



**Centre for
Ecology & Hydrology**

NATURAL ENVIRONMENT RESEARCH COUNCIL



The Scottish
Government

CAPER 2009

Chancellors Court Manchester

34th Annual Meeting

Monday 6th - Wednesday 8th April 2009

Programme & Abstracts

Secretariat sponsored by DEFRA

Afternoon Programme

Monday 6 April

Registration at Chancellors Court

www.meeting.co.uk/chancellors/interact

(use this website for transport and location details)

12.00 Depart for Ruabon - minibuses

19.30 - Dinner

Followed by

Poster Pub with very short introductions to each poster

Displays by ADC and Skye

Committee meeting following on from poster pub

Tuesday 7 April

7.30am Breakfast

Talks in

Session Chair: Neil Cape - Ozone in the environment

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| 09.00 | Felicity Hayes
(CEH Bangor) | A flux-effect relationship for above- and below-ground impacts of ozone on two semi-natural grassland species |
| 09.20 | Patrick Buker
(SEI) | Development and provisional European application of a multi-layer grassland ozone flux model |
| 09.40 | Sylvia Toet
(York University) | Chemical ozone reaction on leaf surfaces identified using a novel stable isotope approach |
| 10.00 | Sally Power
(Imperial College) | How does resource availability affect plant response to ozone ? |
| 10.20 | Tim Morrissey
(SEI) | Modelling soil moisture to determine ozone flux to European forest trees |
| 10.40 | Jeremy Barnes
(Newcastle University) | Ozone exposure versus dose response in Winter Wheat |
| 11.00 | COFFEE | |

Session Chair: David Fowler

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| 11.20 | David Stevenson,
(University of Edinburgh) | Past, present and future tropospheric ozone |
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| 12.10 | Jennifer
Williamson
(CEH Bangor) | Mechanisms of effects of elevated ozone exposure on carbon cycling processes in temperate wetlands. |
| 12.30 | Serena Wagg
(CEH Bangor) | Combined effects of drought and increasing ozone on semi-natural upland vegetation |
| 12.50 | Chubamenla
Jamir
(SEI) | Assessing the impact of ground level ozone (O ₃) on crops in south Asia |
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13.10 LUNCH

Session Chair: Harry Harmen - Drivers of change

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| 14.10 | Simon Caporn
(MMU) | Twenty years of nitrogen addition to an upland heath: what have we learned? |
| 14.30 | Elizabeth Jones
(Imperial) | It isn't easy being green: invertebrates, plants and pollution in urban green spaces |
| 14.50 | Leon van den Berg
(SEI York) | Changes in flora of calcareous grasslands in UK |
| 15.10 | Raúl Ochoa-Hueso,
(Madrid University) | Nitrogen deposition effects on a Mediterranean ecosystem of Central Spain: preliminary results a long-term fertilization experiment |
| 15.30 | Stephanie McGovern
(Bangor University) | Long-term Vegetation Change on Snowdon |
| 15.50 | TEA | |

Session Chair: Mike Ashmore - Field issues

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| 16.20 | Keith Goulding
(Rothamsted) | Pollution swapping: 'from nitrogen to almost everything'. |
| 16.40 | Simon Peacock
(Newcastle University) | Impacts of ozone on upland vegetation |
| 17.00 | Kirsten Wyness
(CEH Bangor) | Ozone and nitrogen controls on carbon allocation within two semi-natural plant species |
| 17.20 | Carly Stevens
(Open University) | Is acidification or eutrophication responsible for declines in species richness? |
| 17.40 | Steve McGrath
(Rothamsted) | Sulphur signals in vegetation and soils reflect changing anthropogenic sulphur pollution since 1850 |
| 18.30 | | DINNER |
| 19.30 | | Terrestrial Umbrella survey meeting |

Wednesday 19 March

7.30am Breakfast

(Move out & return keys)

Session Chair: David Fowler - Heavy Metals

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| 08.45 | Heath Malcolm
(CEH Edinburgh) | Monitoring the atmospheric deposition of the heavy metals in rural areas of the UK |
| 09.05 | Harry Harmens
(CEH Bangor) | Spatial and temporal trends in heavy metal accumulation in mosses in the UK and Europe |
| 09.25 | John Kentisbeer
(CEH Edinburgh) | Continuous and integrated monitoring of rural atmospheric mercury levels in the UK. |
| 09.45 | Ed Tipping
(CEH Lancaster) | Modelling the long term behaviour of heavy metals in upland catchments of the UK |
| 10.05 | Joanna Cloy
(Edinburgh University) | Ombrotrophic Peat Bogs as Archives of Atmospheric Metal Deposition: Examples from Scotland |
| 10.25 | Steve McGrath
(Rothamsted) | Metal effects in soils: differences in bioavailability between soils and |

effects of time

COFFEE

Session Chair: Nigel Bell - Something different

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| 11.20 | Jim Thompson
(IEEM) | Professional Issues in Ecology |
| 11.50 | Nancy Dise and Mike
Ashmore (MMU and
York University) | ROTAP: update on the vegetation
effects chapter |
| 12.20 | David Fowler
(CEH Edinburgh) | ROTAP: overview |

12.45 Lunch & depart