

Biodiversity Action Plan Review 2013

Rehabilitation updates

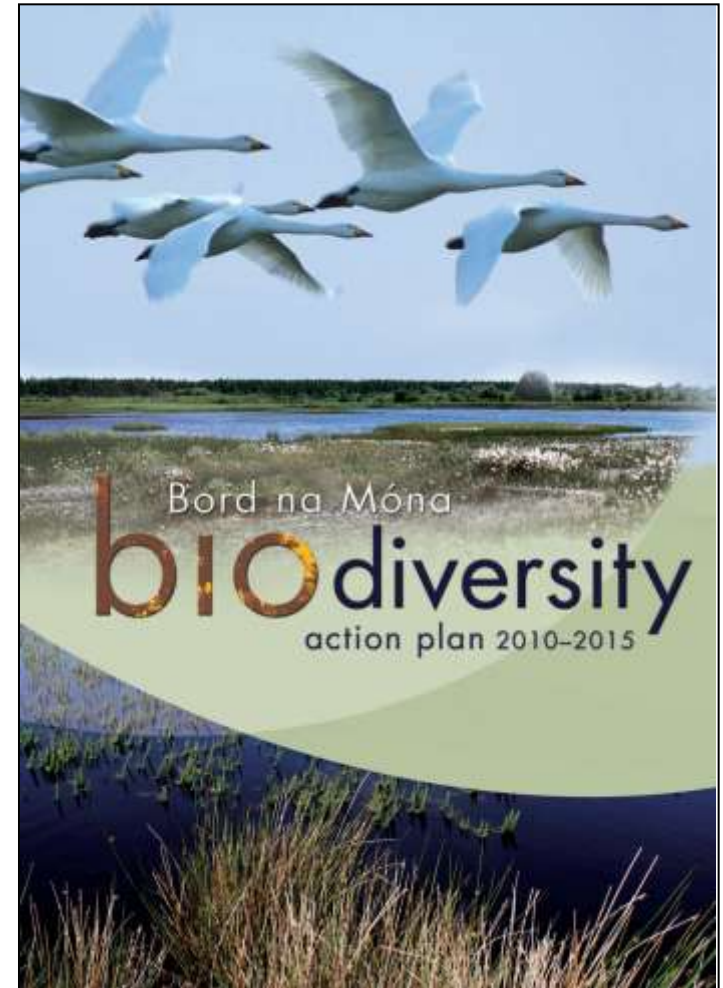


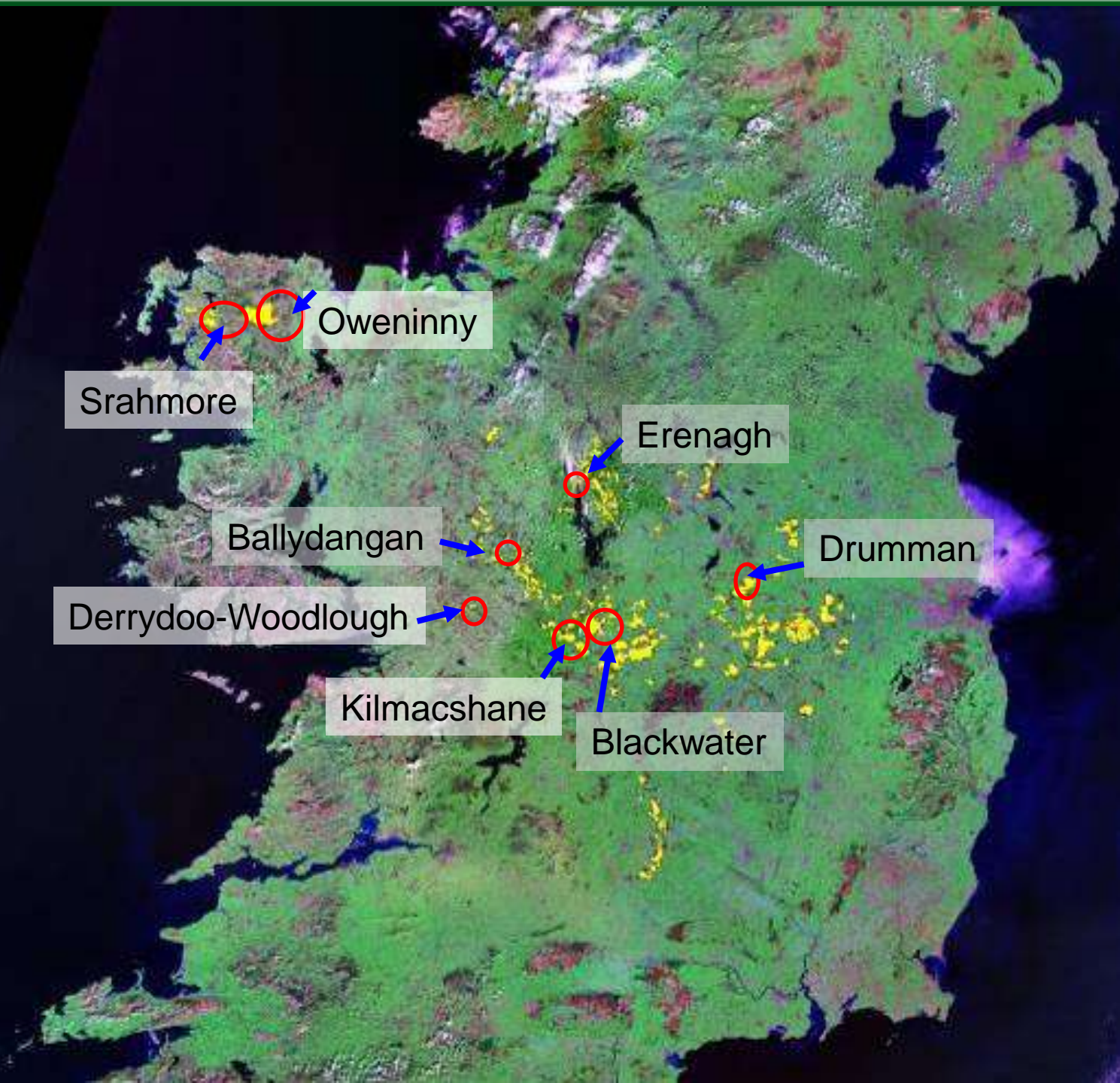
David Fallon



Rehabilitation updates

- Bog restoration programme
- Rehabilitation trial updates
Drumman, Kilmacshane,
Bunahinly, Blackwater,
Drinagh, Srahmore *Sphagnum*
trials
- New rehabilitation trials
Ballycon Heather, Erenagh,
Japanese Knotweed,
Kilmacshane
- Bellacorick study
- Communications





Bord na Móna Bog Restoration Programme

- Ditched b
- Biodivers
- Areas de
- biodiversit
- Ongoing
- planned to
- Consultin
- stakehold
- NPWS al
- as part of
- New exca
- solely for t



Bord na Móna Bog Restoration Programme

Work programme

- Level survey of bog
- Construction of dams
- Ongoing monitoring of the site
- to date 695ha of raised bog restored







BORD NA MÓNA

Ballydangan South

Note: Draft maps for inter discussion purposes only. Evidence of title, all queries boundaries should be referred to the relevant authority.

Ballydangan South - 238ha

- Restoration work commencement – September 2013
- Ongoing 2013/2014 – 75% completed



Drumman

- Vegetate area of bare peat
- 18.3 ha
- Nurse crops planted in April 2010 –
 - Triticale (+ fertiliser)
 - Reed Canary Grass (+ fertiliser)
 - Fertiliser on its own
 - Fertiliser and lime.





2010



Fertiliser and lime

100% vegetation cover
-grasses and rushes
-some birch and willow



2013



2010



Drumman – fertiliser only

2013



50-75% vegetation cover
- Birch, mosses and Willowherb



Kilmacshane crop trials

Reed Canary Grass

100% vegetation cover
- RCG growth with pioneer species



2010

Kilmacshane crop trials

Triticale



10-25% vegetation cover
-pioneer species

2013





Srahmore *Sphagnum* Trial 2013

2013 – 250 ponds excavated and inoculated with *Sphagnum*



Bunahinly re-wetting

Area – 2.4ha, work completed August 2011

- An overall increase in vegetation cover
- Water levels have risen
- Increase in Bog Cotton cover
- Decrease in Heather cover
- Colonisation by *Sphagnum*, White Beak Sedge and Deergrass



Bunahinly re-wetting





Blackwater reedbed trial

Start date – March 2010



Kilmacshane Reed Seed Trial

- Seed collection, Common Reed and Reedmace (Bulrush)
- Process seed heads
- Seed sown at Kilmacshane September 2012
- 2013 no seed germination
- unsuccessful trial – seed viability, weather conditions?



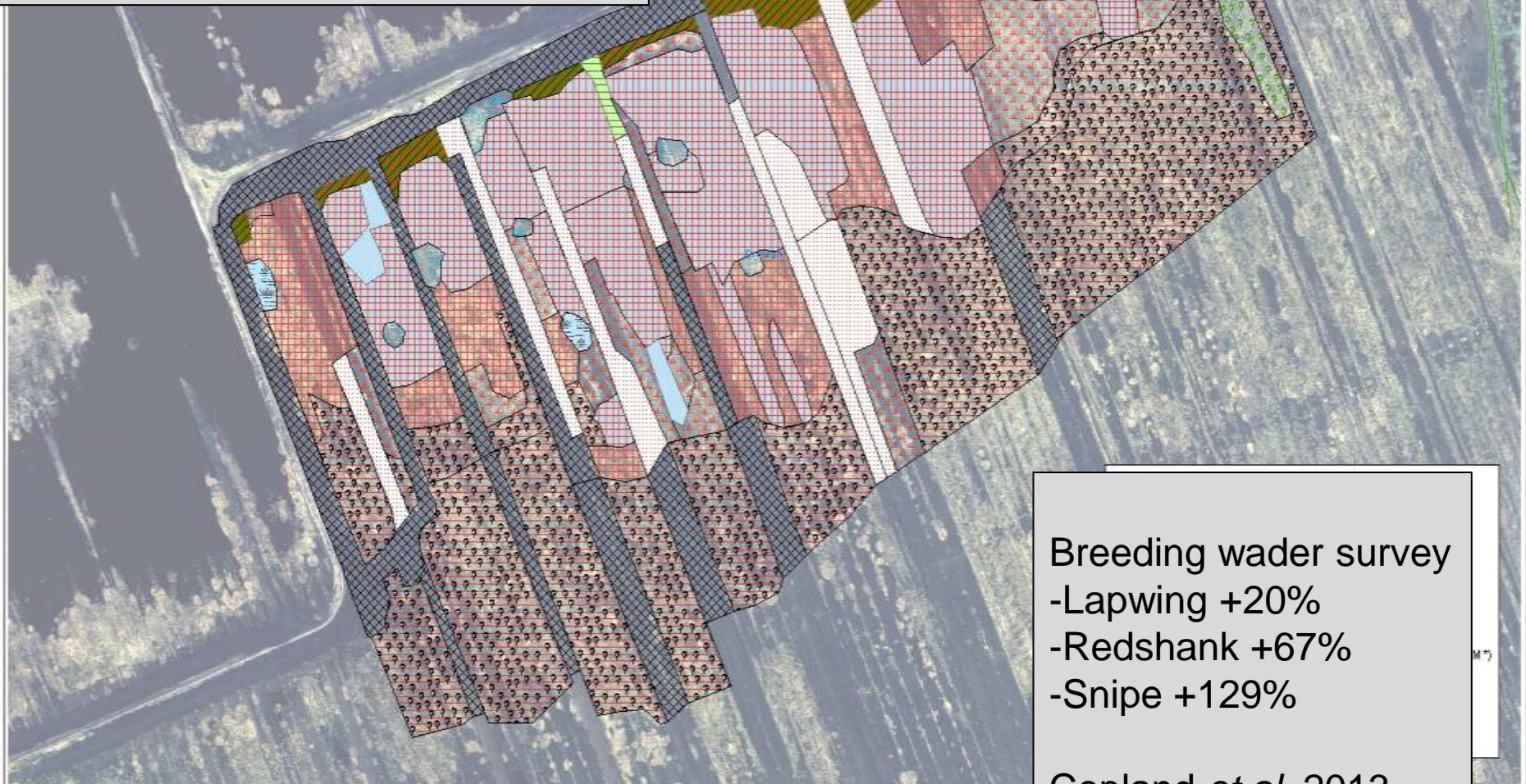
Drinagh

- BnM and Birdwatch Ireland joint project
- Wader habitat creation
- Re-profiling high fields
- Scrub removal
- Block outfalls



Drinagh wetland bird project

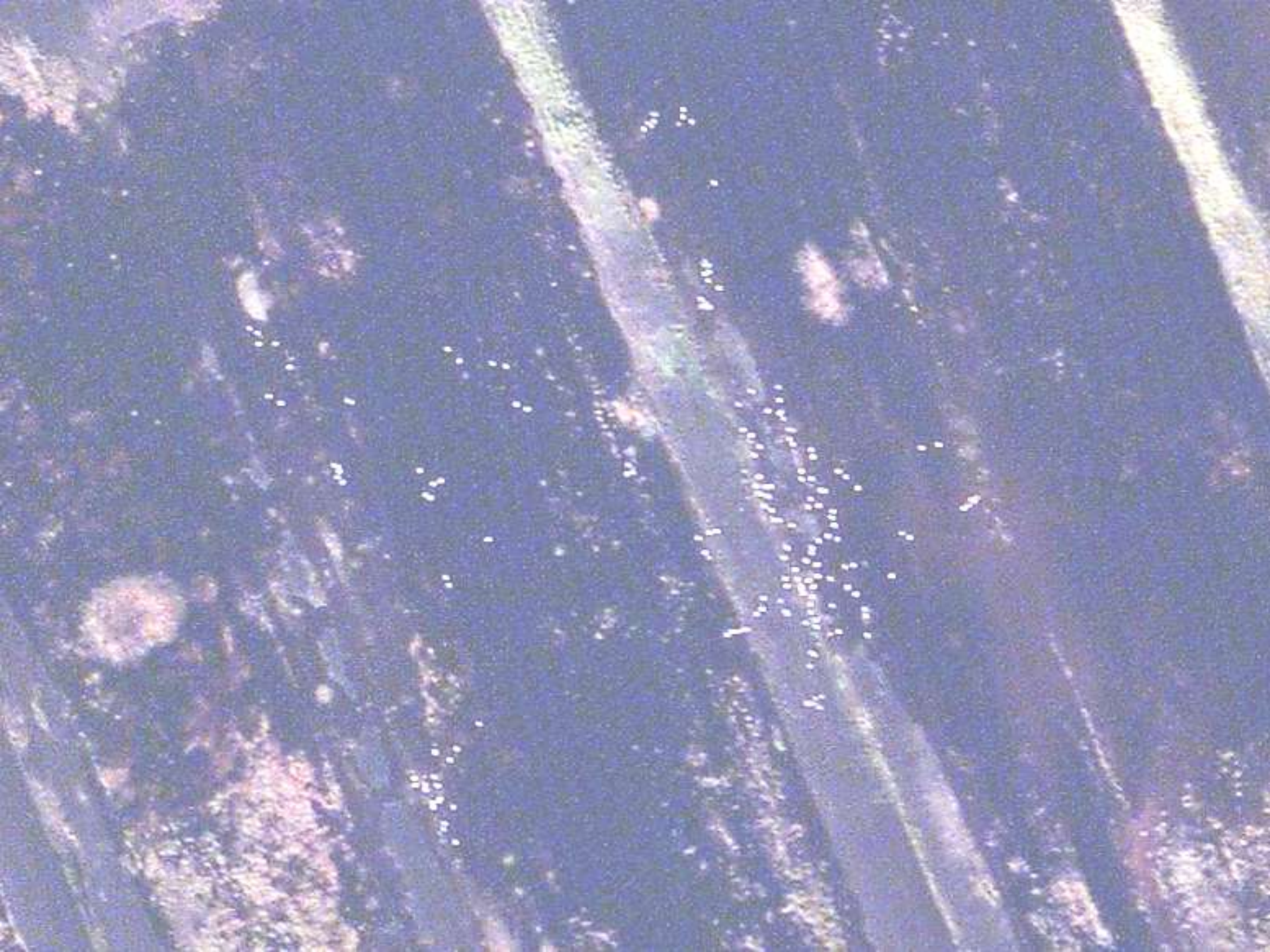
- 31 ha
- second area rehabilitated
- Successful development of wetlands
- Breeding waders in first year
- Minor Birch re-growth from first year
- Ongoing monitoring of water levels and site development



Breeding wader survey

- Lapwing +20%
- Redshank +67%
- Snipe +129%

Copland *et al.* 2013

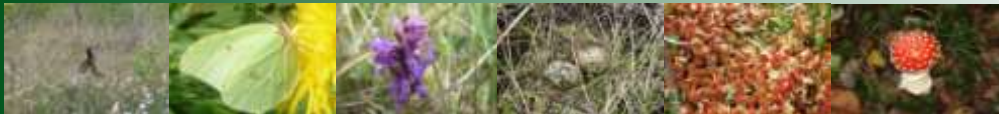




Ballycon Heather trial

- Heather cut in Ballydangan, October 2013
- November 2013 site preparation work carried out in Ballycon
- Heather brash spread on prepared ground in Ballycon





Erenagh re-wetting project



Mount Dillon Works

- Area of cutaway
- Work began in November 2013 – ongoing
- Allow wetland to develop



Japanese Knotweed



- Invasive alien species
- 5 sites identified during the ecology survey
- Treatment with Glyphosate (herbicide)



Vegetation succession post rehabilitation of an industrial cutaway Atlantic blanket bog

Research MSc with I.T. Sligo

- Bare peat
 - 2001 - 53.3%
 - 2011 - 11.7%
- Pioneer poor fen
 - 44.4% increase

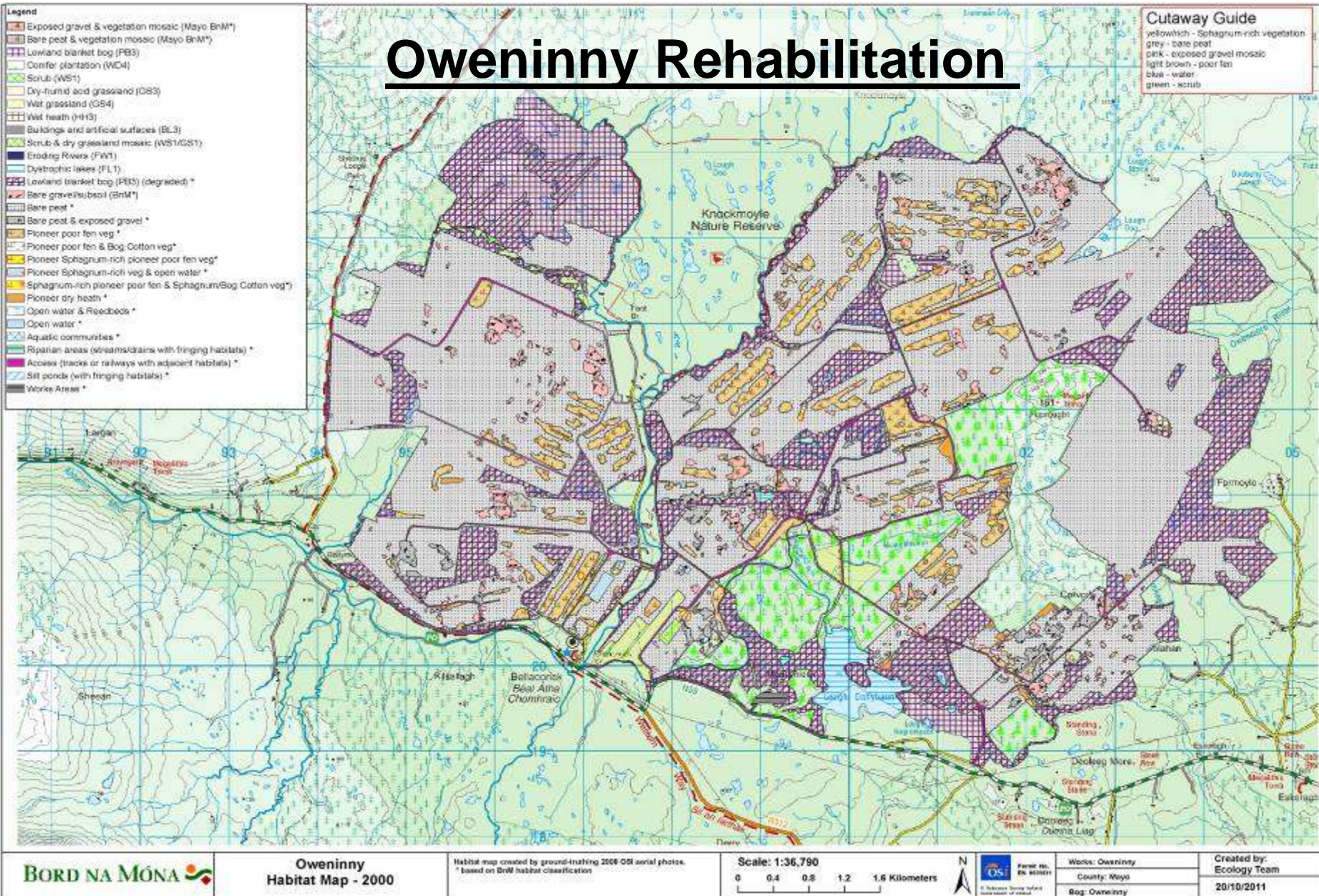


Bellacorick

- *Sphagnum*-rich poor fen habitats
2001 - 1%
2011 - 7%
- *Pinus contorta*
increased by 7%



Oweninny Rehabilitation

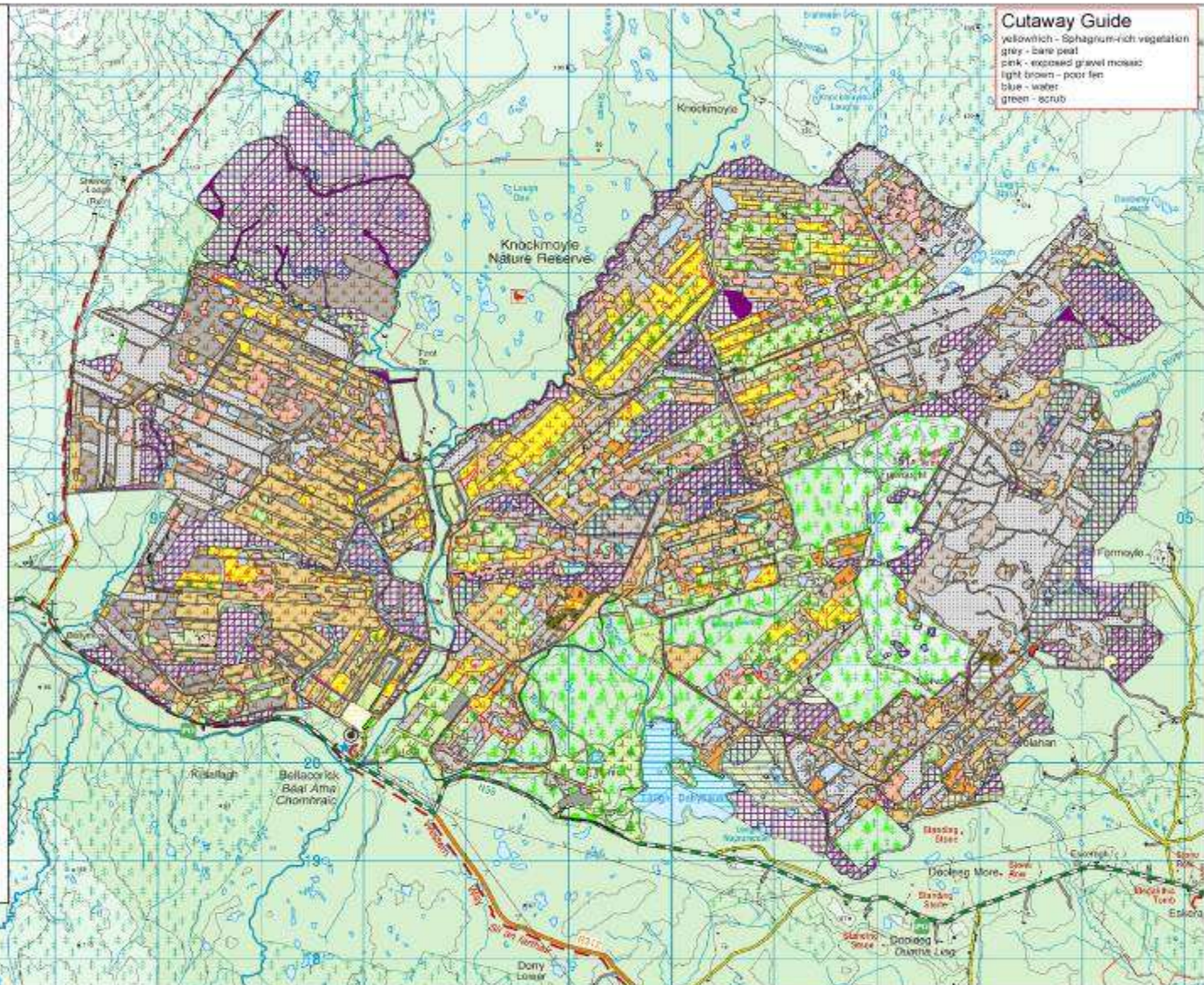


Legend

- Bog Timber
- Exposed gravel & vegetation mosaic (Mayo BnM*)
- Molinia-dominated grass & Willow scrub (Mayo BnM*)
- Pioneer dry heath & Molinia-dominated grass (Mayo BnM*)
- Pioneer poor fen vegetation & Reeds (Mayo BnM*)
- Bare peat & vegetation mosaic (Mayo BnM*)
- Lowland blanket bog (PB3)
- Cutover bog (PB4)
- Poor fen and flush (PF2)
- Wet Willow-Alder-Ash woodland (WV6)
- Mixed broad-leaved woodland (WD1)
- Carrifer plantation (WV4)
- Scrub (WS1)
- Recently-felled woodland (W85)
- Treeline (WL2)
- Improved grassland (GA1)
- Dry calcareous and neutral grassland (GS1)
- Dry meadows and grassy verges (GS2)
- Dry-humid acid grassland (GS3)
- Wet grassland (GS4)
- Dry heath (HH1)
- Wet heath (HH3)
- Dense Bracken (HD1)
- Spoil and bare ground (ED2)
- Recolonising bare ground (ED3)
- Buildings and artificial surfaces (BL3)
- Reed and large sedge swamps (FS1)
- Eroding Rivers (FW1)
- Dystrophic lakes (FL1)
- Lowland blanket bog (PB3) (degraded) *
- Lowland blanket bog (PB3) (rehabilitating) *
- Bare gravel/subsoil (BnM*)
- Bare peat *
- Bare peat & exposed gravel *
- Pioneer poor fen veg *
- Pioneer Bog Cotton veg *
- Pioneer poor fen & Bog Cotton veg *
- Pioneer Sphagnum-rich pioneer poor fen veg *
- Sphagnum-rich pioneer poor fen & Pine scrub *
- Bare peat & pioneer Sphagnum-rich poor fen *
- Pioneer Sphagnum-rich veg & open water *
- Sphagnum-rich pioneer poor fen & Sphagnum/Bog Cotton veg *
- Pioneer dry heath *
- Pioneer poor fen & dry heath *
- Pioneer dry heath & Pine scrub *
- Open water & Reeds *
- Pioneer Willow Scrub *
- Pioneer Pine Scrub *
- Pioneer poor fen & Willow scrub *
- Pioneer poor fen & Pine scrub *
- Open water *
- Pioneer poor fen & open water *
- Rudimentary rich fen vegetation *
- Pioneer Molinia grassland *
- Riparian areas (stream/slopes with fringing habitats) *
- Access (tracks or railways with adjacent habitats) *
- Silt ponds (with fringing habitats) *

Cutaway Guide

- yellowish - Sphagnum-rich vegetation
- grey - bare peat
- pink - exposed gravel mosaic
- light brown - poor fen
- blue - water
- green - scrub



BORD NA MÓNA

**Oweninny
Habitat Map**

Habitat map created by ground truthing 2008 OSI aerial photos.
* based on BnM habitat classification

Scale: 1:37,544

0 0.4 0.8 1.2 1.6 Kilometers



Works: Oweninny
County: Mayo
Rog: Oweninny

Created by:
Ecology Team
16/08/2011



BORD NA MÓNA

COMMUNICATIONS!!!

Community Group Projects Consultation





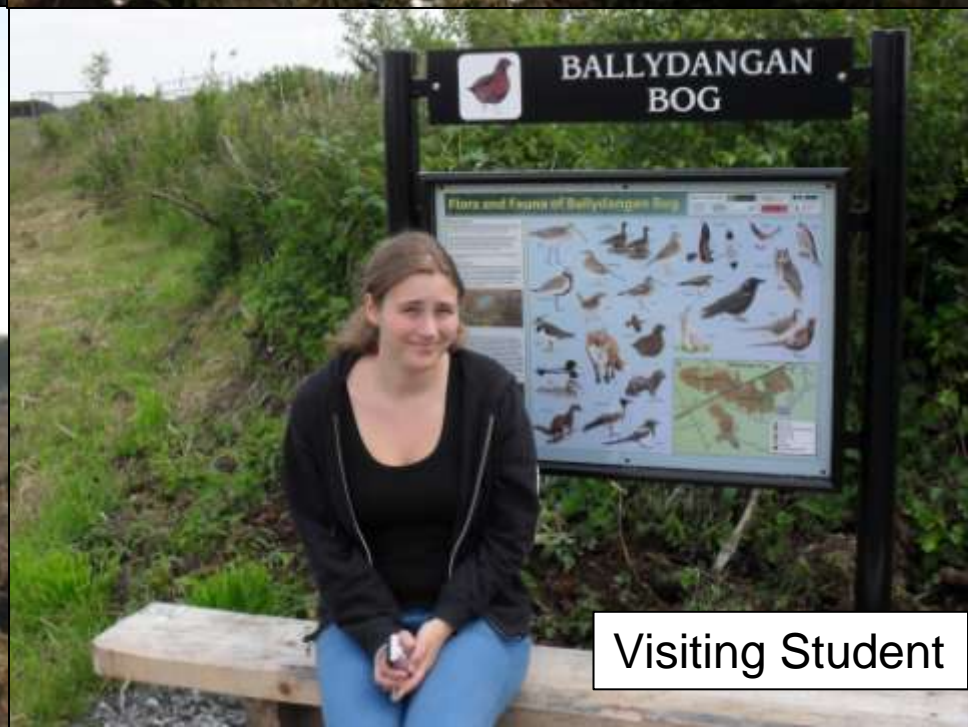
NUIG MSc Students



Irish Peatland Council



Teagasc



Visiting Student

Thank You



Agenda

- 9.00 am Gerry Ryan Welcome and Introduction
- 9.15 am Mark McCorry Rehabilitation planning & updates
- 9.45 am David Fallon Rehabilitation updates
- 10.15 am Coffee
- 10.45 am David Wilson Carbon in cutaway peatlands: Will it stay or will it go
- 11.15 am Paddy Woodworth Ecological restoration as a global strategy for the recovery of native biodiversity
- 11.45 am John Reilly Bord na Mona's Wind Development Strategy to 2030
- 12.15 pm Discussion
- 12.30 pm Lunch
- 1.15 pm Bus leaves for Mountlucas
- 4.00 pm Bus returns to Tullamore Court Hotel

