Integrating Intangible Cultural Heritage in nature recovery: a place-sensitive approach in the Scottish Highlands

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Abstract

This paper explores how integrating Intangible Cultural Heritage (ICH), as defined by the 2003 UNESCO Convention, can support place-sensitive nature recovery. Through two case studies from the Scottish Highlands – the Findhorn Watershed Initiative and Cairngorms 2030 – it examines how placenames, creative cultural expressions and traditional ecological knowledge (TEK) can contribute to inclusive, forward-looking, adaptive approaches. Drawing on qualitative, interdisciplinary methods and lived practitioner experience, the paper reflects on both the opportunities and challenges of aligning emerging ICH policy with nature recovery strategies in a Scottish context, with implications for contexts elsewhere.

Keywords: Nature Recovery, Intangible Cultural Heritage (ICH), Traditional Ecological Knowledge (TEK), Gaelic

Introduction

Nature recovery is as much about our human relationships with nature as it is about the practical work of restoration itself. The long-term sustainability of environmental stewardship depends on emotional, ethical and cultural connections between people and place – relations that foster belonging, responsibility and care. This paper focuses on how humanities disciplines can enrich place-responsive nature recovery initiatives. Drawing on two case studies from the Scottish Highlands – also known as the Gàidhealtachd[1] – it pays particular attention to the opportunities, challenges and implications of integrating elements of UNESCO Intangible Cultural Heritage (ICH) into nature recovery policy and practice.

Defined by the 2003 UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage,[2] ICH encompasses cultural practices, oral tradition, music, narrative, seasonal festivals, craft and traditional ecological knowledge (TEK): that is, long-term, place-based understandings of human-nature relationships.[3] A key mechanism for safeguarding ICH is the identification and inventorying of these practices by state parties, often through community involvement. ICH is also defined as a form of living culture, 'constantly recreated by communities and groups in response to their environment.'[4] As such, ICH can inform and support place-based approaches to nature recovery by grounding them in local cultural practices and community knowledge.

The policy landscape for nature recovery in the UK is complex and multi-layered, with distinct approaches across the four nations. In Scotland, recent developments have set out a clear ambition for the country to become 'Nature Positive' by 2030, with biodiversity restored and regenerated by 2045.[5] Accelerated restoration and regeneration align with supporting thriving communities through a Green and Just Transition,[6] fostering participation and stronger people-nature relationships.[7] The UK's ratification of the UNESCO Convention in 2024 opens up a timely framework and opportunity to support nature recovery through the recognition and integration of ICH. However, policy in this area remains nascent.[8]

We present two landscape-scale case studies: the Findhorn Watershed Initiative and Cairngorms 2030. Led by the Findhorn, Nairn & Lossie Rivers Trust, the FWI aims to restore nature-rich habitats, foster nature connection and build a nature-positive economy across the River Findhorn catchment.[9] It draws on ICH as one way to nurture emotional and ethical connections that support long-term care and stewardship. Cairngorms 2030 is a programme administered by the Cairngorms National Park Authority with the aim of empowering those who live and work in, or visit, the Park to actively address the climate and nature crises. It integrates the Gaelic concept of dùthchas – a worldview emphasising the deep-rooted connection between people and nature

1   The term Gàidhealtachd refers to the Gaelic-speaking, or historically Gaelic-speaking, areas of the Scottish Highlands. Due to language shift and the retreat of Gaelic as a community language, the term is now often used interchangeably with 'the Highlands,' sometimes without explicit reference to language, though it retains strong cultural and historical resonance. See McLeod, W. (1999) 'Galldachd, Gàidhealtachd, Garbhchrìochan', Scottish Gaelic Studies, 19, pp. 1–20.

2   UNESCO (2003) Convention for the Safeguarding of the Intangible Cultural Heritage. Paris: UNESCO. Available at: https://ich.unesco.org/en/convention (Accessed: 11 May 2025).

3   Berkes, F., Colding, J. and Folke, C. (2000) 'Rediscovery of traditional ecological knowledge as adaptive management', Ecological Applications, 10(5), pp. 1251–1262.

4   UNESCO (2003) Convention for the Safeguarding of the Intangible Cultural Heritage. Paris: UNESCO. Article 2, para. 1

5   Scottish Government (2024) Scottish Biodiversity Strategy to 2045: Tackling the Nature Emergency. Edinburgh: Scottish Government.

6   Scottish Government (2021) Just Transition – A Fairer, Greener Scotland: Scottish Government Response. Edinburgh: Scottish Government. Available at: https://www.gov.scot/publications/transition-fairer-greener-scotland/ (Accessed: 15 May 2025).

7   The Scottish National Adaptation Plan (2024–2029) explicitly acknowledges the value of local knowledge —particularly in land-based sectors such as farming, fishing, and forestry— linking nature recovery with inclusive, community-led transitions. See Scottish Government (2024) Scottish National Adaptation Plan 2024–2029. Edinburgh: Scottish Government. Available at: https://www.gov.scot/publications/scottish-national-adaptation-plan-2024-2029-2/ (Accessed: 15 May 2025)

8   The UK Government formally ratified the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage on 7 March 2024, becoming the 183rd State Party. In December 2023, the UK launched a public consultation to help shape the process of developing inventories of living heritage. In April 2025, the Department for Culture, Media and Sport (DCMS) published its response to the key issues raised during the consultation. See https://www.gov.uk/government/consultations/2003-unesco-convention-for-the-safeguarding-of-the-intangible-cultural-heritage/outcome/2003-unesco-convention-for-the-safeguarding-of-the-intangible-cultural-heritage-consultation-response

9   See Findhorn Watershed Initiative (n.d.) Findhorn Watershed Initiative. Available at: https://findhornwatershed.com/ (Accessed: 15 May 2025).

– into its National Park Partnership Plan.[10] These case studies offer valuable lessons for other recovery contexts, especially in protected landscapes or regions with strong local knowledge traditions.

The paper adopts a comparative, qualitative, evidence-based approach. Our methodology combines analysis of lived experience, programme documentation and policy alignment. Examples of meaningful public engagement and development in each context allow for critical exploration of applying culturally embedded concepts in inclusive, future-facing ways, particularly in rural areas undergoing land-use and ownership changes. It is reflexive and interdisciplinary, drawing on the authors' personal and professional involvement as well as diverse perspectives from cultural anthropology, ethnology, human ecology and critical heritage studies.

Image 1: Volunteers planting aspen at Rhindu Farm, as part of the Cairngorms 2030 Future farming project. Image credit: Rupert Shanks.

10   Cairngorms National Park Authority (2022) Cairngorms National Park Partnership Plan 2022–2027: People and Nature Thriving Together. Grantown-on-Spey: Cairngorms National Park Authority. Available at: https://cairngorms.co.uk/wp-content/uploads/2022/09/Cairngorms-National-Park-Partnership-Plan-full-version-FINAL.pdf (Accessed: 15 May 2025).

Scottish Highlands: a cultural and ecological crisis

Nature recovery is urgently needed in the Scottish Highlands due to centuries of ecological degradation resulting from deforestation, overgrazing and land use practices that have diminished biodiversity and disrupted natural systems. The region is vulnerable to climate change, with upland areas experiencing shifts in snowfall and rainfall patterns, as well as increased wildfire risk, which pose significant threats to nature recovery efforts.[11] Vast areas of native woodland have been reduced to fragments,[12] peatlands are widely degraded,[13] and many species once common to the region are now in decline or locally extinct – reflected in its ranking in the lowest 12% globally for biodiversity.[14] Ecological loss is in this region is deeply entwined with cultural loss, as traditional land-based practices and place-based knowledge has been marginalised – a reality poignantly illustrated by the endangered status of the Gaelic language itself, which, having faced historical oppression and persecution, mirrors the very crisis affecting the region's natural systems.[15]

The Highlands is also marked by deeply entrenched land inequalities and today suffers the most concentrated pattern of private land ownership among high income countries.[16] This landscape of exclusion is historically rooted, shaped by events such as the Highland Clearances, which severed long-standing relationships between people and place and laid the groundwork for land use patterns driven by enclosure, industrialisation and extraction. Today, these dynamics persist in new forms, with a rural housing crisis, tourism pressures, the commodification of land through natural capital and carbon offset schemes, and the extraction of energy for distant profit. Global finance and speculative investment play a huge role in land decisions, often excluding local communities from shaping their futures and posing significant challenges for nature recovery.

Complicating these material challenges is a powerful cultural narrative. The Highlands are often imagined as a vast, empty wilderness – born from Romantic literature, 19th-century landscape painting and entangled with the commercial beginnings of the tourism industry. Iconic artworks like Sir Edwin Landseer's Monarch of the Glen (c.1851) helped establish a lasting visual culture that presented the Highlands as wild, sublime, remote and unpeopled.[17] This way of seeing has historically aligned with the interests of capital and landed power, effectively obscuring a complex history of displacement and dispossession – a narrative with global parallels and implications.[18] It also conceals an alternative history: the stories of a once-peopled landscape, known and named by those who had an intimate knowledge of the environment, at a time when ecologies were far richer.

11   Gagkas, Z., Rivington, M., Glendell, M., Gimona, A. and Martino, S. (2023) Fire danger assessment of Scottish habitat types: Deliverable 2.3b for the project D5-2 Climate Change Impacts on Natural Capital. Aberdeen: The James Hutton Institute. Available at: https://www.hutton.ac.uk/wp-content/uploads/2024/03/Deliverable-D2_3b-Fire-Danger-Fuels-Final-6-3-23.pdf (Accessed: 15 May 2025).

12   Only 3% of Scotland's native woodland area is in favorable condition, with the majority classified as intermediate or unfavourable. See Forest Research (2018) NFI woodland ecological condition in Scotland. Edinburgh: Forest Research. Available at: https://cdn.forestresearch.gov.uk/2022/02/fr_nfi_condition_scoring_results_scotland_juzxacp.pdf (Accessed: 15 May 2025).

13   Over 80% of our peatlands are degraded, with an altered biodiversity and losing carbon rather than sequestering it. See NatureScot, (2025), Restoring Scotland's Peatlands, NatureScot, https://www.nature.scot/professional-advice/land-and-sea-management/carbon-management/restoring-scotlands-peatlands (accessed 15 May 2025).

14   This statistic is according to the Biodiversity Intactness Index (BII). See State of Nature Partnership, (2023), State of Nature Scotland 2023 Report, https://stateofnature.org.uk/wp-content/uploads/2023/09/TP26056-SoN-Scotland-summary-report-v5-1.pdf.pagespeed.ce.Elp-TYaoGQ.pdf (accessed 15 May 2025).

15   Ó Giollagáin, C., Camshron, G., Moireach, P., Ó Curnáin, B., Caimbeul, I., MacDonald, B., and Péterváry, T., (2020), Gaelic Crisis in the Vernacular Community: A Comprehensive Sociolinguistic Survey of Scottish Gaelic (GCVC), Aberdeen: Aberdeen University Press.

16   Wightman, A., (1996), Who Owns Scotland, Edinburgh: Canongate Books; Hunter, J., Peacock, P., Wightman, A., and Foxley, M., (2013), 432:50 – Towards a Comprehensive Land Reform Agenda for Scotland, House of Commons Scottish Affairs Committee Briefing Paper, London, p. 5.

17   Sir Edwin Landseer, The Monarch of the Glen, 1851, oil on canvas, Scottish National Gallery, Edinburgh. Available at: https://www.nationalgalleries.org/art-and-artists/159116/monarch-glen (Accessed 28 May 2025).

18   See for example Adams, W.M. and Mulligan, M., (2003), Decolonizing Nature: Strategies for Conservation in a Post-Colonial Era, London: Earthscan Publications; Toogood, M., (2003), 'Decolonizing Highland Conservation', in Adams, W.M. and Mulligan, M. (eds.), Decolonizing Nature: Strategies for Conservation in a Post-Colonial Era, London: Earthscan Publications, pp. 152–171.

Contested landscapes: navigating historical and political contexts

Cultural narratives and imaginaries shape not only perceptions, but also political and material realities. As historian James Hunter points out, dominant conservation models have often treated the region as an empty natural wilderness.[19] The popular concept of rewilding is highly a contested term in the Gàidhealtachd, striking a discord in communities where the historical injustices of the Clearances are still felt – especially where land considered appropriate for rewilding was formerly inhabited. Critics argue that, without community involvement, rewilding risks becoming 'just another form of land colonialism.'[20] This tension is evident in critiques of NatureScot's Wild Land designations,[21] which, as geographer Fraser MacDonald argues, reflect a narrow, elite view of wilderness.[22] In areas of concentrated ownership, this risks sidelining community voices and excluding important cultural perspectives from environmental policy. While frictions exist, some rewilding advocates seek common ground with community-led approaches, integrating ecological restoration with cultural and social renewal.[23]

International precedent supports integrating cultural heritage into conservation and nature recovery, especially in Indigenous and minority language contexts. Evidence from Aotearoa/New Zealand[24] and Canada,[25] for example, demonstrates how these approaches lead to more sustainable, culturally grounded and community-supported outcomes. Scotland offers a distinct context. While Gaelic is protected under Part II of the European Charter for Regional or Minority Languages,[26] it is not officially recognised as an Indigenous language under international law. Although some scholars and community advocates do assert or claim Indigenous status for Gaelic,[27] this remains a highly contentious issue.[28] Internationally, indigeneity is a sharply contested concept because it encompasses complex and often conflicting claims to identity, land and rights, shaped by diverse historical, legal and political contexts.[29] In the Gaelic context, evoking the term can be seen as exclusive or essentialist, potentially sidelining the experiences and identities of people who are not part of Gaelic-speaking communities. Furthermore, using the term risks conflating the historical experiences of Gaels with that of people colonised by external modern imperial powers today. The suppression of Gaelic culture took place within the British state, through policies often viewed as internal colonisation – which is distinct from external domination.

19   Hunter, J., (2014), On the Other Side of Sorrow: Nature and People in the Scottish Highlands, 2nd edn, Edinburgh: Birlinn.

20   For more on this debate, see Legget, J., (2023), 'Highlands Rewilding: Governance and Land Colonialism', Highlands Rewilding Blog, https://www.highlandsrewilding.co.uk/blog/highlands-rewilding-governance-and-land-colonialism (accessed 17 May 2025) and McIntosh, A., (2023), 'The Question of Community and "Rewilding"', Bella Caledonia, 31 January, https://bellacaledonia.org.uk/2023/01/31/the-question-of-community-and-rewilding/ (accessed 17 May 2025);

21   NatureScot is a public body of the Scottish Government responsible for Scotland's natural heritage. See NatureScot, (no date), Wild Land Area Descriptions and Assessment Guidance, https://www.nature.scot/professional-advice/landscape/landscape-policy-and-guidance/wild-land/wild-land-area-descriptions-and-assessment-guidance (accessed 21 May 2025).

22   MacDonald, F., (2013), 'Against Scottish Wildness', Bella Caledonia, 17 July, https://bellacaledonia.org.uk/2013/07/17/against-scottish-wildness/ (accessed 17 May 2025); MacDonald, F., (2021), 'Wild Beasts', London Review of Books, 43(18).

23   See for example, Davidson, M., 2021. Repeopling Scotland. Reforesting Scotland. Available at: https://reforestingscotland.org/wp-content/uploads/2021/10/Repeopling.pdf; Trees for Life, 2023. Let's re-embrace Dùthchas as we rewild and repeople. Available at: https://treesforlife.org.uk/lets-re-embrace-duthchas-as-we-rewild-and-repeople/

24   In Aotearoa, the incorporation of te reo Māori and mātauranga Māori (Māori knowledge) into environmental governance has led to co-management models such as those seen in the Whanganui River settlement, where the river is recognised as a legal person. See: Jacinta Ruru, 'Indigenous Peoples' Ownership and Management of Mountains: The Aotearoa/New Zealand Experience', Indigenous Peoples and the Law: Comparative and Critical Perspectives, ed. by Benjamin J. Richardson, Shin Imai and Kent McNeil (Oxford: Hart Publishing, 2009), pp. 479–503.

25   In Canada, initiatives led by First Nations, such as the Indigenous Guardians programs, embed Indigenous languages and knowledge systems into land stewardship. See: Indigenous Leadership Initiative, Indigenous Guardians: Protecting Land, Empowering Communities https://www.ilinationhood.ca/guardians (accessed 17 May 2025).

26   Council of Europe, (no date), European Charter for Regional or Minority Languages, Part II, https://www.coe.int/en/web/european-charter-regional-or-minority-languages/part-ii (accessed 16 May 2025).

27   See MacKinnon, I., (2021), 'Recognising and reconstituting Gàidheil ethnicity', Scottish Affairs, 30(2), pp. 212–230.; Scottish Crofting Foundation (2008) Crofters: Indigenous People of the Highlands and Islands. Inverness: Scottish Crofting Foundation. Available at: https://www.crofting.org/indigenous_people/ (Accessed: 17 May 2025); Williams, L., (2025), Dùthchas agus Dualchas an Saoghal nan Gàidheil: Gàidheil Resurgence and Indigenous Place-Based Knowledge in and of the Hebrides: Strengthening Climate and Cultural-Ecological Resilience, Tauranga Moana: Alliance for Inter-generational Resilience, https://www.intergenresil.com/images/Gaidheal-Resurgence-30-Mar.pdf (accessed 21 May 2025).

28   Armstrong, T.C., McLeod, W., Dunbar, R., Dunmore, S., O'Rourke, B., and NicLeòid, M., (2022), 'Gaelic and Identity: A Response to Iain MacKinnon', Scottish Affairs, 31(1), pp. 64–83, https://doi.org/10.3366/scot.2022.0398.

29   For a review of these debates see Gausset, Q., Kenrick, J., and Gibb, R., (2011), 'Indigeneity and autochthony: a couple of false twins?', Social Anthropology, 19(2), pp. 135–142.

Scotland's own complex history as a colonising power must also be acknowledged. Such a context calls for a very careful approach that does not oversimplify or conflate distinct colonial histories and their diverse forms of loss and resilience.[30]

This said, Gaelic culture does embody rich traditions of place-based knowledge that resonate, in some respects, with Indigenous ontologies globally. Studies draw attention to an alternative worldview; as Bateman notes, the 'landscape of the Gaelic imagination' reflects a deep, reciprocal relationship between people and nature,[31] described by Newton as a 'bidirectionality between humans and the natural world.'[32] This relational depth is embodied in the Gaelic concept of dùthchas, which refers to 'an existential sense of being in place'[33] carrying with it not only a profound sense of belonging, but also a form of responsible stewardship historically linked to communal land tenure.[34] Dùthchas remains particularly strong in crofting communities, where it continues to inform land-based practices, communal responsibilities and intergenerational knowledge-sharing.[35]

Place, culture and policy

The relational worldview embodied in dùthchas has long underpinned cultural life in many Highland communities. In policy, it has appeared in local and regional sustainability initiatives[36] and is increasingly referenced in literature on land management and community-led environmental stewardship.[37] A report from Adaptation Scotland underscores its relevance to contemporary land-use planning and climate adaptation,[38] while Rewilding Britain highlights its potential to inform equitable, community-centred approaches to land reform and rewilding,[39] advocating its inclusion in legislation such as the Land Reform Act (2016).[40]

30   Similar questions about indigeneity and belonging are also being navigated in Wales; see for example Wynne-Jones, S., Strouts, G. and Holmes, G. (2018) Abandoning or reimagining a cultural heartland? Understanding and responding to rewilding conflicts in Wales – the case of the Cambrian Wildwood. Environmental Values, 27(4), pp. 377–403; Jones, F. (2022) Gendered, embodied knowledge within a Welsh agricultural context and the importance of listening to farmers in the rewilding debate. Area.

31   Bateman, M., (2009), 'The Landscape of the Gaelic Imagination', International Journal of Heritage Studies, 15(2–3), pp. 142–152. See also Macdonald, M. (2010) 'Seeing colour in the Gàidhealtachd: an ecology of mind?', Scottish Affairs, 73(1), pp. 1–10.

32   Newton, M., (2009), Warriors of the Word, Edinburgh: Birlinn.

33   In a research paper for the Sustainability Research Institute (SRI) at the University of Leeds, Murphy draws on personal correspondence with Gaelic scholar Ronnie Black to inform his discussion of dùthchas in the context of imperialism, development and environment in Gaelic Ireland and Scotland. See Murphy, J. (2009) Place and Exile: Imperialism, Development and Environment in Gaelic Ireland and Scotland. SRI Papers (Online), No. 17. Leeds: Sustainability Research Institute, University of Leeds. Available at: https://www.see.leeds.ac.uk/fileadmin/Documents/research/sri/workingpapers/SRIPs-17_02.pdf (Accessed: 29 May 2025). p15.

34   Scottish Gaelic scholar John MacInnes writes, "The native Gael who is instructed in this poetry carries in his imagination not so much a landscape, nor a sense of geography alone, nor a history alone, but a formal order of experience in which these are all merged. The native sensibility responds not to landscape but to dùthchas. And just as 'landscape', with its romantic aura, cannot be translated directly into Gaelic, so 'dùthchas'...cannot be translated in English without robbing the terms of their emotional energy. The complexity involved can be appreciated by reflecting on the range of meaning: dùthchas is ancestral or family land; it is also family tradition; and, equally, it is the hereditary qualities of an individual...a truly transformative word." See MacInnes, J. (2006). 'The Panegyric Code in Gaelic Poetry and its Historical Background.' In M. Newton (Ed.), Dùthchas nan Gàidheal: Selected Essays of John MacInnes (pp. 265–319). Edinburgh: Birlinn. P279. For an extensive discussion with further references, see Mackenzie, F. (2002) 'Re-claiming place: the Millennium Forest, Borgie, North Sutherland, Scotland', Environment and Planning D: Society and Space, 20, pp. 535-560.

35   This is demonstrated in Williams' recent work on cultural-ecological resilience in the Hebrides. See Williams, L., (2025), Dùthchas agus Dualchas an Saoghal nan Gàidheil: Gàidheil Resurgence and Indigenous Place-Based Knowledge in and of the Hebrides: Strengthening Climate and Cultural-Ecological Resilience, Tauranga Moana: Alliance for Inter-generational Resilience, https://www.intergenresil.com/images/Gaidheal-Resurgence-30-Mar.pdf (accessed 21 May 2025).

36   For example, Urras Oighreachd Ghabhsainn (Galson Estate Trust), established in 2005, places dùthchas at the heart of its long-term vision for sustainable land management. See: Scottish Land Commission (n.d.) Land Management Planning: Urras Oighreachd Ghabhsainn (Galson Estate Trust). Available at: https://www.landcommission.gov.scot/our-work/good-practice/transparency-of-ownership-and-land-use/land-management-planning-urras-oighreacht-ghabhsainn-galson-estate-trust (Accessed: 29 May 2025). See also: International Institute for Environment and Development (2001) Sowing Seeds of Sustainability with Dùthchas. Available at: https://www.iied.org/sites/default/files/pdfs/migrate/G01895.pdf (Accessed: 28 May 2025).

37   See Dziadowiec, R.J., (2025). Dùthchas: Locating and Nourishing the Roots of Scotland's Land Reform Revolution. PhD thesis, Coventry University. Available at: https://pureportal.coventry.ac.uk/en/studentTheses/d%C3%B9thchas-locating-and-nourishing-the-roots-of-scotlands-land-refo

38   See Zamuruieva, I., Payne, C., Wolstenholme, R., Casey, J., Connor, B. and Cameron-Smith, A. (2023) Land use & climate change adaptation in Scotland: insights. Commissioned by the Scottish Government as part of the Adaptation Scotland programme. Available at: https://adaptation.scot/app/uploads/2024/09/land-use-and-climate-change-adaptation-report-digital-v2.pdf (Accessed: 29 May 2025)

39   Rewilding Britain (2023). Let's re-embrace Dùthchas as we rewild and repeople. Available at: https://www.rewildingbritain.org.uk/blog/lets-re-embrace-duthchas-as-we-rewild-and-repeople (Accessed: 28 May 2025).

40   Scottish Government (2016) Land Reform (Scotland) Act 2016. Available at: https://www.legislation.gov.uk/asp/2016/18/contents/enacted (Accessed: 29 May 2025).

There are those who advocate for Gaelic culture as a whole to be situated prominently within regional development,[41] which aligns with broader calls to integrate cultural engagement into sustainability efforts.[42] However, it is important to resist essentialist portrayals of the Gàidhealtachd as a homogenous, fixed or static cultural entity; instead, a relational and dynamic understanding is needed – one that recognises the region as a living landscape shaped by diverse, evolving relationships between people, language and place. Such an approach not only reflects the lived realities of the region, but also creates space for the development of policies that are rooted in place, inclusive in scope and responsive to changing social and ecological needs.

Integrating ICH in nature recovery in a UK context

UNESCO's concept of Intangible Cultural Heritage (ICH) offers a constructive framework for recognising the significance of Gaelic cultural practices without conflating them with Indigenous rights. Crucially, the Convention explicitly affirms the contribution of traditional knowledge and practices to environmental sustainability:

> 'States Parties shall endeavour to ensure recognition of, respect for, preservation, and enhancement of the knowledge and practices concerning nature and the universe that are recognized by communities, groups, and, in some cases, individuals as part of their intangible cultural heritage and that contribute to environmental sustainability, including their capacity to evolve, and to harness their potential role in the protection of biodiversity and in the sustainable management of natural resources.'[43]

The Convention calls for action, emphasising the need for capacity building, policy development and community engagement. As a signatory, the UK has made a commitment to uphold these principles; however, as the Government Consultation on the Convention notes, 'there is currently no single government or organisation responsible for implementation across the UK.'[44] Putting it into practice will require collaboration and dedicated resourcing – especially if, as stated, the intended approach is to be community-led.

We can look to Ireland for a leading example. Since ratifying the Convention in 2015, Ireland has integrated ICH into its biodiversity strategies, supporting community-led initiatives.[45] For instance, the Waterways Ireland Heritage and Biodiversity Plan (2023–2030),[46] links the conservation of inland waterways with the safeguarding of traditional cultural practices – such as boat building, oral storytelling and riverside festivals.

In the Scottish context, there has been considerable interest in ICH policy and practice prior to the 2024 ratification. This work – such as the development of a national inventory – has been led and supported through a partnership between creative, museum, and heritage organisations.[47]

41   G. Camshron, 'Resisting Dismissal in the Gàidhealtachd', Scottish Affairs, 30.2 (2021), 240–50

42   E. Auclair and G. Fairclough, 'Living Between Past and Future: An Introduction to Heritage and Cultural Sustainability', in Theory and Practice in Heritage and Sustainability: Between Past and Future, ed. by E. Auclair and G. Fairclough (London: Routledge, 2015), pp. 1–22.

43   Emphasis added. UNESCO. (2003) Convention for the Safeguarding of the Intangible Cultural Heritage. Paris: United Nations Educational, Scientific and Cultural Organization. Article 2.2. Available at: https://ich.unesco.org/en/convention (Accessed: 24 May 2025).

44   UK Government (2024) Consultation on the 2003 UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage. Available at: https://www.gov.uk/government/consultations/2003-unesco-convention-for-the-safeguarding-of-the-intangible-cultural-heritage/consultation-on-the-2003-unesco-convention-for-safeguarding-of-the-intangible-cultural-heritage (Accessed: 29 May 2025).

45   Government of Ireland. (2023) National Biodiversity Action Plan 2023–2030. Dublin: Department of Housing, Local Government and Heritage. Available at: https://www.gov.ie/en/department-of-housing-local-government-and-heritage/publications/irelands-4th-national-biodiversity-action-plan-20232030/ (Accessed: 24 May 2025).

46   Waterways Ireland. (2023) Heritage and Biodiversity Plan 2023–2030. Enniskillen: Waterways Ireland. Available at: https://www.waterwaysireland.org (Accessed: 24 May 2025).

47   The ICH Scotland Partnership, comprising Museums Galleries Scotland (MGS), Traditional Arts and Culture Scotland (TRACS), Historic Environment Scotland and Creative Scotland, has been instrumental in advancing ICH initiatives. In 2024, TRACS was recognised by UNESCO as an accredited advisory organisation on ICH, highlighting its commitment to 'safeguarding Scotland's living heritage.' Historic Environment Scotland (2023) Joint statement from Intangible Cultural Heritage Scotland Partnership. Available at: https://www.historicenvironment.scot/about-us/news/joint-statement-from-intangible-cultural-heritage-scotland-partnership/ (Accessed: 29 May 2025). See also Local Voices CIC, (2021), Mapping Intangible Cultural Heritage Assets and Collections in Scotland, commissioned by Museums Galleries Scotland, Historic Environment Scotland, Traditional Arts and Culture Scotland and Creative Scotland. https://heritagecrafts.org.uk/wp-content/uploads/2021/08/Mapping-ICH-in-Scotland-Local-Voices-Aug-2021-w-Logos.pdf (accessed 18 May 2025).

Notably, ICH policy in Scotland has adopted an inclusive approach, aiming to sustain traditional practices while also recognising diverse contemporary cultural expressions, including those of migrant and marginalised communities. However, there is still very little structured engagement between ICH and nature recovery discourse – reflecting a persistent divide between cultural and environmental policy spheres that limits the potential for more integrated, place-based approaches.[48]

The concept of biocultural diversity[49] offers a useful framework for bridging the 'nature–culture divide.'[50] It speaks to the interconnectedness of biological, cultural and linguistic diversity, recognising that cultural loss can significantly impact the sustainability and resilience of ecosystems. This integrated perspective underpins the UNESCO Biosphere model, which promotes sustainable relationships between people and nature.[51] Zoe Russell's research in the Wester Ross Biosphere, a community-led initiative in northwest Scotland,[52] explores how these nature–culture relations are actively negotiated on the ground.[53] Her work highlights significant gaps in UK policy frameworks – particularly the absence of formal mechanisms for incorporating forms of ICH into biodiversity strategies and land management decisions. Yet, as this research shows, practices like crofting and Gaelic language revitalisation can enhance community resilience, support biodiversity and offer more just, place-sensitive models of environmental governance.

It is also crucial to consider how global concepts are interpreted and applied in local contexts. Often rooted in Western epistemologies and emerging from institutional agendas, frameworks like ICH and TEK may not align with community understandings.[54] As such, they risk cognitive or epistemic extractivism – a dynamic observed in other contexts where minoritised or colonised cultural heritage is treated instrumentally, as a resource to be mined for policy and practice.[55] Speaking to the Scottish Gaelic context, Ní Mhathúna suggests that international concepts are best understood as collaborative tools – valuable only when they foster mutual respect and meaningful dialogue across worldviews.[56] In this spirit, concepts such as ICH and TEK can act as a bridge: a means of fostering dialogue grounded in mutual respect for both ecological and cultural complexity.

In the context of the Scottish Highlands and Islands, this is especially important. Integrating ICH into nature recovery brings challenges, particularly when long-standing traditions intersect with policies that emphasise adaptation and inclusion. For example, historical tensions between conservation bodies such as the RSPB and local crofting communities in Uist and Benbecula over

48 See Bachell, A. (2021) 'Appendix 4: The national natural heritage organisations and ICH – a personal perspective', in Local Voices CIC Mapping Intangible Cultural Heritage Assets and Collections in Scotland. Available at: https://heritagecrafts.org.uk/wp-content/uploads/2021/08/Mapping-ICH-in-Scotland-Local-Voices-Aug-2021-w-Logos.pdf (Accessed: 18 May 2025), pp. 108–109.

49 The concept of biocultural diversity was first developed in the 1990s through interdisciplinary work connecting ecology, linguistics, and anthropology. Key contributions came from Luisa Maffi and the organisation Terralingua, who emphasized the co-evolution of human cultures and the ecosystems they inhabit. See: Maffi, L. (2001) On Biocultural Diversity: Linking Language, Knowledge, and the Environment. Washington, DC: Smithsonian Institution Press.

50 See Harmon, D. (2007) 'A bridge over the chasm: finding ways to achieve integrated natural and cultural heritage conservation.' International Journal of Heritage Studies, 13(4–5), pp. 380–392.

51 The Man and the Biosphere (MAB) Programme, launched by UNESCO in 1971, provides a framework for integrating biodiversity conservation with cultural values and traditional knowledge through designated Biosphere Reserves. See: UNESCO (2020) Man and the Biosphere Programme (MAB). Available at: https://www.unesco.org/en/mab (Accessed: 5 July 2025).

52 Wester Ross is a rural region of north-west Scotland which received UNESCO biosphere designation in 2016. Wester Ross Biosphere Ltd., 2025. See: https://www.wrb.scot/ (Accessed 25 May 2025).

53 Russell, Z. (2022). Moving beyond 'common sense' discourses of nature-culture in the Scottish Highlands: A critical ethnography of Wester Ross UNESCO Biosphere Reserve. PhD thesis, University of Stirling. Available at: https://storre.stir.ac.uk/handle/1893/34893 (Accessed 25 May 2025).

54 See Pickerill (2024) for a critique of white environmentalism's reliance on nature–society dualisms and its colonial-capitalist framing, drawing on encounters between white environmentalists and Indigenous activists in northwest Australia. See Pickerill, J., 2024. Lived environmentalisms: everyday encounters and difference in Australia's north. Geography and Environment, 11(1).

55 Grosfoguel, R. (2019). Epistemic Extractivism: A Dialogue with Alberto Acosta, Leanne Betasamosake Simpson, and Silvia in B. De Sousa Santos and M.P. Meneses (Eds.) Knowledges born in the struggle: Constructing the epistemologies of the global south. New York: Routledge; Simpson, L. & Klein, N. (2013). Dancing the World into Being: A Conversation with Idle No More's Leanne Simpson. Available at https://www.yesmagazine.org/social-justice/2013/03/06/dancing-the-world-into-being-a-conversation-with-idle-no-more-leanne-simpson (Accessed 25/05/25). See also Pickerill, J. (2024) Lived environmentalisms: everyday encounters and difference in Australia's north. Geography and Environment, 11(1).

56 Ní Mhathúna, D., (2021), 'Traditional Ecological Knowledge and the Relevance of Dùthchas in Gàidhealtachd Environmental Futures', Scottish Affairs, 30(2), pp. 251–261; Whyte, K.P., (2013), 'On the Role of Traditional Ecological Knowledge as a Collaborative Concept: A Philosophical Study', Ecological Processes, 2(7), p. 2.

land management practices on the machair[57] reflect broader struggles to balance long-established livelihoods with externally framed ecological goals.[58] In such cases, perceptions of marginalisation – particularly at the outset of initiatives – can shape community responses as much as actual impacts. It is also important to recognise that community perspectives are rarely uniform: while some voices may express resistance, others may welcome conservation efforts, though these differing views are not always equally represented.

The UNESCO definition of ICH as living culture is particularly relevant and useful here. This framing allows for a more dynamic understanding of cultural practices – not as romanticised or static relics of the past, but as adaptable systems that can contribute positively to environmental goals. This could lead to collaborative solutions that do not simply preserve traditions in isolation, but incorporate them into contemporary recovery strategies, ultimately strengthening both community wellbeing and ecological outcomes.

To integrate ICH effectively within nature recovery policy, the following high-level recommendations are proposed:

- Commit strategically to cross-sector collaboration between cultural and environmental policy spheres by establishing infrastructure and interdisciplinary spaces such as working groups or advisory panels.

- Provide education and training for policymakers, practitioners and communities to deepen understanding of ICH's role in nature recovery.

- Ensure meaningful community leadership in ICH-related environmental stewardship through inclusive decision-making processes.

The following case studies offer further policy recommendations for effective local-level implementation.

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57   The machair is a fertile, low-lying coastal grassland unique to north-west Scotland, especially the Outer Hebrides. Formed by wind-blown shell sand, it supports rich biodiversity and reflects centuries of traditional Gaelic crofting practices.

58   For instance, the RSPB's involvement in projects like the Machair LIFE+ initiative in North Uist highlights the complexities of aligning conservation goals with the needs and practices of local communities. Some crofters expressed concerns about the implications of conservation policies on their traditional land use, viewing certain interventions as top-down approaches that did not fully account for local knowledge and socio-economic realities. See: Hayes, K.L. (2018) 'Oh, dear! What can the Machair be?', Glasgow Natural History Society. Available at: https://www.glasgownaturalhistory.org.uk/machair/ohdear.pdf (Accessed: 26 May 2025).

CASE STUDY 1:

Findhorn Watershed Initiative[59]

The Findhorn Watershed Initiative (FWI) was launched in 2022[60] as a multi-generational vision to restore a mosaic of nature-rich habitats, cultivate a local culture of nature connection, and enable a thriving, nature-positive economy within the River Findhorn catchment area of northeast Scotland.[61] Covering 1,300 km² from the uplands of the Monadhliath Mountains to the Moray Firth coast, the initiative is led by the Findhorn, Nairn, & Lossie Rivers Trust in collaboration with landowners, land managers, local communities and businesses. It emerged in response to the Trust's 2021–2026 Management Plan,[62] which focuses on climate action and ecosystem restoration in response to both local challenges as well as global environmental goals.[63]

Guided by a bioregioning approach,[64] the FWI focuses on restoring the ecological and cultural integrity of the landscape by working within natural boundaries – such as watersheds – rather than political or administrative ones.[65] Bioregionalism also underscores the interconnectedness of ecological systems and cultural heritage, recognising that forms of ICH and TEK play a vital role in shaping sustainable relationships with the land.[66]

The FWI adopts a holistic vision for nature recovery, structured around three interdependent areas: Nature Recovery, Nature Connection, and Nature-Positive Economy. Of particular focus in this discussion is the Nature Connection programme, which aims to achieve three core outcomes:

1. Increased nature-connectedness to support the wellbeing of all watershed inhabitants.

2. A deeper sense of place and belonging, rooted in the watershed.

3. The development of stewardship mindsets that inspire pro-nature behaviour changes.

At the heart of the FWI's approach is the belief that nature recovery is as much about human relationships with the natural world as it is about practical measures – such as planting trees or improving water retention. Crucially, it also involves supporting shifts in everyday behaviours and attitudes toward the environment.[67] This is reflected in its range of community-focused strategies, which includes a programme of cultural research and engagement events. Activities have included community cèilidh gatherings,[68] art workshops, educational public talks and guided family walks – all designed to foster a deeper sense of place, connection and belonging.

59　This case study was also presented at a national conference 'Intangible Cultural Heritage in Scotland' held in Birnam, 2024, where it was highlighted as an example of best practice in integrating ICH principles into nature recovery, demonstrating how cultural heritage can play a vital role in ecological conservation and community resilience.

60　Elle Adams was the visionary founder of the Findhorn Watershed Initiative, inspiring its holistic approach to landscape restoration. Her leadership has been pivotal in fostering collaborative activities that deepen connection to place and promote sustainable stewardship.

61　The first 3-year pilot phase of the FWI was funded through a blending of public, private and philanthropic funding sources, including; the Scottish Government Climate Change Division's Just Transition Fund, LNER's Customer & Community Investment Fund, NatureScot's Nature Restoration Fund, Moray Climate Action Network, and a multi-year partnership with Scotch whisky company Chivas Brothers.

62　Findhorn, Nairn, and Lossie Rivers Trust, (2021), Catchment Management Plan 2021–2026: River Findhorn, River Nairn and River Lossie, Elgin: FNLRT.

63　The decline of wild Atlantic salmon and the identification of the need for restoration of river woodlands to shade the river and reduce water temperatures to make the rivers more hospitable for salmon as the climate changes has been a key entry point for engaging landowner and land managers in the projects. For more, see SCOTLAND: The Big Picture. (2022). Riverwoods.

64　According to the Bioregional Learning Centre, bioregioning is 'a practice, a journey of connection learning and action. There is no separation between human systems and ecosystems, bioregioning brings them together. Nor is there privilege of one kind of 'knowing' over another. Science and art, community action and policy-making go hand in hand.' See also the Bioregional Learning Centre https://www.bioregion.org.uk/bioregioning

65　Wahl, D.C. (2020) Bioregionalism – Living with a Sense of Place at the Appropriate Scale for Self-reliance. Medium. Available at: https://medium.com/age-of-awareness/bioregionalism-living-with-a-sense-of-place-at-the-appropriate-scale-for-self-reliance-a8c9027ab85d (Accessed: 28 May 2025); Thackara, J. (2025) 'Stories of Reconnection: Water Design in Bioregions', in Waal, H. and Driessen, C. (eds.) Water Works: Eco-Social Design in Practice. Amsterdam: Valiz;

66　For more on how contemporary bioregionalism can support place-based learning and action see Wearne, S., Hubbard, E., Jónás, K. & Wilke, M., (2023). A learning journey into contemporary bioregionalism. People and Nature, 5(6), pp.2124–2140. doi:10.1002/pan3.10548. Available at: https://doi.org/10.1002/pan3.10548 (Accessed 20 July 2025).

67　See Martin, L., White, M.P. Hunt, A., Richardson, M., Pahl, S & Burt, J., (2020), Nature contact, nature connectedness and associations with health, wellbeing and pro-environmental behaviours. Journal of Environmental Psychology, 68. doi.org/10.1016/j.jenvp.2020.101389;

68　A cèilidh is a traditional convivial social gathering where music, song and food might be shared, upholding community and culture.

Human Ecology was chosen as the framing for this programme of work because it offers an accessible and intuitive way to communicate the integration of cultural and ecological perspectives to a broad audience. Focused on the relationship between people and their environment, human ecology is an interdisciplinary approach that can inform both understanding and practice. It calls for participatory, place-based methodologies that embrace ecological, cultural and spiritual dimensions.[69]

The researchers-in-residence, Mairi McFadyen and Raghnaid Sandilands, drew on their shared creative ethnological practice of cultural darning and mending – finding threads from the past and purposefully weaving them back together.[70] Their work is future-oriented, rooted in an ethical, reciprocal relationship with the land, its people and their stories: 'While we acknowledge that we cannot mend the whole, we can make small acts of repair that nurture memories of those who stepped before, helping to both make and renew people and place.'[71] By speaking to local community members and drawing on local sources such as historical maps, manuscripts, periodicals, song collections, audio archives and oral histories, the researchers created a publication and series of podcasts as an offering back to the local community.[72]

While many residents in the River Findhorn watershed recognise Gaelic heritage as part of the region's history, few maintain a living connection to the language due to cultural displacement, the decline of intergenerational transmission, inward migration and limited Gaelic education. Gaelic can be seen as a distant cultural artefact – belonging to the past rather than a living source of environmental insight.

Gaelic placenames and their ecological significance

Geographical placenames are an important part of ICH, relating to the domains of oral traditions and expressions and knowledge concerning nature and the universe.[73] The connection between cultural memory and ecological understanding is vividly illustrated in the context of the River Findhorn, or Uisge Èireann in Gaelic. Although the terrain of the upper reaches may appear ecologically diminished today, the cultural memory embedded in placenames, song and story holds valuable knowledge about the land and its former richness. Names encode details about flora and fauna, landforms, traditional land uses, settlement patterns, local stories and beliefs. Even the smallest features of the landscape were named, reflecting a depth of local knowledge and care.[74]

For example, the word caochan refers to the smallest streamlet, defined as 'a fine moorland rivulet, a purling rill.' Derived from the old Gaelic caeich, meaning blind, one interpretation is that these rills are named from the perspective of the land – 'small blind one' – so embedded in the moor that it cannot see out of its own bed (as well as, perhaps, being obscured from human sight). The tributaries flowing into the river Findhorn are rich with such names, 86 in total, including Caochan a' Chrithinn (of the aspen), Caochan Clais nan Eun (of the hollow of the birds), and Caochan na Suidheig (of the wild raspberries). Creating a new map of these names reminds us that the land is neither empty nor untouched, but rather richly layered with human meaning. This shifts our focus, inviting us to see the landscape through other perspectives.

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69   The researchers were particularly influenced by Jamie Whittle's White River: A Journey Up and Down the River Findhorn (2008), which draws on the Scottish tradition of human ecology to explore the deep interconnection between people, place, and landscape. His reflective, place-based narrative weaves ecological insight with cultural memory and spiritual reflection. Similarly, Alastair McIntosh's Soil and Soul: People versus Corporate Power (2001) advocates for a grounded human ecology approach that integrates emotional, cultural, spiritual and community dimensions in fostering sustainable relationships with the land. See Whittle, J. (2008) White River: A Journey Up and Down the River Findhorn. Edinburgh: Sandstone Press; McIntosh, A. (2001) Soil and Soul: People versus Corporate Power. London: Aurum Press.

70   McFadyen, M. and Sandilands, R., (2021), 'On "Cultural Darning and Mending": Creative Responses to Ceist an Fhearainn / The Land Question in the Gàidhealtachd', Scottish Affairs, 30(2), pp. 157–177.

71   This quote draws on the sentiment of poet and ethnologist Cáit O'Neill McCullagh. See McFadyen, M. and Sandilands, R., (2024), Uisge Èireann: Sgeulachd na h-Aibhne is nan Daoine | Findhorn: the River's Human Story – Placenames, Music, Song and Story from the Upper Catchment, Findhorn: Findhorn Watershed Initiative. https://findhornwatershed.com/human-ecology (accessed 21 May 2025).

72   See https://findhornwatershed.com/human-ecology

73   UN Statistics Division, (no date), Chapter 22: Geographical Names as Cultural Heritage, United Nations Group of Experts on Geographical Names (UNGEGN), https://unstats.un.org/unsd/geoinfo/ungegn/docs/CHAPTER%2022.pdf (accessed 21 May 2025).

74   This kind of traditional knowledge embedded in Gaelic cultural heritage was explored in relation to Ecosystem Services in a scoping report for NatureScot, linking historic Gaelic perspectives to contemporary and future management of land, freshwater and marine resources. See Maclean, R. (Ruairidh MacIlleathain) (2021) Ecosystem Services and Gaelic: A Scoping Exercise. NatureScot Research Report No. 1230. Available at: https://www.nature.scot/doc/naturescot-research-report-1230-ecosystem-services-and-gaelic-scoping-exercise

Caochan

a fine moorland rivulet;
a purling rill.

1. *of the willow corrie*
2. *of the base ruins*
3. *of the party*
4. *of the corrie of the raid*
5. *of the aspen*
6. *of the pot*
7. *of the corrie of the black stag*
8. *of the black gap of the thieves*
9. *of the hollow of the stag*
10. *of the corrie of the calves*
11. *black caochan of the tree*
12. *of the hollow of the birds*
13. *of the dun coloured corrie*
14. *small caochan of the base of the sheiling*
15. *of the black cairns*
16. *big caochan of the base of the sheiling*
17. *of the rounded hill of the calves*
18. *little red caochan*
19. *litte grey caochan*
20. *of the rock of the eagle*

5. Caochan a' Chrithinn
12. Caochan Clais nan Eun
20. Caochan Creag na h-Iolaire
9. Caochan Clais an Daimh
1. Caochan a' Choire Sheilich
13. Caochan a' Choire Odhair
20. Caochan Glas Beag
3. Caochan na Buidheinn
18. Caochan Dearg Beag
10. Caochan Coire nan Laogh
14. Caochan Beag Bun Ruighe
2. Caochan na Làraiche Maoile
6. Caochan na Poite
11. Caochan Dubh na Craoibhe
15. Caochan nan Càrnaichean Dubha
16. Caochan Mòr Bun Ruighe
17. Caochan Meall nan Laogh
4. Caochan Coire na Creiche
7. Caochan Coire an Daimh Dhuibh
8. Caochan Eag Dhubh nam Meirleach

From the old Gaelic 'caeich' meaning 'blind' - 'small blind one'
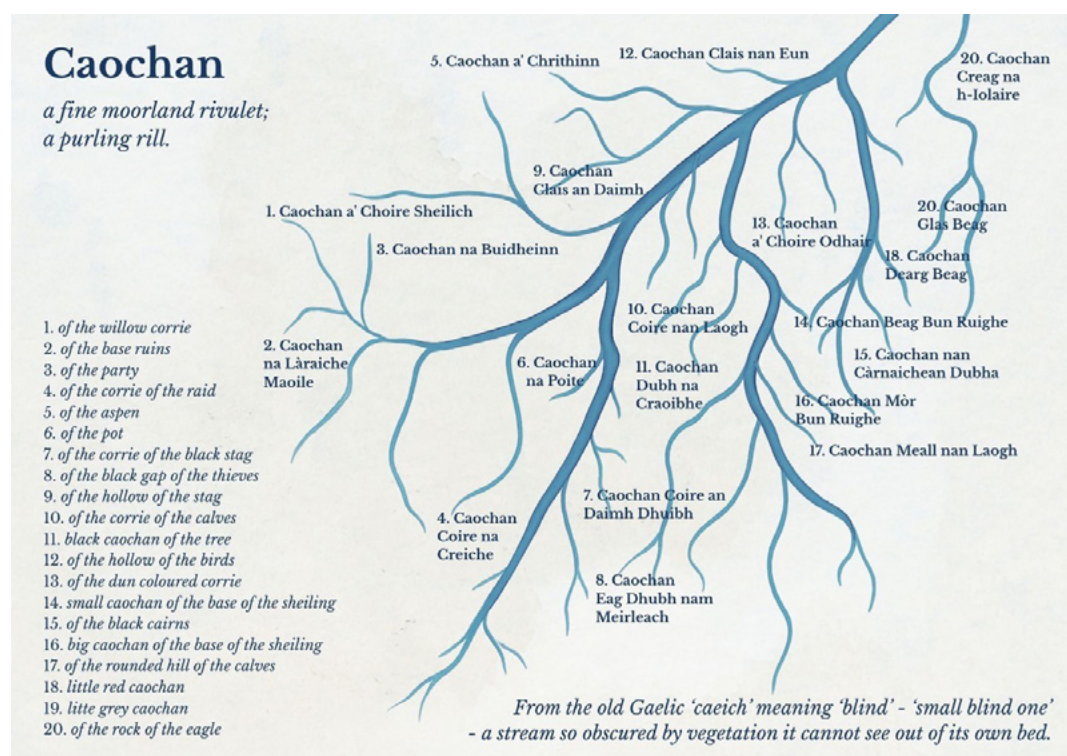*- a stream so obscured by vegetation it cannot see out of its own bed.*

Image 2: Uisge Èireann, Ceann Shuas na h-Aibhne | River Findhorn, Upper Reaches. Small detail of the headwaters, featuring an intricate network of tributaries. A selection of the smallest rivulets, caochain in Gaelic, are named. Centre coordinates: 57°10'51'N, 4°13'47'W. Image credit: Mairi McFadyen & Raghnaid Sandilands, Findhorn Watershed Initiative

To understand that the watershed was once an ecologically diverse landscape, known and named by people who had an intimate knowledge of their place – who lived and understood at a watershed scale – helps us imagine what this landscape could look like restored, re-enlivened and flourishing into the future.

Names also provide valuable insights about past ecological conditions, which can help guide restoration efforts. The FWI Nature Recovery team are now beginning to utilise the nature-related placename dataset created to cross reference with habitat restoration schemes in development, and prioritise re-establishment of specific species where the Gaelic names indicate they would once have been more prevalent.[75]

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75   Another example of this is the The Coilltean Caillte ('Forgotten Woodlands') project, led by NatureScot and partners, which has mapped over 15,000 place-names – drawn from Gaelic, Scots, Old Norse, and Pictish – that indicate historical woodland presence. By uncovering where forests once thrived, this linguistic and cultural mapping offers valuable insights for ecological restoration and reconnects communities with their environmental heritage. See NatureScot (2022) Coilltean Caillte (Forgotten Woodlands): Using historical place-names to support woodland restoration. NatureScot. Available at: https://www.nature.scot/coilltean-caillte-forgotten-woodlands (Accessed 29 May 2025).

Cultural expressions: music, song and story

Cultural forms such as music and song are widely recognised for their expansive capacity to stir emotion and memory.[76] In the context of nature recovery, they can deepen a sense of place and connection, as well as bring people together. For example, in March 2024, the FWI hosted a community event in Tomatin sharing cultural finds connected to the upper catchment, featuring renowned Gaelic singer Julie Fowlis and other musicians. The event followed the course of the river, reviving fiddle and pipe tunes[77] alongside Gaelic songs that recall a time when the strath echoed with stories of drovers, lovers, cattle reivers and fairies. Some of this music had not been heard for perhaps hundreds of years. As the researchers remind us, 'To hear again songs that describe the sun on the river or the wind from the heights, that remember the grief and love that happened here, is to connect with the river's ongoing human story.'[78]

In some cases, new tunes were composed for old songs,[79] recorded in manuscript without their original melodies. This is an example of 'future heritage-making,'[80] where heritage is not only preserved but actively reshaped for the future through contemporary cultural practice and transmission – made living again.[81] The heritage concept of 'transforming loss' shifts the focus from preservation and lamentation to active creative renewal, recognising that awareness of loss can inspire deeper, more meaningful relationships with land, language, and culture.[82]

Image 3: Headwaters Celebration at the Strathdearn Hub, Tomatin. An evening of music, song and stories, March 16, 2024. Image credit: Mark Hamblin/scotlandthebigpicture.com

76   McFadyen, M. (2015) 'Presencing' imagined worlds - understanding the Maysie: a contemporary ethnomusicological enquiry into the embodied ballad singing experience. PhD thesis. University of Edinburgh.

77   Sourced with help from musician Munro Gauld, 2024.

78   McFadyen, M. and Sandilands, R. (2024) Uisge Èireann: Sgeulachd na h-Aibhne is nan Daoine. Findhorn: Findhorn Watershed Initiative. Available at: https://findhornwatershed.com/human-ecology (Accessed: 21 May 2025).

79   One of these songs, 'Buidheann Mo Chridhe Clann Ualrig', was later recorded by Julie Fowlis, Karine Polwart and Mary Chapin Carpenter on the album Looking for the Thread (2024).

80   Vidal, F. and Dias, N., (2016), 'The Endangerment Sensibility', in Vidal, F. and Dias, N. (eds.), Endangerment, Biodiversity and Culture, London: Routledge, pp. 1–40.

81   One example is a poem by a local bard Donald MacAskill, Ceann na Coille (1928) which was given new life with a new tune composed by Julie Fowlis. It is a simple poem that reflects a profound sense of belonging, where nearby hilltops are named as if they are points on a compass of affection. He takes delight in the sights and sounds of nature and the river, where salmon and trout are plentiful: 'Far an cluinninn fuaim na h-abhainn / 'S am bheil bradan 's bric gu leòr.'

82   Bartolini, N. and DeSilvey, C., (2020), 'Transforming Loss', in Harrison, R., DeSilvey, C., Holtorf, C., MacDonald, S., Bartolini, N., Fredheim, H., Lyons, A., May, S., Morgan, J., and Penrose, S. (eds.), Heritage Futures: Comparative Approaches to Natural and Cultural Heritage Practices, London: UCL Press, pp. 347–356.

The details of the night were recorded on a map, placing the songs and tunes in the landscape. This served not only as a memento but also as an invitation to steward the music and the river into the future. For many in attendance, it was a revelation – they had no idea such a rich, deep heritage even existed, highlighting how disconnected some communities are from the cultural memory embedded in the landscape. Audience feedback was often quite emotional, with one audience member writing,

> 'It's hard to put into words just how impactful last night was – bringing to life the connections, the history, the stories, the tunes embedded in the landscape. It was captivating, inspiring, uplifting and a beautiful, poignant reflection of times gone by, of people, words and music that, without the work captured here, are in danger of being lost to us all, but particularly to generations where concepts of connectedness and a sense of belonging are so needed.'[83]

In this case, the researcher-in-residence model offers long-term, place-based engagement, bringing ethnological expertise and cultural knowledge into nature recovery work. In other contexts, enabling communities to practically engage with local heritage requires support to access and interpret resources – such as museums, archives, heritage organisations and libraries – as sites of connection, memory and ecological insight.

Transferable policy lessons:

- Support place-based partnerships that enable collaboration across administrative boundaries to reflect natural landscapes, allowing communities, landowners and organisations to work together

- Support local ICH mapping; resource the research and documentation of local knowledge and cultural expression related to ecological awareness

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83   Audience feedback was gathered during the event held on Saturday 16 March 2024 at The Strathdearn Hub in Tomatin.

CASE STUDY 2:

Cairngorms 2030

The Cairngorms[84] is the UK's largest national park at 4,528 sq km (6% of Scotland's land mass), featuring internationally important habitats for meeting climate and biodiversity targets through landscape-scale nature recovery. It hosts over a quarter of the UK's rare or threatened species, is home to around 18,000 people and receives approximately two million visitors annually.[85] Land ownership in UK national parks is largely private, with over 150 landholdings ranging from 100 to 40,000 hectares. As a consequence, partnership working is crucial, coordinated through the Cairngorms National Park Authority's National Park Partnership Plan.[86]

Cairngorms 2030 itself is an ambitious programme of twenty long-term projects bringing together £42 million of funding to deliver transformational change.[87] Entering its delivery phase in January 2024, over 80 partners, from individual farms to community groups and public bodies, are working across themes of nature, community empowerment, sustainable transport, and health and wellbeing towards the vision that, by 2030, the Park will be 'an exemplar of people and nature thriving together in a rapidly changing world.'[88] Projects include land management changes, peatland woodland and river restoration, and low-carbon agriculture pilots. Nature-focused relations are integral to other projects, such as nature prescriptions, support for creative practitioners, and community climate grants.

Funding for Cairngorms 2030 comes from a range of sources, including significant support from the National Lottery Heritage Fund. As a result, the language used to communicate the vision must work across different contexts. The use of dùthchas as a central concept in this case serves to illustrate both the potential and the complexity of drawing on forms of ICH, as discussed further below.

Defining heritage in Cairngorms 2030

Heritage in Cairngorms 2030 is defined as 'the bond between specific Cairngorms communities and the unique nature and landscape that surrounds them, as well as how they shape one another.'[89] There are three key elements to this definition relevant to this discussion paper, particularly in terms of communication, engagement and working across multiple knowledge frameworks. The first is reciprocity: an acknowledgement that humans and nature have and will continue to shape and support each other in specific places. This is both an acknowledgment of traditional ways of being in relation with land – not all of which are necessarily conducive to nature recovery – and an indication that reciprocal 'shaping' can be the locus of change or recovery, not just maintenance of a status quo.

84   Cairngorms is the English name, derived from Càrn Gorm – the name of one of the individual mountains – which came, over time, to describe the wider mountain range. In Gaelic, the area is known as Am Monadh Ruadh (the Red Hills), distinguishing it from the neighbouring Monadh Liath (the Grey Hills) to the west.

85   Cairngorms National Park Authority (2025) About the National Park. Available at https://cairngorms.co.uk/the-national-park/about (Accessed 27/05/25)

86   Cairngorms National Park Authority (2022) Cairngorms National Park Partnership Plan 2022–2027: People and Nature Thriving Together. Grantown-on-Spey: Cairngorms National Park Authority. Available at:https://cairngorms.co.uk/wp-content/uploads/2022/09/Cairngorms-National-Park-Partnership-Plan-full-version-FINAL.pdf (Accessed: 15 May 2025).

87   Cairngorms National Park Authority (2025) Cairngorms 2030. Available at https://cairngorms.co.uk/what-we-do/cairngorms-2030.

88   Cairngorms National Park Authority (2023) Cairngorms 2030 full programme report. Grantown-on-Spey: Cairngorms National Park Authority.

89   ibid

The second element is an inclusive definition of communities, potentially taking in both human and non-human communities, or ecological assemblages.[90] In the Cairngorms, human communities extend beyond resident 'communities of place' to include communities of interest, practice and identity – such as visitors and national or international stakeholders – each bringing distinct cultures and forms of knowledge. The third key element is the scope for plurality, acknowledging that different people can and will have different relationships with the same places. These relationships are in turn enacted through different practices, some of which may align with goals of nature recovery more than others.

Dùthchas as a central concept

Within Cairngorms 2030, dùthchas serves as a cross-cutting concept, defined in the partnership plan as the 'deep-rooted connection between people and nature.' Research links stronger human-nature connections with improved wellbeing and pro-environmental behaviour, suggesting dùthchas holds significant potential to support the transformative change sustainability requires.[91] Centering dùthchas not only reflects the Park Authority's commitment to Gaelic cultural and linguistic heritage, but also offers several strengths, including its connections to environmental practices, identities, values and attitudes, all of which can be linked to pro-environmental behaviour change.[92] It offers a way to recognise and respect existing ICH and TEK, while also strengthening the case for place-sensitive change. Further, dùthchas holds potential as a concept that can bridge different disciplines and ways of thinking, supporting more adaptive and forward-looking approaches to environmental stewardship.

Framing key domains of Cairngorms 2030 through dùthchas helps embed the principle of reciprocal human-nature connectedness across the programme, increasing the likelihood of holistic and meaningful change – whether through individual shifts in perception or the co-design and funding of community-led initiatives. Some projects explicitly encourage renegotiating or deepening relationships with place and nature, including adapting land-based practices like deer stalking or livestock farming – which are long-standing, vocational and deeply intergenerational practices tightly hefted to place. In these rural contexts, where uncertainty around nature recovery is significant and already having impacts,[93] the hope is that the use of dùthchas offers a way to both honour the heritage of 'how things have been done' as well as create space for transformative, just and sustainable change. It is an ambitious balancing act – but a vital one.

Challenges of integrating ICH

In this case, the very idea of dùthchas raises important questions about who can access and embody this relationship today. In some places across the Gàidhealtachd, particularly in island crofting communities, the intergenerational depth of dùthchas remains strong,[94] but for many living in the Cairngorms, that same inherited connection to place is not a lived or possible reality. For many residents, particularly those without historic family ties to the region, or from different cultural backgrounds, a connection to place may emerge in new ways: through present-day experiences such as active travel, or volunteering on community nature recovery projects. While these actions

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90   Donna Haraway highlights how ecological assemblages extend beyond human communities to include multispecies relationships, emphasising interconnectedness and kinship across species boundaries. See Haraway, D.J. (2016) Staying with the Trouble: Making Kin in the Chthulucene. Durham: Duke University Press; also Tsing, A.L. (2015) The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins. Princeton: Princeton University Press.

91   See Martin, L., White, M.P. Hunt, A., Richardson, M., Pahl, S & Burt, J., (2020), Nature contact, nature connectedness and associations with health, wellbeing and pro-environmental behaviours. Journal of Environmental Psychology, 68. doi.org/10.1016/j.jenvp.2020.101389; Barragan-Jason, G., de Mazancourt, C., Parmesan, C., Singer, M. C., & Loreau, M., (2022), Human–nature connectedness as a pathway to sustainability: A global meta-analysis. Conservation Letters, 15(1), 1–7. https://doi.org/10.1111/conl.12852

92   Clayton, S. D. (2012) The Oxford Handbook of Environmental and Conservation Psychology. Oxford University Press.

93   e.g. Leavey-Wilson, C., (2024), Evaluation of the Common Ground Forum. Available at https://futurewoodlands.org.uk/wp-content/uploads/2025/01/Common-Ground-Forum-Evaluation-Report-Dec-2024.pdf (Accessed: 15 May 2025)

94   Williams, L., (2025), Dùthchas agus Dualchas an Saoghail nan Gàidheil: Gàidheil Resurgence and Indigenous Place-Based Knowledge in and of the Hebrides: Strengthening Climate and Cultural-Ecological Resilience, Tauranga Moana: Alliance for Inter-generational Resilience, https://www.intergenresil.com/images/Gaidheal-Resurgence-30-Mar.pdf (accessed 21 May 2025).

may not carry the weight of ancestral knowledge, they still represent meaningful steps toward cultivating relations of place-based kinship – relationships that may enable lasting transitions to sustainable stewardship.

Promoting dùthchas in a public-facing, programme-wide context also risks inadvertently excluding those already under-represented, especially if the term is perceived as culturally exclusive or historically fixed. Cairngorms 2030 aspires to support a 'Park for all,' framing dùthchas in inclusive terms that invites diverse communities to connect with nature in ways that resonate with them – even if they are unfamiliar with Gaelic culture. This stands in contrast to contexts where dùthchas is being reclaimed as part of broader cultural resurgence, rooted in ancestral knowledge and land rights, where the stakes of cultural dilution or misrepresentation are much higher. The challenge is whether these differing interpretations can coexist without flattening or undermining one another. This is where the UNESCO framing of ICH as living culture becomes especially relevant. In the context of nature recovery, honouring deep-rooted heritage must go hand in hand with welcoming new voices, balancing ancestral knowledge with evolving, plural understandings of community and emerging relationships to place.

One major challenge is the risk of epistemic extractivism – discussed earlier in this paper – where cultural concepts are appropriated or simplified without proper understanding or respect. This risk becomes especially pronounced when a concept like dùthchas is invoked strategically at multiple levels of a programme – by contractors, partners and in communication materials. In general, dùthchas often gets reduced to a general sense of 'connection to nature,' rather than being recognised as a complex ontological framework. The question arises: is it better to engage with dùthchas, encourage familiarity and support people to do their best – risking some oversimplification or misinterpretation – or not engage with it at all? Who has the right to use it? These questions do not have easy answers. Avoiding it altogether may mean losing an opportunity for deeper connection and learning. Perhaps the more meaningful challenge lies not in deciding who has the right to use the concept, but in how it is approached – with humility, accountability and a willingness to be guided by those for whom it holds lived significance.

Transferable policy lessons:

- Frame ICH inclusively, supporting both ancestral traditions and contemporary, evolving cultural expressions

- Resource education and ethical guidance to avoid extractive, reductive or instrumental uses of cultural knowledge and promote deeper understanding

Conclusion

This discussion paper has shown that ICH and the TEK held within it can serve as a foundational element for place-sensitive nature recovery in the Scottish Highlands. The Findhorn Watershed Initiative shows how placenames, song and story from Gaelic tradition can foster deeper connections to the landscape and guide restoration efforts. In the Cairngorms, the use and recognition of dùthchas as living culture represents a pragmatic application of ICH which may support the type of human-nature relations necessary for developing 'place-sensitive environmental policymaking that is inclusive, forward-looking, and adaptive.'[95] Integrating ICH in recovery strategies helps preserve local wisdom and knowledge while enriching restoration with meaning and a generosity of approach that deepens relational connection. An inclusive understanding of ICH balances longstanding traditions while welcoming new voices, helping orient environmental policymaking towards more vibrant, hopeful futures. This is the healthy root system from which place-sensitive nature recovery can grow.

95   British Academy (2023) Where We Live Next: Evidence Synthesis Report. London: The British Academy. Available at: https://www.thebritishacademy.ac.uk/publications/where-we-live-next-evidence-synthesis-report/ (Accessed: 25 May 2025).

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