

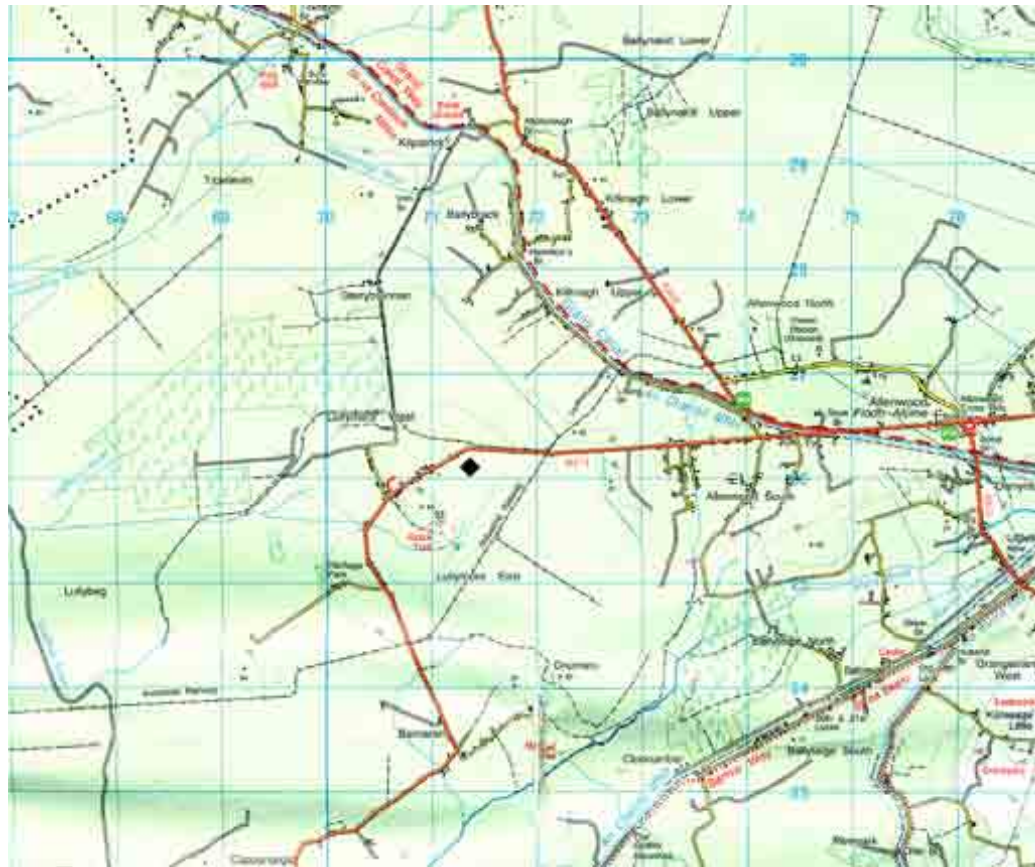


Management of Lodge Bog for Conservation & Biodiversity

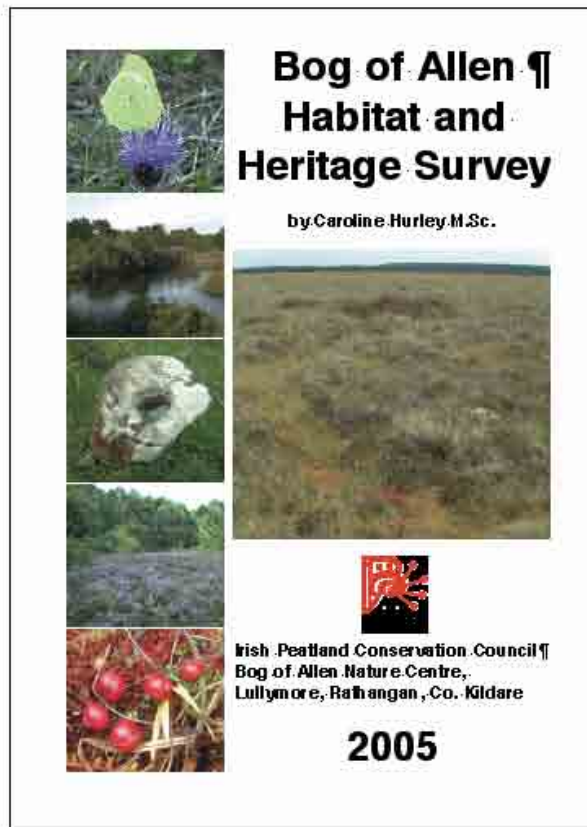
- **Dr Catherine O'Connell**
- **Irish Peatland Conservation Council**
- Bog of Allen Nature Centre
- Lullymore, Rathangan,
Co. Kildare
- www.ipcc.ie



Location of Lodge Bog, Co. Kildare



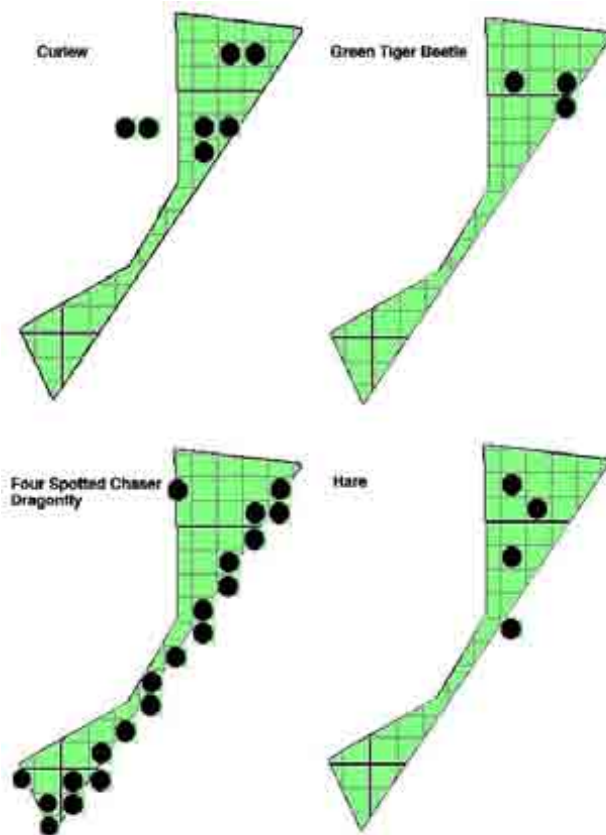
Bog of Allen Survey 2004/2005



- Lodge Bog was first identified by the IPCC during a Habitat and Heritage Survey of the Bog of Allen
- Lodge Bog is one of five unprotected intact remnants of the Bog of Allen in Kildare and Offaly



Fauna Mapping



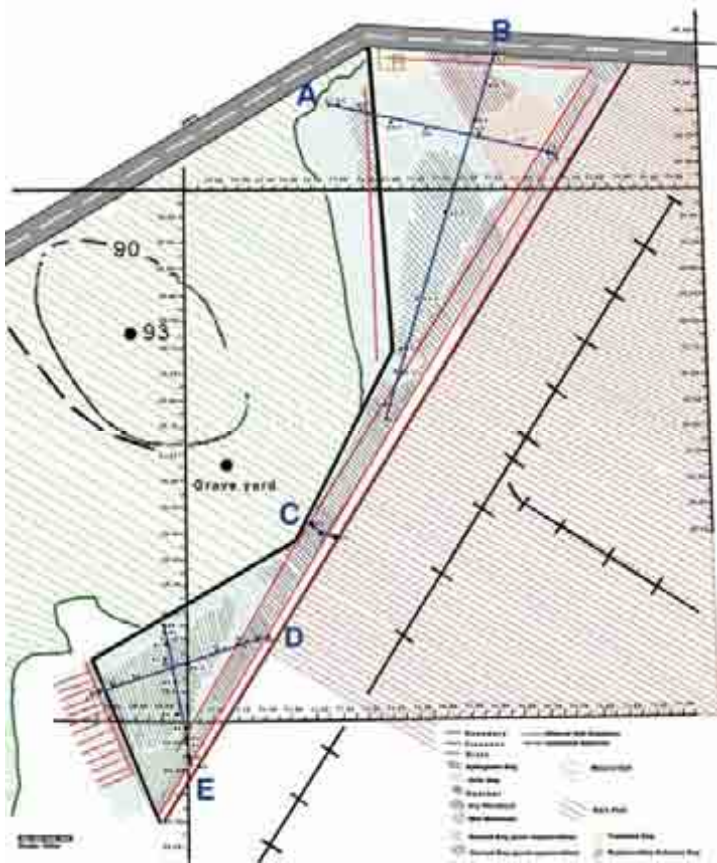
- 139 species of bird, mammal, amphibian and invertebrate
- Breeding birds include snipe, curlew, cuckoo & willow warbler
- 10 species of dragonfly
- Work undertaken by Michael O'Meara of Waterford Wildlife

Spider Survey



- Spiders were surveyed by specialist Myles Nolan of the Natural History Museum
- 44 species identified
- *Hypsosinga albovittata* new to Ireland

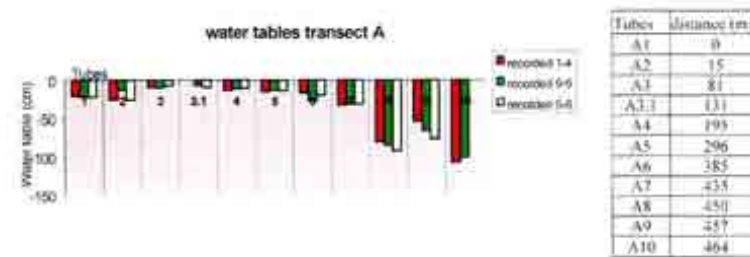
Vegetation Mapping



- Vegetation Mapping undertaken by Collette Coumans of the University of Utrecht
- 14 communities identified including: birch woodland, heathland, grassland, *Sphagnum* bog
- 5 permanent transects (A-E) set up for monitoring water levels
- 143 plants identified

Water Levels & Height Levelling

- Transect A runs parallel to the R414 on the northern margin of Lodge bog
- The western intact margin of Lodge Bog is 4m higher than the eastern side at the industrial bogland
- The water table varies from 10cm to 100cm below the bog surface



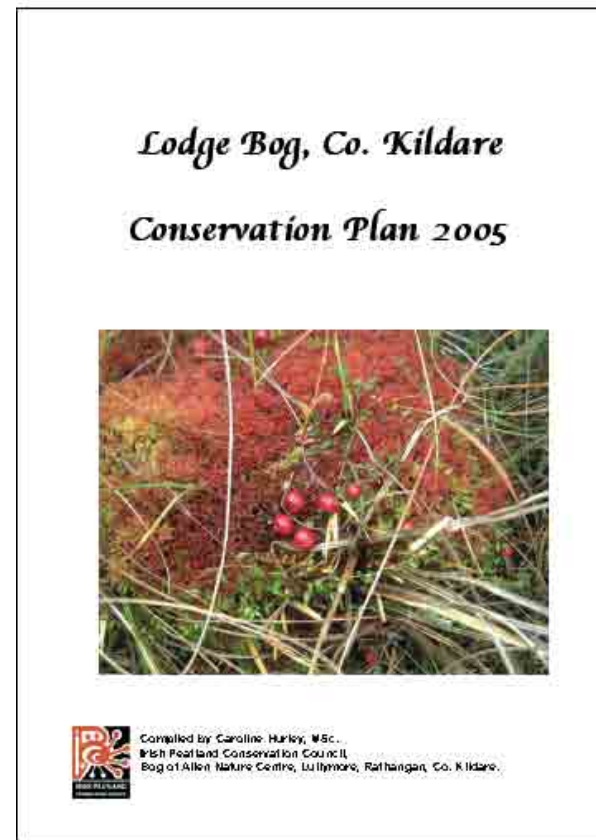
Peat Stratigraphy



- The depth of peat in Lodge Bog is 5m
- Peat stratigraphy shows an abundance of *Sphagnum imbricatum* moss in the recent past. This species is rare on the bog today

Lodge Bog Management Plan

- Research undertaken led to the compilation of the Lodge Bog Conservation Management Plan by Caroline Hurley
- Overall aim of the plan is to restore the bog to peat forming vegetation and to enhance its biodiversity



Goal: Peat Forming Vegetation



Lodge Bog Management Plan

- Objective 1: restore Lodge Bog to a peat forming habitat
- Objective 2: use Lodge Bog for education without damage to the bog



Lodge Bog Management Plan



- Objective 3: ensure the boundaries of Lodge Bog are visible to the public
- Objective 4: prevent harmful human effects to Lodge Bog such as fire and dumping

Lodge Bog Management Plan

- Objective 5: increase health and safety awareness of visitors
- Objective 6: monitor Lodge Bog to ensure the effectiveness of the Conservation Plan. Monthly monitoring of water levels is carried out by volunteers



Lodge Bog Management Plan



- Objective 7: encourage further research on Lodge Bog and maintain an archive of research findings in the library at the Bog of Allen Nature Centre.
- Currently IPCC is mapping plant distribution on Lodge Bog

Restoring the Water Table on Lodge Bog - Drain Blocking Part 1



- Coillte Life Project Team advised IPCC on the DIY of Drain Blocking
- Plastic lumber purchased from Ecoplastic Recycling Limited in lengths up to a maximum of 3m. Cost Euro 40 per 3m sheet
- Strategic damming of drains on northern and eastern sides of Lodge Bog.
- 2km of drains blocked with 40 dams in 2006
- Labour undertaken by IPCC staff and volunteers
- Monitoring of dam effectiveness is on-going
- Work supported financially by the Heritage Council's Biodiversity Fund 2006, Adobe and IPCC's Friends of the Bog

Restoring the Water Table on Lodge Bog - Drain Blocking Part 2



- In 2008 IPCC will block a further 1.5km of drains on the western and southern margins.
- Remove invasive birch trees
- The work is supported financially by the Heritage Council's Biodiversity Fund 2008 and IPCC's Friends of the Bog

Project Benefits

- Providing practical skills on habitat restoration and conservation
- Preserving the biodiversity of species that were once typical of the Bog of Allen Region
- Providing a site for peatland education
- Providing opportunities for volunteering and engaging the community
- Increasing the volume of water stored in the bog
- Increasing the height of the phreatic water levels in the bog which sustain the active peat forming functions of the bog

Thank You to Coillte and to the Researchers, Volunteers & Sponsors of the Lodge Bog Conservation Project

Bord na Móna	Adobe	Heritage Council Biodiversity Fund 2006	Vodafone and Conservation Volunteers Ireland Nature Fund
Kelt	Leader Plus	European Union Structural Funds	National Development Plan
IPCC Friends of the Bog	Michael O'Meara Waterford Wildlife	Myles Nolan Natural History Museum	Catherine O'Connell and Caroline Hurley of the Irish Peatland Conservation Council
Collette Coumans University of Utrecht	Heritage Council Biodiversity Fund 2008	Patrick Crushell	IPCC Staff and Volunteers