



## **Nevis Landscape Partnership Seasonal Rangers**

**End of Season Report**

**06<sup>th</sup> June 2022 – 28<sup>th</sup> October 2022**



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## Introduction

The Ranger Team for the 2022 season, running from 6th of June until 28th of October, played a vital role in caring for the Nevis area and were a key presence at tourist hotspot sites within the Glen over the course of the season. They worked closely with rangers from The John Muir Trust and Jahama Highland Estates as well as other landowners in the Glen. The majority of the work focused on patrols in the Glen, interacting with locals and visitors, litter picking, fire pit dismantling and keeping a general presence in the area. They also focused on path maintenance, clearing cross drains and water bars, preserving the paths and stopping braiding, which was much appreciated by walkers and runners and key for the longevity of supporting visitors to the area. Moth surveys, butterfly surveys and tree planting were regular tasks and allowed opportunities for personal learning and CPD.

## The 2022 Ranger Team

Charlotte Norrbom



Ellie Moore



Julia Robertson



Evie Osborn





## Totals Summary

Over the course of the season, between June 6th and October 28th, the Rangers have:

- Completed **101 patrols**: 30 in the Lower Glen, 46 in the Upper Glen, 23 on the Ben Nevis Mountain path and 2 on the Allt a' Mhuilinn Path.
- The Rangers engaged with **1190 visitors** about the work of the Nevis Landscape Partnership, the importance of SOAC and Leave No Trace and the value of the unique Nevis landscape.
- **25 conservation days** were carried out, including owl monitoring, tree planting and butterfly surveys.
- **19 path maintenance days** were completed, with every cross drain on the Ben Nevis path being cleared at least once.
- **120 bags of litter** were removed from Ben Nevis and Glen Nevis.
- **83 fire pits were re-turfed.**
- **5 volunteer events** and **7 engagement events** were run and attended including, path maintenance days, tree planting and training and engagement with local students from University of Highlands and Islands.
- The Rangers had numerous days in collaboration with John Muir Trust and Jahama Highland Estates Rangers.
- The Team walked around **1,213,150 steps** over approximately **54.2km of patrol routes.**

During this season our Rangers have worked with:



Forestry and  
Land Scotland  
Coilltearachd agus  
Fearann Alba



**Glen Nevis**

## Ranger Team Training

Over the course of the season, the Ranger Team have been lucky enough to take part in various training sessions and workshops that have significantly increased the team's skillset. A brief list of training can be found below, and more detailed descriptions of certain areas can be found throughout the document in their relevant sections.

- Induction - meeting staff and walking the key patrol areas
- Mountain Safety Awareness Workshop (see section: [4.2.4](#))
- SOAC Seminar
- Leave No Trace Awareness Workshop (see section: [4.2.5](#))
- Conflict Avoidance Seminar run by Loch Lomond and Trossachs National Park
- Wader and Water Bird ID Training (see section: [3.2.6](#))
- Foraging and Plant ID Training (see section: [4.4.1](#))
- Deer Stalking (see section: [3.2.7](#))



Figure 1: The Ranger Team with JMT Ranger Steph and NLP Participation Officer Rory paddling on a Team Training Day





# 1. Visitor Management

## 1.1 Overview

To reduce the impacts of increasing tourism pressure within Glen Nevis, the Seasonal Ranger team worked on a daily rotation system responsible for patrolling the Nevis area including patrols up the Ben Nevis Mountain path, Lower Glen, Upper Glen and the Allt a Mhuilinn and surrounding path network. Main duties involved providing a regular customer focused presence at key sites (see section 1.2), positively engaging visitors and the local community, promoting responsible access to the outdoors through the Scottish Outdoor Access Code (SOAC) and leave no trace principles. Furthermore, duties involved dealing with the impacts of irresponsible access through the removal of litter, waste, abandoned camping sites and dismantling and covering up or re-turfing fire pits. The Ranger Team took a proactive approach to visitor management working with other landowners in the Nevis area (Jahama Highland Estates, John Muir Trust, Forestry and Land Scotland, Glen Nevis Estate) to support their visitor management objectives and conservation work and referring queries on outdoor access and impact from members of the public and the local community to the relevant landowners.

The Rangers helped the John Muir Trust conduct 226 Visitor surveys this season in the Nevis area. This number does not indicate the number of individual respondents as many entries counted for groups of 3 or more. This proved a great way to interact with visitors and start conversations about conservation, visitor pressure, and Leave No Trace Principles.

## 1.2 Patrolling

The Ranger Team covered the main hotspot areas in the Glen, dividing their time to undertake patrols in the following areas:

- Lower Glen- Riverside Roaring Mill & Curling Pond to Visitor Centre, Visitor Centre to Youth Hostel, Youth Hostel to Polldubh Cottages along Riverside, Lower Falls car park and Sheep Fanks area.



*Figure 2: Charlotte and Evie litter picking in the Lower Glen*

- Upper Glen - Lower falls to Paddy's Bridge (both sides), Polldubh Crag, Paddy's Bridge to Steall (South Side and roadside), Steall car park to Steall falls (including upper path.)

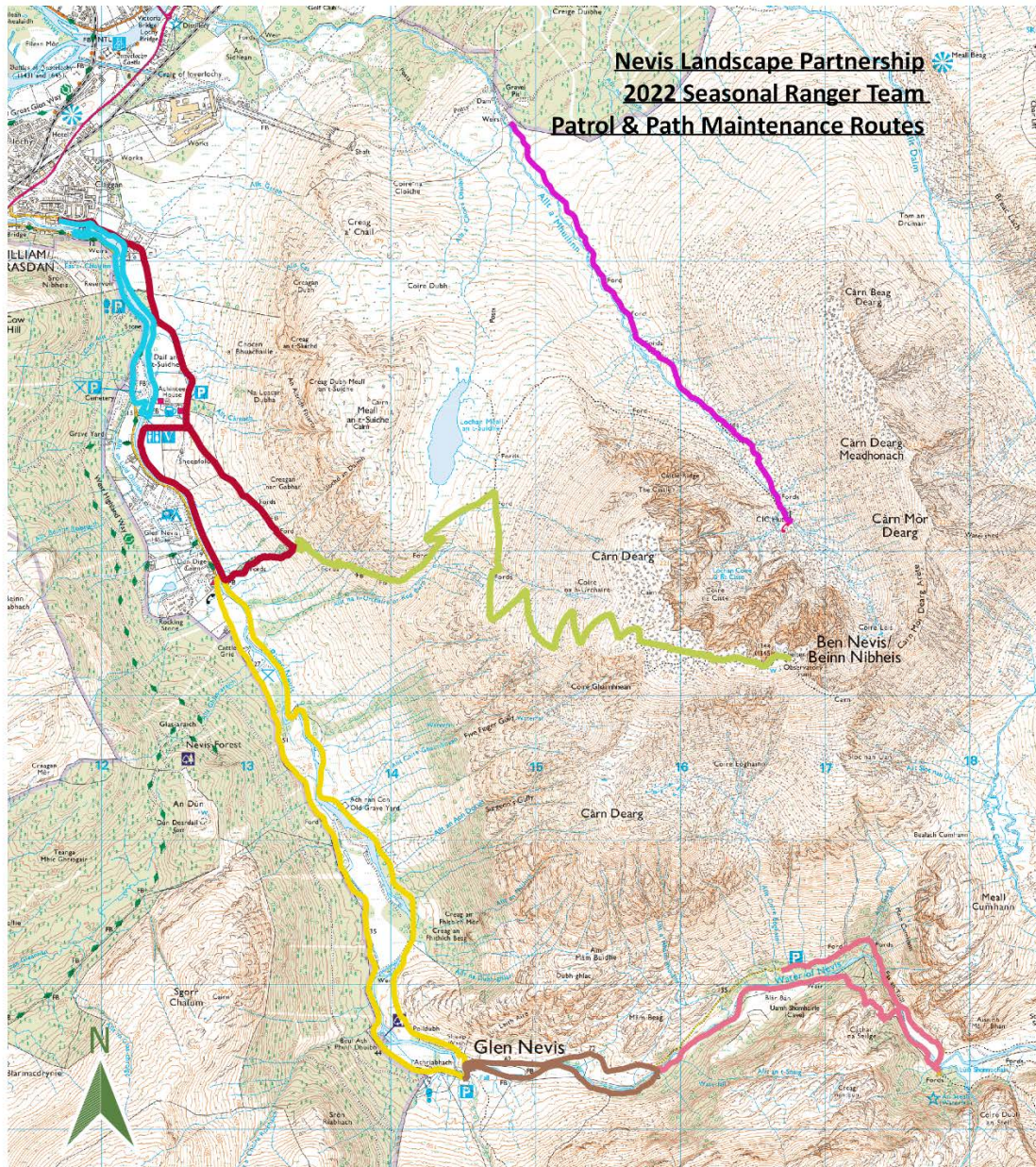


*Figure: 3 Steall Meadows*

- Ben Nevis Mountain Path- Lower Ben triangle (Achintee to Heart Attack to Youth Hostel), Heart attack to halfway lochan, Lochan to Summit.

*Figure 4: The Ranger team on the Ben Nevis Mountain path*





### Route Key

- An Drochaid (base) to Roaring Mill Return: 4km
- An Drochaid (base) up Achintee Ben Path, Return via Riverside All Ability Path: 6.2km
- Polldubh Cottages to Glen Nevis Youth Hostel Return via Glen Nevis Road: 10.5km
- Lower Falls Car park to Paddy's Bridge Return via Glen Nevis Road: 3.5km
- Paddy's Bridge to Steall Falls (South Side) + Steall Gorge Path: 7km
- Ben Nevis Mountain Path Return: 16km
- Allt a Mhuilinn from North Face Car Park to CIC Hut Return: 7km



Over the course of the season, the Rangers undertook a total of 101 patrols. Working on the ground proved to be highly successful as they engaged with a total of 1190 visitors, providing a friendly face within the Nevis area, offering local information and advice, and highlighting the importance of the 'Leave No Trace' principles and Scottish Outdoor Access Code (SOAC). Visitors were reminded of the importance of taking away their own rubbish and campers were informed of the best practice for having a fire with low impact. Whilst there, the Rangers generally encountered respectful visitors and campers; a substantial amount of litter was collected on patrols over the course of the season, culminating in a total of 120 bags of rubbish. This highlights the need for educating visitors and having valuable conversations about littering and waste management to foster behavioural changes now and for the future.

A total of 30 patrols were undertaken in the Lower Glen and the team undertook 46 patrols in the Upper Glen. A key focus in the Upper Glen was removing fire pits, toileting waste particularly in the vicinity of Paddy's bridge and Steall car park.



*Figure 5: A new fire pit in Glen Nevis*



The upper glen proved to be increasingly popular with campervans, car-boot camping and campers predominantly pitching their tents in the Steall Meadow area.

Ben patrols involved patrolling all areas of the Mountain path from Achintee to the summit. The Ranger team spent 23 days on the Ben path, engaged with visitors as well as collecting litter and undertaking path maintenance.



*Figure 6: The Lower Glen with a view of Sgurr a'Mhaim*



### 1.3 Camping

During the season, the upper Glen was the most popular spot for camping. Car-based camping and campervanning were regularly sighted within the vicinity of the Paddy's bridge area and by Lower Falls/ Sheep Fanks. Steall Meadows was found to be a common site for tourists and hikers pitching their tents on the flat level grounds near the wire bridge and water source, either hiking in from Steall car park or pitching up after a long day's hike in the Mamore's.

The Ranger Team scheduled late patrols on Fridays and early patrols on Mondays to engage with campers either starting or finishing their camping trip with the hope that they would be able to inform more campers on the need for camping responsibly. For example, on late Friday evening patrols the team patrolled the Steall Meadows area whilst campers were either setting up camp or campfires for cooking, so it was a good opportunity to advise them of how to have campfires responsibly and encourage them to use a camping stove instead of starting fires.



*Figure 7: Evie preparing to dismantle and return a new fire pit*



We recommended to visitors that having a fire on the shingle beach would be better practice rather than on the open grass where a trace of their actions would be left. It takes a substantial amount of time for a burnt patch of grass to recover but to speed up the process and discourage more people from doing the same, fire pits were dismantled, turned or re-turfed.



*Figure 8: A turned fire pit, one method of encouraging grass regeneration*



The Rangers were inclined to leave some fire pits at popular sites which were repeatedly used to reduce the overall impact on the environment. **83 fire pits** were found over the season. Rangers discussed and suggested that a study should be conducted to investigate how well re-turfed fire pits recover and how long the surrounding vegetation takes to regenerate, which would inform best practice moving forward.

*Figure 9: A re turfing fire pit, another method for encouraging grass regeneration*



Whilst most campers were respectful of others and their environment, there were numerous sightings of 'dirty camping' with cases of completely abandoned campsites and gear, and more frequently littering and defecating at sites were regularly found.



*Figure 10: Rory (NLP Participation Officer), Evie and Ellie clearing up an abandoned party site in the Lower Glen*

Furthermore, the Rangers found multiple sites where nearby trees were cut down for use as firewood which clearly goes against the principles of Leave No Trace and is environmentally damaging as deadwood is a vital habitat for an abundance of species. The Rangers were proactive in informing campers of the definition of 'wild' camping and suggested suitable alternative sites when campers had pitched their tents just meters from their car, which goes against SOAC.





*Figure 11: An abandoned campsite in Steall Meadows*

### 1.3.1 Toileting

The opening of two new toilet facilities at Lower Falls car park proved to be successful and well used. The Rangers were responsible for the cleaning and maintenance of the toilets which eased some pressure on toileting in the Glen. However, issues of toileting still remain a frequent problem in the area. The Rangers found that the main hotspot sites were around the Paddy's Bridge area where car boot camping is common but several places just down from Steall car park also had a lot of toileting. Furthermore, unpleasant remains of human excrement can be found down the branch-off paths along the Steall Gorge path, behind large boulders as well as in Steall Meadows itself. Issues of toileting can be seen on Ben Nevis Mountain path particularly concentrated around the 'poo boulder' near Johns Wall area at the Halfway Lochan where large amounts of toilet paper, wipes, sanitary products can be found. Jahama Highland Estates has formally reported the huge quantities of human excrement and waste on Ben Nevis to SEPA due to health concerns and the surrounding negative environmental impact.



## 1.4 Visitors

### 1.4.1 Visitor Surveys

The Ranger Team helped carry out 226 visitor surveys on behalf of the John Muir Trust to gain a better understanding of the demographic visiting the area, how people use and value greenspace, and any improvements that can be made to enhance their visit in the area (e.g., more toilet facilities, better transport links etc.). Visitor surveys were conducted in numerous locations in order to reach a wider demographic so the results would be less biased and more insightful. Surveys were undertaken in the following locations: Achintee, the visitor centre, Lower Falls car park, Steall car park, Steall Meadows and on the Ben Nevis Mountain path.

### 1.4.2 People Counters

Alongside the visitor surveys, the Rangers maintained the people counters in the Glen and on the Ben and collected data on visitor numbers recorded on people counters installed at the following sites: all ability path beside visitor centre, the wooden bridge on the Ben Nevis, beginning of heart attack path, and on the Allt a Mhuillin/CIC path.



*Figure 12: Ellie repairing the visitor counter on the Allt a 'Mhuilinn and taking annual recordings*



### 1.4.3 VMOG

The Highland Council's Visitor Management Operations Group meetings were attended by the Rangers every two weeks. The operational group meetings aim to coordinate local visitor management on the ground in particularly busy hotspot areas, taking a collaborative cross-sectoral approach to managing tourist impacts and issues. The meeting is attended by fellow Ranger Teams in the Highlands, representatives from the police, local landowners and various Highland Council departments such as Traffic management/enforcement, roads team, waste management and visitor services. The VMOG gives a good insight into how other Rangers and operational teams have been managing and addressing the complex array of problems associated with high visitor numbers during peak times in the season. These meetings provide an opportunity to voice concerns and raise issues that need to be addressed such as the lack of waste disposal facilities in lower falls carpark, issues of parking, toileting and irresponsible behaviour out of line with the SOAC.





## 2. Infrastructure

### 2.1 Overview

Infrastructure and maintenance are an incredibly important part of the work that the Nevis Ranger Team carries out over the season. With hundreds of thousands of visitors every year, it is vital that the paths, structures, signage, and car parks are kept safe, tidy, and in brilliant working order. This has kept the Team on their toes and constantly learning as the season has developed.

*Figure 13: The NLP and JMT Ranger Team doing a litter pick on the summit of Ben Nevis*



## 2.2 Path Maintenance

All through the season, the Ranger Team have been incredibly proactive when it came to path maintenance and repair in the Glen and on the Ben. By the end of August, every cross drain on the Ben Nevis Mountain Path had been cleared at least once, and many twice.

*Figure 14: The Rangers maintaining the Ben Nevis Mountain path*

The Allt a Mhuilinn path has also been cleared from the top North Face car park all the way to the CIC Hut, again, many drains twice.



*Figure 15: Ellie clearing the cross drains on the Allt a’Mhuilinn*

Throughout the Glen, the Ranger Team also tackled all the path maintenance on the 1.2km stretch of path between Lower Falls Car Park and Paddy’s Bridge, restoring it once again into an effective and fun trail to explore. The Steall Falls path, from the Car Park to the Meadows was also successfully cleared by the whole team in conjunction with two John Muir Trust staff in fantastically efficient time.





*Figure 16: A path maintenance day in Steall Meadows with JMT*

Several of these path maintenance days have also been run as volunteer work parties meaning the Team have worked with many local people and those from further afield who have been interested in the work. (See more in section: [4.6 Volunteer Work Parties & Events](#))



*Figure 17: A Friends of Nevis path maintenance day on Ben Nevis*



### 2.2.1 Path Repair

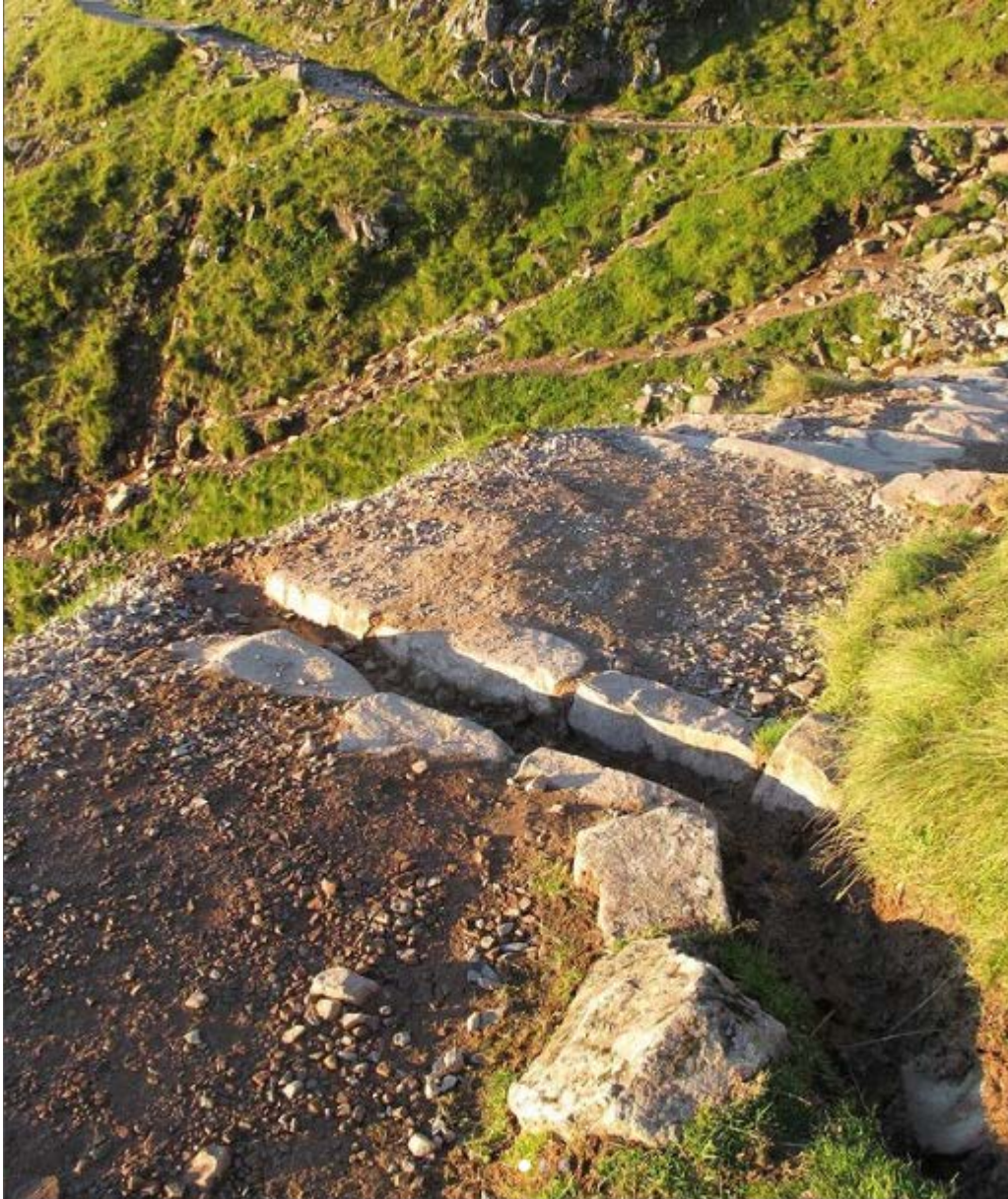
On top of path maintenance, the Ranger Team also carried out several path repairs. The first of which saw 3 members of the Team head up to the Red Burn on Ben Nevis to assist with path repair contractors.



*Figure 18: The Redburn path damage*



They spent the day rebuilding a dangerous section of collapsed path, put in a new cross drain, new steps, and created a new outlet drain down the side of the path to keep it safe and functioning for plenty of time to come.



*Figure 19: A new cross drain by the Redburn on the Ben Nevis path*



They also developed a section of path at Steall Meadows where damaging braiding of the path had been identified. The Team and the John Muir Trust widened an existing section of the path and built a small, natural wall on the desire line to discourage walkers from using it.



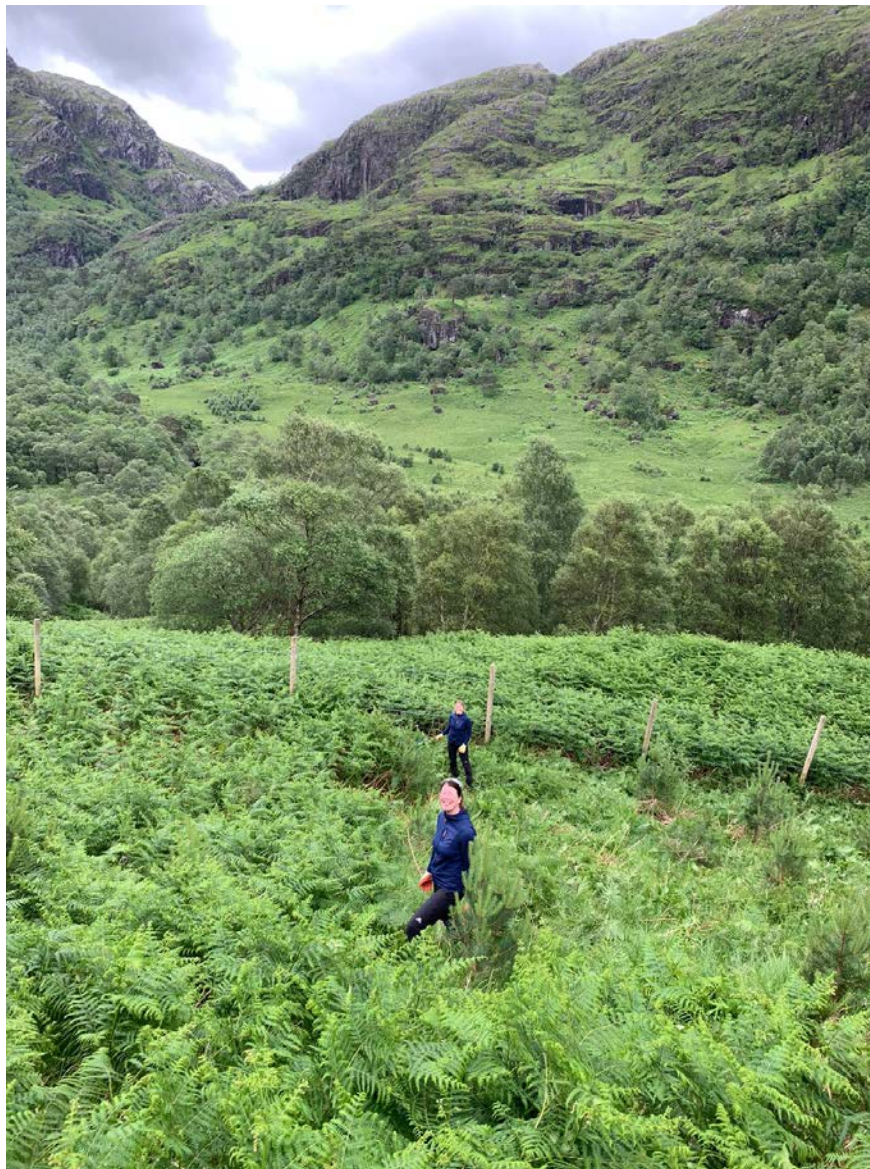
*Figure 20: Charlotte reducing the impacts of braiding on the Steall Meadows path*



## 2.3 Infrastructure Repair and Construction

### 2.3.1 Stile Maintenance

As well as path repair and maintenance, the Ranger Team have also kept on top of other related infrastructure tasks within the Glen. Two large stiles have been improved over the course of the season; the first being located up in one of the many tree enclosures where they added an additional step to improve useability and safety for walkers.



*Figure 21: Evie and Charlotte in a tree enclosure in Upper Glen Nevis*





The second is located at the beginning of the Allt a Mhuilinn path on Ben Nevis. Two members of the team, along with two rangers from Jahama Highland Estates, retrofitted the large stile with tacks and high-grade chicken wire to address feedback from the public that the wood was too slippery in adverse weather.

*Figure 22: Ellie adding chicken wire to the Allt a’Mhuilinn stile*

This will increase the longevity of the existing infrastructure and demonstrate to the public that their feedback is valued and taken seriously.

### 2.3.2 Signage

Signage has also been improved at several locations in the Glen. The Ranger Team headed up the South Steall path to place two new directional signs after feedback from the public suggested the existing path was too vague and tricky to follow. This remediation will hopefully make the path safer and simpler to follow.



*Figure 23: The south Steall path*

### 2.3.3 Lower Falls Car Park

With the opening of the new Lower Falls car park, the team also assisted in the placement of new signs that help with traffic flow and directing the public towards correct parking spaces, walks, and donations.



*Figure 24: The newly refurbished Lower Falls Car Park*



The car park has also created other infrastructural work, including tree planting which the Team spent a day doing along with the John Muir Trust Ranger, Steph McKenna, and NLP Participation Officer, Rory Stewart. The trees continue to thrive and spruce up the car park for the hundreds of visitors that pass through it each day.

*Figure 25: The Rangers planting trees at the Lower Falls Car Park*



## 3. Conservation

### 3.1 Overview

Over the course of the season the Ranger team undertook a total of 25 conservation days. Carrying out species monitoring, and other conservation tasks was key for the Rangers continued professional development as they gained new skills identifying local flora and fauna which was then used to engage with visitors and the local community using Nevis. Furthermore, conservation days created opportunities for the Rangers to network with different organisations and local conservationists helping to foster new working relations and future learning opportunities.

### 3.2 Wildlife Surveys & Species Management

#### 3.2.1 Butterfly Surveys

The Ranger team worked with the John Muir Trust to complete their annual Mountain Ringlet (UKBAP priority species) survey in the remote Corrie Giubhsachan and Stob Corrie Bhealaich. The survey was hugely successful, recording a total of 78 Mountain ringlets on the 5 transects of which 5 were nectaring. Working in a new location also gave the Rangers an opportunity to explore more of the John Muir Trust property as well developing confidence working in remote locations on difficult terrain. Additionally, it gave a chance to further improve plant ID skills, in field species identification, recording, using a GPS and following transects.

*Figure 26: The Rangers conducting a Mountain Ringlet survey in Coire nan Laogh*



When the weather conditions were appropriate for Butterfly flight (above 17 degrees Celsius or full sun and low wind) the Ranger team continued annual monitoring of the two butterfly transects in Glen Nevis. As part of this, the Rangers used the transects in Glen Nevis to take part in the 'Big Butterfly Count' in August, contributing to the UK wide survey. These surveys and records collected can also be compared with records from previous years to highlight any changes in species type or abundance throughout the area.

*Figure 27: The Rangers and Rory Stewart conducting a butterfly survey in Glen Nevis*



Table 1: Glen Nevis Butterfly Transect Recordings

Species	Number Recorded			
	June	July	August	Total
Scotch Argus		1	75	76
Small Pearl Bordered Fritillary	4		1	4
Meadow Brown			1	1
Small Blue			1	1
Small Heath		1		1
Chequered Skipper		5		5



Figure 28: Small Pearl Bordered Fritillary in Glen Nevis

### 3.2.2 Moth Monitoring

The Rangers regularly set up the moth trap at the NLP site at the start of Glen Nevis to record and monitor species in the local area over the season. Over the 17 monitoring sessions 60 different species were recorded and 141 individual moths. The most recorded species was the Clouded Bordered Brindle, followed by the Large Yellow Underwing and the Brightline Brown Eye.



Figure 29: Rosy Rustic moth



Table 2: Most Abundant Recorded species (see [appendix 1](#) for full moth species count)

Species	Number Recorded			
	June	July	August	Total
Clouded Bordered Brindle	3	7		10
Large Yellow Underwing		4	5	9
Brightline Brown Eye	2	6		8
Dark Arches		3	4	7
Small Angle Shades	6	1		7



Figure 30: Poplar Hawk Moth

### 3.2.3 Barn Owl Monitoring

The Ranger Team has been involved with several bird monitoring activities. The primary bird conservation practices this season has been checking the dozens of Barn Owl boxes that are placed throughout the Glen. This has involved working as a team to safely and efficiently check specific locations for Barn Owl chicks so that they could later be ringed by a licensed ringer. This is also something that the Team has been involved with, led by schedule one licence hold and licensed ringer Lewis Pate. Overall, more than 9 chicks were ringed with the help of the Ranger Team and many adults were located and noted down for next year.



Figure 31: Julia returning an owl chick to its box after it has been ringed, supervised by Lewis Pate



### 3.2.4 Kestrel Boxes and Training

As well as the owl boxes, the Team have also monitored Kestrel boxes throughout the Glen for signs of use from various birds of prey. Friends of Nevis have also held bird ringing events at the Ben Nevis Visitor Centre which the Ranger Team have attended. This, along with participation in optional WBBS surveys, has provided the team with excellent additional training opportunities that have led to further understanding and knowledge of species in the area, which can be passed on to the wider public during moments of engagement.



*Figure 32: The Ranger team checking kestrel boxes in Glen Nevis*

### 3.2.5 Bat Survey

Part of the Team also took part in a night-time bat survey run by the John Muir Trust up at Steall Meadows and Ruins. This was another exciting opportunity to expand the skillset and knowledge of the Team and resulted in the first ever recorded sighting of Daubenton's Bats in the area.



### 3.2.6 Wader & Water Bird Training with the BTO

Using existing connections, Nevis Landscape Partnership was able to set up some local training for the Ranger Team and Participation Officer Rory Stewart on wader and water bird ID with the BTO. They spent a fantastic afternoon with Dr Ben Darvill, the BTO's Head of Development and Engagement, learning to ID birds on Loch Linnhe. Several activities were used to get the Team thinking about how to describe, identify, and learn the key features of birds at a distance, covering everything from size, shape, habitat, plumage, colour, and calls. They worked together to practice these new skills out at the Loch and developed their knowledge and abilities which will be incredibly useful for conservation and sharing information with the public.



*Figure 33: Wader bird training with Dr Ben Darvill*

### 3.2.7 Stalking with the John Muir Trust

The Ranger team made the most of the opportunity to get out on a day with the John Muir Trust Stalkers to learn more about the importance of deer management when it comes to managing important habitats in Glen Nevis. The day involved an early, cool, and wet morning start from Steall car park walking out towards Steall ruins and beyond, sticking to the lower path due to some torrential rains and high flowing rivers meaning river crossing were out of the question. The stalkers outlined the processes of tracking the deer herds, monitoring signs of deer presence and weather conditions which would influence their movement. A hind and its calf were shot, and the stalkers undertook the butchering, taking the cuts of meat home and leaving the remains on the hillside for the Raptors to eat. The Rangers found it a great learning experience, gaining an insight into an important area of the land management sector.



### 3.3 Tree Planting and Exclosures

#### 3.3.1 UHI Tree Planting

This season's Rangers helped plant 12 Scots Pine at the Forestry and Land Scotland site Phemie's Wood in Strontian.



Figure 34: Tree planting in Strontian (photo credit: Zeemon Erhardt)

This was the final stage of the 'Future Forests' project which commemorated the 10-year anniversaries of UHI West Highland. Our Ranger's found this was a great chance to meet and make connections with local stakeholders and volunteers.



Figure 35: The NLP Staff and members from UHI preparing to plant Scots Pine at Strontian (Photo Credit: Zeemon Erhardt)



### 3.3.2 Tree Planting in Glen Nevis

With the Nevis Landscape Partnership Tree nursery bursting with 961 Scots Pine (*Pinus sylvestris*), 33 Oak (*Quercus robur*), 5 Crab Apple (*Malus sylvestris*), 24 Hazel (*Corylus avellana*), 2 Goat Willow (*Salix caprea*), 3 Blackthorn (*Prunus spinosa*) and 1 Hawthorn (*Crataegus monogyna*) this autumn was an important time for tree planting.

The Rangers joined Rory Stewart and Rangers from Jahama Highland Estates on a tree planting scoping exercise in a JHE owned enclosure on the lower slopes of Sgùrr a'Mhaim to discuss and identify appropriate locations for planting. The core principles for appropriate planting included: current tree density, site conditions (including light, moisture, aspect and soil) as well as access and health and safety for planting. These factors were important to ensure the long-term success of the trees.



*Figure 36: Rory and Ellie laden with Scots Pine trees ready to plant on the slopes of Sgùrr a'Mhaim*



In late September, planting in Glen Nevis began. The whole NLP Ranger Team, alongside Rory Stewart and the Jahama Seasonal Rangers, planted 400 Scots Pine over three days in one of the Jahama owned exclosures on the lower slopes of Sgùrr a' Mhaim. The Rangers were also involved with a tree planting engagement day with the Jahama Smelter staff (see section: [4.6.4](#))



*Figure 37: Rory (NLP) giving a tree planting demo*



### 3.3.3 Tree Exclosures in Glen Nevis

Bracken Removal in Glen Nevis exclosures is a key task over the summer months. This reduces competition for light and nutrients for the trees planted in the exposure in their early years of growth. The enclosure's targeted were those with youngest trees where reducing the competition was most vital. This season the Rangers were lucky to have support from Outward Bound groups, Friends of Nevis volunteers and a Haberdashers Young Persons Volunteers group with this task (see section: [4.2.3.](#))

*Figure 38: Bracken bashing with Friends of Nevis volunteers in the Upper Glen*



### 3.4 Invasive Species

The Rangers helped identify and flag the invasive species American Skunk Cabbage (*Lysichiton americanus*) for removal in Lower Glen Nevis. Due to its rapid growth rate and location near the watercourse it was imperative to remove the plants found rapidly to ensure it did not pose a threat to native species by outcompeting them for resources. The Rangers assess whether the plants were spreading and mark any new plants for a contractor to come and spray.



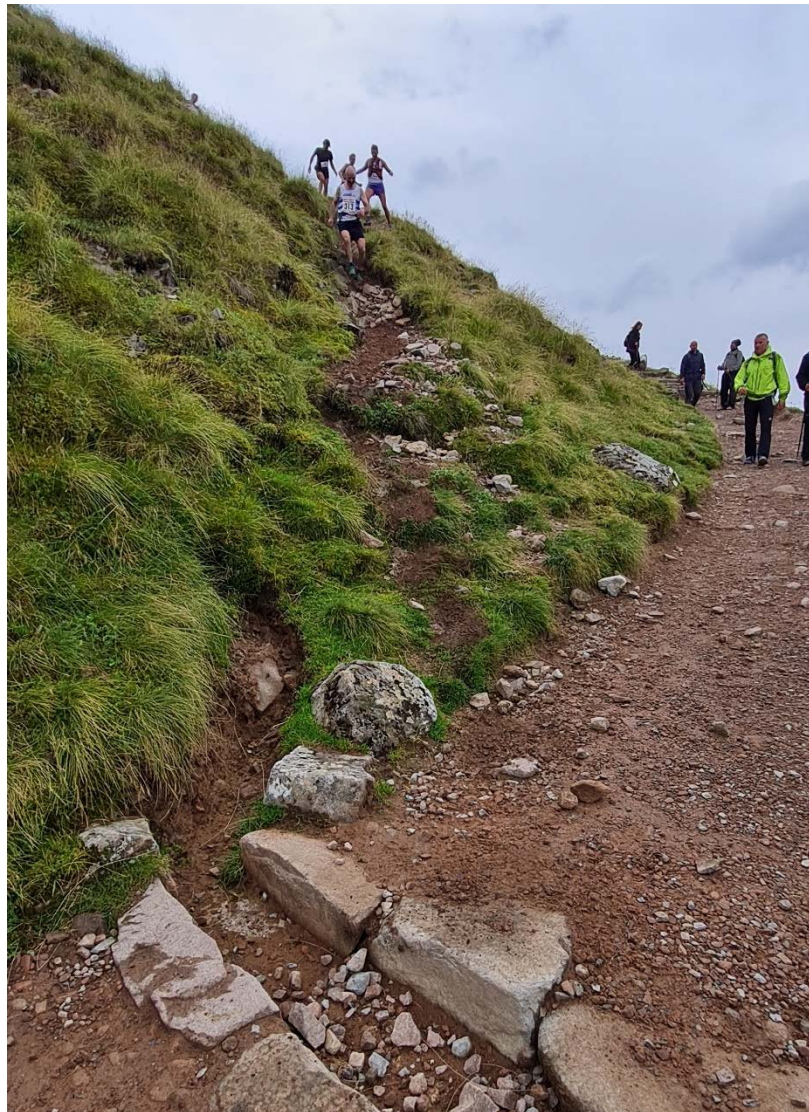
Figure 39: Labelling American Skunk Cabbage for removal in the Lower Glen

Rhododendron Ponticum has been spotted in a couple of remote locations, the rangers pulled them up if they were not too large or took a grid reference for later removal.



### 3.5 Environmental Impact Surveys

With Ben Nevis being a hotspot for events and visitors, it is useful to assess how its use impacts the vegetation and levels of erosion. In support of the John Muir Trust seasonal Ranger, the NLP Ranger Team helped carry out an environmental impact survey on Ben Nevis in response to the annual Ben Nevis fell race. This involved taking photos of the runner's path prior and after the event as well as observing routes taken during the event.



*Figure 40: Runners coming down the short cut on the Ben Nevis race*

The Rangers also helped the JMT Ranger to photograph and mark the route to monitor habitat recovery after the ITERA race passed through the sensitive peatland of Coire Guibsachan. This data will help to ensure habitats don't get damaged by events with a lot of participants in the future.



*Figure 41: Steph (JMT Ranger) following the route taken by the ITERA event in Coire Giubhsachan to assess for damage*



## 4. Education and Community Engagement

### 4.1 Overview

The Ranger team were involved in several education and community engagement events during the summer. This was a great opportunity for sharing knowledge about the Scottish Outdoor Access Code and the importance of the work carried out by the Rangers as well as provide an opportunity to learn more about the important habitats and environments they were working in. The Rangers also had a presence at some core large-scale events in the Glen and on Ben Nevis, to assess their impact and gain insight into how these events are being managed in line with sustainable practises. This provided an opportunity for further networking and engagement with event participants and supporters about the necessity of Rangers in the area.

### 4.2 Outdoor Education

#### 4.2.1 John Muir Trust Junior Ranger Programme

The John Muir Trust was in its second year running the Junior Ranger programme in 2022. Working in partnership with NLP, it gives young people from Lochaber High School an opportunity to gain first-hand experience in practical conservation. The Ranger Team have been involved in several sessions; helping to run a Leave No Trace Awareness workshop, for which all the Junior Rangers were accredited for their new knowledge and understanding, and a SOAC activity day where several games and a litter pick was used to help the young people to understand the principles of the Outdoor Access Code.

*Figure 42: The Ranger team with the JMT Junior Rangers*



#### 4.2.2 UHI Living Landscape Sessions

The Ranger Team, alongside participation officer Rory Stewart, helped deliver two sessions for first year Adventure Geography students at UHI. These sessions were exploring Glen Nevis as a 'Living landscape' with the intent of getting the student thinking about some of the land use issues facing Glen (and Ben) Nevis, focusing on present day over tourism, but also considering the historical use of the land and how that shapes the cultural and physical landscape we see today. The Rangers took a group of 12 students each day on a short interpretation walk starting at the Ben Nevis Visitor centre and up along the start of the mountain path before returning down Heart Attack hill and back along the all-ability path. The Rangers highlighted the importance of the work they undertake and outlined some of the conservation conflicts and management challenges they see on a day-to-day basis. The Team found the session enjoyable and incredibly worthwhile relating present human land use issues with how it shapes present day landscape and the outdoor activities which take place within it.

#### 4.2.3 Education Days

The Ranger Team assisted in the running of several educational days for various school and university groups over the season. They helped two groups from Outward Bound complete conservation tasks such as bracken bashing for their John Muir Award, all the while battling drizzle and midges.

Several members of the Team also assisted in some navigation training for the Masters in Art in the Environment class from Dartington College who were visiting Glen Nevis while working out of Outlandia, on one of several module residentials on their course. They took the group up to Dun Deardail and to Steall Falls over two days, while also educating the young people on any matters of wildlife, plant life, culture, history, and the Ranger role that they were curious about for their work.



Figure 43: Julia and Rory doing navigation training with the Dartington College students



A group of senior school pupils from the South of England also took part in some conservation bracken control in two of the Future Forests exclosures in the Glen, as part of a longer outdoor venture with the Wilderness Foundation. The Ranger Team assisted the conservation activity which was also a part of their John Muir Award.



*Figure 44: School students in a Future Forests tree exclosure working in the Glen through the Wilderness Foundation*





#### 4.2.4 Mountain Safety Awareness Workshop

As part of the induction week, the Ranger team undertook a Mountain Safety awareness workshop run by Rory Stewart and Jahama Estates Liaison Officer, Jonathan Hart, also a member of the Lochaber Mountain Rescue team. The session gave an overview of the skills required to operate in remote environments covering basic hill safety from map interpretation to weather planning, navigation, hazard management and equipment talks with the use of GPS and personal locator beacons. The Rangers were also refreshed on first aid and how to assist in the quick and effective extraction of a casualty from remote environments, along with the procedure for reporting an accident to the mountain rescue.

*Figure 45: The Ranger team practicing first aid in the group shelter in wet conditions in Glen Nevis*

#### 4.2.5 Leave No Trace Awareness Workshop

As part of the training the Ranger Team received, Rory Stewart ran a Leave No Trace Awareness workshop that also included the other Ranger Teams from the Nevis area. This was a brilliant way to make sure everyone was on the same page and ensure that all the Rangers had correct and sufficient information to educate and engage with the public on LNT Principles in the Glen. The group completed several useful activities and had a go at some more hands-on practical tasks while out and about.

### 4.3 Monthly Blog

The rangers have been writing a blog for the NLP website every month sharing their work with the public and giving acknowledgement to all the volunteers helping with different tasks. This gave them a chance to reflect on the work done and informed decisions about work for the following month. It's a valuable tool for reaching people online and highlighting the work undertaken as well as piquing people's interest about the ranger job.

To read the monthly Ranger Update blogs, follow [this link](#).

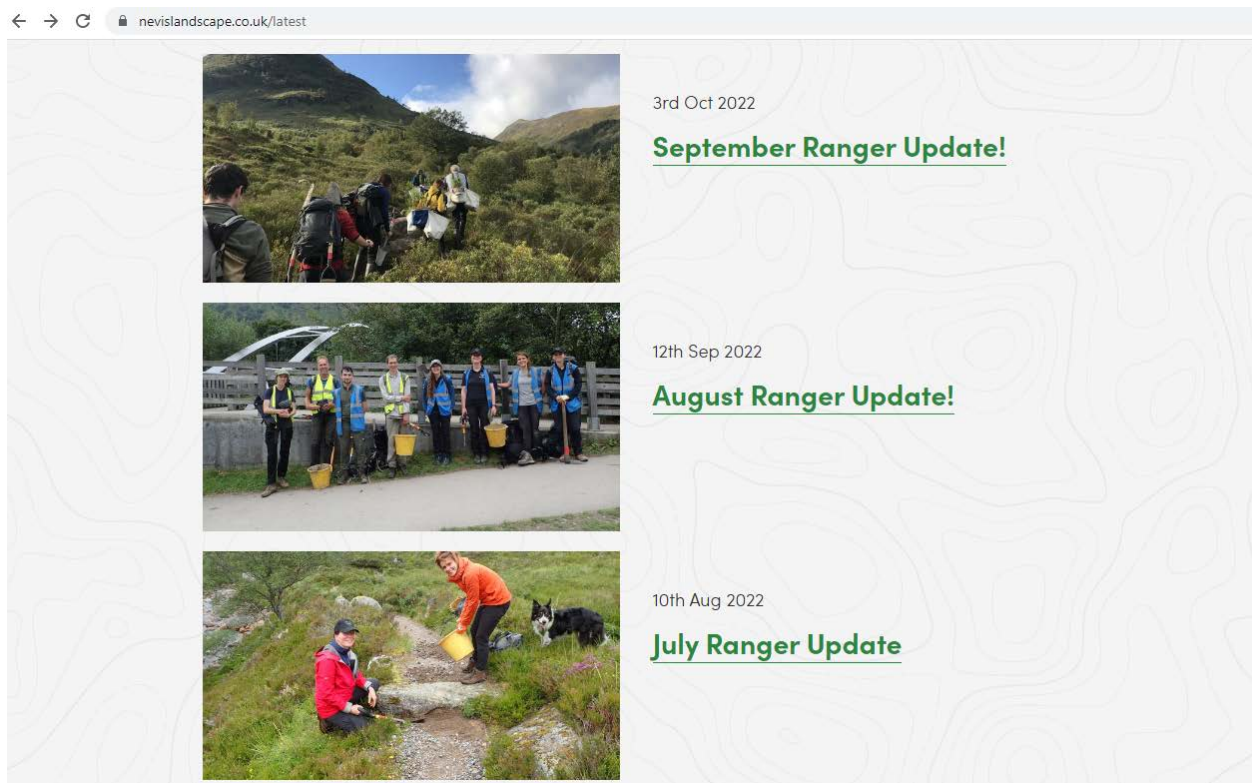


Figure 46: The Ranger monthly blogs on the NLP website



## 4.4 Events and Community Engagement

### 4.4.1 Herbalist Workshop with Clare Holohan

For the third year in a row the Rangers hosted a day with Clare Holohan at West Highland Herbal which was open to the public. In the morning there was a forage walk along the river Nevis, tasting different leaves, flowers and seeds. After lunch there was a chance to collect some more produce and make tinctures, ointment and tea. Everybody gained a lot of new knowledge, both learning to identify new plants and about the medicinal properties of many common species and their folklore.



*Figure 47: Clare Holohan running a foraging workshop in Glen Nevis*



#### 4.4.2 Fungi Foray with Liz Holden

The Rangers also hosted a Fungi Walk with mycologist Liz Holden. This event was also open to the public and has been run throughout the NLP programme therefore keeping this interest alive in the community for many years and encouraging many locals to go out safely foraging. There was a range of mushrooms found and identified and Liz explained the different intricate relationship fungi have with the trees and the important part they play in the ecosystem.

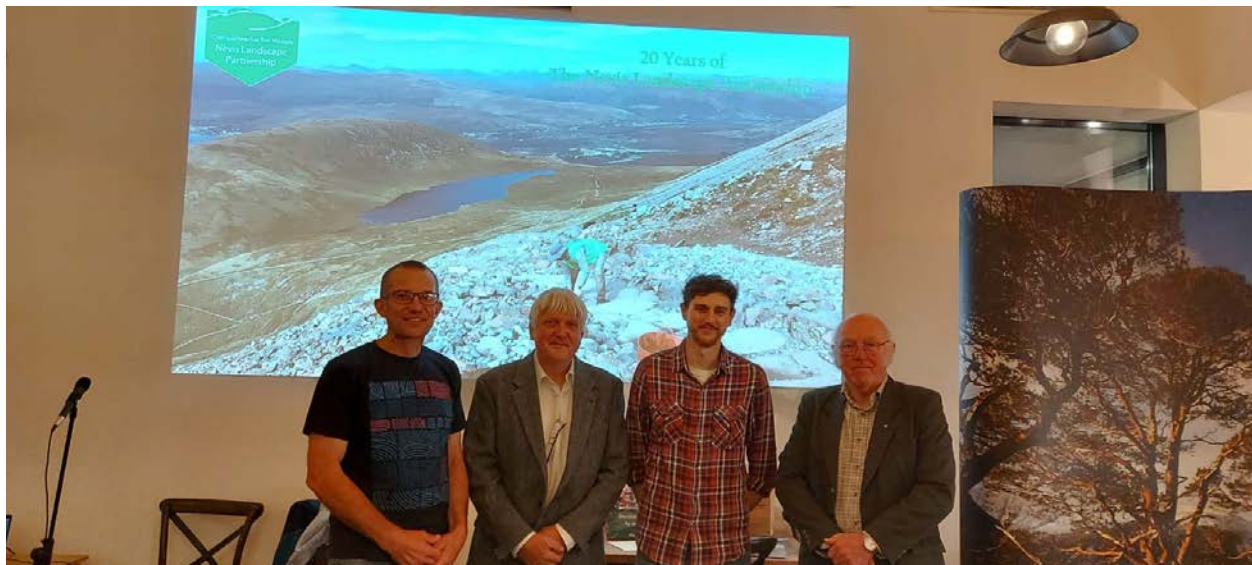


Figure 48: Fungi Foray with Liz Holden



#### 4.4.3 20<sup>th</sup> Anniversary Celebration

On the 24th of September, the Nevis Landscape Partnership celebrated its 20th anniversary. Several walks were planned throughout the day, including a guided walk-up Ben Nevis, a walk up to the vitrified fort 'Dun Deardail' and a Riverside walk led by the Ranger team taking participants on a short trip through the Glen to highlight the important work they do. The day culminated in a celebration at the Highland Cinema with talks from John Hutchison MBE, John Muir Trust's Nathan Berrie, and our own Participation Officer Rory Stewart who shared stories about adventures in and around the Glen. Raffle prizes helped raise money for future NLP work. The evening was a great opportunity for the team and wider NLP community to come together and reflect on many years of hard work and time invested into such a worthwhile cause.



*Figure 49: (Left to right) Mike Pescod (NLP Board Chair and Abacus Mountaineering), Rory Stewart (NLP Participation Officer), Nathan Berrie (JMT) and John Hutchison (Former NLP Board member) giving talks at the NLP 20<sup>th</sup> Anniversary Event*

#### 4.4.4 Councillor Sarah Fanet Visit

The Ranger team were joined by SNP local councillor Sarah Fanet one day for a local patrol. She helped with some cross drain clearing between the visitor centre and the Ben path and a litter pick. She was very interested to find out more about the Rangers and their work and they gained an insight into her role. It was good to share knowledge about the local area and the issues faced here.



*Figure 50: The Ranger Team doing path maintenance with Sarah Fanet SNP's local councillor*

## 4.5 External Events

### 4.5.1 Green Space Dark Skies

September saw a two-day event called Green Space Dark Skies take place on the Ben. This light-based installation involved filming 250 participants up at the Halfway Lochan encouraged and empower individuals to make more environmentally conscious decisions through highlighting the importance of our wild places and protecting them.





*Figure 51: Walking back down the Ben Nevis path after the Dark Skies Event*

Due to the large scale and valuable message of the event, the Ranger team decided there was merit in being present there. It meant the team was able to keep track of how sustainably the event was being run and enabled them to engage with the public and participants in a positive way about SOAC - specifically when it came to toileting on the Ben during the event. They were pleased to find the event organisers handled this exceptionally well and gave the team a fantastic opportunity to work with other professionals in the area who work in a similar sector. Ideas and thoughts were shared among the groups which was beneficial for everyone involved, including the Ranger team. They were also able to collaborate with the John Muir Trust and Jahama Highland Estates for the event which provided even further engagement and learning opportunities.

#### 4.5.2 Salomon Skyline Race

The Salomon Skyline Scotland weekend saw runners from across the world come to tackle a range of skyrunning and trail races in the heart of the Highlands. It was great to see the Glen extra busy with supporters, runners and the events crew out and about enjoying the Scottish hills. The Ranger team continued with their patrols in the Glen and conducted a number of visitor surveys over the course of this busy weekend engaging with a wide range of visitors.

#### 4.5.3 The Ben Race

At one of the biggest local events, The Ben Race, the Rangers helped with pre- and post-race surveys, monitoring the impact on the environment of runners on the mountain. This entailed photos before and after and being in situ on the race day to evaluate the erosion on protected areas. On the same day they also assisted a walker in distress, keeping them safe until mountain rescue arrived to help them.



*Figure 52: Runners coming down the Ben path short cut*





## 4.6 Volunteer Work Parties & Events

Over the season, the Ranger team has been involved with several volunteer work parties run through Friends of Nevis. These have brought likeminded people together and given opportunities for learning in the outdoors. The Ranger team's role has been to support these days through additional practical work and assisting volunteers completing and enjoying their tasks.

### 4.6.1 Bracken Bashing

Bracken bashing with Friends of Nevis and other volunteers brought together Ranger representation from the last three years of the Countryside Skills and Ranger Training course run by UHI West Highland in conjunction with NLP. A few of the Scots Pine planted in that enclosure, some as part of the WHC course are getting taller than the bracken but a lot are not so getting some light into the trees was very satisfying. Also, there are quite a few Oaks in there that needed some respite from the bracken.

*Figure 53: Bracken Bashing with Rangers and Friends of Nevis Volunteers*

#### 4.6.2 Ben Path Maintenance

Path maintenance from the Halfway Lochan down to the wooden bridge with the two seasonal rangers from Jahama and volunteers, cleared all the cross drains and waterbars, stopping the path eroding with all the footfall.



*Figure 54: Preparing for path maintenance on the Ben path with Friends of Nevis volunteers*

Two volunteers also joined for an early October path maintenance from Achintee towards heart attack and a ranger team worked from Halfway Lochan to conservation corner.



*Figure 55: Friends of Nevis path maintenance work party*



#### 4.6.3 John Muir Trust Ben Nevis Volunteer Day

The Ranger Team was also involved in the John Muir Trust Ben Nevis volunteer day. This saw a cross section of volunteers coming from both further afield as well as some familiar faces from Friend of Nevis volunteer workdays. The team split in two, one working on path maintenance between Corner 2 and 3 and the other heading to the summit to collect litter. This was the busiest recorded day on the mountain path this season, so it was a great opportunity to engage with visitors about the work of NLP and JMT and the importance of cooperation between organisations in caring for the landscape.



*Figure 56: Friends of Nevis regular volunteer hard at work on the JMT path maintenance day*

#### 4.6.4 Jahama Highland Estates Community Tree Planting

At the end of October, the Rangers also got involved with a tree planting engagement day with the Jahama Smelter Staff. 300 trees, including Oak, Hazel, and Scots Pine were planted with the help of the NLP Ranger Team, Jahama Highland Estates Rangers, local volunteers, and the smelter staff and their families. This was a great opportunity to engage with local people about their experience of the area as well as having interesting discussions about the work of NLP.



Figure 57: Evie and Ellie tree planting with Michaela, one of Jahama's Rangers on Jahama's Community Tree Planting Day

#### 4.6.5 Drop in Bird Ringing

The Ranger Team have also attended several drop-in bird ringing sessions run through Friends of Nevis and licensed BTO ringers. This has given them a fantastic opportunity to interact with the local wildlife in a different way and engage with other members of the public who have also attended these sessions, as well as Friends of Nevis and BTO volunteers. They have witnessed some exciting finds for the area, including Great Spotted Woodpeckers, a Goldcrest, and a Nuthatch!



Figure 58: A Great Spotted Woodpecker caught at a Friends of Nevis bird ringing drop in



## 5. Conclusion and Recommendations

After a busy season of work, learning, and engagement, the Ranger Team have discovered several things that could be changed, adapted, or made easier for future Seasonal Ranger Teams with Nevis Landscape Partnership. The following are some of the Teams' recommendations:

### 5.1 Connection and Communication

- The WhatsApp group was invaluable as a communications tool with all NLP, JMT and JHE Rangers included in that.
- Following an end of season review with Lochaber Rangers from the Highland Council, JHE, Forestry and Land Scotland and National Trust Scotland, a larger WhatsApp group was proposed for next season. A regular online or face to face meeting was also proposed every 4-6 weeks to share best practice and updates on the area as a whole.
- Schedule one day a week when all NLP rangers are in for catch up about issues and successes faced that week in the area to then appropriate plan the rota accordingly.
- One formal monthly check in with other NLP staff and perhaps JMT and Jahama rangers.
- Each Ranger having their own email addresses would be beneficial.

### 5.2 Community Engagement

- Prepare and promote events early on in the season (June/July) and contact local groups to promote the events to engage with the local community.
- Being involved with community engagement events such as days out with UHI college students was invaluable for meeting more local people who use and will be working in the area in the future and sharing our knowledge of issues and successes faced in the area. Prioritising more of these interactions and events is key for a cohesive approach to managing the Nevis area.

### 5.3 Equipment

- More branded clothing (specifically outer layers) with a Ranger logo would be beneficial so they can be easily identified by the public. It was noted that when the rangers were wearing their short sleeve polo with the Nevis Ranger logo people approached them more readily to ask questions and wanted to talk about their work.
- Using the electric bikes and electric van was a huge success. Logos for the bike trailer would help promote NLP as many people see this when the Rangers are biking up and down the Glen.
- Waterproof bags and /or phone bags could be useful as two phones got waterlogged in pockets of waterproof jackets.

## 5.4 Other

- Removing the bins in the Lower Falls toilets, meant that visitors were encouraged to take their waste home with them. Prior to removing the bins there were issues overfilled and surplus items left around and next to the toilets.
- Starting the role earlier in the season (e.g. April or May) would be hugely beneficial to avoid having to play catch up from these months whilst also tackling the issues from the busiest part of the season in June and July.

## 5.5 Conclusion

The Nevis area is a living, thriving landscape, with so much to offer. This is well known and loved by the public and receives a variety of visitors from those who simply have to step out of their door, all the way to those from much further afield in the world. The Glen and the Ben is *always* going to be impacted by this, by people who want to get out and enjoy everything this incredible landscape has to offer.

For some, the Scottish Outdoor Access Code and Leave No Trace Principles are ingrained in their minds, but for others, these things aren't necessarily so obvious. We believe it is simply lack of education; almost no one would willingly want to harm our environment if they fully understood the implications of certain actions. It's this education that a Ranger Team such as ours provides, and it has been crystal clear to us, and many others who we have talked to in meetings, at events, and out in the Glen that the efforts we put in to protecting this place and engaging with the visitors really is working.

An area like Nevis is always going to feel the weight of the sheer number of feet that fall on the ground. Our people counter data from the last few years demonstrates this well. The pandemic certainly created a surge, but the interest in the area has not dropped now that we are out of lockdowns and stay-at-home rules. If anything, this has allowed people to rediscover the beauty that lies on their doorstep and make the most of the incredible outdoor opportunities in our country.

Without our Ranger Teams, the Glen and the Ben would have looked very different this season, and all seasons previously. What we have learned and seen first-hand more than anything, is the huge importance for our roles, and the funding that makes them possible. Small organisations like Nevis Landscape Partnership would not be able to make this happen on their own and rely entirely on external funding to keep these roles going. We cannot stress how important it is that organisations like NatureScot continue to support these roles and help to enable our landscape to flourish.



## 6. Appendix

### Appendix 1: Moth Monitoring Total Counts

Species	Number Recorded				
	June	July	August	September	Total
Yellow Brimstone Moth	2				2
Silver Ground Carpet	1				1
Browline British Eye	1				1
White Ermine	2				2
Scalloped Hazel	1				1
Small Angle Shades	6	1			7
Pale Shouldered Brocade	3				3
Silver Y	1				1
Common Marbled Carpet	1		2		3
Heart and Dart	2				2
Iron Prominent	1				1
Clouded Bordered Brindle	3	7			10
Brown House Moth	1				1
Cinnabar	1				1
Beautiful Brocade	1				1
Angle Shade	1				1
Buff Ermine	2				2
Birch Mocha	1				1

Map Winged Swift	3	2			5
Mottled Beauty	2	2			4
Green Arches	2	2			4
Poplar Hawk Moth	1	3			4
Beautiful Golden Y	1	1			2
Brown Rustic	1				1
Double Striped Pug	1				1
Grey Dagger	1				1
Brightline Brown Eye	2	6			8
Double Square Spot	1	2			3
Common Rustic	2	2	1		5
Flame	1				1
Large Emerald		1			1
Purple	1				1
Large Yellow Underwing		4	5		9
Snout		1			1
Sward Grass		1			1
Coxcomb prominent		1			1
Burnished Brass		2			2
Slender Brindle		1			1
Dusky Brocade		1			1
Dark Arches		3	4		7
Cloaked Minor		1			1
Green Carpet		2			2
Gold Spangle		1			1
Peach Blossom		1			1





Dotted Clay		5	1		6
Rufous Minor		1			1
Annulet		1			1
July Highflyer		1			1
Common White Wave		1			1
Golden Spot			1		1
Common Wave			1		1
Lesser Broad Bordered Underwing			6		6
Rosy Rustic			6		6
Barred Chestnut			1		1
Dark Marbled Carpet			1	1	2
Lesser Yellow Underwing			1	1	2
Spruce Carpet				1	1
Red Headed Chestnut			1		1
Number of Different Species				60	141