

UHI INVERNESS



Peat, Diesel and Seaweed



A Poetic Inquiry into the Green Transition in Northwest Highland Coastal Communities

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> In partnership with: Northwest 2045

The green transition is the shift we need to a better future for climate and biodiversity. This project has used poetry to explore this topic locally.

This folder contains a project summary and some of the poems that have been generated from survey data, interviews and workshops.

Your feedback is very welcome.

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Research Project Outline

This research has aimed to find out how people in coastal communities in the NW Highlands feel about climate change and explore their hopes for effective climate action. The project is a partnership between the University of the Highlands and Islands and the Northwest 2045 network of community organisations (hosted by Assynt Development Trust), funded by the Arts and Humanities Research Council to run from 2023-5. The three topics of peatland restoration, marine diesel and seaweed were selected with the partner as the research focus as they are issues with significant carbon emissions and/or sequestration potential in our area, but all relatively under-discussed. They are also all mostly hidden and distinctively aromatic!

The research began with a survey as a point of engagement of local people, then involved interviews with local and regional experts on peat and marine diesel, plus creative workshops, particularly involving young people, on peat and seaweed. Words and phrases from survey responses, interview transcripts and workshop data were used to write poems and other 'poemish' texts.

Key Findings Summary

- The starting point, revealed by the preliminary survey and reinforced in subsequent encounters, is that there is a deeply negative feeling around the issue of climate change and climate action, and a lack of hope, especially among young people.
- Peat bogs excite wonder and curiosity. Peatland restoration is underway and has huge potential in our area to stop some land-based emissions and turn them into absorption, thus contributing to net zero aims, whilst restoring a special ecosystem and creating jobs for ecologists and digger drivers. The World Heritage listing of the Flow Country impacts the east of our area and could extend further in. *This merits a skill-development focus*.
- The future of marine propulsion is renewable electricity and hydrogen or ammonia but our area is excluded from the main opportunities in this sector, despite huge potential. Marine diesel is a major cause of our emissions, although there is a lack of transparency about marine diesel sales at our harbours and the vessels that burn it, many of which are French and Spanish. Offshore wind developments and their electricity transmission and hydrogen production will by-pass our harbours, only benefiting the northeast and east coast. *This merits a campaign*.
- Seaweed is cool and could help us cool the planet maybe a bit, anyway. Seaweed cultivation is being actively pursued by our communities and could offer some exciting opportunities. *This merits ongoing monitoring, skill development and research support.*
- Time travel generates hope and the sea is a time machine this is the main discovery of the project, resulting from the development of a creative workshop method involving imaginary time travel, which has repeatedly seemed to turn despairing participants into optimistic ones. *This merits further research*.
- Poetry is a powerful tool for distilling and blending data (e.g. survey responses and interview transcripts) into more digestible forms and generating creative insights, and it can be shared at occasions like community events, thus transmitting research findings to people who would otherwise miss out.

if you lack all hope take good things from the past into the future

PART 1: How people feel about climate change

Pooling the results

Polar bear fears, three	_	Hope, none
Fear of extinction of species, four	_	Hope, none
Storms and floods and sea level rises, five	_	Planting trees, three
Burning to death or ice age, two	_	Simple life, one
Food insecurity, two	_	Gardening, four
Mass migration, one	_	Technological progress, three
Conflict and war, two	_	Positive news, two
Inertia of government, two	_	Greta Thunberg, five
Suffering of vulnerable people, two	_	Hope, none
Climate denial, one	_	Hope, none

This poem combines themes from answers to questions about people's worst fears about climate change (left hand column) and what hope they get from climate actions (right hand column), to which four respondents said 'none'. The other numbers refer to how many people mentioned that theme. The questions were part of an online survey in the Peat, Diesel and Seaweed project.

Intermittent Panic

nature is losing its beauty polar bears die – RIP polar bears, love you sad sad – worried worried sad sad – no future enraged by my own apathy practice support - fear of denial fear - scared for animals urgency - intermittent panic professional engagement – panicked support a younger generation impelled to act to hope

Constructed from words written on leaves hung on a tree at an open day at UHI Inverness on Friday 24 March 2023, responding to the question How do you feel about climate change?'

PART 2: Peatland Restoration

Peat is Breathing

(with thanks to Roxane Andersen)

We need to talk about Peat. Not Lewis, Tony, Colin or Simon, it's Peat – we absolutely must do something. Now.

Peat's not dead you know. Peat's very much alive, breathing, very slowly, but you can watch their body

swelling and shrinking, swelling and shrinking, ups and downs like a heartbeat. If they're healthy they can breathe deeply, the amplitude of those movements is really big.

When Peat's less healthy, like now, the breath is more shallow, it's stiff, it's lost that elastic capacity.

Peat's completely underappreciated. A lot of it has been the language that's been used to talk about them for a very long time – poor, empty, dangerous, smelly...

but imagine if we can turn that on its head, see the beauty, the uniquess, the really cool things in Peat, maybe that will change.

Peat's amazing. Peat can help us to go back into our past and to understand our future. Even the oceans depend a little bit on Peat.

I love Peat. I want everyone to love Peat. We need Peat to keep breathing.

Gully Blocking

(with thanks to Lewis MacAskill)

It's a bit of a helter-skelter, gullies continually scouring out washing peat and soil away down the hill. Some of them are fifteen or twenty feet deep, rivers running down off the top of the mountain in the worst winter weather. See the forces of the elements when the water's racing. The hags are huge and the washing out is more prevalent and erosion's increasing because we're getting more and longer spells of rain. The sheep and deer grazing didn't help, left large areas degraded, washed out, in poor shape.

We've a problem with culture, with identity. Kids who grow up here are different to other kids. It's a unique place. We've got folk from all four corners of the UK and beyond but you go into the school playground and there's no-one speaking with an Assynt accent. It's a bit brutal. Song and spoken word was really important, but we're struggling.

When I was a young graduate forester we had all these guys ploughing up and down the hills. We're living with a legacy of all these bloody plough furrows that washed everything away. I'm having to go back in and repair work that I thought was a good thing all those years ago.

We're building dams and bunds to slow the water running off the hill. It's still flowing, but slowing allows the peat to stabilize. Things recover: more plants, more photosynthesis, more flowers, more insects, more birds, more life.

There are opportunities here: good jobs, good money. We need guys and girls on the ground: ecologists, bird people and digger operators. We're building dams and building knowledge. We're blocking washed out peat gullies, bringing in new streams of revenue. Just stopping emitting carbon isn't enough. This goes beyond locking it in. It's about making the land and community healthy, so moss grows over the scars.

Reductionism

(with thanks to Romany Garnett)

A really positive thing to do with the climate change question is not to reduce it to some sort of chemical formula or something you can put in a spreadsheet and account for. Leave it in its beathing, living environment. Understand that it is something bigger, more spiritual. Allow nature to teach us: it will have a way of healing itself. Hope is a wonderful thing: it makes things happen.

If we reduce ourselves to carbon emitting machines sitting in front of screens then we do exactly the same as reducing the bog to something just chemical. A bog is not a flat, dead, empty expanse of carbon. If you have that narrow view you miss

> the greenshank, the dragonflies and frogs, the sheer beauty of a bog asphodel flower. The closer you look the richer it is: sundews, bladderworts, butterworts, exquisite little flowers, sphagnum moss, purple sandpipers and golden plovers, damselflies dipping for a drink.

Temperatures rising is really scary. I swing from extreme anxiety – why aren't we doing more? – to complete apathy – what the hell, we're going to die anyway. I feel guilty too. But I've got a great belief in the earth being able to look after itself and there are pockets of people tackling things on a local level, regaining identity.

You can't really care for the planet if you're struggling with your own concerns. We need songs and stories and laughter, joining together, having a good time. We're beautiful too.

Bog

If I go too far I will dissolve into the bog I will soak through I will sink in You will find me sleepy and sodden You will find me buried below Under the carpet of capitulum-headed fronds Inside the deep damp softness Becoming water Squelching when you stand too close Shuddering when you touch me Be careful with your tools, your tairsgear, your tractor tyres I found the earth dreaming here I found her breathing.

PART 3: Alternatives to Marine Diesel

Joining the Dots

Colin says it's all 'produce, produce', produce', when we really should be 'efficient, efficient'. Tony says 'electric, electric, electric' and Simon says 'before the meter, before the meter'. Everyone says 'wind farm, wind farm, wind farm' and 'hydrogen, hydrogen'. Simon and Tony say 'ammonia, ammonia'. Simon says 'refuelling stations, refuelling stations, refuelling stations' while Tony says 'big tanks, big tanks, big tanks'. Tony asks about 'infrastructure, infrastructure, infrastructure' and when Simon says 'cost, cost, cost' Colin says 'tax breaks and incentives, tax breaks and incentives, tax breaks and incentives' and Tony says 'investment, investment, investment'. Colin and Tony say 'ferries, ferries', Simon and Tony say 'fishing vessels, fishing vessels'. Colin says 'tides, tides, tides' and Tony says 'yacht, yacht, yacht'. Colin and Tony say 'companies, companies, companies', and Tony also says 'government, government, government', while Simon adds 'communities, communities'. Colin says 'design, design, design' Tony says 'jobs, jobs, jobs', Simon says 'skills, skills, skills' and I hear 'dot, dot, dot...'

With thanks to Tony Usher (Highland Council Harbour Authority), Colin Risbridger (UHI Orkney) and Simon Nesbitt (Mott MacDonald), from interviews with whom these words were taken, as part of the Peat, Diesel and Seaweed' poetic inquiry into alternatives to marine diesel in the Northwest Highlands of Scotland.

Stink

To step away from diesel is not going to be easy. Blue and green hydrogen might be an alternative, but it would need a big, heavy tank. Big ships are physically more able whereas small boats, creel boats and yachts, need to look at electric.

Put a little wind generator on your vessel and a solar panel, super-reliable – you know exactly how much light you're going to get. All the ballast in the keel could be batteries. Rip out the engine, get a tesla motor bolted in, connect it to the shaft and it'll go like stink.

Talking of which, another fuel is ammonia. It's not a very nice gas, not something you'd want to breathe in. The old Lochinver ice-plant's refrigerant used to be ammonia. I couldn't breathe in there, would never go in.

But electric's a good solution. They're looking at it for ferries. There'll be designs, there'll be construction jobs, lots of call for electricians. Somehow we've got to cut emissions - climate change is happening. The future's coming. It's going to smell strong.

With thanks to Tony Usher (Highland Council Harbour Authority) from an interview with whom these words were taken, as part of the Peat, Diesel and Seaweed' poetic inquiry into alternatives to marine diesel in the Northwest Highlands of Scotland.

Diesel poems

A diesel poem, based on $C_{11}H_{23}$ represented as pairs of one-syllable words with a 4-syllable word between them and one solitary H before the C at the end.

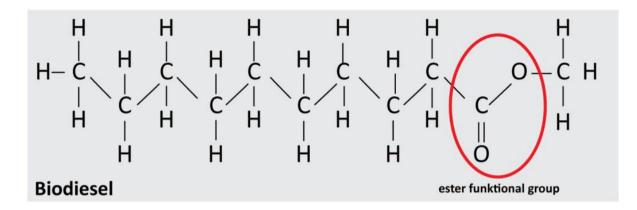
hooked on hydrocarbons pushed by capitalists sold by oil-industry jagged through leaky-pipelines

so much greenhouse gases too hot high-emission high-risk particulates

must halt supertankers give up fossil fuels don't use petroleum

next fix? biofuels stop! dependency

Two based on $C_{11}H_{zz}O_2$ interpreted as 11 4-syllable words, 2 2-syllable words and 22 1-syllable words, linked according to this molecular diagram.



Why does combustion seem so necessary to us? Petroleum has caused revolution and this climate-changing hell. Our politicians make such inadequate laws. False expectations. They're just comedians, just perpetuate crisis Instead? We're transitioning to hope.

Can we decarbonise our lives? Regulations could make agriculture much more sustainable, our food deliciously free from guilt-inducing peat, and especially meat. Less transportation and more vegetables. It's a problematic world. Industrial palm-oil soya don't definitely solve it.

PART 4: Seaweed

What is cool about seaweed?

There's loads of different kinds of seaweed. Their categories - egg wrack, sugar kelp... There are 3 main types – red, green, brown, different shapes, colourful green and brown shapes.

You can eat seaweed. You can eat it. It can be eaten. They are edible.

It has many uses carbon capture, ecosystems, food, fertiliser. It helps the biodiversity of our seas. Lowers carbon. It is versatile.

It grows on each other. They all grow on each other. They can reproduce. They can have sex. They pop!

(with thanks to the students from Kinlochbervie High School S1&S2 Rural Skills class)

Three Seaweed poems

These poems were created from words written by people at a consultation event in Lochinver about a possible community seaweed enterprise. The questions were: 1. What is the value of seaweed? 2. What could seaweed's value be in future? 3. What actions could increase seaweed's value? There were 9 contributors. Questions 1 and 2 were answered on yellow and orange seaweed-frond-shaped strips of paper, question 3 on blue fish-shaped pieces of paper. The poems use all and only the words written on those pieces of paper.

Seaweed's present value

Complex colours, carbon, compost, sequestered swim smells, vibrant food. Great & varied continuation.

Ecosystem element, habitat, home: a beautiful little kelp forest octopus tickles me!

When I value it as one person's riches or as much as people will pay,,, hmm

Seaweed's future value

Which is more important?
A piece of a key ecosystem – future food
Long-growing seaweed– a cash splurge
Planet – string
Possible global system collapse – more time
Complex, vibrant biodiversity – actual local jobs
National carbon sequestration – vitamins for sustaining community wellbeing
Food - how climate becomes part of life

What to do to enhance seaweed's value

Leave it alone! Use it as food and applications of compost for reliable, sustainable soil nutrient and energy growth. Increased recognition and increased economic investment in biodiversity and carbon production, storage, harvest and supply. Use tactics for including more people wanting inspiration, Stuff faith in bioplastic science - it's worth more. Hands off, ya thievin bastards!

OR...

Use it as a foodstuff and compost for sustainable soil nutrients. Increase inspiration, faith and recognition of energy science including reliable carbon tactics. People want economic investment in bioplastic production, it's worth more. Increase harvest, storage and supply.

PART 5: Emotional transitions

This section presents some poetic analysis of participants' feelings about the future and how they have changed from before and after taking part in project events, and in particular joining in an activity using the sea as an imaginary time machine.

Imagining climate change

Before: Please government, ban all plastic packaging concerning human selfishness economics is put before it rapid relief at our real cost

culpable shameful exhausted

a looming dagger devastating – aaaaaaaaargh gutted.

After: The aeroplanes have got to go. I'll take the train or the bus or maybe not go at all. A future unknown, unknowing. Genocide – stealing life that was prosperous. Same – desperate for a change.

Promises. Interest. Adaptation, inevitable.

I have a hope if humans stop being greedy. Hoping for hope. Hope!

Constructed from words and phrases written on paper ripples on a beach by Creative Writing students before and after a writing session involving imagining the past and the future and writing about the sea, on Thursday 20 March 2023, responding to the question 'How do you feel about climate change?'

The Future

In the morning... I feel baad Bad Disappointed by slow progress Scared I feel scared and hopeless Worried Worried Apprehensive Climate change Climate change Plastic pollution It is in chaos Tipping point Warm Deisel (finished) By the afternoon... How do I feel about the future? A little terrified to begin with. Warm 🙁 Too warm and bad for the planet. I feel that the government should be doing more. More bike trails. Hopeful from activities like this but also quite scared. Hopeful Optimistic Hopeful & excited! Good Great Good Great Gooood OK Interested Curious The future is bright At least seaweed will survive!

With thanks to the students from Kinlochbervie High School S1&S2 Rural Skills class in Lochinver on 22 January 2025, who were asked at 10.30 am How do you feel about climate change and the future?' and at 2.30 pm How do you feel about climate change and the future now?'

SEAWEED

Speak, stands, shops Ethical jobs Animals Workers, walking, wildlife, watersports Electric cars Eddrachilles Dogs, deer

HOPE

sand through my **H**and I taste h**O**ney the air was cris**P** Breagha's big **E**ars

TIME MACHINE

first **T**ime

I see myself

swi**M**ming

in the s**E**a

doing the **M**arathon

studying se**A**weed

my first **C**ar

people c**H**eering

the world Is quiet

a se**N**se of

prid**E**

GREEN TRANSITION

fi**G**hting

fo**R** life

f**E**arful

tir**E**d

a lo**N**ely seagull

less frigh**T**ened

info**R**med

in deni**A**l

it's happe $\pmb{\mathsf{N}}$ ing

nature hug**S** us

change is Inevitable

but suppor Ted, held

without crlsis

pe**O**ple coming together

responsible se**N**sible urgent

PAST & FUTURE

Pounding

wAves

Sea **S**ounds

soli**T**ude

Fragility

contin**U**ity

res**T**oration

res**U**rgence

t**R**avelling

saf**E**

Hope

A reflective poem, based on the finding that imaginative time-travel using the sea's tidal rhythm as a metaphor for going back and forth in time, seems to help people to generate hope about climate change and other environmental problems we are facing.

out of the calm, deep-sea darkness where history is hidden where filth sinks and melds into maerl where surface motion stills violence quells hot air cools sins and sorrows heal where seals swim among holdfasts and mudworms and crabs watch – something is brewing the sea breathes and chuckles swells and surges storm and filigree

each waft of a kelp frond each swish of eel grass each shimmy of a wrack lifts us into the future look what's rising on the tide waves of change entangle us in flow bounce and froth splash life and freshness into our faces sunshine sparkles and ripples glitter wonder at the wild, wild hope that bubbles up once we see we are all people of the sea

Mandy Haggith

We'd love to hear your feedback. Here are some questions.

Did any of these poems interest you in particular?

Did any of these poems make you think about climate change differently?

Did these poems give you any ideas about how the green transition should happen in the northwest Highlands?

Is there anything that you think should be added to these poems?

Does any climate action give you hope?

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