Challenges to Peatland Restoration in the Cairngorms

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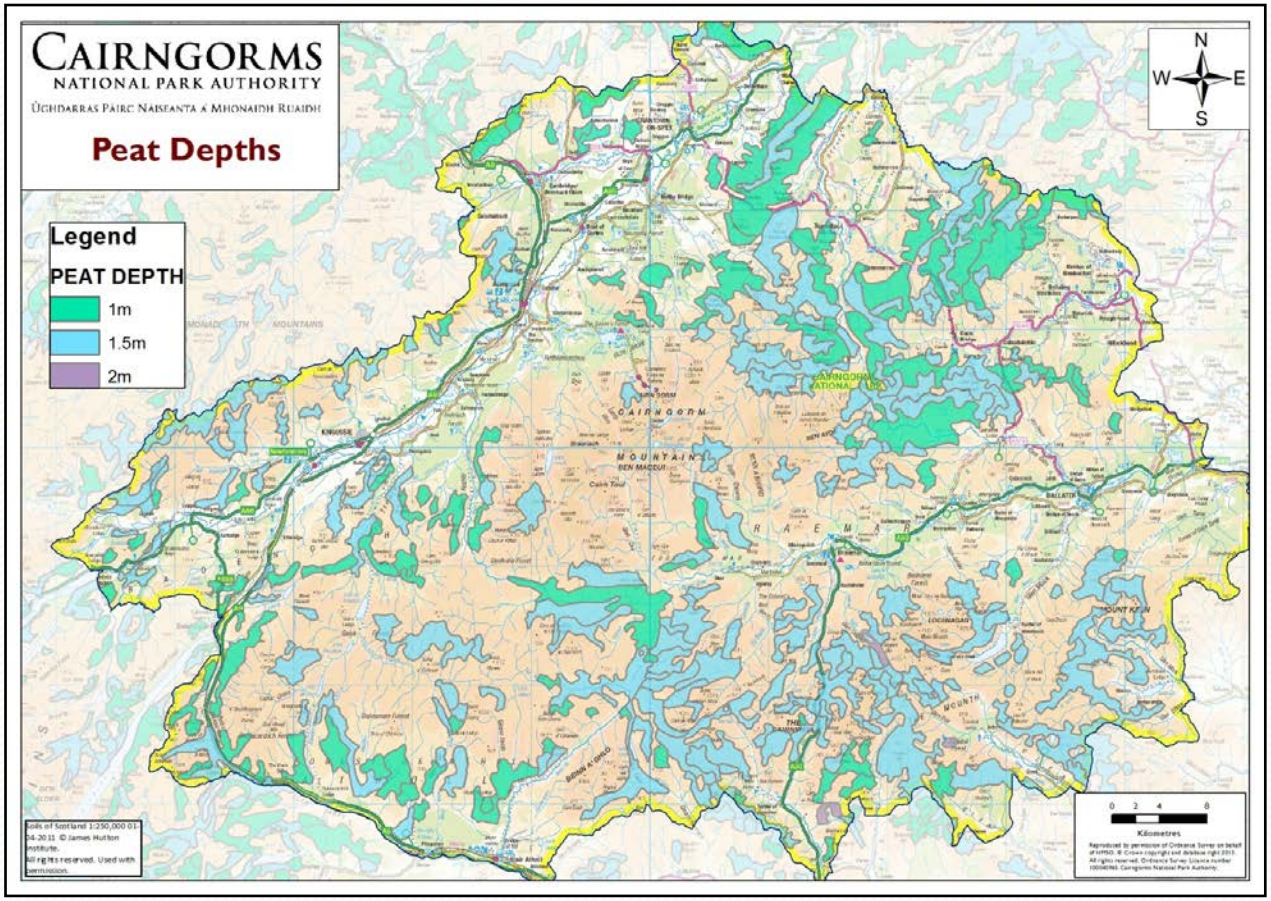
Scottish Natural Heritage
Dualchas Nàdair na h-Alba

Peatland ACTION Restoring Scotland's peatlands

Cairngorms NATIONAL PARK

The Cairngorms National Park



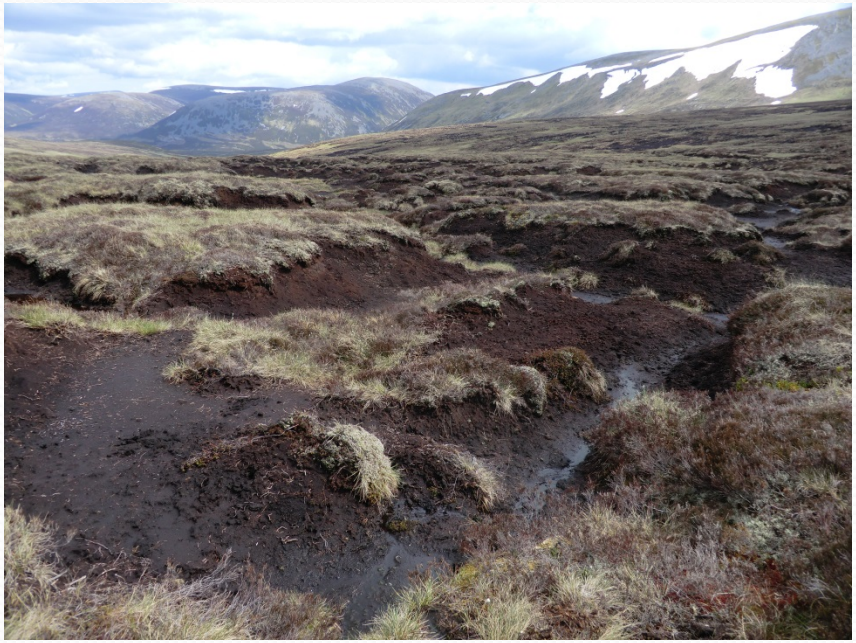
Cairngorms National Park

- 25% or 1,137km² of CNP on deep peat (>0.5m)
- Estimated 80% of peatland is degraded
- = 20% of CNP degraded peatland habitat
- = 910km²
- Managed for deer, grouse, forestry and conservation

Scale

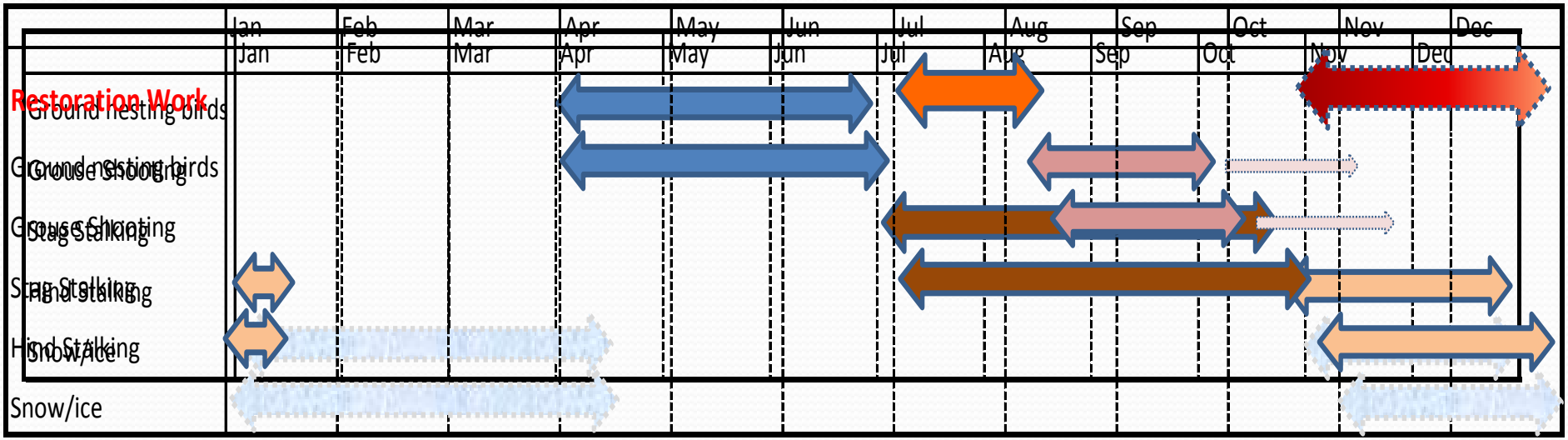
- How much is actually degraded?
- Scale of moorland grips?
- Depth of peat?
- Carbon loss?
- Impact on water quality?
- Priority areas?

Perception



Land Management

Timing


Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Restoration Work
Ground nesting birds
Grouse Shooting
Stag Stalking
Hind Stalking
Snow/ice

Timing of Works

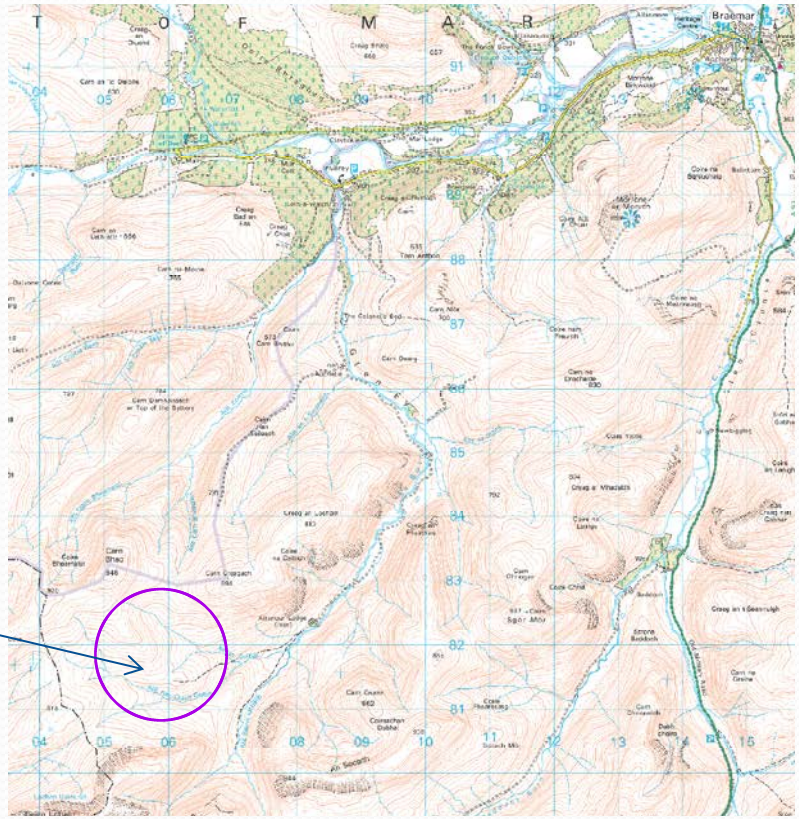
Glenlivet Estate 13 March

Mar estate 16 May

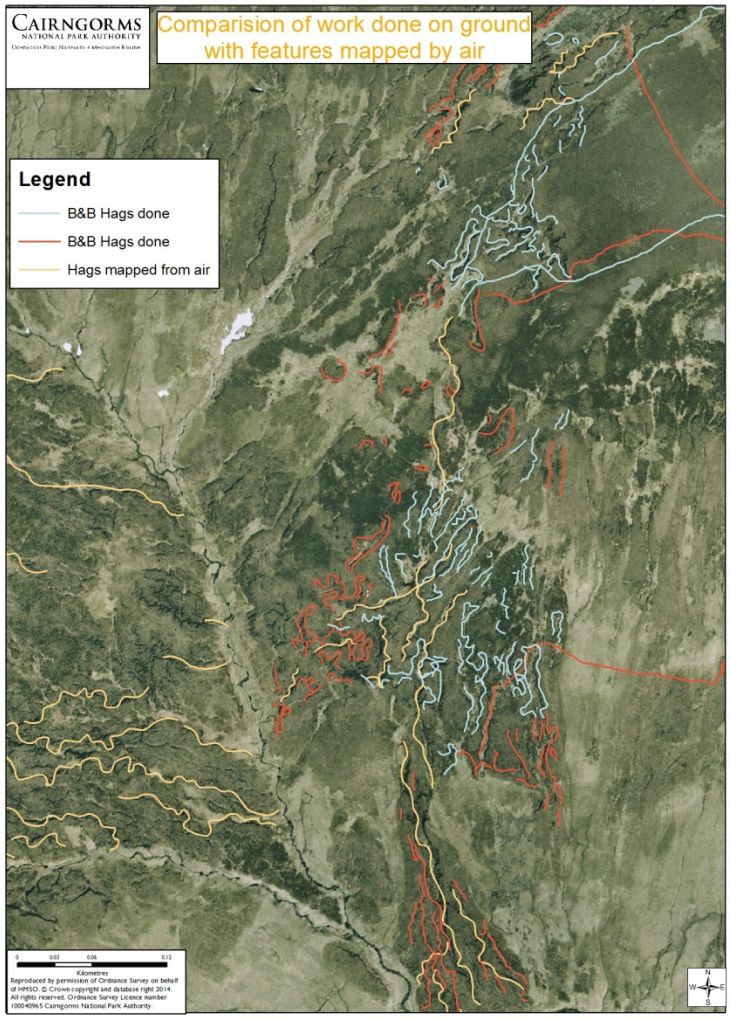
Access

- Accessibility not an issue
- Do not need helicopters
- But higher cost due to travel & fuel

Mar site, 10km track, 4km across country



Site Assessment



Restoration Techniques

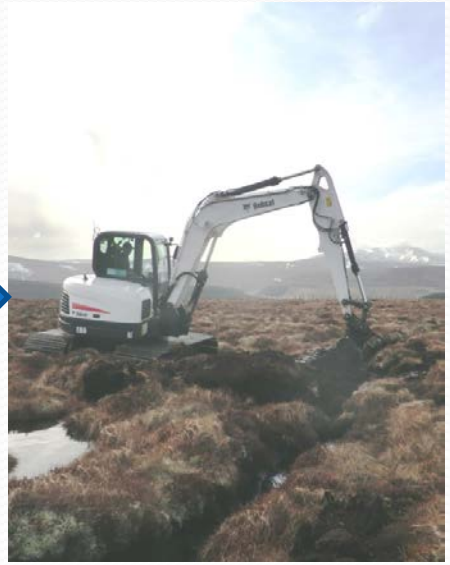
???

Bare Peat Restoration

Bare Peat Restoration

Bare peat restoration

Ditch blocking



Peat hag repair

Other Issues

- Contractor availability
- Wide difference in tender quotations
- Very short project timescales
- Limited planning time
- Lack of expertise to manage peatland projects

The unknowns

Effectiveness of restoration techniques

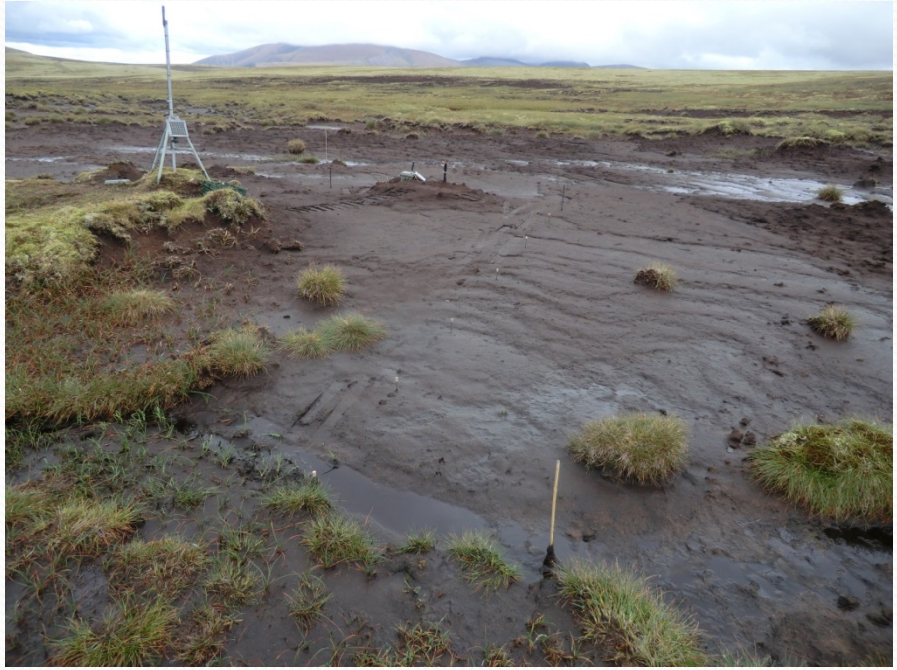
- High altitude (700+m)
- Short growing season
- Snow cover
- Freeze/thaw condition
- High winds
- Deer & sheep & hares
- Vegetation differences

Altitude

Inshriach, sheltered, 250m

Balmoral, exposed, 725m

Monitoring



- What data should we collect?
- What is a measure of success?
- Sustainability and repeatability of monitoring
- Sharing lessons learnt
- Funding & resources

Funding

- Peatland Action now closed – but very short term
- Agri-Environment Climate Scheme few options for peatlands
- Peatland Code still some way off

Key requirements:

- Long-term 5+ years
- Multiple year projects
- Project Officers on the ground
- Appropriate options
- Flexible costs
- Large scale projects (sub-catchment)

Delivery

728ha of degraded peatland restored across 9 sites in 2014 and 2015

- 91km of hags & gullies
- 15km of drains
- 27ha of bare peat
- 10,666 tonnes CO_2 equivalent saved *per year*
- Or the same as the annual emissions from 2232 houses
- Costs £483,491, or £660 per hectare

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