Challenges to Peatland Restoration in the Cairngorms

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The Cairngorms National Park

Peat Depths

Legend

<table>
<thead>
<tr>
<th>PEAT DEPTH</th>
<th>Color</th>
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</thead>
<tbody>
<tr>
<td>1m</td>
<td>Green</td>
</tr>
<tr>
<td>1.5m</td>
<td>Blue</td>
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<tr>
<td>2m</td>
<td>Purple</td>
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</tbody>
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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 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
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 CO₂ equivalent saved per year
- Or the same as the annual emissions from 2232 houses
- Costs £483,491, or £660 per hectare