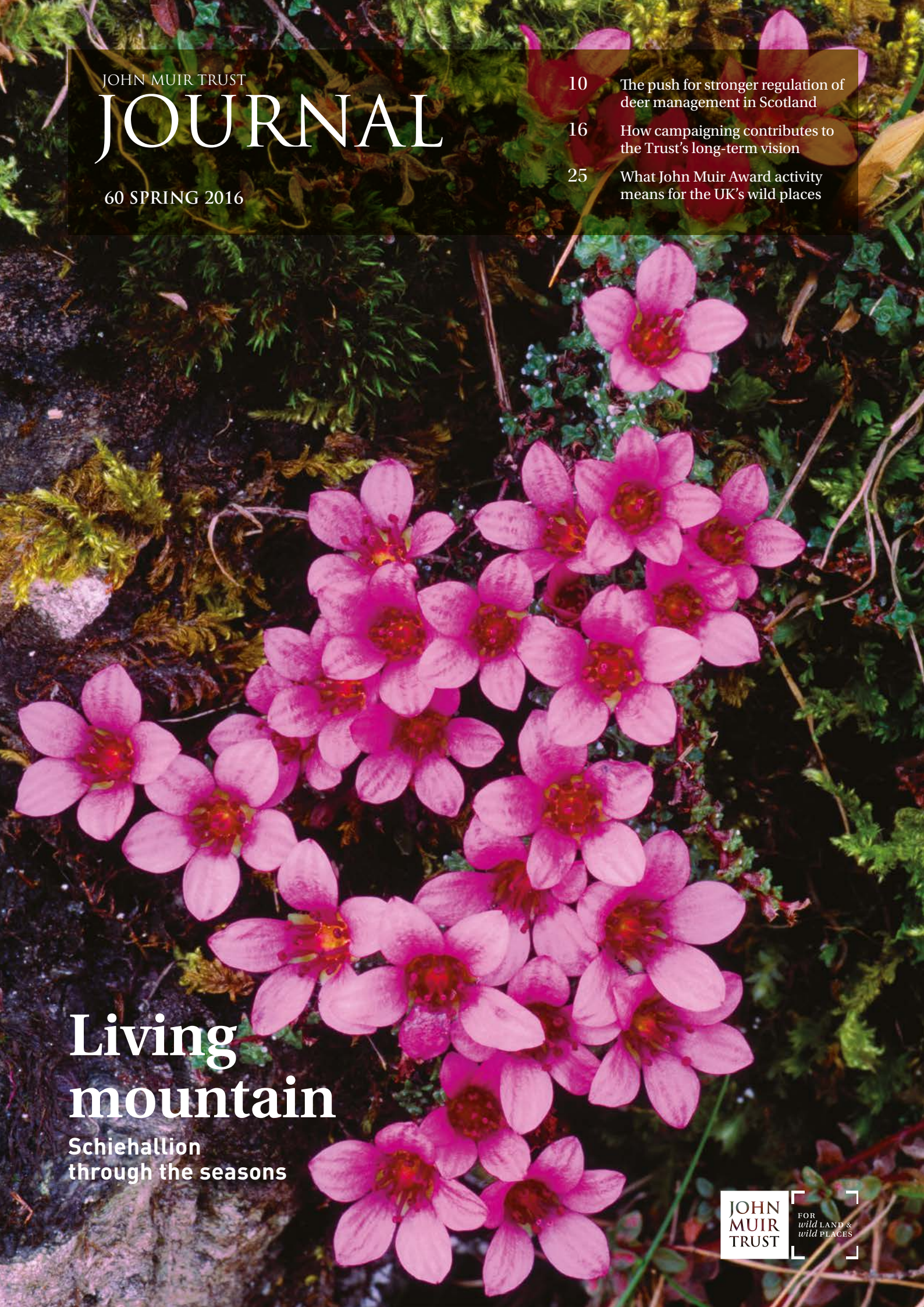
JOHN MUIR TRUST
JOURNAL
60 SPRING 2016



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COVER: PURPLE SAXIFRAGE, LAURIE CAMPBELL

JOURNAL 60, SPRING 2016

Editor:
Richard Rowe journal@johnmuirtrust.org

Managing editor:
Alan McCombes alan.mccombes@johnmuirtrust.org

Design and production:
Connect Communications www.connectcommunications.co.uk

This journal is printed on Cocoon 100 uncoated stock, a recycled grade paper containing 100% post-consumer waste and manufactured at a mill accredited with ISO 14001 environmental management standard. The pulp used in this product is bleached using an Elemental Chlorine Free (ECF) process. We use a Scottish printer, J Thomson Colour, which has excellent environmental credentials, achieving environmental standard ISO4001 plus FSC and PEFC standards all in 2006.

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The John Muir Trust is a Scottish charitable company limited by guarantee. Registered office: Tower House, Station Road, Pitlochry PH16 5AN

Charity No. SC002061.
Company No. SC081620

HEAD OFFICE

John Muir Trust
Tower House
Station Road
Pitlochry
Perthshire PH16 5AN

t. 01796 470 080
w. www.johnmuirtrust.org

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From the chief executive

WHETHER you are a regular or first-time reader, I'd like to extend a warm welcome to this spring edition of the John Muir Trust Journal. Our regular readers are mostly members and that is certainly the best way to receive this publication. If not yet a member, please do consider joining as it's the best way to support our work to protect wild places.

As the impact of nature conservation is often measured in years, decades and even centuries, we focus on issues and places where we have a long-term involvement. It's good to remind ourselves of that fact when taking land use and policy decisions. After all, what feels right today may not be in decades to come. And whether over the short- or long-term, it's also important to demonstrate the impacts of our work – something we have tried to do through a variety of articles in this edition of the Journal.

Some of that work can easily be seen when visiting one of our properties, including Schiehallion in Highland Perthshire. In these pages, Liz Auty, our property manager at Schiehallion, highlights a year in the life of the Fairy Hill of the Caledonians, and her priorities through the seasons.

There are persistent issues that we return to with regularity, and deer management is certainly one of them. In the years following World War Two, when the deer population in Scotland was about 100,000, the last of the major deer management inquiries led to the creation of the Red Deer Commission – a body with powers to intervene where need be to protect agriculture and forestry.

The advice of its then official adviser, Dr Frank Fraser Darling, was that this population was too large and an optimum number might be closer to 60,000. Since then, red deer numbers have more than trebled, while with increasing populations of roe, sika and fallow deer, the total deer population in Scotland now stands at well over half a million. As the current Scottish Government attempts to get to grips with the issues, Mike Daniels, the Trust's head of land management, outlines the case for more radical reform of deer management.

We also look at the impact of our campaigning efforts – work that has won plenty of accolades in recent years. At the very sharp end, our campaigning has prevented the development of several large-scale wind farms that would have irretrievably destroyed the wild character of surrounding landscapes, not to mention important wildlife habitat. This is sometimes uncomfortable territory to occupy and not everyone shares our values and objectives. Mel Nicoll, the Trust's campaign co-ordinator, describes how our work contributes to what is a long-term vision for wild places.

I recently wrote an article for the Chartered Institute of Ecology and Environmental Management about helping people engage with nature, especially those who have formidable barriers to overcome. If society as a whole values nature and wild places they are much more likely to be protected for the common good.

Within the article I make reference to our own John Muir Award scheme, while elsewhere in this edition we share some of the impact that scheme has through its collective action on the ground. I suspect you will be impressed by the headline statistics it has created.

And if all of the above leaves you pondering, relax and just marvel at the sheer majesty of our wild landscapes as we share the winning entries from a Trust-sponsored award category in this year's Scottish Landscape Photographer of the Year competition.

Finally, I'd like to thank Journal editor Rich Rowe who is standing aside after seven years at the helm. Rich has been an impressive and talented editor of our flagship publication and will be sadly missed. We wish him all the very best for the future.

Stuart Brooks
Chief executive, John Muir Trust

Red deer numbers have spiralled out of control in Scotland

PHOTOGRAPH: PETER CAIRNS/2020VISION

Footpath work continued throughout the winter despite the wild conditions

PHOTOGRAPH: CHRIS GOODMAN

Challenging conditions fail to deter Skye path workers

Despite the succession of fierce Atlantic storms that battered the north west of Scotland over the winter months, local workers have managed to complete phase one of a major footpath restoration project on the Isle of Skye.

The Druim Hain section of the path, which connects Sligachan with Loch Coruisk, now has a new flight of steps and drainage features to help combat severe gullying.

The work was carried out by local employees of the Arran Footpath Partnership under the supervision of the John Muir Trust. As well as battling the elements, the team had to undertake a gruelling two-hour walk-in each day to reach the site over the four-month period of work.

"The guys were great," said Chris Goodman, Trust footpath officer. "Even in the teeth of the fierce storms that really hammered north west Scotland over the four months of the initial project, they continued working on all but a handful of days."

Repairs to the 340-metre stretch of path cost around £200/metre – an exceptionally high figure because of the distances and terrain. To find out more, or to make a donation, visit **www.johnmuirtrust.org/wildways**

Trust holds inaugural Welsh Gathering

The inaugural John Muir Trust Welsh Gathering has been called for Saturday 1 October 2016 at Plas y Brenin, Capel Curig. Speakers confirmed at time of writing include Trust chief executive Stuart Brooks and Dr Steve Carver of the University of Leeds Wildland Research Institute, who will talk about wild land mapping with a special focus on Wales.

After a relaxed lunch there will be an open discussion session, guided by the guest speakers, to explore ways that the Trust and others can help manage and reinstate wild landscapes across Wales.

To help cover costs we will be asking for £10 per head (including tea/coffee and lunch). Those who'd like to make a weekend of it can stay over at Plas y Brenin itself, or in nearby Capel Curig.

For more information, contact Peter Foulkes on **01650 511821** or **peter.foulkes249@btinternet.com**

Positive developments in Scottish Parliament's new Land Reform Bill

The Scottish Land Reform Bill has now passed its third and final scrutiny stage. The Trust has expressed its support for the key measures of the bill, which include renewed support and encouragement for community ownership, and greater transparency in land ownership.

Significantly, the bill has now been supplemented by several amendments which can pave the way for stronger and more consistent regulation of deer numbers.

Mike Daniels, head of land management for the Trust, said: "We welcome these changes as a step in the right direction to ensure that public as well as private interests are taken properly into account. Managing deer at high densities over vast areas of wild land, solely to provide a surplus of stags to be shot for a few months each year, has caused too much environmental damage for too long."

Helicopters played an important role in airlifting material

PHOTOGRAPH: BLAIR FYFFE

Nevis summit restored AND higher

A two-year infrastructure restoration project on Britain's highest mountain has been completed – with surprising results. The work, carried out by the Trust and the Nevis Landscape Partnership in conjunction with local contractor Stonescape, enabled a new Ordnance Survey measurement which found that the height of the mountain had risen by a metre to 1,345m.

The final phase of the work saw an upgrade of 16 of the 23 navigational cairns, the summit shelter and the triangulation point on top of the Ben. The work was jointly funded by the Heritage Lottery, Ordnance Survey and the John Muir Trust.

PHOTOGRAPH: ZEKI BASAN

Funding life-changing adventures

The Trust is delighted to announce that this year's Bill Wallace Grant will fund six exciting conservation adventures, from a study of endangered blue-eyed black lemurs in Madagascar to a reforestation and schools project in Uganda.

The grant was launched in 2007 as a memorial to the late Bill Wallace, a real Trust stalwart who played an important role in the early development of the organisation. It is used to help people seek out life-changing experiences in wild places.

The six successful applicants this year are:

- Alex Fall from Hampshire, who will gather raptor data as part of an independent expedition to the Rewilding Europe region of the Rhodope Bulgarian mountain range.
- 16-year-old Zeki Basan (pictured) from Moray, who will walk and make a film of Scotland's newest long-distance route, the John Muir Way
- Jesse Dufton, a Loughborough-based registered blind climber, who will measure and record data on Greenland's ice caps and glaciers
- Caitlin Eschmann from Bristol, who will study the endangered blue-eyed black lemur in Madagascar
- Emma Vicary from Falmouth, who will help develop elephant conservation through a honey bee project in Kenya
- Ninette Gray, who will take a group of 15 Northumberland Scouts to help a reforestation and schools project in Uganda

The John Muir Trust manages the Bill Wallace Grant for free – all funding raised goes to adventures and expeditions that benefit people and places. You can apply for, or support the Bill Wallace Grant at **www.johnmuirtrust.org/grants-and-awards/the-bill-wallace-grant**

Inspirational fundraising expeditions from the Hebrides to the Rockies

The Trust is fortunate to have dedicated supporters willing to push themselves to the limits to raise funds. This spring and summer sees two inspirational examples.

Trust member David Broom will undertake an unsupported, continuous run through the wild landscapes of the Outer Hebrides, from Barra in the south to the Butt of Lewis in the north, aiming to link the highest places on each island. Wild camping and carrying all necessary food and equipment, David's trip will involve about 150 miles of wild running through some extremely rugged landscapes, and will take about a week to complete. You can support David's efforts at **www.justgiving.com/David-Broom2**

Meanwhile, James Boulter – whom some might know from his Backpackingbongos blog (pictured below) – will walk all 486 miles of the Colorado Trail. Starting in August, James will take six weeks to walk, unsupported, from Denver to Durango, passing through eight mountain ranges and including a cumulative 89,000 feet of ascent and descent. It's a major physical challenge, with all money raised going to the John Muir Award – read more and sponsor James at **www.givey.com/coloradotrail**

If these exploits inspire you to do some fundraising of your own, we'd love to hear from you! Contact Adam Pinder on **01796 484 965**, or **adam.pinder@johnmuirtrust.org**

PHOTOGRAPH: JOHN MUIR TRUST

Anna Levin is one of many authors to have appeared at the Wild Space

Wild Space set to break 100k milestone

Having opened just three years ago, the Trust's Wild Space visitor centre in Pitlochry is ready to welcome its 100,000th visitor this summer. This means that in an average month, 2,500 people come through the centre's doors to learn about the work of the Trust.

Wild Space has also emerged as an important cultural hub in Highland Perthshire, having displayed around 20 exhibitions in the Alan Reece Gallery, from big names to up-and-coming artists. The centre has also hosted a diverse range of events, including talks, book launches, readings, special receptions and even a traditional music concert.

Over 200 people have signed up to join the Trust during their visit to Wild Space – including seven new life members – with countless more inspired to keep in touch. "We're especially heartened by the rising number of younger visitors," said Jane Grimley, Wild Space manager. "There's a really energetic feel here that resonates with the wider work of the Trust."

Several wind farm developments near the Cairngorms National Park have been rejected or withdrawn

PHOTOGRAPH: CNPA/ANGUS FINDLAY

Wild land latest: many positive signs

Following the Scottish Government's decision last November to refuse consent for Glencassley and Sallachy, in Wild Land Area 34, Highland Council planning officials, after consultation with local councillors, have decided to oppose the Caplich wind farm application in the same area.

The fate of the proposed wind farm – which would involve the erection of 20 turbines up to 132 metres high, plus the construction of an extensive network of access roads – is now in the hands of the Scottish Government. Nonetheless, the council's opposition to Caplich means we are another step closer to ensuring that wild land is protected for future generations.

On a less positive note, Highland councillors have supported their planning officer's recommendation not to object to an extension to the Gordonbush wind farm (on the boundary of Wild Land Area 35 near the east coast of Sutherland), subject to the developer's agreement to remove one turbine and reduce the height of another. Again, the final decision now rests with Scottish Government ministers.

Elsewhere, Highland councillors have unanimously rejected an application to repower the already consented Tom nan Clach wind farm, north of the Cairngorms. The redesign would reduce the number of turbines from 17 to 13, while spreading them over a wide area and increasing their height from 110m to 125m. The developer is appealing the decision.

The Trust opposed the repowering proposal for a number of reasons, including the cumulative impact on the Cairngorms National Park. Elsewhere, to the south of the Cairngorms National Park, a proposed wind farm on Macritch Hill in Angus has been withdrawn, with the developer Eneco Wind UK citing changes to the subsidy regime as the main reason.

The Trust has also raised concerns about the nearby 14-turbine Saddle Hill wind farm, which, following an objection from Angus Council, will now go through further planning process.

Trust properties add to national seed project

Holly, alder and downy birch seeds collected from Trust properties have been added to the National Tree Seed Project as part of an exciting tie-in with the Royal Botanic Gardens, Kew.

Scotland's native woodlands are a fragment of their former glory – covering just four per cent of the land – and typically consist of scattered individuals or clumps of trees clinging on in gorges or crags, away from the attentions of deer and sheep.

The seeds were collected across the Trust's properties in Skye, at Quinag and Schiehallion. At Schiehallion alone, property manager Liz Auty and our intern, Jen Derr from Patagonia Inc in the US, collected, dried and sorted more than 10,000 downy birch seeds in late September, followed by a collection of alder seeds.

The Trust plans further collections this coming autumn, with the hope that the project and information gathered will help raise the profile of threatened native trees, and provide useful genetic information to ensure their future survival.

Stronelairg appeal hearing set for May

As we go to press, the Trust awaits the outcome of an appeal by the Scottish Government and SSE against the Court of Session ruling last December, in favour of the Trust, to 'reduce' the 2014 decision by Scottish Ministers to approve the development. The appeal hearing is expected to take place over the period 4–6 May.

Our ability to defend the great central plateau of the Monadhliath Mountains from the proposed 67-turbine development has been enabled by the continuing generosity of Trust members. The Trust is 'cross-appealing' the Court's refusal of a Protective Expenses Order. If we win this, that will make a significant difference to our liabilities in the event of losing the appeal.

In the meantime, we'd like to thank everyone who has pledged or donated money so far, and for your messages of encouragement.

News in brief

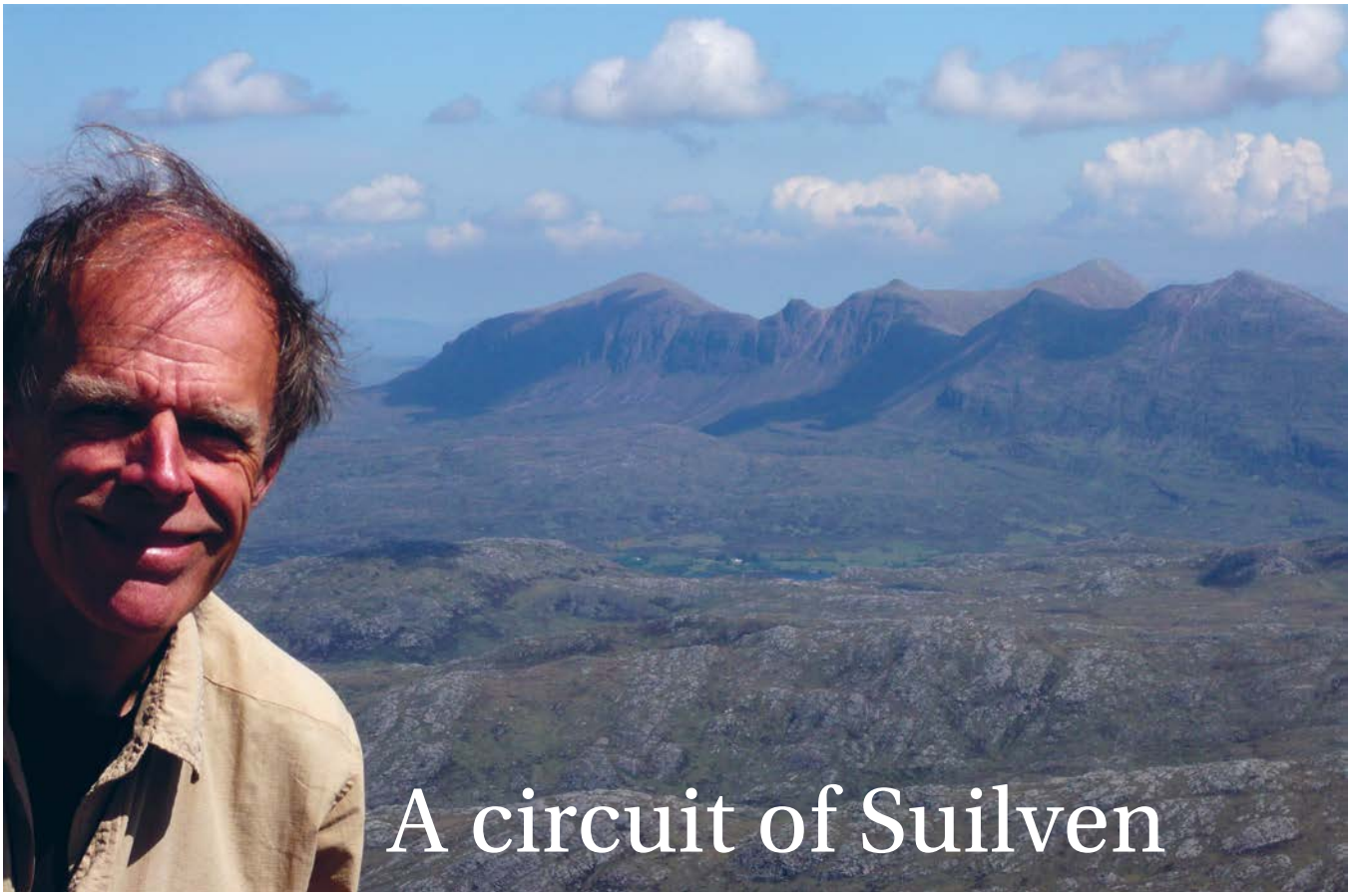
• In recent months the Trust has submitted objections to three proposed wind farms in South Ayrshire at Balunton Hill, Chirmorie and Altercannoch, which would have an impact on both Wild Land Area 1 (Merrick) and on peatlands.

• **Tidal and weather conditions at Sandwood Bay have once again revealed the remains of an engine belonging to a Spitfire that crash-landed on the beach in September 1941. The pilot, Sergeant Michael Kilburn from 124 Squadron at RAF Castletown, escaped uninjured.**

• The Trust has been accepted onto a grant programme from Google to help non-profit organisations work more efficiently, and get supporters to take action. The Google Ad Grant could be worth as much as £70,000 a year in free online advertising.

Thank you

To those members that completed the recent survey on potentially reducing or ceasing production of Members' News. The results show it to be an important information source for many and we will continue at this time to produce two a year.



PHOTOGRAPH: JAMES BROWNHILL

A circuit of Suilven

We recently asked members to share stories and poems about their experiences in wild places … and boy did you deliver. Here's one of our favourites so far – the tale of a walk up one of Scotland's most celebrated mountains by **James Brownhill**

IT'S JUNE. One week to go to the John Muir Trust Volunteers conservation work party in Assynt. Good chance to meet up with co-volunteers from previous years. Check the weather. Fantastic, the forecast looks dry. I've a plan: drive up to Lochinver one day early and walk up Suilven.

And so I found myself waking early one morning in Lochinver with the sun not yet risen in a cloudless sky. It was a short drive to the walker's car park at Glen Canisp Lodge with the first views of the rounded silhouette of Suilven, a name derived from the Norse word for 'pillar'. I was alone with nature and the challenge of a complete circuit of Suilven north to south lay ahead.

At first, it was easy walking along a Land Rover track passing Loch Druim Suardalain, bounded on all sides by extensive spreads of bright yellow gorse. But the best views were further up the glen: flanked on the left by the angular summit of Canisp wearing a belt of low level stratus cloud that was still hanging on after the chill of the early morning; and on the right, the towering side of Suilven now illuminated by the mid-morning sun.

Once the track crossed the Abhainn Na Clach Airigh burn the view of Suilven was full broadside to its northern flanks. A small cairn indicated where the path to Suilven began. Initially, a small ascent led to a flat, boggy section cradling over 20 lochans – a scene typical of a landscape dominated by three-million-year-old Lewisian gneiss. It was Loch a Choire Dhuibh that offered the most attractive stop for a first bite of lunch.

Post-lunch the walking was only one way: up. And very steeply so, following a natural drainage gully ultimately to Bealach Mor between Suilven's two summits: the rounded Caisteal Liath (the Grey Castle) to the west and Meall Meadhonach (the Middle Round Hill) to the east. The ascent was relentless and often the highly-eroded path mingled with the drainage gully to the point that the two were indiscernible.

Once on the bealach, it was easy to reach Suilven's summit at 731m. It was surprisingly flat and covered in verdant grass. Beyond the green grass lay only blue sky, and to the west blue sea merging into even more blue sky. It was like being in a green upholstered, open cockpit airplane flying trans-Atlantic at 35,000 feet.

I stayed 'onboard' for two hours in windless, midge-free heaven admiring the views of neighbouring and distant Sutherland summits, before some more 'passengers' boarded. After a chat, I began the descent on the southern side. This path was even more badly eroded, effectively a human-created scree. I was glad to be going down, rather than up.

Once on the flat, it was a wonderful ramble alongside Fionn Loch to the magnificent Kirkaig Falls with views back to mighty Suilven. From the falls a simple northerly bearing amongst small hills and lochans led back to the gorse landmarks of Glen Canisp Lodge, and the end of 24km of sheer exhilaration.

Tomorrow is the John Muir Trust work party. I'll be pulling down deer fences, repairing footpaths, or working in the Little Assynt tree nursery. It'll be fun working with fellow volunteers.

Further info

Please do continue to submit your short stories or poems, and we'll publish the best ones in the Journal, as well as online. For more details, visit **www.johnmuirtrust.org/wild-moments**

Following on from James's story, we are pleased to report that our Suilven path appeal has now reached its target. Many thanks to all who contributed.

PHOTOGRAPH: PETER CAIRNS/2020 VISION

A time of change

Mike Daniels outlines why the Trust seeks stronger regulation of deer management in Scotland and why, in the absence of natural predators, it will continue with its conservation stalking model

ALL TRUST MEMBERS who have read the Journal over the years will know that deer impacts are one of the most significant threats to the ecology of wild land in Scotland, and that deer management is one of the most contentious areas the Trust is involved with. Articles in previous issues (see Spring 2010) and our deer management policy have explained the rationale behind why and how the Trust manages deer on its land, and highlighted the fact that this sometimes puts the Trust in direct conflict with 'traditional' deer manager neighbours.

Quite simply, there are two visions for deer management in Scotland. First, the traditional Victorian model where deer are managed to produce a surplus of trophy stags to be shot for sport over a few weeks in the autumn. This model is based typically on a relatively small number of wealthy guests hiring a stalker and ghillie and spending a day on the hill in pursuit of their quarry. Culturally, this is an iconic part of Scotland's land management history; undoubtedly there are associated economic spin-offs. Accommodation is rented and stalkers and ghillies employed, while wider economic benefits are generated from venison and the supply of hunting gear and equipment.

But there are also significant societal costs associated with the traditional deer management model. Ensuring a surplus of accessible and suitable stags relies on high deer densities, typically more than 15 deer – and often more than 20, and even up to 40 – per square kilometre on large areas of land. As a result, the overall density for the whole of Scotland is around five deer per km^2. In contrast, the average red deer density per square kilometre across Europe is 0.32.

The economic cost to Scotland of fencing, public sector culling and road accidents involving deer has been estimated at £13 million a year (see p12). The ecological costs meanwhile cannot be quantified in financial terms, but are far-reaching: dozens of our most important European protected sites, Special Areas of Conservation, are in unfavourable condition as a result of deer browsing and trampling. Across much of Europe, woodlands commonly regenerate without fences, with hunting taking place in a multiple land-use environment. But over large areas of wild land in Scotland, trees can only grow behind six-foot-high deer fences within what is effectively a treeless, deer-stalking monoculture.

Despite these costs, the current social and economic drivers encourage landowners and stalkers to maintain or increase high deer numbers. The valuation of estates is partly based on the average number of sporting stags shot per year – with each one adding £40-£50,000 to the value of the property. Scotland is the only country in the world with full-time resident deer stalking as a

profession. These jobs are entirely dependent on the availability of 'shootable stags' during the autumn hunting season. Currently, regulation to reduce deer numbers and prevent ecological damage is weak (with the results clear from the graph on p12).

The alternative, in the absence of natural predators, is the conservation stalking model, where native deer are managed at a much lower density. Rather than focussing on a small proportion of the population (sporting stags) for a small window of the year, at a time when they are high on the hillsides, conservation management simulates wild predators by hunting all year – especially in the winter and sometimes at night – when deer come down to lower grounds and are more accessible.

This is the model supported by publicly funded and conservation charity landowners including Forest Enterprise, Scottish Natural Heritage, the Scottish Wildlife Trust, RSPB, the National Trust for Scotland, Trees for Life, the John Muir Trust, plus a small but growing number of private landowners such as the Corrour Estate (Lochaber) and Glenfeshie (Cairngorms). Despite claims to the contrary, this model also generates significant economic activity in fragile rural areas. For example, the Trust's annual cull of 400 red deer helps support four full-time staff jobs, five self-employed contractors and two neighbouring estate stalkers. In addition, a wide range of stalking

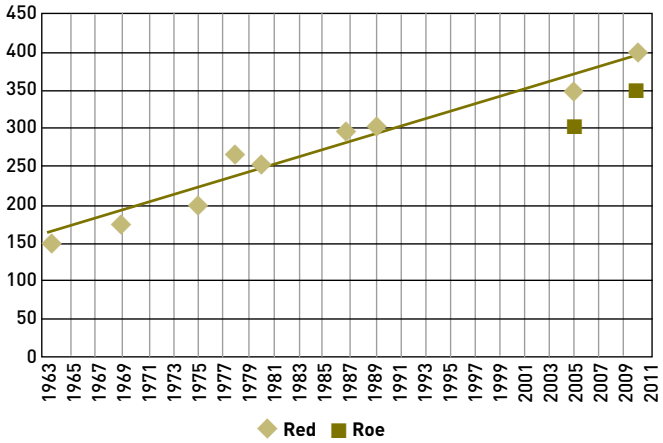
Numbers game: red deer stag in woodland (main); rutting stags (inset)

→ continued

Published impacts of deer densities in Scotland

Impacts	Costs per annum
Deer vehicle collisions	£4.9m (source: SNH)
Deer fencing costs	£2.3m (source Scottish Parliament)
Forestry Enterprise Scotland deer culling and fencing costs	£6m

Estimates of deer numbers and trends in Scotland

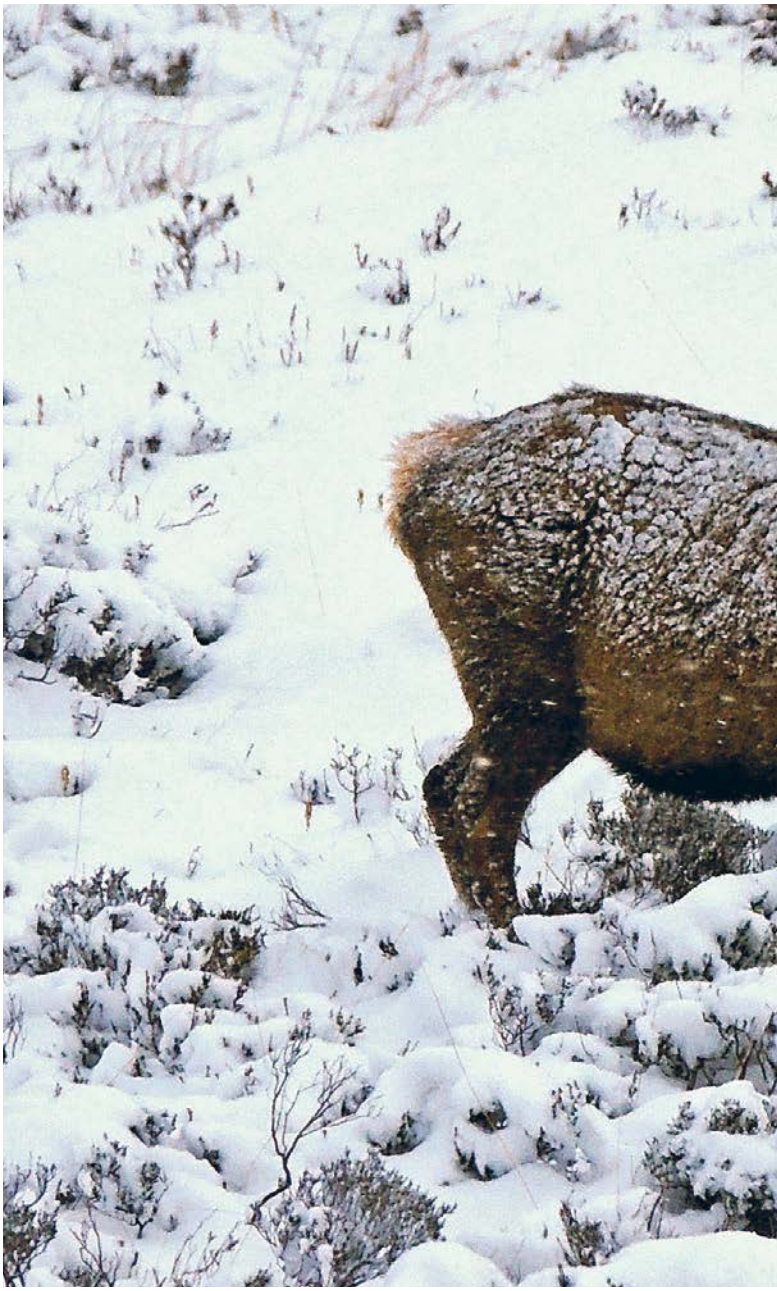


Deer numbers in hundreds of thousands

Source: Scottish Parliament

Culture clash – traditional versus conservation models of deer management

Traditional deer management	Conservation deer management
Surplus for sport **Low cull** focus on stags **High density** (>15km^2)	**'Natural'** – mimic missing predators **High cull** across ages/sexes **Low density** (<5km^2)
Intense management infrastructure (roads, fences, ATV), feeding stags	**Low impact** presumption against tracks, regeneration without fences, ATVs
Professional stalkers – livelihood (and tips) based on **'sporting stags'**	Conservationists – paid for **ecological** enhancement, contractors
Private landowner interest – minimal state **interference**	Deer are a public asset (good and bad) need state **regulation**
Hunting ethic only in open seasons 'Honour deer' use all venison	**Natural ethic** simulate wolf (night, all year), leave carcasses for eagles



PHOTOGRAPH:: FRAN LOCKHART

guests, including local people, help with the cull.

The two models are not mutually exclusive. On at least two of our properties, full-time professional stalkers from neighbouring estates carry out the bulk of our deer cull. Similarly, those private estates that have adopted the lower deer density model continue to 'let stags' for sport shooting, with hunters happy to stalk in a low-deer-density environment. But there are fundamental cultural differences in the two approaches.

It is universally acknowledged that landowners do not get wealthy from owning 'deer forests'; they own deer forests because they are wealthy. Most traditional sporting estates are expensive to run, and steeped in a set of beliefs, customs and unwritten rules many of which are at odds with conservation deer management (see Culture clash table above).

And because it does not conform to this traditional culture, conservation deer management often finds itself under attack from some wealthy, influential and passionate people. Over the years, private sporting estates and their gamekeepers have used the media to seek to undermine the efforts of government agencies and conservation charities to control deer numbers, generating headlines that typically involve the words 'massacre' or 'slaughter'.

In autumn 2015 the Trust culled 86 stags at Li and Coire Dhorrcail. This cull was higher than usual and due to difficulties of extraction in season – when the deer are higher up the hill – we had to leave the majority of carcasses. A deer management plan for the wider area is now being drafted; our preference is to cull fewer deer, out of season when carcasses can be more easily extracted from this difficult terrain.

Of the 400 deer we cull across nine properties, we extract the majority for sale to game dealers, and on into the human food chain. Where extraction is difficult but still practical, we take the main venison cuts from culled deer for domestic consumption. We also leave whole carcasses for eagles and other wildlife as well as for recycling nutrients. At some properties, the Trust and the crofting townships on our land have received payments from the government for leaving deer carcasses for eagles.

For context, thousands of deer die on the hill every year in Scotland due to a lack of forage and woodland shelter in the winter. These published figures are based on voluntary data

Many deer are lost during the winter months due to a lack of forage and woodland cover

collected by Scottish Natural Heritage (SNH) and are widely accepted as an underestimate – many dead deer are not discovered and many others are unreported. Traditional landowners and gamekeepers who oppose the Trust's culling policy clearly have no objection on principle to killing deer: sporting estates account for 80 per cent of all red deer shot in Scotland annually (55,000 out of a total of 67,000). Despite the lurid headlines, opposition to conservation deer management is not about numbers, but reflects the hostility of many in the traditional sector towards the practice of culling of deer for ecological reasons rather than for sport.

UNDER THE SPOTLIGHT

Deer management has increasingly been placed under the political spotlight in Scotland. Firstly, the new Land Reform Bill, just passed by the Scottish Parliament, contains two sections relating to deer management: the reinstatement of business rates for sporting estates (which were abolished in 1994), and changes to deer management planning. At the final reading of the bill at the end of March, MSPs agreed to several amendments suggested by the John Muir Trust, the Scottish Wildlife Trust and the RSPB which will strengthen the regulatory powers of SNH.

Secondly, SNH itself has set up a panel to look at authorisations for deer culling in the close season. And thirdly, the Rural Affairs, Climate Change and Environment Committee has scheduled a review of deer management by the end of the year, which will specifically focus on the functioning of deer management planning and deer legislation to protect the natural heritage.

Parliamentary interest in deer management in Scotland is not new. Following the growth of deer forests in the nineteenth century, no fewer than seven government-appointed inquiries sought to address the damage caused to agriculture by marauding red deer. The last of these inquiries ultimately led to the creation of the Red Deer Commission in 1959, with powers to intervene to protect agriculture and forestry.

At that time, the red deer population already stood at 150,000 – two and a half times larger than the optimum figure of 60,000 recommended by eminent conservationist Frank Fraser Darling, the then official adviser to the Red Deer Commission.

Thirty years later, the population had risen to 300,000. In 1996,

→ continued

the Red Deer Commission became the Deer Commission for Scotland, with a broader remit which included other deer species and ecological protection. But still numbers continued to climb. In 2010, after 50 years of trying and failing to tackle growing deer numbers through voluntary persuasion, the Deer Commission for Scotland merged with Scottish Natural Heritage, as red deer numbers reached 400,000.

Recent legislation has tried to square the circle by trying to reconcile two conflicting demands: the insistence of private sporting estates on high deer densities, and the public interest in tackling the environmental damage caused by such densities. There are public policy objectives for biodiversity, woodland expansion, designated sites and peatland condition, but none for how many sporting stags must be produced or shot. Statutory deer management – essentially a government agency setting cull targets for landowners as is the norm across the rest of Europe – would make delivering public objectives much more straightforward. But vigorous objections from powerful and influential traditional deer management interests have to date prevailed in resisting significant change.

All deer managers understand we are in a time of change. While progress is undoubtedly being made on processes, this needs to lead to action to improve habitats and the health of deer. In the absence of predators there will always to be a need to manage deer. The majority are culled by private estates.

The prospect of lower deer densities and a regulator taking a more active role in setting culls and monitoring impacts shouldn't be seen as a threat – but rather a transition to a new model of deer management that delivers a much greater range of public benefits, for a greater number of people. If we are to reverse centuries of sustained damage to Scotland's wild lands, lower deer densities are essential.

Further info
Our deer management policy can be read in full at **bit.ly/1U4rfY7**

About the author
Mike Daniels is the Trust's head of land management. He can be contacted at **mike.daniels@johnmuirtrust.org**

PHOTOGRAPH: ALAN MCCOMBES

PHOTOGRAPH: JOHN MUIR TRUST

Wild vision: healthy woodland in Glen Feshie (above); the John Muir Trust land team, with Mike Daniels centre front

Why fencing is no panacea

The Trust is often asked why we don't just erect fencing to protect woodland. So what exactly is our attitude to the use of exclosures, as they are known?

First, we recognise that in certain situations fencing can be a useful tool for reducing grazing pressure, particularly around plantations of nursery-grown trees. On our Knoydart and Skye properties, we have used fencing to exclude deer and other grazing animals.

However, over time we have learnt that fencing treats the symptoms of the problem rather than the cause – too high deer densities. Also fencing does not remove the need to cull deer. Where we have fenced, we are duty bound on animal welfare grounds to take a 'compensatory cull' – i.e. to cull those deer that relied on the fenced area for shelter or food – otherwise those animals will be adversely affected.

PHOTOGRAPH: LESTER STANDEN

Deer fence, Knoydart

If the deer population outside the fence doesn't change then once a fence goes up there will never be a good time to take it down, because the trees, or their seedlings, will always be at risk of damage while deer numbers remain so high.

Such high intensity grazing and trampling damages not just woodland but the entire ecosystem, from arctic-alpine plants on the high tops to blanket bogs further down. Therefore if fencing is the real solution, it needs to be carried out on a landscape scale – in other words, by fencing off entire properties. This would be a massive and costly undertaking.

Finally, deer fences themselves are not impact free: they restrict the movements of wildlife and people, and are especially hazardous for larger birds, including the endangered capercaillie.

Pursuing a vision

Mel Nicoll highlights how the Trust's dedicated campaign work – and the invaluable support of members – contributes to our long-term vision for protecting and enhancing wild places

FIVE YEARS AFTER delivering our petitions calling for better protection for wild land to the Scottish and UK Parliaments, my eye is still drawn to the folder on a shelf in my office that contains copies of thousands of signatures from members, supporters, or simply people who just feel passionately about the Trust's vision.

Today, that passion and commitment remains as strong as ever, this time reflected in the phenomenal backing received throughout the Stronelairg Judicial Review process. To win a court case to protect wild land when pitted against the Scottish Government and Scottish and Southern Energy (SSE) – one of the 'big six' energy companies – was a remarkable result. That case could simply not have been fought without the financial backing and considerable support of our members.

And when we advised that the government and SSE were appealing the Judicial Review decision, we were again overwhelmed by supporters' generosity. There was further encouragement too in being nominated for the third year in the row, and subsequently winning, the Outdoor Campaigner of the Year accolade at The Great Outdoors Awards 2015. It all adds to that sense of people being behind us.

As a charity dedicated to protecting and enhancing wild places, campaigning is at the heart of what the Trust stands for; indeed, since the Trust was founded in 1983, it has never been shy of taking the battle for wild land into the corridors of power. In the 30-plus years since, the Trust's voice has grown ever stronger, in part through demonstrating what can be achieved for wild land at

Wild assets (clockwise from main): greylag geese at nest site; the Trust's Wild Land Areas 34 campaign has won successes; the area of wild land under threat from a proposed wind farm at Stronelairg

PHOTOGRAPH: MARK HAMBLIN/2020VISION

'Since its foundation, the Trust has never been shy of taking the battle for wild land into the corridors of power'

PHOTOGRAPH: KEVIN LELLAND

our own properties, but also thanks to the vital role played by our more than 25,000 members and supporters.

Periodic surveys of that membership, alongside regular correspondence, demonstrate that the campaigning ethos of our founding members has not been lost, and that there remains a strong appetite for the Trust to continue to speak up for wild land.

Since the Trust submitted petitions to the Scottish and UK Parliaments calling for better protection for wild land, we, alongside others, have achieved much. Key milestones have included the publication in 2014 of the Scottish Natural Heritage (SNH) Wild Land Areas map, and its subsequent recognition in Scottish Government planning policy as a constraint on proposed onshore wind developments.

CONTINUED VIGILANCE

After this historic breakthrough, there was little time to draw breath as we faced a wave of applications for developments that we believed ran counter to that new policy. Several cases with which we've been involved have been long-running, including the Glencassley and Sallachy wind farm proposals in Sutherland – the focus of our recent Wild Land Area 34 campaign. Thankfully, these developments were rejected by the Scottish Government late last year.

At the time of writing, there are several cases – proposed wind farms at Caplich, Creag Riabhach, Cairn Duhie and Crossburns – that we will watch closely over the short- to medium-term. However, the indications from recent Scottish Government and some local authorities' decisions suggest that the direction of travel in wild land protection has shifted, giving us real hope that decisions will continue to be made in favour of wild land. It's a hugely positive development. If the loss of wild land is halted, we can begin to focus more on the benefits wild land can provide to people and nature, and how that wild land can be enhanced.

Although the Wild Land Areas map is specific to Scotland, the

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PHOTOGRAPH: JOHN MUIR TRUST

Visualisation of an early design of the approved Muaitheabhal windfarm; Muir quote on the walls of the Scottish Parliament (below)

breakthrough has potentially wider resonance across the UK and beyond, by illustrating what can be achieved for wild places throughout these isles.

We firmly believe that SNH's advice to government on publication of the WLA map is a message that should be heard and adopted well beyond Scotland. As SNH noted, "areas of wild land are widely acknowledged as important assets, providing a number of significant ecosystem services that support a range of social and economic benefits and outcomes".

That broader function of wild land echoes Muir's own holistic, and at the time revolutionary, view of ecology that has always been part of the Trust's vision – although it's one that tends to be lost in the battles over whether or not a particular development should or shouldn't be consented. That more subtle but less headline-grabbing aspect of our work has not attracted as much media attention, yet the advocacy the Trust is doing for environmental improvements, such as the need for more extensive woodland regeneration and peatland restoration, and for stronger deer control, is nothing new.

In a 1992 Edinburgh lecture entitled John Muir And The United States National Park System, the Sierra Club's Lawrence Downing spoke of how "the works and deeds of John Muir led not only to the creation of National Parks, National Monuments and great forest reserves in this country in his lifetime, but have been a continuing inspiration … teaching us that nature is not just a commodity, but an integrated whole. Muir showed us that it is the flow of life itself which must be preserved if humanity is to continue to thrive on this planet". Downing concluded saying that "the lessons John Muir taught in his day are just as valuable to us and to the world today".

Similarly, while continuing to challenge individually damaging developments, the Trust's campaigning work aims to move thinking forward towards recognising that wild land is an asset and opportunity for transformational change rather than simply a constraint on planning.

After all, there is so much more that can be done to improve the quality of wild land in the UK: restoration of natural processes across large areas will help reverse declines in native wildlife; protection and enhancement of peatlands will ensure efficient carbon storage, provide natural flood management, and vital habitats for specialist wildlife; while the expansion of native woodland will enable key species to widen their range. Together, these actions can help provide us all with natural goods and services – from clean air and fresh water to carbon storage – and create robust ecosystems that are better able to adapt to our changing climate.

VITAL SUPPORT

We will need the continued support of members as we seek to move these issues up the political and public agenda. That support and activism will no doubt be required in a variety of ways, from writing letters to elected representatives and the media to providing a physical presence in the public gallery when key issues are debated in the Scottish Parliament – as was the case when the Talladh-a-Bheithe wind farm was debated recently.

Members represent our core manpower when there is an urgent need for action. The number of people who speak out on issues, especially at key times when public policy is being developed or changed, gives policy-makers the incentive and mandate to act and take the bold decisions that our vision sets out so clearly.

We know we'll continue to face challenges – the history of campaigning, whether environmental or otherwise, has always encountered opposition. Muir faced this too, not least when Hetch Hetchy Valley in Yosemite National Park was to be dammed for San Francisco's water supply. Muir described the valley as "this most precious and sublime feature of the Yosemite National Park, one of the greatest of all our natural resources". He did not confine himself to simply opposing the plan: he proposed alternatives, explaining that "water as pure and abundant can be got from sources outside of the people's park, in a dozen different places".

Similarly, the Trust also tries to move difficult issues forward by using evidence-based research to back our position. Recently, along with others, we have brought evidence before the Scottish Parliament demonstrating the damaging impact of unsustainably high deer numbers – and offered alternative models of management (see lead feature on p10).

Success will not come easily, but we are committed to pursuing our vision for wild land, with campaigning a vital part of that effort. Wild land is one of our most important assets, not just in terms of spectacular scenery and as a home for wildlife, but also for the natural resources and services that it supplies, and the wider economic benefits that it offers.

As Muir pointed out all those years ago, nature may not need people, but people very much need nature. That is the true foundation of our message – one we are grateful that so many of our supporters share.

About the author
Mel Nicoll is the Trust's campaigns co-ordinator. She can be contacted at **mel.nicoll@johnmuirtrust.org**

Value and protect

In an extract from his keynote address at the Chartered Institute of Ecology and Environmental Management's autumn conference, **Stuart Brooks** highlights his vision for reconnecting people and nature


PHOTOGRAPH: KATRINA MARTIN

IN MY WORK, I've picked up a narrative around a lack of connection between people and nature – often presented as something that has been lost, getting worse, and a root cause of the decline in the state of our countryside and biodiversity. If this is reflected in society's values, it underpins decision-making by governments and could be a downward spiral for nature, and us. So, if we only protect what we value, how do we ensure society values nature?

Of course, there is nothing new in this discussion. Over a century ago, John Muir advocated to politicians the establishment of national parks to protect America's wilderness. He had limited evidence to draw on but was persuasive, appealing to the heart as much as the head. He was also up against it, with speculators looking to realise the 'natural capital' nature had provided.

Assigning a positive value to these places and encouraging people to visit and experience them proved a good move all round, and a solution to an enduring problem. As Muir wrote at the time: "Thousands of tired, nerve-shaken, over-civilized people are beginning to find that going to the mountains is going home; that wildness is a necessity; and that mountain parks and reservations are useful not only as fountains of timber and irrigating rivers, but as fountains of life."

Today, more than 292 million people visit US national parks each year. And for every $1 spent by visitors, the parks generate an estimated $4 dollars' benefit to the wider economy. It seems that protecting nature, and giving people access to it, is good both for the soul and the coffers.

'It seems that protecting nature, and giving people access to it, is good both for the soul and the coffers'

COHERENT CASE

Ahead of the last general election, a coalition of organisations led by the Wildlife Trusts and RSPB put forward a coherent case for a new Nature and Wellbeing Act, linking the nation's health to the state of our natural environment. An associated RSPB report, Connecting with Nature, claimed that only 21% of 8-12 year olds across the UK have a 'connection to nature that could be considered to be realistic and achievable for all children'.

A more positive message comes from a recent UK government report which states that 70% of children spend time in the natural environment at least once a week. Meanwhile, longitudinal studies such as Scottish Natural Heritage's annual Scotland's People and Nature Survey show a generally positive trend in the number of visits to the outdoors and in perceptions of the value of spending time in nature – albeit with considerable variability depending on age, background and affluence.

There is, however, one common trend: if you are poor, you are less likely to access the benefits of nature. So, while the general population might be nudged towards nature, more targeted intervention is needed to encourage and support those who might benefit the most.

There is now a body of scientific evidence that demonstrates the link between nature and well-being, and the associated potential saving to the public purse. According to a study by Natural England, if every household in England was provided with good access to quality green space, it could save an estimated £2.1 billion in health care costs.

COMPELLING MESSAGE

The overall case is compelling: whether by choice or compliance, as a preventative or prescriptive measure, people benefit from being in nature. This leads ultimately to seeing the benefit of protecting nature for people, as much as for its own sake. The challenge is to enable everyone to access these benefits – making the environment relevant to everyone – and for wider society to value nature and ultimately protect it. Initiatives such as the John Muir Award – the impacts of which you can learn all about on p25 – and others are being used to great effect, especially by organisations who reach out to those most in need.

And judging by the change in attitude towards the environment of my own children's generation compared to mine growing up in the 1970s, there is cause for optimism. Outdoor learning has become a mainstream component of an education curriculum – particularly in Scotland – that places greater emphasis on environmental awareness, understanding and connection.

Increasingly, I sense that our kids know they are part of nature, and that our actions have consequences that ultimately impact on us as well as the other species we share this planet with.

About the author
Stuart Brooks is the Trust's chief executive. He can be contacted at **stuart.brooks@johnmuirtrust.org**

A lasting impact

Adam Pinder highlights the importance to the Trust of gifts in wills, and the impact of one particular gift on our property at Glenlude in the Scottish Borders

PHOTOGRAPH: KAREN PURVIS

I FIND MY JOB at the John Muir Trust genuinely humbling sometimes. There's the feeling of being on top of the right hill at the right time, when weather and circumstances combine to produce a truly majestic view, and there seems no more perfect place to be.

And then there's the feeling when someone leaves a gift in their will to the Trust – often someone who already provides great support through membership, appeal donations, or tireless volunteering. Having supporters who trust us to use their money wisely, and honour their generosity, is a rare privilege.

Equally, hearing what inspires people to support us in this way can itself be inspiring. Following the death of her parents, Alex in 2011 and Morag in 2014, Trust member Jane Garven chose to vary her mother's will in order to support the Trust with a substantial gift. But what lay behind this act of generosity? It was, Jane says, a simple desire to give something back and to support work that her parents would have approved of.

Jane credits her mum and dad with instilling in her a life-long love of nature. "My late sister and I were lucky to have parents who took us out into nature from an early age," she explains. "Any protests on our part were met with 'you'll like it when you get there!' which we invariably did. It fostered a love for and knowledge of our local wild places that continued into our adult lives."

When asked why she thinks the Trust's work is important, Jane cites "so many reasons: my own work interests, including Forest School, mindfulness, play in nature and Early Years practice outdoors, and my education – I'm doing a Masters in Outdoor Environmental and Sustainability Education at the University of Edinburgh, part-time". But there are deeper reasons too, such as "John Muir's emphasis on everything being connected, and the fact that we are close to losing so much, in Scotland and elsewhere, which is precious and irreplaceable". This feeling also came from Jane's parents. "They both had a deep awareness of the value of the natural world," she explains.

PERFECT FIT

While most gifts in wills received by the Trust are unrestricted – meaning we are able to use the funds across a variety of projects – we recognise that people have different reasons for supporting our work, and so are committed to respecting our donors' wishes. For Jane, it was the Trust's work at Glenlude in the Scottish Borders, our smallest and most recent property, that struck a chord. "Being so close to the urban centres of Scotland, Glenlude seemed a good fit for my parents' interests," she explains. "Their 'outdoors' was not the wild and remote Scottish Highlands, but the ancient landscape of the Galloway hills and coast. They were folk who went for Sunday walks and gardened together all their lives."

The Trust is working to rewild Glenlude, replacing commercial sitka spruce and larch with broadleaf species, extending the area of native woodland and increasing biodiversity. Progress has been swift, with hundreds of volunteers helping with brashing, thinning and replanting, as well as constructing basic infrastructure to develop Glenlude as a volunteering hub and to support future conservation work. A tree nursery with a polytunnel has been established, plus a volunteers' shelter, composting toilet, workshop, tool store and campsite.

Meanwhile, Glenlude's accessibility, facilities, and the variety of habitats and tasks it supports make the site ideal for John Muir Award activity – an aspect that also appealed to Jane. "My parents would be delighted that all kinds of young, and not-so-young, people were discovering what is important to them, while developing a love for their own small patch of nature."

Volunteer input is such that a small gift can have a large impact at Glenlude, both in terms of reaching a high number of Award participants, but also helping to create lasting change in the physical landscape. And that's true across all our properties – in recent years, legacy income has made a huge impact on the scale and scope of our work to protect wild land. Gifts in wills of all sizes make a very real difference.

It's always a hugely personal matter, but if the time is ever right for you to consider leaving a gift in your will to the John Muir Trust, I'd be delighted to hear from you.

About the author
Adam Pinder is the John Muir Trust's fundraising manager. He can be contacted at **adam.pinder@johnmuirtrust.org**, or **01796 484 965**.

Transforming lives and landscape (clockwise from main): native tree planting at Glenlude; Alex and Morag Garven; polytunnel at Glenlude

PHOTOGRAPH: GARVEN FAMILY

'My parents took us out into nature from an early age ... it fostered a love for and knowledge of local wild places that continued into our adult lives'

Legacy law

There can be practical as well as personal reasons for leaving a gift in your will to the Trust, explains Donald Simpson, partner at law firm Turcan Connell

Any bequest on death to a registered charity such as the Trust is exempt from inheritance tax. A relatively new incentive is the reduced rate of inheritance tax which applies to the rest of an estate where at least 10% of the estate which would otherwise be chargeable to inheritance tax is left to charity. Where the conditions are satisfied, the inheritance tax rate applying to an estate reduces from 40% to 36%. It is not simply 10% of an estate which must be left to charity to qualify for the reduced inheritance tax rate on the rest, but only 10% of an estate after all other reliefs and exemptions and thresholds have been applied (which means, in practice, that the amount required to be left to charity can be much less than 10% of an estate).

Beneficiaries of an estate can also vary how an estate is divided up to introduce a bequest to the Trust or other charities. In these circumstances, the reduced inheritance tax rate can be obtained where a bequest of an appropriate amount is left to charity.

Inheritance tax planning is a complicated area and if there is a wish to structure a will to secure the inheritance tax reductions in estates by leaving bequests to the Trust and other charities then professional advice should always be sought.

A year on the fairy hill

PHOTOGRAPH: LIZ AUTY

Liz Auty provides a seasonal insight into managing our East Schiehallion property in Perthshire – a site with year-round ecological interest

THE ARRIVAL of spring at Schiehallion, the Fairy Hill of the Caledonians, brings an orchestra of bird song and a whirring of wings. As the snow-line retreats, bird activity increases, with the meadow pipit the most easily heard, its song like the trilling of miniature skylarks as they parachute onto the heath.

I spend part of the spring surveying breeding birds and looking out for any raptors establishing territories. Last year, we had a specific interest in long-eared owls – a secretive and often under-recorded species. With the support of two volunteers, we carried out a survey one evening and were rewarded with the haunting 'hoo hoo' call of a male. This year, I hope we'll go one step further and hear a pair of owls calling to each other. If they nest successfully, we may even be treated to the strange creaky calls of the young later in the summer.

April sees the spectacular lekking displays of up to 50 black grouse on the mountain – an impressive number in a Scottish context. Just seven years ago, we had only 18 males on the site. It's believed that good spring weather in recent years has helped chick survival rates.

When I took some of our members out to see them early one morning, we saw not just black grouse at the lek, but also a male hen harrier – a distinctive bird, with pale grey body and dark wing tips, whose 'sky dancing' courtship is a feature of spring. Sadly, like many raptors, hen harriers continue to be threatened by disturbance and illegal persecution. We know the species has nested at Schiehallion in the past and would be delighted if a pair chose to nest here once again – as would many of those who visit the site.

While bird activity is a noticeable sign of spring, I also spend much of the season thinking about trees. Schiehallion has the potential for trees to be present from the edges of its rocky summit down to what remains of its former woodland. Historically, there would have been a gradual change in the vegetation from woodland at the base of the mountain to montane shrubs and on to a summit boulder field encrusted with a rich variety of lichens and mosses.

SUMMER

I feel privileged to spend so much time on the ground monitoring biodiversity, and especially love the long days of summer at Schiehallion. The influence of the underlying limestone and the wide mosaic of habitats produce an array of colourful flowering plants.

Among the first of the plants to come into flower are purple saxifrage and wood anemones, closely followed by mountain pansy and, later, grass of Parnassus. The latter is really special. Its name comes from Mount Parnassus, a limestone mountain in Greece where the cattle were said to love eating the plant as much as they did grass.

Another of my favourite plants is rockrose, which appears where limestone outcrops to the surface. Its delicate, bright yellow petals are often found among carpets of thyme, which produce a wonderful scent under a warm sun.

There are fascinating insects, too. Last year's highlights included sightings of emperor moth, golden ringed dragonfly and wood wasp. We undertake butterfly and insect surveys through the summer and are lucky to have a very special butterfly at Schiehallion – the mountain ringlet. Each summer, two of our dedicated volunteers walk transects to record how the species is faring. It's not the easiest to study. Found only above 350m in very specific habitat where its caterpillars feed on mat grass, the adults have a short flight period and only do so in sunny weather. Although last year's mountain ringlet survey did not detect any butterflies on the wing, we expect they are still hanging on.

Another indicator of the flux in local species has been our recording of water vole populations. Two years ago, I led a group of volunteers who were thrilled to find signs that the animal had returned for the first time in a while. We then worked closely with our neighbours, the Highland Perthshire Communities Land Trust, on further survey work on two sections of a hill called Dun Coillich to the east of Schiehallion. Again, that work was positive and showed increased signs of water vole activity in the area.

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‘We’d be delighted if a pair of hen harriers chose to nest here once again’

PHOTOGRAPH: ALAN SCOTT

PHOTOGRAPH: LIZ AUTY

PHOTOGRAPH: LIZ AUTY

PHOTOGRAPH: LIZ AUTY

Wild seasons (clockwise from below): common rockrose; black grouse at the lek; trail camera; purple saxifrage; hen harriers may return to the area; Liz with a mountain ringlet; emperor moth

PHOTOGRAPH: LIZ AUTY

Tech recording

I’ve been playing with various mobile applications this year to help with species recording and identification. The BirdTrack app is easy to use in the field, as long as there is a GPS signal. The app works out the grid reference, and it’s then easy to record the birds and upload the information once home. I can also recommend the iRecord Butterflies app that allows users to record sightings and also help with identification.

Fast forward to last summer and it seems the cooler temperatures resulted in much reduced water vole activity, with a knock-on effect on the success of birds of prey. However, in 2015, and for the first time, people across the country surveyed for water voles along burns and watercourses near where they live during a set period. The survey will now take place on an annual basis, which is a very positive step towards creating a coordinated national picture.

AUTUMN

I always look forward to autumn, with cooler temperatures often bringing morning mists that lift to leave clear skies and fabulous views. The autumn colours in Perthshire last year were particularly spectacular, not least among the aspens in the Glen Mhor gorge here at Schiehallion.

Last autumn, I was joined by Jen Derr, an intern from the Patagonia clothing company in the US. During her time with us, Jen helped on a variety of projects and also got us very interested in seeds and berries. The Trust is part of a seed-collecting project for the Millennium Seed Bank at Kew Gardens. Jen helped by collecting and storing seeds from different native species, including alder and birch – and discovered that the rowan trees on site had very few berries.

PHOTOGRAPH: KEVIN LELLAND

The autumn was very warm and many birds stayed later than in previous years. We continued to see hen harriers well into October and even when the first snow came in November a few stonechats remained on the hill braving the icy showers and cold.

WINTER

It doesn't go completely quiet in winter, with many animals remaining long after the last migrant birds have headed south. They can be difficult to spot though. Red squirrels are still active, but do spend more time in their dreys having been busy in the preceding months collecting and storing nuts, and lining their nests with moss. Black grouse don't mind the snow either, and continue lekking to keep or establish their place ready for the breeding season in April. On higher ground, ptarmigan and mountain hare – two species that are supremely adapted to winter conditions – turn white, while deer find shelter where they can.

One of the enjoyable things about winter is that it's a great time for spotting animal tracks in the snow, such as those left by grouse (pictured left). During the colder months, I continue my detective work to learn more about the behaviour of some of the animals spotted on a trail camera we have mounted on site – including pine marten and badger. I had researched how lynx surveys are carried out over the winter in Norway when their tracks are visible in the snow. As I wandered the slopes in December and January, I had hoped to find evidence of our own Scottish wildcat, an elusive species that some people believe still roams parts of Highland Perthshire.

But while noticing seasonal changes is important, it's also interesting to reflect on changes over a longer period of time. There's a great variety of life here at Schiehallion, but there could be so much more. I imagine a future when waxwings arrive because of the wealth of berries; when grasshopper and willow warblers are heard singing from willow trees along the whole valley, not just in a tiny corner of the land; and when there is sufficient woodland to support tens of red squirrels, rather than the handful that show themselves only on occasion each year.

In my vision, aspen trees are not just confined to the steepest, most inaccessible slopes, but expand onto the side of the hill and really shimmer in the wind. I'd like to see the joining up of existing woodland – something that I believe is possible by working in partnership at a local level. However, it will also need significant changes in land and deer management at a national level.

The projects planned for the coming years are small in scale, and will take time for there to be visible change, but it's hoped that by working on the smaller projects, the bigger dreams will become a reality in the future.

About the author
Dr Liz Auty is the Trust's Schiehallion property manager. She can be contacted at **liz.auty@johnmuirtrust.org**

For more on how the Trust looks after the land at Schiehallion, visit **www.johnmuirtrust.org/trust-land/east-schiehallion**

Family fun

In May last year, the Trust helped the Yorkhill Children's Charity (now Glasgow Children's Hospital Charity) organise a hugely-successful family day out at Schiehallion. Under a clear blue sky, and with the snow-capped summit glinting in the sunshine, children and adults alike were captivated by the setting and the range of outdoor activities on offer.

Some intrepid adventurers joined mountain guides to trek up the 10km path to the summit – for many the most serious hill they had ever climbed – while down in the foothills, two local organisations (Wild Sparks and Do-It-Outdoors) held mini-workshops on fire lighting and shelter building. Others helped with tree planting on the lower slopes of the mountain.

PHOTOGRAPH: ROBERT PERRY

NTS Trailblazers removing fencing

PHOTOGRAPH: ANDREW MACDONALD/NTS TRAILBLAZERS

Measuring up

Having been asked in 2009 what people really do for the Conserve element of the John Muir Award, the Award team decided it was time to drill deeper. The result, explains **Rob Bushby**, was an occasional audit that highlights the range and value of John Muir Award participation on wild places

PUT SIMPLY, the John Muir Award Conserve Audit is a monitoring exercise. As groups conclude their John Muir Award involvement – having Discovered a wild place, Explored it, done something to Conserve it, and Shared experiences – we ask them to identify the type and amount of activity carried out to meet the Conserve challenge. We then collate this diverse activity and summarise data nationally, by region, and by key themes.

Our last full year Conserve Audit, in 2011, was hugely valuable in terms of demonstrating the difference that Award participation can make to wild places – not just for the John Muir Trust but for partners, funders, and everyone involved. So we decided to do another in 2015.

The ambitions of the John Muir Trust – to protect, enhance and care for nature so that wild places are valued by and for everyone – offer an important context. The Trust runs the John Muir Award, for free, to encourage people to share its vision. This recognises the importance of putting something back for wild places, and the benefits this can bring for people and for the places themselves. Rather than a passive enjoyment of the outdoors, it's about being 'active conservationists', as Muir himself once urged. This is what being 'active conservationists' looked like in 2015, through involvement in the John Muir Award:

- 36,200 days of Conserve activity
- 33,488 John Muir Award participants
- Valued at £1,291,710, based on Heritage Lottery Fund figures
- Over 7.5 hours of Conserve activity per participant

And as you'll see in our info-graphic over the page, activity took place in an extensive range of geographical locations and across a rich diversity of habitats, from mountain landscapes and coastal plains to woodlands and school playgrounds. Data was captured to measure everything from invasive species control to surveying earthworms, and tree planting to litter picking.

A third of all activity was carried out by participants from excluded backgrounds – many who wouldn't normally engage in positive action for the environment – contributing almost 10 hours each on average.

Overall, the Conserve Audit provides a comprehensive insight into an incredible array of contributions that help maintain, improve and restore wild places during a full calendar year. It demonstrates that individuals and groups can make a significant and meaningful impact on their environment, both locally and nationally.

It also shows how effective the Trust is as a catalyst for links between the environmental sector, formal education, youth work, 'inclusion' audiences, outdoor learning, and a health and well-being agenda. Fundamentally, carrying out a Conserve Audit over a full year has shown that people of all ages and backgrounds enjoy and value exploring their relationship with wild places by taking responsibility, making a contribution, and getting their hands dirty.

The John Muir Trust would like to thank the hundreds of Provider organisations around the UK for contributing and enabling us to demonstrate the impact that the John Muir Award can help them to make, and to our diverse range of funders.

About the author
Rob Bushby is the Trust's John Muir Award manager. He can be contacted at **rob.bushby@johnmuirtrust.org**

→ continued

29,939m²

of **invasive species** cleared by

6,684 people

including rhododendron, non-native evergreen, Himalayan balsam, lodgepole pine, Japanese knotweed, laurel, bamboo, sitka spruce, salmonberry, larch, western hemlock, holm oak, gunnera, snowberry, hottentot fig, Japanese rose, pheasant berry, duckweed and sycamore

5,421

people **making feeders** for birds, butterflies, red squirrels, ladybirds, hedgehogs, insects and bees

12,533

trees planted by

3,819 people

including wild cherry, fruit orchard, hazel, ash, hawthorn, oak, holly, silver birch, elder, alder, willow, crab apple, rowan, maple and many more

63,103m

of **footpath created, maintained or improved**

4,692m²

of **pond restored or created** by over 1,700 people

4,599

people in

196 groups

worked on over 18,000m² of **wildflower areas** with species including daffodils, bluebells, poppy, lavender, primroses, sunflowers and many more

8,712

people in

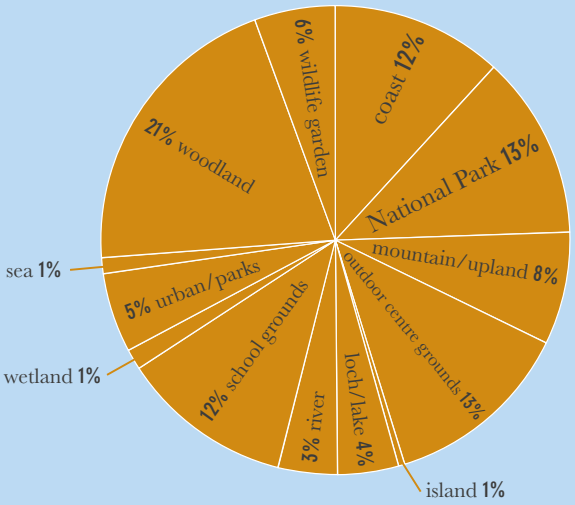
389 groups

maintained or created 3,900 wildlife habitats for birds, bees, butterflies, minibeasts, moorland species, peat bog species, frogs, newts, small mammals, bats, hibernaculum, amphibians, hedgehogs, field mice, voles and doormice

19,339

people cleared 8,442 bags of **litter** and **recycled** 1,162 bags

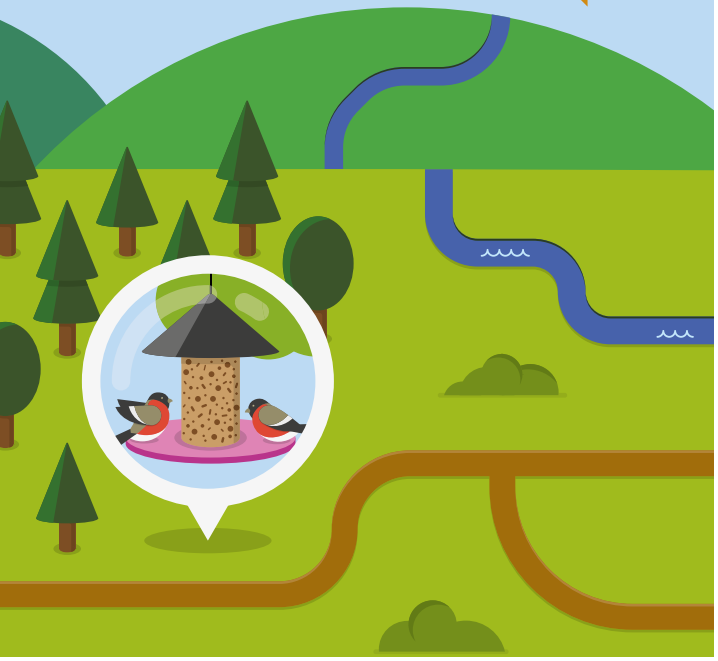
Habitats activities took place in



"We have now helped to conserve the woodland over an eight year period."

"The Conserve activity is the most powerful challenge. It's often when the 'penny drops' and a real connection is made."

"We've changed how we feel about wild places. We've gained a lot more respect."



Surveys

With growing interest in Citizen Science – gathering, recording and analysis of scientific data by members of the public – surveys are a popular way to get hands-on with nature and contribute to the scientific community in a meaningful way. Information and resources offer increasingly sophisticated and engaging support, too. Almost **7,000 participants'** survey contributions were audited.

What was surveyed?

Birds, trees, plants, bees, minibeasts, otters, bats, fungi, lichens, rare summer migrants, red squirrels, riverfly, butterflies, earthworms, hedgehogs, frog spawn, badgers, wetland birch, water voles, newts, Japanese knotweed, basking sharks, Himalayan balsam, rhododendron, wood mice, breeding birds, New Zealand flatworms, corncrakes, shells, grouse, cetaceans, seaweed, pendunculate oak trees, dragonflies, moths, Japanese wireweed, ladybirds, eider ducks, twayblade, nightjars, coral reef fish, grey seals, peat soils. Plus: litter, human impact, climate change, tested sands for pollution, coastal erosion, water & air quality.

OPAL Surveys (used by 98 groups) explore the health of our soils and trees, the quality of our air and water, the distribution of invertebrates, and the importance of hedges.

Campaigns

National, regional and localised campaigns are strongly represented in the Conserve Audit – from **Grow Wild** and **RSPB Big Garden Birdwatch**, to **Your Park** and **Wild Park** initiatives in Loch Lomond & The Trossachs National Park, to a dog mess poster project in St. Helens – with active campaigning being monitored by 110 groups.

Grow Wild inspires communities, friends, neighbours and individuals across the UK to transform local spaces by sowing, growing and enjoying native wild flowers.

Impact

57% of groups referenced **Leave No Trace** and **45%** mentioned **Minimum Impact** principles in relation to their activity.

Specific initiatives highlighted included:
Countryside Code, Scottish Outdoor Access Code, Green Travel, Reduced/Reused/Recycled waste, Reduced/Audited/Alternative energy use, Monitored/Reduced/Audited Food Miles, Created/Applied Environmental Policy

Wild shots

Feast your eyes on the ten winning entries in the Trust-sponsored Wild Places prize – a special award category in this year's prestigious Scottish Landscape Photographer of the Year competition

WHEN THE TRUST agreed to sponsor a new Wild Places category in this year's Scottish Landscape Photographer of the Year competition, we had a feeling that picking the winners would be a difficult task. And so it proved. Staff and trustees pored over the entries short-listed for a category with a clear but broad brief: images must be from Scotland and convey wildness.

We chose ten winners in all, with each of the images reproduced here together with some background detail from the various photographers. It's a wonderful selection of images spanning some of the country's most dramatic locations, from Arran to Assynt. And it seems we have pretty good photographic taste: one of the ten images (a photograph of Ben Loyal by Ian Cameron) was the competition's overall winner, while another (an image of Suilven by Sven Soell) was runner-up in the landscape category. We hope you enjoy them.

Above: Rory Marland, Light of the wild, Isle of Skye. "I took this photo while driving to Elgol on the Isle of Skye. The shaft of light created a wonderful atmosphere with Blà Bheinn in the background, and the row of birch trees also made for a great foreground subject."

Right: Jesse Harrison, Rothiemurchus Forest, Cairngorms National Park. "Rothiemurchus is a remnant of ancient Caledonian pine forest. It is one of the most magical places I have visited, and I hope it is preserved for generations to come."

Above: Ian Cameron – Awakening Ben Loyal, Tongue, Sutherland (also overall winner of Scottish Landscape Photographer of the Year).
"Midsummer sunrise at the edge of Loch Hakel on a captivatingly still morning. First light paints the summit of Ben Loyal and a thin band of mist rises from the surface of the mirror smooth loch."

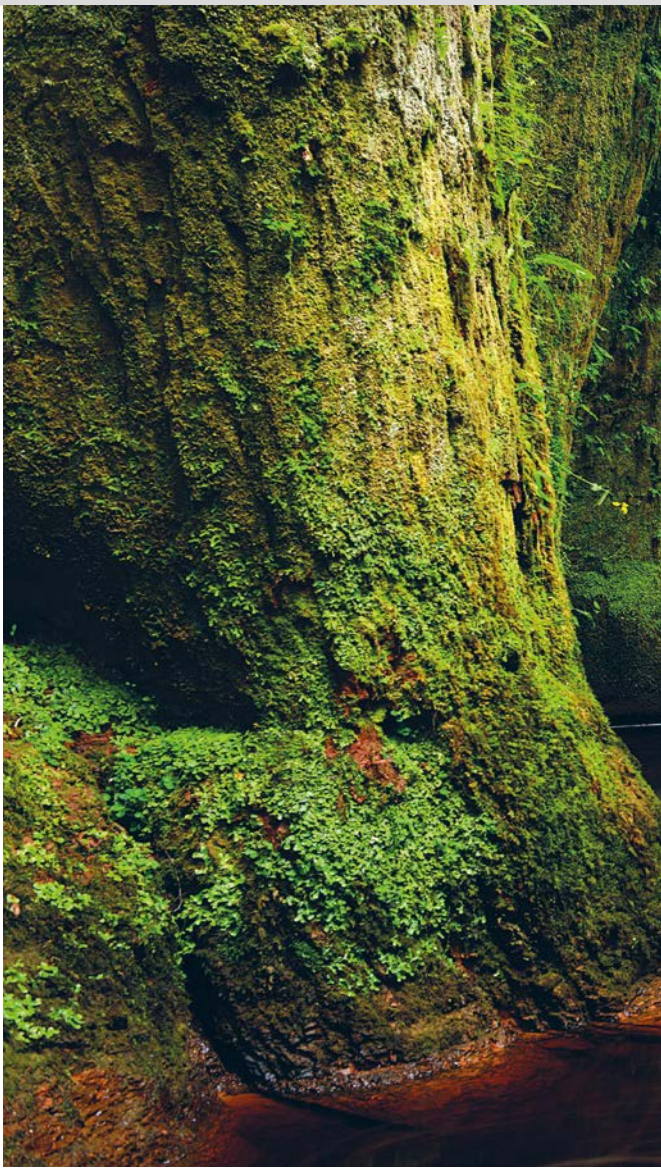
Left: Dietmar Herzog, Loch Assynt, Sutherland.

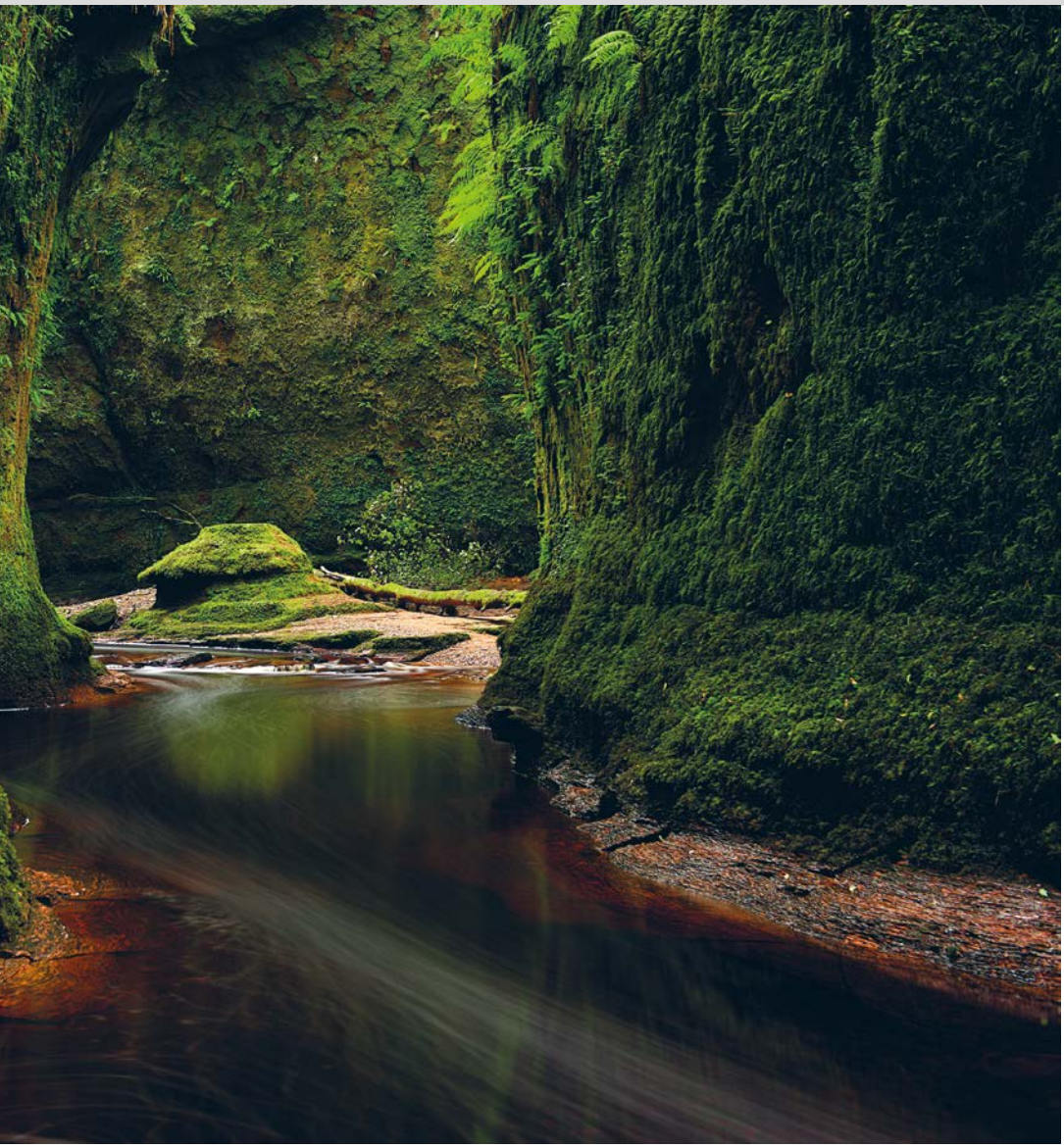
→ continued

Jackie Matear, Storm clouds over Stac Pollaidh, Loch Lurgainn, Inverpolly.
"Gusting winds signalled the arrival of the next storm as dark clouds rolled in. There was a brief moment of sunlight on Stac Pollaidh before hail and heavy rain blew across Loch Lurgainn and the view disappeared completely."

Above: Douglas Griffin, Liathach & Loch Clair, Glen Torridon, Wester Ross.
"December in Glen Torridon. As the sun's first rays touched the summit of Liathach the wind briefly dropped, allowing a perfect reflection to form in the waters of Loch Clair."

Above: Simon Swales, The pool, Goatfell, Isle of Arran.
"From rocks beneath the summit of Goatfell. North Goatfell is illuminated by strong evening sunlight. The peaks of Cir Mhor and Caisteil Abhail are in silhouette and the dark clouds reinforced the ominous feeling of the approaching weather."



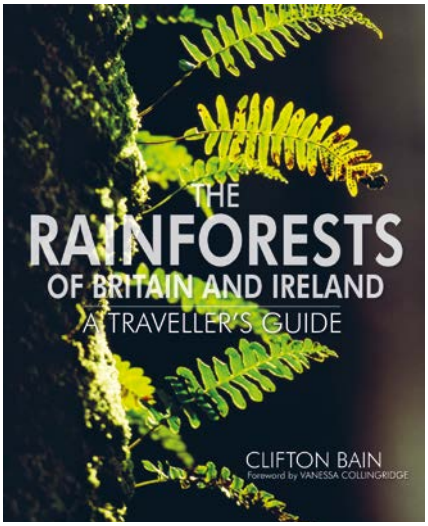


Left: Charlie Davidson, The Devil's Pulpit, Finnich Glen, Stirlingshire.
"After a three-hour drive, a treacherous scramble down into Finnich Glen, and wading up river I was delighted to find some fantastic light shining directly onto the stone named The Devils Pulpit. Worth the effort I believe!"

Below: Sven Soell, Shroud of Suilven, Assynt (also Landscape category runner-up).
"Like a bride wearing a veil, Suilven's beauty is hidden and enhanced by the silken cloud."

Below left: Lewis Golbourn, Epic, Sgùrr an Fhidhleir, Coigach.
"The Inverpolly-Canisp Wild Land area, as seen from the Ben Mor Coigach range. The image was taken during a five-minute gap in the solid bank of cloud that plagued an overnight hill-top camp."

Further info
These images will exhibit in the Alan Reece Gallery in the Trust's Wild Space visitor centre in Pitlochry, 24 October to 7 November 2016. For more on the Scottish Landscape Photographer of the Year competition, visit **www.slpoty.co.uk**



PHOTOGRAPH: CLIFTON BAIN

The Rainforests of Britain and Ireland – A traveller's guide, by Clifton Bain

Mike Daniels enjoys learning more about an ancient habitat that is so often overlooked – the wonderfully biodiverse temperate rainforest that clings on in coastal areas of Britain and Ireland

THE RAINFORESTS OF BRITAIN and Ireland is a follow-up to Clifton Bain's previous book, *The Ancient Pinewoods of Scotland*. Both these habitats lay claim to being among the last remaining 'old growth forests' in Europe, having had continuous woodland cover since the end of the last ice age. Yet both of these ancient woodland types are overlooked, neglected and in a perilous state.

Over half of the 'Celtic rainforests' of Scotland, England, Wales and Ireland are in unfavourable condition as a result of destruction, overgrazing and invasion by rhododendrons. This is particularly alarming given their global significance: the Celtic rainforest represents a significant proportion of all the temperate coastal rainforests which cling on in the wilder fringes of the world's continents. The author's great achievement with this book is to raise the profile of a Cinderella habitat, just as he did with *The Ancient Pinewoods of Scotland*.

As well as being ancient natural treasures, the rainforests on the fringe of the Atlantic are also a treasure trove for bryophytes (mosses and lichens) and other flora, making them one of the most biodiverse habitats in the world. The bryophytes that thrive in the high shade and humidity of these woodlands themselves belong to even more ancient lineages, going back 450 million years – long before the dinosaurs arrived. The Celtic rainforests have also played an important role in human culture from Neolithic axe factories, through medieval hunting forests, to 18th century charcoal production for iron-smelting furnaces.

Having set the scene, the book takes the form of a traveller's guide, exploring some of the most interesting, distinctive and accessible of these Celtic rainforests. These include a number of hidden gems in, or on the fringes of, wild land, including Ardvar and Loch a' Mhuilinn in the far north west of Sutherland (part of which is on Quinag, managed by the John Muir Trust); Borrowdale in the Lake District; the Dart Valley of Dartmoor; the Vale of Ffestiniog in North Wales; Cwm y Rhaiadr in South Wales; the Antrim Glens in the north of Ireland; and Glengariff in south west Ireland.

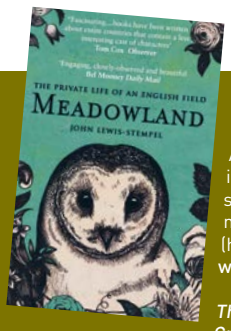
The information on each site is perhaps a little superficial in terms of, for example, management, ownership and threats, but only because of the breadth of the land area covered. Each account offers a description, a location and details of how to get there by public transport, bike and on foot.

Undoubtedly, the book will inspire many to take up the transport challenge and explore this ancient and important component of our natural and social history. But perhaps even more importantly, it will also open many eyes to the precious fragments of the Celtic rainforest on our doorstep, and act as a call to arms for their future conservation and enhancement.

£25 (hardback)
www.sandstonepress.com

The reviewer
Mike Daniels is the Trust's head of land management.

Others we like



***Meadowland, The private life of an English field*, John Lewis-Stempel.** An intoxicating account of a year in the life of an English meadow by an author whose keen eye and understanding of the natural world is matched by his exquisite prose. A delight from start to finish. Winner of the Thwaites Wainwright Prize 2015. £8.99. **www.transworldbooks.co.uk**

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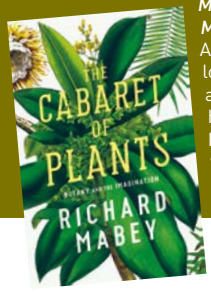

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Doug in his element photographing walrus

PHOTOGRAPH: DOUG ALLAN

Doug Allan

Kevin Lelland caught up with Doug Allan, the celebrated wildlife film-maker best known for his work filming life in inhospitable places for series such as the BBC's Blue Planet and Frozen Planet

How did you become a wildlife cameraman?
A fascination with diving led me to a degree in marine biology. On graduating, 'underwater anywhere' was my mantra – I dived for freshwater pearls in Scotland, did three Red Sea expeditions, ran a Jersey dive school, and fixed German canals. The big turning point was the chance to work in Antarctica as a research diver, where the photography bug took hold. While there, a chance meeting with David Attenborough in 1981 introduced me to the world of wildlife filming. I helped the crew for a couple of days, and decided there and then that I wanted to make a film about life under the ice. So, not so much a career path, as a careering path.

What's been your most memorable moment behind the camera?
If pushed for one place and animal, I'd say the hour I spent with a pod of belugas off the ice edge in Lancaster Sound in the Canadian Arctic. Flat calm, clear, black water, curious, all-white whales, and the sea full of their chirping calls. They were surely trying to talk to me.

Is there a place that you feel a particular connection with?
I spent five winters and eight summers in Antarctica between 1976 and 1987 working as a diver, biologist, boat driver, sledge builder, Sno-Cat driver, photographer, base commander and finally a film-maker. All while (mostly!) relishing the all-encompassing experiences of small-group, isolated living for up to two years at a stretch. Antarctica is a very special place to me.

How do you prepare for spending long periods of time in remote, wild places?
The more you do that kind of shoot, the easier it becomes. It helps hugely to have a supportive, experienced team back in the office – the kind who realise you can't control the weather, or for that matter the animals. They know you're just doing your best.

You've worked with David Attenborough many times. What do you admire most about him?
David is as enthusiastic now about the natural world as he was 62 years ago when he started. He's a natural raconteur, with a great memory for stories, but also a wickedly self-deprecating sense of humour. But most of all I admire him for his utterly genuine generosity of spirit towards other people.

You've spoken about making a documentary with the Inuit people. What fascinates you about them?
You learn from an Inuit by listening rather than asking. Don't ask: 'When will we see the narwhal?' He doesn't know. He will tell you later when they're in front of you that it was to do with when the whales would let themselves be seen. Being patient in the company of an Inuit is enlightening.

At a recent talk in Perthshire, you highlighted the dramatic rate at which the Arctic ice caps are melting. How do you feel conservation bodies should try to tackle climate change?
The key lies in helping people reconnect with nature. Encourage them outside. Show them the big picture. Introduce them to the relationships and balances between the forces of nature and how we choose to live. And conservation bodies must always take the voices of their members to whoever is in government.

You were on Desert Island Discs a couple of years back. What kind of music do you listen to?
Ideally something I can sing along with – meaningful lyrics for all shades of mood. Six years ago when my son Liam was fifteen, I offered him my 20 best songs of all time in return for his choices. Bruce Springsteen met Eminem.

Further info
Signed copies of Doug's debut book, *Freeze Frame*, are available now, £25 (plus £6 p&p for UK addresses). Contact Doug direct at **dougallancamera@mac.com**

About the author
Kevin Lelland is the Trust's head of communications and membership. He can be contacted at **kevin.lelland@johnmuirtrust.org**

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