



Peatland Restoration

Routes to success



Why peatlands?

Global distribution of peatlands

Some background

Peatlands store large amounts of carbon.

Estimates are they cover than three per cent of global land surface

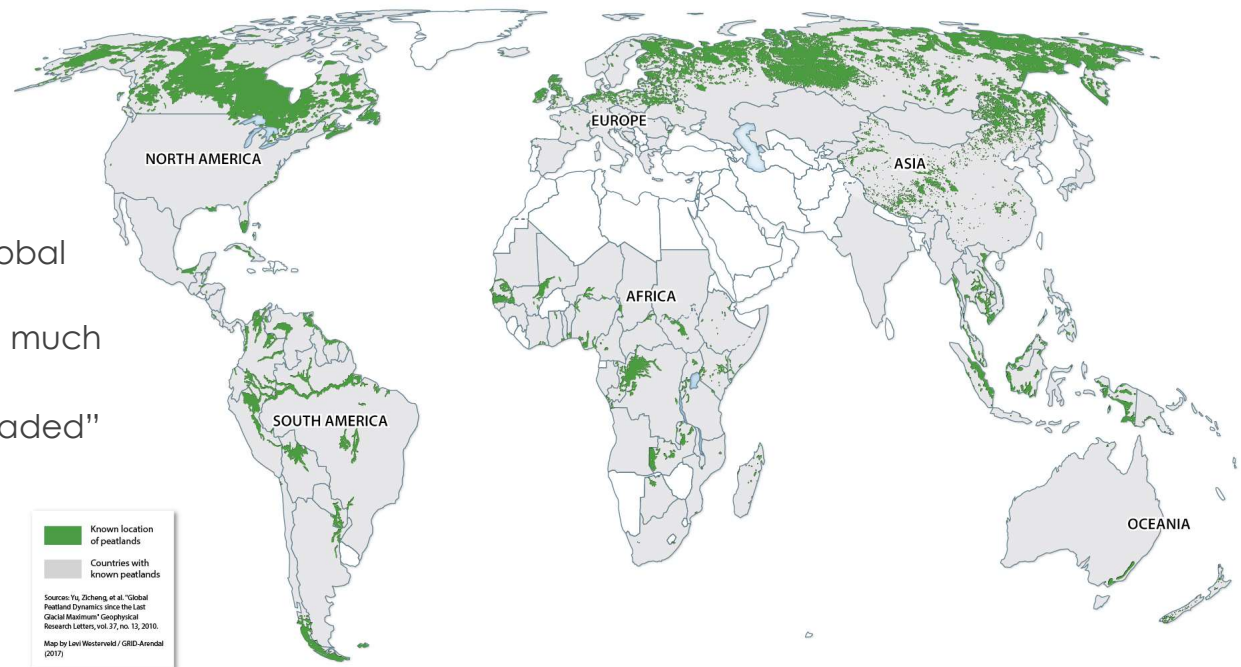
estimates suggest that peatlands contain twice as much carbon as in the world's forest biomass combined.

80% of Scotland's peatlands are classed as "degraded"

Scotland's peat soils cover more than 20% of the country and store around 1 600 million tonnes of carbon

Loosing all of the carbon stored in our peat soils as CO₂, it would be the equivalent of more than 120 times our annual GHG emissions.

ScotGov (peatland action) aims to restore at least 250,000 hectares of degraded peatland by 2030.



What are actually the issues peatlands face?



Degraded banks

Bare areas

Damaged watercourses



Restoration outcomes



Reprofiled banks



Pool systems



Watercourse protection



Comparisons?

Pre - resto



Post - resto



The process to restoration

Funding pathways





Peatland action process

- Fully fund projects to completion with a 10 year overview by peatland action on restoration success
- There is no additional funding or credits via peatland action that are given to landowners
- Projects can be overseen by private developers (ADL), WRFT, Peatland action or NGO's
- Initial approach takes the form of an experienced assessor walking the site to identify potential
- Once site is cleared for action, it is peat depthed and assessed for habitat condition
- Drone imagery is used to create 3D maps and the site is then mapped to define its characteristics
- Typical site will have 65km of reprofiling, 6500 vegetative dams and 3ha of bare areas
- Application – offer of finance (PA) – Contractor selected (tendering process) - work undertaken to restore the site

Why restore

Provisioning services:

- wild food
- Crops
- timber
- drinking water provision

Regulating services:

- climate regulation through carbon storage and sequestration,
- regulation of water quality through filtration of pollutants and protection from disasters e.g. extensive wild fires

Cultural services:

- symbolic, experiential or cognitive enrichment
- creates opportunities for recreation, spiritual and aesthetic experiences
- information and knowledge gain e.g. learning from the peat palaeo-environmental archive about past cultures and climate.

How do we restore? – tools / techniques / stakeholders



Tools

Excavators – 8 – 13 tonne on wide tracks

Argocats – daily access

Operators that are upland aware

Techniques

Ditch blocking – Zipping, wave dams, peat dams

Reprofiling

Pool system creation

Revegetating

Sphagnum in pools

Stakeholders

Peatland action officers

ADL consultants

Landowners

Highland council

Contractors

ADL

Angus
Davidson Ltd

Established in 2008 – Director is Angus Davidson

Started peatland resto in 2017 with 3 members in the business

In 2023 – there are now 8 staff members in the business

We have restored an area to date that is x2 size of Inverness

We use the latest tools such as drone imagery, orthomapping software and sophisticated mapping systems

Our team are (younger than me!!!!) and all from the Highlands

We are keen to work with, and train young talent who have their roots in the Highlands – essential when building links with many of our clients

We continue to adapt and share our processes with peatland action in order to provide an open platform for discussion (and success)

QUESTIONS?

