescod

Fort William Mountain Festival



“Fort William Mountain Festival aims to help people understand the value of the beautiful wild landscape surrounding Fort William by sharing films and hearing presentations by people who engage with the landscape. We aim to inspire people to take part in workshops and competitions so that they can appreciate Ben Nevis and Glen Nevis more through poetry, film making, mountaineering and climbing. The John Muir Trust has been a long standing and very supportive partner, for which we are very grateful.

We now work closely with the Trust to deliver the annual film competition which forms a central part of the festival. Film gives us the ability to reach people around the world and by supporting and encouraging film makers we will continue to demonstrate the importance of our wild land and our engagement with it.”

Ian Strachan

Botanist



“The Ben Nevis north face project has been an amazing experience, which allowed me and fellow botanists to explore the awesome cliffs, crags and gullies of the north face of Scotland’s highest mountain in safety – getting to places I have only been able to look at from afar with binoculars.

Our climbing guides were superb and took a real interest in the project, identifying likely locations for rare plants and even spotting them! We have found numerous previously unknown sites for nationally rare and scarce plants, such as Highland saxifrage, hare’s-foot sedge, alpine speedwell and even tufted saxifrage, which seems to be struggling elsewhere.

We found the first sites for Ben Nevis of alpine saxifrage and the largest known population in Britain of wavy meadowgrass. This survey has allowed us to confirm that the mountain flora of this SSSI is in ‘favourable condition’ and to create a baseline for future studies.”

Forest plans revealed

While grazing pressure remains an issue, there are high hopes for the new Heart of Scotland Forest project, as **Dr Liz Auty** explains

ONE OF SCOTLAND'S MOST recognisable mountains, Schiehallion is beloved by walkers, botanists and wildlife enthusiasts. More than 20,000 people climb to the summit every year on a main path that has been dramatically realigned and improved by the Trust since we first took ownership of the property in 1999.

Part of the appeal of Schiehallion is the influence of the underlying quartzite and limestone on the area's vegetation and habitat. Sited within the Loch Rannoch and Glen Lyon National Scenic Area, part of East Schiehallion is also designated as a Site of Special Scientific Interest for its geology and montane habitat. We are pleased that this remains in favourable condition.

Partnering for the future

With the help of volunteers, we monitor the key habitats and species present on Schiehallion. This includes monitoring dwarf shrub heath, tree seedlings and limestone flushes on an annual basis, and measuring tree transects every five

years. Sadly, this work demonstrates that the site is changing little, and that the regenerating saplings close to existing ancient woodland are simply not growing due to continued high grazing pressure from deer and sheep.

The Trust has long worked in partnership with Kynachan Estate, Forest Enterprise and Highland Perthshire Communities Land Trust, but we are now also working with the Woodland Trust and the Scottish Wildlife Trust on an exciting new project – the Heart of Scotland Forest Partnership.

As part of this project, we plan to fence some areas at East Schiehallion to exclude neighbouring sheep and encourage natural regeneration. In time, we hope to develop a woodland corridor that links existing woodland lower down the Keltneburn valley with that on Schiehallion and Kynachan.

Each year, we also count the number of male black grouse displaying on leks as part of the local black grouse study group. We're delighted that this vulnerable species is doing well, with one of the largest leks anywhere in Scotland on the neighbouring Dun Coillich estate.

In a perfect example of local partnership, we continue to run black grouse walks each spring – with the lek site on Dun Coillich, the viewing spot at Schiehallion, and expert interpretation provided by the RSPB.

As well as black grouse, we also record a breeding bird transect, plus transects to monitor the mountain ringlet butterfly – an

Fast facts

- > East Schiehallion covers an area of 871 ha (2,152 acres), including the quieter Gleann Mor to the south
- > Volunteers typically spend 650 hours a year helping us look after Schiehallion

upland specialist, and a species that is particularly vulnerable to climate change.

Inventing lines

Schiehallion was the site of Reverend Neville Maskelyne's 18th Century experiment in 'weighing the world' – an endeavour recently explored by installation and performance artist Karen Rann. For her Great Lines project, Karen investigated the work of Charles Hutton, the mathematician who developed contour lines from the measurements taken for Maskelyne's experiment.

Together with Karen, we visited the site of the Southern observatory used by Maskelyne and saw how surveyors had placed poles at various points on the mountain and across Glen Mhor. It was fascinating to understand more about the work that was carried out in 1774, and the challenges of detecting a microscopic change in the direction of a plumbline using only the stars.

The observatory was located more than 700m up the mountain, with the work taking place in a summer during which Maskelyne described "the badness of the weather, which was almost continually cloudy or misty", which made work very difficult. Perhaps not much has changed after all.



Dr Liz Auty is the Trust's East Schiehallion Property Manager.



Black grouse at the lek

PHOTOGRAPH: PETER CAIRNS / 2020VISION



Schiehallion perspectives

Jeremy Robinson

Kynachan Estate



“Kynachan Estate has worked closely with the John Muir Trust since an informal partnership was established in 2011. Kynachan adjoins the Trust ground on Schiehallion and delivers deer management holistically across both units.

Nevertheless, cooperation extends well beyond deer management and is based upon mutual respect of different management objectives, both parties are able to exert genuine influence on each other, from conservation to agriculture. The recent Beauty-Denny Line was built through Kynachan Estate and the Trust influenced a decision to remove the access tracks in full and to supervise reinstatement to a suitably high standard. Had mutual influence not been at play, then the estate may have sought to retain some of the tracks for forestry access purposes.

Most recently, Kynachan entered into a partnership with the Trust to deliver the Heart of Scotland Forest. Not only is Kynachan now planting some five hectares of ground as part of the plan but we are also identifying other areas where planting can take place to deliver an enhanced landscape in the foothills of Schiehallion.

Mutual respect has been at the heart of this successful partnership – one that will continue to deliver great benefits in an important and sensitive part of the Highlands.”

Kirsten Sinclair

Glasgow Children's Hospital Charity



“The John Muir Trust has hosted two very special family fun days on Schiehallion in partnership with Glasgow Children's Hospital Charity. The oncology unit at the Royal Hospital for Children is known as Schiehallion, so the iconic mountain was the perfect location to gather with patients and families, both past and present, who have spent time in the ward.

The support that we received from the Trust was wonderful; the enthusiasm of the staff, the adventurous activities and the warm welcome ensured that all of the children and their families had a wonderful day out.

Schiehallion symbolises the mountain that our patients face on a daily basis. Thanks to our partnership with the John Muir Trust we have been able to create lasting memories for our young patients with these unique family fun days”.

Pictured: A family enjoying fine views at Schiehallion

A rewilding journey

Five years in, we are now well down the road in our rewilding work at Glenlude, explains **Karen Purvis**

SINCE OUR FIRST OFFICIAL work party five years ago, Glenlude has continued to go from strength to strength with a diverse range of groups now working with us to rewild the hill.

In 2014, hardy volunteers levelled and built up a patch of ground behind our hut and constructed a large poly-tunnel to serve as a tree nursery, plus outdoor staging made from recycled pallets for the hardening off and growing on of seedlings. Three years down the line, we are now planting our first homegrown trees, with the seeds having all being sourced locally.

Currently in year five of a 20-year management plan, we continue to restructure the plantations. Several small coups have already been felled, with the waste branches used to build three 'mega' brash hedges – the largest of which covers an area of 0.5ha – and several smaller enclosures to protect the native trees planted within from browsing deer.

Natural regeneration is also occurring within the shelter of these enclosures with blaeberry, greater wood rush, bedstraw, tormentil and birch seedlings all coming on well.

Out on the open hill, we continue to plant each winter and are even removing protection from some of the first trees planted in 2012 as they are now too high for deer to reach – a real milestone for our project.

In 2016, we secured a Postcode Lottery Grant to purchase a firewood processor and install secure storage – a used shipping container disguised as a turf-roofed log cabin with a wooden lean-to attached for processed logs. The plan is to offer firewood for sale locally from the site on a small scale.

Annual surveys

Each year brings new learning at Glenlude. Our annual surveys of fauna and flora continue to highlight changes in the diversity of species and habitat across the property. We no longer have any grazing stock apart from wild deer on site and this has contributed to changes in the habitat.

Our second breeding bird survey by local member John Savory (May-June 2015) highlighted an increase of nearly 100% in bird numbers, with several new species spotted. We are very hopeful that we now have black grouse and curlew nesting on the open hill.

Other monitoring has highlighted an abundance of moths, plus several new discoveries of amphibians and reptiles in a basic survey of the four ponds on site, all of which have proved to be in healthy condition.

Making a difference

As well as volunteers, our work with charities, local groups and the John Muir Award continues to be an important part of life at Glenlude. One example is Phoenix Futures, a drug and alcohol rehabilitation charity that uses Recovery Through Nature to aid service user recovery from drug and alcohol problems.

As part of their programme, Phoenix Futures adopted a policy of planting a tree for every service user who successfully completes a treatment programme, but with the nearest woodland site a long way south in England, they were pushed for time and resources. And so the Phoenix Forest was born at Glenlude, with more than 1,000 trees planted in the area that Phoenix Futures now manages at Glenlude. With the

Fast facts

- > Glenlude covers 149 hectares (368 acres) in the Scottish Borders, on the edge of the Southern Uplands
- > Over 6,000 trees have been planted to date by volunteers
- > In 2016, over 570 people used and worked on the site, totaling over 600 volunteer days

area equipped with a fire pit and log benches, overnight bivouacs have become a firm favourite alongside monthly visits by staff and service users.

We also work closely with the Galashiels Focus project, a local branch of the UK-wide Tomorrow's People charity that helps give young people confidence and skills to gain employment. Regular visitors, the charity has now adopted an area of Glenlude that they manage for participants.

This management of individual areas by different groups has become a real theme at Glenlude. The Green Team, an Edinburgh-based organisation that works with young people to restore and conserve wild places, is another group that now manages its own corner of the site high up on the Glenlude Hill side – an area known as Green Team Wildwood.

It's just another way in which we share a property that has already proved a fantastic asset for people from all walks of life.



Karen Purvis is the Trust's Glenlude Property Manager.



Glenlude perspectives

John Deeney

Phoenix Futures

“Glenlude offers our service users the opportunity to carry out practical conservation tasks in a tranquil setting in the Scottish countryside rather than the suburban areas that they currently work in. It’s a chance to explore, meet new people, take on new challenges and feel free from everyday problems.

The service users have adopted Glenlude as their second home; they love coming down and are always trying to persuade us to take them more often. It is a very special place for everyone. To me, this is a very powerful partnership that exemplifies how collaborative working supports individuals in their recovery journeys. As an organisation, we are very proud of the partnership we have developed with the John Muir Trust and look forward to our continued working together.”



Mark Timmins

Tomorrow’s People Edinburgh and Borders Hub, Galashiels Focus project

“Our partnership with the John Muir Trust at Glenlude is an ever enriching experience for our young people, allowing them to gain positive experiences, which help to move them towards a fulfilling role in society. We look forward to developing our relationship in the years to come, along with the continuing addition of trees to the wood which we like to call the Gala Wood.”



Pictured: Volunteers plant saplings out on the open hill

John Muir Award

A powerful tool

Across the UK, the John Muir Award is used by thousands of people to connect with and care for nature. **Rob Bushby** and **Toby Clark** highlight how the Award was used on Trust properties in 2016

THE JOHN MUIR TRUST has long positioned itself as very much part of the communities on and around our properties, with the John Muir Award a particularly valuable tool for reaching people of all ages. In 2016, more than 2,500 people achieved their John Muir Award as part of direct involvement with Trust properties and partnerships.

The reaction of trainee volunteer rangers at the Nevis Landscape Partnership is typical: "We feel volunteer involvement has increased community engagement in local conservation, and we hope this leaves a legacy."

We hope so too, not just at Nevis, but across Trust properties where we work with many partners and local communities.

Ben Nevis

- > Seven volunteer rangers from the Nevis Landscape Partnership achieved their John Muir Award as part of their Nevis Training Programme placement.
- > Outward Bound Loch Eil worked with Trust staff and Highland Rangers in and around Glen Nevis throughout the year, delivering 1,260 Awards.
- > George Watson's College, Edinburgh took part in a residential trip that included practical footpath conservation work as part of a wider outdoor learning expedition programme that has used the Award for the last 13 years. In 2016, 135 pupils achieved their Award, with time spent across various Trust properties.
- > Pupils from Spean Bridge Primary School visited Glen Nevis where

they took part in pond dipping, invertebrate classification, and guided walks with the Highland Council Ranger Service, as well as creative work with local artists.

- > Comunn na Gàidhlig youth workers undertook a day-long John Muir Award training course.

East Schiehallion

- > Pupils from Pitlochry High School went on a guided walk and planted native trees on the neighbouring Dun Coillich Trust estate.
- > Pupils from George Watson's College took part in a guided walk and brash hedging.

Quinag (Coigach-Assynt Living Landscape Partnership)

- > For the fourth year running, pupils from Ullapool High School took a residential trip to the island of Tanera to work with Summer Isles Enterprises Ltd and Highland Ranger Service. Senior pupils also enrolled on an employability programme, while S3 pupils on a broader outdoor learning course took part in the Award.
- > Before stepping up to Ullapool High School, pupils from local feeder primaries completed a three-month Discovering Wild Places project with the Coigach-Assynt Living Landscape Partnership.
- > Pupils from George Watson's College took part in a day of conservation work with Caithness and Sutherland Countryside Rangers.

Sandwood Bay

- > Long-standing Provider Ridgway Adventure Ltd delivered 178

Awards during the year.

- > Ingrid & Chris Todd joined a Trust work party to repair damaged footpaths and beach clean as part of their self-guided Explorer Award.
- > Pupils from George Watson's College took part in a wild camp and beach clean.

Skye

- > The University of Highlands and Islands, Broadford Campus achieved 12 Explorer Awards through its Further Education Outdoor Adventure Unit.

Li & Coire Dhorrcail (Knoydart Foundation)

- > Pupils and teachers from George Watson's College carried out a beach clean.
- > Pupils from Inverie Primary School achieved their Discovery Award working with the Knoydart Foundation Ranger.

Glenlude

- > Phoenix Futures, a respected drug and alcohol rehabilitation service, established a 'Phoenix Forest' partnership with the Trust, with more than 60 service users achieving their Award.
- > Following a 12-week employability programme for young adults with Galashiels Works!, more than 20 young people and three staff achieved their Awards.
- > Young people and volunteer leaders on a Green Team Green Volunteers programme took part in woodland management activities.
- > Pupils from All Saints Primary School Airdrie and parent helpers achieved their Explorer Award, which included a three-day wild camp at Glenlude.



Rob Bushby is the Trust's John Muir Award Manager, while Toby Clark is John Muir Award Scotland Manager

Special projects

People power

The Trust is fortunate to be able to call on an army of volunteers, helpers and contractors to assist with footpath and conservation work, write **Chris Goodman** and **Sandy Maxwell**

THE APPOINTMENT OF A dedicated footpath officer in 2012 saw a step change in the Trust's approach to managing footpaths. It began with an audit of the more than 120kms of footpaths on Trust land that helped identify, prioritise and cost up the path work needed and provide a more strategic approach to our work.

Since March 2012, we have invested £374,000 on capital repairs and maintenance undertaken by contractors across a variety of properties. Around £320,000 of this has gone into contractor's staff wages, helping to support rural jobs as well as providing trickle down benefits for local economies.

As home to more than half of the Trust's path network, Skye is a major focus. Here, the impact of boots on the ground and extremes of weather mean that the paths that have evolved over the years are prone to erosion.

At the time of our footpath audit, the worst cases of path erosion were on Skye – especially on Blà Bheinn and Druim Hain which had become metres-wide gullies of scree. We are now working our way through the major repair work required, with contract path repair teams in place

on Skye every autumn and winter since 2014.

With the scale of the path work increasing over the next two years, the Trust has employed local path consultant Donald Mackenzie to project manage the work on Skye and help develop opportunities for training and volunteering. The project will focus on the paths from Sligachan to Coruisk, and the route up Beinn Dearg Mheadhonach in the Red Cuillin.

Meanwhile, in Assynt, we are project managing a two-year footpath restoration project on Suilven. One of Britain's most majestic mountains, Suilven is owned and managed by the Assynt Foundation, a community land group with which the Trust works in partnership as part of the wider Coigach & Assynt Living Landscape Partnership (CALLP).

We've been busy elsewhere too. Nevis saw major repair work on the path through Steall Gorge following a massive rockfall in October 2016, while we have committed to substantial work on various sections of path at Quinag over the next five years, again through the CALLP Scheme.

Work parties

Meanwhile, the Trust's conservation work parties remain as popular as ever. In 2016, we had 32 organised work parties, plus a wide range of volunteering by individuals and local members groups.

Work parties mostly take place on Trust properties, although visits were also made to partners such as CALLP, community-owned estates that the Trust is involved with, plus like-minded estates where the Trust assists with conservation management.

During 2016, we saw 659 days of volunteering provided by 150 different people across the main programme of work parties. It's an impressive figure that excludes volunteering done by John Muir Award participants on Trust properties, and volunteers with local groups away from our properties.

From path resurfacing and beach cleans at Sandwood and species monitoring at Nevis to removal of invasive species from places such as Knoydart, Quinag and Corrour Estate, teams of dedicated volunteers continue to make an invaluable contribution to wild places.

Tree planting and preparation has been a particular theme of late, with many days work carried out at Glenlude nursery processing seeds, pricking them out and weeding. Between Glenlude and Li & Coire Dhorrcail, we planted around 4,500 native trees in 2016, while a further 10,000 trees were weeded around at our Knoydart property – also now home to a tree nursery at Inbhir Dhorrcail.



Chris Goodman is the Trust's Footpath Project Officer, while Sandy Maxwell is the Trust's Volunteer Coordinator.



PHOTOGRAPH: JAMES BROWNHILL

Footpath restoration



Conserving wild places

The John Muir Trust thanks Mountain Equipment for supporting our land team out in the field as they work through all seasons to maintain mountain routes and expand wild habitats.

Photograph of the Trust's Nevis Manager, Alison Austin, at Ben Nevis taken by Lukasz Warzecha for Mountain Equipment.

