

Moor House – Upper Teesdale Publications 1993 To Present

28 August 2007

2007

Cundill, A., Chapman, P. J. & Adamson, J. K. (2007) Spatial variation in concentration of dissolved nitrogen species in an upland blanket peat catchment. *Science of the Total Environment*, 373, 166-177.

Evans, M. & Warburton, J. (2007) *Geomorphology of Upland Peat: Erosion, Form and Landscape Change*. Blackwell.

2006

Clark, J.M., Chapman, P.J., Heathwaite, A.L. & Adamson, J.K. (2006) Suppression of dissolved organic carbon by sulphate induced acidification during simulated droughts. *Environmental Science and Technology*, 40, 1776-1783.

Evans, C.D., Chapman, P.J., Clark, J.M., Monteith, D.T. & Cresser, M.S. (2006) Alternative explanations for rising dissolved organic carbon export from organic soils. *Global Change Biology*, 12, 2044-2053.

Littlewood, N.A., Pakeman, R.J. & Woodin, S.J. (2006) The response of plant and insect assemblages to the loss of *Calluna vulgaris* from upland vegetation. *Biological Conservation*, 128, 335 – 345.

Redpath, S.M., Mougeot, F., Leckie, F. M. & Evans, S.A. (2006) The effects of autumn testosterone on survival and productivity in red grouse *Lagopus lagopus scoticus*. *Animal Behaviour*, 71, 1297-1305.

Redpath, S.M., Mougeot, F., Leckie, F.M., Elston, D.A. & Hudson, P.J. (2006) Testing the role of parasites in driving the cyclic population dynamics of a gamebird. *Ecology Letters*, 9, 410-418.

Ward, S. E. (2006) Effects of burning and grazing on peatland carbon dynamics. PhD Thesis, University of Lancaster.

Worrall, F., Burt, T. P. & Adamson, J. K. (2006) Trends in drought frequency – the fate of DOC export from British peatlands. *Climatic Change*, 76, 339-359.

Worrall, F., Burt, T.P. & Adamson, J.K. (2006) Long-term changes in hydrological pathways in an upland peat catchment – recovery from severe drought? *Journal of Hydrology*, 321, 5-20.

Worrall, F., Burt, T.P. & Adamson, J.K. (2006) The rate of and controls upon DOC loss in a peat catchment. *Journal of Hydrology*, 321, 311-325.

Worrall, F., Burt, T. P. & Adamson, J. K. (2006) Do nitrogen inputs stimulate dissolved organic carbon production in upland peat bogs? *Global Biogeochemical Cycles*, 20, GB3013.

2005

Armstrong, A. (2005) Monitoring and modelling suspended sediment flux in British upland catchments. PhD thesis. University of Durham.

Bonnet, S. (2005) Above-below ground interactions in peatland biogeochemistry. PhD Thesis, University of Wales, Bangor.

Chapman, P.J., Clark, J.M., Heathwaite, A.L., Adamson, J.K., & Lane, S.N. (2005). Sulphate controls on dissolved organic carbon dynamics in blanket peat: linking field and laboratory evidence. In *Dynamics and Biogeochemistry of River Corridors and Wetlands*, Vol. 294, pp. 3-9. IAHS.

Clark, J.M., Chapman, P.J., Adamson, J.K., & Lane, S.N. (2005) Influence of drought induced acidification on the

mobility of dissolved organic carbon in peat soil. *Global Change Biology*, 11, 791-809.

Clark, J.M. (2005) Environmental controls on the production and export of Dissolved Organic Carbon in an upland peat catchment. PhD Thesis, University of Leeds.

Clement, S. (2005) The future stability of upland blanket peat following historical erosion and recent re-vegetation. PhD thesis, University of Durham.

Cundill, A. (2005) Hydrological controls on nitrogen dynamics in an upland blanket peat. PhD thesis, University of Leeds.

Evans, M. & Warburton, J. (2005) Sediment budget for an eroding peat-moorland catchment in northern England. *Earth Surface Processes and Landforms*, 30, 557-577.

French, G. C., Hollingsworth, P. M., Corner, R. W. M., Roberts, F. J. & Taylor, I. (2005) Clonal diversity in two recently discovered English populations of *Carex vaginata* Tausch (Cyperaceae). *Watsonia*, 25, 389-395.

Goulder, R. (2005) Aquatic plants in slack water and riverside pools immediately downstream of Cow Green Dam: Compensation for loss of the Weel of Tees? *Naturalist*, 130, 113-117.

Gregg, R. (2005) Impacts of a population outbreak of *Lasiocampa quercus callunae* on peatland carbon dynamics. MSc Dissertation, University of Lancaster.

Mougeot, F., Dawson, A., Redpath, S. M. & Leckie, F. (2005) Testosterone and autumn territorial behaviour in male red grouse *Lagopus lagopus scoticus*. *Hormones and Behavior*, 47, 576-584.

Mougeot, F., Redpath, S. M., Piertney, S. B. & Hudson, P. J. (2005) Separating behavioural and physiological mechanisms in testosterone mediated trade offs. *American Naturalist*, 166, 158-168.

Plant, T. (2005) Carbon dioxide and methane flux from a peatland gully in the northern Pennines: The effect of vegetation, water table depth, temperature and rainfall. MSc Dissertation, University of York.

Roberts, J. (2005) Further notes on the flora of the Cross Fell range. *Carlisle Naturalist* 13, 20-24.

Seivwright, L. J., Redpath, S. M., Mougeot, F., Leckie, F. & Hudson, P. J. (2005) Interactions between intrinsic and extrinsic mechanisms in a cyclic species: testosterone increases parasite infection in red grouse. *Proceedings of the Royal Society B*, 272, 2299-2304.

Vines, G. (2005) When the Helm Wind blows. *New Scientist*, 14 May 2005, 50-51.

Weldon, S.M. (2005) Why choose heather?: Aspects of the nutritional ecology of the Northern Eggar moth (*Lasiocampa quercus callunae*). MSc Dissertation, University of Lancaster.

Worrall, F. & Burt, T.P. (2005) Predicting the future DOC flux from upland peat catchments. *Journal of Hydrology*, 300, 126-139.

Worrall, F. & Burt, T. (2005) Reconstructing long-term records of dissolved CO₂. *Hydrological Processes*, 19, 1791-1806.

Worrall, F., Burt, T., & Adamson, J.K. (2005) Fluxes of dissolved carbon dioxide and inorganic carbon from an upland peat catchment: implications for soil respiration. *Biogeochemistry*, 73, 515-539.

2004

Briones, M.J.I., Poskitt, J., & Ostle, N. (2004) Influence of warming and enchytraeid activities on soil CO₂ and CH₄ fluxes. *Soil Biology & Biochemistry*, 36, 1851-1859.

Foulds, S. (2004) Wind-splash erosion and wind direction control on blanket peat geomorphology. MSc Dissertation, University of Leeds.

Garnett, M. & Stevenson, A. (2004) Testing the use of bomb radiocarbon to date the surface layers of blanket peat. *Radiocarbon*, 46, 841-851.

Holden, J. (2004) Hydrological connectivity of soil pipes determined by ground-penetrating radar tracer detection. *Earth Surface Processes and Landforms*, 29, 437-442.

Holden, J., Chapman, P.J., & Labadz, J.C. (2004) Artificial drainage of peatlands: hydrological and hydrochemical process and wetland restoration. *Progress in Physical Geography*, 28, 95-123.

Simms, D. (2004) Mapping the upper limit of *Calluna vulgaris* in response to climate change. MSc Dissertation, Cranfield University at Silsoe.

Smith, E.J., Rey-Castro, C., Longworth, H., Lofts, S., Lawlor, A.J., & Tipping, E. (2004) Cation binding by acid-washed peat, interpreted with Humic Ion-Binding Model VI-FD. *European Journal of Soil Science*, 55, 433-447.

Smith, H. (2004) Significance of bedrock channel morphology and sediment dynamics in a UK upland river. M.Sc Dissertation, University of Durham.

Wishart, D. (2004) A combined catchment and reach-based assessment of historical channel planform change in a UK upland gravel-bed river. PhD Thesis, University of Durham.

Worrall, F., Burt, T., & Adamson, J.K. (2004) Can climate change explain increases in DOC flux from upland peat catchments. *Science of the Total Environment*, 326, 95-112.

Worrall, F., Harriman, R., Evans, C., Watts, C., Adamson, J.K., Neal, C., Tipping, E., Burt, T., Grieve, I., Monteith, D., Naden, P., Nisbet, T., Reynolds, B., & Stevens, P.A. (2004) Trends in dissolved organic carbon in UK rivers and lakes. *Biogeochemistry*, 70, 369-402.

2003

Burt, T.P. (2003) Monitoring change in hydrological systems. *Science of the Total Environment*, 310, 9-16.

Holden, J. & Burt, T.P. (2003) Hydraulic conductivity in upland blanket peat: measurement and variability. *Hydrological Processes*, 17, 1227-1237.

Holden, J. & Burt, T.P. (2003) Hydrological studies in blanket peat: the significance of the acrotelm-catotelm model. *Journal of Ecology*, 91, 86-102.

Lawlor, A.J. & Tipping, E. (2003) Metals in bulk deposition and surface waters at two upland locations in northern England. *Environmental Pollution*, 121, 153-167.

Matthiopoulos, J., Moss, R., Mougeot, F., Lambin, X. & Redpath, S. M. (2003) Territorial behaviour and population dynamics in the red grouse *Lagopus lagopus scoticus*. II Population models. *Journal of Animal Ecology* 72, 1083-1096.

Mougeot, F., Redpath, S.M., Leckie, F., & Hudson, P.J. (2003) The effect of aggressiveness on the population dynamics of a territorial bird. *Nature*, 421, 737-739.

Mougeot, F., Redpath, S. M., Moss, R., Matthiopoulos, J. & Hudson, P. J. (2003) Territorial behaviour and population dynamics in the red grouse *Lagopus lagopus scoticus*. I Population experiments. *Journal of Animal Ecology*, 72, 1073-1082.

Scott, W.A. & Anderson, R. (2003) Temporal and spatial variation in carabid assemblages from the United Kingdom Environmental Change Network. *Biological Conservation*, 110, 197-210.

Scott, W.A. & Hallam, C.J. (2003) Assessing species misidentification rates through quality assurance of vegetation monitoring. *Plant Ecology*, 165, 101-115.

Taylor, K. & Rumsey, F.J. (2003) Biological flora of the British Isles: *Bartsia alpina* L. *Journal of Ecology*, 91, 908-921.

Tipping, E., Smith, E.J., Lawlor, A.J., Hughes, S., & Stevens, P.A. (2003) Predicting the release of metals from ombrotrophic peat due to drought-induced acidification. *Environmental Pollution*, 123, 239-253.

Turner, B.L., Baxter, R., Ellwood, N.T.W., & Whitton, B.A. (2003) Seasonal phosphatase activities of mosses from Upper Teesdale, northern England. *Journal of Bryology*, 25, 189-200.

Turner, B.L., Baxter, R., & Whitton, B.A. (2003) Nitrogen and phosphorus in soil solutions and drainage streams in Upper Teesdale, northern England: implications of organic compounds for biological nutrient limitation. *Science of the Total Environment*, 314-316, 153-170.

Turner, B.L., Chudek, J.A., Whitton, B.A., & Baxter, R. (2003) Phosphorus composition of upland soils polluted by long-term atmospheric nitrogen deposition. *Biogeochemistry*, 65, 259-274.

Warburton, J. (2003) Windsplash erosion of bear peat on UK upland moorlands. *Catena*, 53, 1-17.

Warburton, J., Evans, M., & Johnson, R.M. (2003) Discussion on - The extent of soil erosion in upland England and Wales. *Earth Surface Processes and Landforms*, 28, 219-223.

Worrall, F., Burt, T., & Adamson, J.K. (2003) Controls on the chemistry of runoff from an upland peat catchment. *Hydrological Processes*, 17, 2063-2083.

Worrall, F., Reed, M., Warburton, J., & Burt, T. (2003) Carbon budget for a British upland peat catchment. *Science of the Total Environment*, 312, 133-146.

2002

Briones, M.J.I. & Ineson, P. (2002) Use of ¹⁴C carbon dating to determine feeding behaviour of enchytraeids. *Soil Biology & Biochemistry*, 34, 881-884.

Burt, T.P., Warburton, J., & Allison, R.J. (2002). Eroding upland landscapes? Past, present and future perspectives. In *The British uplands: Dynamics of change* (eds T.P. Burt, D.B.A. Thompson & J. Warburton), Report 319, pp. 60-66. JNCC, Peterborough.

Cole, L., Bardgett, R.D., Ineson, P., & Adamson, J.K. (2002) Relationships between enchytraeid worms (*Oligochaeta*), climate change, and the release of dissolved organic carbon from blanket peat in northern England. *Soil Biology & Biochemistry*, 34, 599 - 607.

Crowe, S.K. (2002) The role of large peat blocks in sedimentation and their control of invertebrate ecosystem dynamics: an experimental field investigation. MSc, University of Durham.

Green, B. (2002) Investigating the release of nutrients from two different blanket peats: The role of severe drought. MSc Dissertation, University of Leeds.

Holden, J. (2002). A comparison of some runoff process regimes in upland blanket peat. In *The British uplands: Dynamics of change* (eds T.P. Burt, D.B.A. Thompson & J. Warburton), Report 319, pp. 136-137. JNCC, Peterborough.

Holden, J. & Adamson, J.K. (2002) The Moor House long-term upland temperature record: new evidence of recent warming. *Weather*, 57, 119-127.

Holden, J. & Burt, T.P. (2002) Piping and pipeflow in a deep peat catchment. *Catena*, 48, 163 - 199.

Holden, J. & Burt, T.P. (2002) Infiltration, runoff and sediment production in blanket peat catchments: implications of field rainfall simulation experiments. *Hydrological Processes*, 16, 2537 - 2557.

Holden, J. & Burt, T.P. (2002) Laboratory experiments on drought and runoff in blanket peat. *European Journal of Soil Science*, 53, 1 - 15.

Holden, J., Burt, T.P., & Vilas, M. (2002) Application of ground-penetrating radar to the identification of subsurface piping in blanket peat. *Earth Surface Processes and Landforms*, 27, 235- 249.

Jackson, J. (2002) Monitoring vegetation boundaries (*Calluna* & *Eriophorum*) - Moor House NNR, North Pennines. MSc, Cranfield University at Silsoe.

Joyce, A., Huntley, B., Baxter, R., Adamson, J.K., & Parr, T. (2002). Modelling daily surface air temperature over

complex terrain. In *The British uplands: Dynamics of change* (eds T.P. Burt, D.B.A. Thompson & J. Warburton), Report 319, pp. 141-142. JNCC, Peterborough.

Lewthwaite, K.J., Baxter, R., Huntley, B., Willis, S., & Adamson, J.K. (2002). Impacts of environmental change on the vegetation of Widdybank Fell, Upper Teesdale NNR. In *The British uplands: Dynamics of change* (eds T.P. Burt, D.B.A. Thompson & J. Warburton), Report 319, pp. 143-144. JNCC, Peterborough.

Morecroft, M.D., Bealey C.E., Howells, O., Rennie, S.C., & I.P., W. (2002) Effects of drought on contrasting insect and plant species in the UK in the mid-1990s. *Global Ecology and Biogeography*, 11, 7-22.

Naden, P., Watts, C., Broadbent, P., & Blyth, E. (2002). Conserving landscape ecology: the impact of climate change on soil moisture. In *The British uplands: Dynamics of change* (eds T.P. Burt, D.B.A. Thompson & J. Warburton), Report 319, pp. 151-153. JNCC, Peterborough.

Roberts, J. (2002) After Foot and Mouth, Cross Fell in bloom. *Carlisle Naturalist*, 10, 33-42.

Scott, W.A., Adamson, J.K., Rollinson, J., & Parr, T.W. (2002) Monitoring of aquatic macrophytes for detecting of long-term change in river systems. *Environmental Monitoring and Assessment*, 73, 131-153.

Werkman, B.R. & Callaghan, T.V. (2002) Responses of bracken and heather to increased temperature and nitrogen addition, alone and in competition. *Basic and Applied Ecology*, 3, 267 - 276.

Worrall, F., Burt, T.P., Jaeban, R.Y., & Shedden, R. (2002) Release of dissolved organic carbon from upland peat. *Hydrological Processes*, 16, 3487 – 3504.

2001

Adamson, J.K., Scott, W.A., Rowland, A.P., & Beard, G.R. (2001) Ionic concentrations in a blanket peat bog in northern England and correlations with deposition and climate variables. *European Journal of Soil Science*, 52, 69-79.

Beckwith, C.W. & Baird, A.J. (2001) Effect of biogenic gas bubbles on water flow through poorly decomposed blanket peat. *Water Resources Research*, 37, 551-558.

Burns, A. (2001) Stable isotope analysis of food web structure in Trout Beck, an upland stream in Northern England. PhD Thesis, University of Lancaster.

Clement, S. (2001) Recent history and regeneration of an upland gully system at Moor House National Nature Reserve, North Pennines. MSc Dissertation, University of Durham.

Corner, R. & Robinson, L. (2001) Observations on plant colonisation at the Civil Aviation Authority station on the summit of Great Dun Fell (848 m), Cumbria with comparisons to the Icelandic flora. *BSBI News*, 20-24.

Evans, M. & Warburton, J. (2001) Transport and dispersal of organic debris (peat blocks) in upland fluvial systems. *Earth Surface Processes and Landforms*, 26, 1087-1102.

Garnett, M., Ineson, P., Stevenson, A., & Howard, D. (2001) Terrestrial organic carbon storage in a British moorland. *Global Change Biology*, 7, 375-388.

Holden, J. (2001) Recent reduction of frost in the North Pennines. *Journal of Meteorology*, 26, 369 - 374.

Holden, J. & Adamson, J.K. (2001) Gordon Manley and the North Pennines. *Journal of Meteorology*, 26, 329 - 333.

Holden, J., Burt, T.P., & Cox, N.J. (2001) Macroporosity and infiltration in blanket peat: the implications of tension disc infiltrometer measurements. *Hydrological Processes*, 15, 289-303.

Joyce, A., Adamson, J.K., Huntley, B., Parr, T., & Baxter, R. (2001) Standardisation of temperature observed by automatic weather stations. *Environmental Monitoring and Assessment*, 68, 127-136.

Miller, J.D., Adamson, J.K., & Hirst, D. (2001) Trends in stream water quality in Environmental Change Network upland catchments: the first 5 years. *The Science of the Total Environment*, 265, 27-38.

Naden, P. & Watts, C.D. (2001) Estimating climate-induced changes in soil moisture at the landscape scale: an application to five areas of ecological interest in the UK. *Climatic Change*, 49, 411 - 440.

Parish, D.M.B., Thompson, D.B.A., & Coulson, J.C. (2001) Effects of age, cohort and individual on breeding performance in the Lapwing *Vanellus vanellus*. *Ibis*, 143, 288-295.

Scott, M.J., Jones, M.N., Woof, C., Simon, B., & Tipping, E. (2001) The molecular properties of humic substances isolated from a UK upland peat system - A temporal investigation. *Environment International*, 27, 449-462.

Whittaker, J. (2001) Insects and plants in a changing atmosphere. *Journal of Ecology*, 89, 507-518.

Whittingham, M.J., Percival, S.M., & Brown, A.F. (2001) Habitat selection by golden plover *Pluvialis apricaria* chicks. *Basic and Applied Ecology*, 2, 177-191.

Winter, C. (2001) Atmospheric heavy metal pollution on blanket peat in Northern England. MSc Dissertation, University of Durham.

2000

Beckwith, C.W. (2000) Seepage in bogs: the role of anisotropy, heterogeneity and pore occlusion by biogenic gas bubbles. PhD Thesis, University of Sheffield, Sheffield.

Cole, L. (2000) Impact of climate change on biological interactions in upland peat soils. PhD Thesis, University of Manchester.

Cole, L., Bardgett, R.D., & Ineson, P. (2000) Enchytraeid worms (Oligochaeta) enhance mineralization of carbon in organic upland soils. *European Journal of Soil Science*, 51, 185-192.

Demir, T. (2000) The influence of particle shape on bedload transport in coarse bed river channels. PhD Thesis, University of Durham.

Garnett, M.H., Ineson, P., & Stevenson, A.C. (2000) Effects of burning and grazing on carbon sequestration in a Pennine blanket bog, UK. *The Holocene*, 10, 729-736.

Hicks, W.K., Leith, I.D., Woodin, S.J., & Fowler, D. (2000) Can the foliar nitrogen concentration of upland vegetation be used for predicting atmospheric nitrogen deposition? Evidence from field surveys. *Environmental Pollution*, 107, 367-376.

Holden, J. (2000) Runoff generation in blanket peat covered catchments. PhD, University of Durham.

Holden, J. & Burt, T.P. (2000). Spatial and temporal distribution of runoff generation in upland blanket peat; implications of plot, hillslope, and catchment scale monitoring. In *Proceedings of BHS National Hydrology Symposium, Newcastle.*, pp. 2.89 - 2.96.

Hyvarinen, M. & Crittenden, P.D. (2000) ³³P transformation in the thallus of the mat-forming lichen *Cladonia portentosa*. *New Phytologist*, 145, 281-288.

Jensen, A.J., Forseth, T., & Johnsen, B.O. (2000) Latitudinal variation in growth of young Brown Trout *Salmo trutta*. *Journal of Animal Ecology*, 69, 1010-1020

Jonsell, B., Nordal, I., & Roberts, F.J. (2000) *Viola rupestris* and its hybrids in Britain. *Watsonia*, 23, 269-278.

Joyce, A. (2000) Modelling surface climate over complex terrain for landscape ecology. PhD Thesis, University of Durham.

Spiller, D. (2000) The influence of characteristics of upland catchments on stream nitrogen concentrations. MSc Dissertation, University of Reading.

Warburton, J. & Demir, T. (2000). Influence of bed material shape on sediment transport in gravel-bed rivers: a field experiment. In *Tracers in geomorphology* (ed D.L. Foster), pp. 401-410. John Wiley.

Whittingham, M.J., Percival, S.M., & Brown, A.F. (2000) Time budgets and foraging of breeding golden plover

Pluvialis apricaria. *Journal of Applied Ecology*, 37, 632-646.

1999

- Anderson, J.M. & Hetherington, S.L. (1999) Temperature, nitrogen availability and mixture effects on the decomposition of heather (*Calluna vulgaris* (L.) Hull) and bracken (*Pteridium aquilinum* (L.) Kuhn) litters. *Functional Ecology*, 13 (Supplement 1), 116-124.
- Arnold, A. (1999) An investigation of the hydraulic and ecological nature of physical biotopes. MSc, University of Lancaster.
- Beard, G.R., Scott, W.A., & Adamson, J.K. (1999) The value of consistent method in long-term environmental monitoring. *Environmental Monitoring and Assessment*, 54, 239-258.
- Bell, V.A. & Moore, R.J. (1999) An elevation-dependent snowmelt model for upland Britain. *Hydrological Processes*, 13, 1887-1903.
- Bol, R.A., Harkness, D.D., Huang, Y., & Howard, D.M. (1999) The influence of soil processes on carbon isotope distribution and turnover in the British uplands. *European Journal of Soil Science*, 50, 41-51.
- Charman, E. (1999) Land Cover Mapping of Moor House National Nature Reserve, Cumbria using Landsat Thematic Mapper, Airborne Thematic Mapper and Geo-chemical Data. MSc Thesis, University of London.
- Evans, M.G., Burt, T.P., Holden, J., & Adamson, J.K. (1999) Runoff generation and water table fluctuations in blanket peat: evidence from UK data spanning the dry summer of 1995. *Journal of Hydrology*, 221, 141-160.
- Fielding, C.A., Whittaker, J.B., Butterfield, J.E.L., & Coulson, J.C. (1999) Predicting responses to climate change: the effect of altitude and latitude on the phenology of the Spittlebug *Neophilaenus lineatus*. *Functional Ecology*, 13 (Supplement 1), 65-73.
- Fitter, A.H., Self, G.K., Brown, T.K., Bogie, D.S., Graves, J.D., Benham, D., & Ineson, P. (1999) Root production and turnover in an upland grassland subjected to artificial soil warming respond to radiation flux and nutrients, not temperature. *Oecologia*, 120, 575-581.
- Gallagher, M.W. editor (1999) Great Dun Fell Experiment. 9 papers in special issue of *Atmospheric Research* (Volume 50, Issue 3-4).
- Håkansson, M. (1999) Nitrogen Dynamics in a UK Environmental Change Network Site. MSc Thesis, Huddersfield University.
- Hodkinson, I.D., Bird, J., Miles, J.E., Bale, J.S. & Lennon, J.J. (1999) Climatic signals in the life histories of insects: the distribution and abundance of heather psyllids (*Strophingia* spp.) in the UK. *Functional Ecology* 13 (Suppl. 1), 83-95
- Huang, Y., Li, B., Bryant, C., Bol, R., & Eglinton, G. (1999) Radiocarbon dating of aliphatic hydrocarbons: a new approach for dating passive-fraction carbon in soil horizons. *Soil Science Society of America Journal*, 63, 1181-11871.
- Lewthwaite, K.J. (1999) An investigation into the impact of environmental change upon the vegetation at Widdybank Fell, Upper Teesdale. PhD Thesis, University of Durham.
- Melzian, R.P.O. (1999) A study of macroinvertebrate drift in relation to discharge and nutrient transport, Trout Beck - Moor House National Nature Reserve. MSc Thesis, University of Lancaster.
- Pepin, N., Benham, D., & Taylor, K. (1999) Modeling lapse rates in the Maritime uplands of Northern England: Implications for climate change. *Arctic, Antarctic and Alpine Research*, 31, 151-164.
- Pepin, N., Benham, D., & Taylor, K. (1999) Temperature inversions in the Vale of Eden. *Weather*, 54, 241-253.
- Rumble, D.B. (1999) Unoccupied gaps in host plant resources for insect herbivores. PhD Thesis, University of Lancaster.

Taylor, K., Woof, C., Ineson, P., Scott, W.A., Rigg, E., & Tipping, E. (1999) Variation in seasonal precipitation chemistry with altitude in the northern Pennines, UK. *Environmental Pollution*, 104, 1-9.

Tipping, E., Woof, C., Rigg, E., Harrison, A.F., Ineson, P., Taylor, K., Benham, D., Poskitt, J., Rowland, A.P., Bol, R., & Harkness, D.D. (1999) Climatic influences on the leaching of dissolved organic matter from upland UK moorland soils, investigated by a field manipulation experiment. *Environment International*, 25, 83-95.

Whittingham, M.J., Percival, S.M., & Brown, A.F. (1999) Evaluation of radiotelemetry methods of measuring habitat choice by young Golden Plover *Pluvialis apricaria* chicks. *Bird Study*, 46, 363-368.

Whittingham, M.J., Percival, S.M., & Brown, A.F. (1999) Notes on night-time activity of Golden Plover *Pluvialis apricaria* chicks in the north Pennines. *Wader Study Group Bulletin*, 90, 56-58.

1998

Adamson, J.K., Scott, W.A., & Rowland, A.P. (1998) The dynamics of dissolved nitrogen in a blanket peat dominated catchment. *Environmental Pollution*, 99, 69-77.

Bealey, C., Howells, O., & Parr, T. (1998) Environmental change and its effect on wildlife: the role of the Environmental Change Network. *British Wildlife*, 9, 341-347.

Briones, M.J.I., Carreira, J., & Ineson, P. (1998) *Cognettia sphagnetorum* (Enchytraeidae) and nutrient cycling in organic soils: a microcosm experiment. *Applied Soil Ecology*, 9, 289-294.

Briones, M.J.I., Ineson, P., & Poskitt, J. (1998) Climate change and *Cognettia sphagnetorum*: effects on carbon dynamics in organic soils. *Functional Ecology*, 12, 528-535.

Burt, T.P., Adamson, J.K., & Lane, A.M.J. (1998) Long-term rainfall and streamflow records for north central England: putting the Environmental Change Network site at Moor House, Upper Teesdale, in context. *Hydrological Sciences Journal*, 43, 775-787.

Burt, T.P., Evans, M., & Warburton, J. (1998). Contemporary runoff and erosion in blanket peat catchments on the Moor House National Nature Reserve. In *Patterned mires and mire pools. Origin and development; flora and fauna* (eds V. Standen, J. Tallis & R. Meade), pp. 103-115. British Ecological Society, London.

Clark, E.D. (1998) Microthermal habitats in British rivers. PhD Thesis, University of Exeter.

Coulson, J.C., Downie, I.S., & Butterfield, J.E.L. (1998). The invertebrate fauna of lowland mires in northern Britain: comparison with high-altitude mires and evidence of an east-west gradient. In *Patterned mires and mire pools. Origin and development; flora and fauna* (eds V. Standen, J. Tallis & R. Meade), pp. 170-181. British Ecological Society, London.

Crisp, D.T. & Heal, O.W. (1998). Diversity and distribution of aquatic meso- and micro-fauna in mires. In *Patterned mires and mire pools. Origin and development; flora and fauna* (eds V. Standen, J. Tallis & R. Meade), pp. 163-168. British Ecological Society, London.

Crowe, A.M. (1998) A study of macroinvertebrate drift in Trout Beck, Moor House NNR, Teesdale. MSc Thesis, University of Lancaster.

Fitter, A.H., Graves, J.D., Self, G.K., Brown, T.K., Bogie, D.S., & Taylor, K. (1998) Root production, turnover and respiration under two grassland types along an altitudinal gradient: influence of temperature and solar radiation. *Oecologia*, 114, 20-30.

Garnett, M.H. (1998) Carbon storage in Pennine moorland and response to change. PhD Thesis, University of Newcastle upon Tyne.

Gilbert, O.L. & Anderson, P. (1998) *Habitat Creation and Repair* Oxford University Press, Oxford.

Hetherington, S. & Anderson, J.M. (1998) Simplified procedure for the characterisation of plant lignins by alkaline CuO oxidation. *Soil Biology & Biochemistry*, 30, 1477-1480.

Huang, Y., Eglinton, G., Van Der Hage, E.R.E., Boon, J.J., Bol, R., & Ineson, P. (1998) Dissolved organic matter

and its parent organic matter in grass upland soil horizons studied by analytical pyrolysis techniques. *European Journal of Soil Science*, 49, 1-15.

Huang, Y., Stankiewicz, B.A., Eglinton, G., Snape, C.E., Evans, B., Latter, P.M., & Ineson, P. (1998) Monitoring biomacromolecular degradation of *Calluna vulgaris* in a 23 year field experiment using solid state ¹³C-NMR and pyrolysis-GC/MS. *Soil Biology and Biochemistry*, 30, 1517-1528.

Huntley, B., Baxter, R., Lewthwaite, K.J., Willis, S.G., & Adamson, J.K. (1998) Vegetation responses to local climatic changes induced by a water-storage reservoir. *Global Ecology and Biogeography Letters*, 7, 241-257.

Ineson, P., Benham, D.G., Poskitt, J., Harrison, A.F., Taylor, K., & Woods, C. (1998) Effects of climate change on nitrogen dynamics in upland soils. 2. A soil warming study. *Global Change Biology*, 4, 153-161.

Ineson, P., Taylor, K., Harrison, A.F., Poskitt, J., Benham, D.G., Tipping, E., & Woof, C. (1998) Effects of climate change on nitrogen dynamics in upland soils. 1. A transplant approach. *Global Change Biology*, 4, 143-152.

Latter, P.M., Howson, G., Howard, D.M., & Scott, W.A. (1998) Long-term study of litter decomposition on a Pennine peat bog: which regression? *Oecologia*, 113, 94-103.

McTiernan, K.B., Garnett, M.H., Mauquoy, D., Ineson, P., & Couteaux, M.-M. (1998) Use of near-infrared reflectance spectroscopy (NIRS) in palaeoecological studies of peat. *The Holocene*, 8, 729-740.

Parish, D.M.B. & Coulson, J.C. (1998) Parental investment, reproductive success and polygyny in the lapwing, *Vanellus vanellus*. *Animal Behaviour*, 56, 1161-1167.

Scott, M.J. (1998) Temporal patterns in the chemistry, flux and molecular characteristics of dissolved organic carbon in drainage water from an upland peat system. PhD Thesis, University of Manchester.

Scott, M.J., Jones, M.N., Woof, C., & Tipping, E. (1998) Concentrations and fluxes of dissolved organic carbon in drainage water from an upland peat system. *Environment International*, 24, 537-546.

Watson, A. & Nedwell, D.B. (1998) Methane production and emission from peat: the influence of anions (sulphate, nitrate) from acid rain. *Atmospheric Environment*, 32, 3239-3245.

Whittaker, J.B. & Tribe, N.P. (1998) Predicting numbers of an insect (*Neophilaenus lineatus*: Homoptera) in a changing climate. *Journal of Animal Ecology*, 67, 987-991.

1997

Barnard, L. (1997) From database design to the analysis of vegetation change: a study of the archive vegetation data from the Moor House National Nature Reserve. MSc Dissertation, University of York.

Briones, M.J.I., Ineson, P., & Pearce, T.G. (1997) Effects of climate change on soil fauna; responses of enchytraeids, Diptera larvae and tardigrades in a transplant experiment. *Applied Soil Ecology*, 6, 117-134.

De Groot, W.J., Thomas, P.A., & Wein, R.W. (1997) Biological flora of the British Isles, *Betula nana* L. and *Betula glandulosa* Michx. *Journal of Ecology*, 85, 241-264.

Fitter, A.H., Graves, J.D., Wolfenden, J., Self, G.K., Brown, T.K., Bodie, D., & Mansfield, T.A. (1997) Root production and turnover and carbon budgets of two contrasting grasslands under ambient and elevated atmospheric carbon dioxide concentrations. *New Phytologist*, 137, 247-255.

Fuzzi, S., ed. (1997) The Great Dun Fell Cloud Experiment 1993, Eurotrac Sub-Project Ground-Based Cloud Experiment (GCE). 23 Papers in a special issue of *Atmospheric Environment*. (Volume 31, Number 16).

Garnett, M.H., Ineson, P., & Adamson, J.K. (1997) A long-term upland temperature record: No evidence for recent warming. *Weather*, 52, 342-351.

Gilbert, O.L. & Giavarini, V.J. (1997) The lichen vegetation of acid watercourses in England. *Lichenologist*, 29, 347-367.

Huang, Y., Eglinton, G., Ineson, P., Latter, P.M., Bol, R., & Harkness, D.D. (1997) Absence of carbon isotope

fractionation of individual n-alkanes in a 23-year field decomposition experiment with *Calluna vulgaris*. *Organic Geochemistry*, 26, 497-501.

Mauquoy, D. (1997) Testing the sensitivity of the palaeoclimatic signal from ombrotrophic peat stratigraphy. PhD Thesis, University of Southampton.

Miles, J.E., Bale, J.S., & Hodkinson, I.D. (1997) Effects of temperature elevation on the population dynamics of the upland heather psyllid *Strophingia ericae* (Curtis) (Homoptera: Psylloidea). *Global Change Biology*, 3, 291-297.

Morecroft, M.D., Adamson, J.K., & Lane, A.M. (1997) The Environmental Change Network: Integrating climate and ecological monitoring. *Weather*, 52, 7-12.

Palmer, S.C.F. (1997) Prediction of the shoot production of heather under grazing in the uplands of Great Britain. *Grass and Forage Science*, 52, 408-424.

Parish, D.M.B., Thompson, P.S., & Coulson, J.C. (1997) Attempted double-brooding in the Lapwing *Vanellus vanellus*. *Bird Study*, 44, 111-113.

Parish, D.M.B., Thompson, P.S., & Coulson, J.C. (1997) Mating systems in the Lapwing *Vanellus vanellus*. *Ibis*, 139, 138-143.

Pepin, N.C. (1997) Scenarios of future climate change: effects on frost occurrence and severity in the maritime uplands of Northern England. *Geografiska Annaler*, 79A, 121-137.

Taylor, K. (1997) Biological flora of the British Isles, *Geum rivale*. *Journal of Ecology*, 85, 721-731.

Taylor, K. (1997) Biological flora of the British Isles, *Geum urbanum*. *Journal of Ecology*, 85, 705-720.

Whitehead, S.J., Caporn, S.J.M., & Press, M.C. (1997) Effects of elevated CO₂, nitrogen and phosphorus on the growth of two upland perennials: *Calluna vulgaris* and *Pteridium aquilinum*. *New Phytologist*, 135, 201-211.

Yonghui, Y., Harrison, A.F., & Ineson, P. (1997) Biomass responses to a simulated global warming by changing of elevation and fertilizer addition in upland grassland. *Acta Phytocologica Sinica*, 21, 234-241.

1996

Adamson, J.K., Rowland, A.P., Scott, W.A., & Hornung, M. (1996) Changes in soil acidity and related variables over 25 years in the North Pennine Uplands, UK. *Soil Use and Management*, 12, 55-61.

Bol, R., Huang, Y., Meridith, J.A., Eglinton, G., Harkness, D.D., & Ineson, P. (1996) The 14C age and residence time of organic matter and its lipid constituents in a stagnohumic gley soil. *European Journal of Soil Science*, 47, 215-222.

Butterfield, J.E.L. (1996) Carabid life-cycle strategies and climate change: a study on an altitudinal transect. *Ecological Entomology*, 21, 91-96.

Fitter, A.H., Self, G.K., Wolfenden, J., van Vuuren, M.M.I., Brown, T.K., Williamson, L., Graves, J.D., & Robinson, D. (1996) Root production and mortality under elevated atmospheric carbon dioxide. *Plant and Soil*, 187, 299-306.

Hales, B.A., Edwards, C., Ritchie, D.A., Hall, G., Pickup, R.W., & Saunders, J.R. (1996) Isolation and identification of methanogen-specific DNA from blanket bog peat by PCR amplification and sequence analysis. *Applied and Environmental Microbiology*, 62, 668-675.

Hall, G.H., Simon, B.M., & Pickup, R.W. (1996) CH₄ production in blanket bog peat: a procedure for sampling, sectioning and incubating samples whilst maintaining anaerobic conditions. *Soil Biology & Biochemistry*, 28, 9-15.

Harwood, T. (1996) A dynamic three-dimensional plant-microclimate simulation model: "Ecospace". PhD, University of Edinburgh.

Houghton, S.L. (1996) Do Thick Peat Beds Contain Geochemical Records of Climate Change? A Study of the Moor House Blanket Peat Bog, Cumbria. MSc Thesis, University of Newcastle upon Tyne.

Huang, Y., Bol, R., Harkness, D.D., Ineson, P., & Eglinton, G. (1996) Post-glacial variations in distributions, ¹³C and ¹⁴C contents of aliphatic hydrocarbons and bulk organic matter in three types of British acid upland soils. *Organic Geochemistry*, 24, 273-287.

Huang, Y., Eglinton, G., Van Der Hage, E.R.E., Boon, J.J., Bol, R., & Ineson, P. (1996) PY-MS(GC/MS) study of dissolved organic matters and their parent soil horizon. *Abstracts of the American Chemical Society*, 212, 53.

McDonald, I.R., Hall, G.H., Pickup, R.W., & Murrell, J.C. (1996) Methane oxidation potential and preliminary analysis of methanotrophs in blanket bog peat using molecular ecology techniques. *Microbiology Ecology*, 21, 197-211.

Morecroft, M.D. & Woodward, F.I. (1996) Experiments on the causes of altitudinal differences on the leaf nutrient contents, size and ¹³C of *Alchemilla alpina*. *New Phytologist*, 134, 471-479.

Pearson, S., Davison, A., Reiling, K., Ashenden, T., & Ollerenshaw, J. (1996) The effects of different ozone exposures on three contrasting populations of *Plantago major*. *New Phytologist*, 132, 493-502.

Skiba, U., McTaggart, I.P., Smith, K.A., Hargreaves, K.J., & Fowler, D. (1996) Estimates of nitrous oxide emissions from soil in the UK. *Energy Conversion Management*, 37, 1303-1308.

Smith, R.S., Pullan, S., & Shiel, R.S. (1996) Seed shed in the making of hay from mesotrophic grassland from a field in Northern England: effects of hay cut date, grazing and fertilizer in a split-split plot experiment. *Journal of Applied Ecology*, 33, 833-841.

Werkman, B.R., Callaghan, T.V., & Welker, J.M. (1996) Responses of bracken to increased temperature and nitrogen availability. *Global Change Biology*, 2, 59-66.

Whittaker, J.B. & Tribe, N.P. (1996) An altitudinal transect as an indicator of responses of insects to climate change. *European Journal of Entomology*, 93, 319-324.

Whittingham, M.J. (1996) Habitat requirements of breeding Golden Plover *Pluvialis apricaria*. PhD Thesis, University of Sunderland.

Whittingham, M.J. (1996) The use of radio telemetry to measure the feeding behavior of breeding European golden plovers. *Journal of Field Ornithology*, 67, 463-470.

Yang, Y., Ineson, P., Harrison, A.F., & Coward, P. (1996) N₂O emission from grassland and the feedback effect of nutrient changes resulting from global warming. *Chinese Journal of Applied Ecology*, 7, 386-390.

1995

Archer, D. & Stewart, D. (1995) The installation and use of a snow pillow to monitor snow water equivalent. *Journal of the Chartered Institution of Water and Environmental Management*, 9, 221-230.

Case, S.L. (1995) The macroinvertebrate communities of four contrasting moorland streams at Moor House National Nature Reserve. MSc Dissertation, Lancaster University.

Cummins, C.P., Beran, M.A., Bell, B.G., & Oliver, H.R. (1995) The TIGER programme. *Journal of Biogeography*, 22, 897-905.

Downie, I.S., Butterfield, J.E.L., & Coulson, J.C. (1995) Habitat preferences of sub-montane spiders in northern England. *Ecography*, 18, 51-61.

Huang, Y., Bol, R., Harkness, D., Ineson, P., & Eglinton, G. (1995). The distribution of carbon isotopic compositions on individual lipids and of bulk organic matter in acid upland soils. In *Organic Geochemistry* (ed C. Dorransoro). Donostia, San Sebastian.

Pearce, F. (1995) Airborne urine threatens heaths and moors. *New Scientist*, 25 March 1995, p16.

Pepin, N.C. (1995) The use of GCM scenario output to model the effects of future climate change on the thermal climate of marginal maritime uplands. *Geografiska Annaler*, 77A, 167-185.

Pitcairn, C.E.R., Fowler, D., & Grace, J. (1995) Deposition of fixed atmospheric nitrogen and foliar nitrogen content of bryophytes and *Calluna vulgaris* (L.) Hull. *Environmental Pollution*, 88, 193-205.

Price, E.A.C., Sheffield, E., & Tyson, M. (1995) Distribution on bracken clones along a heather-bracken boundary and responses to environmental change. *Bulletin of the British Ecological Society*, 26, 195-200.

Todd, C.M. & Block, W. (1995) A comparison of the cold hardiness attributes of larvae of four species of Diptera. *Cryo-Letters*, 16, 137-146.

Tribe, N.P. (1995) Some aspects of the population of *Neophilaenus lineatus* (L.) (Homoptera, Cercopidae). MSc Thesis, Lancaster University.

Werkman, B.R. & Callaghan, T.V. (1995). Bracken growth in a changing environment. In *Bracken: An Environmental Issue* (eds R.T. Smith & J.A. Taylor), pp. 90-93. International Bracken Group, Aberystwyth.

Willis, S. (1995) An investigation into changes in composition and distribution of the vegetation of Widdybank Fell, Upper Teesdale, during the last twenty years. MSc Thesis, University of Durham.

Wolfenden, J. & Diggle, P.J. (1995) Canopy gas exchange and growth of upland pasture swards in elevated CO₂. *New Phytologist*, 130, 369-380.

1994

Colville, R.N., Choularton, T.W., Gallagher, M.W., Wicks, A.J., Downer, R.M., Tyler, B.J., Storeton-West, K.J., Fowler, D., Cape, J.N., Dollard, G.J., Davies, T.J., Jones, B.M.R., Penkett, S.A., Bandy, B.J., & Burgess, R.A. (1994) Observation on Great Dun Fell of the pathways by which oxides of nitrogen are converted to nitrate. *Atmospheric Environment*, 28, 397-408.

Crisp, D.T. (1994) Reproductive investment of female brown trout *Salmo trutta* L., in a stream and reservoir system in northern England. *Journal of Fish Biology*, 44, 343-349.

Downie, I.S., Coulson, J.C., Bauer, L.J., Butterfield, J.E.L., Davies, L., & Goodyear, S.A. (1994) The invertebrate fauna of Cross Fell and Dun Fell summits, Cumbria. *Vasculum*, 79, 48-62.

Harrison, A.F., Taylor, K., Hatton, J.C., & Howard, D.M. (1994) Role of nitrogen in herbage production by *Agrostis-Festuca* hill grassland. *Journal of Applied Ecology*, 31, 351-360.

McDonald, A.P. (1994) The response to global warming of plants restricted to North-Western Britain. MSc Thesis, University of Durham.

Milne, C.A. (1994) The hydrogeochemistry of the Vale of Eden as a guide to groundwater resources assessment. MSc Thesis, University of Newcastle upon Tyne.

Pepin, N.C. (1994) The possible effects of climate change on the spatial and temporal variation of the altitudinal temperature gradient and the consequences for growth potential in the uplands of northern England. PhD Thesis, University of Durham.

Sivell, D. (1994) The small mammal community at Moor House NNR. MSc Dissertation, Lancaster University.

Thompson, P.S., Baines, D., Coulson, J.C., & Longrigg, G. (1994) Age of first breeding, philopatry and breeding site fidelity in the lapwing *Vanellus vanellus*. *Ibis*, 136, 474-484.

1993

Block, W., Grubor-Lajsic, G., & Worland, R. (1993) Cold tolerance of larval tipulid from an upland habitat. *Cryo-Letters*, 14, 185-192.

Crisp, D.T. (1993) Population densities of juvenile trout in five upland streams and their effects on growth, survival and dispersal. *Journal of Applied Ecology*, 30, 759-771.

Cuthbertson, M. (1993) A database for environmental research programmes. *Journal of Environmental*

Management, 37, 291-300.

John Adamson
jka@ceh.ac.uk