

# Peatlands and Peatland Restoration in Shetland

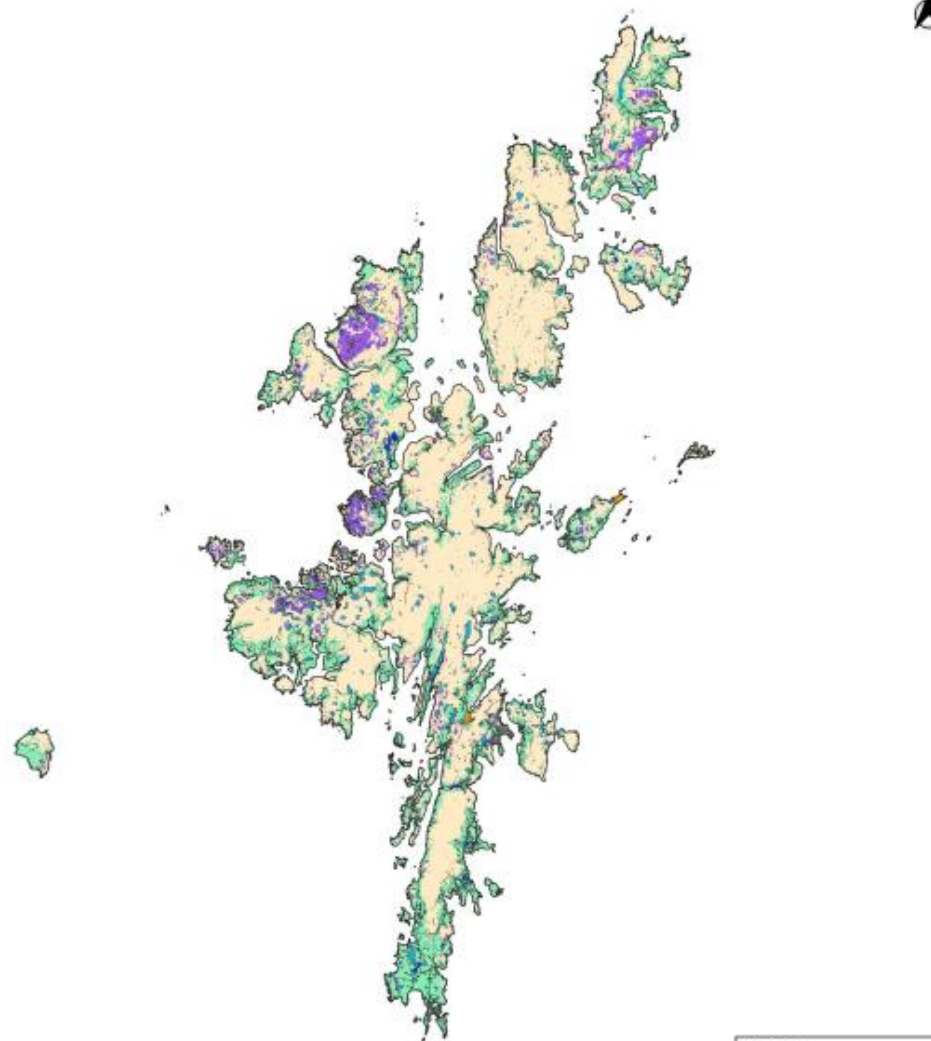
Sue White, Peatland Action Project Officer  
Shetland Amenity Trust



Sept 2023



*Land cover in Shetland, taken  
from Ricardo, 2022.  
Peat bog shown in beige*



- Legend**
- Land cover**
- Agricultural land - arable land
  - Agricultural land - pastoral land/intensive/improved grassland
  - Artificial
  - Bare rock, sand and ground
  - Inland water
  - Natural grassland
  - Peat bog
  - Lowland heath
  - Wetlands, fen, marsh, swamp
  - Woodland - broadleaved
  - Woodland - coniferous

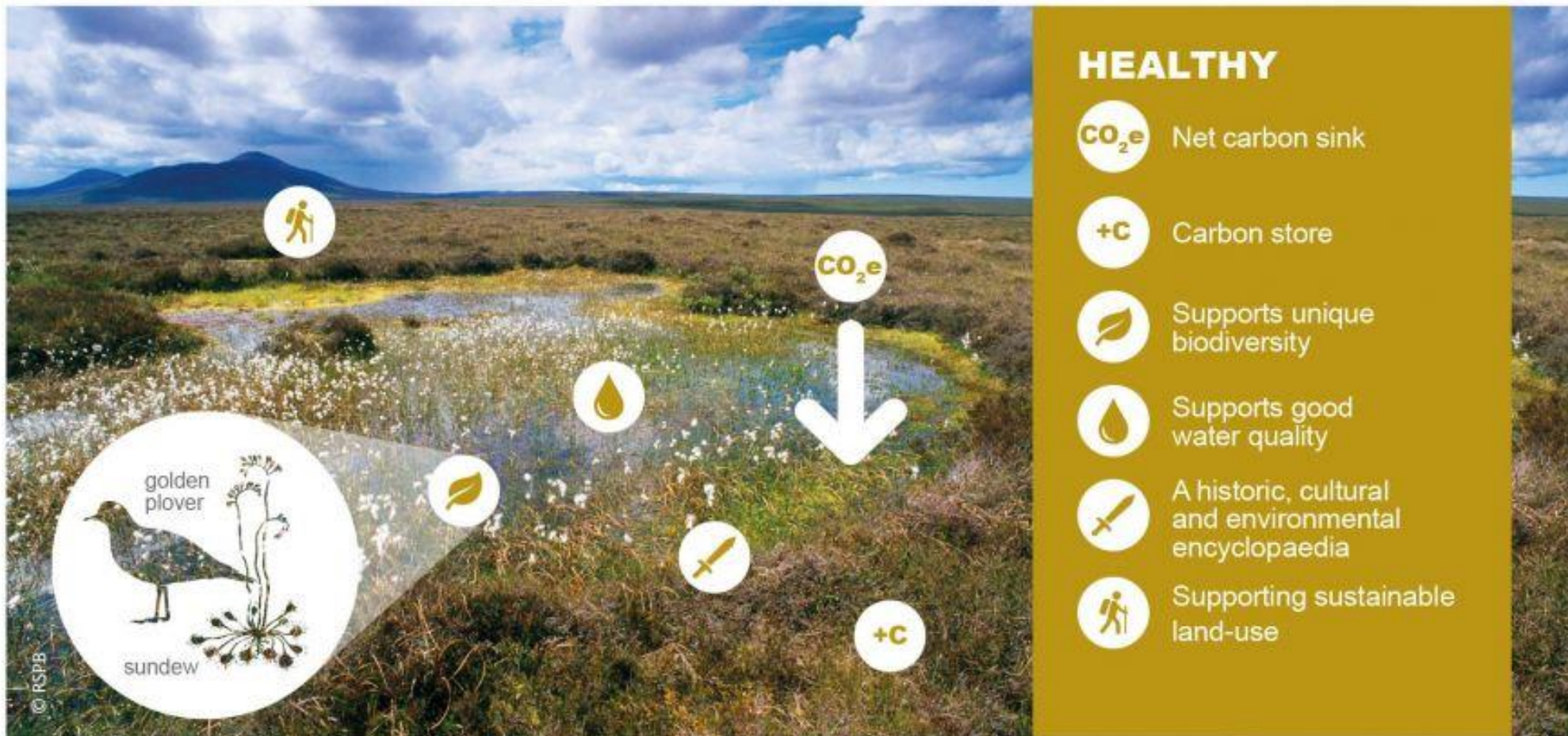
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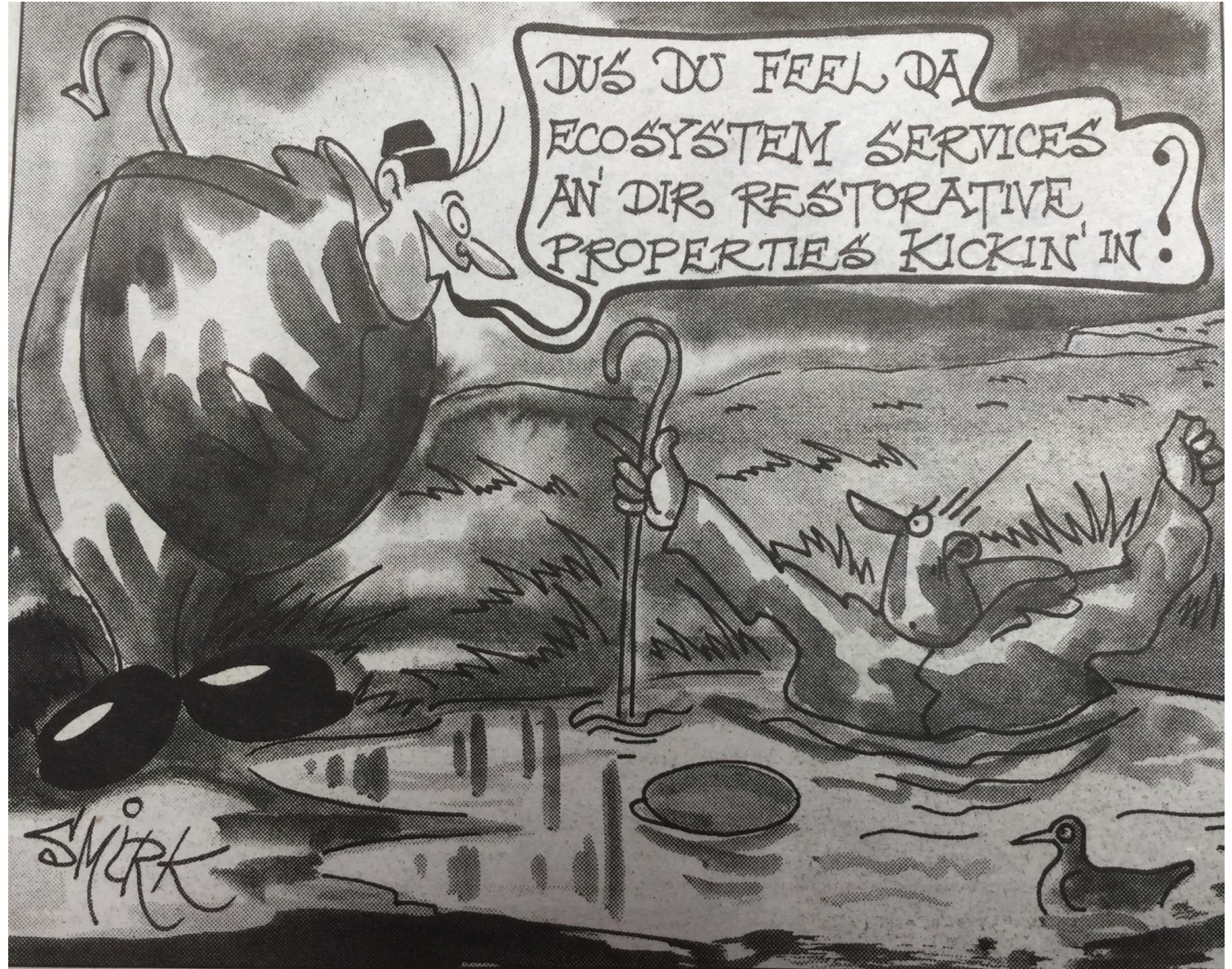
**Table 2-2 Areal split of each land cover based on condition status within SIC Landholdings and Shetland (area-wide)**

Land cover	Area (ha)							
	SIC Landholdings				Shetland (area-wide)			
	Semi-natural	Degraded	Managed	Total	Semi-natural	Degraded	Managed	Total
Peat bog - actively eroding		3577		3577		24,430		24,430
Peat bog – drained		2093		2093		14,293		14,293
Peat bog – modified	3683	1212		4894	25,151	8,275		33,427
Wetlands, fen, marsh, swamp	51	30		80	483	284		767
Salt marsh	0	0		0	0	0		0
Natural grassland	2375	1720		4095	27,937	20,230		48,167
Upland heath/moorland	0	0		0	0	0		0
Lowland heath	618	2325		2944	2,565	9,648		12,212
Inland water	179	0		179	4,611	0		4,611
Artificial	136	0		136	2,768	0		2,768
Bare rock, sand and ground	533	0		533	5,562	0		5,562
Agricultural land - pastoral land/intensive/improved grassland			0	0			194	194
Agricultural land - arable land			1	1			25	25
Orchards			0	0			0	0
Woodland - broadleaved	0		8	8	0		62	62
Woodland - coniferous	0		0	0	0		24	24
Woodland - mixed	0		0	0	0		0	0
<b>Total area</b>	<b>7,574</b>	<b>10,957</b>	<b>9</b>	<b>18,540</b>	<b>69,078</b>	<b>77,160</b>	<b>305</b>	<b>146,543</b>



# ECOSYSTEM SERVICES IN A HEALTHY PEATLAND





## IMPACT ON ECOSYSTEM SERVICES IN A DAMAGED PEATLAND

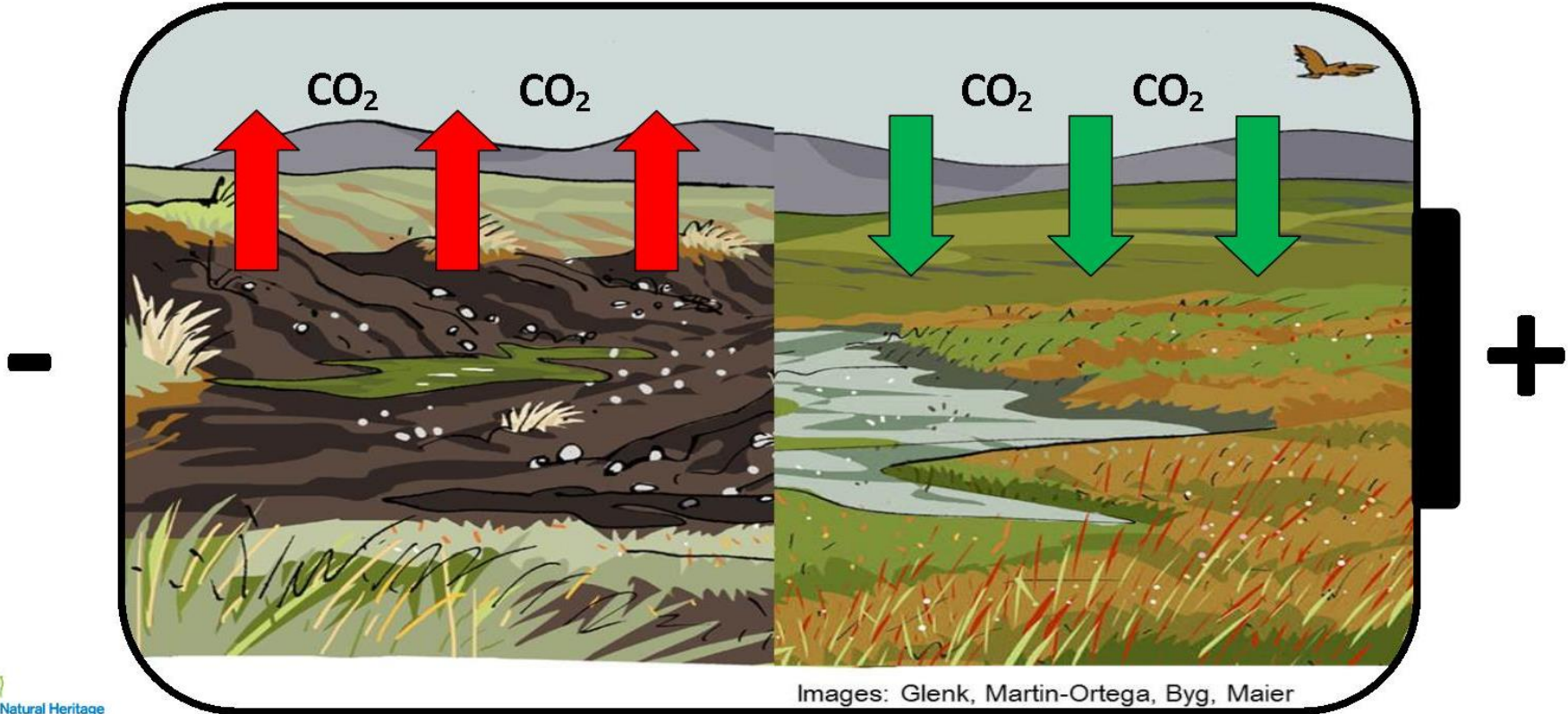








**NatureScot**  
**Peatland**  
**ACTION**



Images: Glenk, Martin-Ortega, Byg, Maier

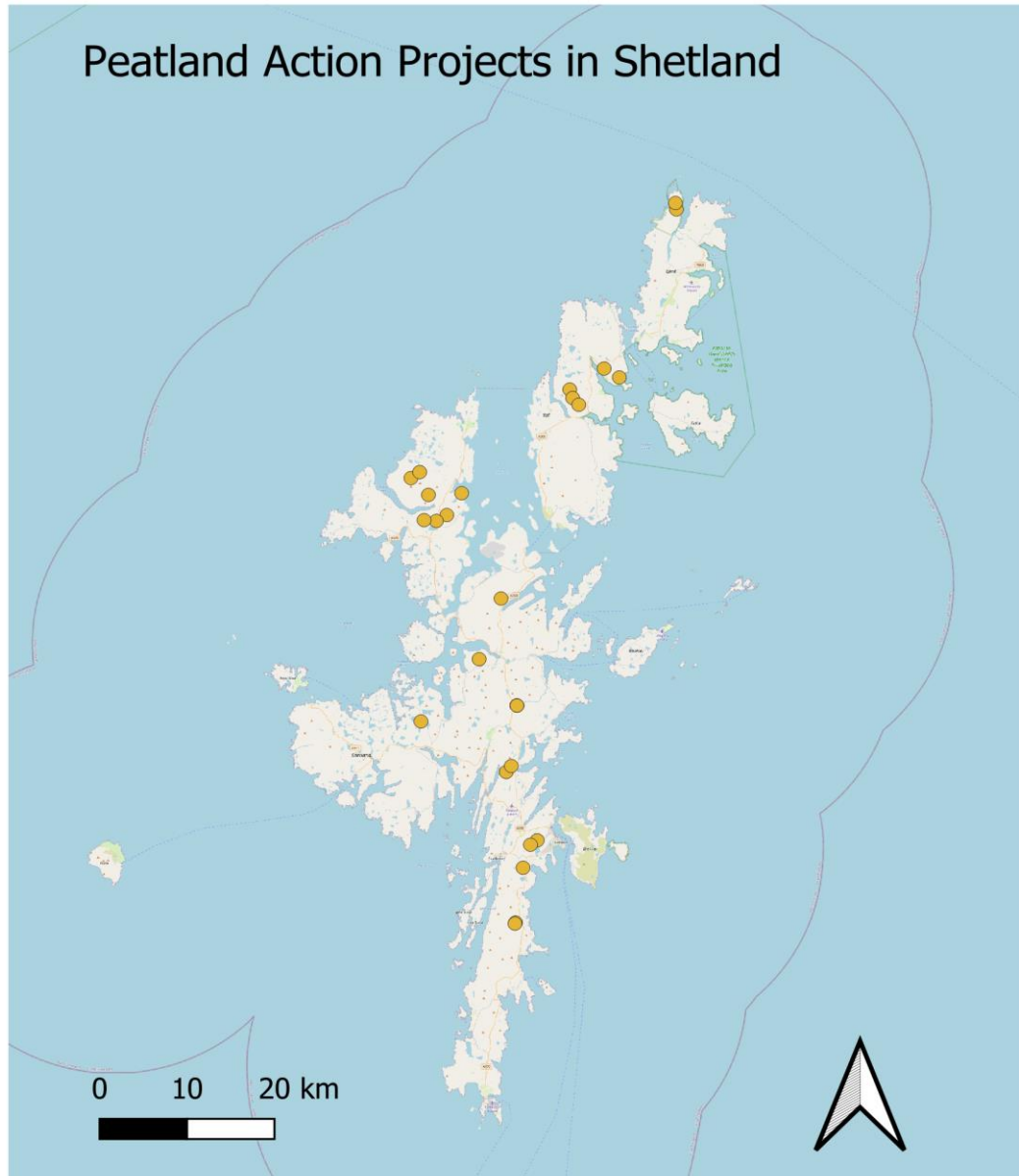


  
 Scottish Natural Heritage  
 Dualchas Nàdair na h-Alba  
**Peatland**  
**ACTION**

  
**NatureScot**  
**Peatland**  
**ACTION**

Restoration of **peatlands** is a low hanging fruit, and among the most cost-effective options for mitigating climate change.

— IUCN UK Commission of Inquiry on Peatlands Full Report, IUCN UK Peatland Programme October 2011 page 8



Approx £2M Peatland  
Action funds so far





- Case Study- Sandy Loch Phase 4
- Part of the 440ha drinking water catchment supplying 12000 customers.
- 40 hectares of restoration
  - 3250 peat dams
  - 6000m hag and peat bank re-profiling
  - 19460m erosion gully re-profiling
  - 3 ha bare peat restoration









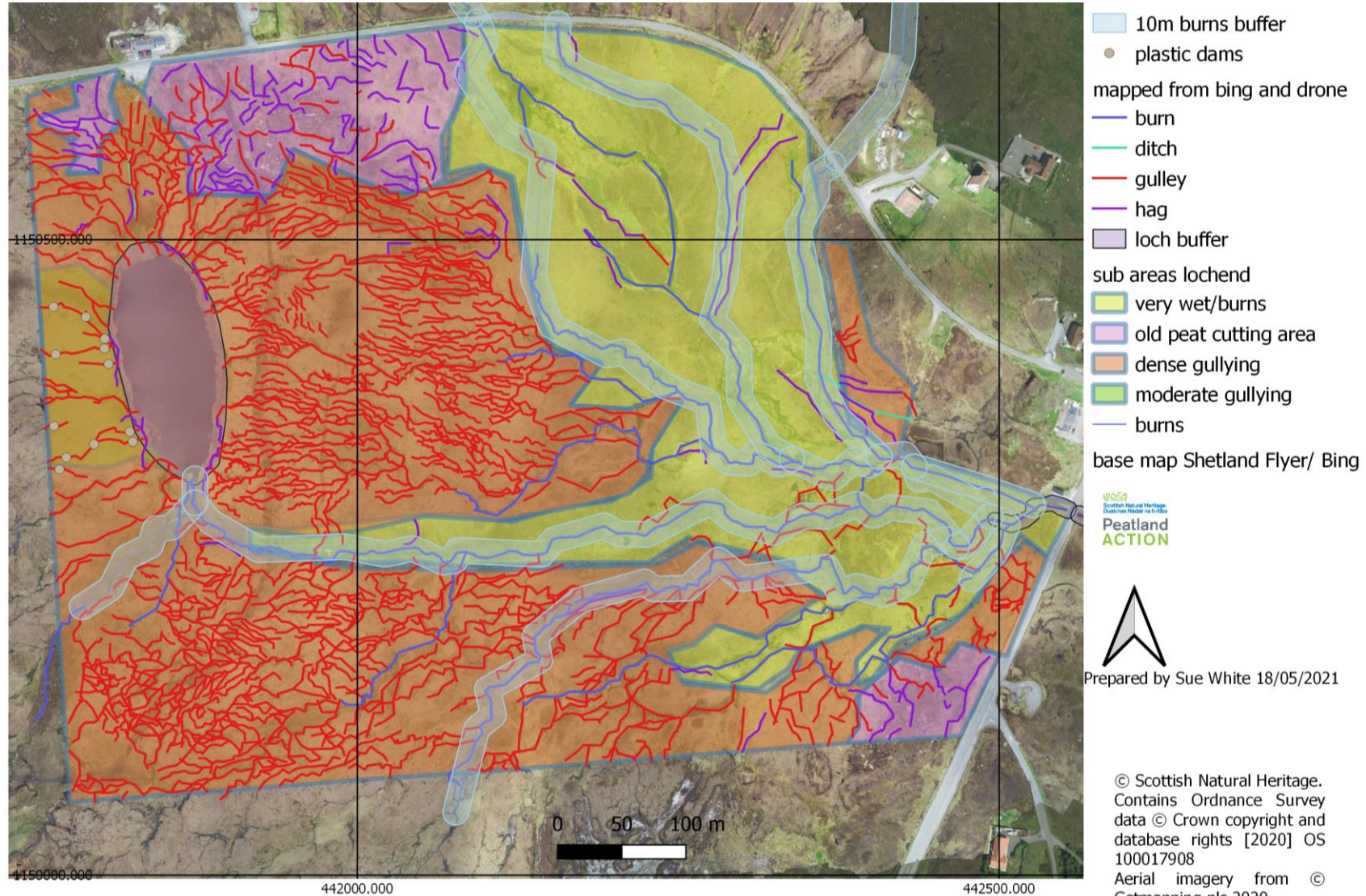








# Case Study- Girlsta- 39 ha, emitting 703.2 T CO<sub>2</sub>e/yr



## Case Study- Girlsta







Aim- restore hydrology and  
repair bare peat  
29000m of gullies and hags to  
re-profile  
5200 dams to construct  
3 ha of old peat cutting areas to  
restore







**NatureScot**  
**Peatland**  
**ACTION**



**NatureScot**  
**Peatland**  
**ACTION**



  
**NatureScot**  
**Peatland**  
**ACTION**





Sphagnum moss remembers. It recalls the touchdown of each lark that tumbles down upon its surface, the slightness of that weight recorded in the tendrils of each stem. It anticipates the appetites of flock which graze upon that wasteland when the rare haze of summer-heat crisps heather. The constant tide and toll of weather. Snow concealing peat and turf like surf, rolling in with weight of dark clouds curving around the bleak horizon. The persistent smidge of rain blurring the land's muted shades year upon damp year again.

From *Sphagnum Moss* by Donald S. Murray, opening *The Guga Stone: Lies, Legends and Lunacies from St Kilda* (Luath Press, 2013)