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 bogs early 1980s
- Biodiversity survey
- Areas designated as Bord na Móna biodiversity areas in 2009
- Ongoing project – 1000+ ha planned to date
- Consulting with all stakeholders
- NPWS also assessing bogs as part of SAC/NHA review
- New excavator purchased solely for this work
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
Derrydoo Woodlough - 443ha
• Phase 1 Moyarwood Bog
• Restoration work commencement in 2012
• Completed 2013 – 190ha
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.
RCG – 100% vegetation cover with Birch and mosses

Triticale – 50% vegetation cover with Birch mosses and Willowherb
Fertiliser and lime

100% vegetation cover
-grasses and rushes
-some birch and willow
Drumman – fertiliser only

50-75% vegetation cover
- Birch, mosses and Willowherb
Kilmacshane crop trials

Reed Canary Grass

100% vegetation cover
- RCG growth with pioneer species
Kilmacshane crop trials

Triticale

10-25% vegetation cover - pioneer species
SRAHMORE PDA

– Sphagnum pools

June 2012: 250+ pools (4x8m excavated in stabilised peat)
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
- Exposed gravel & vegetation mosaic (Mamo BnM)
- Bare peat & vegetation mosaic (Mamo BnM)
- Litoral blanket bog (BLB)
- Conifer plantation (WD9)
- Scrub (WS9)
- Dry-grassland (DwG)
- Wet grassland (GW)
- Wet heath (H-w)
- Buildings & artificial surfaces (BS-l)
- Scrub & dry grassland mosaic (WS-1/GW-1)
- Eroding Rivers (PwK)
- Hydromorphic areas (FI)
- Lowland blanket bog (KBI) (degraded)
- Bare gravel & soil (BnM)
- Bare peat
- Bare peat & exposed gravel
- Pioneer poor fen veg
- Pioneer poor fen & Bog Cotton veg
- Pioneer Sphagnum-rich pioneer poor fen veg
- Pioneer Sphagnum-rich veg & open water
- Sphagnum-rich pioneer poor fen & Sphagnum Bog Cotton veg
- Open water & Reeds beds
- Open water
- Aquatic communities
- Riparian areas (stream/drainages with fringing habitats)
- Access (tracks or railways with adjacent habitats)
- Still ponds (with fringing habitats)
- Works Areas

Oweninny Habitat Map - 2000
Habitat map created by ground-truthing 2000-08 aerial photos. Based on BnM habitat classification.

Scale: 1:36,790
0 0.4 0.8 1.2 1.6 Kilometers

Works: Oweninny
County: Mayo
Map: Oweninny

Created by: Ecology Team
20/10/2011

Bord na Móna

Bord na Móna
COMMUNICATIONS!!

Community Group Projects
Consultation
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