# The Scottish Wildlife Trust Moving from data gathering to action on Peatland Restoration





## **Presentation Outline**

## Scottish Wildlife Trust lowland raised bogs programme

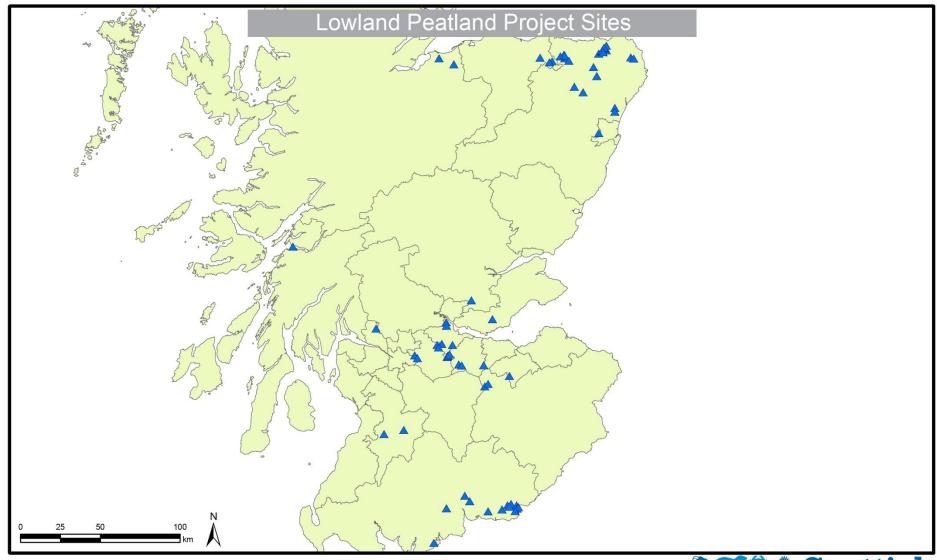
The state of Scotland's lowland raised bogs – project 2010-12

Government funding under Green Stimulus Peatland Restoration Fund

**SWT's Lowland Peatland Restoration Challenge project** 

## The state of Scotland's lowland raised bogs 2010-2012

- Determined the current state of Scotland's lowland raised bogs (LRBs) by surveying 58 sites.
- Analysed change in condition since previous surveys SWT carried out during the 1990s.
- Estimated restoration costs to bring these sites into good condition.
- Verified owner's interest in restoration.
- Considered the implications of changing climate on Scotland's LRBs.
- Raised awareness of the poor condition and emissions savings.



Gill Dowse Biodiversity Data Manager Scottish Wildlife Trust Cramond House 3 Kirk Cramond Edinburgh EH4 6HZ © Crown copyright 2009. All rights reserved. Ordnance Survey Licence No: 100028223. **Legend** 

▲ Lowland Peatland Project Sites

local authorities



### Restoration of lowland raised bogs in Scotland: Emissions savings and the implications of a changing climate on lowland raised bog condition



### Final report



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## The state of Scotland's lowland raised bogs in 2012

Findings from a survey of 58 Scottish lowland raised bogs and analysis of change since 1994/1995







## Overview of the findings

- 58 lowland raised bogs surveyed covering 4060 ha. (different ownership mostly privately owned non designated sites)
  - 67% of sites are less than 50 ha. (Average size 34 ha)
  - 32% of the surveyed area is considered non-restorable.
- 68% of the area is restorable deep peat.
   (45% have woodland cover.) (9% commercially worked bare peat)

Scottish LRBs show a high level of degradation and damage Unmanaged sites show a net deterioration in condition over the last 15 years.

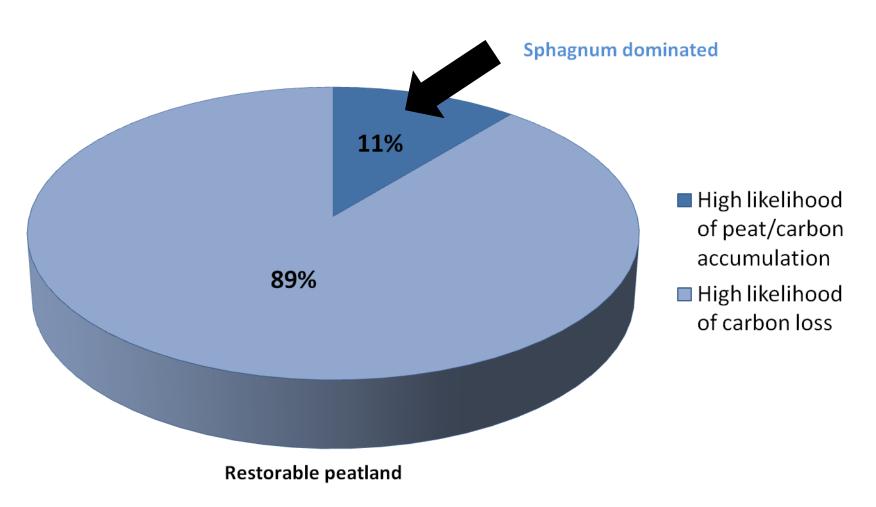
## Carbon storage and peat accumulation

### **Carbon storage**

- Average primary mire (uncut) peat depth is 4.7 m at the centre.
   (probably underestimated because did not reach the bottom)
- Average secondary mire (cutover) peat depth is 2.2 m.
- Based on these measurements the total carbon stored across the survey area (4060 ha) is estimated to be 10.1 M tonnes.
- An extrapolation of this figure gives an indicative carbon storage figure for all Scottish lowland raised bogs of 59.4 M tonnes of carbon.

(It should be noted that for various reasons such us unsure depth and density, there is a great deal of uncertainty in this calculation but our 2 consultants could agree it should be between 59 – 71 M tonnes)

### **Likelihood of Carbon Storage Across Survey Sites**



## Carbon storage and emissions

•89% of these LRBs are degraded and emitting greenhouse gases and suffering from carbon loss, as a result of drying and related processes.

It is so important to invest in the restoration of peatland now to reduce emissions from damaged and dried out bogs and to re-wet them so they can return to their more natural state of carbon sequestration.

## **Other Project Outputs**

Joint SWT and IUCN UK Peatland Programme
Parliamentary Reception was held at Holyrood, April 2012
The state of Scotland's lowland raised bogs 2012 report
was launched

Raised more awareness about the degradation of peat bogs and emissions

Stressed the importance of taking action quickly to reduce emissions

## Moving from data gathering to Action!

Government support for peatland restoration

Originally £1.7 Million

Later in 2013 a further £15 Million was announced

### Green Stimulus Peatland Restoration Project

Scottish Natural Heritage seeks new applications for an ambitious £1.7m peatland restoration project, set to run over the next two years.

### 1. Project background

The Green Stimulus Peatland Restoration Project is a Scottish Government initiative to reduce carbon released into the atmosphere. Restoring peat-forming habitats which have been drained or damaged helps ensure that they remain as long-term sinks rather than sources of greenhouse gases. In addition, healthy and fully functional peatlands provide a fascinating habitat with a unique and special wildlife.

The project will contribute to the objectives of Scotland's National Peatland Plan which is currently being developed by SNH, Scottish Government, its Agencies and a wide group of stakeholders.

### 2. Project aims

**Primary aim** 

on the ground

peatland restoration

To facilitate

The primary aim of the project is to facilitate on the ground peatland restoration work.



Ditch blocking at Fannyside Muir.

In addition to restoration work, we also welcome applications for funding to:

deliver demonstration events

- improve innovation (testing new techniques)
- raise awareness of peatland restoration.



Sharing good practice at Blawhorn Moss

#### 3. How to apply

Given the extent of Scotland's peatlands (-2m ha) and the relatively poor condition of much of the resource, it is important that this funding is targeted at areas where it can make a significant difference in the timescales and budgets involved.

If you have any potential projects you would like to discuss with the project team, please get in touch via the project mail box:

#### GSPRP@snh.gov.uk

For project grants running up until March 2015, we invite applications for funding as follows:

- First closing date 28 June 2013
- Further closing date 4 October 2013

Application forms, eligibility criteria and information about future application submission deadlines are available on the project webpage:

http://www.snh.gov.uk/climate-change/whatsnh-is-doing/green-stimulus-peatlandrestoration/



## Secondary issues that can be funded

- Deliver demonstration events
- Improve innovation
- Raise awareness of peatland restoration

Closing Date for Applications

**4 October 2013** 

## SWT Lowland Peatland Restoration Challenge Project

Developed a new project from the results of our assessment of the state of LRBs

Prioritisation of 15 sites (470 ha) for restoration

Objectives of new project

**Develop detailed Restoration Plans for each site** 

**Carry out the Restoration** 

**Document as a Case Study** 

## **Lowland Peatland Restoration Challenge Project**

Project split into 2 project phases after submission

- 1) Jan Mar 2014 Ongoing now
- Restoration plans on 3 pilot sites
- Confirm owner's commitment on15 sites
- Gather up to date prices for use in next phase
- Apply information to review budget and inform next phase.

Assumption second phase approved to start 2) Jun 2014 – March 2015

Complete the other 12 Restoration Plans Complete restoration work on all 15 sites Publish on-line Case Study

## **Lowland Peatland Restoration Challenge Project**

Issues

No funds available under Green Stimulus for:

Maintenance (at least 5 years)
Long-term monitoring (25-30 years)

**SRDP** funding not clear yet

Tight time scale - financial year deadlines - more risk

Owners who were very interested being asked to sign up to maintain for at least 10 years are not so sure of any income from clearing timber or future support from SRDP

## Download the Reports and Summaries from SWT website



1)The state of Scotland's lowland raised bogs in 2012: Findings from a survey of 58 Scottish lowland raised bogs and analysis of change since 1994/1995



2) Restoration of lowland raised bogs in Scotland: Emissions savings and the implications of a changing climate on lowland raised bog condition



3) A Survey of 15 Scottish Lowland Raised Bogs: Findings from a survey of lowland raised bogs with landowners supportive of restoration

http://scottishwildlifetrust.org.uk/who-we-are/publications/

Copies of summary reports available to take away today