

Raasay: rainforest and rhododendron

A community approach to eradicating R. ponticum is key to achieving the island's Net Zero ambition and natural regeneration. Tom Lusink reports



Raasay, an island off an island off a bigger island, is shaped by its surrounding waters. To live here you need to have persisted since the ice retreated, or discovered seaborne travel: Take the hazel which travelled its way up the Irish Sea, dispersing seeds along the coast that formed the start of the woodlands here, some of which are still with us today; or the humans and the boats they built to pick up alluring yet unruly passengers such as *Rhododendron ponticum*.

Sitting slenderly between the Isle of Skye and the mainland, Raasay is a 62 square kilometre microcosm of the Highlands in many ways. Its varied geology and isolation create a base for a wide spectrum of habitats, home to nationally rare plants and bryophytes and even the endemic Raasay vole. In the lee of the mighty Skye Cuillins, Raasay is no stranger to rain, creating a hyper-oceanic climate, an ideal place for temperate rainforest.

While the island is dominated by various shades of acidic peaty soils and rocky landscapes, there are significant pockets of woodland, old and new

(9% of Raasay is woodland, trending up¹). On the east coast, huge Jurassic limestone cliffs with weathered pinnacles tower over a steep hillside woodland clad in ferns and mosses so heavily that bark can be hard to spot. White-tailed and golden eagles soar the updrafts, imbuing the place with a feeling of ancientness.

Spanning below for a few miles, a mosaic of grassy hillsides with a mixed wood of hazel, birch, wych elm (which appears disease free, possibly thanks to isolation), alder, willows, rowan and holly makes up the island's oldest bit of woodland. More knowledgeable friends tell me there is an abundance of species verifying its status as longstanding temperate rainforest.

The pockets of old hazel wood heavily armoured with a host of lichens, mosses and ferns amaze me the most, likely saved by the sheer steepness and inaccessibility of their sites. I still remember the surprise of learning that what looks like a modest few trees is in fact one organism 'stooling' out, which could be thousands of years old.² Inaccessibility, protector of many highland trees, together with

Regeneration at Inver. Photo: Tom Lusink.

the alkaline base from the limestone, has also allowed rarer plants such as rock whitebeam, dark-red helleborine and round-leaved wintergreen to survive. The latter does not tolerate disturbance, suggesting small parts of this land have lain undisturbed since the last ice age.

The cleared townships of Screapadal to the north and Hallaig to the south of the cliffs were once home to some of the main population centres of the island, and are now void of living human inhabitants. The connecting path can still be seen in sections, weaving below the cliffs amongst the trees. I dream of what it must have been like in its heyday. Few walk it today. To the south, Fearnas (alder in Gaelic) is a stretch of woods made up of birch, hazel, alder, rowan, aspen and a few sentinel oak, a reminder of the greater woods that once made up Raasay.

On the west and north of the island we have our best examples of regeneration in action. One such place is Inver, which 50 years ago was largely



desolate of trees and is now resurgent thanks to the local grazing committee, which made it an enclosure. It is exciting to see the regenerating trees emanating outwards from the side of the burn in which their parents lie. Birch, hazel and willows are predominant here, and it is even home to some rarities such as the threatened white script-lichen.

The window is nailed and boarded through which I saw the West and my love is at the Burn of Hallaig, a birch tree, and she has always been between Inver and Milk Hollow, here and there about Baile-chuirn: she is a birch, a hazel, a straight, slender young rowan.

– From ‘Hallaig’ by Sorley MacLean

‘Hallaig’ by Sorley MacLean poignantly depicts the sadness and destruction of the clearances, but also a deep belonging to a living place.³ A connection built upon millennia of stories and being, now severed, a missing piece of this rainforest.

Today much of the 186i-sh population is concentrated in the south-west of the island, which is owned by the Scottish Ministers and

Forestry and Land Scotland (FLS). Most of the island is designated common grazing, a socialist opportunity on paper. In practice, like many places, crofting is near inaccessible, and the landlord sleeps elsewhere. I sense many do not feel they have a say in land management.

Purple path to Net Zero

In 2022 the Scottish Government chose the island to be part of the Carbon Neutral Islands (CNI) programme, aiming to make it Net Zero by 2040 in a way that is informed and steered by the community. Carbon audits showed that the land was its biggest emission and sequestering source (with peatlands a significant net emitter and woodlands sequestering).¹ In early spring 2023 we created a Community Climate Action Plan; protecting and encouraging biodiversity and carbon-sequestering environments was a priority.

I sought the input, assessment and knowledge of experts both local and further afield. What was revealed was an ecosystem out of balance by factors that are by no means unique: the woodlands (and bogs) are threatened by grazing pressure and invasives like *Rhododendron ponticum*. In response CNI set up a Habitat Restoration

Project, starting with the easier and more immediate rhododendron.

Rhododendron’s reach

Surveys showed 361 hectares, or around 6% of Raasay, were infested with rhododendron, emanating out from human habitation around Raasay House, the former clan seat turned estate house. Unlike the east coast, most of the island has no natural alkaline defender against this plant, and it is spreading prolifically. Concentrations appear most in areas of human disturbance like commercial forestry sites but also threaten places like Inver which are actively regenerating.

The Pandora’s box has been opened, and the dark shade of rhododendron is encroaching. Where might we find our solution in this daunting task? Conventional cut-and-burn methods had been tried here before and in part failed, due to lack of follow-up and to the vigorous regrowth they caused. Doing a second round of this seemed both unpalatable and less accessible (tickets needed, and so on), and manual removal at this scale would require an eager battalion.

We found hope in a more accessible approach being championed by a few. Stem treatment is a technique that



Left: Sharing methods at Morvern, an exchange facilitated by the Community Woodlands Association. Photo: Andy Rockall. Previous page: Cliffs with ancient woodland on the east coast of Raasay. Photo: Tom Lusink.

leaving the bush in situ, except at sensitive sites such as those near watercourses or in gardens.

A small incision or well is made at the base of the plant with a hatchet or drill, and using a handheld spray bottle a small amount of diluted glyphosate is applied directly to the cambium, taken up by the plant's vascular system and translocated around it (cutting disrupts translocation).

It is with regret that we use a herbicide. Done diligently, though, I believe the chemical action is largely contained in the plant, and that this may be a case of *pharmakon* – where the cure is found in the poison. With very limited resources it makes the unfeasible maybe feasible. By the time we reached the southern rhododendron stronghold on FLS land, we had a tried and tested method that secured a partnership with them to clear it on their land.

As of June 2026 we have cleared 239 hectares, about two thirds of the infested area (some of the densest areas still await!), with kill rates above 90%, and above 95% on some sites. And because there is no cutting, no vigorous regrowth arises. Effective treatment has been demonstrated at significantly lower dilution than the guidance, reducing exposure for everyone involved. Three of the original contractors have stuck at the work come rain or shine (mostly rain). Up to five contractors have worked at any one time.

The method comes into its own on larger bushes, though it works across all types of infestation. It has proven highly cost-effective, and our costs are significantly cheaper than commercial rates. I attribute this to the method paired with the consistent, thorough effort of the team. They know the land and its people, they have skin in the game and, I speculate, they care.

As we move into the next phase and seek the next round of funding, the

can be used on almost all levels of infestation, with hand tools, in a way minimally intrusive to the surrounding environment that is accessible to most people, and easily applied. Inspired by this, and seeing communities like Knoydart who have taken ownership of their problem rhododendron, we set off.

Island approach

Seasonality affects the wildlife as much as the economy here, with a large percentage of jobs relying on seasonal tourism. So we chose to lead with a paid model, funded currently through CNI, that creates community wealth through local employment and skills. This has become as important a part of the project as the ecological restoration,

and in late 2024 we offered pesticide-handling training to the community.

On a crisp January 2025 morning, a team of three locally procured contractors began treating rhododendron on behalf of CNI. Set-up was challenging. Solid site-management guidance exists, but once you add the real variables like land access, contractor availability and weather, it becomes hard to apply. A dynamically creative approach was a must.

Infestations near or within ecologically high-value sites such as Inver were prioritised, and a general direction from north to south was taken. Bushes that can easily be levered or pulled out are dealt with that way; otherwise the method is exclusively stem treatment,

COAST

Right: Rhododendron, the looming threat. Below right: Light returns after years of darkness once the rhododendron is removed. All photos: Tom Lusink.

focus is widening to include active regeneration and other invasives like Japanese knotweed. Selective planting will happen in heavily infested areas. In areas of lighter infestation natural regeneration is already evident. Working with Tennessee University, we have been studying sites for the biodiversity impacts of rhododendron and intend to extend this to its carbon implications.

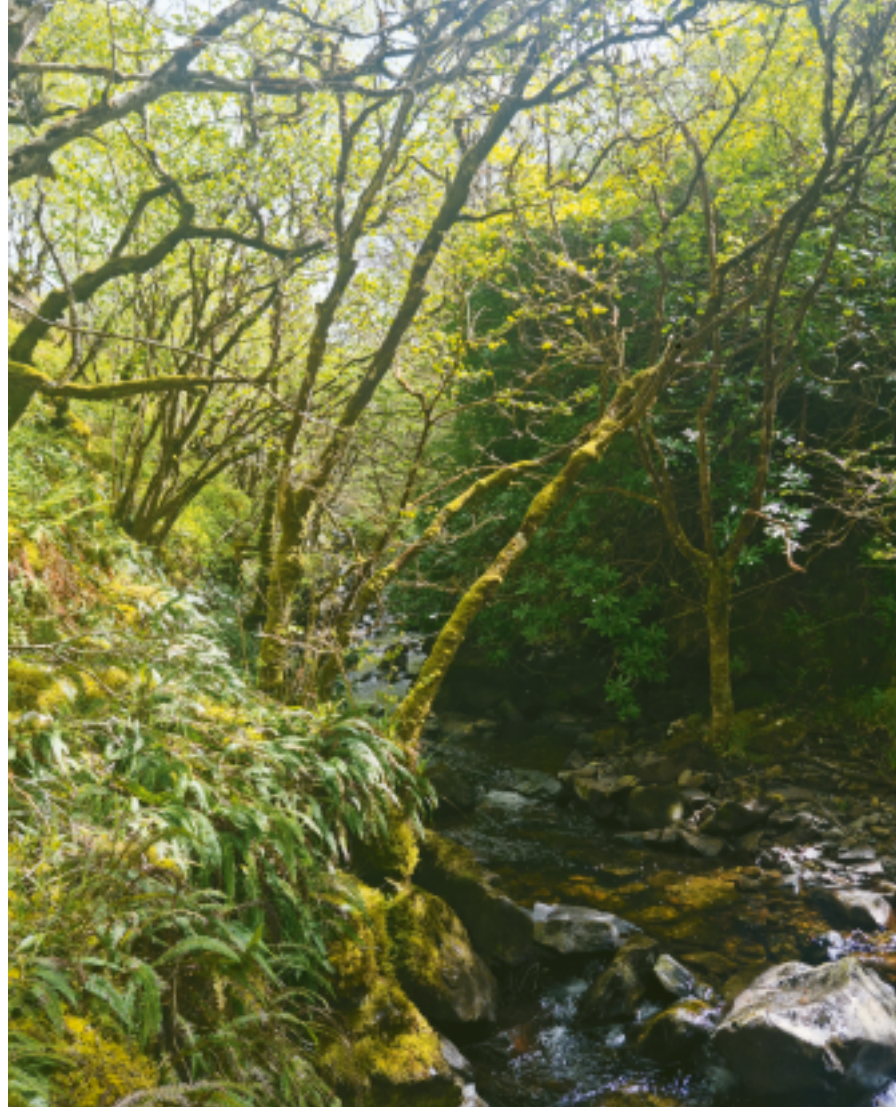
To make a start with the other piece of the puzzle we are working with Raasay Crofters Association to create a deer larder.

We need to give more people a seat at the table of what happens to our land. For Raasay, rhododendron treatment could be an accessible stepping stone to wider community stewardship of the land. One resident said: "I would love to see this work expand into community ranger roles, people employed to serve the island's ecological and human needs, whether that is invasive species control, tree planting or creating paths."

Raasay has recently been identified by the Scottish Government as a priority area for rainforest restoration, which likely means more funding for this kind of work, for now. However, long-term success requires follow-ups over many years, well beyond funding cycles, which makes local ownership and embedment critical.

The clearances and previous poor land management decisions whose fallout is still with us show that things can be destroyed far quicker than they can be built. That amplifies the importance of protecting what we have, and of not delaying regeneration. Until we learn to feel part of the environment we inhabit, its demise is surely inevitable to succumb to the greatest threat of all: people not caring.

It is thanks to the likes of friend and local botanist Stephen Bungard, who has helped me understand the magnificence of this desperately rare rainforest here. If it were not for the guidance, input and help of him and many others we would not have made



this much progress. If I can return some of that, you can reach me at tom@raasaydevelopmenttrust.org.

References

- 1 Aether. (2022) *Carbon Audit of Raasay*. Carbon Neutral Islands Raasay.
- 2 Coppins, S and B. (2012) *Atlantic Hazel: Scotland's Special Woodlands*. Atlantic Hazel Action Group.

3 www.scottishpoetrylibrary.org.uk/poem/hallaig/

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