

Peter H Freer-Smith B.Sc., Ph.D., D.Sc,

Professional experience

Professor Department of Environmental Science and Policy, University of California at Davis	July 2017 - present	Research (Forestry & climate change, air pollution and plant health) and teaching (3 Classes: The Botany and Physiology of Cultivated Plants, Urban Forestry, Restoration Ecology and a Masters degree in Environmental Management)
GB Forestry Commission's Chief Scientific Adviser	2010 – 2017	To advise the Forestry Commissioners, Government Ministers and senior officials and implement the national forestry research strategy.
Chief Scientist in The FC's research agency - Forest Research - and Head of the Scientific and Engineering Profession for the Forestry Commission	2009 - 2017	To lead the science and business development, including to develop new funding opportunities from government departments, the forestry and charitable sectors. To provide leadership and management to the FC's science staff.
Visiting Professor in The School of Biological Sciences, University of Southampton	2005 – present	To advise the School and to develop interactions with the UK forestry industry.
Forestry Commission Research Director	2004 – 2009	The staffing and budgetary responsibility for 5 research divisions in (Forest Inventory and Production Forecasting, Environmental and Social Science, Tree Protection, Ecology and Forest Management and the Technical Support Group), leading the winning of funding and delivery of research and science related services.
Chief Research Officer, Forest Research	Oct.1998 – March 2004	Organisational development of the new agency – Forest Research. The establishment of new partnership and customer relations.
Forestry Commission, Chief Research Officer and Head of Station, Alice Holt Lodge	March 1997 – Oct. 1998	To direct and manage the research at Alice Holt Lodge Research Station
Head of Environmental Research, Forestry Commission Research Division	Sept 1987 – March 1997	To deliver research and knowledge exchange on air, soil and water pollution, site nutrition, forest hydrology, climate change and land reclamation. The group was responsible for a number of international partnerships and for the direct technical support to the UK forest industry.
Lecturer in Plant Biology at The University of Ulster	June 1985 – August 1987	University teaching and leading an active research group working on O ₃ damage to forests and on the uptake of particulate pollution (PM ₁₀) by trees.
Post-doctoral Research Associate on European Commission	Oct. 1984 – May 1985	<i>'The physiology and biochemistry of resistance and susceptibility to SO₂, NO₂ and O₃ pollution'</i> . Lancaster University & Institute of Terrestrial Ecology, Edinburgh (now the Centre for Ecology and Hydrology).
Post-doctoral Research Assistant on European Commission Grant No. 599-UK	Oct. 1982 – Sept. 1984	<i>'The influence of environmental factors on the responses of plants to SO₂ and NO₂ pollution'</i> . Lancaster University

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Academic record:

Doctor of Science in Biological Sciences – D.Sc. (awarded July 2002):

Awarded by Lancaster University in acknowledgement of a record of published work and research on The Sustainability of Forest Ecosystems showing conspicuous ability and originality and constituting a distinguished and sustained achievement.

Doctor of Philosophy - Ph.D. (awarded 2 December 1983):

Chronic pollution injury to some tree species in response to SO₂ and NO₂
NERC/CASE studentship jointly between the University of Lancaster and the Institute of Terrestrial Ecology, Bush Estate, Edinburgh.

First degree Bachelor of Science - B.Sc. (awarded 20 June 1979):

University of Stirling Scotland.

1st Class Honours Degree in Biology

Part I Biology prize 1977.

A broad-based Biology Degree where I specialised in Plant Sciences Ecology, Soil Science and Genetics.

School: Milton Abbey, Dorset.

10 O levels, 1 S level and 3 A levels (Biology, Chemistry & Physics).

Professional achievements:

After two EU postdoctoral posts and two years as a university lecturer, I was appointed as Principal Site Studies South in the Forestry Commission's Research Division. I quickly refocused this group to form a much needed, Environmental Research Branch to conduct research and offer advice on climate change, air pollution, forest hydrology and land reclamation. I was subsequently promoted and undertook the roles of Head of Station, Alice Holt Lodge; Chief Research Officer; Research director; Chief Scientist and Chief scientific adviser for the

Forestry Commission. In these roles I provided scientific leadership setting a personal example on the winning of external funding, delivery and communication of results and effective interaction with partners, in international forestry, in the forestry sector and with policy makers. I continue to be active in research having authored over 125 publications in a mixture of good quality science journals and as forestry practice/policy guidance.

In my current post I have recently won funding to look at the use of biomass from forestry and other sources in the State in order to mitigate climate change (to minimize greenhouse gas emissions) and for a strategic review of the potential impact of afforestation in Europe (funded by the European Forest Institute). I am co chair of the International Union of Forest Research Organisation's (IUFRO) working Group on Plantation Forestry, am on the Board of the European Institute of Cultivated Forests and have been funded by the European Forestry Institute to attend and run a session at the 4th International Congress on Plantation forestry in Beijing in October 2018. I am also working closely with the New generation Plantations Partnership on a current initiative on global forestry data. I thus have considerable experience of UK forestry and am closely involved internationally in forestry research and communication to policy makers.

Regularly requested to contribute to international forest science/policy interface work e.g.

- 2018 – present Forestry Commission Research Fellow (Forest Research)
- 2000 – 2017 UK representative on the International Union of Forest Research Organisations International Council
- 2015 – 2017 UK Representative on the SUMFOREST EU ERANET Steering Committee. (Sustainable Forest Management & European Forest Policy)
- 2012 – present Board member of the European Institute for Cultivated Forests
- 2009 – present Board member of the European Forest Institute Atlantic Regional Centre.
- 2007 High level visit to China as part of UK/China bilateral forestry programme – initiating co funding of Giant Panda and landscape projects.
- 2003 – 2008 UK rep on the EU / European Science Foundation technical committee - Forests and Forest Products of COST.

- 1990 – 1996 Consultancy for UN FAO to prepare submission for the International Commission on Sustainable Development and for the Intergovernmental Panel on Climate Change.
- 1996 – 2002 Member of the UK UNESCO/MAB Man and Biosphere Committee.
- 1995 Evaluator for the EU Framework Programme 5
- 1987 – 1997 UK rep on the International Programme Forests of the UN/ECE Convention on Longrange Transboundary Air Pollution
- 1987 – 1997 UK rep of the Air Pollution working group of the EU Standing Forestry Committee (EEC regulations 3528/86 and 5339/92).
- 1987 – 1992 Co-chairman of the IUFRO Working Group on soils and pollution.

Substantial publication record (please see separate list) covering peer-reviewed journals of high impact, a number of major national and international reports, technical papers & guidelines, books and book chapters.

International reputation reflected in requests to review research programmes e.g.

- 2012 External evaluator for New Zealand Ministry of Business Innovation & Employment.
- 2010 Evaluator for French National Research Agency EQUIPEX call 2010.
- 2007 – 2008 External evaluator for UK Research Assessment Exercise to evaluate the quality of research in UK higher education institutes (i.e the universities).
- 2004 External Review of the Forest Research Institute of Sweden (Skogforsk) on behalf of the Swedish Research Council for the Environment Agricultural Sciences and Spatial Planning.
- 1999 – 2002 Member of Natural Environment Research Council Terrestrial Life Sciences Peer Review Committee.
- 1996 World Health Organisation advisor on Air Quality Guidelines.
- 1990 Forestry member for the second review of the Dutch Priority Programme on Acidification.

1988 Forestry member for the first review of the Dutch Priority Programme on Acidification

Invited conference and seminar presentations e.g.

2019 Invited presentation at the European Forest Institute Annual meeting, Aberdeen, Scotland.

2018 Invited presentation at the 5 th International Congress on Planted Forests, Beijing China

2017 Invited Congress presentation “The assessment of risk from introduced tree pests and pathogens and mitigation actions” Swedish University of Agriculture Uppsala.

2016 Invited talk at New Generations Plantations Encounter 2016 Sao Paulo Brazil “IUFRO Task Force on sustainable Plantations for a greener Future”

2015 Invited talk Our Common Future Under Climate Change ISC Session 2216 – Paris Framework Convention of the Parties preparatory meeting. “Achieving th Potential Contribution of Planted Forests to Adaptation and Mitigation of Climate Change”.

2015 Aberdeen University Borthwick-Stevens Annual Lecture “Forest Science / policy linkages in the UK”

2014 IUFRO World Congress invited talk session SP 05 “Biodiversity and Ecosystem Services in Planted Forests”.

2012 Institute of Chartered Foresters Annual Conference invited keynote talk “Research Agendas in a Changing Climate”.

Science Journal editorial work:

1986 – 1995 Environmental Pollution

1985 – 2008 Forest Ecology and Management

2001 – 2017 Forestry, An International Journal of Forest Research

Membership of societies, committees etc.

2016 – 2017	Organising Committee for the 2017 New Generations Plantations Encounter 2017 – Chatham House London and Edinburgh.
2016 – 2017	Organising Committee for the 2017 Annual Conference of the European Forest Institute Atlantic Regional Centre, West Coast of Scotland.
2015 – present	Deputy Coordinator of IUFRO Task Force “Sustainable Planted Forests for a Greener Future”
2015 – 2017	Member of the advisory board of the Birmingham University Institute for Forest Research.
2014 – 2017	Member of the advisory board of the University of Southampton Department of Biological Sciences
2012 – 2017	Member of the UK Expert Committee on Forest Science.
2013 – 2018	Member of the UK Institute of Chartered Foresters
2012 – 2016	Technical adviser to the UK Government Taskforce on Tree Health and Plant Biosecurity
2012 -2014	Member of the UK Government Chief Scientist’s oversight group on the outbreak of Chalara (<i>Hymenoscyphus fraxineus</i>) on ash.
2013	Member of the organising and scientific committee for the Third International Congress on Planted Forests, Estoril.
2012	Member of the organising Committee for the EU Congress of Forestry and Climate Change, Tours, 2012.
2010 – 2017	Membership of Government Science & Engineering (GSE) network
2008 – 2011	Scientific Advisory Group member for the EU FORFLUX project.
2008 – 2009	Lead of science input to the UK Assessment of the Potential of the UK’s Trees and Woodlands to Mitigate and Adapt to Climate Change (1 st National report)

2008 – 2011	Chair Forestry Commission Innovation and new markets committee
1997 – 2011	Secretary to the Forestry Commission's Advisory Committee on Forestry Research
1997 – 2008	Secretary to the interdepartmental Forestry Research Co-ordination Committee which was established as part of the Government's response to a Select Committee
2000	External review of the Oxford Forestry Institute.
1989 – 1998	Member of the UK Department of the Environment Critical Loads Advisory Group
1989 – 2001	External Examiner in Forestry at University College Worcester and at the University of Brighton.
1984 – 1992	Forestry expert of UK first Terrestrial Effects Review Group.
1991	Organising committee for Royal Soc. of Edinburgh International Symposium: Acidification its Nature and Impacts
1987 – 1988	UK rep on COST/EU project on Effects of wet and dry deposition on Forest Ecosystems
1979 – 1987	Member of the Society of Experimental Biology.

Personal research grants and consultancies

2019 – 2020	The best use of biomass for climate and air quality objectives. Contract for California Air Resource Board
2018 – 2020	Afforestation and plantation forests: potential and impacts in Europe contract for the European Forest Institute.
2016 - 2017	UK Ministry of Defence Forestry contract
2013 - 2017	EU era-net SUMForest programme "Sustainable and Multifunctional Forestry through Enhanced Research Coordination for Policy Decisions".

2013 - 2014	Funding to host international workshop Forest landscape Restoration, REDD Plus and Ecosystem Services, Dublin May 2013 from UK Department For International Development.
2009 - 2013	EU Framework Programme 7 TRANZFOR Project “Forestry and Climate Change”
2008 - 2011	EU Framework Programme 7 BRIDGE Project “Sustainable Urban Planning Decision Support”
2007	Civil Service funding to participate in the Windsor Leadership Trust
2006	Organisation for Economic Development workshop funding; Forestry & Climate Change, Wilton Park, Sussex, UK
2006	Organisation For Economic Development Fellowship “The Development of an integrated approach to achieve sustainable management practice, efficient use and protection of forest resources” Theme 1 The Natural Resource Challenge.
2004- 2006	EC Review of Forest Focus Regulations. (as Project Coordinator)
2001	NERC funding for Centre for Terrestrial Carbon Dynamics (Sheffield Univ)
1998	Biological and Biomedical Research Council /CASE PhD studentship (Sussex Univ.) “Particulate pollutants and trees”
1997	Natural Environment Research Council PhD studentship “Beech and oak water relations and CO ₂ ”
1995 –1996	European Union PHARE Programme – consultancy on the commercial development of forestry in Romania.
1992	Department for the Environment and /FC PhD studentship (Lancaster Univ) Elevated CO ₂ , water relations and nutrition of Sitka spruce
1993	EU/FC studentship (Lancaster Univ.) Effects of air pollution on hybrid poplar.
1993 – 1994	CEC Env Programme; Effects of CO ₂ on trees – ECO-CRAFT
1991	DoE/FC PhD studentship (University of Ulster
1990 – 1993	CEC STEP grant; Interacting effects of drought and pollution

1994	EU Forest Monitoring funding under regulation 3528/86 and 2158/92
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1990	EU Forest Monitoring funding under regulation 3528/86
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1988	EU Forest Monitoring funding under regulation 3528/86
1987	EU Forest Monitoring funding under regulation 3528/86
1986 – 1989	Department of the Environment grant on O ₃ and SO ₂ impacts
1987 - 1990	CEC; Early diagnosis of forest decline
1987 - 1991	NERC/CASE studentship (Lancaster Univ.)
1986	Northern Ireland Forest Service; Survey of Forest Decline
1985	Mandops UK Ltd (Agrochemical Specialists)

Publication list P. H. FREER-SMITH

- FREER-SMITH P, BOZANO M, DRÖSSLER L, FARRELLY N, JACTEL H, KORHONEN J, MIJNIK M, MINOTTA G, MUYS B, CHRISTOPHE O
Afforestation and plantation forests: potential and impacts in Europe In preparation for publication Nov 2019 **From Science to Policy – series report No X** European Forest Institute.
<https://www.efi.int/policysupport/publications>
- FREER-SMITH P H The Story of Forest Science. Chapter 15 of the Forestry Commission Centenary Book to be launched in Sept. 2019 at The House of Commons, London. In press Third Millennium/Profile Editions
<http://profileeditions.com>
- FREER-SMITH P H and PEACE S 2019 100 years of Forestry Research.
The Quarterly Journal of Forestry Vol 113 (1) 21-27 www.rfs.org.uk
- SILVA L N, FREER-SMITH P H and MADSEN P 2018 Over 10 years, the NGP concept has demonstrated ways to address some of the biggest global challenges. NGP Review 2018 pages 6- 11 <https://newgenerationplantations.org/multimedia/file/fa03cc28-c6ef-11e8-b1d8-005056986313>
- SILVA L N, FREER-SMITH P H and MADSEN P 2018 Production, Restoration, Mitigation: a new generation of plantations. **New Forests** DOI 10.1007/s11056-018-9644-6 <https://link.springer.com/article/10.1007/s11056-018-9644-6>
- JEFFRIES, B, FREER-SMITH P H and others. 2017 10 years of the New Generation Plantations Platform. E book launched in June 2017 at the NGP annual event www.newgenerationplantations.org.
- FREER-SMITH P H and WEBBER, J F. 2015. Tree pests and diseases: the threat to biodiversity and the delivery of ecosystem services. **Biodiversity and Conservation** DOI: 10.1007/s10531-015-1019-0
- WHITEMAN et al 2015 Carbon benefits by changing management practice of trees/forests. Chapter 5 of FAO Paper The Economics of Climate Change Mitigation Options in the Forest Sector. To be launched at the Framework Convention on Climate Change COP 21 in Paris Nov 2015.
- TALLIS J T, AMORIM J, CALFAPIETRA C, FREER-SMITH P H, GRIMMOND S, KOTTHAU S, LEMES DE OLIVEIRA F, MIRANDA A I & TOSCANO P 2015 The impacts of green infrastructure on air quality and temperature. Chapter 2 in Handbook on Green Infrastructure Planning, Design and Implementation, Ed Sinnott D, Smith N and Burgess S. Edward Elgar Publishing.
- PAYN T, CARNUS J-M, FREER-SMITH P H, KOLLET W, LIU SHIRONG, ORAZIO C, RODRIGUEZ L, SILVA L N and WINGFIELD M 2015 Changes in Planted

Forests and Future Global Implications **Forest Ecology and Management**. 352, 57-67.

FREER-SMITH P H and ORAZIO C 2015 (Sept) Integrating mitigation and adaptation into sustainable development. Session 2216 report to Our Common Future Under Climate Change submitted for briefing papers of COP 21 Paris Nov/Dec 2015. <http://www.commonfuture-paris2015.org>

FREER-SMITH P H, ORAZIO C, MORISON J-, CARTNUS J-M, TOME M and PAYN T 2015 Achieving the Potential Contribution of Planted Forests to Adaptation and Mitigation of Climate Change. Paper presented to session 2216 of Our Common Future Under Climate Change ISC preparation for FCC COP 21 July 2015. Published online at <http://www.commonfuture-paris2015.org/programme/parallel-sessions/>

FREER-SMITH P H 2015 Global Forest Resources and Management. Paper presented to the Cambridge Forum on Sustainability. published online at <http://www.cfse.cam.ac.uk/directory/forum> April 2015

FREER-SMITH P H 2014 Ecosystem Services provided by Planted Forests Paper presented at IUFRO World Congress, Salt Lake City, October 2014 in side event "Towards Strengthened International Collaboration on Planted Forests". Published on line at www.iufro.org/science/task-forces/planted-forests/.

BORREGO C, LOPES M, CASCAO P, AMORIM J, MARTINS H, TAVAROS R, MIRANDA A, TALLIS M and FREER-SMITH P 2014 Urban air quality models. Chapter 8 of Understanding Urban Metabolism; A tool for urban planning. Edited by Chrysoulakis N, de Castro E A and Morris E J. Published by Routledge, 2 Park Square Abingdon OX14 4RM and 711 Third Avenue NY 10017. ISBN:978-0-415-83511-4

CARNUS J-M, FREER-SMITH P H, TOME M and PAYN T 2014 Adaptation of Planted Forests to Climate Change; from Global to Local Approaches. Paper presented at IUFRO World Congress, Salt Lake City, October 2014 and **The International Forest Review** Vol 16 (5) 221 ISBN (print) 1465-5498 and ISBN (online) 2053-7778 at www.iufro2014.com

CARNUS J-M, FREER-SMITH P H and ORAZIO C 2014 Main Issues and Research Needs for Planted Forests. Paper presented at IUFRO World Congress, Salt Lake City, October 2014 **The International Forest Review** Vol 16 (5) 151 ISBN (print) 1465-5498 and ISBN (online) 2053-7778 at www.iufro2014.com

FREER-SMITH P H and WEBBER J 2014 The Impacts of Pests and Diseases on Future Delivery of Ecosystem Services. Paper presented at IUFRO World Congress, Salt Lake City, October 2014 **The International Forest Review** Vol 16 (5) 5 ISBN (print) 1465-5498 and ISBN (online) 2053-7778 at www.iufro2014.com

PAYN T, CARNUS J-M, FREER-SMITH P H, ORAZIO C, and NABUURS 2014 Planted Forests on the Globe – Renewable Resources for the Future. **New Zealand**

Journal of Forestry Science. 44 (Suppl 1):S1 DOI:10:1186/1179-5395-44-S1-S1 and online at www.nzforestryscience.com/supplements/44/S1

BOYD I L, FREER-SMITH P.H, GODFRAY H.C.J. and GILLIGAN C.A. 2013. The global importance of tree pests and diseases. **Science** 342 2013 DOI: 10:1126/science 1235773

FREER-SMITH P H 2013 Ash dieback – The biology and spread of *Chalara fraxinea/Hymenoscyphus pseudoalbidus*. **Science in Parliament** 70 (1) 23 – 25

MENDES A, MASON B, ORAZIO C, NABUURS G-J JACTEL H, MARTINEZ I, CARNUS J-M TOME M, FREER-SMITH P H, KOLLERT W (in alphabetic order) 2013 Summary Report of the 3 rd International Congress on Planted forests. Published by FAO at www.fao.int and also available at http://www.efiatlantic.efi.int/portal/events/past_events/2013/icpf/.

CHRYSOULAKIS N., BORREGO C., SAN JOSE R., GRIMMOND C.S.B., JONES M., MAGIULO E., KLOSTERMANN J., SANTAMOURIS M., MITRAKA Z., CASTRO E., GONZALES A., VOGT R., VESALA T., SPANO D., PIGEON G., FREER-SMITH P. H., STASZEWSKI T., HODGES N., MILLS G. AND CARTALIS C., 2013 Sustainable urban metabolism as link between bio-physical sciences and urban planning, **Landscape and Urban Planning** 112, 100-117

FREER-SMITH P. H. and WEBBER J. 2012 Tree Health and Plant Biosecurity – Known and likely threats Paper presented to Defra Task force on tree Health and Plant Biosecurity.

CHRYSOULAKIS N., BORREGO C., SAN JOSE R., GRIMMOND C.S.B., JONES M. MAGIULO E., KLOSTERMANN J., SANTAMOURIS M., MITRAKA Z., CASTRO E., GONZALES A., VOGT R., VESALA T., SPANO D., PIGEON G., FREER-SMITH P. H., STASZEWSKI T., HODGES N., MILLS G. AND CARTALIS C., 2011 Sustainable urban metabolism as link between bio-physical sciences and urban planning. The BRIDGE Final Contract Report to CEC

ROWE R., WHITTAKER J., FREER-SMITH P.H., HOWARD D. and TAYLOR G. 2012 Good or bad biofuels? Counting the cost of carbon reveals limitations in LCA approach for bioenergy comparisons. **Biofuels.** 2 (6) 693-707

TALLIS, M., TAYLOR Gail, SINNETT, D. AND FREER-SMITH P H. 2011 Estimating the removal of atmospheric particulate pollution by the urban tree canopy of London, under current and future environments. **Landscape and Urban Planning** 103 129-138.

CARNUS J-M, TOME M., BATTAGLIA M., PAYN T, and FREER-SMITH P.H. 2011 TRANZFOR Transferring research between EU and Australia – New Zealand on forestry and climate change. International innovation, Disseminating science research and technology. 1 – 8 Research Media Ltd

- COPPOCK, R. and FREER-SMITH, P.H. 2010 Forest Resilience and the Use of Species Mixtures. Paper presented to the UK Forestry Commissioners, November 2010.
- TALLIS, M., FREER-SMITH P H, SINNETT, D. AYLOTT M. and TAYLOR Gail 2010 Estimating the influence of different urban canopy cover types on atmospheric particulate matter (PM10) pollution abatement. Paper to European Geosciences Union, General Assembly, Vienna May 2010 and published in **Geophysical Research** 12, EGU2010 - 11815
- FREER-SMITH, P.H. and EYCOTT, A.E. 2010 Will forestry's contribution to the low carbon economy change the UK's rural landscape? Presented to the International Association for Landscape Ecology Conference, Brighton 2010 and published in the proceedings: pp 72-80 "Future Landscape Ecology" Edited by Amy Eycott, Dawn Scott & Richard J Smithers. IALE UK, Colin Cross Printers Ltd, Lancashire UK.
- READ, D.J. and FREER-SMITH, P.H. 2009 Overview and Research Priorities Chapter 14 in Combating Climate Change: a role for UK forests. Main report. pp 216- 221 **The Stationary Office, Edinburgh**
- READ D.J., FREER-SMITH, P.H., MORISON, J.I.L., HANLEY, N., WEST, C.C. AND SNOWDON, P. 2009 Combating Climate Change: a role for UK forests; An Assessment of the potential of the UK's trees and woodlands to mitigate and adapt to climate change. The Synthesis report **The Stationary Office, Edinburgh.**
- READ D.J., FREER-SMITH, P.H., MORISON, J.I.L., HANLEY, N., WEST, C.C. AND SNOWDON, P. (Eds.) 2009 Combating Climate Change: a role for UK forests; An assessment of the potential of the UK's trees and woodlands to mitigate and adapt to climate change. Main report pp 1- 222 **The Stationary Office, Edinburgh**
- PEACHEY C J., SINNETT D., FREER-SMITH P.H. and HUTCHINGS T R 2009 Deposition and Bioavailability of airborne metals to four plant species growing at varying distances from two heavily trafficked roads in London. **Environmental Pollution.** 157 2292-2299
- FREER-SMITH, P H 2008 Chief Executive's Introduction Report on Forest Research 2007.8 pages 4-7 **Forestry Commission The Stationary Office 978-10-295211-7**
- LYNCH J.M., FREER-SMITH P.H. and BROADMEADOW M.S.J. 2008 Global Change and Forests: The Science/Policy Interact: Proceedings the IUFRO and Soc. of American Foresters Conference "Forest Research Management in an Era of Globalisation", Washington April 2007. Published by the **Society of American Foresters.** 6.06.00 105-108
- FREER-SMITH P.H and CARNUS J-M 2008 The Sustainable Management and Protection of Forests: analysis of the current position globally. **Ambio.** 37 No 4

- FREER-SMITH P.H. 2007 Environmental Change and the sustainability of European Forests Chapter 9 165-188 in "Sustainable Forestry Management and Wood Production in a Global Economy" Edited by R.L Deal, R White and G.L Grey
- SOLOMON A.M. and FREER-SMITH P.H. 2007 Forest Responses to Global Change in North America: Interacting Forces define a Research Agenda. Chapter 19 151-160 in "Forestry and Climate Change" Edited by Freer-Smith, Broadmeadow and Lynch CABI Wallingford.
- FREER-SMITH P.H., BROABMEADOW M.S.J. AND LYNCH J.M. 2007 Forestry and Climate Change: the Knowledge-base for Action. Chapter 2 7-14 in "Forestry and Climate Change" Edited by Freer-Smith, Broadmeadow and Lynch CABI Wallingford.
- FREER-SMITH P.H., BROADMEADOW M.S.J. and LYNCH J.M. 2007 Forestry and Climate Change pp 258 CABI Wallingford.
- FREER-SMITH, P H 2007 Biological Sustainability of European Forests in **The Journal of Sustainable Forestry**. 246 165-186
- FREER-SMITH P.H., EVANS S., MORGAN G., ILVESNIEMI H., FINER L., MOFFAT A., DEROME J. HUMPHREY J., LAINE J., MICHALAK R. and PAWLACZYK P. 2006 Development and Review concerning Forest Focus. Final report of EU contract No C2 – 07 03 01/ 2004 / 396316/ MAR/B3
[www.http://ec.europa.eu/environment/forests/pdf/final_report.pdf](http://ec.europa.eu/environment/forests/pdf/final_report.pdf)
- FREER-SMITH P.H. Paper for EU Standing Forestry Committee June 2006.Final Report of the Review of the EU Forest Focus Regulation (EC 2152/2003).
- FREER-SMITH, P.H., EVANS.S, HUMPHREY,j. LAINE, J., FINER, L.,ILVESNIEMI H, 2006 "Progress report on the development and review concerning the EU Forest Focus Regulation" Paper to the CEC Standing Forestry Committee. February 2006.
- FREER-SMITH P.H. 2005. The Significance of Forests: Mitigators and Indicators of Climate Change. Invited paper to Wilton Park Conference "Climate Change – international Dimensions" Sept 2005.
- FREER-SMITH, P.H. and TAYLOR, G. 2005 The effects of trees on pollutant transport & fate; modelling the benefits to the urban and periurban environment and to human health. Presentation to IUFRO Congress 2005 Brisbane Australia and **International Forestry Review** 7 (5) 290
- FREER-SMITH, P.H., 2005 Biological Sustainability of European Forests. Invited State of the art presentation for the International Union of Forest Research Organisation 2005 World Congress. Brisbane, Australia and **International Forestry Review** 7 (5) 232.
- GARDINER, S.D.L., FREER-SMITH, P.H.and TAYLOR, G. 2005 Elevated CO₂ protects poplar (*Populus trichoderma* x *P. deltoides*) from damage induced by O₃ ; identification of mechanisms. Accepted for publication in **Functional Plant Biology** 32, 221-235

- FREER-SMITH, P.H., BECKETT, K.P. and TAYLOR, G. 2005 Deposition velocities to *Sorbus aria*, *Acer campestre*, *Populus deltoides* X *trichocarpa* 'Beaupre', *Pinus nigra* and x *Cupressocyparis leylandii* for coarse, fine and ultra-fine particles in the urban environment. **Environmental Pollution**. 133 157-167.
- SEPPALA, R., FREER-SMITH, P.H., LARSSON-STERN, M and ORKE, J **Review of Swedish Forestry Research Institute Framework Programme 2001 to 2004**. FORMAS/Swedish Ministry of Agriculture and the Environment.
- BURLEY, J., PLENDERLEITH K., HOWE, R. and FREER-SMITH, P.H. 2004 Forest Education and Research in the United Kingdom. Paper for presentation and publication in the Proceedings: **International Symposium on Forest Research and Education in the 21 st Century**, Korea October 2004. Pages 1 to 18.
- QUINE, C. and FREER-SMITH, P. H. 2004 Woodland birds in the UK – FRCC Workshop Report. **FRCC Information note No A16**
- FREER-SMITH P.H. 2003 Chief Executive's Introduction. Report on Forest Research 2002/03 **Forestry Commission TSO (The Stationary Office)**. ISBN 0-10-292625-5
- FREER-SMITH, P.H. 2003 Forest Research Corporate Plan 2003-2006 **Forestry Commission**.
- FREER-SMITH, P.H., EI-KHATIB, A.A. and TAYLOR, G. 2004 Capture of particulate pollution by trees: Effects of species and windspeed. **Water Air and Soil Pollution**. 155, nos 1-4, 173 - 187
- FREER-SMITH, P.H. and TAYLOR G 2003 Workshop Report on Tree Genomics. **FRCC Information Note No A15**
- FREER-SMITH, P.H., and KENNEDY, F. 2003. Base cation removal in harvesting and biological limit terms for use in the simple mass balance equation to calculate critical loads for forest soils. **Water, Air and Soil Pollution**. 145, 499-427
- FREER-SMITH, P.H. Forest Research Corporate Plan 2002- 2005. **Forestry Commission**
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