

CAPER 2004

COMMITTEE ON AIR POLLUTION EFFECTS RESEARCH

Close House, Newcastle
5th - 7th April 2004

Programme

Monday 5th April

Registration at Close House*

- 13:00 *Buffet lunch at Close House*
- 14:00 Tour Close House Facilities
- 15:30 *Break*
- 16:00 Supporting U - David MacKay: Troubleshooting O₃ Monitors
- 17:30 'Newcastle University: New Initiatives/Research Directions'
- 18:00 Cocktail bar (drinks to be purchased)/Croquet
- 19:00 Evening Meal
- 20:30 Departure to Castle Leazes Halls, Central Newcastle
(Minibus transfer)
- 21:00 Halls Bar until 23:00

*Transport can be arranged if Jeremy is alerted in advance j.d.barnes@newcastle.ac.uk

Tuesday 6th April

- 0810 Depart Halls to Close House (minibus - no return until after Conference Dinner)
0900 Morning Refreshments
- Chairman - Jeremy Barnes**
- 0920 Pot pourri session (for anyone to raise issues of interest - 1 or 2 overheads max if required)
- 0945 Holly Smith
(Newcastle University) INCORPORATION OF OZONE DETOXIFICATION INTO FLUX MODELS
- 1005 Iker Hernández
(Newcastle University & Universitat de Barcelona) APOPLAST REDOX STATUS: A NEW PERSPECTIVE ON PLANT DEFENCE RESPONSES
- 1025 Colin Gillespie
(Newcastle University) QTLs GOVERNING OZONE IMPACTS ON WHEAT YIELD
- 1040 Anne Borland
(University of Newcastle) IS OXIDATIVE STRESS A KEY SIGNAL UNDERPINNING ACCLIMATION TO SALINITY IN THE ICE PLANT?
- 1100 *Coffee*
- Chairman - David Fowler**
- 1130 Jeremy Barnes
(Newcastle University) ESTABLISHING THE FUNCTIONAL SIGNIFICANCE OF HAP5c IN OXIDATIVE DEFENCE AND REPAIR PROCESSES
- 1150 Johan Uddling
(Göteborg University) BIOMASS REDUCTION OF JUVENILE BIRCH IS MORE STRONGLY RELATED TO STOMATAL UPTAKE OF OZONE THAN TO INDICES BASED ON EXTERNAL EXPOSURE
- 1210 Satoshi Ishii
(Imperial College) RESPONSES OF LOCALLY GROWN MALAYSIAN RICE CULTIVARS (*ORYZA SATIVA*, L.) TO AMBIENT AND INCREMENTED O₃ LEVELS IN OPEN TOP CHAMBERS AND GREENHOUSE CHAMBERS
- 1230 Discussion
1300 *Lunch* *hot finger food, quiche and sandwiches*
- Chairman - Sally Power**
- 1400 Felicity Hayes
(CEH Bangor) OZONE SENSITIVITY IN UPLAND VEGETATION
- 1420 Mike Ashmore
(University of Bradford) LONG-TERM SIMULATION OF IMPACTS OF NITROGEN DEPOSITION ON HEATHLANDS AND MOORLANDS IN THE UK
- 1440 Deirdre Wilson
(Manchester Metropolitan University) THE IMPACTS OF ELEVATED NITROGEN DEPOSITION AND ENVIRONMENTAL STRESS ON THE FLORA AND NITROGEN CYCLING OF A LOWLAND HEATH
- 1500 Emma Green
(Imperial College, London) THE EFFECT OF NITROGEN DEPOSITION ON HEATHLAND SYSTEMS

1520	Paul Horswill (University of Sheffield)	THE EFFECTS OF ATMOSPHERIC NITROGEN DEPOSITION ON THE SOIL CHEMISTRY AND SPECIES COMPOSITION OF SEMI-NATURAL ACIDIC AND CALCAREOUS GRASSLANDS
1540	Laurence Jones (CEH Bangor)	ATMOSPHERIC NITROGEN INPUTS TO A SAND DUNE SYSTEM IN SOUTH WALES, IN CONTEXT OF THE WIDER NITROGEN BUDGET FOR THE SITE
1600	<i>Break</i>	
	Chairman - Neil Cape	
1620	Jennifer Carfrae (CEH Edinburgh)	COMPARISON OF THE IMPACTS OF TWO ATMOSPHERIC NITROGEN SPECIES ON <i>CALLUNA VULGARIS</i> (L.) ECO-PHYSIOLOGY
1640	Simon Caporn (Manchester Metropolitan University)	RELEVANCE OF NITROGEN EXPERIMENTS ON HEATHER MOORLAND FOR THE BRITISH UPLANDS
1700	Nigel Bell (Imperial College, London)	A STUDY OF THE LICHENS IN LONDON UNDER CONTEMPORARY ATMOSPHERIC CONDITIONS (2002-2003)
1720	Poster Session	
1800	Pre dinner drinks/Committee Meeting	
1915	<i>Conference Dinner</i>	
2130	Departure to Leazes Halls: Minibus Transfer	
2200	Arrival halls - late bar	

Conference Dinner: Menu

Curried parsnip soup with lime sabayon

OR

Tian of melon with a compote of soft fruit and oranges

Fillet of salmon with a sweet pear, prawn and dill broth

OR

Pan-fried chicken supreme with mushrooms, garlic, tomato and chilli

OR

Pinenut, stilton and shallot risotto with creamed leeks

Plus a selection of seasonal vegetables and potatoes

Banana and rosemary crème brûlée with homemade shortbread

OR

Sticky toffee pudding with butterscotch sauce

OR

Selection of cheese and biscuits served with a selection of grapes

Freshly brewed coffee and mints

Choices to be relayed prior to arrival

Wine to be purchased directly by delegates from extensive menu

Wednesday 7th April

- 08:10** Depart halls (remember to bring your luggage!)
- 09:00** Morning refreshments
Chairman - David Fowler
- 09:20** Mark Broadmeadow (Forest Research) MONITORING THE EFFECTS OF AIR POLLUTION IN BRITISH FORESTS
- 09:40** James Heath (University of Lancaster) CARBON FLUX FROM ATMOSPHERE TO SOILS UNDER ELEVATED CO₂ CONCENTRATIONS
- 10:00** **PHIL INESON** (Guest Speaker) APPLICATION OF NATURAL ISOTOPES IN ECOLOGICAL RESEARCH
- 11:00** *Break*
- 11:30** Keeley Bignal (University of Bradford) THE ECOLOGICAL IMPACTS OF AIR POLLUTION FROM ROAD TRANSPORT ON LOCAL VEGETATION
- 11:50** René Larsen (Natural History Museum, London) LICHEN AND BRYOPHYTE BIODIVERSITY IN LONDON BIOMONITORING AND RE-INVASION
- 12:10** William Purvis (Natural History Museum, London) INVESTIGATING BIOGEOCHEMICAL SIGNATURES IN THE LICHEN *PARMELIA SULCATA* IN BURNHAM BEECHES, W. LONDON
- 12:30** Lucy Sheppard (CEH Edinburgh) EARLY IMPACTS OF DIFFERENT N FORMS ON SEMI NATURAL VEGETATION GROWING ON ACID ORGANIC SOIL
- 12:50** *Lunch - Hot finger food, quiche and sandwiches*
- 14:00** *Close of conference: departure. Minibus transfer to Newcastle/station*
- 14:05** Hands-on CIRRAS training session: 'treat your CIRRAS with TLC'*

* if we are to run this session Lindsay needs to know numbers participating before Wed 31st. If just the Newcastle crew, then we'll probably arrange an alternative time/venue with Keith P & Caroline. However, if others would find it useful then happy to dovetail this session with CAPER (as are Keith/Caroline). Sooner we know numbers the sooner I can finalise arrangements